

# *2018 Progress Report*

## *January 2018 - June 2018*

*Former Amoco Terminal  
2904 Winter Street, Superior, Wisconsin*

*FID No. 816009920*

*BRRTS Nos.*

*Amoco Terminal (02-16-000331)*

*Amoco Barge Dock - Manifold & AST Area (02-16-117873)*

*Amoco Barge Dock - OW Separator & Loading Rack (02-16-297979)*

*Antea Group Project No. WISUP181*

*August 14, 2018*

*Prepared by:*

**Antea®Group**

5910 Rice Creek Parkway, Suite 100

Shoreview, MN 55126



# Table of Contents

1.0	INTRODUCTION AND SCOPE OF WORK .....	1
2.0	SITE LOCATION AND BACKGROUND .....	2
3.0	ACTIVITIES COMPLETED JANUARY THROUGH JUNE, 2018.....	2
3.1	Well Installation.....	2
3.2	Groundwater Gauging and Bailing .....	4
3.3	Groundwater Sampling .....	6
3.4	Operation and Maintenance of Phase II System, January - June, 2018 .....	9
3.5	MWAST-4 LNAPL Recovery .....	10
3.6	MRW-3 LNAPL Recovery .....	10
3.7	LRMW-7 LNAPL Recovery .....	11
3.8	MW-32 LNAPL Recovery .....	11
3.9	Waste Disposal.....	12
4.0	CONCLUSIONS AND RECOMMENDATIONS .....	12
5.0	REMARKS.....	13

## *Figures*

Figure 1	Area Properties Map
Figure 2	Terminal Site Map with BRRTs Numbers
Figure 3	Amoco Barge Dock, Manifold & AST Area Wells
Figure 4	Groundwater Contour Map – June 2018 – Shallow Wells (Barge Dock)
Figure 5	Groundwater Contour Map – June 2018 – Deep Wells (Barge Dock)
Figure 6	Groundwater Contour Map – June 2018 – Double Deep Wells (Barge Dock)
Figure 7	Dissolved Phase Benzene Concentrations – June 2018 – Deep Wells (Barge Dock)
Figure 8	Dissolved Phase Benzene Concentrations – June 2018 – Shallow Wells (Barge Dock)
Figure 9	LNAPL Extent Map – June 2017 (Barge Dock)
Figure 10	LNAPL Extent Map – June 2017 (Terminal)
Figure 11a	Barge Dock Phase II System – LNAPL Recovery Graph
Figure 11b	Barge Dock Phase II System – LNAPL Recovery Graph
Figure 11c	Barge Dock Phase II System – LNAPL Recovery Graph
Figure 12	MRW-3 LNAPL Recovery Test Graph
Figure 13	LRMW-7 LNAPL Recovery Test Graph

## *Tables*

Table 1	2018 Gauge and Bail Table
Table 2	2018 Groundwater Sampling Plan
Table 3	Groundwater and LNAPL Gauging Data - Terminal
Table 4	Groundwater and LNAPL Gauging Data – Barge Dock
Table 5	Groundwater Analytical Results - Terminal
Table 6	Groundwater Analytical Results – Barge Dock
Table 7	Phase II System LNAPL Recovery Summary
Table 8	MWAST-4 Extended Duration LNAPL Recovery Test Summary
Table 9	MRW-3 LNAPL Recovery Test Summary
Table 10	LRMW-7 LNAPL Recovery Test Summary

## *Appendices*

Appendix A	Groundwater Sample Analytical Laboratory Reports
Appendix B	Boring Logs and Well Construction Forms
Appendix C	Select Dissolved Benzene Hydrographs
Appendix D	Select Groundwater/LNAPL Hydrographs
Appendix E	WDNR Operation, Maintenance, Monitoring, and Optimization Form (Form 4400-194)
Appendix F	Corrected Groundwater Elevation Graphs
Appendix G	Waste Disposal Manifest – Future Environmental
Appendix H	3D Benzene Plume Model – Vertical Delineation Well Network

# 2018 Progress Report January - June

*Former Amoco Terminal  
2904 Winter Street, Superior, Wisconsin*

## 1.0 INTRODUCTION AND SCOPE OF WORK

---

Antea®Group is submitting this progress report documenting work conducted from January 1 to June 30, 2018 at the Former Amoco Terminal in Superior, Wisconsin. The Former Amoco Terminal is comprised of two investigation areas and three open Bureau for Remediation and Redevelopment Tracking System (BRRTS) numbers, the Terminal (BRRTS #02-16-000331) and the Barge Dock (BRRTS #02-16-117873 and BRRTS #02-16-297979).

The work conducted from January through June 2018 included:

- **Well Installation**
  - 11 vertical delineation monitoring wells were installed from June 11 to June 19, 2018. Total well depths ranged from 38 to 99 feet below ground surface (bgs). Well installation methods and materials are discussed in **Section 3.1**. Boring logs and well construction diagrams are included in **Appendix B**.
- **Groundwater Monitoring**
  - 66 wells were gauged and 41 wells were sampled from January to June 2018. Groundwater samples, four duplicates and four trip blanks were submitted for laboratory analysis for Petroleum Volatile Organic Compounds (PVOC) and naphthalene. Well gauging data and analytical results are presented in **Section 3.2 and 3.3**, respectively.
- **Barge Dock Phase II LNAPL Skimming System Operation, Maintenance, and Monitoring**
  - The seasonal Phase II system operated with minimal interruption from May 14 through June 30, 2018. System data was collected during 11 monitoring events. Phase II system data is presented in **Section 3.4**.
- **LNAPL Recovery MWAST-4, MRW-3, LRMW-7, MW-32**
  - LNAPL recovery from MWAST-4 (a seasonal skimming pump tied into the Phase II System that pumped to a dedicated 1,000 gallon LNAPL holding tank) was terminated on August 22, 2017 due to minimal LNAPL thickness in the well. The well will remain on a gauge and bail schedule as presented in **Section 3.5** to monitor LNAPL thickness changes.
  - A seasonal skimming pump tied into the Phase II System operated in well MRW-3 with limited interruption from May 15 through June 30, 2018. System data was collected during 10 monitoring events during the operating period. MRW-3 system data is presented in **Section 3.6**.
  - A second seasonal skimming pump tied into the Phase II System operated in well LRMW-7 with limited interruption from May 15 through June 30, 2018. System data was collected during 10 monitoring events during the operating period. LRMW-7 system data is presented in **Section 3.7**.

- The portable LNAPL skimming pump was removed from well MW-32 due to limited or no measurable LNAPL in the well, and the well was added to the gauge and bail monitoring program. MW-32 gauging data is presented in **Section 3.8**.

## 2.0 SITE LOCATION AND BACKGROUND

---

The Former Amoco Terminal is located at 2904 Winter Street in Superior, Wisconsin in the SE ¼ of the NE ¼ of Section 16, Township 49 North Range 14 West, Douglas County, Wisconsin (NE ¼ Sec. 25, SE ¼, Sec. 24 T24N, R20E). The Former Amoco Terminal is comprised of two investigation areas and three open BRRTS numbers, the Terminal (BRRTs #02-16-000331) and the Barge Dock (BRRTs #02-16-117873, #02-16-297979). The Terminal, which was sold by BP in July 2000 to RRS Inc., is 42 acres and has been subdivided for commercial redevelopment. The Barge Dock is 12.6 acres, 3,900 feet long by approximately 125 to 136 feet wide; the two investigation areas are separated by Winter Street and a railroad right of way. An area properties map illustrating the location of the Terminal and Barge Dock and identifying the associated BRRTS numbers for properties surrounding the site is included as **Figure 1**. An area properties map illustrating the location of BRRTS numbers for the properties which make up the Former Amoco Terminal site is included as **Figure 2**. A map illustrating the wells included in the Amoco Barge Dock – Manifold & above ground storage tank (AST) Area (BRRTs #02-16-117873, #02-16-297979) and the Terminal Area (BRRTs #02-16-00033) is included as **Figure 3**.

The Former Amoco Terminal has been used for petroleum storage by various entities since the late 1800s. It had been used by Amoco and its predecessors as a bulk petroleum storage terminal from 1908 until 1999. The Terminal formerly operated with ASTs, an office building, truck loading racks, and a railroad loading rack. The Barge Dock formerly included underground and above ground pipelines, a manifold, ASTs, a railroad loading rack, and a truck loading rack. All Amoco petroleum operations ceased at both properties in 1999. Tanks, rail lines, and loading racks have been removed. Pipelines that connected the Barge Dock to the Terminal have also been removed within the boundaries of the Barge Dock property.

Building expansion in the Winter Business Park (**Figure 1**) has included the construction of FedEx Ground Package System at 2929 Halvor Lane in October 2005, and in July of 2016, construction of Guardian Pest solutions was completed at 3131 Halvor Lane. Four additional terminal land parcels remain available for commercial and/or industrial development as of June 2018 within the limits of the Former Amoco Terminal south of Winter Street.

## 3.0 ACTIVITIES COMPLETED JANUARY THROUGH JUNE, 2018

---

### 3.1 Well Installation

Antea Group contracted Cascade Environmental (Cascade) to install 11 vertical delineation wells (MW-30DDD, MW-52D, MW-52DD, MW-50D, MW-51D, MW-37DDD, MW-41DD, MW-38DD, MWRR-1D, MWOW-2D, MWBD-1DD) on the C. Reiss Coal and Hallett Dock parcels. The well installation locations are shown in **Figure 3** and in-fill the

remaining dissolved phase groundwater impact delineation gaps. Installation followed requirements set forth in Wisconsin DNR Chapter NR 141. Proposed installation locations were discussed with a public utility representative from Superior Water, Light, & Power, the Port Director with the City of Superior, and a representative of Murphy Oil. Proposed boring locations were also scanned for utilities using ground penetrating radar by GPRS Subsurface Scanning Solutions.

The 11 vertical delineation wells were installed by Cascade from June 11 through June 19, 2018 using a Boart Longyear 200c Mini Sonic drill rig with a six-inch boring diameter. Fresh water collected from the city was used as a drilling fluid. The wells were completed using two-inch diameter Schedule 40 PVC casing with approximately 2.5 feet of stick up completion. All wells have three foot screened intervals with 0.010-inch slot Schedule 40 PVC. Installation for all wells included a sand filter pack placed in the annular space surrounding each well screen to two feet above the well screen, and a five-foot thick layer of bentonite chips was placed above the sand pack. Bentonite grout was placed in the well annulus above the bentonite chip layer and continued to near the ground surface. The surface seal was completed with bentonite chips from 0-5 feet bgs, and a native soil cap was placed on top of the bentonite. The wells installed on the North Barge Dock and their total well depths (bgs) are (**Figure 3**):

- MWBD-1DD - 68 feet
- MWRR-1D - 53.4 feet
- MWOW-2D - 37.83 feet

The wells installed on the Amoco Barge Dock – Manifold & AST are:

- MW-38DD - 76 feet
- MW-41DD - 74 feet
- MW-37DDD - 87 feet
- MW-50D - 66 feet
- MW-51D - 66 feet
- MW-30DDD - 99 feet
- MW-52D - 60 feet
- MW-52DD - 88 feet

Soil samples were continuously collected and placed in plastic disposable sample bags for every five feet of material below ground surface to the total depth. Soils were screened for organic vapors every 2.5 feet using a photoionization detector (PID). The PID results are included in the soil boring logs and well diagrams in **Appendix B**. Elevated PID readings were observed during soil screening in the fill layer from 0 to 7 feet bgs for MW-52D and MW-52DD. These wells are located adjacent to the Hallett Dock rail spur (**Figure 3**). Elevated PID readings in the fill layer were also screened during installation of MWOW-2D from 0-10 feet bgs. These responses are likely related to the former aboveground petroleum pipeline that ran approximately 90 feet to the east of the boring location. A table summarizing well construction details and maximum PID screening results is presented below:

Well ID	Total Well Depth (ft bgs)	Screened Interval (ft bgs)	Screened Interval (ft amsl)	Clay Interval (ft bgs)	Max PID Reading (ppm)	Max PID Reading Depth (ft bgs)
MW-30DDD	99	96-99	534-531	1-14.5	1,528	25
MW-50D	66	63-66	563-560	0.5-27	42.9	42.5
MW-51D	66	63-66	563-560	0.5-13	11.9	15
MW-37DDD	87	84-87	531-528	2.5-6	44.3	55
MW-41DD	74	71-74	538-535	0.5-10	52.8	27.5
MW-38DD	76	73-76	538-535	0-9.5	9.5	60
MWRR-1D	53	50-53	568-565	0.5-17	14.8	40
MWBD-1DD	68	65-68	538-535	1-5	12.1	60
MWOW-2D	38	35-38	573-570	2.5-10	1,715	7.5
MW-52D	60	57-60	575-572	7-30	81.1	10
MW-52DD	88	95-88	548-545	2.5-30	86.9	5

The wells were developed using surge and purge methods after a minimum waiting period of 12 hours after installation. A total of 10 times the total well volume was bailed from the wells, or until the well produced sediment free water. Development fluids were stored in a dedicated groundwater collection tank pending removal from the site by Future Environmental for proper disposal (**Section 3.9**). Groundwater sampling methods and analytical results are provided in **Section 3.3**.

During groundwater sampling events as discussed in **Section 3.3**, MWRR-1D was found to have an obstruction approximately 30 feet bgs, preventing a standard-length bailer from passing. The blockage was investigated with a SeeSnake camera reel, and it was found that the well casing was bent at this depth, and sediments may be entering the well and preventing bailer passage. While a sample was collected in June, the well is scheduled to be replaced in July, and a new well log and groundwater re-sampling analytical results will be included in the July through December Semi-Annual Report.

### 3.2 Groundwater Gauging and Bailing

During multiple field mobilization events from January through June 2018, 13 of the 33 Terminal area wells, 44 of the 68 wells on the Amoco Barge Dock – Manifold & AST area, and 9 of the 16 North Barge Dock area wells were gauged for depth to water and depth to LNAPL (**Table 1**). Additional gauging of all wells will occur during third quarter mobilization events (**Table 2**). Wells that had LNAPL thicknesses of approximately 0.5 feet or greater were also bailed. All groundwater and LNAPL measurements were obtained using a water level indicator or an oil/water interface probe, which indicates when a probe is in contact with the groundwater or LNAPL in the well. All measurements were recorded to the nearest 0.01-foot. The wells gauged and select wells that were bailed are listed below. The 2018 Groundwater Sampling Plan (**Table 2**) shows the semi-annual and annual gauging as well as the semi-annual



groundwater sampling schedule. Groundwater and LNAPL gauging data since 1988 are included in **Table 3** (Terminal) and in **Table 4** (Barge Dock). LNAPL extent maps constructed with June 2018 and earlier historical data are presented as **Figure 9** and **Figure 10**. LNAPL spatial extents documented during the May to June 2018 gauging events were consistent with October 2017 data, except for the area around MWAST-4, which has significantly reduced in extent. LNAPL thicknesses in many wells have decreased due to the seasonally low water table as discussed below. Historic LNAPL and groundwater hydrographs are presented for select static condition monitoring wells on both the Terminal and Barge Dock parcels in **Appendix D**. Groundwater contour maps constructed with data collected from the June 18-21, 2018 groundwater sampling event are presented as **Figure 4** (Barge Dock, shallow wells), **Figure 5** (Barge Dock, deep wells), and **Figure 6** (Barge Dock, double deep wells).

- Select wells shown in **Appendix D** demonstrate minimal LNAPL thicknesses in a majority of the wells, and select wells in **Appendix F** show low seasonal groundwater elevations at the beginning of the 2018 operating season.
  - Groundwater levels were approximately 2 feet lower than the 2017 operating season.
  - A lowering of the water table and ultimately the potentiometric surface have resulted in limited to non-existent LNAPL thicknesses in MW-32 as discussed in **Section 3.8**. MW-32 was removed from portable system LNAPL recovery and added to the gauge and bail schedule due to the limited occurrence of LNAPL.
  - LNAPL accumulation and thicknesses in wells across the Barge Dock have reduced significantly. Very few wells consistently accumulate enough LNAPL to bail during operations and maintenance events.
  - Wells near the edge of the LNAPL plume in the Manifold area (MRW-9 and MRW-10) were gauged and bailed on a more frequent schedule to demonstrate LNAPL plume stability and limited LNAPL recharge (**Table 1**).
  - MWAST-4 was switched to a gauge and bail schedule after insufficient LNAPL was measured precluding portable recovery system operation (**Section 3.5**).
  - Wells in Areas of Concern (AOCs) 11 through 13 exhibited LNAPL thicknesses of 0.05, 0.03, and 0.04 feet in MWRR-8, MWOW-5, and MWOW-1, respectively. These wells continue to exhibit limited product accumulation and thicknesses which are insufficient for LNAPL recovery.
- Wells gauged during May 14 through June 30, 2018:
  - Barge Dock BRRTs #02-16-297979: LRMW-9, MWRR-1D, MWRR-4, MWRR-8, MWOW-1, MWOW-2D, MWOW-5, MWBD-1D, and MWBD-1DD.
  - Manifold Area BRRTs #02-16-117873: LRMW-1, LRMW-6, LRMW-7, MRW-1, MRW-2, MRW-3, MRW-5, MRW-6, MRW-7, MRW-8, MRW-9, MRW-10, MWAST-3, MWAST-4, MWAST-8, MWAST-9, RWAST-1, RWAST-2, MWM-3, MWM-6, MWM-7D, MWM-9RD, MWM-10D, MWT-2D, MW-36D, MW-36DD, MW-37D, MW-37DD, MW-37DDD, MW-38D, MW-38DD, MW-40D, MW-41D, MW-

- 41DD, MW-45D, MW-46D, MW-48S, MW-48D, MW-49S, MW-49D, MW-50D, MW-51D, MW-52D, MW-52DD.
- Terminal BRRTs #02-16-00033: MWT-6, MW-14, MW-16, MW-27, MW-30S, MW-30D, MW-30DD, MW-30DDD, MW-32, RW-1, RW-4, RW-8, and RW-9.
- Wells bailed during May 14 through June 30, 2018:
  - Manifold Area BRRTs #02-16-117873:
    - MWAST-4 (3 gallons)
    - LRMW-7 (6 gallons)
    - MRW-3 (14.5 gallons)
    - MRW-10 (0.75 gallons)
    - MWM-6 (0.25 gallons)
  - Terminal BRRTs #02-16-00033:
    - MW-16 (1.25 gallons)
    - MW-27 (0.5 gallons)
    - MW-32 (0.25 gallons)
    - RW-1 (15 gallons)
    - RW-9 (0.45 gallons)

Groundwater contour maps (**Figures 4, 5 and 6**) constructed from data collected from 41 wells during the June 2018 groundwater sampling event (**Section 3.3**) illustrate a prevailing north-northwest groundwater flow direction on the Barge Dock and Manifold, consistent with historical data collected at the site.

### 3.3 Groundwater Sampling

Groundwater samples were collected during the June 2018 semi-annual sampling event from 41 monitoring wells. Newly installed wells were developed in advance of the sampling mobilization by purging 10 times the total well volume, or until the well produced sediment free water. A minimum of 3 well volumes were purged from all wells prior to sampling and groundwater samples were retrieved using dedicated disposable well bailers. Water samples were transferred to containers provided by Pace Analytical Services, Inc. (Pace) of Green Bay, Wisconsin with the appropriate preservative and stored on ice until being submitted for analysis. All groundwater samples were submitted to Pace for laboratory analysis of PVOCs and Naphthalene. Chain of custody records are provided with all laboratory reports. Twenty-two samples were submitted to the Pace Analytical Duluth service center for shipment to Green Bay on June 20, and nineteen samples were submitted to the Pace Analytical service center for shipment to Green Bay on June 21. The second shipment of nineteen samples was shipped by Pace via FedEx ground instead of FedEx overnight, so the samples arrived in Green Bay out of temperature range. The affected wells were re-sampled from June 27 to 28 and resubmitted for analysis. The wells sampled are listed below and can be found in **Table 2**. Copies of the groundwater analytical laboratory reports are included in **Appendix A**. Groundwater analytical results since 1988 are included in **Table 5** (Terminal) and since 2003 in **Table 6** (Barge Dock).

- The following 41 wells were sampled during June 2018: MW-30S, MW-30D, MW-30DD, MW-30DDD, MW-36D, MW-36DD, MW-37D, MW-37DD, MW-37DDD, MW-38, MW-38DD, MW-40D, MW-41D, MW-41DD, MW-45D, MW-46D, MW-48S, MW-48D, MW-49S, MW-49D, MW-50D, MW-51D, MW-52D, MW-52DD, MWM-2D, MWM-7D, MWM-9RD, MWM-10D, MWBD-1D, MWBD-1DD, MWOW-2D, MWRR-1D, MWRR-4, MWT-2D, RWAST-1, RWAST-2, LRMW-1, LRMW-6, LRMW-9, MWAST-3, MWAST-8
- Water samples from the following wells were reported to exceed the Wisconsin Administrative Code Chapter NR 140 Enforcement Standard (NR 140 ES) for Benzene (5 µg/L) in June 2018: LRMW-1 (6,850 µg/L), LRMW-6 (1,060 µg/L), LRMW-9 (2,270 µg/L), RWAST-1 (2,270 µg/L), RWAST-2 (1,460 µg/L), MWAST-8 (2,840 µg/L), MW-30S (685 µg/L), MW-30D (1,930 µg/L), MW-36D (1,820 µg/L), MW-37D (2,830 µg/L), MW-41D (12.9 µg/L), MW-45D (155 µg/L), MW-49S (1,660 µg/L), MWM-7D (2,100 µg/L), MWM-9RD (2,470 µg/L), MWM-10D (1,110 µg/L), MWT-2D (2,970 µg/L), MWRR-1D (50.6 µg/L), MWBD-1D (123 µg/L), and MWRR-4 (323 µg/L).
- Water samples from the following wells were reported to exceed the NR 140 ES for Naphthalene (100 µg/L) in June 2018: LRWM-1 (303 µg/L), LRMW-6 (127 µg/L), MWAST-8 (260 µg/L), RWAST-1 (104 µg/L), RWAST-2 (149 µg/L), MW-30D (200 µg/L), MW-30S (120 µg/L), MWT-2D (133 µg/L), and MWRR-4 (136 µg/L).
- Water samples from the following wells were reported to exceed the NR 140 ES for Methyl Tertiary Butyl Ether (MTBE) (60 µg/L) in June 2018: MWT-2D (190 µg/L), and MWM-9RD (116 µg/L).
- Water samples from the following wells were reported to exceed the NR 140 ES for Toluene (800 µg/L) in June 2018: LRMW-1 (1,740 µg/L), and RWAST-1 (1,200 µg/L).
- Water samples from the following wells were reported to exceed the NR 140 ES for Ethylbenzene (700 µg/L) in June 2018: LRMW-1 (859 µg/L), and LRMW-6 (1,290 µg/L).
- Water samples from the following well were reported to exceed the NR 140 ES for Xylene (2000 µg/L) in June 2018: LRMW-1 (2,714 µg/L).
- Water samples from the following wells were reported to exceed the NR 140 ES for Total Trimethylbenzene (480 µg/L) in June 2018: LRMW-1 (769 µg/L), LRMW-6 (835 µg/L), MWAST-8 (660 µg/L), and RWAST-2 (590 µg/L).
- The areal extent of the dissolved-phase benzene plume in the shallow (water table) zone on the Barge Dock parcel, from the June 2018 groundwater sampling data, is illustrated on **Figure 8**.
  - An atypical benzene concentration for MW-49S was reported (1,660 µg/L). Results for both sampling events in 2017 (June 13 and October 3) reported benzene concentrations that were below the laboratory detection limits (<0.40 µg/L) for this well. MW-49S will be sampled again during the October sampling event to further evaluate groundwater benzene impact at this location.
  - Dissolved phase benzene results for wells surrounding AOC 6 and 7 (see Figure 9) confirm that the dissolved phase benzene plume in this area has decreased with the diminishing LNAPL plume. Dissolved phase benzene results for MWAST-3 have decreased from the last sampling result of 207

- µg/L (October 2012) to <0.31 µg/L (June 2018). Dissolved phase benzene results for MWAST-8 have decreased from the last sampling result of 12,000 µg/L (October 2003) to 2,840 µg/L (June 2018).
- Dissolved phase benzene results for RWAST-1 have decreased from the last sampling result of 5,420 µg/L (October 2016) to 2,270 µg/L (June 2018).
  - The Barge Dock dissolved-phase benzene plume in the “D” level vertical delineation zone extends west of the manifold and beneath the C. Reiss Coal property to the west edge of the Hallett Dock property. The inferred areal extent of the dissolved-phase benzene plume is fully delineated by the deeper wells in the surficial aquifer as illustrated on **Figure 7**.
    - Newly installed vertical delineation wells MW-30DDD, MW-37DDD, MW-38DD, MW-41DD, MW-50D, MW-51D, MW-52D, and MW-52DD all reported results below the NR 140 ES or below the laboratory detection limits. Wells MW-50D, MW-51D, MW-52D, and MW-52DD define the vertical extent of the dissolved phase plume to the west, wells MW-41DD and MW-38DD define the vertical extent of the dissolved phase plume to the north, and well MW-30DDD defines the vertical extent of the dissolved phase plume to the south.
    - The deep well network dissolved phase benzene plume is vertically and spatially finite on the Barge Dock. An updated model of the plume is illustrated in **Appendix H**. This recently developed model is based on groundwater data collected in June 2018. The plume is controlled by the confining aquifer conditions and base of clay in the area. As illustrated, the plume emanates from the Terminal and is oriented southeast-northwest with the prevailing historical groundwater flow direction. The maximum depth of the plume is delineated by MW-37DDD and is spatially bounded by non-detect wells in all directions.
    - MWBD-1D benzene concentrations have continued to decrease since the historical high of 213 µg/L in May 2016, and MWBD-1DD reported results below laboratory detection limits for benzene, thus fully delineating the dissolved phase vertical extent in the area.

Historic dissolved benzene and groundwater hydrographs are presented for eight of the sampled wells (MWM-10D, MW-36D, MWM-7D, MWM-9RD, MW-37D, MWBD-1D, MW-30D, MWT-2D) in **Appendix C**. Dissolved benzene hydrographs show long term decreasing or stable trends of benzene concentrations in six of the eight wells (MW-36D, MWM-7D, MWM-9RD, MWBD-1D, MW-30D, MWT-2D). While MW-37D has a demonstrated benzene concentration increases from May 2013 to October 2015, concentrations have decreased over the last six sampling events. Benzene concentrations in well MWM-10D continue to remain below the historical high concentrations.

The percent reduction from the historical high benzene concentrations to the June 2018 benzene concentrations in the 8 key vertical delineation wells are summarized in the table below:

Well	June 2018 Benzene Concentration (µg/L)	Historical High Benzene Concentration (µg/L)	Date of Historical High Benzene Concentration	Percent Change From Historical High Benzene Concentration
MWT-2D	2,970	5,740	October 2015	-48.3%
MW-37D	2,680	3,090	October 2015	-13.3%
MW-36D	1,820	2,270	July 2011	-19.8%
MW-30D	1,930	2,560	October 2015	-24.6%
MWM-10D	1,110	1,230	April 2010	-9.8%
MWM-9RD	2,380	5,540	April 2011	-57.0%
MWM-7D	2,100	2,340	October 2009	-10.3%
MWBD-1D	123	213	May 2016	-42.3%

### 3.4 Operation and Maintenance of Phase II System, January - June, 2018

The seasonal Phase II system operated with limited interruption from May 14 – June 30, 2018. System data was collected during 11 monitoring events during the referenced period. The Phase II System was installed in 2012 as a spring through fall seasonally operated system with above-grade piping to address the LNAPL plume extending from the Barge Dock manifold across the C. Reiss Coal property to the west. The system originally consisted of a network of seven recovery wells, of which five wells remain active (MRW-5, MRW-6, MRW-7, MRW-8, and MWM-3) as wells MRW-9 and MRW-10 at the western extent of the heritage LNAPL plume no longer contain sufficient LNAPL for system recovery. Wells MRW-5, MRW-6, MRW-7, and MRW-8 are 6 inches in diameter, and MWM-3 is 4 inches in diameter. Each active recovery well contains a pneumatic skimming pump that tracks the water table using a floating head intake and removes LNAPL that accumulates in recovery wells. Recovered LNAPL is pumped into a 7,000-gallon capacity, double-walled, steel AST located next to the system building. Cumulative Phase II System LNAPL recovery is illustrated on **Figures 11 a-c** and summarized in **Table 7**. The Phase II system is monitored on an approximate weekly basis. Approximately 95% of LNAPL recovered from Barge Dock wells is from the Finger Plume area (mobile skimmer, Phase I system, Phase II system). The WDNR Operation, Maintenance, Monitoring, and Optimization Form is included in **Appendix E**.

- The total amount of LNAPL recovered by the Phase II skimming system from May 14 to June 28, 2018 was approximately 714 gallons.
- The Phase II system recovery rate from May 14 to June 28, 2018 was 15.5 gallons per day or approximately 3.10 gallons per day per active recovery well.
- Total LNAPL recovered since Phase II system startup in June 2012 is approximately 35,400 gallons.
- The LNAPL recovery has decreased over time (**Figures 11a-c**). **Figure 11c** highlights the progressive decrease in LNAPL recovery rate (gallons/day) one month after system startup during the 2012 operating season (153.3 gal/day) to one month after system startup during the 2018 operating season (9.6 gal/day).

- Antea Group recommends continued operation of the Phase II recovery system during the 2018 operating season.

### **3.5 MWAST-4 LNAPL Recovery**

The extended duration LNAPL recovery was initiated in July 2015 and discontinued on August 22, 2017. The system operated for one day in May 2018 to remove product that accumulated through the off season. The skimming pump was removed from the well on June 7, 2018. MWAST-4 is four inches in diameter and contained a pneumatic skimming pump that tracked the water table using a floating head intake and removed LNAPL that accumulated in the recovery well. Recovered LNAPL was pumped through a double-walled product line into 1,000-gallon capacity, double-walled AST located in a fenced enclosure adjacent to the remediation system building.

Gauging events during system startup May 14, 2018 measured 1.62 feet of product in MWAST-4. The pump was restarted on May 14 to remove accumulated product. The system was shut down on May 15 with a total product recovery of 76.8 gallons (**Table 8**). The well has been gauged on a regular basis (**Table 1**), and the pump was removed from service on June 7, 2018 to allow for manual product recovery. Since the system has been discontinued, limited product has accumulated into MWAST-4. Four monitoring events between May 15 and June 30, 2018 measured an average product thickness of 0.95 feet, and 3 gallons of LNAPL have been recovered through hand bailing events. Intermittent gauge and bail events for MWAST-4 will continue through the 2018 operating season and the recovery pump will be re-installed, as warranted by measured LNAPL thickness.

### **3.6 MRW-3 LNAPL Recovery**

On August 22, 2017, a four-inch diameter pneumatic skimming pump was installed in six-inch diameter monitoring well MRW-3. The skimming pump has a fixed intake which removes LNAPL that accumulates in the recovery well. Recovered LNAPL is pumped through a high-density polyethylene (HDPE) product line into a 1,000-gallon stationary recovery tank. An airline was installed that connects the MRW-3 pump to the Phase II System compressor to operate the pump. The pump in MRW-3 operated from August 22 through November 8, 2017. Total volume of LNAPL recovered from MRW-3 was approximately 130.2 gallons.

The LNAPL recovery pump was restarted on May 15, 2018 and operated with limited interruption through June 30, 2018. System data was collected over 10 monitoring events. The air line for the system was turned off on June 15 after no product was observed in MRW-3. The well was allowed to recharge and the system was restated on June 19. The system was shut down for approximately 12 hours during tank pump outs on June 28. Product thicknesses during system operation have ranged from 0.98 feet on May 23 to 0.00 feet on June 15. Total LNAPL recovery during the reporting period was approximately 94.9 gallons as shown in **Table 9** with an average daily recovery rate of 1.5 gallons per day. **Figure 12** shows the trends for LNAPL recovery rates and total LNAPL recovered. Continued operation of the LNAPL recovery pump in MRW-3 will be evaluated during each monitoring event with operation continued if sufficient LNAPL exists in the well.

### **3.7 LRMW-7 LNAPL Recovery**

On August 30, 2017, a four-inch diameter pneumatic skimming pump was installed in four-inch diameter monitoring well LRMW-7. The skimming pump has a fixed intake which removes LNAPL that accumulates in the recovery well. Recovered LNAPL is pumped through a HDPE product line into a 1,000-gallon stationary recovery tank that has been previously used for storage of hand bailed product. An airline was installed on August 30, 2017 connecting the LRMW-7 pump to the Phase II System compressor to operate the pump. The LNAPL recovery pump initially operated at LRMW-7 from August 30 through November 8, 2017. Total volume of LNAPL recovered during the LRMW-7 2017 season was approximately 108.35 gallons.

The LNAPL recovery pump was restarted on May 15, 2018 and operated with limited interruption through June 30, 2018. System data was collected over 10 monitoring events. The air line for the system was turned off on June 13 after limited product thickness was observed in the well. The well was allowed to recharge and the system was restated on June 15. The system was shut down for approximately 12 hours during tank pump outs on June 28. Product thicknesses during system operation have ranged from 0.79 feet on May 30 to 0.01 feet on June 8. Total LNAPL recovery during the reporting period was approximately 41.78 gallons as shown in **Table 10** with an average daily recovery rate of 1.3 gallons. **Figure 13** shows the trends for LNAPL recovery rates and total LNAPL recovered over the recovery period. Continued operation of the LNAPL recovery pump in LRMW-7 will be evaluated during each monitoring event with operation continued if sufficient product exists in the well.

### **3.8 MW-32 LNAPL Recovery**

An LNAPL recovery pump has operated in MW-32 since August 2015. Monitor well MW-32 is a two-inch well which contained a 2-inch-diameter Alpha Ferret pneumatic skimming pump with a fixed interval LNAPL intake that removed LNAPL that accumulated in the well. The LNAPL recovery pump operated at MW-32 from August to November 2015. The pump operated at monitoring well MW-32 during the period of July 6 through November 8, 2016, and again from May 3 through November 7, 2017. Total volume of LNAPL recovered during 2015-2017 from MW-32 was 1,330 gallons.

The skimming pump was not installed in MW-32 during system startup in 2018 as no LNAPL was measured in the well. Water levels were gauged at 17.50 feet on May 14, 2018, which is approximately 2 feet lower than May water levels in 2017. A groundwater elevation graph for the well as presented in **Appendix F**. MW-32 has been gauged 3 times since May 14, and product thicknesses have ranged from 0.22 feet on May 23 to 0.00 feet on May 30.

The base of clay elevation at MW-32 is 620.81 feet amsl, and corrected water table elevations during the 2017 operation season ranged from 618.76 to 621.65 feet amsl. This elevated potentiometric surface pushed LNAPL against the clay layer, increasing LNAPL recovery. Groundwater elevations during the 2018 season have decreased significantly and ranged from 616.50 to 617.95 feet amsl. Without the above referenced hydraulic effects, limited product thicknesses have been observed in many wells, including MW-32. MW-32 has been switched to a gauge and bail schedule and regular monitoring will continue through the 2018 operating season. Operation of the LNAPL

recovery pump in MW-32 will be evaluated during each monitoring event with operation restarted if sufficient LNAPL is measured in the well.

### 3.9 Waste Disposal

Future Environmental removed approximately 2,400 gallons of investigation-derived liquid waste (purge water, hand bailed LNAPL, and LNAPL system recovered groundwater) from the site on June 28, 2018. The waste manifests are included in **Appendix F**.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

---

Based on the available site information, Antea Group makes the following conclusions and recommendations:

### Conclusions:

- The following LNAPL recovery systems were active during the January to June 2018 operating period:
  - The Phase II system recovered approximately 714 gallons of LNAPL from May 14 to June 30, 2018 at an average recovery rate of 3.10 gallons per active recovery well per day since 2018 system startup. The cumulative system recovery for the 2018 season is expected to continue the year over year decreasing trend from 2017 recovery totals (2,158 gallons).
  - The pneumatic skimming pump in MRW-3 recovered approximately 110.2 gallons of LNAPL from May 15 to June 30, 2017 at an average recovery rate of 1.5 gallons per day. The system has recovered approximately 240.4 gallons of LNAPL since recovery pump installation on August 22, 2017.
  - The pneumatic skimming pump in LRMW-7 recovered approximately 41.78 gallons of LNAPL from May 15 to June 30, 2017 at an average recovery rate of 1.5 gallons per day. The system has recovered approximately 157.26 gallons of LNAPL since pump installation on August 30, 2017.
- The following LNAPL recovery systems were inactive during the January to June 2018 operating period:
  - Limited LNAPL occurrence at MWA-4 has resulted in the removal of the pneumatic pump recovery system from the well. The well has been placed on a regular gauge and bail schedule for the remainder of the 2018 operating season.
  - The pneumatic pump was not installed in MW-32 during 2018 system startup as no product was observed in the well. Groundwater levels were gauged approximately 2 feet lower than 2017 groundwater levels at the start of the season. Regular gauging of MW-32 will continue through the 2018 operating season.
- Semi-annual groundwater sampling analytical results continue to exhibit stable or decreasing conditions at 6 of 8 key “D” level wells on the C. Reiss Coal and Hallett Dock parcels (MW-36D, MWM-7D, MWM-9RD, MWBD-1D, MW-30D, MWT-2D; **Appendix C**).
- Recently installed “D”, “DD”, and “DDD” level wells MW-30DDD, MW-52D, MW-52DD, MW-51D, MW-50D, MW-41DD, and MW-38DD exhibited non-detect levels for benzene. MW-37DDD reported a result of 3.9



µg/L, which is below the NR 140 ES. The site vertical delineation well network fully delineates the extent of the dissolved-phase benzene plume.

- North Barge Dock wells in AOCs 11-13 continue to exhibit limited to no LNAPL thicknesses (**Table 1**) and no LNAPL recovery potential.
- Elevated PID readings were observed during new vertical delineation well installation in the top fill layer (0-7 feet bgs) of MW-52D and MW-52DD, and in the fill layer of MWOW-2D. The fill layers near MW-52D and MW-52DD were likely placed during construction of adjacent Hallett Dock railroad spur, and the origin of the contamination is unknown. The PID measurements at MWOW-2D are likely area-wide petroleum impact from activities unrelated to the heritage Amoco Terminal operation.

Recommendations:

- Continue operation of the Phase II LNAPL recovery system through the end of the 2018 operating season.
- Continue weekly operation evaluation of the MRW-3 and LRMW-7 LNAPL recovery pumps through the end of the 2018 operating season; if sustained LNAPL occurrence or recovery is not observed, pump recovery operation will be terminated.
- Continue hand bailing activities at select AOCs that re-accumulate LNAPL over the 2018 operating season.
- Continue semi-annual groundwater monitoring including gauging and sampling wells included on the 2018 Groundwater Sampling Plan (**Table 2**).
- Continue monitoring report submittals through the WDNR BRRTS database for adjacent upgradient open LUST incidents (BRRTS Nos. 03-16-000059, 03-16-000320, and 03-16-000721) as contamination has not been delineated vertically at any of these sites.

## 5.0 REMARKS

---

The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. The contract between Antea USA, Inc. and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Antea USA, Inc.'s client and anyone else specifically identified in writing by Antea USA, Inc. as a user of this report. Antea USA, Inc. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea USA, Inc. makes no expressed or implied warranty as to the contents of this report



---

Layne Kortbein  
Staff Professional

Date: 8/14/2018



Date: 8/14/2018

---

Todd Kremmin  
Project Professional

I, Wayne Hutchinson, hereby certify that I am a hydrogeologist as that term is defined in s. [NR 712.03 \(1\)](#), Wis. Adm. Code, am registered in accordance with the requirements of ch. [GHSS 2](#), Wis. Adm. Code, or licensed in accordance with the requirements of ch. [GHSS 3](#), Wis. Adm. Code, and that, to the best of my knowledge, all of the 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.



Date: 8/14/2018

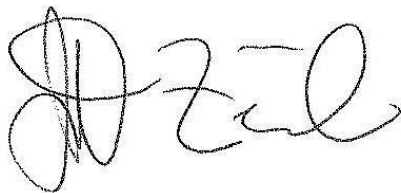
---

Wayne Hutchinson, PG, PH  
Senior Hydrogeologist

Professional Seal



Reviewed by:



Date: 8/14/2018

---

Jonathan Zimdars  
Consultant

## Figures

Figure 1 - Area Properties Map

Figure 2 - Terminal Site Map with BRRTs Numbers

Figure 3 - Amoco Barge Dock, Manifold & AST Area Wells

Figure 4 - Groundwater Contour Map - June 2018 - Shallow Wells (Barge Dock)

Figure 5 - Groundwater Contour Map - June 2018 - Deep Wells (Barge Dock)

Figure 6 - Groundwater Contour Map - June 2018 - Double Deep Wells (Barge Dock)

Figure 7 - Dissolved Phase Benzene Concentrations - June 2018 - Deep Wells (Barge Dock)

Figure 8 - Dissolved Phase Benzene Concentrations - June 2018 - Shallow Wells (Barge Dock)

Figure 9 - LNAPL Extent Map - June 2018 (Barge Dock)

Figure 10 - LNAPL Extent Map - June 2018 (Terminal)

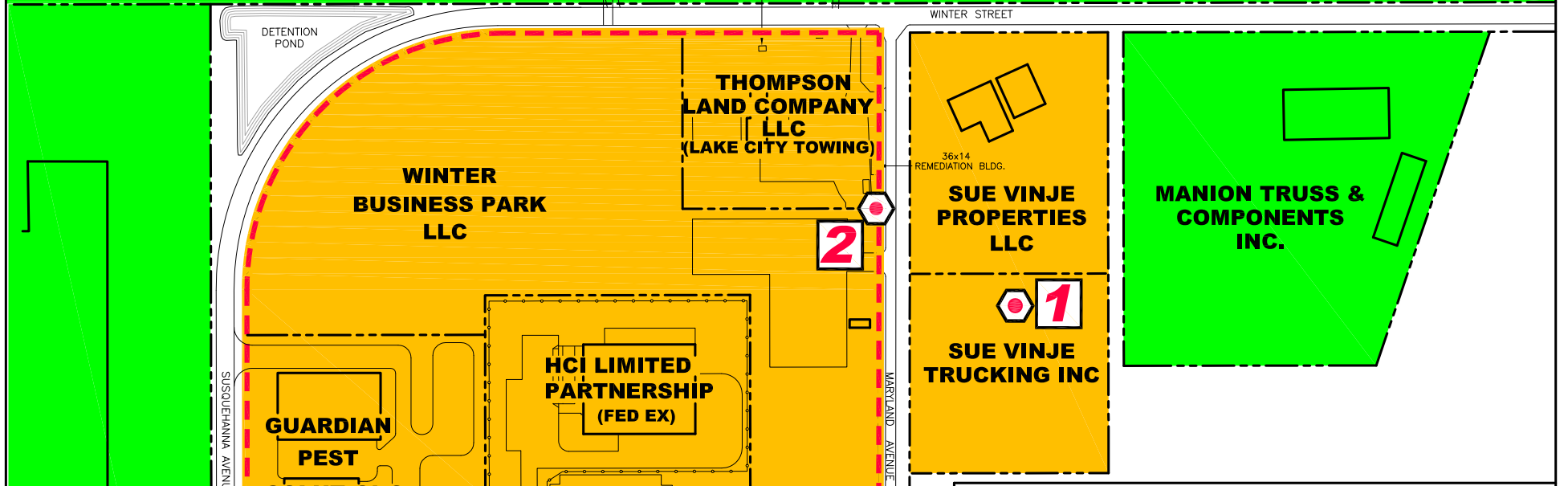
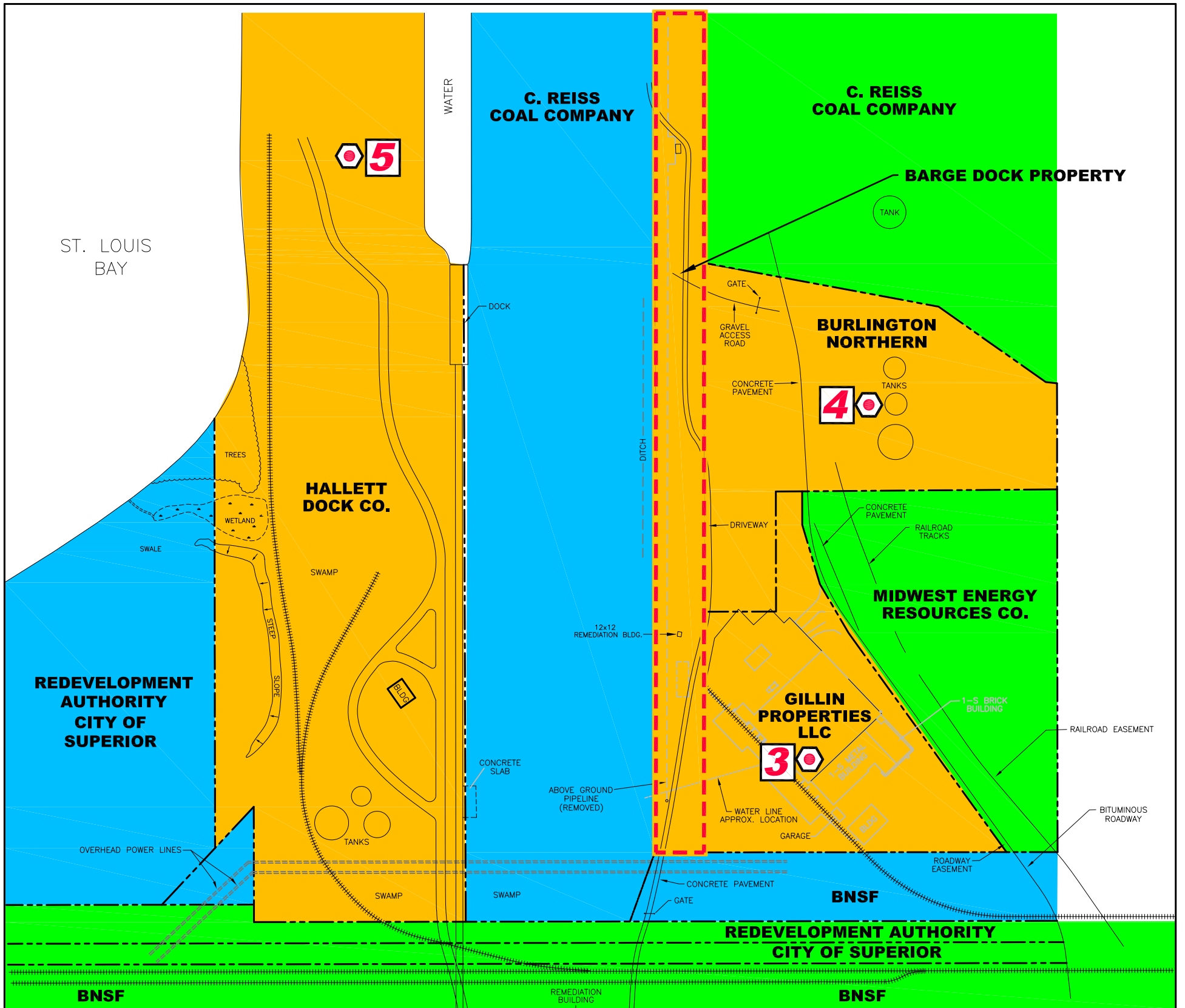
Figure 11a - Barge Dock Phase II System - LNAPL Recovery Graph

Figure 11b - Barge Dock Phase II System - LNAPL Recovery Graph

Figure 11c - Barge Dock Phase II System - LNAPL Recovery Graph

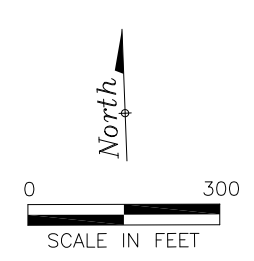
Figure 12 - MRW-3 LNAPL Recovery Test Graph

Figure 13 - LRMW-7 LNAPL Recovery Test Graph



**LEGEND - COLORS**

	ACTIVE COMMERCIAL (NO INCIDENT)
	ACTIVE COMMERCIAL (INCIDENT)
	VACANT
	SUBJECT SITE



**LEGEND - ADJACENT BRRTS**

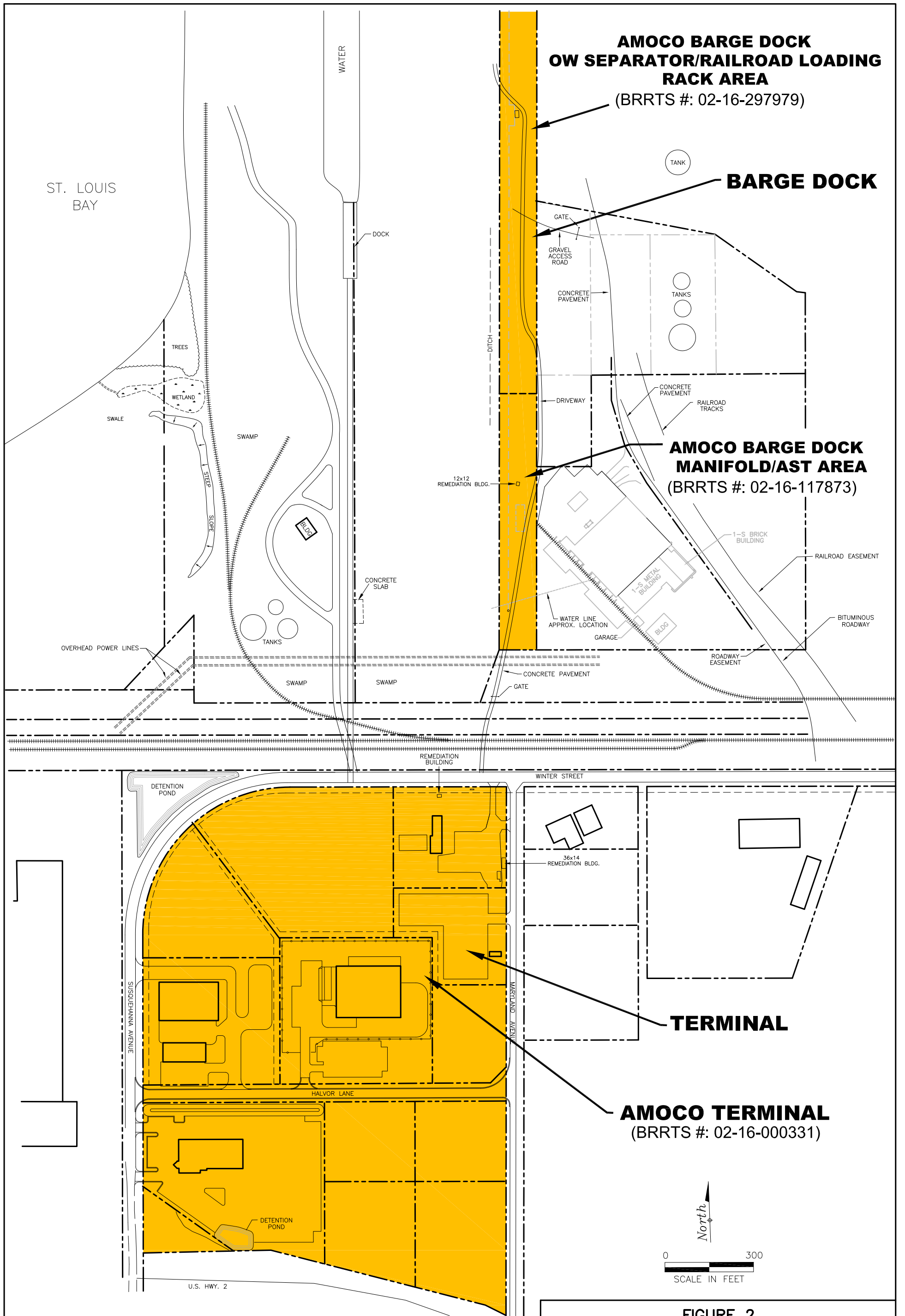
= WDNR BRRTS LISTING

COC = CHEMICAL OF CONCERN  
 WDNR = WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
 BRRTS = BUREAU FOR REMEDIATION AND REDEVELOPMENT TRACKING SYSTEM

<b>1</b>	BRRTS 02-16-554133 STOTT BRIQUETTE COMPANY COC - METALS, PAHs
<b>2</b>	BRRTS (NA) MURPHY OIL PIPELINE COC - DIESEL NO. 1
<b>3</b>	BRRTS 02-16-119619 ABC RAIL COMPRESSOR RELEASE BRRTS 03-16-000802 ABC RAIL CORP. WASTE OIL UST BRRTS 03-16-000801 ABC RAIL CORP. FUEL OIL UST BRRTS 03-16-000059 ABC RAIL (FMR) ABEC GASOLINE UST
<b>4</b>	BRRTS 02-16-554200 MURPHY OIL WEST SPILL BRRTS 03-16-000320 MURPHY MARINE TERMINAL COC - PETROLEUM BRRTS 03-16-000721 MURPHY OIL TANK #2 - COC GASOLINE
<b>5</b>	BRRTS 02-16-544665 HALLETT DOCK #8 - COC METALS, PAHs

**FIGURE 1  
AREA PROPERTIES MAP  
FORMER AMOCO TERMINAL  
SUPERIOR, WISCONSIN**

PROJECT NO. WISUP171	PREPARED BY LK	DRAWN BY DD
DATE 07/06/17	REVIEWED BY	FILE NAME 2017-Area

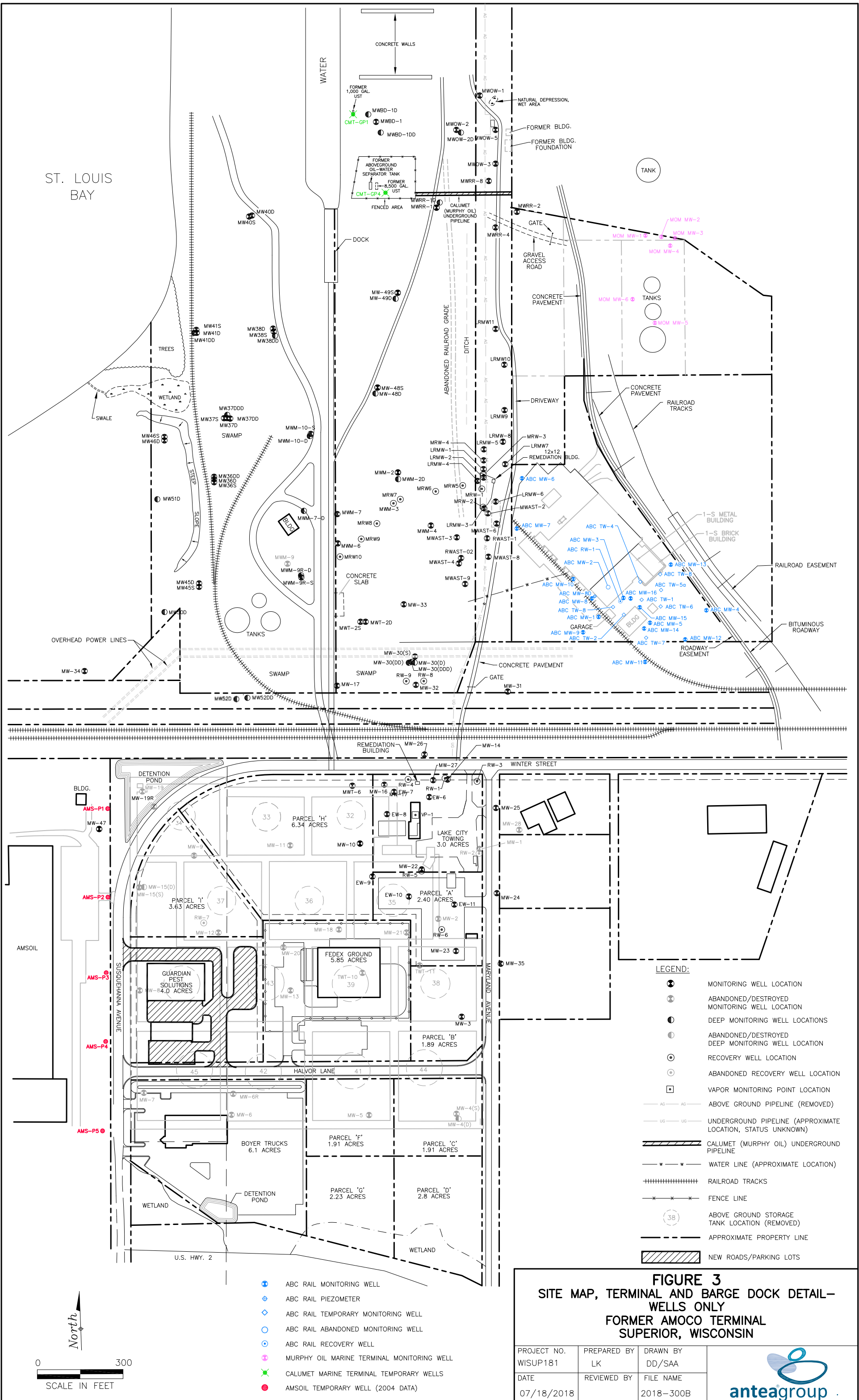


**FIGURE 2  
SITE MAP**

**FORMER AMOCO TERMINAL  
SUPERIOR, WISCONSIN**

PROJECT NO. WISUP171	PREPARED BY LK	DRAWN BY DD
DATE 07/06/17	REVIEWED BY	FILE NAME 2017-Base





ST. LOUIS BAY

WATER

CONCRETE WALLS

FORMER 1,000 GAL UST  
CMT-GP1  
MWBD-1D  
MWBD-1  
MWBD-1DD

NATURAL DEPRESSION, WET AREA  
FORMER BLDG.  
FORMER BLDG. FOUNDATION

FORMER ABOVEGROUND OIL-WATER SEPARATOR TANK  
FORMER 8,500 GAL UST  
CMT-GP4

FENCED AREA  
MWR-1  
MWR-2  
MWR-3  
MWR-4  
MWR-5  
MWR-6  
MWR-7  
MWR-8

CALUMET (MURPHY OIL) UNDERGROUND PIPELINE  
MWR-1  
MWR-2  
MWR-3  
MWR-4  
MWR-5  
MWR-6  
MWR-7  
MWR-8

GATE  
GRAVEL ACCESS ROAD  
CONCRETE PAVEMENT

ABANDONED RAILROAD GRADE  
DITCH

DRIVEWAY  
REMEDATION BLDG.

CONCRETE PAVEMENT  
RAILROAD TRACKS

1-S METAL BUILDING  
1-S BRICK BUILDING

RAILROAD EASEMENT  
BITUMINOUS ROADWAY

CONCRETE PAVEMENT  
GATE

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

CONCRETE PAVEMENT  
RAILROAD TRACKS

TANK

MOM MW-2  
MOM MW-1  
MOM MW-3  
MOM MW-4  
MOM MW-5  
MOM MW-6

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS

TANKS


TANKS

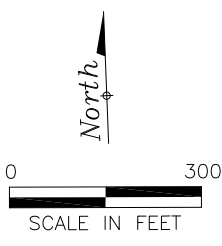
LEGEND:

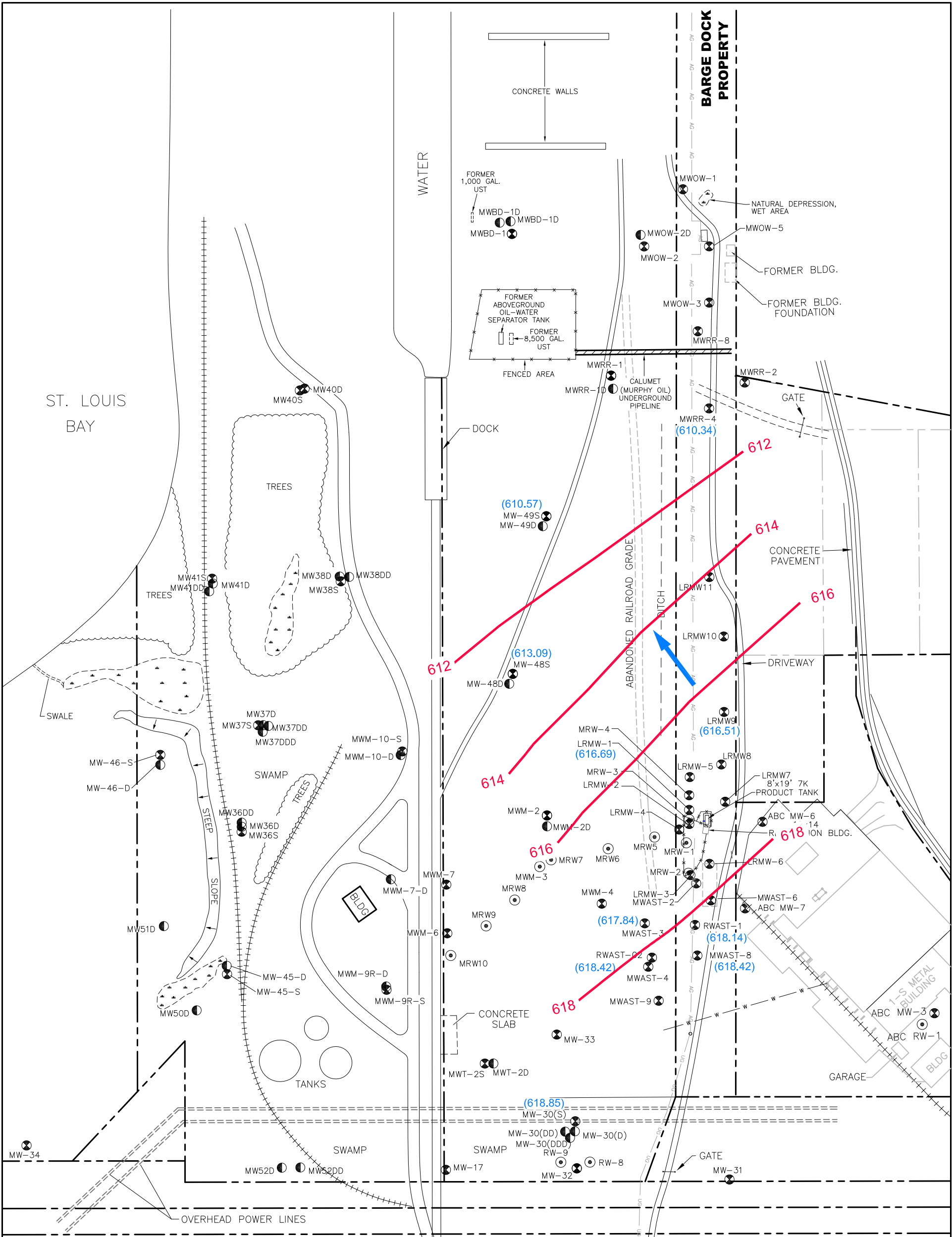
- ⊗ MONITORING WELL LOCATION
- ⊗ ABANDONED/DESTROYED MONITORING WELL LOCATION
- ⊗ DEEP MONITORING WELL LOCATIONS
- ⊗ ABANDONED/DESTROYED DEEP MONITORING WELL LOCATION
- ⊗ RECOVERY WELL LOCATION
- ⊗ ABANDONED RECOVERY WELL LOCATION
- ⊗ VAPOR MONITORING POINT LOCATION
- AG — AG — ABOVE GROUND PIPELINE (REMOVED)
- UG — UG — UNDERGROUND PIPELINE (APPROXIMATE LOCATION, STATUS UNKNOWN)
- w — w — WATER LINE (APPROXIMATE LOCATION)
- ||||| RAILROAD TRACKS
- - - - - FENCE LINE
- (38) ABOVE GROUND STORAGE TANK LOCATION (REMOVED)
- - - - - APPROXIMATE PROPERTY LINE
- ▨ NEW ROADS/PARKING LOTS

- ⊗ ABC RAIL MONITORING WELL
- ⊗ ABC RAIL PIEZOMETER
- ⊗ ABC RAIL TEMPORARY MONITORING WELL
- ⊗ ABC RAIL ABANDONED MONITORING WELL
- ⊗ ABC RAIL RECOVERY WELL
- ⊗ MURPHY OIL MARINE TERMINAL MONITORING WELL
- ⊗ CALUMET MARINE TERMINAL TEMPORARY WELLS
- ⊗ AMSOIL TEMPORARY WELL (2004 DATA)

**FIGURE 3**  
**SITE MAP, TERMINAL AND BARGE DOCK DETAIL—**  
**WELLS ONLY**  
**FORMER AMOCO TERMINAL**  
**SUPERIOR, WISCONSIN**

PROJECT NO. WISUP181	PREPARED BY LK	DRAWN BY DD/SAA	
DATE 07/18/2018	REVIEWED BY	FILE NAME 2018-300B	

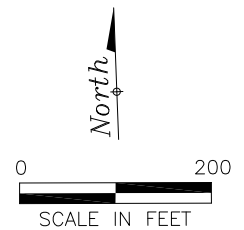




- LEGEND:**
- ⊗ MONITORING WELL LOCATION
  - ⊙ DEEP MONITORING WELL LOCATIONS
  - ⊕ RECOVERY WELL LOCATION
  - ⊖ ABANDONED RECOVERY WELL LOCATION

- ☁ NATURAL DEPRESSION, WET AREA
- AG — ABOVE GROUND PIPELINE (REMOVED)
- UG — UNDERGROUND PIPELINE (APPROXIMATE LOCATION, STATUS UNKNOWN)
- C — CALUMET (MURPHY OIL) UNDERGROUND PIPELINE
- W — WATER LINE (APPROXIMATE LOCATION)
- ==== GRAVEL ACCESS ROAD
- ++++ RAILROAD TRACKS
- - - - FENCE LINE
- - - - APPROXIMATE PROPERTY LINE

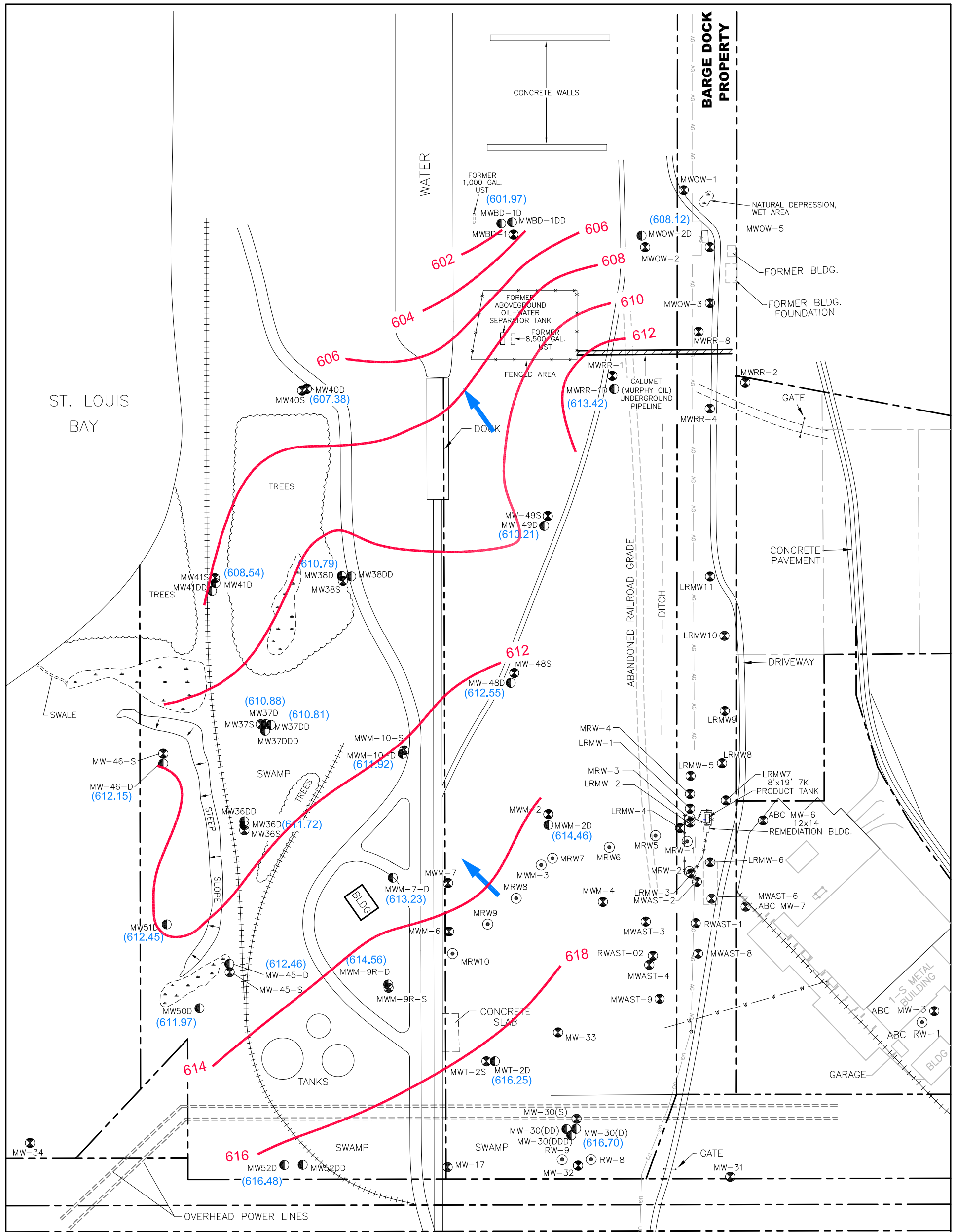
- (613.75) GROUNDWATER ELEVATION (NO LNAPL IN WELL)
- 612 — GROUNDWATER CONTOUR LINE
- ← INFERRED GROUNDWATER FLOW DIRECTION



**FIGURE 4**  
**GROUNDWATER CONTOUR MAP –JUNE 18, 2018**  
**SHALLOW WELLS (BARGE DOCK)**  
**FORMER AMOCO TERMINAL**  
**SUPERIOR, WISCONSIN**

PROJECT NO. WISUP181	PREPARED BY LK	DRAWN BY DD/SAA
DATE 07/18/2018	REVIEWED BY	FILE NAME BD-0618-CWS





**LEGEND:**

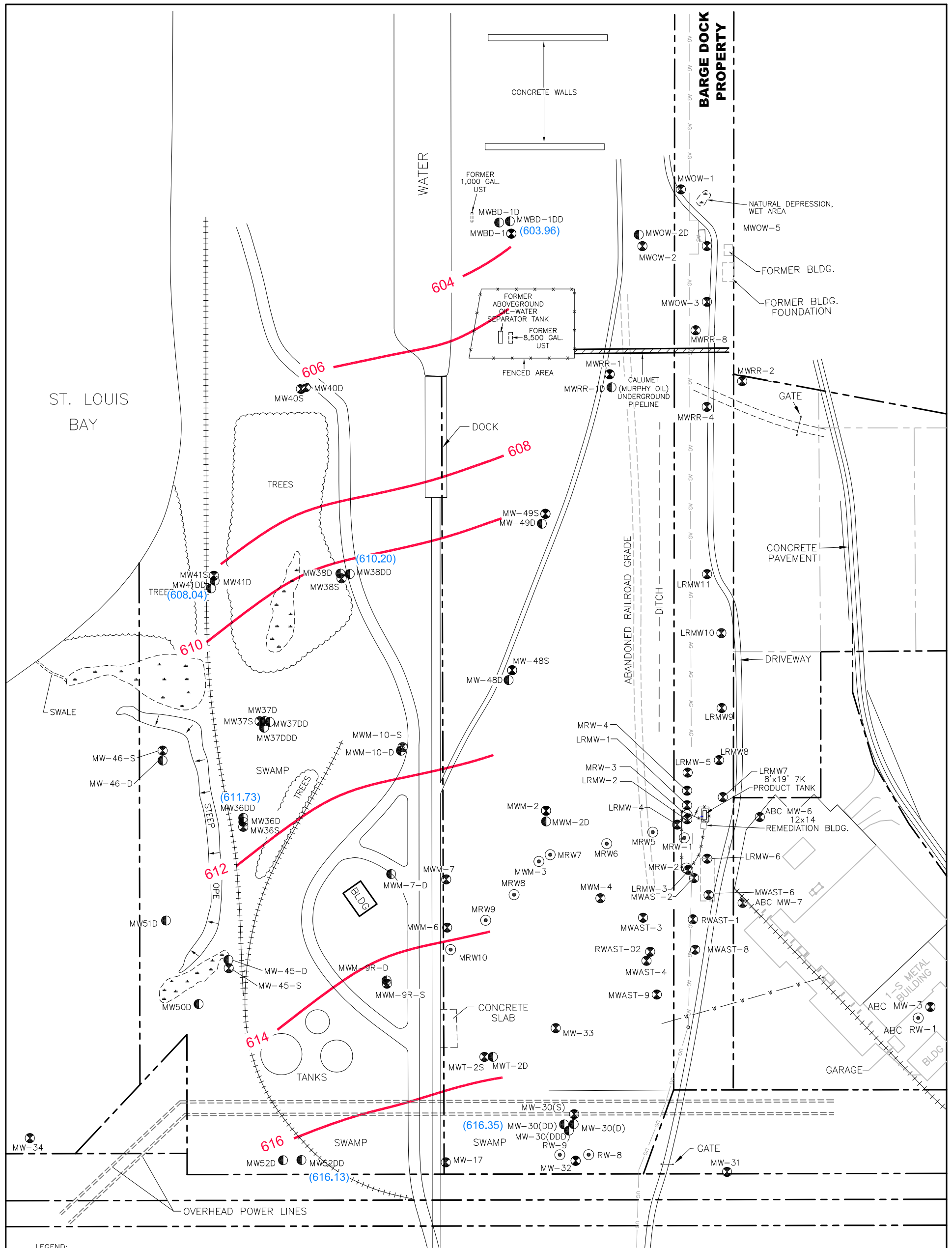
- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATIONS
- RECOVERY WELL LOCATION
- ABANDONED RECOVERY WELL LOCATION
- NATURAL DEPRESSION, WET AREA
- AG — ABOVE GROUND PIPELINE (REMOVED)
- UG — UNDERGROUND PIPELINE (APPROXIMATE LOCATION, STATUS UNKNOWN)
- CALUMET (MURPHY OIL) UNDERGROUND PIPELINE
- w — WATER LINE (APPROXIMATE LOCATION)
- ==== GRAVEL ACCESS ROAD
- ++++ RAILROAD TRACKS
- - - - FENCE LINE
- - - - APPROXIMATE PROPERTY LINE
- (610.79) GROUNDWATER ELEVATION (NO LNAPL IN WELL)
- 610 — GROUNDWATER CONTOUR LINE
- ← INFERRED GROUNDWATER FLOW DIRECTION

North  
 0 200  
 SCALE IN FEET

**FIGURE 5**  
**GROUNDWATER CONTOUR MAP –JUNE 18, 2018**  
**DEEP WELLS (BARGE DOCK)**  
**FORMER AMOCO TERMINAL**  
**SUPERIOR, WISCONSIN**

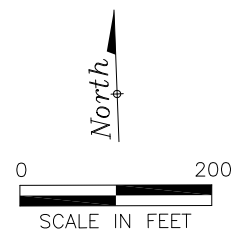
PROJECT NO. WISUP181	PREPARED BY LK	DRAWN BY DD/SAA	
DATE 07/18/2018	REVIEWED BY	FILE NAME BD-0618-GWS	





LEGEND:

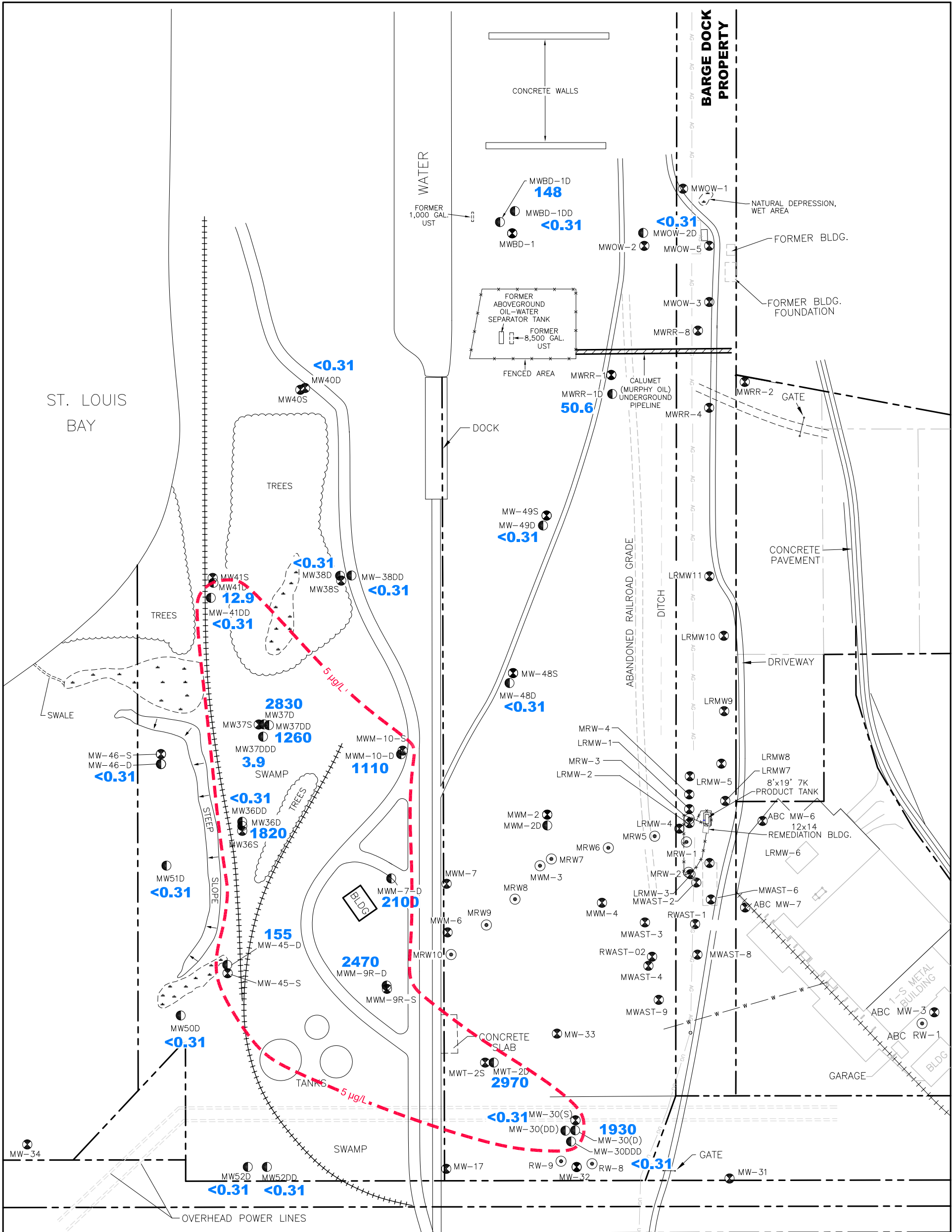
- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATIONS
- RECOVERY WELL LOCATION
- ABANDONED RECOVERY WELL LOCATION
- NATURAL DEPRESSION, WET AREA
- AG — ABOVE GROUND PIPELINE (REMOVED)
- UG — UNDERGROUND PIPELINE (APPROXIMATE LOCATION, STATUS UNKNOWN)
- CALUMET (MURPHY OIL) UNDERGROUND PIPELINE
- w — WATER LINE (APPROXIMATE LOCATION)
- ==== GRAVEL ACCESS ROAD
- ++++ RAILROAD TRACKS
- - - - FENCE LINE
- - - - APPROXIMATE PROPERTY LINE



**FIGURE 6**  
**GROUNDWATER CONTOUR MAP –JUNE 18, 2018**  
**DD LEVEL WELLS (BARGE DOCK)**  
**FORMER AMOCO TERMINAL**  
**SUPERIOR, WISCONSIN**

PROJECT NO. WISUP181	PREPARED BY LK	DRAWN BY DD/SAA
DATE 07/18/2018	REVIEWED BY	FILE NAME BD-0618-GWS

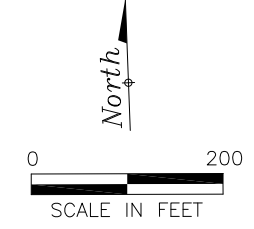




- LEGEND:**
- ⊗ MONITORING WELL LOCATION
  - ⊙ DEEP MONITORING WELL LOCATIONS
  - ⊕ RECOVERY WELL LOCATION
  - ⊖ ABANDONED RECOVERY WELL LOCATION
  - ⊙ NATURAL DEPRESSION, WET AREA
  - AG — ABOVE GROUND PIPELINE (REMOVED)
  - UG — UNDERGROUND PIPELINE (APPROXIMATE LOCATION, STATUS UNKNOWN)
  - CALUMET (MURPHY OIL) UNDERGROUND PIPELINE
  - W — WATER LINE (APPROXIMATE LOCATION)
  - ==== GRAVEL ACCESS ROAD
  - ++++ RAILROAD TRACKS
  - \*—\*— FENCE LINE
  - - - - - APPROXIMATE PROPERTY LINE


**1930** BENZENE CONCENTRATION µg/L (OCTOBER 2017) (ES = 5 µg/L)

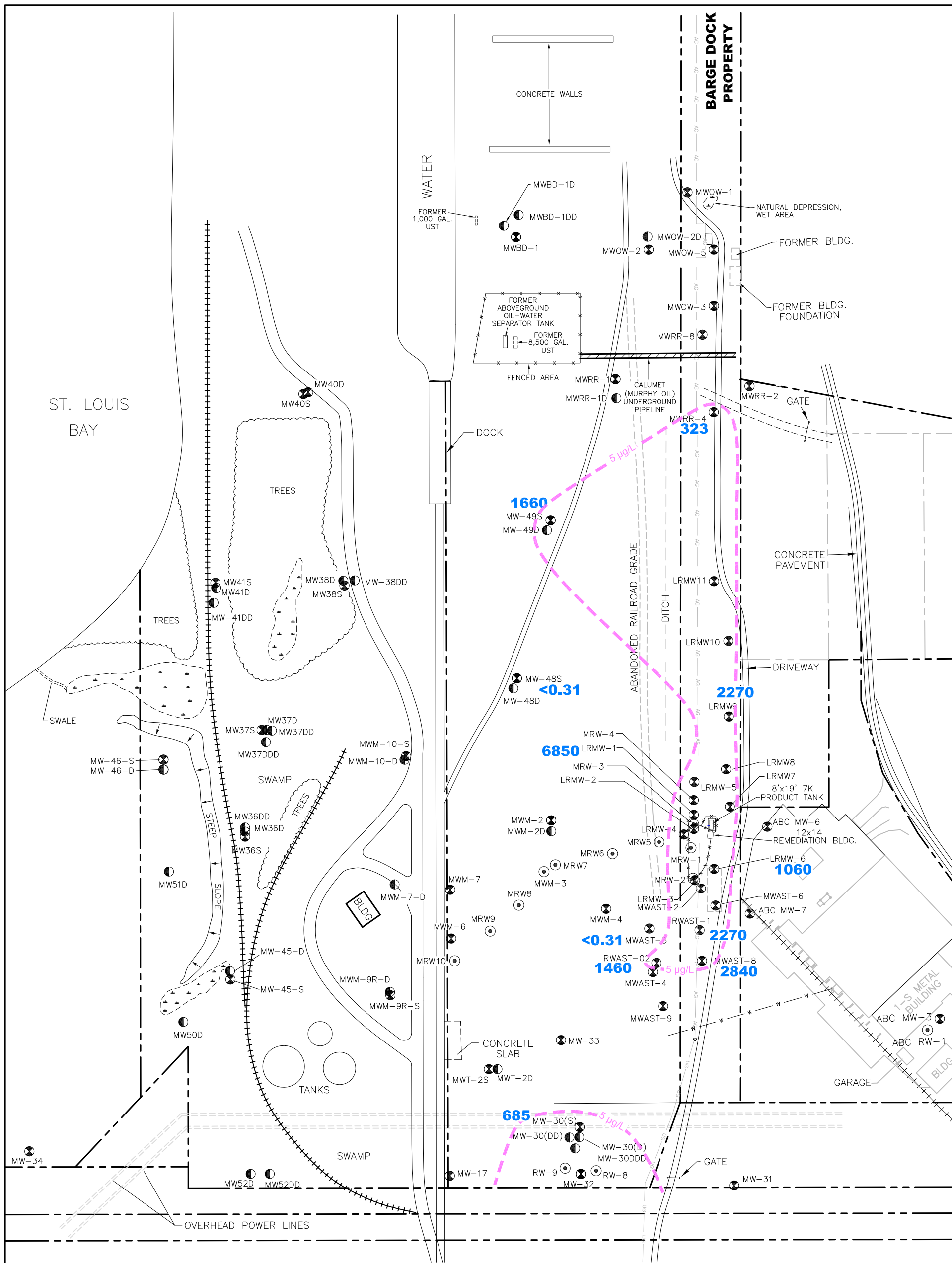
**5 µg/L** - INFERRED HORIZONTAL EXTENT OF BENZENE CONTAMINATION EXCEEDING THE NR 140 ES



**FIGURE 7**  
**DISSOLVED PHASE BENZENE CONCENTRATIONS—**  
**BARGE DOCK (DEEP WELLS)**  
**OCTOBER 2017**  
**FORMER AMOCO TERMINAL**  
**SUPERIOR, WISCONSIN**

PROJECT NO. WISUP181	PREPARED BY LK	DRAWN BY DD/DR
DATE 7/25/18	REVIEWED BY	FILE NAME BD-1017-BENZ





- LEGEND:**
- MONITORING WELL LOCATION
  - DEEP MONITORING WELL LOCATIONS
  - RECOVERY WELL LOCATION
  - ABANDONED RECOVERY WELL LOCATION
  - NATURAL DEPRESSION, WET AREA
  - <sup>AG</sup>— ABOVE GROUND PIPELINE (REMOVED)
  - <sup>UG</sup>— UNDERGROUND PIPELINE (APPROXIMATE LOCATION, STATUS UNKNOWN)
  - ==== CALUMET (MURPHY OIL) UNDERGROUND PIPELINE
  - w— WATER LINE (APPROXIMATE LOCATION)
  - ===== GRAVEL ACCESS ROAD
  - + + + + + RAILROAD TRACKS
  - \*—\*—\*— FENCE LINE
  - - - - - APPROXIMATE PROPERTY LINE

**685** BENZENE CONCENTRATION ug/L  
(OCTOBER 2017)  
(ES = 5 ug/L)

— 5 ug/L — INFERRED HORIZONTAL EXTENT OF BENZENE CONTAMINATION EXCEEDING THE NR 140 ES



0 200  
SCALE IN FEET

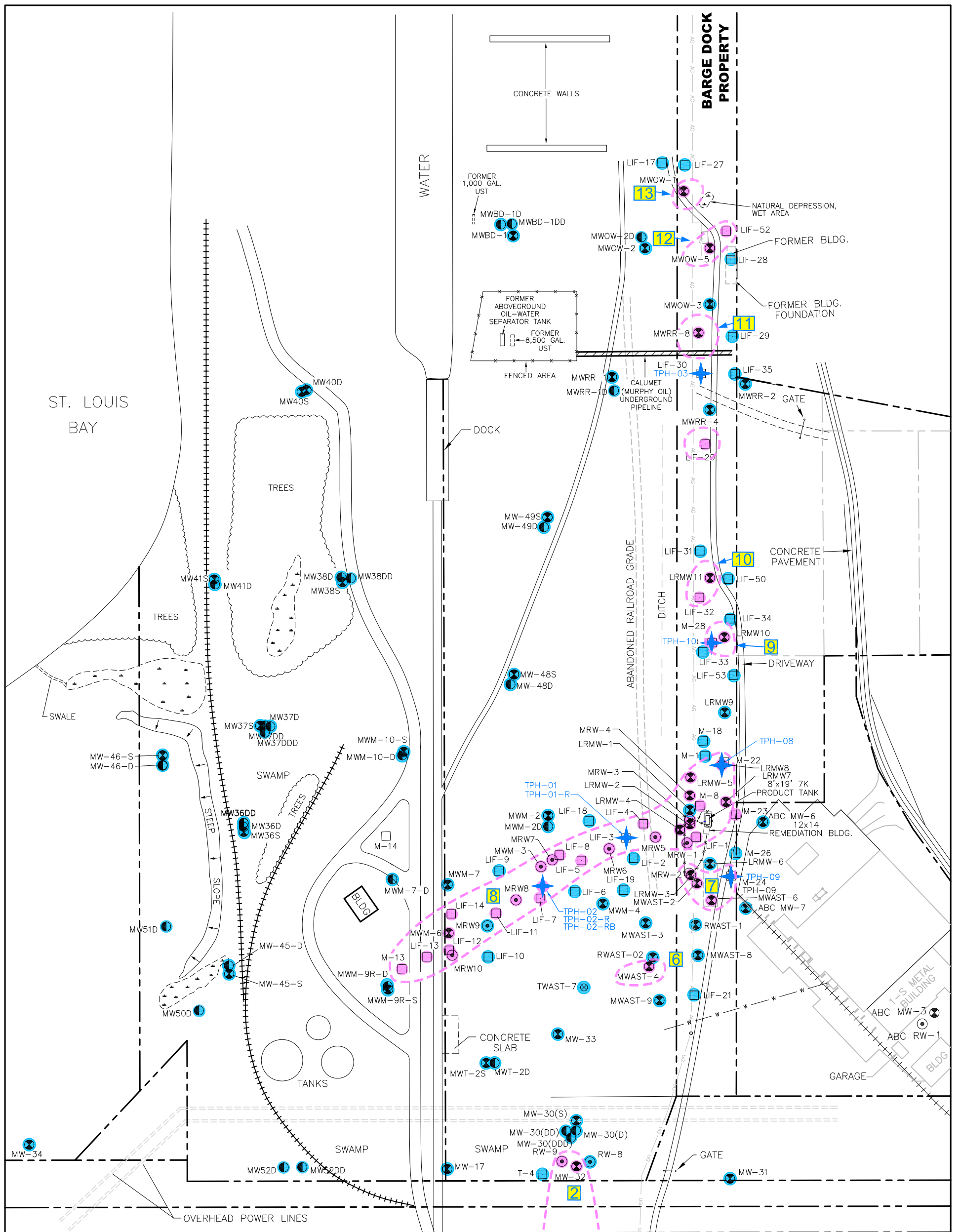
### FIGURE 8

#### DISSOLVED PHASE BENZENE CONCENTRATIONS— BARGE DOCK (SHALLOW WELLS)

OCTOBER 2017  
FORMER AMOCO TERMINAL  
SUPERIOR, WISCONSIN

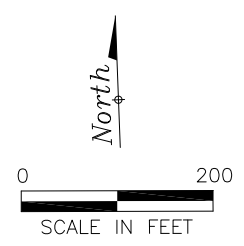
PROJECT NO. WISUP181	PREPARED BY LK	DRAWN BY DD/DR
DATE 7/25/18	REVIEWED BY	FILE NAME BD-1017-BENZ

anteagroup



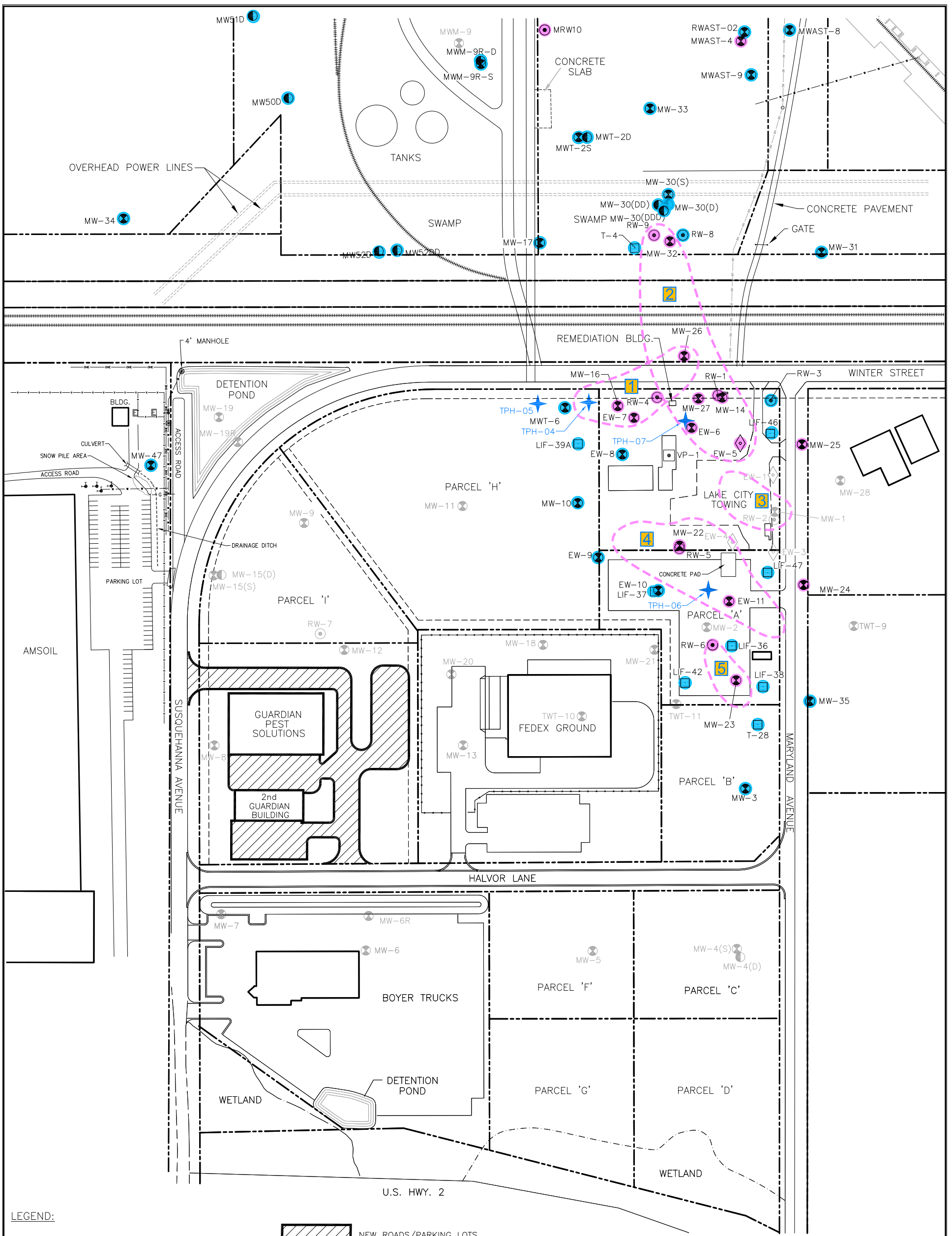
- LEGEND:**
- MONITORING WELL LOCATION
  - TEMPORARY MONITORING WELL LOCATION (REMOVED)
  - DEEP MONITORING WELL LOCATIONS
  - RECOVERY WELL LOCATION
  - ABANDONED RECOVERY WELL LOCATION
  - TPH BORING LOCATION
  - SVE TOTAL FLUIDS RECOVERY WELL LOCATION
  - CPT-LIF BORING LOCATION
  - NATURAL DEPRESSION, WET AREA
  - ABOVE GROUND PIPELINE (REMOVED)
  - UNDERGROUND PIPELINE (APPROXIMATE LOCATION, STATUS UNKNOWN)
  - CALUMET (MURPHY OIL) UNDERGROUND PIPELINE
  - WATER LINE (APPROXIMATE LOCATION)
  - GRAVEL ACCESS ROAD
  - RAILROAD TRACKS
  - FENCE LINE
  - APPROXIMATE PROPERTY LINE

- LNAPL EXTENT (INFERRED FROM LIF & WELL GAUGING DATA) (PLUME I.D. REFERENCED IN TEXT)
- POINTS WITH LNAPL
- NO LNAPL



**FIGURE 9**  
**LNAPL EXTENT MAP – JUNE 2018**  
**(BARGE DOCK)**  
**FORMER AMOCO TERMINAL**  
**SUPERIOR, WISCONSIN**

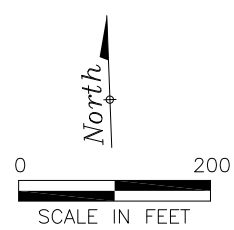
PROJECT NO. WISUP181	PREPARED BY LK	DRAWN BY DD/SA
DATE 07/18/18	REVIEWED BY	FILE NAME BD-0618-LNAPL



LEGEND:

- ⊗ MONITORING WELL LOCATION
- ⊗ ABANDONED MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATIONS
- ABANDONED DEEP MONITORING WELL LOCATION
- ⊙ RECOVERY WELL LOCATION
- ⊙ ABANDONED RECOVERY WELL LOCATION
- ◇ SVE TOTAL FLUIDS RECOVERY WELL LOCATION
- ◇ ABANDONED SVE TOTAL FLUIDS RECOVERY WELL LOCATION
- ★ LIF-TPH BORING LOCATION
- CPT-LIF BORING LOCATION
- ⊠ VAPOR MONITORING POINT LOCATION
- ⊕ MANHOLE
- ⊕ FIRE HYDRANT
- ⊠ ELECTRICAL BOX
- ▨ NEW ROADS/PARKING LOTS
- OHE — OVERHEAD ELECTRIC LINE
- ||||| RAILROAD TRACKS
- x-x-x- FENCE LINE
- - - - - APPROXIMATE PROPERTY LINE
- AG — ABOVE GROUND PIPELINE (REMOVED)
- UG — UNDERGROUND PIPELINE (APPROXIMATE LOCATION, STATUS UNKNOWN)
- W — WATER LINE (APPROXIMATE LOCATION)
- G — NATURAL GAS LINE (APPROXIMATE LOCATION)
- 1 LNAPL EXTENT (PLUME I.D. REFERENCED IN TEXT)
- POINTS WITH LNAPL
- LOW/NO LNAPL

NOTE:  
PLUME 3 IS INFERRED, BASED ON HISTORICAL DATA

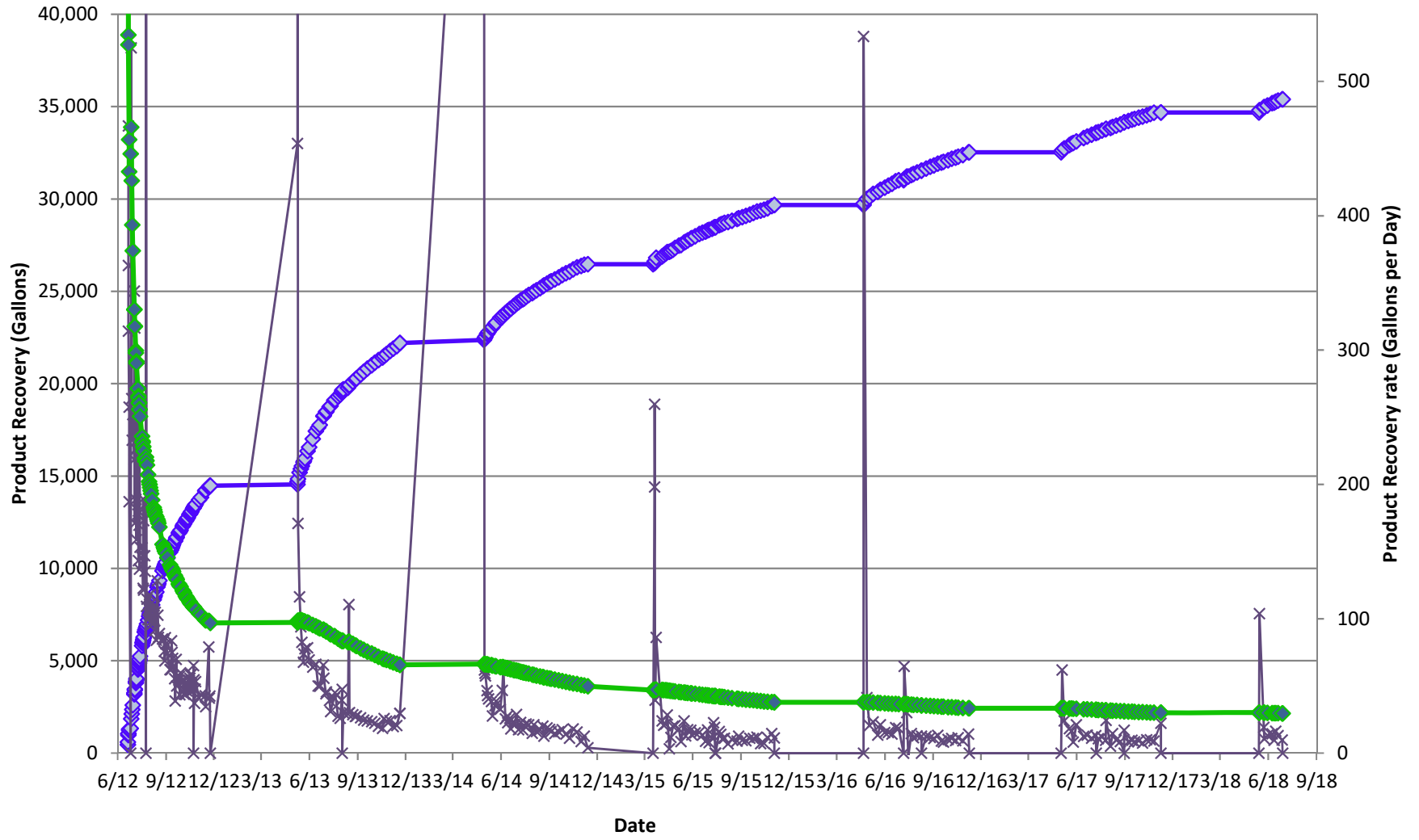


**FIGURE 10**  
**LNAPL EXTENT MAP – JUNE 2018**  
**(TERMINAL)**  
**FORMER AMOCO TERMINAL**  
**SUPERIOR, WISCONSIN**

PROJECT NO. WISUP181	PREPARED BY LK	DRAWN BY DD/SAA
DATE 07/18/18	REVIEWED BY	FILE NAME TERM-0618-LNAPL

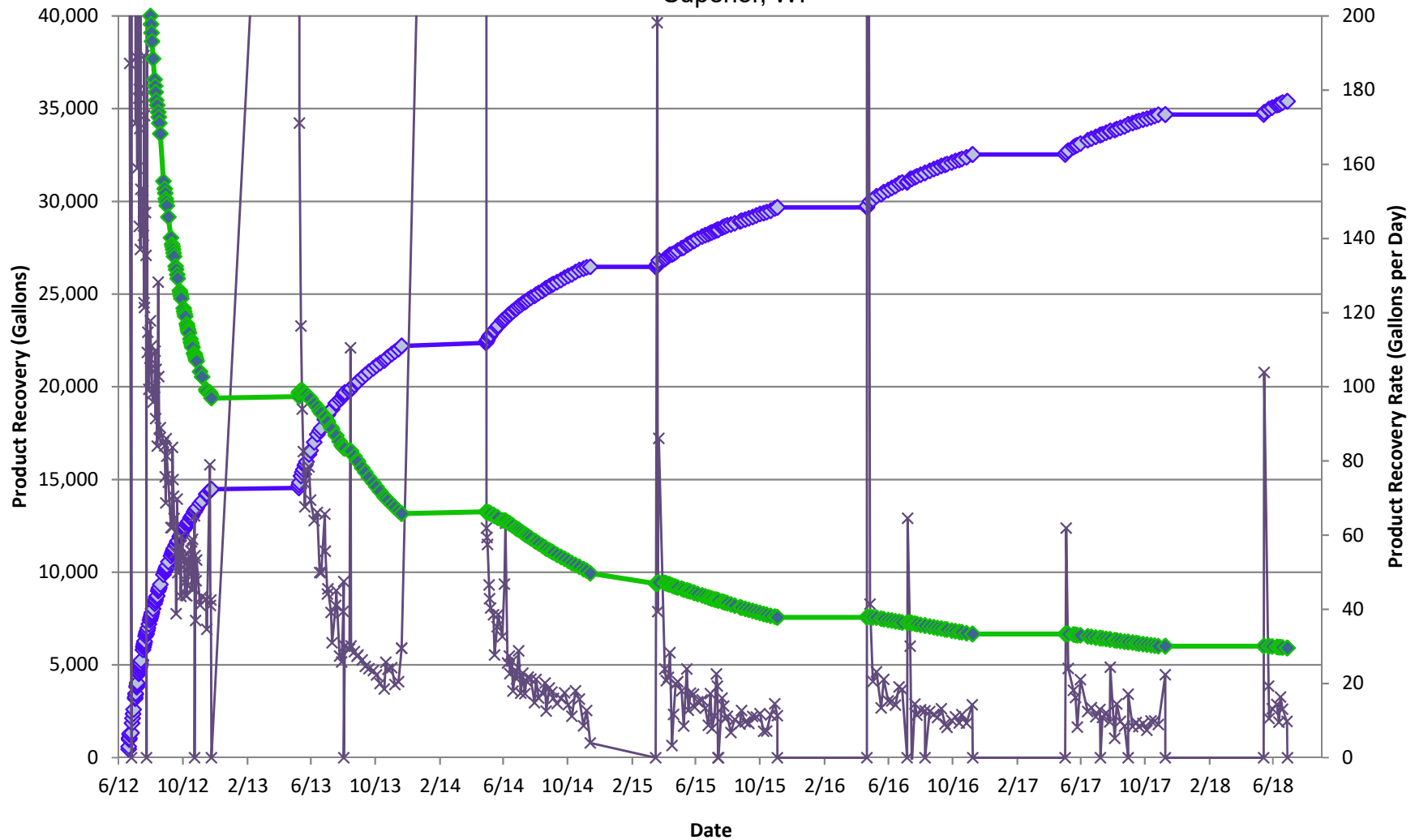


**Figure 11a**  
**Barge Dock Phase II System**  
**LNAPL Recovery**  
 Former Amoco Terminal  
 Superior, WI



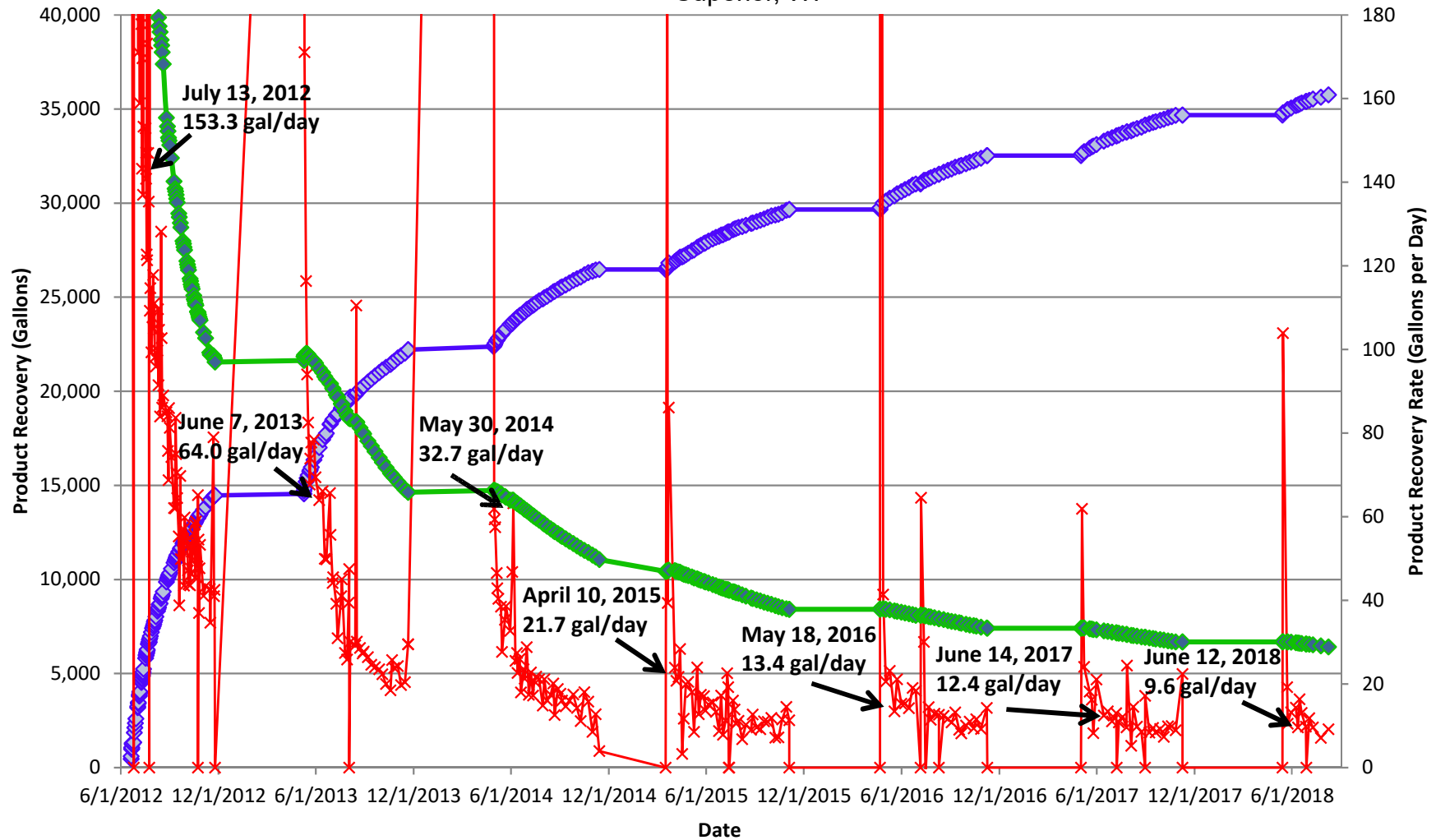
◆ Cumulative Product recovered (gallons)     
 × Period Product recovery rate (gallons / day)     
 ◆ Cumulative Product recovery rate (gallons / day)

**Figure 11b**  
**Barge Dock Phase II System**  
**LNAPL Recovery Graph**  
 Former Amoco Terminal  
 Superior, WI



◆ Cumulative Product recovered (gallons)     
 × Period Product recovery rate (gallons / day)     
 ◆ Cumulative Product recovery rate (gallons / day)

**Figure 11c**  
**Barge Dock Phase II System**  
**LNAPL Recovery Graph**  
 Former Amoco Terminal  
 Superior, WI

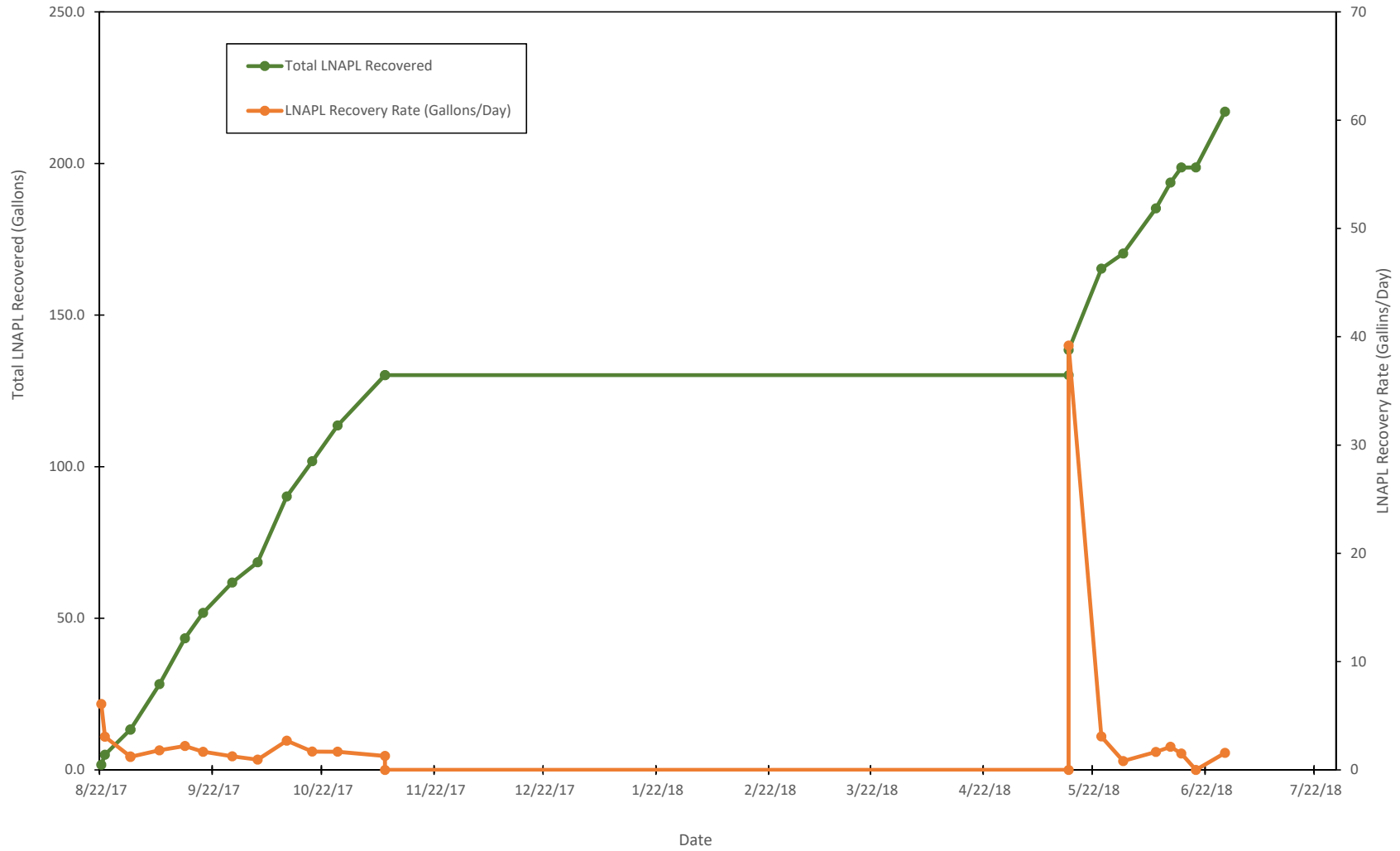


◆ Cumulative Product recovered (gallons)   
 × Period Product recovery rate (gallons / day)   
 ◆ Cumulative Product recovery rate (gallons / day)

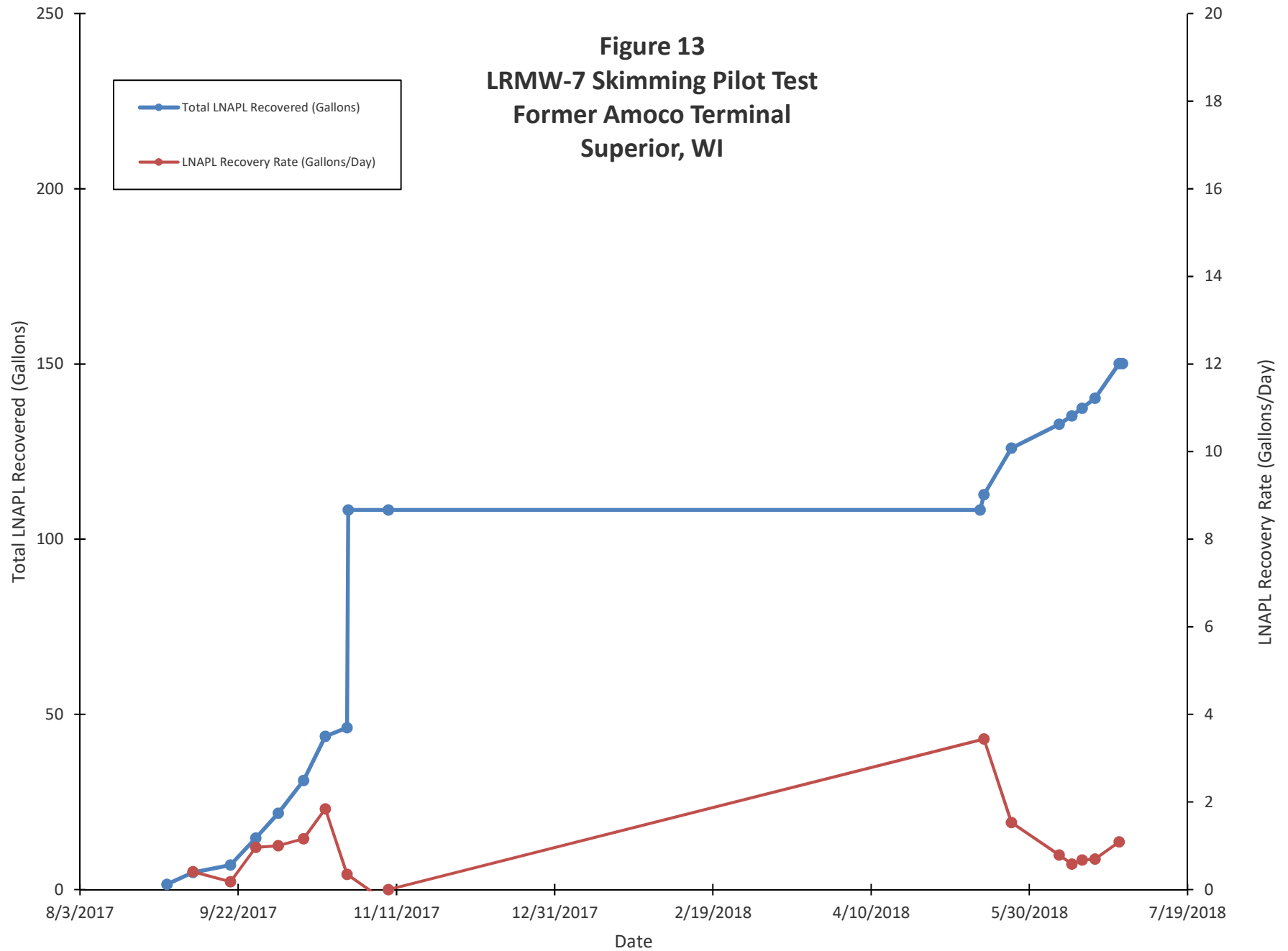
Highlighted dates mark LNAPL recovery rate 4 weeks after seasonal system startup



**Figure 12**  
**MRW-3 LNAPL Recovery**  
**Former Amoco Terminal**  
**Superior, WI**



**Figure 13**  
**LRMW-7 Skimming Pilot Test**  
**Former Amoco Terminal**  
**Superior, WI**



## Tables

- Table 1 - 2018 Gauge and Bail Table
- Table 2 - 2018 Groundwater Sampling Plan
- Table 3 - Groundwater and LNAPL Gauging Data - Terminal
- Table 4 - Groundwater and LNAPL Gauging Data - Barge Dock
- Table 5 - Groundwater Analytical Results - Terminal
- Table 6 - Groundwater Analytical Results - Barge Dock
- Table 7 - Phase II System LNAPL Recovery
- Table 8 - MWASt-4 Extended Duration LNAPL Recovery Test Summary
- Table 9 - MRW-3 LNAPL Recovery Test Summary
- Table 10 - LRMW-7 LNAPL Recovery Test Summary

**Table 1**  
**2018 Gauge and Bail**

Well	5/14/2018			5/15/2018			5/23/2018		
	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)
RW-8	14.56	14.64	--				14.62	14.7	--
RW-9	14.72	15.2	--				14.85	15.33	0.25
MW-32	--	17.5	--				17.59	17.81	0.25
MWM-6	15.32	15.9	--	15.75	15.95	0.25	15.63	15.83	--
MWM-7									
MWM-7D									
MRW-9	--	15.18	--				--	15.28	--
MRW-10	15.28	15.6	--	15.66	15.95	0.25	15.44	15.75	--
MWAST-2									
MWAST-3	--	13.72	--						
MWAST-6									
LRMW-1									
LRMW-2									
LRMW-3									
LRMW-4									
LRMW-5									
LRMW-6									
LRMW-7	12.26	19.62	6	13.49	16.45	--	14.45	14.57	--
LRMW-8									
LRMW-9									
LRMW-10									
LRMW-11									
MRW-1	14.44	14.5							
MRW-2	14.5	14.56							
MRW-3	13.17	20.09	14.5	13.97	18.02	--	15.47	16.45	--
MRW-4									
MWBD-1									
MWRR-1									
MWRR-2									
MWRR-4									
MWRR-8									
MWOW-1									
MWOW-2									
MWOW-3									
MWOW-5									
RWAST-1									
RWAST-2	--	15.02	--						
MWAST-8									
MWAST-9	--	14.94	--						
MWM-4									
MWAST-4	14.38	16	--	14.96	15.15	--	14.6	15.2	3
MRW-5	11.75	18.83	--	13.41	13.72	--	13.7	14.00	--
MRW-6	12.26	20.31	--	14.1	14.41	--	14.33	14.69	--
MRW-7	14.03	25.34	--	16.59	16.8	--	16.8	17.08	--
MWM-2									
MWM-2D									
MWM-3	14.11	--	--	17.06	17.2	--	17.4	17.7	--
MWM-9RS									
MWM-9RD									
MWM-10S									
MWM-10D									
MRW-8							16.5	16.78	--
MWT-2S									
MWT-2D									
MWT-6							20.3	20.43	--
MW-16				20.23	25.76	1	20.13	25.78	0.25
RW-4							19.4	21.5	--
RW-1				20.26	23.73	12	20.5	22.6	3

**Table 1**  
**2018 Gauge and Bail**

Well	5/14/2018			5/15/2018			5/23/2018		
	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)
MW-14							--	19.44	--
MW-17									
RW-3									
MW-22									
EW-6									
EW-7									
EW-8									
EW-9									
EW-10									
EW-11									
RW-5									
RW-6									
MW-10									
MW-23									
MW-27				20.45	21.26	0.25	20.35	21.15	0.25
MW-3									
MW-30S	--	16.00	--						
MW-30D	--	17.74	--						
MW-30DD	--	17.91	--						
MW-31									
MW-33									
MW-34									
MW-35									
MW-38D									
MW-38S									
MW-40S									
MW-40D									
MW-37S									
MW-37D									
MW-37DD									
MW-37DDD									
MW-36S									
MW-36D									
MW-36DD									
MW-41S									
MW-41D									
MW-41DD									
MW-46S									
MW-46D									
MW-45D									
MW-45S									
MW-48S									
MW-48D									
MW-49S									
MW-49D									
MWBD-1D									
MW-24									
MW-25									
MWRR-1D									
MW-30DDD									
MW-38DD									
MW-50D									
MW-51D									
MW-52D									
MW-52DD									
MWOW-2D									
MWBD-1DD									
MW-26									
TOTAL			20.5			13.75			7

**Table 1  
2018 Gauge and Bail**

Well	5/24/2018			5/30/2018			6/8/2018		
	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)
RW-8				14.27	14.31	--			
RW-9	14.85	15.25	--	14.49	14.86	0.2			
MW-32	17.58	17.7	--	--	17.25	--			
MWM-6									
MWM-7									
MWM-7D									
MRW-9				--	14.85	--	--	14.47	--
MRW-10				15.01	15.33	--	14.63	14.95	0.5
MWAST-2									
MWAST-3				--	13.52	--			
MWAST-6									
LRMW-1				--	13.82	--			
LRMW-2									
LRMW-3									
LRMW-4									
LRMW-5									
LRMW-6				--	16.22	--			
LRMW-7	14.4	14.55	--	13.64	14.43	--	13.2	13.21	--
LRMW-8									
LRMW-9				--	12.2	--			
LRMW-10									
LRMW-11									
MRW-1									
MRW-2									
MRW-3	15.26	15.95	--	14.49	15.75	--	13.99	14.46	--
MRW-4									
MWBD-1									
MWRR-1									
MWRR-2									
MWRR-4				--	16.28	--			
MWRR-8				15.4	15.45	--			
MWOW-1				5.21	5.25	--			
MWOW-2									
MWOW-3									
MWOW-5				14.94	14.97	--			
RWAST-1				--	13.28				
RWAST-2				--	14.8				
MWAST-8				--	15.12				
MWAST-9									
MWM-4									
MWAST-4	14.55	16.25	--	14.32	14.68	--	13.89	14.86	--
MRW-5	13.64	13.91	--	13.03	13.26	--	12.49	12.79	--
MRW-6	14.3	14.6	--	13.76	14.04	--	13.28	13.57	--
MRW-7	16.76	17	--	16.28	16.48	--	15.85	16.04	--
MWM-2									
MWM-2D									
MWM-3	17.25	17.4	--	16.81	--	--	16.44	16.46	--
MWM-9RS									
MWM-9RD									
MWM-10S									
MWM-10D									
MRW-8	16.46	16.7	--	16.06	16.28	--	15.78	15.86	--
MWT-2S									
MWT-2D									
MWT-6									
MW-16									
RW-4									
RW-1									

**Table 1**  
**2018 Gauge and Bail**

Well	5/24/2018			5/30/2018			6/8/2018		
	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)
MW-14									
MW-17									
RW-3									
MW-22									
EW-6									
EW-7									
EW-8									
EW-9									
EW-10									
EW-11									
RW-5									
RW-6									
MW-10									
MW-23									
MW-27									
MW-3									
MW-30S									
MW-30D									
MW-30DD									
MW-31									
MW-33									
MW-34									
MW-35									
MW-38D									
MW-38S									
MW-40S									
MW-40D									
MW-37S									
MW-37D									
MW-37DD									
MW-37DDD									
MW-36S									
MW-36D									
MW-36DD									
MW-41S									
MW-41D									
MW-41DD									
MW-46S									
MW-46D									
MW-45D									
MW-45S									
MW-48S									
MW-48D									
MW-49S									
MW-49D									
MWBD-1D									
MW-24									
MW-25									
MWRR-1D									
MW-30DDD									
MW-38DD									
MW-50D									
MW-51D									
MW-52D									
MW-52DD									
MWOW-2D									
MWBD-1DD									
MW-26									
<b>TOTAL</b>			0			0.2			0.5

**Table 1  
2018 Gauge and Bail**

Well	6/12/2018			6/15/2018			6/19/2018		
	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)
RW-8									
RW-9									
MW-32									
MWM-6									
MWM-7									
MWM-7D							--	10.7	--
MRW-9									
MRW-10									
MWAST-2									
MWAST-3							--	11.85	--
MWAST-6									
LRMW-1									
LRMW-2									
LRMW-3									
LRMW-4									
LRMW-5									
LRMW-6							--	14.86	--
LRMW-7	13.35	13.4	--	12.71	15.23	--	11.72	13.26	--
LRMW-8									
LRMW-9							--	10.75	--
LRMW-10									
LRMW-11									
MRW-1									
MRW-2									
MRW-3	14.2	14.43	--	--	14.5	--	12.1	15.49	--
MRW-4									
MWBD-1									
MWRR-1									
MWRR-2									
MWRR-4							--	15.79	--
MWRR-8									
MWOW-1									
MWOW-2									
MWOW-3									
MWOW-5									
RWAST-1							--	11.67	--
RWAST-2							--	13.12	--
MWAST-8							--	13.4	--
MWAST-9									
MWM-4									
MWAST-4									
MRW-5	12.64	12.92	--	12.71	13	--	11.68	11.69	--
MRW-6	13.39	13.72	--				12.46	12.47	--
MRW-7	16	16.23	--				14.99	15	--
MWM-2									
MWM-2D								14.6	
MWM-3	16.47	16.65	--				pump obstruction		
MWM-9RS									
MWM-9RD							--	12.37	--
MWM-10S									
MWM-10D							--	8.9	--
MRW-8	15.67	15.92	--				14.81	14.98	--
MWT-2S									
MWT-2D							--	16.22	--
MWT-6									
MW-16									
RW-4									
RW-1									



**Table 1**  
**2018 Gauge and Bail**

Well	6/12/2018			6/15/2018			6/19/2018		
	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)
MW-14									
MW-17									
RW-3									
MW-22									
EW-6									
EW-7									
EW-8									
EW-9									
EW-10									
EW-11									
RW-5									
RW-6									
MW-10									
MW-23									
MW-27									
MW-3									
MW-30S							--	14.2	--
MW-30D							--	16.45	--
MW-30DD							--	16.7	--
MW-31									
MW-33									
MW-34									
MW-35									
MW-38D							--	2.95	--
MW-38S									
MW-40S									
MW-40D							--	1.42	--
MW-37S									
MW-37D							--	6.17	--
MW-37DD							--	5.53	--
MW-37DDD							--	6.35	--
MW-36S									
MW-36D							--	7.35	--
MW-36DD								7.08	
MW-41S									
MW-41D							--	2.32	--
MW-41DD							--	3.58	--
MW-46S									
MW-46D							--	15.9	--
MW-45D							--	9.82	--
MW-45S									
MW-48S							--	12.7	--
MW-48D							--	13.2	--
MW-49S							--	12.12	--
MW-49D							--	12.77	--
MWBD-1D							--	3.45	--
MW-24									
MW-25									
MWRR-1D							--	7.4	--
MW-30DDD							--	16.38	--
MW-38DD							--	3.28	--
MW-50D							--	16.65	--
MW-51D							--	14.98	--
MW-52D							--	18.35	--
MW-52DD							--	19.52	--
MWOW-2D							--	2.62	--
MWBD-1DD							--	1.35	--
MW-26									
TOTAL			0			0			0

**Table 1  
2018 Gauge and Bail**

Well	6/27/2018			6/28/2018		
	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)
RW-8						
RW-9						
MW-32						
MWM-6						
MWM-7						
MWM-7D	--	10.72	--			
MRW-9						
MRW-10						
MWAST-2						
MWAST-3						
MWAST-6						
LRMW-1	--	12.75	--			
LRMW-2						
LRMW-3						
LRMW-4						
LRMW-5						
LRMW-6						
LRMW-7	12.76	13		12.76	13	--
LRMW-8						
LRMW-9	--	11.24				
LRMW-10						
LRMW-11						
MRW-1						
MRW-2						
MRW-3	13.35	14.2	--	13.35	14.2	--
MRW-4						
MWBD-1						
MWRR-1						
MWRR-2						
MWRR-4						
MWRR-8						
MWOW-1						
MWOW-2						
MWOW-3						
MWOW-5						
RWAST-1	--	11.90	--			
RWAST-2	--	13.34	--			
MWAST-8	--	13.66	--			
MWAST-9						
MWM-4						
MWAST-4				12.45	13.6	--
MRW-5				12.95	13.92	--
MRW-6				12.75	13.15	--
MRW-7				15.25	16.2	--
MWM-2						
MWM-2D						
MWM-3				--	--	pump
MWM-9RS						
MWM-9RD	--	12.34	--			
MWM-10S						
MWM-10D	--	8.99	--			
MRW-8				15.18	17.2	--
MWT-2S						
MWT-2D	--	16.12	--			
MWT-6						
MW-16						
RW-4						
RW-1						

**Table 1  
2018 Gauge and Bail**

Well	6/27/2018			6/28/2018		
	DTP	DTW	Bailed (gal)	DTP	DTW	Bailed (gal)
MW-14						
MW-17						
RW-3						
MW-22						
EW-6						
EW-7						
EW-8						
EW-9						
EW-10						
EW-11						
RW-5						
RW-6						
MW-10						
MW-23						
MW-27						
MW-3						
MW-30S	--	14.2	--			
MW-30D	--	16.3	--			
MW-30DD						
MW-31						
MW-33						
MW-34						
MW-35						
MW-38D						
MW-38S						
MW-40S						
MW-40D						
MW-37S						
MW-37D	--	6.35	--			
MW-37DD	--	5.62	--			
MW-37DDD	--	6.43	--			
MW-36S						
MW-36D	--	7.45	--			
MW-36DD						
MW-41S						
MW-41D						
MW-41DD	--	5.1	--			
MW-46S						
MW-46D						
MW-45D	--	9.85	--			
MW-45S						
MW-48S						
MW-48D						
MW-49S						
MW-49D						
MWBD-1D						
MW-24						
MW-25						
MWRR-1D	--	14.08	--			
MW-30DDD	--	16.27	--			
MW-38DD						
MW-50D						
MW-51D						
MW-52D						
MW-52DD						
MWOW-2D						
MWBD-1DD						
MW-26						
TOTAL			0			0

**Table 2**  
**Groundwater Sampling Plan - 2018**  
Former Amoco Terminal  
Superior, Wisconsin

Area/Well	Last Benzene µg/l	2018 Spring Sampling	2018 Fall Sampling	Semi-Annual Gauge DTW/LNAPL	Annual Gauge DTW/LNAPL
EW-5	LNAPL				X
EW-6	LNAPL				X
EW-7	LNAPL				X
EW-8	407				X
EW-9	28.1				X
EW-10	1.4				X
EW-11	LNAPL				X
MW-10	3.1				X
MW-14	LNAPL				X
MW-16	LNAPL			X	X
MW-17	<0.40				X
MW-22	LNAPL				X
MW-23	LNAPL				X
MW-24	LNAPL				X
MW-25	LNAPL				X
MW-26	LNAPL				X
MW-27	LNAPL			X	X
MW-30D	1850	X	X	X	X
MW-30DD	<0.40	X	X	X	X
MW-30S	1420	X	X	X	X
MW-30DDD	N/A	X	X	X	X
MW-31	<0.40				X
MW-32	LNAPL			X	X
MW-33	<0.40				X
MW-36D	1920	X	X	X	X
MW-36DD	<0.40	X	X	X	X
MW-36S	<0.40		X		X
MW-37D	3020	X	X	X	X
MW-37DD	1060	X	X	X	X
MW-37S	<0.40		X		X
MW-37DDD	N/A	X	X	X	X
MW-38D	<0.40	X	X	X	X
MW-38S	<0.40		X		X
MW-38DD	N/A	X	X	X	X
MW-40D	<0.40	X	X	X	X
MW-40S	<0.40		X		X
MW-41D	18.2	X	X	X	X
MW-41S	<0.40		X		X
MW-41DD	N/A	X	X	X	X
MW-45D	144	X	X	X	X
MW-45S	<0.40		X		X
MW-46D	<0.40	X	X	X	X
MW-46S	<0.40		X		X
MW-48S	<0.40	X	X	X	X
MW-48D	<0.40	X	X	X	X
MW-49S	<0.40	X	X	X	X
MW-49D	<0.40	X	X	X	X
MW-50D	N/A	X	X	X	X
MW-51D	N/A	X	X	X	X
MW-52D	N/A	X	X	X	X
MW-52DD	N/A	X	X	X	X
MWT-2D	3300	X	X	X	X
MWT-2S	<1.0		X		X
MWT-6	LNAPL				X
RW-1	LNAPL			X	X
RW-3	4560				X
RW-4	LNAPL			X	X
RW-5	LNAPL				X
RW-6	LNAPL			X	X
RW-8	LNAPL				X
RW-9	LNAPL			X	X
MW-3	7.6				X
MW-35	<0.40				X
MW-34	<0.40				X
MW-47	<0.40				X
MWAST-2	LNAPL				X
MWAST-3	207	X		X	X
MWAST-4	LNAPL				X
MWAST-6	LNAPL				X
MWAST-8	No LNAPL	X		X	X
MWAST-9	93.2				X

**Table 2**  
**Groundwater Sampling Plan - 2018**  
 Former Amoco Terminal  
 Superior, Wisconsin

Area/Well	Last Benzene µg/l	2018 Spring Sampling	2018 Fall Sampling	Semi-Annual Gauge DTW/LNAPL	Annual Gauge DTW/LNAPL
RWAST-1	No LNAPL	X		X	X
RWAST-2	No LNAPL	X		X	X
LRMW-1	No LNAPL	X		X	X
LRMW-2	LNAPL				X
LRMW-3	LNAPL				X
LRMW-4	LNAPL				X
LRMW-5	LNAPL				X
LRMW-6	1130	X		X	X
LRMW-7	LNAPL			X	X
MWM-2	<0.40				X
MWM-2D	<0.40	X	X	X	X
MWM-3	LNAPL				X
MWM-4	1.0				X
MWM-6	LNAPL				X
MWM-7	4				X
MWM-7D	1980	X	X	X	X
MWM-9RD	2470	X	X	X	X
MWM-9RS	<0.40				X
MWM-10D	1080	X	X	X	X
MWM-10S	<0.40				X
MRW-1	LNAPL				X
MRW-2	LNAPL				X
MRW-3	LNAPL			X	X
MRW-4	LNAPL				X
MRW-5	LNAPL				X
MRW-6	LNAPL				X
MRW-7	LNAPL				X
MRW-8	LNAPL				X
MRW-9	LNAPL				X
MRW-10	LNAPL				X
LRMW-8	LNAPL				X
LRMW-9	2000	X		X	X
LRMW-10	LNAPL				X
LRMW-11	LNAPL				X
MWRR-1	<0.40				X
MWRR-1D	N/A	X	X	X	X
MWRR-2	17.6				X
MWRR-4	676	X		X	X
MWRR-8	LNAPL				X
MWOW-1	LNAPL				X
MWOW-2	0.44J				X
MWOW-2D	N/A	X	X	X	X
MWOW-3	36.8				X
MWOW-5	LNAPL				X
MWBD-1	<0.40				X
MWBD-1D	148	X	X	X	X
MWBD-1DD	N/A	X	X	X	X
Totals:		41	41	50	118

**NOTES:**

X..... = Wells included in the Amoco Barge Dock-Mainfold & AST Area 2017 Sampling Plan

<..... = The compound was not detected at or above the indicated method detection limit. Unlisted detection limit concentrations were unavailable.

µg/L ..... = Micrograms per liter (equivalent to parts per billion)

LNAPL ..... = LNAPL in Well

No LNAPL ..... = No LNAPL in Well

"**BOLD**" ..... = The indicated concentration exceeds the NR 140 ES

NR 140 ES ..... = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-01	03/23/88	635.20	637.80	612.70	603.70	20.62	<b>4.97</b>	25.59	19.14	616.06	Yes	
MW-01	09/08/88	635.20	637.80	612.70	603.70	20.30	<b>4.95</b>	25.25	18.82	616.38	Yes	
MW-01	09/20/88	635.20	637.80	612.70	603.70	20.56	<b>4.42</b>	24.98	18.96	616.24	Yes	
MW-01	04/27/89	635.20	637.80	612.70	603.70	20.56	<b>2.25</b>	22.81	18.47	616.73	Yes	
MW-01	05/18/89	635.20	637.80	612.70	603.70	20.06	<b>5.02</b>	25.08	18.59	616.61	Yes	
MW-01	06/30/89	635.20	637.80	612.70	603.70	19.43	<b>4.10</b>	23.53	17.76	617.44	Yes	
MW-01	07/12/89	635.20	637.80	612.70	603.70	19.82	<b>4.22</b>	24.04	18.17	617.03	Yes	
MW-01	07/26/89	635.20	637.80	612.70	603.70	19.98	<b>6.31</b>	26.29	18.81	616.39	Yes	
MW-01	07/27/89	635.20	637.80	612.70	603.70	20.03	<b>6.87</b>	26.90	18.98	616.22	Yes	
MW-01	09/03/89	635.20	637.80	612.70	603.70	20.19	<b>3.97</b>	24.16	18.49	616.71	Yes	
MW-01	11/16/89	635.20	637.80	612.70	603.70	20.12	<b>9.52</b>	29.64	19.67	615.53	Yes	
MW-01	11/29/89	635.20	637.80	612.70	603.70	20.32	<b>9.62</b>	29.94	19.89	615.31	Yes	
MW-01	12/01/89	635.20	637.80	612.70	603.70	20.42	<b>10.70</b>	31.12	20.24	614.96	Yes	
MW-01	12/02/89	635.20	637.80	612.70	603.70	20.46	<b>8.01</b>	28.47	19.67	615.53	Yes	
MW-01	06/01/90	635.20	637.80	612.70	603.70	12.10	<b>8.75</b>	20.85	11.48	623.72	Yes	
MW-01	06/19/90	635.20	637.80	612.70	603.70	20.64	<b>3.17</b>	23.81	18.76	616.44	Yes	
MW-01	06/27/90	635.20	637.80	612.70	603.70	20.70	<b>3.97</b>	24.67	19.00	616.20	Yes	
MW-01	07/05/90	635.20	637.80	612.70	603.70	20.90	<b>0.44</b>	21.34	18.40	616.80	Yes	
MW-01	07/13/90	635.20	637.80	612.70	603.70	20.81	<b>3.77</b>	24.58	19.06	616.14	Yes	
MW-01	07/17/90	635.20	637.80	612.70	603.70	20.59	<b>4.99</b>	25.58	19.12	616.08	Yes	
MW-01	07/25/90	635.20	637.80	612.70	603.70	20.80	<b>4.30</b>	25.10	19.17	616.03	Yes	
MW-01	08/09/90	635.20	637.80	612.70	603.70	20.70	<b>4.32</b>	25.02	19.08	616.12	Yes	
MW-01	08/27/90	635.20	637.80	612.70	603.70	20.72	<b>3.12</b>	23.84	18.82	616.38	Yes	
MW-01	09/06/90	635.20	637.80	612.70	603.70	20.35	<b>3.70</b>	24.05	18.59	616.61	Yes	
MW-01	01/04/91	635.20	637.80	612.70	603.70	20.00	<b>5.89</b>	25.89	18.73	616.47	Yes	
MW-01	01/30/91	635.20	637.80	612.70	603.70	20.25	<b>8.48</b>	28.73	19.57	615.63	Yes	
MW-01	04/24/91	635.20	637.80	612.70	603.70	20.36	<b>3.32</b>	23.68	18.51	616.69	Yes	
MW-01	06/06/91	635.20	637.80	612.70	603.70	18.93	<b>3.14</b>	22.07	17.04	618.16	Yes	
MW-01	07/09/91	635.20	637.80	612.70	603.70	17.55	<b>2.70</b>	20.25	15.56	619.64	Yes	
MW-01	08/06/91	635.20	637.80	612.70	603.70	16.90	<b>2.98</b>	19.88	14.97	620.23	Yes	
MW-01	09/04/91	635.20	637.80	612.70	603.70	17.10	<b>2.96</b>	20.06	15.17	620.03	Yes	
MW-01	10/08/91	635.20	637.80	612.70	603.70	16.17	<b>3.75</b>	19.92	14.42	620.78	Yes	
MW-01	11/08/91	635.20	637.80	612.70	603.70	17.03	<b>2.95</b>	19.98	15.10	620.10	Yes	
MW-01	12/03/91	635.20	637.80	612.70	603.70	14.98	<b>3.95</b>	18.93	13.27	621.93	Yes	
MW-01	01/07/92	635.20	637.80	612.70	603.70	17.44	<b>2.62</b>	20.06	15.43	619.77	Yes	
MW-01	02/04/92	635.20	637.80	612.70	603.70	18.30	<b>2.50</b>	20.80	16.26	618.94	Yes	
MW-01	03/03/92	635.20	637.80	612.70	603.70	18.72	<b>2.66</b>	21.38	16.72	618.48	Yes	
MW-01	09/24/92	635.20	637.80	612.70	603.70	16.05	<b>2.23</b>	18.28	13.95	621.25	Yes	
MW-01	10/14/92	635.20	637.80	612.70	603.70	17.14	<b>2.34</b>	19.48	15.07	620.13	Yes	
MW-01	06/25/93	635.20	637.80	612.70	603.70	13.91	<b>2.20</b>	16.11	11.81	623.39	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-01	10/28/93	635.20	637.80	612.70	603.70	18.25	1.57	19.82	16.00	619.20	Yes	
MW-01	01/29/94	635.20	637.80	612.70	603.70	19.08	1.60	20.68	16.84	618.36	Yes	
MW-01	04/27/94	635.20	637.80	612.70	603.70	18.49	1.76	20.25	16.29	618.91	Yes	
MW-01	07/21/94	635.20	637.80	612.70	603.70	16.81	2.48	19.29	14.77	620.43	Yes	
MW-01	10/25/94	635.20	637.80	612.70	603.70	16.90	2.66	19.56	14.90	620.30	Yes	
MW-01	11/02/94	635.20	637.80	612.70	603.70	17.34	0.00	17.34	14.74	620.46	Yes	
MW-01	02/01/95	635.20	637.80	612.70	603.70	19.70	0.82	20.52	17.29	617.91	Yes	
MW-01	04/04/95	635.20	637.80	612.70	603.70	19.80	3.21	23.01	17.93	617.27	Yes	
MW-01	07/12/95	635.20	637.80	612.70	603.70	17.94	3.53	21.47	16.14	619.06	Yes	
MW-01	03/13/96	635.20	637.80	612.70	603.70	19.55	2.55	22.10	17.53	617.67	Yes	
MW-01	10/08/96	635.20	637.80	612.70	603.70	15.91	2.48	18.39	13.87	621.33	Yes	
MW-01	04/29/97	635.20	637.80	612.70	603.70	14.47	0.98	15.45	12.09	623.11	Yes	
MW-01	06/10/97	635.20	637.80	612.70	603.70	16.68	0.26	16.94	14.14	621.06	Yes	FP bailed 5/22/97
MW-01	11/03/98	635.20	637.80	612.70	603.70	17.73	2.55	20.28	15.71	619.49	Yes	
MW-01	03/02/99	635.20	637.80	612.70	603.70	19.65	0.91	20.56	17.26	617.94	Yes	
MW-01	10/07/99	635.20	637.80	612.70	603.70	15.88	0.07	15.95	13.30	621.90	Yes	
MW-01	11/09/99	635.20	637.80	612.70	603.70	18.58	0.03	18.61	15.99	619.21	Yes	bailed <0.1 gal. FP
MW-01	12/21/99	635.20	637.80	612.70	603.70	17.50	0.03	17.53	14.91	620.29	Yes	
MW-01	01/27/00	635.20	637.80	612.70	603.70	18.77	0.02	18.79	16.17	619.03	Yes	
MW-01	02/24/00	635.20	637.80	612.70	603.70	19.30	0.45	19.75	16.80	618.40	Yes	bailed 0.1 gal. FP
MW-01	03/31/00	635.20	637.80	612.70	603.70	18.98	0.04	19.02	16.39	618.81	Yes	
MW-01	04/20/00	635.20	637.80	612.70	603.70	17.74	0.36	18.10	15.22	619.98	Yes	bailed 0.2 gal. FP
MW-01	04/26/00	635.20	637.80	612.70	603.70	18.40	0.01	18.41	15.80	619.40	Yes	
MW-01	05/31/00	635.20	637.80	612.70	603.70	18.58	0.03	18.61	15.99	619.21	Yes	
MW-01	06/29/00	635.20	637.80	612.70	603.70	17.95	0.01	17.96	15.35	619.85	Yes	
MW-01	07/26/00	635.20	637.80	612.70	603.70	18.50	0.02	18.52	15.90	619.30	Yes	
MW-01	08/18/00	635.20	637.80	612.70	603.70	18.98	0.01	18.99	16.38	618.82	Yes	
MW-01	09/27/00	635.20	637.80	612.70	603.70	19.29	0.01	19.30	16.69	618.51	Yes	
MW-01	10/11/00	635.20	637.80	612.70	603.70	19.26	0.02	19.28	16.66	618.54	Yes	
MW-01	11/17/00	635.20	637.80	612.70	603.70	18.59	0.01	18.60	15.99	619.21	Yes	
MW-01	12/12/00	635.20	637.80	612.70	603.70	18.91	0.03	18.94	16.32	618.88	Yes	bailed 0.2 gal. FP
MW-01	01/18/01	635.20	637.80	612.70	603.70	19.26	0.02	19.28	16.66	618.54	Yes	bailed 0.1 gal. FP
MW-01	04/24/01	635.20	637.80	612.70	603.70	19.03	0.64	19.67	16.57	618.63	Yes	product abated using vactruck
MW-01	05/23/01	635.20	637.80	612.70	603.70	17.65	1.55	19.20	15.40	619.80	Yes	no product bailed
MW-01	06/19/01	635.20	637.80	612.70	603.70	17.49	1.56	19.05	15.24	619.96	Yes	
MW-01	07/26/01	635.20	637.80	612.70	603.70	18.81	1.03	19.84	16.44	618.76	Yes	
MW-01	08/31/01	635.20	637.80	612.70	603.70	18.85	1.12	19.97	16.50	618.70	Yes	
MW-01	09/26/01	635.20	637.80	612.70	603.70	18.88	1.39	20.27	16.59	618.61	Yes	
MW-01	10/24/01	635.20	637.80	612.70	603.70	18.72	1.52	20.24	16.46	618.74	Yes	
MW-01	12/20/01	635.20	637.80	612.70	603.70	18.76	1.19	19.95	16.43	618.77	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-01	01/22/02	635.20	637.80	612.70	603.70	19.37	1.39	20.76	17.08	618.12	Yes	
MW-01	02/26/02	635.20	637.80	612.70	603.70	20.07	0.96	21.03	17.69	617.51	Yes	
MW-01	03/20/02	635.20	637.80	612.70	603.70	20.23	0.89	21.12	17.83	617.37	Yes	
MW-01	04/24/02	635.20	637.80	612.70	603.70	18.63	1.88	20.51	16.45	618.75	Yes	
MW-01	05/15/02	635.20	637.80	612.70	603.70	17.95	2.11	20.06	15.83	619.37	Yes	
MW-01	06/27/02	635.20	637.80	612.70	603.70	18.43	1.53	19.96	16.18	619.02	Yes	
MW-01	07/25/02	635.20	637.80	612.70	603.70	18.40	1.65	20.05	16.17	619.03	Yes	
MW-01	08/20/02	635.20	637.80	612.70	603.70	18.10	1.34	19.44	15.80	619.40	Yes	
MW-01	09/30/02	635.20	637.80	612.70	603.70	17.12	1.33	18.45	14.82	620.38	Yes	
MW-01	11/05/02	635.20	637.80	612.70	603.70	16.73	1.34	18.07	14.43	620.77	Yes	
MW-01	12/23/02	635.20	637.80	612.70	603.70	19.04	1.09	20.13	16.69	618.51	Yes	
MW-01	01/28/03	635.20	637.80	612.70	603.70	19.79	0.96	20.75	17.41	617.79	Yes	
MW-01	02/19/03	635.20	637.80	612.70	603.70	20.11	0.76	20.87	17.68	617.52	Yes	
MW-01	04/17/03	635.20	637.80	612.70	603.70	20.81	0.62	21.43	18.35	616.85	Yes	
MW-01	05/15/03	635.20	637.80	612.70	603.70	20.76	0.51	21.27	18.28	616.92	Yes	
MW-01	06/10/03	635.20	637.80	612.70	603.70	19.98	0.78	20.76	17.56	617.64	Yes	
MW-01	10/23/03	635.20	637.80	612.70	603.70	19.65	2.02	21.67	17.51	617.69	Yes	
MW-01	12/03/03	635.20	637.80	612.70	603.70	19.69	1.94	21.63	17.53	617.67	Yes	
MW-01	04/19/04	635.81	637.60	612.70	603.70	20.45	0.98	21.43	18.88	616.93	Yes	
MW-01	07/28/04	635.81	637.60	612.70	603.70	18.82	1.03	19.85	17.26	618.55	Yes	
MW-01	11/15/04	635.81	637.60	612.70	603.70	17.60	0.98	18.58	16.03	619.78	Yes	
MW-01	04/18/05	635.81	637.60	612.70	603.70	18.70	0.01	18.71	16.91	618.90	Yes	
MW-01	10/11/05	635.81	637.60	612.70	603.70	NP	0.00	17.30	15.51	620.30	Yes	
MW-01	05/23/06	635.81	637.60	612.70	603.70	16.92	0.30	17.22	15.20	620.61	Yes	
MW-01	10/16/06	635.81	637.60	612.70	603.70	16.92	2.30	19.22	15.65	620.16	Yes	
MW-01	04/23/07	635.81	637.60	612.70	603.70	19.99	0.38	20.37	18.29	617.52	Yes	
MW-01	09/25/07	635.81	637.60	612.70	603.70	19.64	0.31	19.95	17.92	617.89	Yes	
MW-01	05/01/08	635.81	637.60	612.70	603.70	18.33	0.12	18.45	16.57	619.24	Yes	
MW-01	10/20/08	635.81	637.60	612.70	603.70	16.50	0.12	16.62	14.74	621.07	Yes	
MW-01	04/18/09	635.81	637.60	612.70	603.70	17.75	0.36	18.11	16.04	619.77	Yes	
MW-01	10/11/09	635.81	637.60	612.70	603.70	18.10	0.44	18.54	16.41	619.40	Yes	
MW-01	04/28/10	635.81	637.60	612.70	603.70	18.68	0.26	18.94	16.95	618.86	Yes	
MW-01	04/25/11	635.81	637.60	612.70	603.70	17.08	0.41	17.49	15.38	620.43	Yes	
MW-01	10/10/11	635.81	637.60	612.70	603.70	17.85	0.32	18.17	16.13	619.68	Yes	
MW-01	01/04/12	635.81	637.60	612.70	603.70	19.38	0.32	19.70	17.66	618.15	Yes	
MW-01	04/16/12	635.81	637.60	612.70	603.70	NP	0.00	19.84	18.05	617.76	Yes	
MW-01	06/26/12	635.81	637.60	612.70	603.70	NP	0.00	15.13	13.34	622.47	Yes	
MW-01	12/17/12	635.81	637.60	612.70	603.70	19.71	0.39	20.10	18.01	617.80	Yes	
MW-01	03/25/13	635.81	637.60	612.70	603.70	NM	NM	NM	NM	NM	NM	Too much snow on well
MW-01	05/05/13	635.81	637.60	612.70	603.70	NP	0.00	19.29	17.50	618.31	Yes	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-01	10/03/13	635.81	637.60	612.70	603.70	NP	0.00	18.51	16.72	619.09	Yes	
MW-02	03/23/88	635.20	637.39	619.80	610.70	20.37	2.76	23.13	18.80	616.40	No	
MW-02	09/08/88	635.20	637.39	619.80	610.70	20.57	2.53	23.10	18.95	616.25	No	
MW-02	09/20/88	635.20	637.39	619.80	610.70	20.70	2.55	23.25	19.09	616.11	No	
MW-02	04/27/89	635.20	637.39	619.80	610.70	20.76	2.33	23.09	19.10	616.10	No	
MW-02	05/18/89	635.20	637.39	619.80	610.70	20.28	2.20	22.48	18.59	616.61	No	
MW-02	06/30/89	635.20	637.39	619.80	610.70	20.16	2.52	22.68	18.54	616.66	No	
MW-02	07/12/89	635.20	637.39	619.80	610.70	21.05	2.00	23.05	19.31	615.89	No	
MW-02	07/26/89	635.20	637.39	619.80	610.70	20.01	2.72	22.73	18.43	616.77	No	
MW-02	07/27/89	635.20	637.39	619.80	610.70	20.06	2.72	22.78	18.48	616.72	No	
MW-02	09/03/89	635.20	637.39	619.80	610.70	20.37	2.20	22.57	18.68	616.52	No	
MW-02	11/16/89	635.20	637.39	619.80	610.70	20.13	2.57	22.70	18.52	616.68	No	
MW-02	11/29/89	635.20	637.39	619.80	610.70	20.23	2.02	22.25	18.50	616.70	No	
MW-02	12/01/89	635.20	637.39	619.80	610.70	20.45	2.40	22.85	18.80	616.40	No	
MW-02	12/02/89	635.20	637.39	619.80	610.70	20.50	2.56	23.06	18.89	616.31	No	
MW-02	05/04/90	635.20	637.39	619.80	610.70	20.95	2.03	22.98	19.22	615.98	No	
MW-02	06/01/90	635.20	637.39	619.80	610.70	20.45	2.85	23.30	18.90	616.30	No	
MW-02	06/19/90	635.20	637.39	619.80	610.70	20.47	2.45	22.92	18.83	616.37	No	
MW-02	06/27/90	635.20	637.39	619.80	610.70	20.64	2.73	23.37	19.07	616.13	No	
MW-02	07/05/90	635.20	637.39	619.80	610.70	21.09	2.38	23.47	19.44	615.76	No	
MW-02	07/13/90	635.20	637.39	619.80	610.70	20.85	2.45	23.30	19.21	615.99	No	
MW-02	07/17/90	635.20	637.39	619.80	610.70	20.58	2.64	23.22	18.99	616.21	No	
MW-02	07/25/90	635.20	637.39	619.80	610.70	20.84	2.58	23.42	19.23	615.97	No	
MW-02	08/09/90	635.20	637.39	619.80	610.70	20.54	2.82	23.36	18.99	616.21	No	
MW-02	08/27/90	635.20	637.39	619.80	610.70	20.81	2.50	23.31	19.18	616.02	No	
MW-02	09/06/90	635.20	637.39	619.80	610.70	20.19	3.36	23.55	18.76	616.44	No	
MW-02	01/04/91	635.20	637.39	619.80	610.70	19.66	3.62	23.28	18.29	616.91	No	
MW-02	01/30/91	635.20	637.39	619.80	610.70	19.88	3.44	23.32	18.47	616.73	No	
MW-02	04/24/91	635.20	637.39	619.80	610.70	20.30	2.99	23.29	18.79	616.41	No	
MW-02	06/06/91	635.20	637.39	619.80	610.70	18.92	4.20	23.12	17.68	617.52	No	
MW-02	07/09/91	635.20	637.39	619.80	610.70	17.63	5.41	23.04	16.66	618.54	No	
MW-02	08/06/91	635.20	637.39	619.80	610.70	16.70	6.32	23.02	15.94	619.26	No	
MW-02	09/04/91	635.20	637.39	619.80	610.70	16.63	6.35	22.98	15.87	619.33	No	
MW-02	10/08/91	635.20	637.39	619.80	610.70	15.51	7.45	22.96	15.00	620.20	Yes	
MW-02	11/08/91	635.20	637.39	619.80	610.70	16.41	6.60	23.01	15.71	619.49	No	
MW-02	12/03/91	635.20	637.39	619.80	610.70	14.10	8.87	22.97	13.91	621.29	Yes	
MW-02	01/07/92	635.20	637.39	619.80	610.70	16.04	6.99	23.03	15.43	619.77	No	
MW-02	02/04/92	635.20	637.39	619.80	610.70	17.10	5.95	23.05	16.25	618.95	No	
MW-02	03/03/92	635.20	637.39	619.80	610.70	17.70	5.38	23.08	16.73	618.47	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-02	09/24/92	635.20	637.39	619.80	610.70	16.03	<b>7.96</b>	23.99	15.64	619.56	No	
MW-02	10/14/92	635.20	637.39	619.80	610.70	16.08	<b>6.96</b>	23.04	15.46	619.74	No	
MW-02	06/25/93	635.20	637.39	619.80	610.70	12.97	<b>9.92</b>	22.89	13.02	622.18	Yes	
MW-02	10/28/93	635.20	637.39	619.80	610.70	17.38	<b>6.20</b>	23.58	16.59	618.61	No	
MW-02	01/29/94	635.20	637.39	619.80	610.70	17.90	<b>5.18</b>	23.08	16.88	618.32	No	
MW-02	04/27/94	635.20	637.39	619.80	610.70	17.74	<b>5.31</b>	23.05	16.75	618.45	No	
MW-02	07/21/94	635.20	637.39	619.80	610.70	16.36	<b>7.22</b>	23.58	15.80	619.40	No	
MW-02	10/25/94	635.20	637.39	619.80	610.70	16.50	<b>6.53</b>	23.03	15.78	619.42	No	
MW-02	11/02/94	635.20	637.39	619.80	610.70	18.70	<b>1.80</b>	20.50	16.92	618.28	No	
MW-02	02/01/95	635.20	637.39	619.80	610.70	19.02	<b>4.67</b>	23.69	17.88	617.32	No	
MW-02	04/04/95	635.20	637.39	619.80	610.70	19.39	<b>3.56</b>	22.95	18.00	617.20	No	
MW-02	07/12/95	635.20	637.39	619.80	610.70	17.75	<b>5.15</b>	22.90	16.72	618.48	No	
MW-02	11/13/95	635.20	637.39	619.80	610.70	16.95	<b>5.90</b>	22.85	16.09	619.11	No	
MW-02	03/13/96	635.20	637.39	619.80	610.70	18.75	<b>4.20</b>	22.95	17.51	617.69	No	
MW-02	10/08/96	635.20	637.39	619.80	610.70	14.85	<b>7.96</b>	22.81	14.46	620.74	Yes	
MW-02	04/29/97	635.20	637.39	619.80	610.70	13.55	<b>9.05</b>	22.60	13.40	621.80	Yes	
MW-02	06/10/97	635.20	637.39	619.80	610.70	15.45	<b>7.25</b>	22.70	14.90	620.30	Yes	FP bailed 5/22/97
MW-02	03/02/99	635.20	637.39	619.80	610.70	20.15	<b>3.39</b>	23.54	18.73	616.47	No	
MW-02	11/09/99	635.20	637.39	619.80	610.70	NP	<b>0.00</b>	16.73	14.54	620.66	Yes	ferret pump installed
MW-02	12/21/99	635.20	637.39	619.80	610.70	19.00	<b>0.15</b>	19.15	16.84	618.36	No	pump line frozen
MW-02	01/27/00	635.20	637.39	619.80	610.70	19.97	<b>0.63</b>	20.60	17.92	617.28	No	ferret pump re-installed
MW-02	02/24/00	635.20	637.39	619.80	610.70	19.65	<b>0.02</b>	19.67	17.46	617.74	No	
MW-02	03/31/00	635.20	637.39	619.80	610.70	NP	<b>0.00</b>	19.61	17.42	617.78	No	Moved ferret pump to RW-6
MW-02	04/20/00	635.20	637.39	619.80	610.70	19.69	<b>0.58</b>	20.27	17.63	617.57	No	
MW-02	04/26/00	635.20	637.39	619.80	610.70	19.90	<b>0.54</b>	20.44	17.83	617.37	No	bailed 0.25 gal. FP
MW-02	05/31/00	635.20	637.39	619.80	610.70	19.18	<b>0.80</b>	19.98	17.17	618.03	No	bailed 0.25 gal. FP
MW-02	06/29/00	635.20	637.39	619.80	610.70	18.88	<b>0.55</b>	19.43	16.81	618.39	No	bailed 0.25 gal. FP
MW-02	07/26/00	635.20	637.39	619.80	610.70	19.01	<b>0.83</b>	19.84	17.01	618.19	No	bailed <0.1 gal. FP
MW-02	08/18/00	635.20	637.39	619.80	610.70	19.48	<b>0.87</b>	20.35	17.49	617.71	No	bailed 0.25 gal. FP
MW-02	09/27/00	635.20	637.39	619.80	610.70	19.89	<b>0.84</b>	20.73	17.89	617.31	No	bailed <0.1 gal. FP
MW-02	10/11/00	635.20	637.39	619.80	610.70	19.79	<b>0.85</b>	20.64	17.79	617.41	No	bailed 0.25 gal. FP
MW-02	11/17/00	635.20	637.39	619.80	610.70	19.67	<b>1.12</b>	20.79	17.73	617.47	No	bailed 1 gal. FP
MW-02	12/12/00	635.20	637.39	619.80	610.70	19.54	<b>0.26</b>	19.80	17.41	617.79	No	bailed 0.2 gal. FP
MW-02	01/18/01	635.20	637.39	619.80	610.70	19.96	<b>0.72</b>	20.68	17.93	617.27	No	bailed 0.75 gal. FP
MW-02	04/24/01	635.20	637.39	619.80	610.70	20.02	<b>0.91</b>	20.93	18.04	617.16	No	product abated using vactruck
MW-02	05/23/01	635.20	637.39	619.80	610.70	18.73	<b>0.47</b>	19.20	16.65	618.55	No	no product bailed
MW-02	06/19/01	635.20	638.24	619.80	610.70	19.53	<b>0.87</b>	20.40	16.69	618.51	No	TPC = TOC + 0.85 feet
MW-02	07/26/01	635.20	638.24	619.80	610.70	19.35	<b>1.16</b>	20.51	16.57	618.63	No	
MW-02	08/31/01	635.20	638.24	619.80	610.70	20.50	<b>1.09</b>	21.59	17.71	617.49	No	
MW-02	09/26/01	635.20	638.24	619.80	610.70	20.53	<b>0.98</b>	21.51	17.71	617.49	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-02	10/24/01	635.20	638.24	619.80	610.70	19.60	1.07	20.67	16.80	618.40	No	
MW-02	12/20/01	635.20	638.24	619.80	610.70	21.11	1.02	22.13	18.30	616.90	No	
MW-02	02/26/02	635.20	638.24	619.80	610.70	21.52	1.23	22.75	18.76	616.44	No	
MW-02	03/20/02	635.20	638.24	619.80	610.70	21.66	1.39	23.05	18.93	616.27	No	
MW-02	04/24/02	635.20	638.24	619.80	610.70	20.13	1.05	21.18	17.33	617.87	No	
MW-02	05/15/02	635.20	638.24	619.80	610.70	19.68	1.19	20.87	16.91	618.29	No	
MW-02	06/27/02	635.20	638.24	619.80	610.70	19.95	1.21	21.16	17.18	618.02	No	
MW-02	07/25/02	635.20	638.24	619.80	610.70	19.65	1.39	21.04	16.92	618.28	No	
MW-02	08/20/02	635.20	638.24	619.80	610.70	19.86	1.30	21.16	17.11	618.09	No	
MW-02	09/30/02	635.20	638.24	619.80	610.70	19.05	1.61	20.66	16.37	618.83	No	
MW-02	11/05/02	635.20	638.24	619.80	610.70	19.89	1.61	21.50	17.21	617.99	No	
MW-02	12/23/02	635.20	638.24	619.80	610.70	20.79	1.34	22.13	18.05	617.15	No	
MW-02	01/28/03	635.20	638.24	619.80	610.70	21.22	1.59	22.81	18.54	616.66	No	
MW-02	02/19/03	635.20	638.24	619.80	610.70	20.37	1.66	22.03	17.70	617.50	No	
MW-02	04/17/03	635.20	638.24	619.80	610.70	21.84	1.83	23.67	19.21	615.99	No	
MW-02	05/15/03	635.20	638.24	619.80	610.70	21.02	1.88	22.90	18.40	616.80	No	
MW-02	06/10/03	635.20	638.24	619.80	610.70	20.65	1.58	22.23	17.97	617.23	No	
MW-02	10/23/03	635.20	638.24	619.80	610.70	21.84	1.44	23.28	19.13	616.07	No	
MW-02	12/03/03	635.20	638.24	619.80	610.70	21.02	1.53	22.55	18.33	616.87	No	
MW-02	04/19/04	636.16	637.54	619.80	610.70	21.50	2.01	23.51	20.57	615.59	No	
MW-02	07/28/04	636.16	637.54	619.80	610.70	20.35	2.50	22.85	19.53	616.63	No	
MW-02	11/15/04	636.16	637.54	619.80	610.70	19.22	3.63	22.85	18.66	617.50	No	
MW-02	04/18/05	636.16	637.54	619.80	610.70	20.60	3.71	24.31	20.06	616.10	No	
MW-02	09/09/05	636.16	637.54	619.80	610.70	19.23	3.87	23.10	18.72	617.44	No	
MW-02	10/11/05	636.16	637.54	619.80	610.70	18.97	4.11	23.08	18.52	617.64	No	
MW-02	05/23/06	636.16	637.54	619.80	610.70	18.02	4.74	22.76	17.71	618.45	No	
MW-02	10/16/06	636.16	637.54	619.80	610.70	19.22	4.14	23.36	18.78	617.38	No	
MW-02	04/23/07	636.16	637.54	619.80	610.70	NM	NM	NM	NA	NA	NA	Well broken - could not gauge
MW-02	09/25/07						<b>Abandoned</b>					
MW-03	03/23/88	633.90	636.17	618.60	609.60	NP	0.00	18.15	15.88	618.02	No	
MW-03	09/08/88	633.90	636.17	618.60	609.60	NP	0.00	17.89	15.62	618.28	No	
MW-03	09/20/88	633.90	636.17	618.60	609.60	NP	0.00	17.38	15.11	618.79	Yes	
MW-03	04/27/89	633.90	636.17	618.60	609.60	NP	0.00	16.37	14.10	619.80	Yes	
MW-03	05/18/89	633.90	636.17	618.60	609.60	NP	0.00	15.80	13.53	620.37	Yes	
MW-03	06/30/89	633.90	636.17	618.60	609.60	NP	0.00	16.33	14.06	619.84	Yes	
MW-03	07/12/89	633.90	636.17	618.60	609.60	NP	0.00	17.07	14.80	619.10	Yes	
MW-03	07/26/89	633.90	636.17	618.60	609.60	NP	0.00	17.38	15.11	618.79	Yes	
MW-03	07/27/89	633.90	636.17	618.60	609.60	NP	0.00	17.60	15.33	618.57	No	
MW-03	09/03/89	633.90	636.17	618.60	609.60	NP	0.00	17.76	15.49	618.41	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-03	11/16/89	633.90	636.17	618.60	609.60	NP	0.00	17.72	15.45	618.45	No	
MW-03	11/28/89	633.90	636.17	618.60	609.60	NP	0.00	18.15	15.88	618.02	No	
MW-03	06/01/90	633.90	636.17	618.60	609.60	NP	0.00	13.42	11.15	622.75	Yes	
MW-03	06/19/90	633.90	636.17	618.60	609.60	NP	0.00	16.35	14.08	619.82	Yes	
MW-03	06/27/90	633.90	636.17	618.60	609.60	NP	0.00	17.23	14.96	618.94	Yes	
MW-03	07/05/90	633.90	636.17	618.60	609.60	NP	0.00	17.81	15.54	618.36	No	
MW-03	07/13/90	633.90	636.17	618.60	609.60	NP	0.00	18.11	15.84	618.06	No	
MW-03	07/17/90	633.90	636.17	618.60	609.60	NP	0.00	17.72	15.45	618.45	No	
MW-03	07/25/90	633.90	636.17	618.60	609.60	NP	0.00	18.26	15.99	617.91	No	
MW-03	08/09/90	633.90	636.17	618.60	609.60	NP	0.00	18.14	15.87	618.03	No	
MW-03	08/14/90	633.90	636.17	618.60	609.60	NP	0.00	18.23	15.96	617.94	No	
MW-03	08/27/90	633.90	636.17	618.60	609.60	NP	0.00	17.51	15.24	618.66	Yes	
MW-03	09/06/90	633.90	636.17	618.60	609.60	NP	0.00	17.02	14.75	619.15	Yes	
MW-03	01/04/91	633.90	636.17	618.60	609.60	NP	0.00	17.51	15.24	618.66	Yes	
MW-03	01/30/91	633.90	636.17	618.60	609.60	NP	0.00	17.96	15.69	618.21	No	
MW-03	04/24/91	633.90	636.17	618.60	609.60	NP	0.00	15.96	13.69	620.21	Yes	
MW-03	07/09/91	633.90	636.17	618.60	609.60	NP	0.00	13.77	11.50	622.40	Yes	
MW-03	10/08/91	633.90	636.17	618.60	609.60	NP	0.00	13.44	11.17	622.73	Yes	
MW-03	01/07/92	633.90	636.17	618.60	609.60	NP	0.00	13.42	11.15	622.75	Yes	
MW-03	10/14/92	633.90	636.17	618.60	609.60	NP	0.00	7.53	5.26	628.64	Yes	
MW-03	01/29/94	633.90	636.17	618.60	609.60	NP	0.00	15.95	13.68	620.22	Yes	
MW-03	04/27/94	633.90	636.17	618.60	609.60	NP	0.00	12.84	10.57	623.33	Yes	
MW-03	07/21/94	633.90	636.17	618.60	609.60	NP	0.00	13.99	11.72	622.18	Yes	
MW-03	10/25/94	633.90	636.17	618.60	609.60	NP	0.00	6.76	4.49	629.41	Yes	
MW-03	10/27/94	633.90	636.17	618.60	609.60	NP	0.00	6.68	4.41	629.49	Yes	
MW-03	11/02/94	633.90	636.17	618.60	609.60	17.50	0.70	18.20	15.39	618.51	No	
MW-03	02/01/95	633.90	636.17	618.60	609.60	NP	0.00	15.45	13.18	620.72	Yes	
MW-03	04/04/95	633.90	636.17	618.60	609.60	NP	0.00	16.94	14.67	619.23	Yes	
MW-03	07/12/95	633.90	636.17	618.60	609.60	NP	0.00	15.41	13.14	620.76	Yes	
MW-03	11/13/95	633.90	636.17	618.60	609.60	13.45	0.01	13.46	11.18	622.72	Yes	
MW-03	03/13/96	633.90	636.17	618.60	609.60	16.64	0.01	16.65	14.37	619.53	Yes	
MW-03	10/08/96	633.90	636.17	618.60	609.60	NP	0.00	13.32	11.05	622.85	Yes	
MW-03	04/29/97	633.90	636.17	618.60	609.60	NP	0.00	10.22	7.95	625.95	Yes	
MW-03	11/03/98	633.90	636.17	618.60	609.60	NP	0.00	16.55	14.28	619.62	Yes	
MW-03	03/02/99	633.90	636.17	618.60	609.60	NP	0.00	16.94	14.67	619.23	Yes	
MW-03	04/26/00	633.90	636.17	618.60	609.60	NP	0.00	6.72	4.45	629.45	Yes	
MW-03	08/18/00	633.90	636.17	618.60	609.60	NP	0.00	16.31	14.04	619.86	Yes	
MW-03	03/20/02	633.90	636.17	618.60	609.60	NP	0.00	18.14	15.87	618.03	No	
MW-03	05/15/02	633.90	636.17	618.60	609.60	NP	0.00	6.84	4.57	629.33	Yes	very slty
MW-03	08/20/02	633.90	636.17	618.60	609.60	NP	0.00	6.59	4.32	629.58	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-03	11/05/02	633.90	636.17	618.60	609.60	NP	0.00	6.52	4.25	629.65	Yes	
MW-03	12/23/02	633.90	636.17	618.60	609.60	NP	0.00	17.07	14.80	619.10	Yes	
MW-03	01/28/03	633.90	636.17	618.60	609.60	NP	0.00	17.75	15.48	618.42	No	
MW-03	02/19/03	633.90	636.17	618.60	609.60	NP	0.00	18.02	15.75	618.15	No	
MW-03	04/17/03	633.90	636.17	618.60	609.60	NP	0.00	17.60	15.33	618.57	No	
MW-03	06/10/03	633.90	636.17	618.60	609.60	NP	0.00	17.60	15.33	618.57	No	
MW-03	10/20/03	633.90	636.17	618.60	609.60	NP	0.00	17.98	15.71	618.19	No	
MW-03	12/03/03	633.90	636.17	618.60	609.60	NP	0.00	18.30	16.03	617.87	No	
MW-03	04/19/04	634.51	635.97	618.60	609.60	NP	0.00	17.79	16.33	618.18	No	
MW-03	07/28/04	634.51	635.97	618.60	609.60	NP	0.00	16.80	15.34	619.17	Yes	
MW-03	11/16/04	634.51	635.97	618.60	609.60	NP	0.00	15.69	14.23	620.28	Yes	
MW-03	04/18/05	634.51	635.97	618.60	609.60	NP	0.00	15.78	14.32	620.19	Yes	
MW-03	10/11/05	634.51	635.97	618.60	609.60	NP	0.00	15.30	13.84	620.67	Yes	
MW-03	05/23/06	634.51	635.97	618.60	609.60	NP	0.00	12.72	11.26	623.25	Yes	
MW-03	10/16/06	634.51	635.97	618.60	609.60	NP	0.00	16.78	15.32	619.19	Yes	
MW-03	04/23/07	634.51	635.97	618.60	609.60	NP	0.00	10.32	8.86	625.65	Yes	
MW-03	09/25/07	634.51	636.63	618.60	609.60	NP	0.00	13.97	11.85	622.66	Yes	
MW-03	05/01/08	634.51	636.63	618.60	609.60	NP	0.00	12.15	10.03	624.48	Yes	
MW-03	10/20/08	634.51	636.63	618.60	609.60	NP	0.00	6.93	4.81	629.70	Yes	
MW-03	04/18/09	634.51	636.63	618.60	609.60	NP	0.00	8.48	6.36	628.15	Yes	
MW-03	10/11/09	634.51	636.63	618.60	609.60	NP	0.00	16.87	14.75	619.76	Yes	
MW-03	04/28/10	634.51	636.63	618.60	609.60	NP	0.00	15.46	13.34	621.17	Yes	
MW-03	10/25/10	634.51	636.63	618.60	609.60	NP	0.00	7.57	5.45	629.06	Yes	
MW-03	04/25/11	634.51	636.63	618.60	609.60	NP	0.00	7.42	5.30	629.21	Yes	
MW-03	10/10/11	634.51	636.63	618.60	609.60	NP	0.00	16.11	13.99	620.52	Yes	
MW-03	01/04/12	634.51	636.63	618.60	609.60	NP	0.00	17.37	15.25	619.26	Yes	
MW-03	04/16/12	634.51	636.63	618.60	609.60	NP	0.00	15.80	13.68	620.83	Yes	
MW-03	06/26/12	634.51	636.63	618.60	609.60	NP	0.00	7.02	4.90	629.61	Yes	
MW-03	09/30/12	634.51	636.63	618.60	609.60	NP	0.00	17.49	15.37	619.14	Yes	
MW-03	12/17/12	634.51	636.63	618.60	609.60	NP	0.00	17.83	15.71	618.80	Yes	
MW-03	03/25/13	634.51	636.63	618.60	609.60	NP	0.00	19.01	16.89	617.62	No	
MW-03	05/05/13	634.51	636.63	618.60	609.60	NP	0.00	9.33	7.21	627.30	Yes	
MW-03	10/01/13	634.51	636.63	618.60	609.60	NP	0.00	17.44	15.32	619.19	Yes	
MW-03	05/21/14	634.51	636.63	618.60	609.60	NP	0.00	5.87	3.75	630.76	Yes	
MW-03	10/30/14	634.51	636.63	618.60	609.60	NP	0.00	8.74	6.62	627.89	Yes	
MW-03	05/06/15	634.51	636.63	618.60	609.60	NP	0.00	15.09	12.97	621.54	Yes	
MW-03	10/06/15	634.51	636.63	618.60	609.60	NP	0.00	8.09	5.97	628.54	Yes	
MW-03	05/23/16	634.51	636.63	618.60	609.60	NP	0.00	6.92	4.80	629.71	Yes	
MW-03	10/03/16	634.51	636.63	618.60	609.60	NP	0.00	6.70	4.58	629.93	Yes	
MW-03	06/29/17	634.51	636.63	618.60	609.60	NP	0.00	7.73	5.61	628.90	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-04S	03/23/88	634.30	636.93	620.00	610.00	NP	0.00	19.02	16.39	617.91	No	
MW-04S	09/08/88	634.30	636.93	620.00	610.00	NP	0.00	19.00	16.37	617.93	No	
MW-04S	09/20/88	634.30	636.93	620.00	610.00	NP	0.00	19.21	16.58	617.72	No	
MW-04S	04/27/89	634.30	636.93	620.00	610.00	NP	0.00	17.80	15.17	619.13	No	
MW-04S	05/18/89	634.30	636.93	620.00	610.00	NP	0.00	17.05	14.42	619.88	No	
MW-04S	06/30/89	634.30	636.93	620.00	610.00	NP	0.00	17.47	14.84	619.46	No	
MW-04S	07/12/89	634.30	636.93	620.00	610.00	NP	0.00	18.14	15.51	618.79	No	
MW-04S	07/26/89	634.30	636.93	620.00	610.00	NP	0.00	18.44	15.81	618.49	No	
MW-04S	07/27/89	634.30	636.93	620.00	610.00	NP	0.00	18.57	15.94	618.36	No	
MW-04S	09/03/89	634.30	636.93	620.00	610.00	NP	0.00	18.89	16.26	618.04	No	
MW-04S	11/16/89	634.30	636.93	620.00	610.00	NP	0.00	18.83	16.20	618.10	No	
MW-04S	11/28/89	634.30	636.93	620.00	610.00	NP	0.00	19.15	16.52	617.78	No	
MW-04S	06/01/90	634.30	636.93	620.00	610.00	NP	0.00	18.14	15.51	618.79	No	
MW-04S	06/19/90	634.30	636.93	620.00	610.00	NP	0.00	18.16	15.53	618.77	No	
MW-04S	06/27/90	634.30	636.93	620.00	610.00	NP	0.00	18.52	15.89	618.41	No	
MW-04S	07/05/90	634.30	636.93	620.00	610.00	NP	0.00	19.00	16.37	617.93	No	
MW-04S	07/13/90	634.30	636.93	620.00	610.00	NP	0.00	19.21	16.58	617.72	No	
MW-04S	07/17/90	634.30	636.93	620.00	610.00	NP	0.00	18.82	16.19	618.11	No	
MW-04S	07/25/90	634.30	636.93	620.00	610.00	NP	0.00	19.27	16.64	617.66	No	
MW-04S	08/09/90	634.30	636.93	620.00	610.00	NP	0.00	19.15	16.52	617.78	No	
MW-04S	08/14/90	634.30	636.93	620.00	610.00	NP	0.00	19.21	16.58	617.72	No	
MW-04S	08/27/90	634.30	636.93	620.00	610.00	NP	0.00	18.94	16.31	617.99	No	
MW-04S	09/06/90	634.30	636.93	620.00	610.00	NP	0.00	18.32	15.69	618.61	No	
MW-04S	01/04/91	634.30	636.93	620.00	610.00	NP	0.00	18.46	15.83	618.47	No	
MW-04S	01/30/91	634.30	636.93	620.00	610.00	NP	0.00	18.92	16.29	618.01	No	
MW-04S	04/24/91	634.30	636.93	620.00	610.00	NP	0.00	18.11	15.48	618.82	No	
MW-04S	07/09/91	634.30	636.93	620.00	610.00	NP	0.00	15.60	12.97	621.33	Yes	
MW-04S	08/06/91	634.30	636.93	620.00	610.00	NP	0.00	15.30	12.67	621.63	Yes	
MW-04S	09/04/91	634.30	636.93	620.00	610.00	NP	0.00	15.75	13.12	621.18	Yes	
MW-04S	10/08/91	634.30	636.93	620.00	610.00	NP	0.00	14.77	12.14	622.16	Yes	
MW-04S	11/08/91	634.30	636.93	620.00	610.00	NP	0.00	15.25	12.62	621.68	Yes	
MW-04S	12/03/91	634.30	636.93	620.00	610.00	NP	0.00	13.34	10.71	623.59	Yes	
MW-04S	01/07/92	634.30	636.93	620.00	610.00	NP	0.00	14.95	12.32	621.98	Yes	
MW-04S	02/04/92	634.30	636.93	620.00	610.00	NP	0.00	16.07	13.44	620.86	Yes	
MW-04S	03/03/92	634.30	636.93	620.00	610.00	NP	0.00	16.77	14.14	620.16	Yes	
MW-04S	09/24/92	634.30	636.93	620.00	610.00	NP	0.00	14.87	12.24	622.06	Yes	
MW-04S	10/14/92	634.30	636.93	620.00	610.00	NP	0.00	15.51	12.88	621.42	Yes	
MW-04S	06/25/93	634.30	636.93	620.00	610.00	NP	0.00	12.88	10.25	624.05	Yes	
MW-04S	10/28/93	634.30	636.93	620.00	610.00	NP	0.00	15.84	13.21	621.09	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-04S	01/29/94	634.30	636.93	620.00	610.00	NP	0.00	17.04	14.41	619.89	No	
MW-04S	04/27/94	634.30	636.93	620.00	610.00	NP	0.00	15.78	13.15	621.15	Yes	
MW-04S	06/14/94	634.30	636.93	620.00	610.00	NP	0.00	14.80	12.17	622.13	Yes	
MW-04S	07/21/94	634.30	636.93	620.00	610.00	NP	0.00	15.25	12.62	621.68	Yes	
MW-04S	08/30/94	634.30	636.93	620.00	610.00	NP	0.00	16.94	14.31	619.99	No	
MW-04S	10/25/94	634.30	636.93	620.00	610.00	NP	0.00	15.52	12.89	621.41	Yes	
MW-04S	10/27/94	634.30	636.93	620.00	610.00	NP	0.00	15.09	12.46	621.84	Yes	
MW-04S	11/02/94	634.30	636.93	620.00	610.00	NP	0.00	18.94	16.31	617.99	No	
MW-04S	04/04/95	634.30	636.93	620.00	610.00	NP	0.00	18.20	15.57	618.73	No	
MW-04S	07/12/95	634.30	636.93	620.00	610.00	NP	0.00	16.74	14.11	620.19	Yes	
MW-04S	11/13/95	634.30	636.93	620.00	610.00	NP	0.00	14.95	12.32	621.98	Yes	
MW-04S	03/13/96	634.30	636.93	620.00	610.00	NP	0.00	18.59	15.96	618.34	No	
MW-04S	04/22/96	634.30	636.93	620.00	610.00	NP	0.00	15.13	12.50	621.80	Yes	
MW-04S	10/08/96	634.30	636.93	620.00	610.00	NP	0.00	14.62	11.99	622.31	Yes	
MW-04S	04/29/97	634.30	636.93	620.00	610.00	NP	0.00	12.75	10.12	624.18	Yes	
MW-04S	11/03/98	634.30	636.93	620.00	610.00	NP	0.00	17.85	15.22	619.08	No	
MW-04S	03/02/99	634.30	636.93	620.00	610.00	NP	0.00	18.14	15.51	618.79	No	
MW-04S	04/26/00	634.30	636.93	620.00	610.00	NP	0.00	16.71	14.08	620.22	Yes	
MW-04S	10/10/00	634.30	636.93	620.00	610.00	NP	0.00	17.90	15.27	619.03	No	
MW-04S	04/24/01	634.30	636.93	620.00	610.00	NP	0.00	17.17	14.54	619.76	No	
MW-04S	10/23/01	634.30	636.93	620.00	610.00	NP	0.00	17.92	15.29	619.01	No	
MW-04S	04/23/02	634.30	636.93	620.00	610.00	NP	0.00	17.94	15.31	618.99	No	
MW-04S	11/05/02	634.30	636.93	620.00	610.00	NP	0.00	16.23	13.60	620.70	Yes	
MW-04S	04/17/03	634.30	636.93	620.00	610.00	NP	0.00	19.28	16.65	617.65	No	
MW-04S	10/20/03	634.30	636.93	620.00	610.00	NP	0.00	19.03	16.40	617.90	No	
MW-04S	04/19/04	634.97	636.67	620.00	610.00	NP	0.00	19.49	17.79	617.18	No	
MW-04S	11/16/04	634.97	636.67	620.00	610.00	NP	0.00	17.08	15.38	619.59	No	
MW-04S	04/18/05	634.97	636.67	620.00	610.00	NP	0.00	17.66	15.96	619.01	No	
MW-04S	10/11/05	634.97	636.67	620.00	610.00	NP	0.00	17.12	15.42	619.55	No	
MW-04S	05/23/06	634.97	636.67	620.00	610.00	NP	0.00	16.09	14.39	620.58	Yes	
MW-04S	10/16/06	634.97	636.67	620.00	610.00	NP	0.00	17.66	15.96	619.01	No	
MW-04S	04/23/07	634.97	636.67	620.00	610.00	NP	0.00	18.77	17.07	617.90	No	
MW-04S	09/25/07	634.97	636.67	620.00	610.00	NP	0.00	19.07	17.37	617.60	No	
MW-04S	05/01/08	634.97	636.67	620.00	610.00	NP	0.00	17.07	15.37	619.60	No	
MW-04S	10/20/08	634.97	636.67	620.00	610.00	NP	0.00	15.67	13.97	621.00	Yes	
MW-04S	04/18/09	634.97	636.67	620.00	610.00	NP	0.00	17.42	15.72	619.25	No	
MW-04S	10/11/09	634.97	636.67	620.00	610.00	NP	0.00	18.36	16.66	618.31	No	
MW-04S	04/28/10	634.97	636.67	620.00	610.00	NP	0.00	18.19	16.49	618.48	No	
MW-04S	10/25/10	634.97	636.67	620.00	610.00	NP	0.00	16.12	14.42	620.55	Yes	
MW-04S	04/25/11	634.97	636.67	620.00	610.00	NP	0.00	17.35	15.65	619.32	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-04S	10/10/11	634.97	636.67	620.00	610.00	NP	0.00	17.32	15.62	619.35	No	
MW-04S	01/04/12	634.97	636.67	620.00	610.00	NP	0.00	18.48	16.78	618.19	No	
MW-04S	04/16/12	634.97	636.67	620.00	610.00	NP	0.00	18.78	17.08	617.89	No	
MW-04S	06/26/12	634.97	636.67	620.00	610.00	NP	0.00	15.52	13.82	621.15	Yes	
MW-04S	09/30/12	634.97	636.67	620.00	610.00	NP	0.00	18.55	16.85	618.12	No	
MW-04S	12/17/12	634.97	636.67	620.00	610.00	NP	0.00	19.45	17.75	617.22	No	
MW-04S	03/25/13	634.97	636.67	620.00	610.00	NP	0.00	19.96	18.26	616.71	No	
MW-04S	05/05/13	634.97	636.67	620.00	610.00	NP	0.00	19.19	17.49	617.48	No	
MW-04D	06/14/94	634.30	636.85	583.00	580.00	NP	0.00	16.76	14.21	620.09	Yes	
MW-04D	07/21/94	634.30	636.85	583.00	580.00	NP	0.00	16.89	14.34	619.96	Yes	
MW-04D	08/30/94	634.30	636.85	583.00	580.00	NP	0.00	18.18	15.63	618.67	Yes	
MW-04D	10/25/94	634.30	636.85	583.00	580.00	NP	0.00	17.09	14.54	619.76	Yes	
MW-04D	10/27/94	634.30	636.85	583.00	580.00	NP	0.00	15.65	13.10	621.20	Yes	
MW-04D	02/01/95	634.30	636.85	583.00	580.00	NP	0.00	18.78	16.23	618.07	Yes	
MW-04D	04/04/95	634.30	636.85	583.00	580.00	NP	0.00	19.41	16.86	617.44	Yes	
MW-04D	07/12/95	634.30	636.85	583.00	580.00	NP	0.00	18.33	15.78	618.52	Yes	
MW-04D	11/13/95	634.30	636.85	583.00	580.00	NP	0.00	16.90	14.35	619.95	Yes	
MW-04D	03/13/96	634.30	636.85	583.00	580.00	19.08	0.01	19.09	16.53	617.77	Yes	
MW-04D	04/22/96	634.30	636.85	583.00	580.00	NP	0.00	17.25	14.70	619.60	Yes	
MW-04D	10/08/96	634.30	636.85	583.00	580.00	NP	0.00	16.52	13.97	620.33	Yes	
MW-04D	04/29/97	634.30	636.85	583.00	580.00	NP	0.00	15.15	12.60	621.70	Yes	
MW-04D	11/03/98	634.30	636.85	583.00	580.00	NP	0.00	19.27	16.72	617.58	Yes	
MW-04D	03/02/99	634.30	636.85	583.00	580.00	NP	0.00	19.28	16.73	617.57	Yes	
MW-04D	04/26/00	634.30	636.85	583.00	580.00	NP	0.00	18.31	15.76	618.54	Yes	
MW-04D	10/10/00	634.30	636.85	583.00	580.00	NP	0.00	19.80	17.25	617.05	Yes	
MW-04D	10/23/01	634.30	636.85	583.00	580.00	NP	0.00	19.21	16.66	617.64	Yes	
MW-04D	04/23/02	634.30	636.85	583.00	580.00	NP	0.00	19.45	16.90	617.40	Yes	
MW-04D	11/05/02	634.30	636.85	583.00	580.00	NP	0.00	17.89	15.34	618.96	Yes	
MW-04D	04/17/03	634.30	636.85	583.00	580.00	NP	0.00	20.37	17.82	616.48	Yes	
MW-04D	10/20/03	634.30	636.85	583.00	580.00	NP	0.00	20.16	17.61	616.69	Yes	
MW-04D	04/19/04	634.98	636.58	583.00	580.00	NP	0.00	20.48	18.88	616.10	Yes	
MW-04D	11/16/04	634.98	636.58	583.00	580.00	NP	0.00	18.61	17.01	617.97	Yes	
MW-04D	04/18/05	634.98	636.58	583.00	580.00	NP	0.00	19.14	17.54	617.44	Yes	
MW-04D	10/11/05	634.98	636.58	583.00	580.00	NP	0.00	18.48	16.88	618.10	Yes	
MW-04D	05/23/06	634.98	636.58	583.00	580.00	NP	0.00	17.58	15.98	619.00	Yes	
MW-04D	10/16/06	634.98	636.58	583.00	580.00	NP	0.00	19.02	17.42	617.56	Yes	
MW-04D	04/23/07	634.98	636.58	583.00	580.00	NP	0.00	18.79	17.19	617.79	Yes	
MW-04D	09/25/07	634.98	636.58	583.00	580.00	NP	0.00	19.75	18.15	616.83	Yes	
MW-04D	05/01/08	634.98	636.58	583.00	580.00	NP	0.00	18.02	16.42	618.56	Yes	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-04D	10/20/08	634.98	636.58	583.00	580.00	NP	0.00	16.6	15.00	619.98	Yes	
MW-04D	04/18/09	634.98	636.58	583.00	580.00	NP	0.00	18.19	16.59	618.39	Yes	
MW-04D	10/11/09	634.98	636.58	583.00	580.00	NP	0.00	18.79	17.19	617.79	Yes	
MW-04D	04/28/10	634.98	636.58	583.00	580.00	NP	0.00	18.91	17.31	617.67	Yes	
MW-04D	10/25/10	634.98	636.58	583.00	580.00	NP	0.00	16.83	15.23	619.75	Yes	
MW-04D	04/25/11	634.98	636.58	583.00	580.00	NP	0.00	18.05	16.45	618.53	Yes	
MW-04D	10/10/11	634.98	636.58	583.00	580.00	NP	0.00	17.81	16.21	618.77	Yes	
MW-04D	01/04/12	634.98	636.58	583.00	580.00	NP	0.00	18.96	17.36	617.62	Yes	
MW-04D	04/16/12	634.98	636.58	583.00	580.00	NP	0.00	19.24	17.64	617.34	Yes	
MW-04D	06/26/12	634.98	636.58	583.00	580.00	NP	0.00	16.53	14.93	620.05	Yes	
MW-04D	09/30/12	634.98	636.58	583.00	580.00	NP	0.00	18.95	17.35	617.63	Yes	
MW-04D	12/17/12	634.98	636.58	583.00	580.00	NP	0.00	18.97	17.37	617.61	Yes	
MW-04D	03/25/13	634.98	636.58	583.00	580.00	NP	0.00	19.88	18.28	616.70	Yes	
MW-04D	05/05/13	634.98	636.58	583.00	580.00	NP	0.00	19.63	18.03	616.95	Yes	
MW-04D	10/03/13	634.98	636.58	583.00	580.00	NM	NM	NM	NM	NM	NM	
MW-05	03/23/88	634.40	636.94	618.50	609.50	NP	0.00	19.45	16.91	617.49	No	
MW-05	09/08/88	634.40	636.94	618.50	609.50	NP	0.00	19.50	16.96	617.44	No	
MW-05	09/20/88	634.40	636.94	618.50	609.50	NP	0.00	19.50	16.96	617.44	No	
MW-05	04/27/89	634.40	636.94	618.50	609.50	NP	0.00	18.81	16.27	618.13	No	
MW-05	05/18/89	634.40	636.94	618.50	609.50	NP	0.00	18.06	15.52	618.88	Yes	
MW-05	06/30/89	634.40	636.94	618.50	609.50	NP	0.00	18.35	15.81	618.59	Yes	
MW-05	07/12/89	634.40	636.94	618.50	609.50	NP	0.00	18.81	16.27	618.13	No	
MW-05	07/26/89	634.40	636.94	618.50	609.50	NP	0.00	18.96	16.42	617.98	No	
MW-05	07/27/89	634.40	636.94	618.50	609.50	NP	0.00	19.07	16.53	617.87	No	
MW-05	09/03/89	634.40	636.94	618.50	609.50	NP	0.00	19.35	16.81	617.59	No	
MW-05	11/28/89	634.40	636.94	618.50	609.50	NP	0.00	19.82	17.28	617.12	No	
MW-05	06/01/90	634.40	636.94	618.50	609.50	NP	0.00	18.92	16.38	618.02	No	
MW-05	06/19/90	634.40	636.94	618.50	609.50	NP	0.00	18.95	16.41	617.99	No	
MW-05	06/27/90	634.40	636.94	618.50	609.50	NP	0.00	19.25	16.71	617.69	No	
MW-05	07/05/90	634.40	636.94	618.50	609.50	NP	0.00	19.65	17.11	617.29	No	
MW-05	07/13/90	634.40	636.94	618.50	609.50	NP	0.00	19.78	17.24	617.16	No	
MW-05	07/17/90	634.40	636.94	618.50	609.50	NP	0.00	19.33	16.79	617.61	No	
MW-05	07/25/90	634.40	636.94	618.50	609.50	NP	0.00	19.76	17.22	617.18	No	
MW-05	08/09/90	634.40	636.94	618.50	609.50	NP	0.00	19.61	17.07	617.33	No	
MW-05	08/14/90	634.40	636.94	618.50	609.50	NP	0.00	19.63	17.09	617.31	No	
MW-05	08/27/90	634.40	636.94	618.50	609.50	NP	0.00	19.40	16.86	617.54	No	
MW-05	09/06/90	634.40	636.94	618.50	609.50	NP	0.00	21.34	18.80	615.60	No	
MW-05	01/04/91	634.40	636.94	618.50	609.50	NP	0.00	18.60	16.06	618.34	No	
MW-05	01/30/91	634.40	636.94	618.50	609.50	NP	0.00	19.20	16.66	617.74	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-05	04/24/91	634.40	636.94	618.50	609.50	NP	0.00	18.91	16.37	618.03	No	
MW-05	07/09/91	634.40	636.94	618.50	609.50	NP	0.00	16.74	14.20	620.20	Yes	
MW-05	10/08/91	634.40	636.94	618.50	609.50	NP	0.00	15.61	13.07	621.33	Yes	
MW-05	01/07/92	634.40	636.94	618.50	609.50	NP	0.00	15.74	13.20	621.20	Yes	
MW-05	10/14/92	634.40	636.94	618.50	609.50	NP	0.00	16.06	13.52	620.88	Yes	
MW-05	01/29/94	634.40	636.94	618.50	609.50	NP	0.00	17.38	14.84	619.56	Yes	
MW-05	04/27/94	634.40	636.94	618.50	609.50	NP	0.00	16.69	14.15	620.25	Yes	
MW-05	07/21/94	634.40	636.94	618.50	609.50	NP	0.00	15.80	13.26	621.14	Yes	
MW-05	10/25/94	634.40	636.94	618.50	609.50	NP	0.00	16.23	13.69	620.71	Yes	
MW-05	10/27/94	634.40	636.94	618.50	609.50	NP	0.00	15.82	13.28	621.12	Yes	
MW-05	11/02/94	634.40	636.94	618.50	609.50	18.96	1.88	20.84	16.84	617.56	No	
MW-05	02/01/95	634.40	636.94	618.50	609.50	NP	0.00	18.01	15.47	618.93	Yes	
MW-05	04/04/95	634.40	636.94	618.50	609.50	NP	0.00	18.78	16.24	618.16	No	
MW-05	07/12/95	634.40	636.94	618.50	609.50	NP	0.00	17.30	14.76	619.64	Yes	
MW-05	11/13/95	634.40	636.94	618.50	609.50	NP	0.00	15.88	13.34	621.06	Yes	
MW-05	03/13/96	634.40	636.94	618.50	609.50	NP	0.00	17.92	15.38	619.02	Yes	
MW-05	10/08/96	634.40	636.94	618.50	609.50	NP	0.00	15.28	12.74	621.66	Yes	
MW-05	04/29/97	634.40	636.94	618.50	609.50	NP	0.00	13.82	11.28	623.12	Yes	
MW-05	11/03/98	634.40	636.94	618.50	609.50	NP	0.00	14.34	11.80	622.60	Yes	
MW-05	03/02/99	634.40	637.94	618.50	609.50	NP	0.00	18.46	14.92	619.48	Yes	
MW-05	04/26/00	634.40	637.94	618.50	609.50	NP	0.00	17.39	13.85	620.55	Yes	
MW-05	08/18/00	634.40	637.94	618.50	609.50	NP	0.00	17.94	14.40	620.00	Yes	
MW-05	10/10/00	634.40	637.94	618.50	609.50	NP	0.00	18.29	14.75	619.65	Yes	
MW-05	04/24/01	634.40	637.94	618.50	609.50	NP	0.00	18.17	14.63	619.77	Yes	
MW-05	10/23/01	634.40	637.94	618.50	609.50	NP	0.00	19.08	15.54	618.86	Yes	
MW-05	04/23/02	634.40	637.94	618.50	609.50	NP	0.00	18.83	15.29	619.11	Yes	
MW-05	11/05/02	634.40	637.94	618.50	609.50	NP	0.00	17.23	13.69	620.71	Yes	
MW-05	08/28/03							<b>Abandoned</b>				
MW-06	03/23/88	635.50	637.97	620.30	611.30	NP	0.00	21.34	18.87	616.63	No	
MW-06	09/08/88	635.50	637.97	620.30	611.30	NP	0.00	21.61	19.14	616.36	No	
MW-06	09/20/88	635.50	637.97	620.30	611.30	NP	0.00	21.97	19.50	616.00	No	
MW-06	04/27/89	635.50	637.97	620.30	611.30	NP	0.00	21.61	19.14	616.36	No	
MW-06	05/18/89	635.50	637.97	620.30	611.30	NP	0.00	21.21	18.74	616.76	No	
MW-06	06/30/89	635.50	637.97	620.30	611.30	NP	0.00	20.90	18.43	617.07	No	
MW-06	07/12/89	635.50	637.97	620.30	611.30	NP	0.00	21.00	18.53	616.97	No	
MW-06	07/26/89	635.50	637.97	620.30	611.30	NP	0.00	20.97	18.50	617.00	No	
MW-06	07/27/89	635.50	637.97	620.30	611.30	NP	0.00	21.07	18.60	616.90	No	
MW-06	09/03/89	635.50	637.97	620.30	611.30	NP	0.00	21.34	18.87	616.63	No	
MW-06	11/16/89	635.50	637.97	620.30	611.30	NP	0.00	21.42	18.95	616.55	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-06	11/28/89	635.50	637.97	620.30	611.30	NP	0.00	21.54	19.07	616.43	No	
MW-06	06/01/90	635.50	637.97	620.30	611.30	NP	0.00	21.61	19.14	616.36	No	
MW-06	06/19/90	635.50	637.97	620.30	611.30	NP	0.00	21.51	19.04	616.46	No	
MW-06	06/27/90	635.50	637.97	620.30	611.30	NP	0.00	21.60	19.13	616.37	No	
MW-06	07/05/90	635.50	637.97	620.30	611.30	NP	0.00	21.71	19.24	616.26	No	
MW-06	07/13/90	635.50	637.97	620.30	611.30	NP	0.00	21.68	19.21	616.29	No	
MW-06	07/17/90	635.50	637.97	620.30	611.30	NP	0.00	21.43	18.96	616.54	No	
MW-06	07/25/90	635.50	637.97	620.30	611.30	NP	0.00	21.61	19.14	616.36	No	
MW-06	08/09/90	635.50	637.97	620.30	611.30	NP	0.00	21.56	19.09	616.41	No	
MW-06	08/14/90	635.50	637.97	620.30	611.30	NP	0.00	21.54	19.07	616.43	No	
MW-06	08/27/90	635.50	637.97	620.30	611.30	NP	0.00	21.42	18.95	616.55	No	
MW-06	09/06/90	635.50	637.97	620.30	611.30	NP	0.00	21.57	19.10	616.40	No	
MW-06	01/04/91	635.50	637.97	620.30	611.30	NP	0.00	20.81	18.34	617.16	No	
MW-06	01/30/91	635.50	637.97	620.30	611.30	NP	0.00	21.00	18.53	616.97	No	
MW-06	04/24/91	635.50	637.97	620.30	611.30	NP	0.00	21.65	19.18	616.32	No	
MW-06	07/09/91	635.50	637.97	620.30	611.30	NP	0.00	20.20	17.73	617.77	No	
MW-06	10/08/91	635.50	637.97	620.30	611.30	NP	0.00	18.69	16.22	619.28	No	
MW-06	01/07/92	635.50	637.97	620.30	611.30	NP	0.00	18.68	16.21	619.29	No	
MW-06	10/14/92	635.50	637.97	620.30	611.30	NP	0.00	18.71	16.24	619.26	No	
MW-06	06/25/93	635.50	637.97	620.30	611.30	NP	0.00	17.65	15.18	620.32	Yes	
MW-06	10/28/93	635.50	637.97	620.30	611.30	NP	0.00	18.57	16.10	619.40	No	
MW-06	01/29/94	635.50	637.97	620.30	611.30	NP	0.00	19.52	17.05	618.45	No	
MW-06	04/27/94	635.50	637.97	620.30	611.30	NP	0.00	19.92	17.45	618.05	No	
MW-06	07/21/94	635.50	637.97	620.30	611.30	NP	0.00	18.56	16.09	619.41	No	
MW-06	10/25/94	635.50	637.97	620.30	611.30	NP	0.00	19.13	16.66	618.84	No	
MW-06	10/27/94	635.50	637.97	620.30	611.30	NP	0.00	18.44	15.97	619.53	No	
MW-06	11/02/94	635.50	637.97	620.30	611.30	18.42	1.43	19.85	16.27	619.23	No	
MW-06	02/01/95	635.50	637.97	620.30	611.30	NP	0.00	19.90	17.43	618.07	No	
MW-06	04/04/95	635.50	637.97	620.30	611.30	NP	0.00	20.61	18.14	617.36	No	
MW-06	07/12/95	635.50	637.97	620.30	611.30	NP	0.00	19.83	17.36	618.14	No	
MW-06	11/13/95	635.50	637.97	620.30	611.30	NP	0.00	19.25	16.78	618.72	No	
MW-06	03/13/96	635.50	637.97	620.30	611.30	NP	0.00	20.10	17.63	617.87	No	
MW-06	04/22/96	635.50	637.97	620.30	611.30	NP	0.00	19.72	17.25	618.25	No	
MW-06	10/08/96	635.50	637.97	620.30	611.30	NP	0.00	18.11	15.64	619.86	No	
MW-06	04/29/97	635.50	637.97	620.30	611.30	NP	0.00	17.52	15.05	620.45	Yes	
MW-06	11/03/98	635.50	637.97	620.30	611.30	NP	0.00	20.64	18.17	617.33	No	
MW-06	03/02/99	635.50	637.97	620.30	611.30	NP	0.00	20.60	18.13	617.37	No	
MW-06	04/26/00	635.50	637.97	620.30	611.30	NP	0.00	20.02	17.55	617.95	No	
MW-06	10/10/00	635.50	637.97	620.30	611.30	NP	0.00	20.33	17.86	617.64	No	
MW-06	04/24/01	635.50	637.97	620.30	611.30	NP	0.00	20.83	18.36	617.14	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-06	10/23/01	635.50	637.97	620.30	611.30	NP	0.00	20.43	17.96	617.54	No	
MW-06	04/23/02	635.50	637.97	620.30	611.30	NP	0.00	21.43	18.96	616.54	No	
MW-06	11/05/02	635.50	637.97	620.30	611.30	NP	0.00	21.15	18.68	616.82	No	
MW-06	04/17/03	635.50	637.97	620.30	611.30	NP	0.00	20.56	18.09	617.41	No	
MW-06	10/20/03	635.50	637.97	620.30	611.30	NP	0.00	21.56	19.09	616.41	No	
MW-06	04/19/04	635.32	637.70	620.30	611.30	NP	0.00	22.22	19.84	615.48	No	
MW-06	11/16/04	635.32	637.70	620.30	611.30	NP	0.00	20.75	18.37	616.95	No	
MW-06	04/18/05	635.32	637.70	620.30	611.30	NP	0.00	20.95	18.57	616.75	No	
MW-06	10/11/05	635.32	637.70	620.30	611.30	NP	0.00	20.52	18.14	617.18	No	
MW-06	05/23/06	635.32	637.70	620.30	611.30	NP	0.00	19.95	17.57	617.75	No	
MW-06	10/16/06	635.32	637.70	620.30	611.30	NP	0.00	20.43	18.05	617.27	No	
MW-06	04/23/07	635.32	637.70	620.30	611.30	NP	0.00	21.11	18.73	616.59	No	Well bent
MW-06	09/25/07	635.32	637.70	620.30	611.30	NP	0.00	21.08	18.70	616.62	No	
MW-06	05/01/08	635.32	637.70	620.30	611.30	NP	0.00	20.08	17.70	617.62	No	
MW-06	10/20/08	635.32	637.70	620.30	611.30	NP	0.00	19.05	16.67	618.65	No	
MW-06	04/18/09	635.32	637.70	620.30	611.30	NP	0.00	19.67	17.29	618.03	No	
MW-06	07/29/09						Abandoned					
MW-06R	07/29/09	637.12	639.04	623.12	613.12							
MW-06R	10/11/09	637.12	639.04	623.12	613.12	NP	0.00	21.33	19.41	617.71	No	
MW-06R	04/28/10	637.12	639.04	623.12	613.12	NP	0.00	21.22	19.30	617.82	No	
MW-06R	10/25/10	637.12	639.04	623.12	613.12	NP	0.00	19.43	17.51	619.61	No	
MW-06R	04/25/11	637.12	639.04	623.12	613.12	NP	0.00	20.56	18.64	618.48	No	
MW-06R	10/10/11	637.12	639.04	623.12	613.12	NP	0.00	19.94	18.02	619.10	No	
MW-06R	01/04/12	637.12	639.04	623.12	613.12	NP	0.00	20.94	19.02	618.10	No	
MW-06R	04/16/12	637.12	639.04	623.12	613.12	NP	0.00	21.74	19.82	617.30	No	
MW-06R	06/26/12	637.12	639.04	623.12	613.12	NP	0.00	20.02	18.10	619.02	No	
MW-06R	09/30/12	637.12	639.04	623.12	613.12	NP	0.00	21.03	19.11	618.01	No	
MW-06R	12/17/12	637.12	639.04	623.12	613.12	NP	0.00	21.58	19.66	617.46	No	
MW-06R	03/25/13	637.12	639.04	623.12	613.12	NP	0.00	22.25	20.33	616.79	No	
MW-06R	05/05/13	637.12	639.04	623.12	613.12	NP	0.00	21.99	20.07	617.05	No	
MW-07	03/23/88	634.40	637.04	619.00	610.00	NP	0.00	21.28	18.64	615.76	No	
MW-07	09/08/88	634.40	637.04	619.00	610.00	NP	0.00	21.54	18.90	615.50	No	
MW-07	09/20/88	634.40	637.04	619.00	610.00	NP	0.00	21.70	19.06	615.34	No	
MW-07	04/27/89	634.40	637.04	619.00	610.00	NP	0.00	21.61	18.97	615.43	No	
MW-07	05/18/89	634.40	637.04	619.00	610.00	NP	0.00	21.36	18.72	615.68	No	
MW-07	06/30/89	634.40	637.04	619.00	610.00	NP	0.00	20.98	18.34	616.06	No	
MW-07	07/12/89	634.40	637.04	619.00	610.00	NP	0.00	21.03	18.39	616.01	No	
MW-07	07/26/89	634.40	637.04	619.00	610.00	NP	0.00	21.00	18.36	616.04	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-07	07/27/89	634.40	637.04	619.00	610.00	NP	0.00	21.08	18.44	615.96	No	
MW-07	09/03/89	634.40	637.04	619.00	610.00	NP	0.00	21.17	18.53	615.87	No	
MW-07	11/16/89	634.40	637.04	619.00	610.00	NP	0.00	21.27	18.63	615.77	No	
MW-07	11/28/89	634.40	637.04	619.00	610.00	NP	0.00	21.31	18.67	615.73	No	
MW-07	06/01/90	634.40	637.04	619.00	610.00	NP	0.00	21.68	19.04	615.36	No	
MW-07	06/19/90	634.40	637.04	619.00	610.00	NP	0.00	21.50	18.86	615.54	No	
MW-07	06/27/90	634.40	637.04	619.00	610.00	NP	0.00	21.47	18.83	615.57	No	
MW-07	07/05/90	634.40	637.04	619.00	610.00	NP	0.00	21.46	18.82	615.58	No	
MW-07	07/13/90	634.40	637.04	619.00	610.00	NP	0.00	21.49	18.85	615.55	No	
MW-07	07/17/90	634.40	637.04	619.00	610.00	NP	0.00	21.37	18.73	615.67	No	
MW-07	07/25/90	634.40	637.04	619.00	610.00	NP	0.00	21.36	18.72	615.68	No	
MW-07	08/09/90	634.40	637.04	619.00	610.00	NP	0.00	21.34	18.70	615.70	No	
MW-07	08/14/90	634.40	637.04	619.00	610.00	NP	0.00	21.38	18.74	615.66	No	
MW-07	08/27/90	634.40	637.04	619.00	610.00	NP	0.00	21.34	18.70	615.70	No	
MW-07	09/06/90	634.40	637.04	619.00	610.00	NP	0.00	21.30	18.66	615.74	No	
MW-07	01/04/91	634.40	637.04	619.00	610.00	NP	0.00	20.89	18.25	616.15	No	
MW-07	01/30/91	634.40	637.04	619.00	610.00	NP	0.00	20.98	18.34	616.06	No	
MW-07	04/24/91	634.40	637.04	619.00	610.00	NP	0.00	21.43	18.79	615.61	No	
MW-07	07/09/91	634.40	637.04	619.00	610.00	NP	0.00	20.19	17.55	616.85	No	
MW-07	08/06/91	634.40	637.04	619.00	610.00	NP	0.00	19.83	17.19	617.21	No	
MW-07	09/04/91	634.40	637.04	619.00	610.00	NP	0.00	19.94	17.30	617.10	No	
MW-07	10/08/91	634.40	637.04	619.00	610.00	NP	0.00	19.60	16.96	617.44	No	
MW-07	11/08/91	634.40	637.04	619.00	610.00	NP	0.00	19.37	16.73	617.67	No	
MW-07	12/03/91	634.40	637.04	619.00	610.00	NP	0.00	19.32	16.68	617.72	No	
MW-07	01/07/92	634.40	637.04	619.00	610.00	NP	0.00	19.30	16.66	617.74	No	
MW-07	02/04/92	634.40	637.04	619.00	610.00	NP	0.00	19.51	16.87	617.53	No	
MW-07	03/03/92	634.40	637.04	619.00	610.00	NP	0.00	19.76	17.12	617.28	No	
MW-07	09/24/92	634.40	637.04	619.00	610.00	NP	0.00	16.47	13.83	620.57	Yes	
MW-07	10/14/92	634.40	637.04	619.00	610.00	NP	0.00	19.17	16.53	617.87	No	
MW-07	06/25/93	634.40	637.04	619.00	610.00	NP	0.00	17.54	14.90	619.50	Yes	
MW-07	10/28/93	634.40	637.04	619.00	610.00	NP	0.00	19.16	16.52	617.88	No	
MW-07	01/29/94	634.40	637.04	619.00	610.00	NP	0.00	19.77	17.13	617.27	No	
MW-07	04/27/94	634.40	637.04	619.00	610.00	NP	0.00	20.43	17.79	616.61	No	
MW-07	07/21/94	634.40	637.04	619.00	610.00	NP	0.00	19.36	16.72	617.68	No	
MW-07	10/25/94	634.40	637.04	619.00	610.00	NP	0.00	19.68	17.04	617.36	No	
MW-07	10/27/94	634.40	637.04	619.00	610.00	NP	0.00	19.16	16.52	617.88	No	
MW-07	11/02/94	634.40	637.04	619.00	610.00	NP	0.00	17.10	14.46	619.94	Yes	
MW-07	02/01/95	634.40	637.04	619.00	610.00	NP	0.00	20.24	17.60	616.80	No	
MW-07	04/04/95	634.40	637.04	619.00	610.00	NP	0.00	20.62	17.98	616.42	No	
MW-07	07/12/95	634.40	637.04	619.00	610.00	NP	0.00	20.36	17.72	616.68	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations	
MW-07	11/13/95	634.40	637.04	619.00	610.00	NP	0.00	20.01	17.37	617.03	No		
MW-07	03/13/96	634.40	637.04	619.00	610.00	NP	0.00	20.60	17.96	616.44	No		
MW-07	04/22/96	634.40	637.04	619.00	610.00	NP	0.00	20.47	17.83	616.57	No		
MW-07	10/08/96	634.40	637.04	619.00	610.00	NP	0.00	18.96	16.32	618.08	No		
MW-07	04/29/97	634.40	637.04	619.00	610.00	NP	0.00	18.75	16.11	618.29	No		
MW-07	11/03/98	634.40	637.04	619.00	610.00	NP	0.00	20.85	18.21	616.19	No		
MW-07	03/02/99	634.40	637.04	619.00	610.00	NP	0.00	20.90	18.26	616.14	No		
MW-07	04/26/00	634.40	637.04	619.00	610.00	NP	0.00	20.37	17.73	616.67	No		
MW-07	10/10/00	634.40	637.04	619.00	610.00	NP	0.00	19.68	17.04	617.36	No		
MW-07	04/24/01	634.40	637.04	619.00	610.00	NP	0.00	20.54	17.90	616.50	No		
MW-07	10/23/01	634.40	637.04	619.00	610.00	NP	0.00	20.63	17.99	616.41	No		
MW-07	04/23/02	634.40	637.04	619.00	610.00	NP	0.00	21.15	18.51	615.89	No		
MW-07	11/05/02	634.40	637.04	619.00	610.00	NP	0.00	20.59	17.95	616.45	No	Cover Rusted On	
MW-07	08/28/03					Abandoned							
MW-08	03/23/88	632.50	634.78	616.60	606.60	NP	0.00	20.97	18.69	613.81	No		
MW-08	09/08/88	632.50	634.78	616.60	606.60	NP	0.00	21.52	19.24	613.26	No		
MW-08	09/20/88	632.50	634.78	616.60	606.60	NP	0.00	21.62	19.34	613.16	No		
MW-08	04/27/89	632.50	634.78	616.60	606.60	NP	0.00	21.30	19.02	613.48	No		
MW-08	05/18/89	632.50	634.78	616.60	606.60	NP	0.00	21.04	18.76	613.74	No		
MW-08	06/30/89	632.50	634.78	616.60	606.60	NP	0.00	20.85	18.57	613.93	No		
MW-08	07/12/89	632.50	634.78	616.60	606.60	NP	0.00	20.87	18.59	613.91	No		
MW-08	07/26/89	632.50	634.78	616.60	606.60	NP	0.00	20.90	18.62	613.88	No		
MW-08	07/27/89	632.50	634.78	616.60	606.60	NP	0.00	20.96	18.68	613.82	No		
MW-08	09/03/89	632.50	634.78	616.60	606.60	NP	0.00	21.13	18.85	613.65	No		
MW-08	11/16/89	632.50	634.78	616.60	606.60	NP	0.00	21.21	18.93	613.57	No		
MW-08	11/28/89	632.50	634.78	616.60	606.60	NP	0.00	21.25	18.97	613.53	No		
MW-08	06/01/90	632.50	634.78	616.60	606.60	NP	0.00	21.92	19.64	612.86	No		
MW-08	06/19/90	632.50	634.78	616.60	606.60	NP	0.00	21.59	19.31	613.19	No		
MW-08	06/27/90	632.50	634.78	616.60	606.60	NP	0.00	21.57	19.29	613.21	No		
MW-08	07/05/90	632.50	634.78	616.60	606.60	NP	0.00	21.56	19.28	613.22	No		
MW-08	07/13/90	632.50	634.78	616.60	606.60	NP	0.00	21.60	19.32	613.18	No		
MW-08	07/17/90	632.50	634.78	616.60	606.60	NP	0.00	21.47	19.19	613.31	No		
MW-08	07/25/90	632.50	634.78	616.60	606.60	NP	0.00	21.50	19.22	613.28	No		
MW-08	08/09/90	632.50	634.78	616.60	606.60	NP	0.00	21.51	19.23	613.27	No		
MW-08	08/14/90	632.50	634.78	616.60	606.60	NP	0.00	21.55	19.27	613.23	No		
MW-08	08/27/90	632.50	634.78	616.60	606.60	NP	0.00	21.53	19.25	613.25	No		
MW-08	09/06/90	632.50	634.78	616.60	606.60	NP	0.00	21.47	19.19	613.31	No		
MW-08	01/04/91	632.50	634.78	616.60	606.60	NP	0.00	20.80	18.52	613.98	No		
MW-08	01/30/91	632.50	634.78	616.60	606.60	NP	0.00	20.97	18.69	613.81	No		

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-08	04/24/91	632.50	634.78	616.60	606.60	NP	0.00	21.44	19.16	613.34	No	
MW-08	07/09/91	632.50	634.78	616.60	606.60	NP	0.00	20.11	17.83	614.67	No	
MW-08	10/08/91	632.50	634.78	616.60	606.60	NP	0.00	18.47	16.19	616.31	No	
MW-08	01/07/92	632.50	634.78	616.60	606.60	NP	0.00	17.97	15.69	616.81	Yes	
MW-08	10/14/92	632.50	634.78	616.60	606.60	NP	0.00	17.78	15.50	617.00	Yes	
MW-08	06/25/93	632.50	634.78	616.60	606.60	NP	0.00	17.54	15.26	617.24	Yes	
MW-08	10/28/93	632.50	634.78	616.60	606.60	NP	0.00	17.73	15.45	617.05	Yes	
MW-08	01/29/94	632.50	634.78	616.60	606.60	NP	0.00	18.34	16.06	616.44	No	
MW-08	04/27/94	632.50	634.78	616.60	606.60	NP	0.00	18.98	16.70	615.80	No	
MW-08	07/21/94	632.50	634.78	616.60	606.60	NP	0.00	17.98	15.70	616.80	Yes	
MW-08	10/25/94	632.50	634.78	616.60	606.60	NP	0.00	18.29	16.01	616.49	No	
MW-08	10/27/94	632.50	634.78	616.60	606.60	NP	0.00	17.98	15.70	616.80	Yes	
MW-08	11/02/94	632.50	634.78	616.60	606.60	NP	0.00	17.38	15.10	617.40	Yes	
MW-08	02/01/95	632.50	634.78	616.60	606.60	NP	0.00	18.90	16.62	615.88	No	
MW-08	04/04/95	632.50	634.78	616.60	606.60	NP	0.00	19.59	17.31	615.19	No	
MW-08	07/12/95	632.50	634.78	616.60	606.60	NP	0.00	19.43	17.15	615.35	No	
MW-08	11/13/95	632.50	634.78	616.60	606.60	NP	0.00	18.81	16.53	615.97	No	
MW-08	03/13/96	632.50	634.78	616.60	606.60	NP	0.00	19.49	17.21	615.29	No	
MW-08	04/22/96	632.50	634.78	616.60	606.60	NP	0.00	19.05	16.77	615.73	No	
MW-08	10/08/96	632.50	634.78	616.60	606.60	NP	0.00	17.38	15.10	617.40	Yes	
MW-08	04/29/97	632.50	634.78	616.60	606.60	NP	0.00	17.16	14.88	617.62	Yes	
MW-08	11/03/98	632.50	634.78	616.60	606.60	NP	0.00	19.99	17.71	614.79	No	
MW-08	03/02/99	632.50	634.78	616.60	606.60	NP	0.00	20.09	17.81	614.69	No	
MW-08	04/26/00	632.50	634.78	616.60	606.60	NP	0.00	19.04	16.76	615.74	No	
MW-08	10/10/00	632.50	634.78	616.60	606.60	NP	0.00	19.45	17.17	615.33	No	
MW-08	04/24/01	632.50	634.78	616.60	606.60	NP	0.00	20.23	17.95	614.55	No	
MW-08	10/23/01	632.50	634.78	616.60	606.60	NP	0.00	19.66	17.38	615.12	No	
MW-08	04/23/02	632.50	634.78	616.60	606.60	NP	0.00	20.55	18.27	614.23	No	
MW-08	11/05/02	632.50	634.78	616.60	606.60	NP	0.00	19.50	17.22	615.28	No	
MW-08	08/18/03						<b>Abandoned</b>					
MW-09	03/23/88	629.40	631.98	613.90	604.90	NP	0.00	16.19	13.61	615.79	Yes	
MW-09	09/08/88	629.40	631.98	613.90	604.90	NP	0.00	15.22	12.64	616.76	Yes	
MW-09	09/20/88	629.40	631.98	613.90	604.90	NP	0.00	15.27	12.69	616.71	Yes	
MW-09	04/27/89	629.40	631.98	613.90	604.90	NP	0.00	15.72	13.14	616.26	Yes	
MW-09	05/18/89	629.40	631.98	613.90	604.90	NP	0.00	15.09	12.51	616.89	Yes	
MW-09	06/30/89	629.40	631.98	613.90	604.90	NP	0.00	15.00	12.42	616.98	Yes	
MW-09	07/12/89	629.40	631.98	613.90	604.90	NP	0.00	15.36	12.78	616.62	Yes	
MW-09	07/26/89	629.40	631.98	613.90	604.90	NP	0.00	15.67	13.09	616.31	Yes	
MW-09	07/27/89	629.40	631.98	613.90	604.90	NP	0.00	15.74	13.16	616.24	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-09	09/03/89	629.40	631.98	613.90	604.90	NP	0.00	15.50	12.92	616.48	Yes	
MW-09	11/16/89	629.40	631.98	613.90	604.90	NP	0.00	13.77	11.19	618.21	Yes	
MW-09	11/28/89	629.40	631.98	613.90	604.90	NP	0.00	14.28	11.70	617.70	Yes	
MW-09	06/01/90	629.40	631.98	613.90	604.90	NP	0.00	14.87	12.29	617.11	Yes	
MW-09	06/19/90	629.40	631.98	613.90	604.90	NP	0.00	14.54	11.96	617.44	Yes	
MW-09	06/27/90	629.40	631.98	613.90	604.90	NP	0.00	14.70	12.12	617.28	Yes	
MW-09	07/05/90	629.40	631.98	613.90	604.90	NP	0.00	15.03	12.45	616.95	Yes	
MW-09	07/13/90	629.40	631.98	613.90	604.90	NP	0.00	15.28	12.70	616.70	Yes	
MW-09	07/17/90	629.40	631.98	613.90	604.90	NP	0.00	15.15	12.57	616.83	Yes	
MW-09	07/25/90	629.40	631.98	613.90	604.90	NP	0.00	15.50	12.92	616.48	Yes	
MW-09	08/09/90	629.40	631.98	613.90	604.90	NP	0.00	15.56	12.98	616.42	Yes	
MW-09	08/14/90	629.40	631.98	613.90	604.90	NP	0.00	15.75	13.17	616.23	Yes	
MW-09	08/27/90	629.40	631.98	613.90	604.90	NP	0.00	14.93	12.35	617.05	Yes	
MW-09	09/06/90	629.40	631.98	613.90	604.90	NP	0.00	15.09	12.51	616.89	Yes	
MW-09	01/04/91	629.40	631.98	613.90	604.90	NP	0.00	14.28	11.70	617.70	Yes	
MW-09	01/30/91	629.40	631.98	613.90	604.90	NP	0.00	15.26	12.68	616.72	Yes	
MW-09	04/24/91	629.40	631.98	613.90	604.90	NP	0.00	15.47	12.89	616.51	Yes	
MW-09	07/09/91	629.40	631.98	613.90	604.90	NP	0.00	12.85	10.27	619.13	Yes	
MW-09	10/08/91	629.40	631.98	613.90	604.90	NP	0.00	11.98	9.40	620.00	Yes	
MW-09	01/07/92	629.40	631.98	613.90	604.90	NP	0.00	10.20	7.62	621.78	Yes	
MW-09	10/14/92	629.40	631.98	613.90	604.90	NP	0.00	9.98	7.40	622.00	Yes	
MW-09	01/29/94	629.40	631.98	613.90	604.90	NP	0.00	14.04	11.46	617.94	Yes	
MW-09	04/27/94	629.40	631.98	613.90	604.90	NP	0.00	12.84	10.26	619.14	Yes	
MW-09	07/21/94	629.40	631.98	613.90	604.90	NP	0.00	12.96	10.38	619.02	Yes	
MW-09	10/25/94	629.40	631.98	613.90	604.90	NP	0.00	11.62	9.04	620.36	Yes	
MW-09	10/27/94	629.40	631.98	613.90	604.90	NP	0.00	11.18	8.60	620.80	Yes	
MW-09	11/02/94	629.40	631.98	613.90	604.90	NP	0.00	9.30	6.72	622.68	Yes	
MW-09	02/01/95	629.40	631.98	613.90	604.90	NP	0.00	14.66	12.08	617.32	Yes	
MW-09	04/04/95	629.40	631.98	613.90	604.90	NP	0.00	15.61	13.03	616.37	Yes	
MW-09	07/12/95	629.40	631.98	613.90	604.90	NP	0.00	13.70	11.12	618.28	Yes	
MW-09	11/13/95	629.40	631.98	613.90	604.90	NP	0.00	10.19	7.61	621.79	Yes	
MW-09	03/13/96	629.40	631.98	613.90	604.90	NP	0.00	14.97	12.39	617.01	Yes	
MW-09	10/08/96	629.40	631.98	613.90	604.90	NP	0.00	10.94	8.36	621.04	Yes	
MW-09	04/29/97	629.40	631.98	613.90	604.90	NP	0.00	10.35	7.77	621.63	Yes	
MW-09	11/03/98	629.40	631.98	613.90	604.90	NP	0.00	14.24	11.66	617.74	Yes	
MW-09	03/02/99	629.40	631.98	613.90	604.90	NP	0.00	14.95	12.37	617.03	Yes	
MW-09	04/26/00	629.40	631.98	613.90	604.90	NP	0.00	14.20	11.62	617.78	Yes	
MW-09	08/18/00	629.40	631.98	613.90	604.90	NP	0.00	14.24	11.66	617.74	Yes	
MW-09	10/10/00	629.40	631.98	613.90	604.90	NP	0.00	14.66	12.08	617.32	Yes	
MW-09	11/05/02	629.40	631.98	613.90	604.90	NP	0.00	15.79	13.21	616.19	Yes	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-09	10/21/03	<b>Monitoring Well Replaced Due to Road Construction</b>										
MW-09	04/19/04	631.30	634.22	613.90	604.90	NP	0.00	20.55	17.63	613.67	No	
MW-09	11/16/04	631.30	634.22	613.90	604.90	NP	0.00	18.39	15.47	615.83	Yes	
MW-09	04/18/05	631.30	634.22	613.90	604.90	NP	0.00	19.32	16.40	614.90	Yes	
MW-09	10/11/05	631.30	634.22	613.90	604.90	NP	0.00	18.50	15.58	615.72	Yes	
MW-09	05/23/06	631.30	634.22	613.90	604.90	NP	0.00	17.69	14.77	616.53	Yes	
MW-09	10/16/06	631.30	634.22	613.90	604.90	NP	0.00	18.58	15.66	615.64	Yes	
MW-09	04/23/07	631.30	634.22	613.90	604.90	NP	0.00	19.31	16.39	614.91	Yes	
MW-09	09/25/07	631.30	634.22	613.90	604.90	NP	0.00	19.46	16.54	614.76	Yes	
MW-09	05/01/08	631.30	634.22	613.90	604.90	NP	0.00	18.21	15.29	616.01	Yes	
MW-09	10/20/08	631.30	634.22	613.90	604.90	NP	0.00	16.83	13.91	617.39	Yes	
MW-09	04/18/09	631.30	634.22	613.90	604.90	NP	0.00	17.66	14.74	616.56	Yes	
MW-09	10/11/09	631.30	634.22	613.90	604.90	NP	0.00	18.17	15.25	616.05	Yes	
MW-09	04/28/10	631.30	634.22	613.90	604.90	NP	0.00	18.12	15.20	616.10	Yes	
MW-09	10/25/10	631.30	634.22	613.90	604.90	NP	0.00	16.62	13.70	617.60	Yes	
MW-09	04/25/11	631.30	634.22	613.90	604.90	NP	0.00	17.42	14.50	616.80	Yes	
MW-09	10/10/11	631.30	634.22	613.90	604.90	NP	0.00	16.93	14.01	617.29	Yes	
MW-09	01/04/12	631.30	634.22	613.90	604.90	NP	0.00	18.12	15.20	616.10	Yes	
MW-09	04/16/12	631.30	634.22	613.90	604.90	NP	0.00	18.75	15.83	615.47	Yes	
MW-09	06/26/12	631.30	634.22	613.90	604.90	NP	0.00	16.50	13.58	617.72	Yes	
MW-09	09/30/12	631.30	634.22	613.90	604.90	NP	0.00	17.92	15.00	616.30	Yes	
MW-09	12/17/12	631.30	634.22	613.90	604.90	NP	0.00	18.54	15.62	615.68	Yes	
MW-09	03/25/13	631.30	634.22	613.90	604.90	NP	0.00	19.38	16.46	614.84	Yes	
MW-09	05/05/13	631.30	634.22	613.90	604.90	NP	0.00	19.07	16.15	615.15	Yes	
MW-10	03/23/88	631.40	633.77	615.90	606.90	NP	0.00	18.01	15.64	615.76	No	
MW-10	09/08/88	631.40	633.77	615.90	606.90	NP	0.00	18.38	16.01	615.39	No	
MW-10	09/20/88	631.40	633.77	615.90	606.90	NP	0.00	18.60	16.23	615.17	No	
MW-10	04/27/89	631.40	633.77	615.90	606.90	NP	0.00	18.37	16.00	615.40	No	
MW-10	05/18/89	631.40	633.77	615.90	606.90	NP	0.00	18.10	15.73	615.67	No	
MW-10	06/30/89	631.40	633.77	615.90	606.90	NP	0.00	17.55	15.18	616.22	Yes	
MW-10	07/12/89	631.40	633.77	615.90	606.90	NP	0.00	17.66	15.29	616.11	Yes	
MW-10	07/26/89	631.40	633.77	615.90	606.90	NP	0.00	17.61	15.24	616.16	Yes	
MW-10	07/27/89	631.40	633.77	615.90	606.90	NP	0.00	17.68	15.31	616.09	Yes	
MW-10	09/03/89	631.40	633.77	615.90	606.90	NP	0.00	17.73	15.36	616.04	Yes	
MW-10	11/16/89	631.40	633.77	615.90	606.90	NP	0.00	17.94	15.57	615.83	No	
MW-10	11/28/89	631.40	633.77	615.90	606.90	NP	0.00	18.20	15.83	615.57	No	
MW-10	06/01/90	631.40	633.77	615.90	606.90	NP	0.00	18.34	15.97	615.43	No	
MW-10	06/19/90	631.40	633.77	615.90	606.90	NP	0.00	18.14	15.77	615.63	No	
MW-10	06/27/90	631.40	633.77	615.90	606.90	NP	0.00	18.28	15.91	615.49	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-10	07/05/90	631.40	633.77	615.90	606.90	NP	0.00	18.50	16.13	615.27	No	
MW-10	07/13/90	631.40	633.77	615.90	606.90	NP	0.00	18.40	16.03	615.37	No	
MW-10	07/17/90	631.40	633.77	615.90	606.90	NP	0.00	18.23	15.86	615.54	No	
MW-10	07/25/90	631.40	633.77	615.90	606.90	NP	0.00	18.36	15.99	615.41	No	
MW-10	08/09/90	631.40	633.77	615.90	606.90	NP	0.00	18.28	15.91	615.49	No	
MW-10	08/14/90	631.40	633.77	615.90	606.90	NP	0.00	18.39	16.02	615.38	No	
MW-10	08/27/90	631.40	633.77	615.90	606.90	NP	0.00	18.09	15.72	615.68	No	
MW-10	09/06/90	631.40	633.77	615.90	606.90	NP	0.00	18.02	15.65	615.75	No	
MW-10	01/04/91	631.40	633.77	615.90	606.90	NP	0.00	17.44	15.07	616.33	Yes	
MW-10	01/30/91	631.40	633.77	615.90	606.90	NP	0.00	17.57	15.20	616.20	Yes	
MW-10	04/24/91	631.40	633.77	615.90	606.90	NP	0.00	18.19	15.82	615.58	No	
MW-10	07/09/91	631.40	633.77	615.90	606.90	NP	0.00	16.16	13.79	617.61	Yes	
MW-10	10/08/91	631.40	633.77	615.90	606.90	NP	0.00	14.89	12.52	618.88	Yes	
MW-10	01/07/92	631.40	633.77	615.90	606.90	NP	0.00	14.88	12.51	618.89	Yes	
MW-10	10/14/92	631.40	633.77	615.90	606.90	NP	0.00	14.87	12.50	618.90	Yes	
MW-10	01/29/94	631.40	633.77	615.90	606.90	NP	0.00	16.01	13.64	617.76	Yes	
MW-10	04/27/94	631.40	633.77	615.90	606.90	NP	0.00	16.13	13.76	617.64	Yes	
MW-10	07/21/94	631.40	633.77	615.90	606.90	NP	0.00	14.78	12.41	618.99	Yes	
MW-10	10/25/94	631.40	633.77	615.90	606.90	NP	0.00	15.25	12.88	618.52	Yes	
MW-10	10/27/94	631.40	633.77	615.90	606.90	NP	0.00	14.70	12.33	619.07	Yes	
MW-10	11/02/94	631.40	633.77	615.90	606.90	NP	0.00	17.20	14.83	616.57	Yes	
MW-10	02/01/95	631.40	633.77	615.90	606.90	NP	0.00	16.96	14.59	616.81	Yes	
MW-10	04/04/95	631.40	633.77	615.90	606.90	NP	0.00	17.12	14.75	616.65	Yes	
MW-10	07/12/95	631.40	633.77	615.90	606.90	NP	0.00	16.15	13.78	617.62	Yes	
MW-10	11/13/95	631.40	633.77	615.90	606.90	NP	0.00	14.88	12.51	618.89	Yes	
MW-10	03/13/96	631.40	633.77	615.90	606.90	16.67	0.01	16.68	14.30	617.10	Yes	
MW-10	10/08/96	631.40	633.77	615.90	606.90	NP	0.00	14.02	11.65	619.75	Yes	
MW-10	04/29/97	631.40	633.77	615.90	606.90	NP	0.00	13.30	10.93	620.47	Yes	
MW-10	11/03/98	631.40	633.77	615.90	606.90	NP	0.00	17.01	14.64	616.76	Yes	
MW-10	03/02/99	631.40	633.77	615.90	606.90	NP	0.00	17.01	14.64	616.76	Yes	
MW-10	04/26/00	631.40	633.77	615.90	606.90	NP	0.00	16.18	13.81	617.59	Yes	
MW-10	08/18/00	631.40	633.77	615.90	606.90	NP	0.00	16.62	14.25	617.15	Yes	
MW-10	10/10/00	631.40	633.77	615.90	606.90	NP	0.00	16.80	14.43	616.97	Yes	
MW-10	09/30/02	631.40	633.77	615.90	606.90	NP	0.00	17.09	14.72	616.68	Yes	
MW-10	11/05/02	631.40	633.77	615.90	606.90	NP	0.00	16.34	13.97	617.43	Yes	
MW-10	06/10/03	631.40	633.77	615.90	606.90	NP	0.00	17.85	15.48	615.92	Yes	
MW-10	10/20/03	631.40	633.77	615.90	606.90	NP	0.00	17.97	15.60	615.80	No	
MW-10	12/03/03	631.40	633.77	615.90	606.90	NP	0.00	18.31	15.94	615.46	No	
MW-10	04/19/04	634.75	633.83	615.90	606.90	NP	0.00	18.39	19.31	615.44	No	
MW-10	07/28/04	634.75	633.83	615.90	606.90	NP	0.00	17.74	18.66	616.09	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-10	11/16/04	634.75	633.83	615.90	606.90	NP	0.00	17.17	18.09	616.66	Yes	
MW-10	04/18/05	634.75	633.83	615.90	606.90	NP	0.00	17.39	18.31	616.44	Yes	
MW-10	10/11/05	634.75	633.83	615.90	606.90	NP	0.00	16.62	17.54	617.21	Yes	
MW-10	05/23/06	634.75	633.83	615.90	606.90	NP	0.00	15.91	16.83	617.92	Yes	
MW-10	10/16/06	634.75	633.83	615.90	606.90	NP	0.00	16.81	17.73	617.02	Yes	
MW-10	04/23/07	634.75	633.83	615.90	606.90	NP	0.00	17.69	18.61	616.14	Yes	
MW-10	09/25/07	634.75	635.95	615.90	606.90	NP	0.00	19.56	18.36	616.39	Yes	
MW-10	05/01/08	634.75	635.95	615.90	606.90	NP	0.00	18.35	17.15	617.60	Yes	
MW-10	10/20/08	634.75	635.95	615.90	606.90	NP	0.00	17.26	16.06	618.69	Yes	
MW-10	04/18/09	634.75	635.95	615.90	606.90	NP	0.00	18.33	17.13	617.62	Yes	
MW-10	10/11/09	634.75	635.95	615.90	606.90	NP	0.00	18.79	17.59	617.16	Yes	
MW-10	04/28/10	634.75	635.95	615.90	606.90	NP	0.00	18.91	17.71	617.04	Yes	
MW-10	10/25/10	634.75	635.95	615.90	606.90	NP	0.00	16.70	15.50	619.25	Yes	
MW-10	04/25/11	634.75	635.95	615.90	606.90	NP	0.00	17.92	16.72	618.03	Yes	
MW-10	10/10/11	634.75	635.95	615.90	606.90	NP	0.00	17.48	16.28	618.47	Yes	
MW-10	01/04/12	634.75	635.95	615.90	606.90	NP	0.00	18.78	17.58	617.17	Yes	
MW-10	04/16/12	634.75	635.95	615.90	606.90	NP	0.00	19.57	18.37	616.38	Yes	
MW-10	06/26/12	634.75	635.95	615.90	606.90	NP	0.00	17.18	15.98	618.77	Yes	
MW-10	09/30/12	634.75	635.95	615.90	606.90	NP	0.00	18.61	17.41	617.34	Yes	
MW-10	12/17/12	634.75	635.95	615.90	606.90	NP	0.00	19.21	18.01	616.74	Yes	
MW-10	03/25/13	634.75	635.95	615.90	606.90	NP	0.00	19.97	18.77	615.98	Yes	
MW-10	05/05/13	634.75	635.95	615.90	606.90	NP	0.00	19.76	18.56	616.19	Yes	
MW-10	10/03/13	634.75	635.95	615.90	606.90	NP	0.00	19.31	18.11	616.64	Yes	
MW-10	05/21/14	634.75	635.95	615.90	606.90	NP	0.00	17.85	16.65	618.10	Yes	
MW-10	10/31/14	634.75	635.95	615.90	606.90	NP	0.00	17.43	16.23	618.52	Yes	
MW-10	05/05/15	634.75	635.95	615.90	606.90	NP	0.00	19.14	17.94	616.81	Yes	
MW-10	10/05/15	634.75	635.95	615.90	606.90	NP	0.00	17.08	15.88	618.87	Yes	
MW-10	05/23/16	634.75	635.95	615.90	606.90	NP	0.00	15.15	13.95	620.80	Yes	
MW-10	10/03/16	634.75	635.95	615.90	606.90	NP	0.00	16.22	15.02	619.73	Yes	
MW-10	06/29/17	634.75	635.95	615.90	606.90	NP	0.00	15.75	14.55	620.20	Yes	
MW-11	03/23/88	630.10	632.57	614.90	605.90	NP	0.00	17.13	14.66	615.44	Yes	
MW-11	09/08/88	630.10	632.57	614.90	605.90	NP	0.00	17.50	15.03	615.07	Yes	
MW-11	09/20/88	630.10	632.57	614.90	605.90	NP	0.00	17.55	15.08	615.02	Yes	
MW-11	04/27/89	630.10	632.57	614.90	605.90	NP	0.00	17.93	15.46	614.64	No	
MW-11	05/18/89	630.10	632.57	614.90	605.90	NP	0.00	17.36	14.89	615.21	Yes	
MW-11	06/30/89	630.10	632.57	614.90	605.90	NP	0.00	16.88	14.41	615.69	Yes	
MW-11	07/12/89	630.10	632.57	614.90	605.90	NP	0.00	16.95	14.48	615.62	Yes	
MW-11	07/26/89	630.10	632.57	614.90	605.90	NP	0.00	17.01	14.54	615.56	Yes	
MW-11	07/27/89	630.10	632.57	614.90	605.90	NP	0.00	17.04	14.57	615.53	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-11	09/03/89	630.10	632.57	614.90	605.90	NP	0.00	17.14	14.67	615.43	Yes	
MW-11	11/16/89	630.10	632.57	614.90	605.90	NP	0.00	17.15	14.68	615.42	Yes	
MW-11	11/28/89	630.10	632.57	614.90	605.90	NP	0.00	17.25	14.78	615.32	Yes	
MW-11	06/01/90	630.10	632.57	614.90	605.90	NP	0.00	17.33	14.86	615.24	Yes	
MW-11	06/19/90	630.10	632.57	614.90	605.90	NP	0.00	16.91	14.44	615.66	Yes	
MW-11	06/27/90	630.10	632.57	614.90	605.90	NP	0.00	17.12	14.65	615.45	Yes	
MW-11	07/05/90	630.10	632.57	614.90	605.90	NP	0.00	17.24	14.77	615.33	Yes	
MW-11	07/13/90	630.10	632.57	614.90	605.90	NP	0.00	17.33	14.86	615.24	Yes	
MW-11	07/17/90	630.10	632.57	614.90	605.90	NP	0.00	17.19	14.72	615.38	Yes	
MW-11	07/25/90	630.10	632.57	614.90	605.90	NP	0.00	17.30	14.83	615.27	Yes	
MW-11	08/09/90	630.10	632.57	614.90	605.90	NP	0.00	17.30	14.83	615.27	Yes	
MW-11	08/14/90	630.10	632.57	614.90	605.90	NP	0.00	17.39	14.92	615.18	Yes	
MW-11	08/27/90	630.10	632.57	614.90	605.90	NP	0.00	17.21	14.74	615.36	Yes	
MW-11	09/06/90	630.10	632.57	614.90	605.90	NP	0.00	17.12	14.65	615.45	Yes	
MW-11	01/04/91	630.10	632.57	614.90	605.90	NP	0.00	16.80	14.33	615.77	Yes	
MW-11	01/30/91	630.10	632.57	614.90	605.90	NP	0.00	16.99	14.52	615.58	Yes	
MW-11	04/24/91	630.10	632.57	614.90	605.90	NP	0.00	17.31	14.84	615.26	Yes	
MW-11	07/09/91	630.10	632.57	614.90	605.90	NP	0.00	15.56	13.09	617.01	Yes	
MW-11	10/08/91	630.10	632.57	614.90	605.90	NP	0.00	14.07	11.60	618.50	Yes	
MW-11	01/07/92	630.10	632.57	614.90	605.90	NP	0.00	14.16	11.69	618.41	Yes	
MW-11	10/14/92	630.10	632.57	614.90	605.90	NP	0.00	14.06	11.59	618.51	Yes	
MW-11	01/29/94	630.10	632.57	614.90	605.90	NP	0.00	15.12	12.65	617.45	Yes	
MW-11	04/27/94	630.10	632.57	614.90	605.90	NP	0.00	15.16	12.69	617.41	Yes	
MW-11	07/21/94	630.10	632.57	614.90	605.90	NP	0.00	13.95	11.48	618.62	Yes	
MW-11	10/25/94	630.10	632.57	614.90	605.90	NP	0.00	13.90	11.43	618.67	Yes	
MW-11	10/27/94	630.10	632.57	614.90	605.90	NP	0.00	13.51	11.04	619.06	Yes	
MW-11	02/01/95	630.10	632.57	614.90	605.90	NP	0.00	18.05	15.58	614.52	No	
MW-11	04/04/95	630.10	632.57	614.90	605.90	NP	0.00	16.09	13.62	616.48	Yes	
MW-11	07/12/95	630.10	632.57	614.90	605.90	NP	0.00	15.13	12.66	617.44	Yes	
MW-11	11/13/95	630.10	632.57	614.90	605.90	NP	0.00	13.85	11.38	618.72	Yes	
MW-11	03/13/96	630.10	632.57	614.90	605.90	NP	0.00	15.79	13.32	616.78	Yes	
MW-11	10/08/96	630.10	632.57	614.90	605.90	NP	0.00	13.26	10.79	619.31	Yes	
MW-11	04/29/97	630.10	632.57	614.90	605.90	NP	0.00	12.85	10.38	619.72	Yes	
MW-11	11/03/98	630.10	632.57	614.90	605.90	NP	0.00	15.93	13.46	616.64	Yes	
MW-11	03/02/99	630.10	632.57	614.90	605.90	NP	0.00	16.78	14.31	615.79	Yes	
MW-11	04/26/00	630.10	632.57	614.90	605.90	NP	0.00	15.39	12.92	617.18	Yes	
MW-11	08/18/00	630.10	632.57	614.90	605.90	NP	0.00	15.95	13.48	616.62	Yes	
MW-11	10/10/00	630.10	632.57	614.90	605.90	NP	0.00	15.95	13.48	616.62	Yes	
MW-11	11/05/02	630.10	632.57	614.90	605.90	NP	0.00	15.95	13.48	616.62	Yes	Cover Rusted On
MW-11	08/18/03						Abandoned					

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-12	03/23/88	630.60	633.72	617.10	608.10	16.95	<b>0.73</b>	17.68	13.99	616.61	No	
MW-12	09/08/88	630.60	633.72	617.10	608.10	17.14	<b>1.31</b>	18.45	14.32	616.28	No	
MW-12	09/20/88	630.60	633.72	617.10	608.10	17.18	<b>1.72</b>	18.90	14.45	616.15	No	
MW-12	04/27/89	630.60	633.72	617.10	608.10	17.36	<b>2.45</b>	19.81	14.79	615.81	No	
MW-12	05/18/89	630.60	633.72	617.10	608.10	17.04	<b>1.77</b>	18.81	14.32	616.28	No	
MW-12	06/30/89	630.60	633.72	617.10	608.10	16.7	<b>0.63</b>	17.33	13.72	616.88	No	
MW-12	07/12/89	630.60	633.72	617.10	608.10	16.76	<b>1.07</b>	17.83	13.88	616.72	No	
MW-12	07/26/89	630.60	633.72	617.10	608.10	16.73	<b>0.88</b>	17.61	13.81	616.79	No	
MW-12	07/27/89	630.60	633.72	617.10	608.10	16.74	<b>1.49</b>	18.23	13.96	616.64	No	
MW-12	09/03/89	630.60	633.72	617.10	608.10	16.81	<b>2.01</b>	18.82	14.14	616.46	No	
MW-12	11/16/89	630.60	633.72	617.10	608.10	16.17	<b>2.51</b>	18.68	13.62	616.98	No	
MW-12	11/29/89	630.60	633.72	617.10	608.10	16.76	<b>1.59</b>	18.35	14.00	616.60	No	
MW-12	12/01/89	630.60	633.72	617.10	608.10	16.86	<b>1.11</b>	17.97	13.99	616.61	No	
MW-12	12/02/89	630.60	633.72	617.10	608.10	17.00	<b>2.42</b>	19.42	14.43	616.17	No	
MW-12	05/04/90	630.60	633.72	617.10	608.10	17.11	<b>1.84</b>	18.95	14.41	616.19	No	
MW-12	06/19/90	630.60	633.72	617.10	608.10	16.95	<b>1.35</b>	18.30	14.13	616.47	No	
MW-12	06/27/90	630.60	633.72	617.10	608.10	17.05	<b>1.53</b>	18.58	14.28	616.32	No	
MW-12	07/05/90	630.60	633.72	617.10	608.10	17.05	<b>2.33</b>	19.38	14.46	616.14	No	
MW-12	07/13/90	630.60	633.72	617.10	608.10	17.00	<b>1.80</b>	18.80	14.29	616.31	No	
MW-12	07/17/90	630.60	633.72	617.10	608.10	16.97	<b>1.73</b>	18.70	14.24	616.36	No	
MW-12	07/25/90	630.60	633.72	617.10	608.10	17.05	<b>2.27</b>	19.32	14.44	616.16	No	
MW-12	08/09/90	630.60	633.72	617.10	608.10	17.13	<b>2.34</b>	19.47	14.54	616.06	No	
MW-12	01/04/91	630.60	633.72	617.10	608.10	16.68	<b>1.23</b>	17.91	13.84	616.76	No	
MW-12	01/30/91	630.60	633.72	617.10	608.10	16.72	<b>1.95</b>	18.67	14.04	616.56	No	
MW-12	04/24/91	630.60	633.72	617.10	608.10	16.83	<b>2.34</b>	19.17	14.24	616.36	No	
MW-12	07/09/91	630.60	633.72	617.10	608.10	15.70	<b>1.18</b>	16.88	12.85	617.75	Yes	
MW-12	10/08/91	630.60	633.72	617.10	608.10	14.22	<b>2.70</b>	16.92	11.71	618.89	Yes	
MW-12	01/07/92	630.60	633.72	617.10	608.10	14.21	<b>2.86</b>	17.07	11.74	618.86	Yes	
MW-12	10/14/92	630.60	633.72	617.10	608.10	13.93	<b>3.65</b>	17.58	11.63	618.97	Yes	
MW-12	06/25/93	630.60	633.72	617.10	608.10	12.73	<b>4.78</b>	17.51	10.69	619.91	Yes	
MW-12	10/28/93	630.60	633.72	617.10	608.10	14.80	<b>2.20</b>	17.00	12.18	618.42	Yes	
MW-12	01/29/94	630.60	633.72	617.10	608.10	15.56	<b>1.13</b>	16.69	12.70	617.90	Yes	
MW-12	04/27/94	630.60	633.72	617.10	608.10	15.88	<b>0.57</b>	16.45	12.89	617.71	Yes	
MW-12	07/21/94	630.60	633.72	617.10	608.10	14.78	<b>0.54</b>	15.32	11.78	618.82	Yes	
MW-12	08/30/94	630.60	633.72	617.10	608.10	15.58	<b>0.41</b>	15.99	12.55	618.05	Yes	
MW-12	10/25/94	630.60	633.72	617.10	608.10	15.09	<b>0.44</b>	15.53	12.07	618.53	Yes	
MW-12	07/12/95	630.60	633.72	617.10	608.10	15.99	<b>0.85</b>	16.84	13.06	617.54	Yes	
MW-12	11/13/95	630.60	633.72	617.10	608.10	14.95	<b>1.60</b>	16.55	12.19	618.41	Yes	
MW-12	03/13/96	630.60	633.72	617.10	608.10	16.47	<b>0.73</b>	17.20	13.51	617.09	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-12	10/08/96	630.60	633.72	617.10	608.10	14.10	2.90	17.00	11.64	618.96	Yes	
MW-12	04/29/97	630.60	633.72	617.10	608.10	13.70	3.50	17.20	11.37	619.23	Yes	
MW-12	06/10/97	630.60	633.72	617.10	608.10	14.47	2.43	16.90	11.90	618.70	Yes	FP bailed 5/22/97
MW-12	11/03/98	630.60	633.72	617.10	608.10	16.71	1.66	18.37	13.96	616.64	No	
MW-12	03/02/99	630.60	633.72	617.10	608.10	16.75	2.34	19.09	14.16	616.44	No	
MW-12	10/07/99	630.60	633.72	617.10	608.10	14.28	3.28	17.56	11.90	618.70	Yes	
MW-12	11/09/99	630.60	633.72	617.10	608.10	14.26	3.11	17.37	11.84	618.76	Yes	bailed .5 gal. FP
MW-12	12/21/99	630.60	633.72	617.10	608.10	17.21	0.15	17.36	14.12	616.48	No	bailed <0.1 gal. FP
MW-12	01/27/00	630.60	633.72	617.10	608.10	16.00	1.30	17.30	13.17	617.43	Yes	bailed 0.2 gal. FP
MW-12	02/24/00	630.60	633.72	617.10	608.10	16.31	0.98	17.29	13.41	617.19	Yes	bailed 0.25 gal. FP
MW-12	03/31/00	630.60	633.72	617.10	608.10	16.37	0.87	17.24	13.45	617.15	Yes	bailed 0.25 gal. FP
MW-12	04/20/00	630.60	633.72	617.10	608.10	16.12	2.11	18.23	13.48	617.12	Yes	bailed .5 gal. FP
MW-12	04/26/00	630.60	633.72	617.10	608.10	16.40	0.83	17.23	13.47	617.13	Yes	bailed .5 gal. FP
MW-12	05/31/00	630.60	633.72	617.10	608.10	16.49	0.56	17.05	13.50	617.10	Yes	bailed .125 gal. FP
MW-12	06/29/00	630.60	633.72	617.10	608.10	16.27	0.77	17.04	13.32	617.28	Yes	bailed 0.25 gal. FP
MW-12	07/26/00	630.60	633.72	617.10	608.10	16.40	0.69	17.09	13.44	617.16	Yes	bailed <0.1 gal. FP
MW-12	08/18/00	630.60	633.72	617.10	608.10	16.62	0.57	17.19	13.63	616.97	No	bailed 0.25 gal. FP
MW-12	09/27/00	630.60	633.72	617.10	608.10	16.83	0.43	17.26	13.81	616.79	No	bailed 0.125 gal. FP
MW-12	10/11/00	630.60	633.72	617.10	608.10	16.74	0.36	17.10	13.70	616.90	No	bailed 0.15 gal. FP
MW-12	11/17/00	630.60	633.72	617.10	608.10	16.89	0.46	17.35	13.87	616.73	No	bailed 0.25 gal. FP
MW-12	12/12/00	630.60	633.72	617.10	608.10	16.84	0.37	17.21	13.80	616.80	No	bailed 0.25 gal. FP
MW-12	01/18/01	630.60	633.72	617.10	608.10	17.10	0.26	17.36	14.04	616.56	No	bailed 0.25 gal. FP
MW-12	05/23/01	630.60	633.72	617.10	608.10	16.30	0.48	16.78	13.29	617.31	Yes	no product bailed
MW-12	06/19/01	630.60	633.72	617.10	608.10	16.24	0.58	16.82	13.25	617.35	Yes	
MW-12	07/26/01	630.60	633.72	617.10	608.10	16.49	0.56	17.05	13.50	617.10	Yes	
MW-12	08/31/01	630.60	633.72	617.10	608.10	16.90	0.39	17.29	13.87	616.73	No	
MW-12	09/26/01	630.60	633.72	617.10	608.10	16.92	0.36	17.28	13.88	616.72	No	
MW-12	10/24/01	630.60	633.72	617.10	608.10	17.00	0.30	17.30	13.95	616.65	No	
MW-12	12/20/01	630.60	633.72	617.10	608.10	17.51	0.21	17.72	14.44	616.16	No	
MW-12	01/22/02	630.60	633.72	617.10	608.10	17.49	0.08	17.57	14.39	616.21	No	
MW-12	02/26/02	630.60	633.72	617.10	608.10	17.73	0.22	17.95	14.66	615.94	No	
MW-12	03/20/02	630.60	633.72	617.10	608.10	17.81	0.60	18.41	14.83	615.77	No	
MW-12	04/24/02	630.60	633.72	617.10	608.10	16.71	0.19	16.90	13.63	616.97	No	
MW-12	05/15/02	630.60	633.72	617.10	608.10	17.41	0.09	17.50	14.31	616.29	No	
MW-12	06/27/02	630.60	633.72	617.10	608.10	17.58	0.14	17.72	14.49	616.11	No	
MW-12	07/25/02	630.60	633.72	617.10	608.10	17.45	0.17	17.62	14.37	616.23	No	
MW-12	08/20/02	630.60	633.72	617.10	608.10	17.49	0.19	17.68	14.41	616.19	No	
MW-12	09/30/02	630.60	633.72	617.10	608.10	17.07	0.29	17.36	14.02	616.58	No	
MW-12	11/05/02	630.60	633.72	617.10	608.10	16.98	0.36	17.34	13.94	616.66	No	
MW-12	12/23/02	630.60	633.72	617.10	608.10	17.19	0.31	17.50	14.14	616.46	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-12	01/28/03	630.60	633.72	617.10	608.10	17.60	0.28	17.88	14.54	616.06	No	
MW-12	02/19/03	630.60	633.72	617.10	608.10	17.72	0.20	17.92	14.65	615.95	No	
MW-12	04/17/03	630.60	633.72	617.10	608.10	17.91	1.12	19.03	15.04	615.56	No	
MW-12	10/23/03	630.60	633.72	617.10	608.10	18.03	1.50	19.53	15.25	615.35	No	
MW-12	12/03/03	630.60	633.72	617.10	608.10	18.12	1.83	19.95	15.41	615.19	No	
MW-12	04/19/04	632.36	633.91	617.10	608.10	18.62	2.43	21.05	17.62	614.74	No	
MW-12	07/28/04	632.36	633.91	617.10	608.10	18.08	0.82	18.90	16.72	615.64	No	
MW-12	11/15/04	632.36	633.91	617.10	608.10	17.55	0.15	17.70	16.03	616.33	No	
MW-12	04/18/05	632.36	633.91	617.10	608.10	17.42	0.16	17.58	15.91	616.45	No	
MW-12	10/11/05	632.36	633.91	617.10	608.10	17.09	0.62	17.71	15.68	616.68	No	
MW-12	05/23/06	632.36	633.91	617.10	608.10	16.35	1.55	17.90	15.15	617.21	Yes	
MW-12	10/16/06	632.36	633.91	617.10	608.10	17.18	1.01	18.19	15.86	616.50	No	
MW-12	04/23/07	632.36	633.91	617.10	608.10	17.68	1.92	19.60	16.56	615.80	No	
MW-12	09/25/07	632.36	633.91	617.10	608.10	17.71	1.93	19.64	16.60	615.76	No	
MW-12	05/01/08	632.36	633.91	617.10	608.10	16.62	1.70	18.32	15.45	616.91	No	
MW-12	10/20/08	632.36	633.91	617.10	608.10	15.59	2.49	18.08	14.60	617.76	Yes	
MW-12	04/18/09	632.36	633.91	617.10	608.10	16.44	1.99	18.43	15.34	617.02	No	
MW-12	10/11/09	632.36	633.91	617.10	608.10	17.07	1.85	18.92	15.94	616.42	No	
MW-12	04/28/10	632.36	633.91	617.10	608.10	16.96	1.72	18.68	15.80	616.56	No	
MW-12	10/25/10	632.36	633.91	617.10	608.10	15.30	2.92	18.22	14.41	617.95	Yes	
MW-12	04/25/11	632.36	633.91	617.10	608.10	16.50	2.37	18.87	15.49	616.87	No	
MW-12	10/10/11	632.36	633.91	617.10	608.10	16.12	2.57	18.69	15.15	617.21	Yes	
MW-12	01/04/12	632.36	633.91	617.10	608.10	17.05	2.24	19.29	16.01	616.35	No	
MW-12	04/16/12	632.36	633.91	617.10	608.10	17.61	1.34	18.95	16.36	616.00	No	
MW-12	06/26/12	632.36	633.91	617.10	608.10	15.35	3.07	18.42	14.49	617.87	Yes	
MW-12	07/12/12	632.36	633.91	617.10	608.10	15.95	2.64	18.59	15.00	617.36	Yes	Spill Buddy Before Reading
MW-12	07/12/12	632.36	633.91	617.10	608.10	16.62	0.36	16.98	15.15	617.21	Yes	Spill Buddy After Reading
MW-12	07/26/12	632.36	633.91	617.10	608.10	16.28	2.52	18.80	15.30	617.06	No	Spill Buddy Before Reading
MW-12	07/26/12	632.36	633.91	617.10	608.10	16.69	0.58	17.27	15.27	617.09	No	Spill Buddy After Reading
MW-12	08/09/12	632.36	633.91	617.10	608.10	16.67	1.72	18.39	15.51	616.85	No	Spill Buddy Before Reading
MW-12	08/09/12	632.36	633.91	617.10	608.10	17.00	0.40	17.40	15.54	616.82	No	Spill Buddy After Reading
MW-12	09/29/12	632.36	633.91	617.10	608.10	17.40	1.09	18.49	16.10	616.26	No	Spill Buddy Before Reading
MW-12	09/29/12	632.36	633.91	617.10	608.10	17.65	0.27	17.92	16.16	616.20	No	Spill Buddy After Reading
MW-12	09/30/12	632.36	633.91	617.10	608.10	17.38	0.98	18.36	16.05	616.31	No	
MW-12	11/21/12	632.36	633.91	617.10	608.10	17.78	0.82	18.60	16.42	615.94	No	
MW-12	12/17/12	632.36	633.91	617.10	608.10	17.96	0.67	18.63	16.56	615.80	No	
MW-12	05/05/13	632.36	633.91	617.10	608.10	18.23	0.59	18.82	16.81	615.55	No	
MW-12	10/03/13	632.36	633.91	617.10	608.10	18.02	0.74	18.76	16.64	615.72	No	
MW-13	03/23/88	634.40	636.48	618.80	609.80	NP	0.00	19.86	17.78	616.62	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-13	09/08/88	634.40	636.48	618.80	609.80	NP	0.00	20.07	17.99	616.41	No	
MW-13	09/20/88	634.40	636.48	618.80	609.80	NP	0.00	20.30	18.22	616.18	No	
MW-13	04/27/89	634.40	636.48	618.80	609.80	NP	0.00	20.19	18.11	616.29	No	
MW-13	05/18/89	634.40	636.48	618.80	609.80	NP	0.00	19.82	17.74	616.66	No	
MW-13	06/30/89	634.40	636.48	618.80	609.80	NP	0.00	18.57	16.49	617.91	No	
MW-13	07/12/89	634.40	636.48	618.80	609.80	NP	0.00	19.74	17.66	616.74	No	
MW-13	07/26/89	634.40	636.48	618.80	609.80	NP	0.00	19.67	17.59	616.81	No	
MW-13	07/27/89	634.40	636.48	618.80	609.80	NP	0.00	19.77	17.69	616.71	No	
MW-13	09/03/89	634.40	636.48	618.80	609.80	NP	0.00	19.93	17.85	616.55	No	
MW-13	11/16/89	634.40	636.48	618.80	609.80	NP	0.00	20.05	17.97	616.43	No	
MW-13	11/28/89	634.40	636.48	618.80	609.80	NP	0.00	20.27	18.19	616.21	No	
MW-13	06/01/90	634.40	636.48	618.80	609.80	NP	0.00	20.00	17.92	616.48	No	
MW-13	06/19/90	634.40	636.48	618.80	609.80	NP	0.00	19.95	17.87	616.53	No	
MW-13	06/27/90	634.40	636.48	618.80	609.80	NP	0.00	21.11	19.03	615.37	No	
MW-13	07/05/90	634.40	636.48	618.80	609.80	NP	0.00	20.38	18.30	616.10	No	
MW-13	07/13/90	634.40	636.48	618.80	609.80	NP	0.00	20.33	18.25	616.15	No	
MW-13	07/17/90	634.40	636.48	618.80	609.80	NP	0.00	20.75	18.67	615.73	No	
MW-13	07/25/90	634.40	636.48	618.80	609.80	NP	0.00	20.28	18.20	616.20	No	
MW-13	08/09/90	634.40	636.48	618.80	609.80	NP	0.00	20.13	18.05	616.35	No	
MW-13	08/14/90	634.40	636.48	618.80	609.80	NP	0.00	20.15	18.07	616.33	No	
MW-13	08/27/90	634.40	636.48	618.80	609.80	NP	0.00	19.90	17.82	616.58	No	
MW-13	09/06/90	634.40	636.48	618.80	609.80	NP	0.00	19.69	17.61	616.79	No	
MW-13	01/04/91	634.40	636.48	618.80	609.80	NP	0.00	19.45	17.37	617.03	No	
MW-13	01/30/91	634.40	636.48	618.80	609.80	NP	0.00	19.58	17.50	616.90	No	
MW-13	04/24/91	634.40	636.48	618.80	609.80	NP	0.00	20.11	18.03	616.37	No	
MW-13	07/09/91	634.40	636.48	618.80	609.80	NP	0.00	18.41	16.33	618.07	No	
MW-13	10/08/91	634.40	636.48	618.80	609.80	NP	0.00	17.07	14.99	619.41	Yes	
MW-13	01/07/92	634.40	636.48	618.80	609.80	NP	0.00	17.20	15.12	619.28	Yes	
MW-13	10/14/92	634.40	636.48	618.80	609.80	NP	0.00	16.88	14.80	619.60	Yes	
MW-13	01/29/94	634.40	636.48	618.80	609.80	NP	0.00	18.08	16.00	618.40	No	
MW-13	04/27/94	634.40	636.48	618.80	609.80	NP	0.00	18.19	16.11	618.29	No	
MW-13	07/21/94	634.40	636.48	618.80	609.80	NP	0.00	17.99	15.91	618.49	No	
MW-13	10/25/94	634.40	636.48	618.80	609.80	NP	0.00	17.33	15.25	619.15	Yes	
MW-13	10/27/94	634.40	636.48	618.80	609.80	NP	0.00	16.82	14.74	619.66	Yes	
MW-13	02/01/95	634.40	636.48	618.80	609.80	NP	0.00	18.51	16.43	617.97	No	
MW-13	04/04/95	634.40	636.48	618.80	609.80	NP	0.00	19.34	17.26	617.14	No	
MW-13	07/12/95	634.40	636.48	618.80	609.80	NP	0.00	18.21	16.13	618.27	No	
MW-13	11/13/95	634.40	636.48	618.80	609.80	NP	0.00	17.22	15.14	619.26	Yes	
MW-13	03/13/96	634.40	636.48	618.80	609.80	NP	0.00	18.68	16.60	617.80	No	
MW-13	10/08/96	634.40	636.48	618.80	609.80	NP	0.00	16.41	14.33	620.07	Yes	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-13	04/29/97	634.40	636.48	618.80	609.80	NP	0.00	15.85	13.77	620.63	Yes	
MW-13	11/03/98	634.40	636.48	618.80	609.80	NP	0.00	19.03	16.95	617.45	No	
MW-13	03/02/99	634.40	636.48	618.80	609.80	NP	0.00	19.02	16.94	617.46	No	
MW-13	04/26/00	634.40	636.48	618.80	609.80	NP	0.00	18.36	16.28	618.12	No	
MW-13	08/18/00	634.40	636.48	618.80	609.80	NP	0.00	18.35	16.27	618.13	No	
MW-13	11/05/02	634.40	636.48	618.80	609.80	NP	0.00	18.44	16.36	618.04	No	
MW-13	08/18/03	<b>Abandoned</b>										
MW-14	09/08/88	634.90	636.47	617.90	607.90	20.75	4.35	25.10	20.16	614.74	No	
MW-14	09/20/88	634.90	636.47	617.90	607.90	20.67	6.23	26.90	20.51	614.39	No	
MW-14	04/27/89	634.90	636.47	617.90	607.90	20.68	6.75	27.43	20.63	614.27	No	
MW-14	05/18/89	634.90	636.47	617.90	607.90	20.21	5.14	25.35	19.80	615.10	No	
MW-14	06/30/89	634.90	636.47	617.90	607.90	19.5	5.28	24.78	19.12	615.78	No	
MW-14	07/12/89	634.90	636.47	617.90	607.90	19.93	5.30	25.23	19.56	615.34	No	
MW-14	07/26/89	634.90	636.47	617.90	607.90	19.9	4.78	24.68	19.41	615.49	No	
MW-14	07/27/89	634.90	636.47	617.90	607.90	20.25	7.58	27.83	20.39	614.51	No	
MW-14	09/03/89	634.90	636.47	617.90	607.90	20.65	7.03	27.68	20.67	614.23	No	
MW-14	11/16/89	634.90	636.47	617.90	607.90	20.59	6.79	27.38	20.55	614.35	No	
MW-14	11/29/89	634.90	636.47	617.90	607.90	20.4	4.90	25.30	19.94	614.96	No	
MW-14	12/01/89	634.90	636.47	617.90	607.90	20.6	4.24	24.84	19.99	614.91	No	
MW-14	12/02/89	634.90	636.47	617.90	607.90	20.67	3.85	24.52	19.97	614.93	No	
MW-14	05/04/90	634.90	636.47	617.90	607.90	21.17	5.25	26.42	20.79	614.11	No	
MW-14	06/01/90	634.90	636.47	617.90	607.90	20.9	5.00	25.90	20.46	614.44	No	
MW-14	06/19/90	634.90	636.47	617.90	607.90	20.78	4.42	25.20	20.21	614.69	No	
MW-14	06/27/90	634.90	636.47	617.90	607.90	20.88	5.53	26.41	20.56	614.34	No	
MW-14	07/05/90	634.90	636.47	617.90	607.90	21.17	4.99	26.16	20.73	614.17	No	
MW-14	07/13/90	634.90	636.47	617.90	607.90	20.88	5.62	26.50	20.58	614.32	No	
MW-14	07/17/90	634.90	636.47	617.90	607.90	20.75	5.90	26.65	20.51	614.39	No	
MW-14	07/25/90	634.90	636.47	617.90	607.90	20.87	6.91	27.78	20.86	614.04	No	
MW-14	08/09/90	634.90	636.47	617.90	607.90	20.83	6.27	27.10	20.68	614.22	No	
MW-14	08/27/90	634.90	636.47	617.90	607.90	20.82	5.83	26.65	20.57	614.33	No	
MW-14	09/06/90	634.90	636.47	617.90	607.90	20.68	4.47	25.15	20.12	614.78	No	
MW-14	01/04/91	634.90	636.47	617.90	607.90	20.11	4.76	24.87	19.62	615.28	No	
MW-14	01/30/91	634.90	636.47	617.90	607.90	20.25	5.52	25.77	19.93	614.97	No	
MW-14	04/24/91	634.90	636.47	617.90	607.90	20.78	3.27	24.05	19.95	614.95	No	
MW-14	06/06/91	634.90	636.47	617.90	607.90	19.82	1.70	21.52	18.63	616.27	No	
MW-14	07/09/91	634.90	636.47	617.90	607.90	18.91	1.37	20.28	17.65	617.25	No	
MW-14	08/06/91	634.90	636.47	617.90	607.90	18.02	1.22	19.24	16.73	618.17	Yes	
MW-14	09/04/91	634.90	636.47	617.90	607.90	18.00	1.34	19.34	16.73	618.17	Yes	
MW-14	10/08/91	634.90	636.47	617.90	607.90	17.12	1.30	18.42	15.84	619.06	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-14	11/08/91	634.90	636.47	617.90	607.90	17.79	1.35	19.14	16.52	618.38	Yes	
MW-14	12/03/91	634.90	636.47	617.90	607.90	16.05	1.25	17.30	14.76	620.14	Yes	
MW-14	01/07/92	634.90	636.47	617.90	607.90	17.57	1.27	18.84	16.29	618.61	Yes	
MW-14	02/04/92	634.90	636.47	617.90	607.90	18.30	1.20	19.50	17.00	617.90	No	
MW-14	03/03/92	634.90	636.47	617.90	607.90	18.70	1.38	20.08	17.44	617.46	No	
MW-14	09/24/92	634.90	636.47	617.90	607.90	16.89	1.20	18.09	15.59	619.31	Yes	
MW-14	10/14/92	634.90	636.47	617.90	607.90	17.83	1.31	19.14	16.56	618.34	Yes	
MW-14	06/25/93	634.90	636.47	617.90	607.90	14.65	1.82	16.47	13.49	621.41	Yes	
MW-14	10/28/93	634.90	636.47	617.90	607.90	18.20	1.82	20.02	17.04	617.86	No	
MW-14	01/29/94	634.90	636.47	617.90	607.90	18.89	1.80	20.69	17.73	617.17	No	
MW-14	04/27/94	634.90	636.47	617.90	607.90	18.60	5.07	23.67	18.18	616.72	No	
MW-14	07/21/94	634.90	636.47	617.90	607.90	17.20	2.18	19.38	16.12	618.78	Yes	
MW-14	10/25/94	634.90	636.47	617.90	607.90	17.91	2.10	20.01	16.81	618.09	Yes	
MW-14	11/02/94	634.90	636.47	617.90	607.90	15.58	3.02	18.60	14.69	620.21	Yes	
MW-14	02/01/95	634.90	636.47	617.90	607.90	19.79	1.71	21.50	18.61	616.29	No	
MW-14	04/04/95	634.90	636.47	617.90	607.90	19.98	2.52	22.50	18.98	615.92	No	
MW-14	07/12/95	634.90	636.47	617.90	607.90	19.01	1.23	20.24	17.72	617.18	No	
MW-14	11/14/95	634.90	636.47	617.90	607.90	17.59	0.66	18.25	16.17	618.73	Yes	
MW-14	03/13/96	634.90	636.47	617.90	607.90	19.70	1.70	21.40	18.51	616.39	No	
MW-14	10/08/96	634.90	636.47	617.90	607.90	16.50	1.43	17.93	15.25	619.65	Yes	
MW-14	04/29/97	634.90	636.47	617.90	607.90	15.45	1.40	16.85	14.20	620.70	Yes	
MW-14	06/10/97	634.90	636.47	617.90	607.90	17.18	0.27	17.45	15.67	619.23	Yes	FP bailed 5/22/97
MW-14	11/03/98	634.90	636.47	617.90	607.90	19.60	3.34	22.94	18.78	616.12	No	
MW-14	03/02/99	634.90	636.47	617.90	607.90	19.74	3.44	23.18	18.95	615.95	No	
MW-14	10/07/99	634.90	636.47	617.90	607.90	16.49	0.16	16.65	14.96	619.94	Yes	
MW-14	11/09/99	634.90	636.47	617.90	607.90	16.30	0.41	16.71	14.82	620.08	Yes	bailed <0.1 gal. FP
MW-14	12/21/99	634.90	636.47	617.90	607.90	18.25	0.05	18.30	16.69	618.21	Yes	
MW-14	01/27/00	634.90	636.47	617.90	607.90	19.10	0.01	19.11	17.53	617.37	No	
MW-14	02/24/00	634.90	636.47	617.90	607.90	17.70	2.31	20.01	16.65	618.25	Yes	bailed <0.1 gal. FP
MW-14	03/31/00	634.90	636.47	617.90	607.90	19.17	1.53	20.70	17.95	616.95	No	bailed 0.25 gal. FP
MW-14	04/20/00	634.90	636.47	617.90	607.90	19.00	1.38	20.38	17.74	617.16	No	bailed 0.25 gal. FP
MW-14	04/26/00	634.90	636.47	617.90	607.90	18.93	1.10	20.03	17.61	617.29	No	bailed 1 gal. FP
MW-14	05/31/00	634.90	636.47	617.90	607.90	19.07	0.13	19.20	17.53	617.37	No	bailed 0.125 gal. FP
MW-14	06/29/00	634.90	636.47	617.90	607.90	19.03	0.11	19.14	17.48	617.42	No	bailed 0.1 gal. FP
MW-14	07/26/00	634.90	636.47	617.90	607.90	19.19	0.05	19.24	17.63	617.27	No	
MW-14	08/18/00	634.90	636.47	617.90	607.90	19.56	0.07	19.63	18.01	616.89	No	bailed 0.125 gal. FP
MW-14	09/27/00	634.90	636.47	617.90	607.90	19.76	1.00	20.76	18.42	616.48	No	bailed 0.125 gal. FP
MW-14	10/11/00	634.90	636.47	617.90	607.90	19.97	1.16	21.13	18.66	616.24	No	bailed 0.75 gal. FP
MW-14	11/17/00	634.90	636.47	617.90	607.90	19.53	2.33	21.86	18.49	616.41	No	bailed 1.75 gal. FP
MW-14	12/12/00	634.90	636.47	617.90	607.90	19.50	0.97	20.47	18.15	616.75	No	bailed 1.25 gal. FP

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-14	01/18/01	634.90	636.47	617.90	607.90	19.76	0.99	20.75	18.41	616.49	No	bailed 2 gal. FP
MW-14	04/24/01	634.90	636.47	617.90	607.90	19.58	2.32	21.90	18.53	616.37	No	product abated using vactruck
MW-14	05/23/01	634.90	636.47	617.90	607.90	18.66	0.92	19.58	17.30	617.60	No	no product bailed
MW-14	06/19/01	634.90	636.47	617.90	607.90	18.49	0.88	19.37	17.12	617.78	No	
MW-14	07/26/01	634.90	636.47	617.90	607.90	19.13	0.90	20.03	17.76	617.14	No	
MW-14	08/31/01	634.90	636.47	617.90	607.90	19.51	0.89	20.40	18.14	616.76	No	
MW-14	09/26/01	634.90	636.47	617.90	607.90	19.71	1.08	20.79	18.38	616.52	No	
MW-14	10/24/01	634.90	636.47	617.90	607.90	19.69	1.46	21.15	18.45	616.45	No	
MW-14	12/20/01	634.90	636.47	617.90	607.90	19.90	2.74	22.64	18.95	615.95	No	
MW-14	01/22/02	634.90	636.47	617.90	607.90	20.39	2.84	23.23	19.46	615.44	No	
MW-14	02/26/02	634.90	636.47	617.90	607.90	20.27	3.74	24.01	19.54	615.36	No	
MW-14	03/20/02	634.90	636.47	617.90	607.90	20.50	3.52	24.02	19.73	615.17	No	
MW-14	04/24/02	634.90	636.47	617.90	607.90	19.78	2.88	22.66	18.86	616.04	No	
MW-14	05/15/02	634.90	636.47	617.90	607.90	19.48	2.42	21.90	18.46	616.44	No	
MW-14	06/27/02	634.90	636.47	617.90	607.90	19.63	1.64	21.27	18.43	616.47	No	
MW-14	07/25/02	634.90	636.47	617.90	607.90	19.69	0.76	20.45	18.29	616.61	No	
MW-14	08/20/02	634.90	636.47	617.90	607.90	19.43	0.85	20.28	18.05	616.85	No	
MW-14	09/30/02	634.90	636.47	617.90	607.90	19.00	0.68	19.68	17.58	617.32	No	
MW-14	11/05/02	634.90	636.47	617.90	607.90	18.71	0.67	19.38	17.29	617.61	No	
MW-14	12/23/02	634.90	636.47	617.90	607.90	19.72	0.68	20.40	18.30	616.60	No	
MW-14	01/28/03	634.90	636.47	617.90	607.90	20.40	0.53	20.93	18.95	615.95	No	
MW-14	02/19/03	634.90	636.47	617.90	607.90	20.38	2.17	22.55	19.30	615.60	No	
MW-14	04/17/03	634.90	636.47	617.90	607.90	20.63	3.57	24.20	19.87	615.03	No	
MW-14	05/15/03	634.90	636.47	617.90	607.90	20.69	3.17	23.86	19.84	615.06	No	
MW-14	06/10/03	634.90	636.47	617.90	607.90	20.51	2.03	22.54	19.40	615.50	No	
MW-14	10/23/03	634.90	636.47	617.90	607.90	20.85	2.43	23.28	19.83	615.07	No	
MW-14	12/03/03	634.90	636.47	617.90	607.90	20.92	2.88	23.80	20.00	614.90	No	
MW-14	04/19/04	635.05	636.38	617.90	607.90	21.35	3.73	25.08	20.86	614.19	No	
MW-14	07/28/04	635.05	636.38	617.90	607.90	20.63	0.94	21.57	19.51	615.54	No	
MW-14	11/15/04	635.05	636.38	617.90	607.90	19.63	0.30	19.93	18.37	616.68	No	
MW-14	04/18/05	635.05	636.38	617.90	607.90	20.37	1.05	21.42	19.28	615.77	No	
MW-14	09/09/05	635.05	636.38	617.90	607.90	19.83	0.91	20.74	18.71	616.34	No	
MW-14	10/11/05	635.05	636.38	617.90	607.90	19.51	0.88	20.39	18.38	616.67	No	
MW-14	05/23/06	635.05	636.38	617.90	607.90	18.54	1.28	19.82	17.50	617.55	No	
MW-14	10/16/06	635.05	636.38	617.90	607.90	19.88	2.33	22.21	19.08	615.97	No	
MW-14	04/23/07	635.05	636.38	617.90	607.90	20.59	3.39	23.98	20.03	615.02	No	
MW-14	09/25/07	635.05	636.38	617.90	607.90	20.48	3.84	24.32	20.02	615.03	No	
MW-14	05/01/08	635.05	636.38	617.90	607.90	19.63	1.01	20.64	18.53	616.52	No	
MW-14	10/20/08	635.05	636.38	617.90	607.90	18.02	1.05	19.07	16.93	618.12	Yes	
MW-14	04/18/09	635.05	636.38	617.90	607.90	19.11	1.05	20.16	18.02	617.03	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-14	08/04/09	635.05	636.38	617.90	607.90	19.73	1.05	20.78	18.64	616.41	No	
MW-14	08/05/09	635.05	636.38	617.90	607.90	20.48	0.20	20.68	19.20	615.85	No	
MW-14	08/13/09	635.05	636.38	617.90	607.90	19.98	0.13	20.11	18.68	616.37	No	
MW-14	08/18/09	635.05	636.38	617.90	607.90	19.91	0.10	20.01	18.60	616.45	No	
MW-14	08/26/09	635.05	636.38	617.90	607.90	19.51	0.09	19.60	18.20	616.85	No	
MW-14	09/03/09	635.05	636.38	617.90	607.90	19.30	0.10	19.40	17.99	617.06	No	
MW-14	09/08/09	635.05	636.38	617.90	607.90	19.38	0.09	19.47	18.07	616.98	No	
MW-14	09/14/09	635.05	636.38	617.90	607.90	19.44	0.08	19.52	18.13	616.92	No	
MW-14	10/11/09	635.05	636.38	617.90	607.90	20.06	0.15	20.21	18.76	616.29	No	
MW-14	10/15/09	635.05	636.38	617.90	607.90	20.06	0.15	20.21	18.76	616.29	No	
MW-14	04/28/10	635.05	636.38	617.90	607.90	19.92	1.13	21.05	18.85	616.20	No	
MW-14	10/25/10	635.05	636.38	617.90	607.90	17.67	1.05	18.72	16.58	618.47	Yes	
MW-14	04/25/11	635.05	636.38	617.90	607.90	18.89	1.07	19.96	17.80	617.25	No	
MW-14	08/04/11	635.05	636.38	617.90	607.90	17.19	1.03	18.22	16.09	618.96	Yes	
MW-14	09/14/11	635.05	636.38	617.90	607.90	18.45	0.14	18.59	17.15	617.90	No	
MW-14	09/23/11	635.05	636.38	617.90	607.90	18.56	0.15	18.71	17.26	617.79	No	
MW-14	09/29/11	635.05	636.38	617.90	607.90	18.50	0.22	18.72	17.22	617.83	No	
MW-14	10/07/11	635.05	636.38	617.90	607.90	18.58	0.14	18.72	17.28	617.77	No	
MW-14	10/10/11	635.05	636.38	617.90	607.90	18.79	0.10	18.89	17.48	617.57	No	
MW-14	10/21/11	635.05	636.38	617.90	607.90	18.99	0.14	19.13	17.69	617.36	No	
MW-14	10/27/11	635.05	636.38	617.90	607.90	19.13	0.16	19.29	17.84	617.21	No	
MW-14	11/04/11	635.05	636.38	617.90	607.90	19.34	0.15	19.49	18.04	617.01	No	
MW-14	11/09/11	635.05	636.38	617.90	607.90	19.23	0.15	19.38	17.93	617.12	No	
MW-14	11/18/11	635.05	636.38	617.90	607.90	19.40	0.15	19.55	18.10	616.95	No	
MW-14	11/22/11	635.05	636.38	617.90	607.90	19.52	0.17	19.69	18.23	616.82	No	
MW-14	12/01/11	635.05	636.38	617.90	607.90	19.91	0.17	20.08	18.62	616.43	No	
MW-14	01/04/12	635.05	636.38	617.90	607.90	20.04	1.08	21.12	18.95	616.10	No	
MW-14	02/16/12	635.05	636.38	617.90	607.90	20.35	2.70	23.05	19.63	615.42	No	
MW-14	03/13/12	635.05	636.38	617.90	607.90	20.32	3.42	23.74	19.76	615.29	No	
MW-14	04/03/12	635.05	636.38	617.90	607.90	20.41	4.01	24.42	19.99	615.06	No	Spill Buddy Before Reading
MW-14	04/03/12	635.05	636.38	617.90	607.90	21.90	1.40	23.30	20.89	614.16	No	Spill Buddy After Reading
MW-14	04/16/12	635.05	636.38	617.90	607.90	20.58	3.38	23.96	20.01	615.04	No	
MW-14	06/18/12	635.05	636.38	617.90	607.90	19.06	0.86	19.92	17.92	617.13	No	
MW-14	06/26/12	635.05	636.38	617.90	607.90	18.31	0.96	19.27	17.20	617.85	No	
MW-14	07/12/12	635.05	636.38	617.90	607.90	18.49	0.97	19.46	17.38	617.67	No	
MW-14	07/24/12	635.05	636.38	617.90	607.90	18.84	0.99	19.83	17.73	617.32	No	
MW-14	08/09/12	635.05	636.38	617.90	607.90	18.99	1.01	20.00	17.89	617.16	No	Spill Buddy Before Reading
MW-14	08/09/12	635.05	636.38	617.90	607.90	ND	0.00	19.30	17.97	617.08	No	Spill Buddy After Reading
MW-14	08/17/12	635.05	636.38	617.90	607.90	19.33	0.09	19.42	18.02	617.03	No	
MW-14	09/17/12	635.05	636.38	617.90	607.90	19.78	0.06	19.84	18.46	616.59	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-14	09/20/12	635.05	636.38	617.90	607.90	19.85	0.07	19.92	18.54	616.51	No	
MW-14	09/30/12	635.05	636.38	617.90	607.90	19.97	0.06	20.03	18.65	616.40	No	
MW-14	10/22/12	635.05	636.38	617.90	607.90	20.16	1.48	21.64	19.16	615.89	No	
MW-14	11/21/12	635.05	636.38	617.90	607.90	20.05	2.83	22.88	19.36	615.69	No	
MW-14	12/17/12	635.05	636.38	617.90	607.90	20.21	3.51	23.72	19.67	615.38	No	
MW-14	03/25/13	635.05	636.38	617.90	607.90	20.90	4.24	25.14	20.53	614.52	No	
MW-14	05/05/13	635.05	636.38	617.90	607.90	20.75	3.97	24.72	20.32	614.73	No	
MW-14	10/03/13	635.05	636.38	617.90	607.90	20.32	2.21	22.53	19.49	615.56	No	
MW-14	05/22/14	635.05	636.38	617.90	607.90	18.96	0.37	19.33	17.71	617.34	No	
MW-14	10/31/14	635.05	636.38	617.90	607.90	18.63	0.34	18.97	17.38	617.67	No	
MW-14	05/06/15	635.05	636.38	617.90	607.90	20.06	2.41	22.47	19.27	615.78	No	
MW-14	07/10/15	635.05	636.38	617.90	607.90	19.27	0.68	19.95	18.09	616.96	No	
MW-14	10/05/15	635.05	636.38	617.90	607.90	18.43	0.03	18.46	17.11	617.94	Yes	
MW-14	05/23/16	635.05	636.38	617.90	607.90	16.03	0.37	16.40	14.78	620.27	Yes	
MW-14	10/03/16	635.05	636.38	617.90	607.90	17.54	0.01	17.55	16.21	618.84	Yes	
MW-14	06/14/17	635.05	636.38	617.90	607.90	NP	0.00	16.22	14.89	620.16	Yes	
MW-14	06/21/17	635.05	636.38	617.90	607.90	NP	0.00	16.73	15.40	619.65	Yes	
MW-14	06/22/17	635.05	636.38	617.90	607.90	NP	0.00	16.55	15.22	619.83	Yes	
MW-14	06/23/17	635.05	636.38	617.90	607.90	16.65	0.01	16.66	15.32	619.73	Yes	
MW-14	05/23/18	635.05	636.38	617.90	607.90	NP	0.00	19.44	18.11	616.94	No	
MW-15S	09/08/88	630.10	632.73	615.10	605.10	NP	0.00	19.92	17.29	612.81	No	
MW-15S	09/20/88	630.10	632.73	615.10	605.10	NP	0.00	20.25	17.62	612.48	No	
MW-15S	04/27/89	630.10	632.73	615.10	605.10	NP	0.00	19.84	17.21	612.89	No	
MW-15S	05/18/89	630.10	632.73	615.10	605.10	NP	0.00	19.61	16.98	613.12	No	
MW-15S	06/30/89	630.10	632.73	615.10	605.10	NP	0.00	19.34	16.71	613.39	No	
MW-15S	07/12/89	630.10	632.73	615.10	605.10	NP	0.00	19.45	16.82	613.28	No	
MW-15S	07/26/89	630.10	632.73	615.10	605.10	NP	0.00	19.52	16.89	613.21	No	
MW-15S	07/27/89	630.10	632.73	615.10	605.10	NP	0.00	19.66	17.03	613.07	No	
MW-15S	09/03/89	630.10	632.73	615.10	605.10	NP	0.00	19.76	17.13	612.97	No	
MW-15S	11/16/89	630.10	632.73	615.10	605.10	NP	0.00	19.92	17.29	612.81	No	
MW-15S	11/28/89	630.10	632.73	615.10	605.10	NP	0.00	20.09	17.46	612.64	No	
MW-15S	06/01/90	630.10	632.73	615.10	605.10	NP	0.00	20.09	17.46	612.64	No	
MW-15S	06/19/90	630.10	632.73	615.10	605.10	NP	0.00	19.91	17.28	612.82	No	
MW-15S	06/27/90	630.10	632.73	615.10	605.10	NP	0.00	19.94	17.31	612.79	No	
MW-15S	07/05/90	630.10	632.73	615.10	605.10	NP	0.00	20.05	17.42	612.68	No	
MW-15S	07/13/90	630.10	632.73	615.10	605.10	NP	0.00	20.14	17.51	612.59	No	
MW-15S	07/17/90	630.10	632.73	615.10	605.10	NP	0.00	19.98	17.35	612.75	No	
MW-15S	07/25/90	630.10	632.73	615.10	605.10	NP	0.00	20.09	17.46	612.64	No	
MW-15S	08/09/90	630.10	632.73	615.10	605.10	NP	0.00	20.50	17.87	612.23	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-15S	08/14/90	630.10	632.73	615.10	605.10	NP	0.00	20.18	17.55	612.55	No	
MW-15S	01/04/91	630.10	632.73	615.10	605.10	NP	0.00	19.57	16.94	613.16	No	
MW-15S	01/30/91	630.10	632.73	615.10	605.10	NP	0.00	19.80	17.17	612.93	No	
MW-15S	04/24/91	630.10	632.73	615.10	605.10	NP	0.00	19.96	17.33	612.77	No	
MW-15S	07/09/91	630.10	632.73	615.10	605.10	NP	0.00	18.13	15.50	614.60	No	
MW-15S	10/08/91	630.10	632.73	615.10	605.10	NP	0.00	17.10	14.47	615.63	Yes	
MW-15S	01/07/92	630.10	632.73	615.10	605.10	NP	0.00	17.03	14.40	615.70	Yes	
MW-15S	10/14/92	630.10	632.73	615.10	605.10	NP	0.00	16.89	14.26	615.84	Yes	
MW-15S	06/25/93	630.10	632.73	615.10	605.10	NP	0.00	15.74	13.11	616.99	Yes	
MW-15S	10/28/93	630.10	632.73	615.10	605.10	NP	0.00	17.00	14.37	615.73	Yes	
MW-15S	01/29/94	630.10	632.73	615.10	605.10	NP	0.00	17.34	14.71	615.39	Yes	
MW-15S	04/27/94	630.10	632.73	615.10	605.10	NP	0.00	17.70	15.07	615.03	No	
MW-15S	06/14/94	630.10	632.73	615.10	605.10	NP	0.00	17.01	14.38	615.72	Yes	
MW-15S	07/21/94	630.10	632.73	615.10	605.10	NP	0.00	16.92	14.29	615.81	Yes	
MW-15S	08/30/94	630.10	632.73	615.10	605.10	NP	0.00	17.65	15.02	615.08	No	
MW-15S	10/25/94	630.10	632.73	615.10	605.10	NP	0.00	17.16	14.53	615.57	Yes	
MW-15S	10/27/94	630.10	632.73	615.10	605.10	NP	0.00	16.98	14.35	615.75	Yes	
MW-15S	02/01/95	630.10	632.73	615.10	605.10	NP	0.00	18.42	15.79	614.31	No	
MW-15S	04/04/95	630.10	632.73	615.10	605.10	NP	0.00	18.75	16.12	613.98	No	
MW-15S	07/12/95	630.10	632.73	615.10	605.10	NP	0.00	18.09	15.46	614.64	No	
MW-15S	11/13/95	630.10	632.73	615.10	605.10	NP	0.00	17.19	14.56	615.54	Yes	
MW-15S	03/13/96	630.10	632.73	615.10	605.10	NP	0.00	18.61	15.98	614.12	No	
MW-15S	04/22/96	630.10	632.73	615.10	605.10	NP	0.00	17.39	14.76	615.34	Yes	
MW-15S	10/08/96	630.10	632.73	615.10	605.10	NP	0.00	16.43	13.80	616.30	Yes	
MW-15S	04/29/97	630.10	632.73	615.10	605.10	NP	0.00	15.85	13.22	616.88	Yes	
MW-15S	11/03/98	630.10	632.73	615.10	605.10	NP	0.00	18.74	16.11	613.99	No	
MW-15S	03/02/99	630.10	632.73	615.10	605.10	NP	0.00	18.93	16.30	613.80	No	
MW-15S	04/26/00	630.10	632.73	615.10	605.10	NP	0.00	18.14	15.51	614.59	No	
MW-15S	10/10/00	630.10	632.73	615.10	605.10	NP	0.00	18.60	15.97	614.13	No	
MW-15S	10/23/01	630.10	632.73	615.10	605.10	NP	0.00	18.57	15.94	614.16	No	
MW-15S	04/23/02	630.10	632.73	615.10	605.10	NP	0.00	19.06	16.43	613.67	No	
MW-15S	11/05/02	630.10	632.73	615.10	605.10	NP	0.00	17.86	15.23	614.87	No	
MW-15S	04/17/03	630.10	632.73	615.10	605.10	NP	0.00	19.72	17.09	613.01	No	
MW-15S	10/20/03	630.10	632.73	615.10	605.10	NP	0.00	19.54	16.91	613.19	No	
MW-15S	04/19/04	632.01	632.44	615.10	605.10	NP	0.00	20.02	19.59	612.42	No	
MW-15S	11/16/04	632.01	632.44	615.10	605.10	NP	0.00	18.33	17.90	614.11	No	
MW-15S	04/18/05	632.01	632.44	615.10	605.10	NP	0.00	18.70	18.27	613.74	No	
MW-15S	10/11/05	632.01	632.44	615.10	605.10	NP	0.00	17.94	17.51	614.50	No	
MW-15S	05/23/06	632.01	632.44	615.10	605.10	NP	0.00	17.43	17.00	615.01	No	
MW-15S	10/16/06	632.01	632.44	615.10	605.10	NP	0.00	18.37	17.94	614.07	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-15S	04/23/07	632.01	632.44	615.10	605.10	NP	0.00	19.03	18.60	613.41	No	
MW-15S	09/25/07	632.01	634.52	615.10	605.10	NP	0.00	20.96	18.45	613.56	No	
MW-15S	05/01/08	632.01	634.52	615.10	605.10	NP	0.00	19.59	17.08	614.93	No	
MW-15S	10/20/08	632.01	634.52	615.10	605.10	NP	0.00	18.41	15.90	616.11	Yes	
MW-15S	04/18/09	632.01	634.52	615.10	605.10	NP	0.00	19.40	16.89	615.12	Yes	
MW-15S	10/11/09	632.01	634.52	615.10	605.10	NP	0.00	19.86	17.35	614.66	No	
MW-15S	04/28/10	632.01	634.52	615.10	605.10	NP	0.00	20.31	17.80	614.21	No	
MW-15S	10/25/10	632.01	634.52	615.10	605.10	NP	0.00	18.58	16.07	615.94	Yes	
MW-15S	04/25/11	632.01	634.52	615.10	605.10	NP	0.00	19.43	16.92	615.09	No	
MW-15S	10/10/11	632.01	634.52	615.10	605.10	NP	0.00	18.85	16.34	615.67	Yes	
MW-15S	01/04/12	632.01	634.52	615.10	605.10	NP	0.00	20.09	17.58	614.43	No	
MW-15S	04/16/12	632.01	634.52	615.10	605.10	NP	0.00	20.78	18.27	613.74	No	
MW-15S	06/26/12	632.01	634.52	615.10	605.10	NP	0.00	18.46	15.95	616.06	Yes	
MW-15S	09/30/12	632.01	634.52	615.10	605.10	NP	0.00	19.87	17.36	614.65	No	
MW-15S	12/17/12	632.01	634.52	615.10	605.10	NP	0.00	20.56	18.05	613.96	No	
MW-15S	03/25/13	632.01	634.52	615.10	605.10	NP	0.00	21.48	18.97	613.04	No	
MW-15S	05/05/13	632.01	634.52	615.10	605.10	NP	0.00	20.84	18.33	613.68	No	
MW-15S	10/03/13	632.01	634.52	615.10	605.10	NP	0.00	20.31	17.80	614.21	No	
MW-15D	06/14/94	630.00	632.81	577.81	574.81	NP	0.00	17.17	14.36	615.64	Yes	
MW-15D	07/21/94	630.00	632.81	577.81	574.81	NP	0.00	17.13	14.32	615.68	Yes	
MW-15D	08/30/94	630.00	632.81	577.81	574.81	NP	0.00	17.83	15.02	614.98	Yes	
MW-15D	10/25/94	630.00	632.81	577.81	574.81	NP	0.00	17.39	14.58	615.42	Yes	
MW-15D	10/27/94	630.00	632.81	577.81	574.81	NP	0.00	17.22	14.41	615.59	Yes	
MW-15D	02/01/95	630.00	632.81	577.81	574.81	NP	0.00	18.52	15.71	614.29	Yes	
MW-15D	04/04/95	630.00	632.81	577.81	574.81	NP	0.00	18.96	16.15	613.85	Yes	
MW-15D	07/12/95	630.00	632.81	577.81	574.81	NP	0.00	18.33	15.52	614.48	Yes	
MW-15D	11/13/95	630.00	632.81	577.81	574.81	NP	0.00	17.35	14.54	615.46	Yes	
MW-15D	03/13/96	630.00	632.81	577.81	574.81	NP	0.00	18.85	16.04	613.96	Yes	
MW-15D	04/22/96	630.00	632.81	577.81	574.81	NP	0.00	17.46	14.65	615.35	Yes	
MW-15D	10/08/96	630.00	632.81	577.81	574.81	NP	0.00	16.17	13.36	616.64	Yes	
MW-15D	04/29/97	630.00	632.81	577.81	574.81	NP	0.00	15.98	13.17	616.83	Yes	
MW-15D	11/03/98	630.00	632.81	577.81	574.81	NP	0.00	18.92	16.11	613.89	Yes	
MW-15D	03/02/99	630.00	632.81	577.81	574.81	NP	0.00	19.08	16.27	613.73	Yes	
MW-15D	04/26/00	630.00	632.81	577.81	574.81	NP	0.00	18.21	15.40	614.60	Yes	
MW-15D	10/10/00	630.00	632.81	577.81	574.81	NP	0.00	18.79	15.98	614.02	Yes	
MW-15D	10/23/01	630.00	632.81	577.81	574.81	NP	0.00	18.76	15.95	614.05	Yes	
MW-15D	04/23/02	630.00	632.81	577.81	574.81	NP	0.00	19.20	16.39	613.61	Yes	
MW-15D	11/05/02	630.00	632.81	577.81	574.81	NP	0.00	17.99	15.18	614.82	Yes	
MW-15D	04/17/03	630.00	632.81	577.81	574.81	NP	0.00	19.87	17.06	612.94	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-15D	10/20/03	630.00	632.81	577.81	574.81	NP	0.00	19.68	16.87	613.13	Yes	
MW-15D	04/19/04	632.28	632.55	577.81	574.81	NP	0.00	20.13	19.86	612.42	Yes	
MW-15D	11/16/04	632.28	632.55	577.81	574.81	NP	0.00	18.46	18.19	614.09	Yes	
MW-15D	04/18/05	632.28	632.55	577.81	574.81	NP	0.00	18.83	18.56	613.72	Yes	
MW-15D	10/11/05	632.28	632.55	577.81	574.81	NP	0.00	18.09	17.82	614.46	Yes	
MW-15D	05/23/06	632.28	632.55	577.81	574.81	NP	0.00	17.57	17.30	614.98	Yes	
MW-15D	10/16/06	632.28	632.55	577.81	574.81	NP	0.00	18.57	18.30	613.98	Yes	
MW-15D	04/23/07	632.28	632.55	577.81	574.81	NP	0.00	19.23	18.96	613.32	Yes	
MW-15D	09/25/07	632.28	634.55	577.81	574.81	NP	0.00	20.95	18.68	613.60	Yes	
MW-15D	05/01/08	632.28	634.55	577.81	574.81	NP	0.00	19.64	17.37	614.91	Yes	
MW-15D	10/20/08	632.28	634.55	577.81	574.81	NP	0.00	18.49	16.22	616.06	Yes	
MW-15D	04/18/09	632.28	634.55	577.81	574.81	NP	0.00	19.52	17.25	615.03	Yes	
MW-15D	10/11/09	632.28	634.55	577.81	574.81	NP	0.00	19.97	17.70	614.58	Yes	
MW-15D	04/28/10	632.28	634.55	577.81	574.81	NP	0.00	20.37	18.10	614.18	Yes	
MW-15D	10/25/10	632.28	634.55	577.81	574.81	NP	0.00	18.73	16.46	615.82	Yes	
MW-15D	04/25/11	632.28	634.55	577.81	574.81	NP	0.00	19.51	17.24	615.04	Yes	
MW-15D	10/10/11	632.28	634.55	577.81	574.81	NP	0.00	19.02	16.75	615.53	Yes	
MW-15D	01/04/12	632.28	634.55	577.81	574.81	NP	0.00	20.2	17.93	614.35	Yes	
MW-15D	04/16/12	632.28	634.55	577.81	574.81	NP	0.00	20.74	18.47	613.81	Yes	
MW-15D	06/26/12	632.28	634.55	577.81	574.81	NP	0.00	18.48	16.21	616.07	Yes	
MW-15D	09/30/12	632.28	634.55	577.81	574.81	NP	0.00	20.02	17.75	614.53	Yes	
MW-15D	12/17/12	632.28	634.55	577.81	574.81	NP	0.00	20.64	18.37	613.91	Yes	
MW-15D	03/25/13	632.28	634.55	577.81	574.81	NP	0.00	21.58	19.31	612.97	Yes	
MW-15D	05/05/13	632.28	634.55	577.81	574.81	NP	0.00	20.88	18.61	613.67	Yes	
MW-15D	10/03/13	632.28	634.55	577.81	574.81	NP	0.00	20.38	18.11	614.17	Yes	
MW-16	09/08/88	634.30	636.37	619.30	604.30	NP	0.00	22.60	20.53	613.77	No	
MW-16	09/20/88	634.30	636.37	619.30	604.30	NP	0.00	22.76	20.69	613.61	No	
MW-16	04/27/89	634.30	636.37	619.30	604.30	NP	0.00	22.44	20.37	613.93	No	
MW-16	05/18/89	634.30	636.37	619.30	604.30	NP	0.00	22.19	20.12	614.18	No	
MW-16	06/30/89	634.30	636.37	619.30	604.30	NP	0.00	21.91	19.84	614.46	No	
MW-16	07/12/89	634.30	636.37	619.30	604.30	NP	0.00	22.12	20.05	614.25	No	
MW-16	07/26/89	634.30	636.37	619.30	604.30	NP	0.00	22.38	20.31	613.99	No	
MW-16	07/27/89	634.30	636.37	619.30	604.30	NP	0.00	22.45	20.38	613.92	No	
MW-16	09/03/89	634.30	636.37	619.30	604.30	NP	0.00	22.59	20.52	613.78	No	
MW-16	11/16/89	634.30	636.37	619.30	604.30	NP	0.00	22.76	20.69	613.61	No	
MW-16	11/28/89	634.30	636.37	619.30	604.30	NP	0.00	22.81	20.74	613.56	No	
MW-16	06/01/90	634.30	636.37	619.30	604.30	NP	0.00	22.75	20.68	613.62	No	
MW-16	06/19/90	634.30	636.37	619.30	604.30	NP	0.00	22.57	20.50	613.80	No	
MW-16	06/27/90	634.30	636.37	619.30	604.30	NP	0.00	22.68	20.61	613.69	No	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-16	07/05/90	634.30	636.37	619.30	604.30	NP	0.00	22.83	20.76	613.54	No	
MW-16	07/13/90	634.30	636.37	619.30	604.30	NP	0.00	22.80	20.73	613.57	No	
MW-16	07/17/90	634.30	636.37	619.30	604.30	NP	0.00	22.80	20.73	613.57	No	
MW-16	07/25/90	634.30	636.37	619.30	604.30	NP	0.00	22.93	20.86	613.44	No	
MW-16	08/09/90	634.30	636.37	619.30	604.30	NP	0.00	22.90	20.83	613.47	No	product beads on probe
MW-16	08/14/90	634.30	636.37	619.30	604.30	NP	0.00	22.99	20.92	613.38	No	
MW-16	08/27/90	634.30	636.37	619.30	604.30	NP	0.00	22.68	20.61	613.69	No	
MW-16	09/06/90	634.30	636.37	619.30	604.30	NP	0.00	22.52	20.45	613.85	No	
MW-16	01/04/91	634.30	636.37	619.30	604.30	NP	0.00	22.33	20.26	614.04	No	
MW-16	01/30/91	634.30	636.37	619.30	604.30	NP	0.00	22.57	20.50	613.80	No	
MW-16	04/24/91	634.30	636.37	619.30	604.30	NP	0.00	22.46	20.39	613.91	No	
MW-16	06/06/91	634.30	636.37	619.30	604.30	NP	0.00	21.10	19.03	615.27	No	
MW-16	07/09/91	634.30	636.37	619.30	604.30	20.31	0.01	20.32	18.24	616.06	No	
MW-16	08/06/91	634.30	636.37	619.30	604.30	19.41	1.45	20.86	17.67	616.63	No	
MW-16	09/04/91	634.30	636.37	619.30	604.30	18.30	6.55	24.85	17.71	616.59	No	
MW-16	10/08/91	634.30	636.37	619.30	604.30	17.70	7.15	24.85	17.24	617.06	No	
MW-16	11/08/91	634.30	636.37	619.30	604.30	18.13	6.93	25.06	17.63	616.67	No	
MW-16	12/03/91	634.30	636.37	619.30	604.30	16.25	9.40	25.65	16.30	618.00	No	
MW-16	01/07/92	634.30	636.37	619.30	604.30	17.78	7.96	25.74	17.51	616.79	No	
MW-16	02/04/92	634.30	636.37	619.30	604.30	18.40	8.25	26.65	18.19	616.11	No	
MW-16	03/03/92	634.30	636.37	619.30	604.30	18.80	8.30	27.10	18.60	615.70	No	
MW-16	09/24/92	634.30	636.37	619.30	604.30	16.92	10.28	27.20	17.17	617.13	No	
MW-16	10/14/92	634.30	636.37	619.30	604.30	17.88	8.52	26.40	17.73	616.57	No	
MW-16	06/25/93	634.30	636.37	619.30	604.30	14.56	12.99	27.55	15.42	618.88	No	
MW-16	10/28/93	634.30	636.37	619.30	604.30	18.27	8.80	27.07	18.19	616.11	No	
MW-16	01/29/94	634.30	636.37	619.30	604.30	19.70	5.51	25.21	18.87	615.43	No	
MW-16	04/27/94	634.30	636.37	619.30	604.30	18.97	5.72	24.69	18.19	616.11	No	
MW-16	07/21/94	634.30	636.37	619.30	604.30	17.80	8.80	26.60	17.72	616.58	No	
MW-16	08/30/94	634.30	636.37	619.30	604.30	18.84	8.58	27.42	18.71	615.59	No	
MW-16	10/25/94	634.30	636.37	619.30	604.30	18.26	8.04	26.30	18.01	616.29	No	
MW-16	11/02/94	634.30	636.37	619.30	604.30	18.49	6.71	25.20	17.94	616.36	No	
MW-16	02/01/95	634.30	636.37	619.30	604.30	22.12	0.09	22.21	20.07	614.23	No	
MW-16	04/04/95	634.30	636.37	619.30	604.30	21.78	0.15	21.93	19.74	614.56	No	
MW-16	07/12/95	634.30	636.37	619.30	604.30	20.65	0.55	21.20	18.70	615.60	No	
MW-16	11/14/95	634.30	636.37	619.30	604.30	18.05	6.80	24.85	17.52	616.78	No	
MW-16	03/13/96	634.30	636.37	619.30	604.30	19.85	7.35	27.20	19.44	614.86	No	
MW-16	10/08/96	634.30	636.37	619.30	604.30	19.43	0.08	19.51	17.38	616.92	No	
MW-16	04/29/97	634.30	636.37	619.30	604.30	16.32	9.58	25.90	16.41	617.89	No	
MW-16	06/10/97	634.30	636.37	619.30	604.30	18.02	6.41	24.43	17.40	616.90	No	FP bailed 5/22/97
MW-16	11/03/98	634.30	636.37	619.30	604.30	19.70	9.25	28.95	19.72	614.58	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-16	09/27/00	634.30	634.92	619.30	604.30	19.35	8.84	28.19	20.73	613.57	No	bailed 2.5 gal. FP
MW-16	10/11/00	634.30	634.92	619.30	604.30	17.70	10.20	27.90	19.38	614.92	No	bailed 2.6 gal. FP
MW-16	11/17/00	634.30	634.92	619.30	604.30	17.84	7.42	25.26	18.90	615.40	No	bailed 2.5 gal. FP
MW-16	12/12/00	634.30	634.92	619.30	604.30	17.98	5.93	23.91	18.70	615.60	No	bailed 2.5 gal. FP
MW-16	01/18/01	634.30	634.92	619.30	604.30	17.85	5.76	23.61	18.53	615.77	No	bailed 2 gal. FP
MW-16	04/24/01	634.30	634.92	619.30	604.30	17.95	5.89	23.84	18.66	615.64	No	product abated using vactruck
MW-16	05/23/01	634.30	634.92	619.30	604.30	17.25	4.37	21.62	17.62	616.68	No	no product bailed
MW-16	06/19/01	635.30	634.92	619.30	604.30	17.02	5.64	22.66	18.67	616.63	No	
MW-16	07/26/01	634.30	634.92	619.30	604.30	17.49	7.56	25.05	18.58	615.72	No	
MW-16	08/31/01	635.30	634.92	619.30	604.30	17.81	7.84	25.65	19.96	615.34	No	
MW-16	09/26/01	636.30	634.92	619.30	604.30	17.64	9.99	27.63	21.28	615.02	No	
MW-16	10/24/01	635.30	634.92	619.30	604.30	17.77	9.51	27.28	20.30	615.00	No	
MW-16	12/20/01	635.30	634.92	619.30	604.30	18.09	8.23	26.32	20.33	614.97	No	
MW-16	01/22/02	635.30	634.92	619.30	604.30	18.16	9.78	27.94	20.75	614.55	No	
MW-16	02/26/02	635.30	634.92	619.30	604.30	18.43	9.97	28.40	21.06	614.24	No	
MW-16	03/20/02	635.30	634.92	619.30	604.30	18.57	9.97	28.54	21.20	614.10	No	
MW-16	04/24/02	635.30	634.92	619.30	604.30	18.16	8.77	26.93	20.52	614.78	No	
MW-16	05/15/02	635.30	634.92	619.30	604.30	17.86	7.09	24.95	19.84	615.46	No	
MW-16	06/27/02	635.30	634.92	619.30	604.30	17.95	6.86	24.81	19.88	615.42	No	
MW-16	07/25/02	635.30	634.92	619.30	604.30	18.00	6.87	24.87	19.93	615.37	No	
MW-16	08/20/02	635.30	634.92	619.30	604.30	17.84	6.75	24.59	19.74	615.56	No	
MW-16	09/30/02	635.30	634.92	619.30	604.30	17.60	6.57	24.17	19.46	615.84	No	
MW-16	11/05/02	635.30	634.92	619.30	604.30	17.33	5.86	23.19	19.03	616.27	No	
MW-16	12/23/02	635.30	634.92	619.30	604.30	17.78	8.28	26.06	20.03	615.27	No	
MW-16	01/28/03	635.30	634.92	619.30	604.30	18.03	9.62	27.65	20.58	614.72	No	
MW-16	02/19/03	635.30	634.92	619.30	604.30	18.22	10.15	28.37	20.89	614.41	No	
MW-16	04/17/03	635.30	634.92	619.30	604.30	18.64	10.26	28.90	21.34	613.96	No	
MW-16	05/15/03	635.30	634.92	619.30	604.30	18.74	8.61	27.35	21.06	614.24	No	
MW-16	06/10/03	635.30	634.92	619.30	604.30	18.50	7.91	26.41	20.67	614.63	No	
MW-16	10/23/03	635.30	634.92	619.30	604.30	18.78	9.46	28.24	21.30	614.00	No	
MW-16	12/03/03	635.30	634.92	619.30	604.30	18.91	9.46	28.37	21.43	613.87	No	
MW-16	04/19/04	633.67	634.42	619.30	604.30	19.60	6.26	25.86	20.26	613.41	No	
MW-16	07/28/04	633.67	634.42	619.30	604.30	18.77	5.84	24.61	19.34	614.33	No	
MW-16	11/15/04	633.67	634.42	619.30	604.30	18.11	4.59	22.70	18.40	615.27	No	
MW-16	04/18/05	633.67	634.42	619.30	604.30	18.25	6.23	24.48	18.91	614.76	No	
MW-16	09/09/05	633.67	634.42	619.30	604.30	20.98	6.73	27.71	21.75	611.92	No	
MW-16	10/11/05	633.67	634.42	619.30	604.30	20.43	6.30	26.73	21.10	612.57	No	
MW-16	05/23/06	633.67	634.42	619.30	604.30	20.35	4.00	24.35	20.50	613.17	No	
MW-16	10/16/06	633.67	634.42	619.30	604.30	21.02	7.14	28.16	21.88	611.79	No	
MW-16	04/23/07	633.67	634.42	619.30	604.30	21.53	7.35	28.88	22.44	611.23	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-16	09/25/07	633.67	637.46	619.30	604.30	22.37	6.88	29.25	20.13	613.54	No	
MW-16	05/01/08	633.67	637.46	619.30	604.30	20.81	3.78	24.59	17.87	615.80	No	
MW-16	10/20/08	633.67	637.46	619.30	604.30	19.57	3.68	23.25	16.61	617.06	No	
MW-16	04/18/09	633.67	637.46	619.30	604.30	20.26	5.04	25.30	17.61	616.06	No	
MW-16	08/04/09	633.67	637.46	619.30	604.30	20.57	6.30	26.87	18.20	615.47	No	
MW-16	08/05/09	633.67	637.46	619.30	604.30	20.79	6.04	26.83	18.36	615.31	No	
MW-16	08/13/09	633.67	637.46	619.30	604.30	20.53	6.23	26.76	18.15	615.52	No	
MW-16	08/18/09	633.67	637.46	619.30	604.30	20.65	6.16	26.81	18.25	615.42	No	
MW-16	08/26/09	633.67	637.46	619.30	604.30	20.51	5.42	25.93	17.94	615.73	No	
MW-16	09/03/09	633.67	637.46	619.30	604.30	20.31	5.79	26.10	17.83	615.84	No	
MW-16	09/08/09	633.67	637.46	619.30	604.30	20.29	5.79	26.08	17.81	615.86	No	
MW-16	09/14/09	633.67	637.46	619.30	604.30	20.31	6.29	26.60	17.94	615.73	No	
MW-16	10/11/09	633.67	637.46	619.30	604.30	20.69	6.59	27.28	18.39	615.28	No	
MW-16	10/15/09	633.67	637.46	619.30	604.30	20.69	6.59	27.28	18.39	615.28	No	
MW-16	04/28/10	633.67	637.46	619.30	604.30	20.73	7.26	27.99	18.58	615.09	No	
MW-16	10/25/10	633.67	637.46	619.30	604.30	18.94	7.01	25.95	16.73	616.94	No	
MW-16	04/25/11	633.67	637.46	619.30	604.30	20.01	6.04	26.05	17.58	616.09	No	
MW-16	08/04/11	633.67	637.46	619.30	604.30	18.31	6.08	24.39	15.89	617.78	No	
MW-16	09/14/11	633.67	637.46	619.30	604.30	19.32	6.16	25.48	16.92	616.75	No	
MW-16	09/23/11	633.67	637.46	619.30	604.30	19.52	6.18	25.70	17.13	616.54	No	
MW-16	09/29/11	633.67	637.46	619.30	604.30	19.53	6.37	25.90	17.18	616.49	No	
MW-16	10/07/11	633.67	637.46	619.30	604.30	19.71	6.32	26.03	17.35	616.32	No	
MW-16	10/10/11	633.67	637.46	619.30	604.30	19.82	6.30	26.12	17.45	616.22	No	
MW-16	10/21/11	633.67	637.46	619.30	604.30	20.05	6.27	26.32	17.68	615.99	No	
MW-16	10/27/11	633.67	637.46	619.30	604.30	20.15	6.25	26.40	17.77	615.90	No	
MW-16	11/04/11	633.67	637.46	619.30	604.30	20.29	6.25	26.54	17.91	615.76	No	
MW-16	11/09/11	633.67	637.46	619.30	604.30	20.31	6.27	26.58	17.94	615.73	No	
MW-16	11/18/11	633.67	637.46	619.30	604.30	20.46	6.22	26.68	18.07	615.60	No	
MW-16	11/22/11	633.67	637.46	619.30	604.30	20.59	6.18	26.77	18.20	615.47	No	
MW-16	12/01/11	633.67	637.46	619.30	604.30	20.83	6.13	26.96	18.42	615.25	No	
MW-16	01/04/12	633.67	637.46	619.30	604.30	21.17	6.28	27.45	18.80	614.87	No	
MW-16	02/16/12	633.67	637.46	619.30	604.30	21.64	6.88	28.52	19.40	614.27	No	
MW-16	03/13/12	633.67	637.46	619.30	604.30	21.64	8.08	29.72	19.68	613.99	No	
MW-16	04/03/12	633.67	637.46	619.30	604.30	21.34	8.29	29.63	19.42	614.25	No	Spill Buddy Probe could not go past approximately 12-15 feet in well, could not recover with Spill Buddy
MW-16	04/16/12	633.67	637.46	619.30	604.30	21.15	7.80	28.95	19.12	614.55	No	
MW-16	06/26/12	633.67	637.46	619.30	604.30	19.89	1.94	21.83	16.54	617.13	No	
MW-16	07/12/12	633.67	637.46	619.30	604.30	19.95	3.91	23.86	17.04	616.63	No	Gauge before hand bail
MW-16	07/12/12	633.67	637.46	619.30	604.30	21.81	0.14	21.95	18.05	615.62	No	Gauge after hand bail
MW-16	07/24/12	633.67	637.46	619.30	604.30	19.90	5.04	24.94	17.25	616.42	No	
MW-16	08/17/12	633.67	637.46	619.30	604.30	20.14	5.53	25.67	17.60	616.07	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-16	09/17/12	633.67	637.46	619.30	604.30	20.45	<b>7.09</b>	27.54	18.26	615.41	No	
MW-16	09/20/12	633.67	637.46	619.30	604.30	20.44	<b>7.15</b>	27.59	18.26	615.41	No	
MW-16	09/30/12	633.67	637.46	619.30	604.30	21.67	<b>6.28</b>	27.95	19.30	614.37	No	
MW-16	10/22/12	633.67	637.46	619.30	604.30	21.03	<b>7.13</b>	28.16	18.85	614.82	No	
MW-16	11/21/12	633.67	637.46	619.30	604.30	21.15	<b>6.94</b>	28.09	18.93	614.74	No	
MW-16	12/17/12	633.67	637.46	619.30	604.30	21.37	<b>6.92</b>	28.29	19.14	614.53	No	
MW-16	03/25/13	633.67	637.46	619.30	604.30	21.71	<b>9.54</b>	31.25	20.07	613.60	No	
MW-16	04/03/13	633.67	637.46	619.30	604.30	21.37	<b>9.72</b>	31.09	19.78	613.89	No	Spill Buddy Before Reading
MW-16	04/03/13	633.67	637.46	619.30	604.30	24.29	<b>0.58</b>	24.87	20.63	613.04	No	Spill Buddy After Reading
MW-16	05/05/13	633.67	637.46	619.30	604.30	21.65	<b>6.45</b>	28.10	19.32	614.35	No	
MW-16	10/03/13	633.67	637.46	619.30	604.30	21.24	<b>5.87</b>	27.11	18.78	614.89	No	
MW-16	05/22/14	633.67	637.46	619.30	604.30	20.30	<b>2.09</b>	22.39	16.98	616.69	No	
MW-16	10/31/14	633.67	637.46	619.30	604.30	19.49	<b>5.64</b>	25.13	16.97	616.70	No	
MW-16	05/06/15	633.67	637.46	619.30	604.30	20.89	<b>6.75</b>	27.64	18.62	615.05	No	
MW-16	07/10/15	633.67	637.46	619.30	604.30	20.26	<b>4.21</b>	24.47	17.42	616.25	No	
MW-16	10/05/15	633.67	637.46	619.30	604.30	19.50	<b>4.12</b>	23.62	16.64	617.03	No	
MW-16	05/23/16	633.67	637.46	619.30	604.30	16.49	<b>11.46</b>	27.95	15.29	618.38	No	
MW-16	10/03/16	633.67	637.46	619.30	604.30	18.27	<b>7.27</b>	25.54	16.12	617.55	No	
MW-16	06/14/17	633.67	637.46	619.30	604.30	16.96	<b>10.44</b>	27.40	15.53	618.14	No	
MW-16	06/21/17	633.67	637.46	619.30	604.30	17.08	<b>10.17</b>	27.25	15.59	618.08	No	
MW-16	06/22/17	633.67	637.46	619.30	604.30	18.75	<b>1.48</b>	20.23	15.29	618.38	No	
MW-16	06/23/17	633.67	637.46	619.30	604.30	18.87	<b>1.33</b>	20.20	15.38	618.29	No	
MW-16	10/26/17	633.67	637.46	619.30	604.30	14.68	<b>14.77</b>	29.45	14.23	619.44	Yes	
MW-16	05/15/18	633.67	637.46	619.30	604.30	20.23	<b>5.53</b>	25.76	17.69	615.98	No	
MW-16	05/23/18	633.67	637.46	619.30	604.30	20.13	<b>5.65</b>	25.78	17.62	616.05	No	
MW-18	09/08/88	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.90	18.59	616.01	No	
MW-18	09/20/88	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	21.20	18.89	615.71	No	
MW-18	04/27/89	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.93	18.62	615.98	No	
MW-18	05/18/89	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.56	18.25	616.35	No	
MW-18	06/30/89	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.27	17.96	616.64	No	
MW-18	07/12/89	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.43	18.12	616.48	No	
MW-18	07/26/89	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.32	18.01	616.59	No	
MW-18	07/27/89	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.48	18.17	616.43	No	
MW-18	09/03/89	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.64	18.33	616.27	No	
MW-18	11/16/89	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.57	18.26	616.34	No	
MW-18	11/28/89	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.81	18.50	616.10	No	
MW-18	06/01/90	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.75	18.44	616.16	No	
MW-18	06/19/90	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.70	18.39	616.21	No	
MW-18	06/27/90	634.60	636.91	619.60	609.60	NP	<b>0.00</b>	20.89	18.58	616.02	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-18	07/05/90	634.60	636.91	619.60	609.60	NP	0.00	21.11	18.80	615.80	No	
MW-18	07/13/90	634.60	636.91	619.60	609.60	NP	0.00	20.98	18.67	615.93	No	
MW-18	07/17/90	634.60	636.91	619.60	609.60	NP	0.00	20.71	18.40	616.20	No	
MW-18	07/25/90	634.60	636.91	619.60	609.60	NP	0.00	20.95	18.64	615.96	No	
MW-18	08/09/90	634.60	636.91	619.60	609.60	NP	0.00	20.96	18.65	615.95	No	
MW-18	08/14/90	634.60	636.91	619.60	609.60	NP	0.00	20.90	18.59	616.01	No	
MW-18	08/27/90	634.60	636.91	619.60	609.60	NP	0.00	20.75	18.44	616.16	No	
MW-18	01/04/91	634.60	636.91	619.60	609.60	NP	0.00	20.16	17.85	616.75	No	
MW-18	01/30/91	634.60	636.91	619.60	609.60	NP	0.00	20.25	17.94	616.66	No	
MW-18	04/24/91	634.60	636.91	619.60	609.60	NP	0.00	20.82	18.51	616.09	No	
MW-18	07/09/91	634.60	636.91	619.60	609.60	NP	0.00	19.05	16.74	617.86	No	
MW-18	10/08/91	634.60	636.91	619.60	609.60	NP	0.00	17.57	15.26	619.34	No	
MW-18	01/07/92	634.60	636.91	619.60	609.60	NP	0.00	17.76	15.45	619.15	No	
MW-18	10/14/92	634.60	636.91	619.60	609.60	NP	0.00	17.60	15.29	619.31	No	
MW-18	01/29/94	634.60	636.91	619.60	609.60	NP	0.00	18.76	16.45	618.15	No	
MW-18	04/27/94	634.60	636.91	619.60	609.60	NP	0.00	18.90	16.59	618.01	No	
MW-18	07/21/94	634.60	636.91	619.60	609.60	NP	0.00	17.52	15.21	619.39	No	
MW-18	10/25/94	634.60	636.91	619.60	609.60	NP	0.00	18.00	15.69	618.91	No	
MW-18	10/27/94	634.60	636.91	619.60	609.60	NP	0.00	17.44	15.13	619.47	No	
MW-18	02/01/95	634.60	636.91	619.60	609.60	NP	0.00	19.22	16.91	617.69	No	
MW-18	04/04/95	634.60	636.91	619.60	609.60	NP	0.00	19.94	17.63	616.97	No	
MW-18	07/12/95	634.60	636.91	619.60	609.60	NP	0.00	18.90	16.59	618.01	No	
MW-18	11/13/95	634.60	636.91	619.60	609.60	NP	0.00	17.71	15.40	619.20	No	
MW-18	03/13/96	634.60	636.91	619.60	609.60	NP	0.00	19.33	17.02	617.58	No	
MW-18	10/08/96	634.60	636.91	619.60	609.60	NP	0.00	16.89	14.58	620.02	Yes	
MW-18	04/29/97	634.60	636.91	619.60	609.60	NP	0.00	16.25	13.94	620.66	Yes	
MW-18	11/03/98	634.60	636.91	619.60	609.60	NP	0.00	19.75	17.44	617.16	No	
MW-18	03/02/99	634.60	636.91	619.60	609.60	NP	0.00	19.76	17.45	617.15	No	
MW-18	04/26/00	634.60	636.91	619.60	609.60	NP	0.00	18.92	16.61	617.99	No	
MW-18	08/18/00	634.60	636.91	619.60	609.60	NP	0.00	19.40	17.09	617.51	No	
MW-18	11/05/02	634.60	636.91	619.60	609.60	NP	0.00	19.01	16.70	617.90	No	
MW-18	08/18/03						<b>Abandoned</b>					
MW-19	06/30/89	632.80	635.42	611.10	601.10	NP	0.00	20.95	18.33	614.47	Yes	
MW-19	07/12/89	632.80	635.42	611.10	601.10	NP	0.00	22.86	20.24	612.56	Yes	
MW-19	07/26/89	632.80	635.42	611.10	601.10	NP	0.00	23.09	20.47	612.33	Yes	
MW-19	07/27/89	632.80	635.42	611.10	601.10	NP	0.00	23.17	20.55	612.25	Yes	
MW-19	09/03/89	632.80	635.42	611.10	601.10	NP	0.00	23.13	20.51	612.29	Yes	
MW-19	11/16/89	632.80	635.42	611.10	601.10	NP	0.00	23.42	20.80	612.00	Yes	
MW-19	11/28/89	632.80	635.42	611.10	601.10	NP	0.00	23.72	21.10	611.70	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-19	06/19/90	632.80	635.42	611.10	601.10	NP	0.00	23.20	20.58	612.22	Yes	
MW-19	06/27/90	632.80	635.42	611.10	601.10	NP	0.00	23.61	20.99	611.81	Yes	
MW-19	07/05/90	632.80	635.42	611.10	601.10	NP	0.00	23.86	21.24	611.56	Yes	
MW-19	07/13/90	632.80	635.42	611.10	601.10	NP	0.00	23.88	21.26	611.54	Yes	
MW-19	07/17/90	632.80	635.42	611.10	601.10	NP	0.00	23.72	21.10	611.70	Yes	
MW-19	07/25/90	632.80	635.42	611.10	601.10	NP	0.00	23.38	20.76	612.04	Yes	
MW-19	08/09/90	632.80	635.42	611.10	601.10	NP	0.00	23.85	21.23	611.57	Yes	
MW-19	08/14/90	632.80	635.42	611.10	601.10	NP	0.00	23.93	21.31	611.49	Yes	
MW-19	08/27/90	632.80	635.42	611.10	601.10	NP	0.00	23.70	21.08	611.72	Yes	
MW-19	09/06/90	632.80	635.42	611.10	601.10	NP	0.00	23.34	20.72	612.08	Yes	
MW-19	01/04/91	632.80	635.42	611.10	601.10	NP	0.00	23.42	20.80	612.00	Yes	
MW-19	01/30/91	632.80	635.42	611.10	601.10	NP	0.00	23.64	21.02	611.78	Yes	
MW-19	04/24/91	632.80	635.42	611.10	601.10	NP	0.00	23.47	20.85	611.95	Yes	
MW-19	07/09/91	632.80	635.42	611.10	601.10	NP	0.00	21.72	19.10	613.70	Yes	
MW-19	10/08/91	632.80	635.42	611.10	601.10	NP	0.00	20.84	18.22	614.58	Yes	
MW-19	01/07/92	632.80	635.42	611.10	601.10	NP	0.00	20.99	18.37	614.43	Yes	
MW-19	10/14/92	632.80	635.42	611.10	601.10	NP	0.00	20.98	18.36	614.44	Yes	
MW-19	06/25/93	632.80	635.42	611.10	601.10	NP	0.00	19.56	16.94	615.86	Yes	
MW-19	10/28/93	632.80	635.42	611.10	601.10	NP	0.00	21.12	18.50	614.30	Yes	
MW-19	01/29/94	632.80	635.42	611.10	601.10	NP	0.00	21.82	19.20	613.60	Yes	
MW-19	04/27/94	632.80	635.42	611.10	601.10	NP	0.00	21.56	18.94	613.86	Yes	
MW-19	07/21/94	632.80	635.42	611.10	601.10	NP	0.00	20.61	17.99	614.81	Yes	
MW-19	10/25/94	632.80	635.42	611.10	601.10	NP	0.00	20.91	18.29	614.51	Yes	
MW-19	10/28/94	632.80	635.42	611.10	601.10	NP	0.00	20.58	17.96	614.84	Yes	
MW-19	02/01/95	632.80	635.42	611.10	601.10	NP	0.00	22.23	19.61	613.19	Yes	
MW-19	04/04/95	632.80	635.42	611.10	601.10	NP	0.00	22.40	19.78	613.02	Yes	
MW-19	07/12/95	632.80	635.42	611.10	601.10	NP	0.00	29.61	26.99	605.81	No	
MW-19	11/13/95	632.80	635.42	611.10	601.10	NP	0.00	20.72	18.10	614.70	Yes	
MW-19	03/13/96	632.80	635.42	611.10	601.10	NP	0.00	23.25	20.63	612.17	Yes	
MW-19	04/22/96	632.80	635.42	611.10	601.10	NP	0.00	20.85	18.23	614.57	Yes	
MW-19	10/08/96	632.80	635.42	611.10	601.10	NP	0.00	20.02	17.40	615.40	Yes	
MW-19	04/29/97	632.80	635.42	611.10	601.10	NP	0.00	19.40	16.78	616.02	Yes	
MW-19	11/03/98	632.80	635.42	611.10	601.10	NP	0.00	22.31	19.69	613.11	Yes	
MW-19	03/02/99	632.80	635.42	611.10	601.10	NP	0.00	22.67	20.05	612.75	Yes	
MW-19	03/02/99	632.80	635.42	611.10	601.10	NP	0.00	21.68	19.06	613.74	Yes	
MW-19	10/10/00	632.80	635.42	611.10	601.10	NP	0.00	22.27	19.65	613.15	Yes	
MW-19	04/24/01	632.80	635.42	611.10	601.10	NP	0.00	21.64	19.02	613.78	Yes	
MW-19	10/23/01	632.80	635.42	611.10	601.10	NP	0.00	22.26	19.64	613.16	Yes	
MW-19	04/23/02	632.80	635.42	611.10	601.10	NP	0.00	22.54	19.92	612.88	Yes	
MW-19	11/05/02	632.80	635.42	611.10	601.10	NP	0.00	21.27	18.65	614.15	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-19	04/17/03	632.80	635.42	611.10	601.10	NP	0.00	23.33	20.71	612.09	Yes	
MW-19	05/15/03	632.80	635.42	611.10	601.10	NM	NM	NM	NM	NM		
MW-19	10/21/03	<b>MW-19 abandoned and replaced as MW-19 due to city road construction</b>										
MW-19	04/19/04	633.62	636.61			NP	0.00	24.61	21.62	612.00	NA	
MW-19	11/18/04	633.62	636.61			NP	0.00	22.95	19.96	613.66	NA	
MW-19	04/18/05	633.62	636.61			NP	0.00	23.12	20.13	613.49	NA	
MW-19	09/07/05	<b>MW-19 again abandoned and replaced as MW-19R due to reconstruction of nearby retention basin by city</b>										
MW-19R	10/11/05	630.50	633.05	11 bgs	26 bgs	NP	0.00	18.47	15.92	614.58	NA	
MW-19R	05/23/06	630.50	633.05	need new survey		17.70	1.72	19.42	15.54	614.96	NA	
MW-19R	10/16/06	630.50	633.05	need new survey		19.19	2.07	21.26	17.11	613.39	NA	
MW-19R	04/23/07	630.50	633.05	need new survey		19.53	1.12	20.65	17.23	613.27	NA	
MW-19R	09/25/07	630.50	633.05	need new survey		19.60	2.53	22.13	17.62	612.88	NA	
MW-19R	05/01/08	630.50	633.05	need new survey		18.02	0.50	18.52	15.58	614.92	NA	
MW-19R	10/20/08	630.50	633.05	need new survey		17.21	0.68	17.89	14.81	615.69	NA	
MW-19R	04/18/09	630.50	633.05	need new survey		18.12	0.49	18.61	15.68	614.82	NA	
MW-19R	10/11/09	630.50	633.05	need new survey		18.57	1.67	20.24	16.40	614.10	NA	
MW-19R	04/28/10	630.50	633.05	need new survey		18.86	1.30	20.16	16.60	613.90	NA	
MW-19R	10/25/10	630.50	633.05	need new survey		17.41	1.46	18.87	15.19	615.31	NA	
MW-19R	04/25/11	630.50	633.05	need new survey		18.18	0.89	19.07	15.83	614.67	NA	
MW-19R	10/10/11	630.50	633.05	need new survey		17.86	2.11	19.97	15.79	614.71	NA	
MW-19R	01/04/12	630.50	633.05	need new survey		19.14	2.25	21.39	17.10	613.40	NA	
MW-19R	04/05/12	630.50	633.05	need new survey		19.57	2.62	22.19	17.61	612.89	NA	Spill Buddy Before Reading
MW-19R	04/05/12	630.50	633.05	need new survey		20.67	0.14	20.81	18.15	612.35	NA	Spill Buddy After Reading
MW-19R	04/16/12	630.50	633.05	need new survey		19.75	1.07	20.82	17.44	613.06	NA	
MW-19R	06/26/12	630.50	633.05	need new survey		17.14	0.01	17.15	14.59	615.91	NA	
MW-19R	07/26/12	630.50	633.05	need new survey		17.65	1.03	18.68	15.33	615.17	NA	Spill Buddy Before Reading
MW-19R	07/26/12	630.50	633.05	need new survey		18.26	0.03	18.29	15.72	614.78	NA	Spill Buddy After Reading
MW-19R	08/09/12	630.50	633.05	need new survey		17.79	1.26	19.05	15.52	614.98	NA	Spill Buddy Before Reading
MW-19R	08/09/12	630.50	633.05	need new survey		18.38	0.07	18.45	15.85	614.65	NA	Spill Buddy After Reading
MW-19R	09/29/12	630.50	633.05	need new survey		18.84	1.75	20.59	16.69	613.81	NA	Spill Buddy Before Reading
MW-19R	09/29/12	630.50	633.05	need new survey		19.50	0.09	19.59	16.97	613.53	NA	Spill Buddy After Reading
MW-19R	09/30/12	630.50	633.05	need new survey		18.94	0.68	19.62	16.54	613.96	NA	
MW-19R	11/21/12	630.50	633.05	need new survey		19.35	0.79	20.14	16.98	613.52	NA	
MW-19R	12/17/12	630.50	633.05	need new survey		19.60	0.85	20.45	17.24	613.26	NA	
MW-19R	03/25/13	630.50	633.05	need new survey		21.39	-0.97	20.42	18.62	612.63	NA	
MW-19R	05/05/13	630.50	633.05	need new survey		19.52	1.11	20.63	17.22	613.28	NA	
MW-19R	10/03/13	630.50	633.05	need new survey		18.91	2.08	20.99	16.83	613.67	NA	
MW-20	06/30/89	633.80	636.47	619.00	609.00	NP	0.00	19.86	17.19	616.61	No	
MW-20	07/12/89	633.80	636.47	619.00	609.00	NP	0.00	19.98	17.31	616.49	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-20	07/26/89	633.80	636.47	619.00	609.00	NP	0.00	19.92	17.25	616.55	No	
MW-20	07/27/89	633.80	636.47	619.00	609.00	NP	0.00	20.05	17.38	616.42	No	
MW-20	09/03/89	633.80	636.47	619.00	609.00	NP	0.00	20.16	17.49	616.31	No	
MW-20	11/16/89	633.80	636.47	619.00	609.00	NP	0.00	20.17	17.50	616.30	No	
MW-20	11/28/89	633.80	636.47	619.00	609.00	NP	0.00	20.33	17.66	616.14	No	
MW-20	06/01/90	633.80	636.47	619.00	609.00	NP	0.00	20.33	17.66	616.14	No	
MW-20	06/19/90	633.80	636.47	619.00	609.00	NP	0.00	20.20	17.53	616.27	No	
MW-20	06/27/90	633.80	636.47	619.00	609.00	NP	0.00	20.27	17.60	616.20	No	
MW-20	07/05/90	633.80	636.47	619.00	609.00	NP	0.00	20.47	17.80	616.00	No	
MW-20	07/13/90	633.80	636.47	619.00	609.00	NP	0.00	20.46	17.79	616.01	No	
MW-20	07/17/90	633.80	636.47	619.00	609.00	NP	0.00	20.24	17.57	616.23	No	
MW-20	07/25/90	633.80	636.47	619.00	609.00	NP	0.00	20.43	17.76	616.04	No	
MW-20	08/09/90	633.80	636.47	619.00	609.00	NP	0.00	20.35	17.68	616.12	No	
MW-20	08/14/90	633.80	636.47	619.00	609.00	NP	0.00	20.41	17.74	616.06	No	
MW-20	08/27/90	633.80	636.47	619.00	609.00	NP	0.00	20.24	17.57	616.23	No	
MW-20	09/06/90	633.80	636.47	619.00	609.00	NP	0.00	19.98	17.31	616.49	No	
MW-20	01/04/91	633.80	636.47	619.00	609.00	NP	0.00	19.76	17.09	616.71	No	
MW-20	01/30/91	633.80	636.47	619.00	609.00	NP	0.00	19.86	17.19	616.61	No	
MW-20	04/24/91	633.80	636.47	619.00	609.00	NP	0.00	20.26	17.59	616.21	No	
MW-20	07/09/91	633.80	636.47	619.00	609.00	NP	0.00	18.83	16.16	617.64	No	
MW-20	10/08/91	633.80	636.47	619.00	609.00	NP	0.00	17.33	14.66	619.14	Yes	
MW-20	01/07/92	633.80	636.47	619.00	609.00	NP	0.00	17.49	14.82	618.98	No	
MW-20	10/14/92	633.80	636.47	619.00	609.00	NP	0.00	17.23	14.56	619.24	Yes	
MW-20	06/25/93	633.80	636.47	619.00	609.00	NP	0.00	15.86	13.19	620.61	Yes	
MW-20	10/28/93	633.80	636.47	619.00	609.00	NP	0.00	17.43	14.76	619.04	Yes	
MW-20	01/29/94	633.80	636.47	619.00	609.00	NP	0.00	18.41	15.74	618.06	No	
MW-20	04/27/94	633.80	636.47	619.00	609.00	NP	0.00	18.52	15.85	617.95	No	
MW-20	07/21/94	633.80	636.47	619.00	609.00	NP	0.00	17.30	14.63	619.17	Yes	
MW-20	10/25/94	633.80	636.47	619.00	609.00	NP	0.00	17.67	15.00	618.80	No	
MW-20	10/27/94	633.80	636.47	619.00	609.00	NP	0.00	16.93	14.26	619.54	Yes	
MW-20	02/01/95	633.80	636.47	619.00	609.00	NP	0.00	18.71	16.04	617.76	No	
MW-20	04/04/95	633.80	636.47	619.00	609.00	NP	0.00	19.35	16.68	617.12	No	
MW-20	11/13/95	633.80	636.47	619.00	609.00	NP	0.00	17.54	14.87	618.93	No	
MW-20	03/13/96	633.80	636.47	619.00	609.00	NP	0.00	19.01	16.34	617.46	No	
MW-20	04/22/96	633.80	636.47	619.00	609.00	NP	0.00	18.35	15.68	618.12	No	
MW-20	10/08/96	633.80	636.47	619.00	609.00	NP	0.00	16.83	14.16	619.64	Yes	
MW-20	04/29/97	633.80	636.47	619.00	609.00	NP	0.00	16.30	13.63	620.17	Yes	
MW-20	11/03/98	633.80	636.47	619.00	609.00	NP	0.00	19.39	16.72	617.08	No	
MW-20	03/02/99	633.80	636.47	619.00	609.00	NP	0.00	19.39	16.72	617.08	No	
MW-20	04/26/00	633.80	636.47	619.00	609.00	NP	0.00	18.71	16.04	617.76	No	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-20	10/10/00	633.80	636.47	619.00	609.00	NP	0.00	18.95	16.28	617.52	No	
MW-20	11/05/02	633.80	636.47	619.00	609.00	NP	0.00	18.88	16.21	617.59	No	
MW-20	04/17/03	633.80	636.47	619.00	609.00	NM	NM	NM	NM	NM	NM	
MW-20	05/15/03	633.80	636.47	619.00	609.00	NM	NM	NM	NM	NM	NM	
MW-20	08/18/03	Abandoned										
MW-21	06/30/89	635.10	637.26	618.50	608.50	NP	0.00	20.53	18.37	616.73	No	
MW-21	07/12/89	635.10	637.26	618.50	608.50	NP	0.00	20.68	18.52	616.58	No	
MW-21	07/26/89	635.10	637.26	618.50	608.50	NP	0.00	20.53	18.37	616.73	No	
MW-21	07/27/89	635.10	637.26	618.50	608.50	NP	0.00	20.69	18.53	616.57	No	
MW-21	09/03/89	635.10	637.26	618.50	608.50	NP	0.00	20.89	18.73	616.37	No	
MW-21	11/16/89	635.10	637.26	618.50	608.50	NP	0.00	20.80	18.64	616.46	No	
MW-21	11/28/89	635.10	637.26	618.50	608.50	NP	0.00	21.03	18.87	616.23	No	
MW-21	06/01/90	635.10	637.26	618.50	608.50	NP	0.00	21.05	18.89	616.21	No	
MW-21	06/19/90	635.10	637.26	618.50	608.50	NP	0.00	21.06	18.90	616.20	No	
MW-21	06/27/90	635.10	637.26	618.50	608.50	NP	0.00	21.25	19.09	616.01	No	
MW-21	07/05/90	635.10	637.26	618.50	608.50	NP	0.00	21.50	19.34	615.76	No	
MW-21	07/13/90	635.10	637.26	618.50	608.50	NP	0.00	21.37	19.21	615.89	No	
MW-21	07/17/90	635.10	637.26	618.50	608.50	NP	0.00	21.06	18.90	616.20	No	
MW-21	07/25/90	635.10	637.26	618.50	608.50	NP	0.00	21.30	19.14	615.96	No	
MW-21	08/09/90	635.10	637.26	618.50	608.50	NP	0.00	21.17	19.01	616.09	No	
MW-21	08/14/90	635.10	637.26	618.50	608.50	NP	0.00	21.33	19.17	615.93	No	
MW-21	08/27/90	635.10	637.26	618.50	608.50	NP	0.00	21.24	19.08	616.02	No	
MW-21	09/06/90	635.10	637.26	618.50	608.50	NP	0.00	21.02	18.86	616.24	No	
MW-21	01/04/91	635.10	637.26	618.50	608.50	NP	0.00	20.41	18.25	616.85	No	
MW-21	01/30/91	635.10	637.26	618.50	608.50	NP	0.00	20.52	18.36	616.74	No	
MW-21	04/24/91	635.10	637.26	618.50	608.50	NP	0.00	21.04	18.88	616.22	No	
MW-21	06/06/91	635.10	637.26	618.50	608.50	NP	0.00	20.06	17.90	617.20	No	
MW-21	07/09/91	635.10	637.26	618.50	608.50	NP	0.00	19.18	17.02	618.08	No	
MW-21	08/06/91	635.10	637.26	618.50	608.50	NP	0.00	18.49	16.33	618.77	Yes	
MW-21	09/04/91	635.10	637.26	618.50	608.50	NP	0.00	18.37	16.21	618.89	Yes	
MW-21	10/08/91	635.10	637.26	618.50	608.50	NP	0.00	17.59	15.43	619.67	Yes	
MW-21	11/08/91	635.10	637.26	618.50	608.50	NP	0.00	18.28	16.12	618.98	Yes	
MW-21	12/03/91	635.10	637.26	618.50	608.50	NP	0.00	16.53	14.37	620.73	Yes	
MW-21	01/07/92	635.10	637.26	618.50	608.50	NP	0.00	17.83	15.67	619.43	Yes	
MW-21	02/04/92	635.10	637.26	618.50	608.50	NP	0.00	18.53	16.37	618.73	Yes	
MW-21	03/03/92	635.10	637.26	618.50	608.50	NP	0.00	18.95	16.79	618.31	No	
MW-21	09/24/92	635.10	637.26	618.50	608.50	NP	0.00	17.08	14.92	620.18	Yes	
MW-21	10/14/92	635.10	637.26	618.50	608.50	NP	0.00	17.84	15.68	619.42	Yes	
MW-21	06/25/93	635.10	637.26	618.50	608.50	NP	0.00	15.67	13.51	621.59	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-21	10/28/93	635.10	637.26	618.50	608.50	NP	0.00	18.26	16.10	619.00	Yes	
MW-21	04/27/94	635.10	637.26	618.50	608.50	NP	0.00	19.03	16.87	618.23	No	
MW-21	07/21/94	635.10	637.26	618.50	608.50	NP	0.00	17.59	15.43	619.67	Yes	
MW-21	04/04/95	635.10	637.26	618.50	608.50	NP	0.00	20.21	18.05	617.05	No	
MW-21	07/12/95	635.10	637.26	618.50	608.50	NP	0.00	19.04	16.88	618.22	No	
MW-21	11/13/95	635.10	637.26	618.50	608.50	17.78	0.01	17.79	15.62	619.48	Yes	
MW-21	10/08/96	635.10	637.26	618.50	608.50	NP	0.00	16.93	14.77	620.33	Yes	
MW-21	04/29/97	635.10	637.26	618.50	608.50	NP	0.00	16.10	13.94	621.16	Yes	
MW-21	03/02/99	635.10	637.26	618.50	608.50	NP	0.00	19.99	17.83	617.27	No	
MW-21	10/07/99	635.10	637.26	618.50	608.50	NP	0.00	16.89	14.73	620.37	Yes	
MW-21	11/09/99	635.10	637.26	618.50	608.50	NP	0.00	16.60	14.44	620.66	Yes	
MW-21	01/27/00	635.10	637.26	618.50	608.50	NP	0.00	19.18	17.02	618.08	No	
MW-21	04/20/00	635.10	637.26	618.50	608.50	NP	0.00	19.11	16.95	618.15	No	
MW-21	04/26/00	635.10	637.26	618.50	608.50	NP	0.00	19.12	16.96	618.14	No	
MW-21	08/18/00	635.10	637.26	618.50	608.50	NP	0.00	19.62	17.46	617.64	No	
MW-21	11/05/02	635.10	637.26	618.50	608.50	NP	0.00	19.01	16.85	618.25	No	
MW-21	10/23/03	635.10	637.26	618.50	608.50	NP	0.00	21.01	18.85	616.25	No	
MW-21	04/19/04	635.88	637.31	618.50	608.50	NP	0.00	21.87	20.44	615.44	No	
MW-21	11/16/04	635.88	637.31	618.50	608.50	NP	0.00	20.14	18.71	617.17	No	
MW-21	04/18/05	635.88	637.31	618.50	608.50	NP	0.00	20.36	18.93	616.95	No	
MW-21	10/11/05	635.88	637.31	618.50	608.50	NP	0.00	19.83	18.40	617.48	No	
MW-21	05/23/06	635.88	637.31	618.50	608.50	NP	0.00	19.08	17.65	618.23	No	
MW-21	10/16/06	635.88	637.31	618.50	608.50	NP	0.00	19.87	18.44	617.44	No	
MW-21	04/23/07	635.88	637.31	618.50	608.50	NP	0.00	20.82	19.39	616.49	No	Well bent
MW-21	06/26/07						<b>Abandoned</b>					
MW-22	06/30/89	636.30	638.97	618.60	608.60	22.21	1.50	23.71	19.88	616.42	No	
MW-22	07/12/89	636.30	638.97	618.60	608.60	22.10	2.50	24.60	19.99	616.31	No	
MW-22	07/26/89	636.30	638.97	618.60	608.60	22.01	2.71	24.72	19.95	616.35	No	
MW-22	07/27/89	636.30	638.97	618.60	608.60	22.06	2.78	24.84	20.02	616.28	No	
MW-22	09/03/89	636.30	638.97	618.60	608.60	22.25	2.64	24.89	20.18	616.12	No	
MW-22	11/16/89	636.30	638.97	618.60	608.60	22.08	2.61	24.69	20.00	616.30	No	
MW-22	11/29/89	636.30	638.97	618.60	608.60	22.02	2.62	24.64	19.94	616.36	No	
MW-22	12/01/89	636.30	638.97	618.60	608.60	22.35	2.45	24.80	20.23	616.07	No	
MW-22	12/02/89	636.30	638.97	618.60	608.60	22.55	2.05	24.60	20.34	615.96	No	
MW-22	05/04/90	636.30	638.97	618.60	608.60	22.78	3.56	26.34	20.91	615.39	No	
MW-22	06/01/90	636.30	638.97	618.60	608.60	22.52	3.53	26.05	20.65	615.65	No	
MW-22	06/19/90	636.30	638.97	618.60	608.60	22.52	3.24	25.76	20.58	615.72	No	
MW-22	06/27/90	636.30	638.97	618.60	608.60	22.69	3.07	25.76	20.71	615.59	No	
MW-22	07/05/90	636.30	638.97	618.60	608.60	22.85	3.22	26.07	20.91	615.39	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-22	07/13/90	636.30	638.97	618.60	608.60	22.65	3.11	25.76	20.68	615.62	No	
MW-22	07/17/90	636.30	638.97	618.60	608.60	22.46	3.11	25.57	20.49	615.81	No	
MW-22	07/25/90	636.30	638.97	618.60	608.60	22.65	3.15	25.80	20.69	615.61	No	
MW-22	08/27/90	636.30	638.97	618.60	608.60	22.60	3.08	25.68	20.63	615.67	No	
MW-22	09/06/90	636.30	638.97	618.60	608.60	22.50	2.94	25.44	20.49	615.81	No	
MW-22	01/04/91	636.30	638.97	618.60	608.60	22.02	1.99	24.01	19.80	616.50	No	
MW-22	01/30/91	636.30	638.97	618.60	608.60	22.10	2.29	24.39	19.95	616.35	No	
MW-22	04/24/91	636.30	638.97	618.60	608.60	22.42	3.02	25.44	20.43	615.87	No	
MW-22	07/09/91	636.30	638.97	618.60	608.60	21.41	0.50	21.91	18.85	617.45	No	
MW-22	10/08/91	636.30	638.97	618.60	608.60	18.94	3.40	22.34	17.04	619.26	Yes	
MW-22	01/07/92	636.30	638.97	618.60	608.60	19.20	2.74	21.94	17.15	619.15	Yes	
MW-22	10/14/92	636.30	638.97	618.60	608.60	19.32	2.74	22.06	17.27	619.03	Yes	
MW-22	06/25/93	636.30	638.97	618.60	608.60	16.97	4.22	21.19	15.25	621.05	Yes	
MW-22	10/28/93	636.30	638.97	618.60	608.60	16.79	5.13	21.92	15.28	621.02	Yes	
MW-22	01/29/94	636.30	638.97	618.60	608.60	20.64	1.40	22.04	18.29	618.01	No	
MW-22	04/27/94	636.30	638.97	618.60	608.60	20.74	1.58	22.32	18.43	617.87	No	
MW-22	07/21/94	636.30	638.97	618.60	608.60	18.96	3.00	21.96	16.97	619.33	Yes	
MW-22	10/25/94	636.30	638.97	618.60	608.60	19.77	2.08	21.85	17.57	618.73	Yes	
MW-22	02/01/95	636.30	638.97	618.60	608.60	21.15	1.17	22.32	18.74	617.56	No	
MW-22	04/04/95	636.30	638.97	618.60	608.60	21.80	1.18	22.98	19.40	616.90	No	
MW-22	07/12/95	636.30	638.97	618.60	608.60	20.90	0.78	21.68	18.41	617.89	No	
MW-22	11/14/95	636.30	638.97	618.60	608.60	19.55	1.00	20.55	17.11	619.19	Yes	
MW-22	03/13/96	636.30	638.97	618.60	608.60	21.34	1.44	22.78	19.00	617.30	No	
MW-22	10/08/96	636.30	638.97	618.60	608.60	18.30	2.42	20.72	16.18	620.12	Yes	
MW-22	04/29/97	636.30	638.97	618.60	608.60	17.60	2.00	19.60	15.38	620.92	Yes	
MW-22	06/10/97	636.30	638.97	618.60	608.60	18.75	2.40	21.15	16.62	619.68	Yes	
MW-22	11/03/98	636.30	638.97	618.60	608.60	21.79	0.64	22.43	19.26	617.04	No	
MW-22	03/02/99	636.30	638.97	618.60	608.60	21.85	1.45	23.30	19.51	616.79	No	
MW-22	10/07/99	636.30	638.97	618.60	608.60	18.62	0.20	18.82	16.00	620.30	Yes	
MW-22	11/09/99	636.30	638.97	618.60	608.60	18.52	0.05	18.57	15.86	620.44	Yes	bailed <0.1 gal. FP
MW-22	12/21/99	636.30	638.97	618.60	608.60	18.36	0.06	18.42	15.70	620.60	Yes	
MW-22	01/27/00	636.30	638.97	618.60	608.60	20.60	1.34	21.94	18.23	618.07	No	bailed 0.3 gal. FP
MW-22	02/24/00	636.30	638.97	618.60	608.60	21.10	0.83	21.93	18.62	617.68	No	bailed 0.2 gal. FP
MW-22	03/31/00	636.30	638.97	618.60	608.60	21.34	0.32	21.66	18.74	617.56	No	bailed 0.12 gal. FP
MW-22	04/20/00	636.30	638.97	618.60	608.60	21.08	1.06	22.14	18.65	617.65	No	bailed 0.5 gal. FP
MW-22	04/26/00	636.30	638.97	618.60	608.60	20.97	0.43	21.40	18.40	617.90	No	bailed 0.25 gal. FP
MW-22	05/31/00	636.30	638.97	618.60	608.60	21.07	0.29	21.36	18.47	617.83	No	bailed 0.125 gal. FP
MW-22	06/29/00	636.30	638.97	618.60	608.60	20.88	0.26	21.14	18.27	618.03	No	bailed 0.1 gal. FP
MW-22	07/26/00	636.30	638.97	618.60	608.60	20.95	0.25	21.20	18.34	617.96	No	bailed <0.1 gal. FP
MW-22	08/18/00	636.30	638.97	618.60	608.60	21.06	0.23	21.29	18.44	617.86	No	bailed 0.125 gal. FP

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-22	09/27/00	636.30	638.97	618.60	608.60	21.69	0.36	22.05	19.10	617.20	No	bailed <0.05 gal. FP
MW-22	10/11/00	636.30	638.97	618.60	608.60	21.57	0.03	21.60	18.91	617.39	No	
MW-22	11/17/00	636.30	638.97	618.60	608.60	21.62	0.86	22.48	19.14	617.16	No	bailed 0.5 gal. FP
MW-22	12/12/00	636.30	638.97	618.60	608.60	21.30	0.51	21.81	18.75	617.55	No	bailed 0.25 gal. FP
MW-22	01/18/01	636.30	638.97	618.60	608.60	21.71	0.57	22.28	19.17	617.13	No	bailed 0.25 gal. FP
MW-22	04/24/01	636.30	638.97	618.60	608.60	21.80	1.59	23.39	19.49	616.81	No	product abated using vactruck
MW-22	05/23/01	636.30	638.97	618.60	608.60	20.78	1.26	22.04	18.39	617.91	No	no product bailed
MW-22	06/19/01	636.30	638.97	618.60	608.60	20.56	1.17	21.73	18.15	618.15	No	
MW-22	07/26/01	636.30	638.97	618.60	608.60	21.04	0.98	22.02	18.59	617.71	No	
MW-22	08/31/01	636.30	638.97	618.60	608.60	21.37	0.67	22.04	18.85	617.45	No	
MW-22	09/26/01	636.30	638.97	618.60	608.60	21.44	0.46	21.90	18.87	617.43	No	
MW-22	10/24/01	636.30	638.97	618.60	608.60	21.50	0.40	21.90	18.92	617.38	No	
MW-22	12/20/01	636.30	638.97	618.60	608.60	21.95	1.39	23.34	19.59	616.71	No	
MW-22	01/22/02	636.30	638.97	618.60	608.60	21.64	2.08	23.72	19.44	616.86	No	
MW-22	02/26/02	636.30	638.97	618.60	608.60	22.05	2.34	24.39	19.91	616.39	No	
MW-22	03/20/02	636.30	638.97	618.60	608.60	22.20	2.56	24.76	20.11	616.19	No	
MW-22	04/24/02	636.30	638.97	618.60	608.60	21.51	3.78	25.29	19.69	616.61	No	
MW-22	05/15/02	636.30	638.97	618.60	608.60	21.32	3.00	24.32	19.33	616.97	No	
MW-22	06/27/02	636.30	638.97	618.60	608.60	21.70	2.15	23.85	19.52	616.78	No	
MW-22	07/25/02	636.30	638.97	618.60	608.60	21.46	2.08	23.54	19.26	617.04	No	
MW-22	08/20/02	636.30	638.97	618.60	608.60	21.59	1.73	23.32	19.31	616.99	No	
MW-22	09/30/02	636.30	638.97	618.60	608.60	21.07	1.37	22.44	18.71	617.59	No	
MW-22	11/05/02	636.30	638.97	618.60	608.60	21.09	0.89	21.98	18.62	617.68	No	
MW-22	12/23/02	636.30	638.97	618.60	608.60	21.71	0.26	21.97	19.10	617.20	No	
MW-22	01/28/03	636.30	638.97	618.60	608.60	21.99	1.34	23.33	19.62	616.68	No	
MW-22	02/19/03	636.30	638.97	618.60	608.60	22.04	1.64	23.68	19.74	616.56	No	
MW-22	04/17/03	636.30	638.97	618.60	608.60	22.35	2.70	25.05	20.29	616.01	No	
MW-22	05/15/03	636.30	638.97	618.60	608.60	22.71	2.56	25.27	20.62	615.68	No	
MW-22	06/10/03	636.30	638.97	618.60	608.60	22.36	2.31	24.67	20.21	616.09	No	
MW-22	10/23/03	636.30	638.97	618.60	608.60	22.44	2.53	24.97	20.34	615.96	No	
MW-22	12/03/03	636.30	638.97	618.60	608.60	22.53	2.81	25.34	20.49	615.81	No	
MW-22	04/19/04	636.32	639.10	618.60	608.60	23.09	3.81	26.90	21.17	615.15	No	
MW-22	07/28/04	636.32	639.10	618.60	608.60	22.49	1.92	24.41	20.14	616.18	No	
MW-22	11/15/04	636.32	639.10	618.60	608.60	21.87	1.25	23.12	19.37	616.95	No	
MW-22	04/18/05	636.32	639.10	618.60	608.60	22.13	1.97	24.10	19.79	616.53	No	
MW-22	09/09/05	636.32	639.10	618.60	608.60	21.69	0.68	22.37	19.06	617.26	No	
MW-22	05/23/06	636.32	639.10	618.60	608.60	20.88	1.11	21.99	18.35	617.97	No	
MW-22	10/16/06	636.32	639.10	618.60	608.60	21.72	1.11	22.83	19.19	617.13	No	
MW-22	04/23/07	636.32	639.10	618.60	608.60	22.54	2.49	25.03	20.32	616.00	No	
MW-22	09/25/07	636.32	639.10	618.60	608.60	22.37	2.28	24.65	20.10	616.22	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-22	05/01/08	636.32	639.10	618.60	608.60	21.52	1.26	22.78	19.02	617.30	No	
MW-22	10/20/08	636.32	639.10	618.60	608.60	20.26	0.36	20.62	17.56	618.76	Yes	
MW-22	04/18/09	636.32	639.10	618.60	608.60	21.11	0.43	21.54	18.43	617.89	No	
MW-22	10/11/09	636.32	639.10	618.60	608.60	21.64	0.48	22.12	18.97	617.35	No	
MW-22	04/28/10	636.32	639.10	618.60	608.60	21.58	0.98	22.56	19.02	617.30	No	
MW-22	10/25/10	636.32	639.10	618.60	608.60	19.32	1.13	20.45	16.80	619.52	Yes	
MW-22	04/25/11	636.32	639.10	618.60	608.60	20.64	0.98	21.62	18.08	618.24	No	
MW-22	08/03/11	636.32	639.10	618.60	608.60	19.17	0.96	20.13	16.61	619.71	Yes	
MW-22	10/10/11	636.32	639.10	618.60	608.60	20.22	0.17	20.39	17.48	618.84	Yes	
MW-22	01/04/12	636.32	639.10	618.60	608.60	21.51	0.49	22.00	18.84	617.48	No	
MW-22	04/05/12	636.32	639.10	618.60	608.60	22.26	1.15	23.41	19.74	616.58	No	Spill Buddy Before Reading
MW-22	04/05/12	636.32	639.10	618.60	608.60	22.48	0.32	22.80	19.77	616.55	No	Spill Buddy After Reading
MW-22	04/16/12	636.32	639.10	618.60	608.60	22.44	1.24	23.68	19.94	616.38	No	
MW-22	06/18/12	636.32	639.10	618.60	608.60	20.85	0.77	21.62	18.24	618.08	No	
MW-22	06/26/12	636.32	639.10	618.60	608.60	20.44	0.66	21.10	17.81	618.51	No	
MW-22	09/30/12	636.32	639.10	618.60	608.60	21.32	0.73	22.05	18.70	617.62	No	
MW-22	11/21/12	636.32	639.10	618.60	608.60	21.88	0.07	21.95	19.12	617.20	No	
MW-22	12/17/12	636.32	639.10	618.60	608.60	22.12	0.18	22.30	19.38	616.94	No	
MW-22	03/25/13	636.32	639.10	618.60	608.60	22.28	2.47	24.75	20.06	616.26	No	
MW-22	05/05/13	636.32	639.10	618.60	608.60	22.32	2.78	25.10	20.17	616.15	No	
MW-22	10/03/13	636.32	639.10	618.60	608.60	22.08	1.02	23.10	19.53	616.79	No	
MW-22	05/22/14	636.32	639.10	618.60	608.60	20.34	1.77	22.11	17.96	618.36	No	
MW-22	10/31/14	636.32	639.10	618.60	608.60	20.16	0.77	20.93	17.55	618.77	Yes	
MW-22	05/06/15	636.32	639.10	618.60	608.60	21.99	0.04	22.03	19.22	617.10	No	
MW-22	10/05/15	636.32	639.10	618.60	608.60	20.35	0.09	20.44	17.59	618.73	Yes	
MW-22	05/23/16	636.32	639.10	618.60	608.60	17.82	0.07	17.89	15.06	621.26	Yes	
MW-22	10/03/16	636.32	639.10	618.60	608.60	18.92	0.10	19.02	16.16	620.16	Yes	
MW-22	06/14/17	636.32	639.10	618.60	608.60	18.00	0.10	18.10	15.24	621.08	Yes	
MW-22	06/21/17	636.32	639.10	618.60	608.60	18.36	0.13	18.49	15.61	620.71	Yes	
MW-22	06/22/17	636.32	639.10	618.60	608.60	18.23	0.10	18.33	15.47	620.85	Yes	
MW-22	06/23/17	636.32	639.10	618.60	608.60	18.32	0.11	18.43	15.56	620.76	Yes	
MW-23	06/30/89	633.90	636.81	624.70	609.70	17.07	3.20	20.27	14.88	619.02	No	
MW-23	07/12/89	633.90	636.81	624.70	609.70	15.08	2.50	17.58	12.73	621.17	No	
MW-23	07/26/89	633.90	636.81	624.70	609.70	17.81	2.73	20.54	15.52	618.38	No	
MW-23	07/27/89	633.90	636.81	624.70	609.70	17.83	2.77	20.60	15.55	618.35	No	
MW-23	09/03/89	633.90	636.81	624.70	609.70	17.95	3.72	21.67	15.88	618.02	No	
MW-23	11/16/89	633.90	636.81	624.70	609.70	17.20	5.15	22.35	15.45	618.45	No	
MW-23	11/29/89	633.90	636.81	624.70	609.70	17.55	3.98	21.53	15.54	618.36	No	
MW-23	12/01/89	633.90	636.81	624.70	609.70	18.20	2.27	20.47	15.80	618.10	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	12/02/89	633.90	636.81	624.70	609.70	18.41	1.41	19.82	15.82	618.08	No	
MW-23	05/04/90	633.90	636.81	624.70	609.70	18.03	4.26	22.29	16.08	617.82	No	
MW-23	06/01/90	633.90	636.81	624.70	609.70	17.35	3.65	21.00	15.26	618.64	No	
MW-23	06/19/90	633.90	636.81	624.70	609.70	17.49	3.37	20.86	15.34	618.56	No	
MW-23	06/27/90	633.90	636.81	624.70	609.70	17.78	3.28	21.06	15.61	618.29	No	
MW-23	07/05/90	633.90	636.81	624.70	609.70	18.10	3.43	21.53	15.96	617.94	No	
MW-23	07/13/90	633.90	636.81	624.70	609.70	18.02	3.65	21.67	15.93	617.97	No	
MW-23	07/17/90	633.90	636.81	624.70	609.70	17.78	3.57	21.35	15.68	618.22	No	
MW-23	07/25/90	633.90	636.81	624.70	609.70	18.10	3.79	21.89	16.05	617.85	No	
MW-23	08/09/90	633.90	636.81	624.70	609.70	20.68	2.65	23.33	18.37	615.53	No	
MW-23	08/27/90	633.90	636.81	624.70	609.70	18.29	3.71	22.00	16.22	617.68	No	
MW-23	09/06/90	633.90	636.81	624.70	609.70	17.75	3.07	20.82	15.53	618.37	No	
MW-23	01/04/91	633.90	636.81	624.70	609.70	17.84	2.56	20.40	15.51	618.39	No	
MW-23	01/30/91	633.90	636.81	624.70	609.70	18.05	3.18	21.23	15.86	618.04	No	
MW-23	04/24/91	633.90	636.81	624.70	609.70	17.18	3.78	20.96	15.12	618.78	No	
MW-23	06/06/91	633.90	636.81	624.70	609.70	15.11	4.67	19.78	13.25	620.65	No	
MW-23	07/09/91	633.90	636.81	624.70	609.70	13.76	5.93	19.69	12.19	621.71	No	
MW-23	08/06/91	633.90	636.81	624.70	609.70	12.87	7.10	19.97	11.56	622.34	No	
MW-23	09/04/91	633.90	636.81	624.70	609.70	13.93	6.02	19.95	12.38	621.52	No	
MW-23	10/08/91	633.90	636.81	624.70	609.70	13.10	6.60	19.70	11.68	622.22	No	
MW-23	11/08/91	633.90	636.81	624.70	609.70	14.32	5.15	19.47	12.57	621.33	No	
MW-23	12/03/91	633.90	636.81	624.70	609.70	10.40	10.15	20.55	9.78	624.12	No	
MW-23	01/07/92	633.90	636.81	624.70	609.70	13.27	7.60	20.87	12.08	621.82	No	
MW-23	02/04/92	633.90	636.81	624.70	609.70	15.40	4.54	19.94	13.52	620.38	No	
MW-23	03/03/92	633.90	636.81	624.70	609.70	15.45	5.75	21.20	13.84	620.06	No	
MW-23	09/24/92	633.90	636.81	624.70	609.70	13.02	6.61	19.63	11.60	622.30	No	
MW-23	10/14/92	633.90	636.81	624.70	609.70	14.23	5.64	19.87	12.59	621.31	No	
MW-23	06/25/93	633.90	636.81	624.70	609.70	9.77	9.74	19.51	9.06	624.84	Yes	
MW-23	10/28/93	633.90	636.81	624.70	609.70	15.31	4.55	19.86	13.43	620.47	No	
MW-23	01/29/94	633.90	636.81	624.70	609.70	16.32	3.70	20.02	14.25	619.65	No	
MW-23	04/27/94	633.90	636.81	624.70	609.70	13.99	6.34	20.33	12.51	621.39	No	
MW-23	07/21/94	633.90	636.81	624.70	609.70	13.72	5.86	19.58	12.13	621.77	No	
MW-23	10/25/94	633.90	636.81	624.70	609.70	13.84	6.49	20.33	12.40	621.50	No	
MW-23	02/01/95	633.90	636.81	624.70	609.70	17.28	2.53	19.81	14.94	618.96	No	
MW-23	04/04/95	633.90	636.81	624.70	609.70	17.60	2.65	20.25	15.29	618.61	No	
MW-23	11/13/95	633.90	636.81	624.70	609.70	13.05	6.90	19.95	11.70	622.20	No	
MW-23	10/08/96	633.90	636.81	624.70	609.70	12.78	6.47	19.25	11.33	622.57	No	
MW-23	04/29/97	633.90	636.81	624.70	609.70	10.25	9.20	19.45	9.42	624.48	No	
MW-23	06/10/97	633.90	636.81	624.70	609.70	13.45	5.40	18.85	11.76	622.14	No	FP bailed 5/22/97
MW-23	11/03/98	633.90	636.81	624.70	609.70	16.05	5.16	21.21	14.31	619.59	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	03/02/99	633.90	636.81	624.70	609.70	16.91	4.04	20.95	14.91	618.99	No	
MW-23	10/07/99	633.90	636.81	624.70	609.70	12.44	5.61	18.05	10.80	623.10	No	
MW-23	11/09/99	633.90	636.81	624.70	609.70	11.95	6.75	18.70	10.56	623.34	No	bailed 3 gal. FP
MW-23	12/21/99	633.90	636.81	624.70	609.70	14.55	4.45	19.00	12.65	621.25	No	bailed 8 gal. FP
MW-23	01/27/00	633.90	636.81	624.70	609.70	17.32	1.58	18.90	14.77	619.13	No	bailed 0.4 gal. FP
MW-23	02/24/00	633.90	636.81	624.70	609.70	17.64	1.32	18.96	15.03	618.87	No	bailed 0.25 gal. FP
MW-23	03/31/00	633.90	636.81	624.70	609.70	15.70	4.07	19.77	13.71	620.19	No	bailed 2 gal. FP
MW-23	04/20/00	633.90	636.81	624.70	609.70	13.18	7.37	20.55	11.93	621.97	No	bailed 6 gal. FP
MW-23	04/26/00	633.90	636.81	624.70	609.70	15.82	3.18	19.00	13.63	620.27	No	bailed 2 gal. FP
MW-23	05/31/00	633.90	636.81	624.70	609.70	16.20	2.58	18.78	13.87	620.03	No	bailed 3 gal. FP
MW-23	06/29/00	633.90	636.81	624.70	609.70	15.15	3.60	18.75	13.05	620.85	No	bailed 1 gal. FP
MW-23	07/26/00	633.90	636.81	624.70	609.70	16.02	2.84	18.86	13.75	620.15	No	bailed 1 gal. FP
MW-23	08/18/00	633.90	636.81	624.70	609.70	16.55	2.50	19.05	14.20	619.70	No	bailed 1 gal. FP
MW-23	09/27/00	633.90	636.81	624.70	609.70	17.41	2.12	19.53	14.98	618.92	No	bailed 1.25 gal. FP
MW-23	10/11/00	633.90	636.81	624.70	609.70	17.60	1.75	19.35	15.09	618.81	No	bailed .25 gal. FP
MW-23	11/17/00	633.90	636.81	624.70	609.70	14.98	5.33	20.31	13.27	620.63	No	bailed 4.25 gal. FP
MW-23	12/12/00	633.90	636.81	624.70	609.70	15.11	4.98	20.09	13.32	620.58	No	bailed 2.5 gal. FP
MW-23	01/18/01	633.90	636.81	624.70	609.70	15.51	4.92	20.43	13.71	620.19	No	bailed 2.75 gal. FP
MW-23	04/24/01	633.90	636.81	624.70	609.70	16.16	3.46	19.62	14.03	619.87	No	product abated using vactruck
MW-23	05/23/01	633.90	636.81	624.70	609.70	13.73	5.82	19.55	12.13	621.77	No	no product bailed
MW-23	06/19/01	633.90	636.81	624.70	609.70	14.77	4.47	19.24	12.87	621.03	No	
MW-23	07/26/01	633.90	636.81	624.70	609.70	16.99	2.36	19.35	14.61	619.29	No	
MW-23	08/31/01	633.90	636.81	624.70	609.70	16.99	2.69	19.68	14.69	619.21	No	
MW-23	09/26/01	633.90	636.81	624.70	609.70	17.59	2.01	19.60	15.13	618.77	No	
MW-23	10/24/01	633.90	636.81	624.70	609.70	17.16	2.70	19.86	14.86	619.04	No	
MW-23	12/20/01	633.90	636.81	624.70	609.70	17.90	2.43	20.33	15.54	618.36	No	
MW-23	01/22/02	633.90	636.81	624.70	609.70	17.89	2.01	19.90	15.43	618.47	No	
MW-23	02/26/02	633.90	636.81	624.70	609.70	18.32	2.89	21.21	16.06	617.84	No	
MW-23	03/20/02	633.90	636.81	624.70	609.70	18.45	3.10	21.55	16.24	617.66	No	
MW-23	04/24/02	633.90	636.81	624.70	609.70	17.33	2.73	20.06	15.04	618.86	No	
MW-23	05/15/02	633.90	636.81	624.70	609.70	16.47	2.99	19.46	14.24	619.66	No	
MW-23	06/27/02	633.90	636.81	624.70	609.70	16.97	2.52	19.49	14.63	619.27	No	
MW-23	07/25/02	633.90	636.81	624.70	609.70	17.23	1.94	19.17	14.76	619.14	No	
MW-23	08/20/02	633.90	636.81	624.70	609.70	17.44	1.95	19.39	14.97	618.93	No	
MW-23	09/30/02	633.90	636.81	624.70	609.70	16.65	2.05	18.70	14.20	619.70	No	
MW-23	11/05/02	633.90	636.81	624.70	609.70	15.29	4.37	19.66	13.37	620.53	No	
MW-23	12/23/02	633.90	636.81	624.70	609.70	17.69	1.78	19.47	15.18	618.72	No	
MW-23	01/28/03	633.90	636.81	624.70	609.70	18.18	1.94	20.12	15.71	618.19	No	
MW-23	02/19/03	633.90	636.81	624.70	609.70	18.31	2.64	20.95	16.00	617.90	No	
MW-23	04/17/03	633.90	636.81	624.70	609.70	18.63	3.61	22.24	16.54	617.36	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	05/15/03	633.90	636.81	624.70	609.70	18.42	3.58	22.00	16.32	617.58	No	
MW-23	06/10/03	633.90	636.81	624.70	609.70	18.10	2.32	20.42	15.71	618.19	No	
MW-23	10/23/03	633.90	636.81	624.70	609.70	18.46	3.32	21.78	16.30	617.60	No	
MW-23	12/03/03	633.90	636.81	624.70	609.70	18.58	3.58	22.16	16.48	617.42	No	
MW-23	04/19/04	635.07	636.91	624.70	609.70	18.89	3.75	22.64	17.90	617.17	No	
MW-23	07/28/04	635.07	636.91	624.70	609.70	17.95	2.15	20.10	16.60	618.47	No	
MW-23	11/15/04	635.07	636.91	624.70	609.70	16.31	3.23	19.54	15.20	619.87	No	
MW-23	04/18/05	635.07	636.91	624.70	609.70	16.59	3.89	20.48	15.63	619.44	No	
MW-23	09/09/05	635.07	636.91	624.70	609.70	17.85	1.40	19.25	16.33	618.74	No	
MW-23	10/11/05	635.07	636.91	624.70	609.70	16.07	4.22	20.29	15.18	619.89	No	
MW-23	05/23/06	635.07	636.91	624.70	609.70	15.63	2.66	18.29	14.39	620.68	No	
MW-23	10/16/06	635.07	636.91	624.70	609.70	17.59	1.53	19.12	16.10	618.97	No	
MW-23	04/23/07	635.07	636.91	624.70	609.70	18.25	3.31	21.56	17.16	617.91	No	
MW-23	09/25/07	635.07	636.91	624.70	609.70	17.93	3.27	21.20	16.83	618.24	No	
MW-23	05/01/08	635.07	636.91	624.70	609.70	15.32	3.84	19.16	14.35	620.72	No	
MW-23	10/20/08	635.07	636.91	624.70	609.70	12.98	6.13	19.11	12.52	622.55	No	
MW-23	04/18/09	635.07	636.91	624.70	609.70	15.02	4.13	19.15	14.11	620.96	No	
MW-23	10/11/09	635.07	636.91	624.70	609.70	17.82	0.52	18.34	16.10	618.97	No	
MW-23	04/28/10	635.07	636.91	624.70	609.70	17.22	1.04	18.26	15.61	619.46	No	
MW-23	10/25/10	635.07	636.91	624.70	609.70	14.84	2.69	17.53	13.61	621.46	No	
MW-23	04/25/11	635.07	636.91	624.70	609.70	15.62	2.62	18.24	14.37	620.70	No	
MW-23	08/03/11	635.07	636.91	624.70	609.70	14.29	3.38	17.67	13.21	621.86	No	
MW-23	10/10/11	635.07	636.91	624.70	609.70	16.41	1.13	17.54	14.83	620.24	No	
MW-23	01/04/12	635.07	636.91	624.70	609.70	17.95	0.51	18.46	16.23	618.84	No	
MW-23	04/05/12	635.07	636.91	624.70	609.70	18.21	2.08	20.29	16.84	618.23	No	Spill Buddy Before Reading
MW-23	04/05/12	635.07	636.91	624.70	609.70	19.55	0.05	19.60	17.72	617.35	No	Spill Buddy After Reading
MW-23	04/16/12	635.07	636.91	624.70	609.70	17.88	1.73	19.61	16.43	618.64	No	
MW-23	06/26/12	635.07	636.91	624.70	609.70	14.11	3.82	17.93	13.13	621.94	No	
MW-23	07/11/12	635.07	636.91	624.70	609.70	13.95	3.90	17.85	12.99	622.08	No	Spill Buddy Before Reading
MW-23	07/11/12	635.07	636.91	624.70	609.70	17.00	0.23	17.23	15.21	619.86	No	Spill Buddy After Reading
MW-23	08/09/12	635.07	636.91	624.70	609.70	16.72	0.98	17.70	15.10	619.97	No	Spill Buddy Before Reading
MW-23	08/09/12	635.07	636.91	624.70	609.70	17.40	0.15	17.55	15.59	619.48	No	Spill Buddy After Reading
MW-23	09/29/12	635.07	636.91	624.70	609.70	17.95	0.50	18.45	16.22	618.85	No	Spill buddy not working
MW-23	09/30/12	635.07	636.91	624.70	609.70	17.88	0.50	18.38	16.15	618.92	No	
MW-23	11/17/12	635.07	636.91	624.70	609.70	18.18	1.35	19.53	16.64	618.43	No	
MW-23	03/25/13	635.07	636.91	624.70	609.70	18.68	3.09	21.77	17.54	617.53	No	
MW-23	05/05/13	635.07	636.91	624.70	609.70	18.23	2.33	20.56	16.92	618.15	No	
MW-23	10/03/13	635.07	636.91	624.70	609.70	18.13	1.48	19.61	16.62	618.45	No	
MW-23	05/22/14	635.07	636.91	624.70	609.70	14.01	2.18	16.19	12.66	622.41	No	
MW-23	10/31/14	635.07	636.91	624.70	609.70	15.17	3.74	18.91	14.17	620.90	No	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-23	05/06/15	635.07	636.91	624.70	609.70	17.86	1.04	18.90	16.25	618.82	No	
MW-23	10/05/15	635.07	636.91	624.70	609.70	13.50	5.10	18.60	12.81	622.26	No	
MW-23	05/23/16	635.07	636.91	624.70	609.70	11.52	6.40	17.92	11.13	623.94	No	
MW-23	10/03/16	635.07	636.91	624.70	609.70	13.55	4.30	17.85	12.68	622.39	No	
MW-23	06/14/17	635.07	636.91	624.70	609.70	11.45	6.51	17.96	11.08	623.99	No	
MW-23	06/21/17	635.07	636.91	624.70	609.70	12.22	5.72	17.94	11.67	623.40	No	
MW-23	06/22/17	635.07	636.91	624.70	609.70	12.10	5.80	17.90	11.57	623.50	No	
MW-23	06/23/17	635.07	636.91	624.70	609.70	13.06	2.19	15.25	11.71	623.36	No	
MW-23	10/26/17	635.07	636.91	624.70	609.70	9.42	8.29	17.71	9.45	625.62	Yes	
MW-24	06/30/89	636.10	638.42	625.37	610.37	19.80	5.40	25.20	18.70	617.40	No	
MW-24	07/12/89	636.10	638.42	625.37	610.37	20.39	4.97	25.36	19.19	616.91	No	
MW-24	07/26/89	636.10	638.42	625.37	610.37	20.40	4.83	25.23	19.17	616.93	No	
MW-24	07/27/89	636.10	638.42	625.37	610.37	20.58	4.69	25.27	19.32	616.78	No	
MW-24	09/03/89	636.10	638.42	625.37	610.37	20.81	4.42	25.23	19.49	616.61	No	
MW-24	11/16/89	636.10	638.42	625.37	610.37	20.83	4.52	25.35	19.53	616.57	No	
MW-24	11/29/89	636.10	638.42	625.37	610.37	20.73	4.60	25.33	19.45	616.65	No	
MW-24	12/01/89	636.10	638.42	625.37	610.37	21.18	4.11	25.29	19.79	616.31	No	
MW-24	12/02/89	636.10	638.42	625.37	610.37	21.27	4.05	25.32	19.86	616.24	No	
MW-24	05/04/90	636.10	638.42	625.37	610.37	21.81	3.43	25.24	20.26	615.84	No	
MW-24	06/01/90	636.10	638.42	625.37	610.37	21.05	4.20	25.25	19.68	616.42	No	
MW-24	06/19/90	636.10	638.42	625.37	610.37	20.98	4.22	25.20	19.61	616.49	No	
MW-24	06/27/90	636.10	638.42	625.37	610.37	21.36	3.78	25.14	19.89	616.21	No	
MW-24	07/05/90	636.10	638.42	625.37	610.37	21.80	3.43	25.23	20.25	615.85	No	
MW-24	07/13/90	636.10	638.42	625.37	610.37	21.55	3.63	25.18	20.05	616.05	No	
MW-24	07/17/90	636.10	638.42	625.37	610.37	21.22	3.93	25.15	19.79	616.31	No	
MW-24	07/25/90	636.10	638.42	625.37	610.37	21.70	3.48	25.18	20.17	615.93	No	
MW-24	08/09/90	636.10	638.42	625.37	610.37	21.46	3.74	25.20	19.98	616.12	No	
MW-24	08/27/90	636.10	638.42	625.37	610.37	21.39	3.78	25.17	19.92	616.18	No	
MW-24	09/06/90	636.10	638.42	625.37	610.37	20.86	4.26	25.12	19.50	616.60	No	
MW-24	01/04/91	636.10	638.42	625.37	610.37	20.47	4.80	25.27	19.23	616.87	No	
MW-24	01/30/91	636.10	638.42	625.37	610.37	20.78	4.47	25.25	19.47	616.63	No	
MW-24	04/24/91	636.10	638.42	625.37	610.37	20.72	4.43	25.15	19.40	616.70	No	
MW-24	07/09/91	636.10	638.42	625.37	610.37	17.27	7.66	24.93	16.68	619.42	No	
MW-24	10/08/91	636.10	638.42	625.37	610.37	15.44	9.60	25.04	15.29	620.81	No	
MW-24	12/03/91	636.10	638.42	625.37	610.37	13.80	11.25	25.05	14.02	622.08	No	
MW-24	01/07/92	636.10	638.42	625.37	610.37	16.58	8.48	25.06	16.18	619.92	No	
MW-24	10/14/92	636.10	638.42	625.37	610.37	16.36	8.78	25.14	16.02	620.08	No	
MW-24	06/25/93	636.10	638.42	625.37	610.37	12.73	12.16	24.89	13.16	622.94	No	
MW-24	10/28/93	636.10	638.42	625.37	610.37	17.58	7.64	25.22	16.99	619.11	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-24	01/29/94	636.10	638.42	625.37	610.37	18.88	6.36	25.24	18.00	618.10	No	
MW-24	04/27/94	636.10	638.42	625.37	610.37	17.99	7.01	25.00	17.25	618.85	No	
MW-24	07/21/94	636.10	638.42	625.37	610.37	16.35	8.70	25.05	16.00	620.10	No	
MW-24	10/25/94	636.10	638.42	625.37	610.37	16.96	8.13	25.09	16.48	619.62	No	
MW-24	02/01/95	636.10	638.42	625.37	610.37	19.33	5.77	25.10	18.31	617.79	No	
MW-24	04/04/95	636.10	638.42	625.37	610.37	20.32	4.73	25.05	19.07	617.03	No	
MW-24	07/12/95	636.10	638.42	625.37	610.37	18.84	6.11	24.95	17.90	618.20	No	
MW-24	10/08/96	636.10	638.42	625.37	610.37	15.34	9.64	24.98	15.20	620.90	No	
MW-24	03/13/97	636.10	638.42	625.37	610.37	19.60	5.45	25.05	18.51	617.59	No	
MW-24	04/29/97	636.10	638.42	625.37	610.37	13.65	11.17	24.82	13.85	622.25	No	
MW-24	06/10/97	636.10	638.42	625.37	610.37	15.85	8.90	24.75	15.54	620.56	No	FP bailed 5/22/97
MW-24	11/03/98	636.10	638.42	625.37	610.37	19.74	5.30	25.04	18.62	617.48	No	
MW-24	03/02/99	636.10	638.42	625.37	610.37	20.24	4.86	25.10	19.02	617.08	No	
MW-24	10/07/99	636.10	638.42	625.37	610.37	15.32	9.35	24.67	15.11	620.99	No	
MW-24	11/09/99	636.10	638.42	625.37	610.37	14.97	9.66	24.63	14.83	621.27	No	bailed 6 gal. FP
MW-24	12/21/99	636.10	638.42	625.37	610.37	17.30	7.45	24.75	16.66	619.44	No	bailed 10 gal. FP
MW-24	01/27/00	636.10	638.42	625.37	610.37	19.20	5.43	24.63	18.11	617.99	No	bailed 1 gal. FP
MW-24	02/24/00	636.10	638.42	625.37	610.37	19.71	4.91	24.62	18.50	617.60	No	bailed 5 gal. FP
MW-24	03/31/00	636.10	638.42	625.37	610.37	19.36	4.99	24.35	18.17	617.93	No	bailed 4 gal. FP
MW-24	04/20/00	636.10	638.42	625.37	610.37	18.02	9.84	27.86	17.92	618.18	No	bailed 6.75 gal. FP
MW-24	04/26/00	636.10	638.42	625.37	610.37	18.77	5.55	24.32	17.70	618.40	No	bailed 4 gal. FP
MW-24	05/31/00	636.10	638.42	625.37	610.37	18.90	5.42	24.32	17.80	618.30	No	bailed 6 gal. FP
MW-24	06/29/00	636.10	638.42	625.37	610.37	18.55	5.40	23.95	17.45	618.65	No	bailed 2.5 gal. FP
MW-24	07/26/00	636.10	638.42	625.37	610.37	18.98	5.13	24.11	17.82	618.28	No	bailed 3 gal. FP
MW-24	08/18/00	636.10	638.42	625.37	610.37	19.21	5.16	24.37	18.06	618.04	No	bailed 4 gal. FP
MW-24	09/27/00	636.10	638.42	625.37	610.37	20.08	4.50	24.58	18.78	617.32	No	bailed 4 gal. FP
MW-24	10/11/00	636.10	638.42	625.37	610.37	20.37	3.07	23.44	18.74	617.36	No	bailed 2.5 gal. FP
MW-24	11/17/00	636.10	638.42	625.37	610.37	19.86	3.55	23.41	18.34	617.76	No	bailed 4 gal. FP
MW-24	12/12/00	636.10	638.42	625.37	610.37	20.00	1.52	21.52	18.02	618.08	No	bailed 2 gal. FP
MW-24	01/18/01	636.10	638.42	625.37	610.37	20.39	1.60	21.99	18.43	617.67	No	bailed 1.75 gal. FP
MW-24	04/24/01	636.10	638.42	625.37	610.37	20.00	3.40	23.40	18.45	617.65	No	product abated using vactruck
MW-24	05/23/01	636.10	638.42	625.37	610.37	18.61	4.79	23.40	17.37	618.73	No	no product bailed
MW-24	06/19/01	636.10	638.42	625.37	610.37	18.55	4.23	22.78	17.19	618.91	No	
MW-24	07/26/01	636.10	638.42	625.37	610.37	19.61	4.22	23.83	18.24	617.86	No	
MW-24	08/31/01	636.10	638.42	625.37	610.37	19.67	4.76	24.43	18.43	617.67	No	
MW-24	09/26/01	636.10	638.42	625.37	610.37	19.93	4.36	24.29	18.59	617.51	No	
MW-24	10/24/01	636.10	638.42	625.37	610.37	19.77	4.55	24.32	18.48	617.62	No	
MW-24	12/20/01	636.10	638.42	625.37	610.37	20.10	4.52	24.62	18.80	617.30	No	
MW-24	01/22/02	636.10	638.42	625.37	610.37	20.43	4.20	24.63	19.06	617.04	No	
MW-24	02/26/02	636.10	638.42	625.37	610.37	21.19	3.50	24.69	19.66	616.44	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-24	03/20/02	636.10	638.42	625.37	610.37	21.45	3.35	24.80	19.89	616.21	No	
MW-24	04/24/02	636.10	638.42	625.37	610.37	20.12	4.23	24.35	18.76	617.34	No	
MW-24	05/15/02	636.10	638.42	625.37	610.37	19.32	4.72	24.04	18.07	618.03	No	
MW-24	06/27/02	636.10	638.42	625.37	610.37	19.56	4.79	24.35	18.32	617.78	No	
MW-24	07/25/02	636.10	638.42	625.37	610.37	19.49	4.85	24.34	18.27	617.83	No	
MW-24	08/20/02	636.10	638.42	625.37	610.37	19.46	4.83	24.29	18.23	617.87	No	
MW-24	09/30/02	636.10	638.42	625.37	610.37	18.52	5.63	24.15	17.47	618.63	No	
MW-24	11/05/02	636.10	638.42	625.37	610.37	18.08	6.32	24.40	17.19	618.91	No	
MW-24	12/23/02	636.10	638.42	625.37	610.37	19.89	5.06	24.95	18.71	617.39	No	
MW-24	01/28/03	636.10	638.42	625.37	610.37	20.61	4.26	24.87	19.25	616.85	No	
MW-24	02/19/03	636.10	638.42	625.37	610.37	21.03	3.85	24.88	19.58	616.52	No	
MW-24	04/17/03	636.10	638.42	625.37	610.37	21.81	3.03	24.84	20.17	615.93	No	
MW-24	05/15/03	636.10	638.42	625.37	610.37	21.71	3.13	24.84	20.10	616.00	No	
MW-24	06/10/03	636.10	638.42	625.37	610.37	21.04	3.62	24.66	19.54	616.56	No	
MW-24	10/23/03	636.10	638.42	625.37	610.37	21.35	3.42	24.77	19.80	616.30	No	
MW-24	12/03/03	636.10	638.42	625.37	610.37	21.55	3.30	24.85	19.98	616.12	No	
MW-24	04/19/04	636.19	638.55	625.37	610.37	22.27	2.77	25.04	20.54	615.65	No	
MW-24	07/28/04	636.19	638.55	625.37	610.37	20.63	3.91	24.54	19.15	617.04	No	
MW-24	11/15/04	636.19	638.55	625.37	610.37	19.29	4.86	24.15	18.03	618.16	No	
MW-24	04/18/05	636.19	638.55	625.37	610.37	19.72	4.74	24.46	18.43	617.76	No	
MW-24	09/09/05	636.19	638.55	625.37	610.37	20.02	4.46	24.48	18.67	617.52	No	
MW-24	10/11/05	636.19	638.55	625.37	610.37	19.21	4.81	24.02	17.94	618.25	No	
MW-24	05/23/06	636.19	638.55	625.37	610.37	17.86	6.35	24.21	16.93	619.26	No	
MW-24	10/16/06	636.19	638.55	625.37	610.37	19.96	4.73	24.69	18.67	617.52	No	
MW-24	04/23/07	636.19	638.55	625.37	610.37	21.44	3.48	24.92	19.87	616.32	No	
MW-24	09/25/07	636.19	638.55	625.37	610.37	21.38	3.24	24.62	19.75	616.44	No	
MW-24	05/01/08	636.19	638.55	625.37	610.37	18.94	5.07	24.01	17.73	618.46	No	
MW-24	10/20/08	636.19	638.55	625.37	610.37	16.85	7.24	24.09	16.13	620.06	No	
MW-24	04/18/09	636.19	638.55	625.37	610.37	18.80	5.09	23.89	17.59	618.60	No	
MW-24	10/11/09	636.19	638.55	625.37	610.37	19.74	4.70	24.44	18.44	617.75	No	
MW-24	04/28/10	636.19	638.55	625.37	610.37	19.89	4.25	24.14	18.49	617.70	No	
MW-24	10/25/10	636.19	638.55	625.37	610.37	16.84	7.20	24.04	16.11	620.08	No	
MW-24	04/25/11	636.19	638.55	625.37	610.37	18.52	2.95	21.47	16.83	619.36	No	
MW-24	08/02/11	636.19	638.55	625.37	610.37	15.96	7.63	23.59	15.32	620.87	No	
MW-24	10/10/11	636.19	638.55	625.37	610.37	18.35	5.59	23.94	17.25	618.94	No	
MW-24	01/04/12	636.19	638.55	625.37	610.37	19.97	4.61	24.58	18.65	617.54	No	
MW-24	04/05/12	636.19	638.55	625.37	610.37	21.20	3.44	24.64	19.62	616.57	No	Spill Buddy Before Reading
MW-24	04/05/12	636.19	638.55	625.37	610.37	21.94	0.76	22.70	19.75	616.44	No	Spill Buddy After Reading
MW-24	04/16/12	636.19	638.55	625.37	610.37	21.23	3.25	24.48	19.60	616.59	No	
MW-24	06/18/12	636.19	638.55	625.37	610.37	18.23	5.33	23.56	17.07	619.12	No	Spill Buddy Before Reading

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-24	06/18/12	636.19	638.55	625.37	610.37	19.47	0.89	20.36	17.31	618.88	No	Spill Buddy After Reading
MW-24	06/26/12	636.19	638.55	625.37	610.37	17.59	4.80	22.39	16.31	619.88	No	
MW-24	07/11/12	636.19	638.55	625.37	610.37	18.07	5.08	23.15	16.86	619.33	No	Spill Buddy Before Reading
MW-24	07/11/12	636.19	638.55	625.37	610.37	19.45	0.34	19.79	17.17	619.02	No	Spill Buddy After Reading
MW-24	08/09/12	636.19	638.55	625.37	610.37	18.95	4.28	23.23	17.56	618.63	No	Spill Buddy Before Reading
MW-24	08/09/12	636.19	638.55	625.37	610.37	20.07	0.64	20.71	17.85	618.34	No	Spill Buddy After Reading
MW-24	09/29/12	636.19	638.55	625.37	610.37	20.32	3.32	23.64	18.71	617.48	No	Spill Buddy Before Reading
MW-24	09/29/12	636.19	638.55	625.37	610.37	21.15	0.37	21.52	18.87	617.32	No	Spill Buddy After Reading
MW-24	09/30/12	636.19	638.55	625.37	610.37	20.49	2.37	22.86	18.67	617.52	No	
MW-24	11/21/12	636.19	638.55	625.37	610.37	20.60	3.15	23.75	18.95	617.24	No	
MW-24	12/17/12	636.19	638.55	625.37	610.37	20.84	3.21	24.05	19.21	616.98	No	
MW-24	03/25/13	636.19	638.55	625.37	610.37	22.22	2.10	24.32	20.33	615.86	No	
MW-24	05/05/13	636.19	638.55	625.37	610.37	21.44	2.54	23.98	19.65	616.54	No	
MW-24	10/03/13	636.19	638.55	625.37	610.37	20.84	3.17	24.01	19.20	616.99	No	
MW-24	05/22/14	636.19	638.55	625.37	610.37	18.61	4.32	22.93	17.23	618.96	No	
MW-24	10/31/14	636.19	638.55	625.37	610.37	18.51	4.50	23.01	17.17	619.02	No	
MW-24	05/06/15	636.19	638.55	625.37	610.37	20.75	2.88	23.63	19.04	617.15	No	
MW-24	10/05/15	636.19	638.55	625.37	610.37	17.90	5.20	23.10	16.71	619.48	No	
MW-24	05/23/16	636.19	638.55	625.37	610.37	14.63	9.36	23.99	14.38	621.81	No	
MW-24	10/03/16	636.19	638.55	625.37	610.37	16.44	7.02	23.46	15.67	620.52	No	
MW-24	06/29/17	636.19	638.55	625.37	610.37	15.97	7.28	23.25	15.25	620.94	No	
MW-25	06/30/89	634.90	637.59	617.50	602.50	20.35	1.15	21.50	17.92	616.98	No	
MW-25	07/12/89	634.90	637.59	617.50	602.50	20.85	1.63	22.48	18.53	616.37	No	
MW-25	07/26/89	634.90	637.59	617.50	602.50	20.83	1.97	22.80	18.58	616.32	No	
MW-25	07/27/89	634.90	637.59	617.50	602.50	20.85	2.24	23.09	18.67	616.23	No	
MW-25	09/03/89	634.90	637.59	617.50	602.50	20.78	3.52	24.30	18.89	616.01	No	
MW-25	11/16/89	634.90	637.59	617.50	602.50	20.72	4.04	24.76	18.94	615.96	No	
MW-25	11/29/89	634.90	637.59	617.50	602.50	20.87	3.56	24.43	18.98	615.92	No	
MW-25	12/01/89	634.90	637.59	617.50	602.50	21.33	2.18	23.51	19.13	615.77	No	
MW-25	12/02/89	634.90	637.59	617.50	602.50	21.54	1.17	22.71	19.11	615.79	No	
MW-25	05/04/90	634.90	637.59	617.50	602.50	21.48	5.67	27.15	20.07	614.83	No	
MW-25	06/01/90	634.90	637.59	617.50	602.50	21.20	3.70	24.90	19.35	615.55	No	
MW-25	06/19/90	634.90	637.59	617.50	602.50	20.94	3.88	24.82	19.13	615.77	No	
MW-25	06/27/90	634.90	637.59	617.50	602.50	21.09	3.61	24.70	19.22	615.68	No	
MW-25	07/05/90	634.90	637.59	617.50	602.50	21.23	3.85	25.08	19.41	615.49	No	
MW-25	07/13/90	634.90	637.59	617.50	602.50	21.30	3.37	24.67	19.37	615.53	No	
MW-25	07/17/90	634.90	637.59	617.50	602.50	21.08	3.43	24.51	19.16	615.74	No	
MW-25	07/25/90	634.90	637.59	617.50	602.50	21.27	3.65	24.92	19.40	615.50	No	
MW-25	08/09/90	634.90	637.59	617.50	602.50	21.13	3.75	24.88	19.29	615.61	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-25	08/27/90	634.90	637.59	617.50	602.50	20.80	4.96	25.76	19.23	615.67	No	
MW-25	09/06/90	634.90	637.59	617.50	602.50	20.65	4.16	24.81	18.90	616.00	No	
MW-25	01/04/91	634.90	637.59	617.50	602.50	20.68	2.87	23.55	18.64	616.26	No	
MW-25	01/30/91	634.90	637.59	617.50	602.50	20.93	2.76	23.69	18.86	616.04	No	
MW-25	04/24/91	634.90	637.59	617.50	602.50	20.40	4.81	25.21	18.80	616.10	No	
MW-25	07/09/91	634.90	637.59	617.50	602.50	17.42	5.97	23.39	16.08	618.82	Yes	
MW-25	10/08/91	634.90	637.59	617.50	602.50	16.36	4.90	21.26	14.78	620.12	Yes	
MW-25	01/07/92	634.90	637.59	617.50	602.50	17.50	3.63	21.13	15.63	619.27	Yes	
MW-25	10/14/92	634.90	637.59	617.50	602.50	17.27	3.72	20.99	15.42	619.48	Yes	
MW-25	06/25/93	634.90	637.59	617.50	602.50	13.16	7.78	20.94	12.23	622.67	Yes	
MW-25	10/28/93	634.90	637.59	617.50	602.50	18.52	2.50	21.02	16.39	618.51	Yes	
MW-25	01/29/94	634.90	637.59	617.50	602.50	19.58	1.76	21.34	17.29	617.61	Yes	
MW-25	04/27/94	634.90	637.59	617.50	602.50	18.41	2.89	21.30	16.37	618.53	Yes	
MW-25	07/21/94	634.90	637.59	617.50	602.50	17.32	3.63	20.95	15.45	619.45	Yes	
MW-25	10/25/94	634.90	637.59	617.50	602.50	17.82	3.42	21.24	15.90	619.00	Yes	
MW-25	02/01/95	634.90	637.59	617.50	602.50	20.20	1.01	21.21	17.74	617.16	No	
MW-25	04/04/95	634.90	637.59	617.50	602.50	20.50	0.73	21.23	17.97	616.93	No	
MW-25	07/12/95	634.90	637.59	617.50	602.50	18.21	3.39	21.60	16.29	618.61	Yes	
MW-25	03/13/96	634.90	637.59	617.50	602.50	20.48	0.82	21.30	17.98	616.92	No	
MW-25	10/08/96	634.90	637.59	617.50	602.50	16.65	3.37	20.02	14.72	620.18	Yes	
MW-25	04/29/97	634.90	637.59	617.50	602.50	14.40	6.12	20.52	13.09	621.81	Yes	
MW-25	06/10/97	634.90	637.59	617.50	602.50	17.33	1.28	18.61	14.93	619.97	Yes	FP bailed 5/22/97
MW-25	11/03/98	634.90	637.59	617.50	602.50	20.24	0.70	20.94	17.71	617.19	No	
MW-25	03/02/99	634.90	637.59	617.50	602.50	20.89	0.30	21.19	18.27	616.63	No	
MW-25	10/07/99	634.90	637.59	617.50	602.50	16.87	0.66	17.53	14.33	620.57	Yes	
MW-25	11/09/99	634.90	637.59	617.50	602.50	16.70	0.80	17.50	14.19	620.71	Yes	bailed 0.25 gal. FP
MW-25	12/21/99	634.90	637.59	617.50	602.50	18.58	0.33	18.91	15.96	618.94	Yes	bailed 0.25 gal. FP
MW-25	01/27/00	634.90	637.59	617.50	602.50	19.19	1.05	20.24	16.74	618.16	Yes	bailed 0.2 gal. FP
MW-25	02/24/00	634.90	637.59	617.50	602.50	20.49	0.26	20.75	17.86	617.04	No	bailed <0.1 gal. FP
MW-25	03/31/00	634.90	637.59	617.50	602.50	20.00	0.15	20.15	17.34	617.56	Yes	No product bailed
MW-25	04/20/00	634.90	637.59	617.50	602.50	18.81	1.28	20.09	16.41	618.49	Yes	bailed 0.25 gal. FP
MW-25	04/26/00	634.90	637.59	617.50	602.50	19.68	0.06	19.74	17.00	617.90	Yes	No product bailed
MW-25	05/31/00	634.90	637.59	617.50	602.50	19.64	0.12	19.76	16.98	617.92	Yes	bailed 0.125 gal. FP
MW-25	06/29/00	634.90	637.59	617.50	602.50	19.33	0.10	19.43	16.66	618.24	Yes	bailed 0.05 gal. FP
MW-25	07/26/00	634.90	637.59	617.50	602.50	18.84	0.86	19.70	16.34	618.56	Yes	bailed <0.1 gal. FP
MW-25	08/18/00	634.90	637.59	617.50	602.50	19.93	0.06	19.99	17.25	617.65	Yes	No product bailed
MW-25	09/27/00	634.90	637.59	617.50	602.50	20.51	0.20	20.71	17.87	617.03	No	bailed <0.1 gal. FP
MW-25	10/11/00	634.90	637.59	617.50	602.50	NP	0.00	19.62	16.93	617.97	Yes	No product bailed
MW-25	11/17/00	634.90	637.59	617.50	602.50	19.01	0.05	19.06	16.33	618.57	Yes	No product bailed
MW-25	12/12/00	634.90	637.59	617.50	602.50	19.20	0.01	19.21	16.51	618.39	Yes	No product bailed

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-25	01/18/01	634.90	637.59	617.50	602.50	19.68	0.02	19.70	16.99	617.91	Yes	No product bailed
MW-25	04/24/01	634.90	637.59	617.50	602.50	NP	0.00	19.68	16.99	617.91	Yes	No product bailed
MW-25	05/23/01	634.90	637.59	617.50	602.50	NP	0.00	18.48	15.79	619.11	Yes	No product bailed
MW-25	06/19/01	634.90	637.59	617.50	602.50	NP	0.00	18.66	15.97	618.93	Yes	
MW-25	07/26/01	634.90	637.59	617.50	602.50	19.94	0.03	19.97	17.26	617.64	Yes	
MW-25	08/31/01	634.90	637.59	617.50	602.50	20.15	0.04	20.19	17.47	617.43	No	
MW-25	09/26/01	634.90	637.59	617.50	602.50	NP	0.00	20.52	17.83	617.07	No	
MW-25	10/24/01	634.90	637.59	617.50	602.50	20.40	0.00	20.40	17.71	617.19	No	
MW-25	12/20/01	634.90	637.59	617.50	602.50	20.48	0.07	20.55	17.81	617.09	No	
MW-25	01/22/02	634.90	637.59	617.50	602.50	NP	0.00	21.03	18.34	616.56	No	
MW-25	02/26/02	634.90	637.59	617.50	602.50	21.39	0.01	21.40	18.70	616.20	No	
MW-25	03/20/02	634.90	637.59	617.50	602.50	NP	0.00	21.44	18.75	616.15	No	
MW-25	04/24/02	635.90	637.59	617.50	602.50	20.43	0.01	20.44	18.74	617.16	No	
MW-25	05/15/02	635.90	637.59	617.50	602.50	NP	0.00	19.36	17.67	618.23	Yes	
MW-25	06/27/02	635.90	637.59	617.50	602.50	NP	0.00	19.56	17.87	618.03	Yes	
MW-25	07/25/02	635.90	637.59	617.50	602.50	NP	0.00	19.98	18.29	617.61	Yes	
MW-25	08/20/02	635.90	637.59	617.50	602.50	NP	0.00	19.57	17.88	618.02	Yes	
MW-25	09/30/02	635.90	637.59	617.50	602.50	NP	0.00	19.18	17.49	618.41	Yes	
MW-25	11/05/02	635.90	637.59	617.50	602.50	NP	0.00	18.87	17.18	618.72	Yes	
MW-25	12/23/02	635.90	637.59	617.50	602.50	20.40	0.03	20.43	18.72	617.18	No	
MW-25	01/28/03	635.90	637.59	617.50	602.50	21.07	0.01	21.08	19.38	616.52	No	
MW-25	02/19/03	635.90	637.59	617.50	602.50	NP	0.00	21.41	19.72	616.18	No	
MW-25	04/17/03	635.90	637.59	617.50	602.50	21.91	0.32	22.23	20.29	615.61	No	
MW-25	05/15/03	635.90	637.59	617.50	602.50	21.60	0.10	21.70	19.93	615.97	No	
MW-25	06/10/03	635.90	637.59	617.50	602.50	21.20	0.14	21.34	19.54	616.36	No	
MW-25	10/23/03	635.90	637.59	617.50	602.50	21.49	0.69	22.18	19.96	615.94	No	
MW-25	12/03/03	635.90	637.59	617.50	602.50	21.51	2.01	23.52	20.27	615.63	No	
MW-25	04/19/04	635.42	637.70	617.50	602.50	21.29	4.58	25.87	20.04	615.38	No	
MW-25	07/28/04	635.42	637.70	617.50	602.50	20.44	2.63	23.07	18.75	616.67	No	
MW-25	11/15/04	635.42	637.70	617.50	602.50	19.10	2.86	21.96	17.47	617.95	Yes	
MW-25	04/18/05	635.42	637.70	617.50	602.50	19.82	2.16	21.98	18.03	617.39	No	
MW-25	09/09/05	635.42	637.70	617.50	602.50	20.12	2.06	22.18	18.31	617.11	No	
MW-25	10/11/05	635.42	637.70	617.50	602.50	18.89	2.72	21.61	17.22	618.20	Yes	
MW-25	05/23/06	635.42	637.70	617.50	602.50	17.99	3.57	21.56	16.52	618.90	Yes	
MW-25	10/16/06	635.42	637.70	617.50	602.50	20.16	2.12	22.28	18.36	617.06	No	
MW-25	04/23/07	635.42	637.70	617.50	602.50	21.05	0.98	22.03	18.99	616.43	No	
MW-25	09/25/07	635.42	637.70	617.50	602.50	20.98	0.74	21.72	18.87	616.55	No	
MW-25	05/01/08	635.42	637.70	617.50	602.50	19.04	2.49	21.53	17.32	618.10	Yes	
MW-25	10/20/08	635.42	637.70	617.50	602.50	16.98	4.55	21.53	15.73	619.69	Yes	
MW-25	04/18/09	635.42	637.70	617.50	602.50	18.92	2.71	21.63	17.25	618.17	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-25	10/11/09	635.42	637.70	617.50	602.50	19.75	1.99	21.74	17.92	617.50	Yes	
MW-25	04/28/10	635.42	637.70	617.50	602.50	20.03	1.75	21.78	18.15	617.27	No	
MW-25	10/25/10	635.42	637.70	617.50	602.50	16.42	5.10	21.52	15.29	620.13	Yes	
MW-25	04/25/11	635.42	637.70	617.50	602.50	18.41	5.54	23.95	17.38	618.04	Yes	
MW-25	08/02/11	635.42	637.70	617.50	602.50	16.07	5.16	21.23	14.96	620.46	Yes	
MW-25	10/10/11	635.42	637.70	617.50	602.50	18.82	2.12	20.94	17.02	618.40	Yes	
MW-25	01/04/12	635.42	637.70	617.50	602.50	20.53	0.71	21.24	18.41	617.01	No	
MW-25	04/05/12	635.42	637.70	617.50	602.50	21.43	0.30	21.73	19.22	616.20	No	
MW-25	04/16/12	635.42	637.70	617.50	602.50	21.41	0.12	21.53	19.16	616.26	No	
MW-25	06/18/12	635.42	637.70	617.50	602.50	18.75	2.10	20.85	16.94	618.48	Yes	Spill Buddy Before Reading
MW-25	06/18/12	635.42	637.70	617.50	602.50	19.15	0.68	19.83	17.02	618.40	Yes	Spill Buddy After Reading
MW-25	06/26/12	635.42	637.70	617.50	602.50	17.82	1.83	19.65	15.95	619.47	Yes	
MW-25	07/11/12	635.42	637.70	617.50	602.50	18.42	1.68	20.10	16.52	618.90	Yes	Spill Buddy Before Reading
MW-25	07/11/12	635.42	637.70	617.50	602.50	18.88	0.40	19.28	16.69	618.73	Yes	Spill Buddy After Reading
MW-25	08/09/12	635.42	637.70	617.50	602.50	19.26	1.00	20.26	17.21	618.21	Yes	Spill Buddy Before Reading
MW-25	08/09/12	635.42	637.70	617.50	602.50	19.64	0.06	19.70	17.37	618.05	Yes	Spill Buddy After Reading
MW-25	09/29/12	635.42	637.70	617.50	602.50	20.48	0.47	20.95	18.31	617.11	No	Spill Buddy Before Reading
MW-25	09/29/12	635.42	637.70	617.50	602.50	NP	0.00	20.64	18.36	617.06	No	Spill Buddy After Reading
MW-25	09/30/12	635.42	637.70	617.50	602.50	20.48	0.37	20.85	18.28	617.14	No	
MW-25	11/21/12	635.42	637.70	617.50	602.50	20.96	0.06	21.02	18.69	616.73	No	
MW-25	12/17/12	635.42	637.70	617.50	602.50	21.18	0.12	21.30	18.93	616.49	No	
MW-25	03/25/13	635.42	637.70	617.50	602.50	21.76	2.32	24.08	20.00	615.42	No	
MW-25	05/05/13	635.42	637.70	617.50	602.50	20.75	2.24	22.99	18.98	616.44	No	
MW-25	10/03/13	635.42	637.70	617.50	602.50	20.59	2.37	22.96	18.85	616.57	No	
MW-25	05/22/14	635.42	637.70	617.50	602.50	18.23	3.56	21.79	16.75	618.67	Yes	
MW-25	06/19/14	635.42	637.70	617.50	602.50	18.18	4.42	22.60	16.90	618.52	Yes	
MW-25	10/31/14	635.42	637.70	617.50	602.50	18.53	2.15	20.68	16.74	618.68	Yes	
MW-25	05/06/15	635.42	637.70	617.50	602.50	20.91	0.31	21.22	18.70	616.72	No	
MW-25	10/05/15	635.42	637.70	617.50	602.50	18.10	2.72	20.82	16.43	618.99	Yes	
MW-25	05/23/16	635.42	637.70	617.50	602.50	15.89	2.45	18.34	14.16	621.26	Yes	
MW-25	10/03/16	635.42	637.70	617.50	602.50	17.38	1.96	19.34	15.54	619.88	Yes	
MW-25	06/29/17	635.42	637.70	617.50	602.50	16.92	1.93	18.85	15.08	620.34	Yes	
MW-26	06/30/89	632.70	635.98	619.20	604.20	19.55	2.50	22.05	16.83	615.87	No	
MW-26	07/12/89	632.70	635.98	619.20	604.20	19.90	2.40	22.30	17.16	615.54	No	
MW-26	07/26/89	632.70	635.98	619.20	604.20	19.96	2.40	22.36	17.22	615.48	No	
MW-26	07/27/89	632.70	635.98	619.20	604.20	20.07	2.44	22.51	17.34	615.36	No	
MW-26	09/03/89	632.70	635.98	619.20	604.20	20.32	2.64	22.96	17.64	615.06	No	
MW-26	11/16/89	632.70	635.98	619.20	604.20	20.42	2.78	23.20	17.77	614.93	No	
MW-26	11/29/89	632.70	635.98	619.20	604.20	20.30	2.81	23.11	17.65	615.05	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-26	12/01/89	632.70	635.98	619.20	604.20	20.47	2.63	23.10	17.78	614.92	No	
MW-26	12/02/89	632.70	635.98	619.20	604.20	20.48	2.63	23.11	17.79	614.91	No	
MW-26	05/04/90	632.70	635.98	619.20	604.20	21.16	3.23	24.39	18.61	614.09	No	
MW-26	06/01/90	632.70	635.98	619.20	604.20	23.50	6.40	29.90	21.67	611.03	No	
MW-26	06/19/90	632.70	635.98	619.20	604.20	20.82	2.46	23.28	18.10	614.60	No	
MW-26	06/27/90	632.70	635.98	619.20	604.20	20.81	2.42	23.23	18.08	614.62	No	
MW-26	07/05/90	632.70	635.98	619.20	604.20	20.80	2.45	23.25	18.07	614.63	No	
MW-26	07/13/90	632.70	635.98	619.20	604.20	20.80	2.48	23.28	18.08	614.62	No	
MW-26	07/17/90	632.70	635.98	619.20	604.20	20.78	2.45	23.23	18.05	614.65	No	
MW-26	07/25/90	632.70	635.98	619.20	604.20	20.80	2.58	23.38	18.10	614.60	No	
MW-26	08/09/90	632.70	635.98	619.20	604.20	20.77	2.63	23.40	18.08	614.62	No	
MW-26	08/27/90	632.70	635.98	619.20	604.20	20.83	2.57	23.40	18.13	614.57	No	
MW-26	09/06/90	632.70	635.98	619.20	604.20	20.67	2.51	23.18	17.96	614.74	No	
MW-26	01/04/91	632.70	635.98	619.20	604.20	19.95	2.47	22.42	17.23	615.47	No	
MW-26	01/30/91	632.70	635.98	619.20	604.20	20.18	2.60	22.78	17.49	615.21	No	
MW-26	04/24/91	632.70	635.98	619.20	604.20	20.41	2.42	22.83	17.68	615.02	No	
MW-26	07/09/91	632.70	635.98	619.20	604.20	17.93	2.59	20.52	15.23	617.47	No	
MW-26	10/08/91	632.70	635.98	619.20	604.20	15.75	5.50	21.25	13.71	618.99	No	
MW-26	01/07/92	632.70	635.98	619.20	604.20	16.55	4.59	21.14	14.31	618.39	No	
MW-26	10/14/92	632.70	635.98	619.20	604.20	16.85	4.25	21.10	14.53	618.17	No	
MW-26	06/25/93	632.70	635.98	619.20	604.20	12.58	7.92	20.50	11.09	621.61	Yes	
MW-26	10/28/93	632.70	635.98	619.20	604.20	17.77	3.10	20.87	15.19	617.51	No	
MW-26	01/29/94	632.70	635.98	619.20	604.20	18.72	2.01	20.73	15.89	616.81	No	
MW-26	04/27/94	632.70	635.98	619.20	604.20	17.97	2.65	20.62	15.29	617.41	No	
MW-26	07/21/94	632.70	635.98	619.20	604.20	16.73	3.72	20.45	14.29	618.41	No	
MW-26	10/25/94	632.70	635.98	619.20	604.20	17.44	3.18	20.62	14.88	617.82	No	
MW-26	02/01/95	632.70	635.98	619.20	604.20	19.14	1.93	21.07	16.30	616.40	No	
MW-26	04/04/95	632.70	635.98	619.20	604.20	19.50	2.33	21.83	16.75	615.95	No	
MW-26	07/12/95	632.70	635.98	619.20	604.20	18.70	1.72	20.42	15.81	616.89	No	
MW-26	11/13/95	632.70	635.98	619.20	604.20	16.45	3.85	20.30	14.04	618.66	No	
MW-26	10/08/96	632.70	635.98	619.20	604.20	15.30	4.93	20.23	13.13	619.57	Yes	
MW-26	04/29/97	632.70	635.98	619.20	604.20	13.95	6.20	20.15	12.07	620.63	Yes	
MW-26	06/10/97	632.70	635.98	619.20	604.20	16.20	3.83	20.03	13.79	618.91	No	FP bailed 5/22/97
MW-26	11/03/98	632.70	635.98	619.20	604.20	19.49	2.26	21.75	16.72	615.98	No	
MW-26	03/04/99	632.70	635.98	619.20	604.20	19.56	2.34	21.90	16.81	615.89	No	
MW-26	10/07/99	632.70	635.98	619.20	604.20	15.10	4.95	20.05	12.94	619.76	Yes	
MW-26	11/09/99	632.70	635.98	619.20	604.20	14.80	5.38	20.18	12.74	619.96	Yes	bailed 4 gal. FP
MW-26	12/21/99	632.70	635.98	619.20	604.20	17.55	1.67	19.22	14.65	618.05	No	bailed 0.25 gal. FP
MW-26	01/27/00	632.70	635.98	619.20	604.20	18.75	1.18	19.93	15.74	616.96	No	bailed 0.2 gal. FP
MW-26	02/24/00	632.70	635.98	619.20	604.20	19.18	1.50	20.68	16.24	616.46	No	bailed 2 gal. FP



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-26	03/31/00	632.70	635.98	619.20	604.20	18.71	1.92	20.63	15.86	616.84	No	bailed 0.25 gal. FP
MW-26	04/20/00	632.70	635.98	619.20	604.20	18.51	1.81	20.32	15.64	617.06	No	bailed 2 gal. FP
MW-26	04/26/00	632.70	635.98	619.20	604.20	18.52	1.56	20.08	15.59	617.11	No	bailed 1.5 gal. FP
MW-26	05/31/00	632.70	635.98	619.20	604.20	18.16	1.60	19.76	15.24	617.46	No	bailed 2 gal. FP
MW-26	06/29/00	632.70	635.98	619.20	604.20	18.25	1.95	20.20	15.41	617.29	No	bailed 0.5 gal. FP
MW-26	07/26/00	632.70	635.98	619.20	604.20	18.80	0.16	18.96	15.56	617.14	No	bailed 2 gal. FP
MW-26	08/18/00	632.70	635.98	619.20	604.20	18.94	1.19	20.13	15.93	616.77	No	bailed 0.25 gal. FP
MW-26	09/27/00	632.70	635.98	619.20	604.20	19.42	1.84	21.26	16.56	616.14	No	bailed 0.5 gal. FP
MW-26	10/11/00	632.70	635.98	619.20	604.20	19.27	2.33	21.60	16.52	616.18	No	bailed 1.5 gal. FP
MW-26	11/17/00	632.70	635.98	619.20	604.20	19.31	1.84	21.15	16.45	616.25	No	bailed 2.5 gal. FP
MW-26	12/12/00	632.70	635.98	619.20	604.20	19.11	0.52	19.63	15.95	616.75	No	bailed 0.25 gal. FP
MW-26	01/18/01	632.70	635.98	619.20	604.20	19.52	0.47	19.99	16.35	616.35	No	bailed 0.2 gal. FP
MW-26	04/24/01	632.70	635.98	619.20	604.20	19.37	1.06	20.43	16.33	616.37	No	product abated using vactruck
MW-26	05/23/01	632.70	635.98	619.20	604.20	17.94	1.88	19.82	15.08	617.62	No	no product bailed
MW-26	06/19/01	632.70	635.98	619.20	604.20	17.78	2.07	19.85	14.97	617.73	No	
MW-26	07/26/01	632.70	635.98	619.20	604.20	18.96	0.88	19.84	15.88	616.82	No	
MW-26	08/31/01	632.70	635.98	619.20	604.20	19.29	1.02	20.31	16.24	616.46	No	
MW-26	09/26/01	632.70	635.98	619.20	604.20	19.28	1.81	21.09	16.41	616.29	No	
MW-26	10/24/01	632.70	635.98	619.20	604.20	19.32	2.00	21.32	16.49	616.21	No	
MW-26	12/20/01	632.70	635.98	619.20	604.20	19.58	1.94	21.52	16.74	615.96	No	
MW-26	01/22/02	632.70	635.98	619.20	604.20	19.66	2.68	22.34	16.99	615.71	No	
MW-26	02/26/02	632.70	635.98	619.20	604.20	20.00	2.94	22.94	17.38	615.32	No	
MW-26	03/20/02	632.70	635.98	619.20	604.20	20.22	2.44	22.66	17.49	615.21	No	
MW-26	04/24/02	632.70	635.98	619.20	604.20	19.65	1.05	20.70	16.61	616.09	No	
MW-26	05/15/02	632.70	635.98	619.20	604.20	19.27	0.89	20.16	16.19	616.51	No	
MW-26	06/27/02	632.70	635.98	619.20	604.20	19.30	0.99	20.29	16.24	616.46	No	
MW-26	07/25/02	632.70	635.98	619.20	604.20	19.27	0.77	20.04	16.16	616.54	No	
MW-26	08/20/02	632.70	635.98	619.20	604.20	19.05	1.12	20.17	16.02	616.68	No	
MW-26	09/30/02	632.70	635.98	619.20	604.20	18.42	1.37	19.79	15.45	617.25	No	
MW-26	11/05/02	632.70	635.98	619.20	604.20	18.10	1.61	19.71	15.18	617.52	No	
MW-26	12/23/02	632.70	635.98	619.20	604.20	19.32	1.17	20.49	16.30	616.40	No	
MW-26	01/28/03	632.70	635.98	619.20	604.20	19.68	2.59	22.27	16.98	615.72	No	
MW-26	02/19/03	632.70	635.98	619.20	604.20	19.80	3.41	23.21	17.29	615.41	No	
MW-26	04/17/03	632.70	635.98	619.20	604.20	20.41	2.72	23.13	17.74	614.96	No	
MW-26	05/15/03	632.70	635.98	619.20	604.20	20.51	1.16	21.67	17.49	615.21	No	
MW-26	06/10/03	632.70	635.98	619.20	604.20	20.10	1.10	21.20	17.07	615.63	No	
MW-26	10/23/03	632.70	635.98	619.20	604.20	20.39	2.81	23.20	17.74	614.96	No	
MW-26	12/03/03	632.70	635.98	619.20	604.20	20.59	2.79	23.38	17.94	614.76	No	
MW-26	04/19/04	633.45	636.11	619.20	604.20	20.89	2.43	23.32	18.78	614.67	No	
MW-26	07/28/04	633.45	636.11	619.20	604.20	20.09	1.67	21.76	17.81	615.64	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-26	11/15/04	633.45	636.11	619.20	604.20	19.25	0.65	19.90	16.74	616.71	No	
MW-26	04/18/05	633.45	636.11	619.20	604.20	19.73	0.57	20.30	17.20	616.25	No	
MW-26	09/09/05	633.45	636.11	619.20	604.20	19.31	1.88	21.19	17.07	616.38	No	
MW-26	10/11/05	633.45	636.11	619.20	604.20	18.82	1.42	20.24	16.48	616.97	No	
MW-26	05/23/06	633.45	636.11	619.20	604.20	17.75	2.11	19.86	15.57	617.88	No	
MW-26	10/16/06	633.45	636.11	619.20	604.20	19.49	2.48	21.97	17.39	616.06	No	
MW-26	04/23/07	633.45	636.11	619.20	604.20	20.39	0.31	20.70	17.80	615.65	No	
MW-26	09/25/07	633.45	636.11	619.20	604.20	20.37	0.38	20.75	17.80	615.65	No	
MW-26	05/01/08	633.45	636.11	619.20	604.20	19.05	0.59	19.64	16.52	616.93	No	
MW-26	10/20/08	633.45	636.11	619.20	604.20	16.92	3.06	19.98	14.95	618.50	No	
MW-26	04/18/09	633.45	636.11	619.20	604.20	18.22	2.08	20.30	16.03	617.42	No	
MW-26	10/11/09	633.45	636.11	619.20	604.20	19.43	1.50	20.93	17.11	616.34	No	
MW-26	04/28/10	633.45	636.11	619.20	604.20	19.29	1.10	20.39	16.88	616.57	No	
MW-26	10/25/10	633.45	636.11	619.20	604.20	16.86	2.90	19.76	14.86	618.59	No	
MW-26	04/25/11	633.45	636.11	619.20	604.20	18.07	1.99	20.06	15.86	617.59	No	
MW-26	08/03/11	633.45	636.11	619.20	604.20	16.12	3.43	19.55	14.23	619.22	Yes	
MW-26	10/10/11	633.45	636.11	619.20	604.20	18.03	1.66	19.69	15.74	617.71	No	
MW-26	01/04/12	633.45	636.11	619.20	604.20	19.38	2.00	21.38	17.17	616.28	No	
MW-26	04/05/12	633.45	636.11	619.20	604.20	20.14	1.81	21.95	17.89	615.56	No	Spill Buddy Before Reading
MW-26	04/05/12	633.45	636.11	619.20	604.20	21.21	0.49	21.70	18.66	614.79	No	Spill Buddy After Reading
MW-26	04/16/12	633.45	636.11	619.20	604.20	20.28	0.17	20.45	17.66	615.79	No	
MW-26	06/26/12	633.45	636.11	619.20	604.20	17.20	1.69	18.89	14.92	618.53	No	
MW-26	07/11/12	633.45	636.11	619.20	604.20	17.80	1.42	19.22	15.46	617.99	No	
MW-26	07/11/12	633.45	636.11	619.20	604.20	18.14	0.34	18.48	15.56	617.89	No	
MW-26	09/29/12	633.45	636.11	619.20	604.20	19.46	0.89	20.35	17.00	616.45	No	Spill Buddy Before Reading
MW-26	09/29/12	633.45	636.11	619.20	604.20	19.76	0.17	19.93	17.14	616.31	No	Spill Buddy After Reading
MW-26	09/30/12	633.45	636.11	619.20	604.20	19.40	0.90	20.30	16.94	616.51	No	
MW-26	11/21/12	633.45	636.11	619.20	604.20	19.70	2.19	21.89	17.53	615.92	No	
MW-26	12/17/12	633.45	636.11	619.20	604.20	19.85	2.60	22.45	17.78	615.67	No	
MW-26	03/25/13	633.45	636.11	619.20	604.20	20.68	2.73	23.41	18.64	614.81	No	
MW-26	05/05/13	633.45	636.11	619.20	604.20	NP	0.00	20.45	17.79	615.66	No	
MW-26	10/03/13	633.45	636.11	619.20	604.20	19.84	1.86	21.70	17.60	615.85	No	
MW-26	05/22/14	633.45	636.11	619.20	604.20	18.34	0.56	18.90	15.81	617.64	No	
MW-26	06/19/14	633.45	636.11	619.20	604.20	17.27	0.71	17.98	14.77	618.68	No	
MW-26	10/31/14	633.45	636.11	619.20	604.20	17.92	2.11	20.03	15.74	617.71	No	
MW-26	05/06/15	633.45	636.11	619.20	604.20	19.56	0.65	20.21	17.05	616.40	No	
MW-26	10/05/15	633.45	636.11	619.20	604.20	17.62	1.68	19.30	15.34	618.11	No	
MW-26	05/23/16	633.45	636.11	619.20	604.20	14.34	5.28	19.62	12.87	620.58	Yes	
MW-26	10/03/16	633.45	636.11	619.20	604.20	16.51	3.03	19.54	14.53	618.92	No	
MW-26	06/21/17	633.45	636.11	619.20	604.20	15.25	4.30	19.55	13.56	619.89	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-26	06/22/17	633.45	636.11	619.20	604.20	16.09	<b>3.44</b>	19.53	14.21	619.24	Yes	
MW-26	06/23/17	633.45	636.11	619.20	604.20	15.23	<b>4.30</b>	19.53	13.54	619.91	Yes	
MW-27	06/30/89	635.10	637.02	620.89	605.89	21.60	<b>4.40</b>	26.00	20.67	614.43	No	
MW-27	07/12/89	635.10	637.02	620.89	605.89	21.70	<b>4.50</b>	26.20	20.80	614.30	No	
MW-27	07/26/89	635.10	637.02	620.89	605.89	21.80	<b>4.14</b>	25.94	20.82	614.28	No	
MW-27	07/27/89	635.10	637.02	620.89	605.89	21.94	<b>7.62</b>	29.56	21.74	613.36	No	
MW-27	09/03/89	635.10	637.02	620.89	605.89	22.10	<b>8.49</b>	30.59	22.10	613.00	No	
MW-27	11/16/89	635.10	637.02	620.89	605.89	21.95	<b>8.27</b>	30.22	21.90	613.20	No	
MW-27	11/29/89	635.10	637.02	620.89	605.89	22.03	<b>7.92</b>	29.95	21.90	613.20	No	
MW-27	12/01/89	635.10	637.02	620.89	605.89	22.15	<b>8.12</b>	30.27	22.06	613.04	No	
MW-27	12/02/89	635.10	637.02	620.89	605.89	22.19	<b>8.16</b>	30.35	22.11	612.99	No	
MW-27	05/04/90	635.10	637.02	620.89	605.89	22.84	<b>8.86</b>	31.70	22.92	612.18	No	
MW-27	06/01/90	635.10	637.02	620.89	605.89	22.65	<b>7.55</b>	30.20	22.44	612.66	No	
MW-27	06/19/90	635.10	637.02	620.89	605.89	22.60	<b>6.67</b>	29.27	22.19	612.91	No	
MW-27	06/27/90	635.10	637.02	620.89	605.89	21.55	<b>6.51</b>	28.06	21.10	614.00	No	
MW-27	07/05/90	635.10	637.02	620.89	605.89	21.58	<b>7.36</b>	28.94	21.32	613.78	No	
MW-27	07/13/90	635.10	637.02	620.89	605.89	21.50	<b>7.00</b>	28.50	21.16	613.94	No	
MW-27	07/17/90	635.10	637.02	620.89	605.89	21.49	<b>6.94</b>	28.43	21.14	613.96	No	
MW-27	07/25/90	635.10	637.02	620.89	605.89	21.50	<b>7.26</b>	28.76	21.22	613.88	No	
MW-27	08/09/90	635.10	637.02	620.89	605.89	21.47	<b>7.30</b>	28.77	21.20	613.90	No	
MW-27	08/27/90	635.10	637.02	620.89	605.89	21.49	<b>6.55</b>	28.04	21.05	614.05	No	
MW-27	09/06/90	635.10	637.02	620.89	605.89	21.40	<b>3.70</b>	25.10	20.32	614.78	No	
MW-27	01/04/91	635.10	637.02	620.89	605.89	20.70	<b>4.12</b>	24.82	19.71	615.39	No	
MW-27	01/30/91	635.10	637.02	620.89	605.89	20.81	<b>7.01</b>	27.82	20.47	614.63	No	
MW-27	04/24/91	635.10	637.02	620.89	605.89	21.17	<b>4.73</b>	25.90	20.32	614.78	No	
MW-27	06/06/91	635.10	637.02	620.89	605.89	20.25	<b>2.90</b>	23.15	18.99	616.11	No	
MW-27	07/09/91	635.10	637.02	620.89	605.89	19.35	<b>2.63</b>	21.98	18.02	617.08	No	
MW-27	08/06/91	635.10	637.02	620.89	605.89	18.44	<b>2.60</b>	21.04	17.11	617.99	No	
MW-27	09/04/91	635.10	637.02	620.89	605.89	18.47	<b>2.47</b>	20.94	17.11	617.99	No	
MW-27	10/08/91	635.10	637.02	620.89	605.89	17.50	<b>3.00</b>	20.50	16.26	618.84	No	
MW-27	11/08/91	635.10	637.02	620.89	605.89	18.17	<b>2.50</b>	20.67	16.81	618.29	No	
MW-27	12/03/91	635.10	637.02	620.89	605.89	16.15	<b>4.15</b>	20.30	15.17	619.93	No	
MW-27	01/07/92	635.10	637.02	620.89	605.89	17.95	<b>2.40</b>	20.35	16.57	618.53	No	
MW-27	02/04/92	635.10	637.02	620.89	605.89	18.65	<b>2.27</b>	20.92	17.24	617.86	No	
MW-27	03/03/92	635.10	637.02	620.89	605.89	19.02	<b>2.48</b>	21.50	17.66	617.44	No	
MW-27	09/24/92	635.10	637.02	620.89	605.89	16.80	<b>3.55</b>	20.35	15.68	619.42	No	
MW-27	10/14/92	635.10	637.02	620.89	605.89	18.21	<b>2.41</b>	20.62	16.83	618.27	No	
MW-27	06/25/93	635.10	637.02	620.89	605.89	14.71	<b>4.95</b>	19.66	13.91	621.19	Yes	
MW-27	10/28/93	635.10	637.02	620.89	605.89	18.74	<b>2.14</b>	20.88	17.30	617.80	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-27	01/29/94	635.10	637.02	620.89	605.89	19.30	2.61	21.91	17.97	617.13	No	
MW-27	04/27/94	635.10	637.02	620.89	605.89	19.21	2.23	21.44	17.79	617.31	No	
MW-27	07/21/94	635.10	637.02	620.89	605.89	17.95	2.09	20.04	16.50	618.60	No	
MW-27	10/25/94	635.10	637.02	620.89	605.89	18.61	1.81	20.42	17.10	618.00	No	
MW-27	11/02/94	635.10	637.02	620.89	605.89	18.20	2.50	20.70	16.84	618.26	No	
MW-27	02/01/95	635.10	637.02	620.89	605.89	20.24	4.16	24.40	19.26	615.84	No	
MW-27	04/04/95	635.10	637.02	620.89	605.89	20.17	2.90	23.07	18.91	616.19	No	
MW-27	07/12/95	635.10	637.02	620.89	605.89	19.43	1.23	20.66	17.79	617.31	No	
MW-27	11/14/95	635.10	637.02	620.89	605.89	18.10	1.22	19.32	16.46	618.64	No	
MW-27	03/13/96	635.10	637.02	620.89	605.89	19.75	2.90	22.65	18.49	616.61	No	
MW-27	10/08/96	635.10	637.02	620.89	605.89	16.92	2.36	19.28	15.53	619.57	No	
MW-27	04/29/97	635.10	637.02	620.89	605.89	15.80	3.20	19.00	14.60	620.50	No	
MW-27	06/10/97	635.10	637.02	620.89	605.89	17.55	1.60	19.15	15.99	619.11	No	FP bailed 5/22/97
MW-27	11/03/98	635.10	637.02	620.89	605.89	20.18	3.33	23.51	19.01	616.09	No	
MW-27	03/02/99	635.10	637.02	620.89	605.89	20.88	1.62	22.50	19.33	615.77	No	
MW-27	10/07/99	635.10	637.02	620.89	605.89	16.78	3.14	19.92	15.57	619.53	No	
MW-27	11/09/99	635.10	637.02	620.89	605.89	16.55	2.50	19.05	15.19	619.91	No	bailed 1.5 gal. FP
MW-27	12/21/99	635.10	637.02	620.89	605.89	18.70	0.58	19.28	16.91	618.19	No	bailed 0.25 gal. FP
MW-27	01/27/00	635.10	637.02	620.89	605.89	19.88	2.12	22.00	18.44	616.66	No	bailed 0.3 gal. FP
MW-27	02/24/00	635.10	637.02	620.89	605.89	19.94	1.93	21.87	18.46	616.64	No	bailed 1 gal. FP
MW-27	03/31/00	635.10	637.02	620.89	605.89	19.63	3.27	22.90	18.45	616.65	No	bailed 2.5 gal. FP
MW-27	04/20/00	635.10	637.02	620.89	605.89	19.65	1.12	20.77	17.98	617.12	No	bailed 0.25 gal. FP
MW-27	04/26/00	635.10	637.02	620.89	605.89	19.57	0.96	20.53	17.87	617.23	No	bailed 1 gal. FP
MW-27	05/31/00	635.10	637.02	620.89	605.89	19.63	0.45	20.08	17.81	617.29	No	bailed 0.125 gal. FP
MW-27	06/29/00	635.10	637.02	620.89	605.89	19.54	0.65	20.19	17.77	617.33	No	bailed 0.25 gal. FP
MW-27	07/26/00	635.10	637.02	620.89	605.89	19.61	0.07	19.68	17.71	617.39	No	
MW-27	08/18/00	635.10	637.02	620.89	605.89	19.55	4.65	24.20	18.68	616.42	No	bailed 1.5 gal. FP
MW-27	09/27/00	635.10	637.02	620.89	605.89	20.10	2.37	22.47	18.72	616.38	No	bailed 1 gal. FP
MW-27	10/11/00	635.10	637.02	620.89	605.89	19.93	2.76	22.69	18.63	616.47	No	bailed 3 gal. FP
MW-27	11/17/00	635.10	637.02	620.89	605.89	20.07	2.92	22.99	18.81	616.29	No	bailed 3 gal. FP
MW-27	12/12/00	635.10	637.02	620.89	605.89	19.92	1.14	21.06	18.26	616.84	No	bailed 2 gal. FP
MW-27	01/18/01	635.10	637.02	620.89	605.89	20.51	1.26	21.77	18.87	616.23	No	bailed 2 gal. FP
MW-27	04/24/01	635.10	637.02	620.89	605.89	19.98	2.19	22.17	18.55	616.55	No	product abated using vactruck
MW-27	05/23/01	635.10	637.02	620.89	605.89	19.47	0.02	19.49	17.55	617.55	No	no product bailed
MW-27	06/19/01	635.10	637.02	620.89	605.89	19.91	0.10	20.01	18.01	617.09	No	TPC = TOC + 0.61 feet
MW-27	07/26/01	635.10	637.02	620.89	605.89	19.82	0.51	20.33	18.02	617.08	No	
MW-27	08/31/01	635.10	637.02	620.89	605.89	20.02	1.41	21.43	18.42	616.68	No	
MW-27	09/26/01	635.10	637.02	620.89	605.89	20.10	1.88	21.98	18.60	616.50	No	
MW-27	10/24/01	635.10	637.02	620.89	605.89	20.08	2.60	22.68	18.75	616.35	No	
MW-27	12/20/01	635.10	637.02	620.89	605.89	21.13	2.68	23.81	19.82	615.28	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-27	01/22/02	635.10	637.02	620.89	605.89	20.78	2.99	23.77	19.54	615.56	No	
MW-27	02/26/02	635.10	637.02	620.89	605.89	20.92	3.35	24.27	19.76	615.34	No	
MW-27	03/20/02	635.10	637.02	620.89	605.89	21.09	3.31	24.40	19.92	615.18	No	
MW-27	04/24/02	635.10	637.02	620.89	605.89	20.29	3.77	24.06	19.22	615.88	No	
MW-27	05/15/02	635.10	637.02	620.89	605.89	19.98	3.19	23.17	18.78	616.32	No	
MW-27	06/27/02	635.10	637.02	620.89	605.89	20.17	2.67	22.84	18.85	616.25	No	
MW-27	07/25/02	635.10	637.02	620.89	605.89	20.08	2.22	22.30	18.66	616.44	No	
MW-27	08/20/02	635.10	637.02	620.89	605.89	19.97	1.89	21.86	18.48	616.62	No	
MW-27	09/30/02	635.10	637.02	620.89	605.89	19.70	0.65	20.35	17.93	617.17	No	
MW-27	11/05/02	635.10	637.02	620.89	605.89	19.57	0.06	19.63	17.66	617.44	No	
MW-27	12/23/02	635.10	637.02	620.89	605.89	20.33	1.06	21.39	18.65	616.45	No	
MW-27	01/28/03	635.10	637.02	620.89	605.89	20.86	1.60	22.46	19.30	615.80	No	
MW-27	02/19/03	635.10	637.02	620.89	605.89	20.89	2.54	23.43	19.54	615.56	No	
MW-27	04/17/03	635.10	637.02	620.89	605.89	21.29	3.33	24.62	20.12	614.98	No	
MW-27	05/15/03	635.10	637.02	620.89	605.89	21.36	3.46	24.82	20.22	614.88	No	
MW-27	06/10/03	635.10	637.02	620.89	605.89	21.30	2.66	23.96	19.98	615.12	No	
MW-27	10/23/03	635.10	637.02	620.89	605.89	21.35	3.01	24.36	20.11	614.99	No	
MW-27	12/03/03	635.10	637.02	620.89	605.89	21.44	3.26	24.70	20.26	614.84	No	
MW-27	04/19/04	635.10	636.93	620.89	605.89	22.02	3.94	25.96	21.08	614.02	No	
MW-27	07/28/04	635.10	636.93	620.89	605.89	21.16	2.08	23.24	19.80	615.30	No	
MW-27	11/16/04	635.10	636.93	620.89	605.89	20.99	1.23	22.22	19.44	615.66	No	
MW-27	04/18/05	635.10	636.93	620.89	605.89	20.82	2.17	22.99	19.48	615.62	No	
MW-27	09/09/05	635.10	636.93	620.89	605.89	20.37	1.70	22.07	18.92	616.18	No	
MW-27	10/11/05	635.10	636.93	620.89	605.89	20.11	1.06	21.17	18.52	616.58	No	
MW-27	05/23/06	635.10	636.93	620.89	605.89	19.36	1.22	20.58	17.81	617.29	No	
MW-27	10/16/06	635.10	636.93	620.89	605.89	20.58	2.37	22.95	19.29	615.81	No	
MW-27	04/23/07	635.10	636.93	620.89	605.89	21.45	3.45	24.90	20.40	614.70	No	
MW-27	09/25/07	635.10	637.67	620.89	605.89	21.63	3.59	25.22	19.87	615.23	No	
MW-27	05/01/08	635.10	637.67	620.89	605.89	20.78	1.43	22.21	18.53	616.57	No	
MW-27	10/20/08	635.10	637.67	620.89	605.89	19.19	0.78	19.97	16.80	618.30	No	
MW-27	04/18/09	635.10	637.67	620.89	605.89	19.23	1.83	21.06	17.07	618.03	No	
MW-27	08/04/09	635.10	637.67	620.89	605.89	20.68	1.66	22.34	18.48	616.62	No	
MW-27	08/05/09	635.10	637.67	620.89	605.89	21.10	1.25	22.35	18.81	616.29	No	
MW-27	08/13/09	635.10	637.67	620.89	605.89	20.90	0.58	21.48	18.46	616.64	No	
MW-27	08/18/09	635.10	637.67	620.89	605.89	20.53	0.79	21.32	18.14	616.96	No	
MW-27	08/26/09	635.10	637.67	620.89	605.89	20.56	0.66	21.22	18.14	616.96	No	
MW-27	09/03/09	635.10	637.67	620.89	605.89	20.28	0.70	20.98	17.87	617.23	No	
MW-27	09/08/09	635.10	637.67	620.89	605.89	20.24	0.69	20.93	17.83	617.27	No	
MW-27	09/14/09	635.10	637.67	620.89	605.89	20.30	0.96	21.26	17.95	617.15	No	
MW-27	10/11/09	635.10	637.67	620.89	605.89	20.71	1.03	21.74	18.37	616.73	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-27	10/15/09	635.10	637.67	620.89	605.89	20.71	1.03	21.74	18.37	616.73	No	
MW-27	04/28/10	635.10	637.67	620.89	605.89	20.73	1.89	22.62	18.59	616.51	No	
MW-27	10/25/10	635.10	637.67	620.89	605.89	18.70	1.14	19.84	16.39	618.71	No	
MW-27	04/25/11	635.10	637.67	620.89	605.89	20.03	0.79	20.82	17.64	617.46	No	
MW-27	08/04/11	635.10	637.67	620.89	605.89	18.21	1.22	19.43	15.92	619.18	No	
MW-27	09/15/11	635.10	637.67	620.89	605.89	19.41	0.32	19.73	16.91	618.19	No	
MW-27	09/23/11	635.10	637.67	620.89	605.89	19.55	0.13	19.68	17.01	618.09	No	
MW-27	09/29/11	635.10	637.67	620.89	605.89	19.45	0.50	19.95	16.99	618.11	No	
MW-27	10/07/11	635.10	637.67	620.89	605.89	19.52	0.42	19.94	17.04	618.06	No	
MW-27	10/10/11	635.10	637.67	620.89	605.89	19.70	0.39	20.09	17.22	617.88	No	
MW-27	10/21/11	635.10	637.67	620.89	605.89	19.96	0.32	20.28	17.46	617.64	No	
MW-27	10/27/11	635.10	637.67	620.89	605.89	20.09	0.29	20.38	17.59	617.51	No	
MW-27	11/04/11	635.10	637.67	620.89	605.89	20.27	0.37	20.64	17.78	617.32	No	
MW-27	11/09/11	635.10	637.67	620.89	605.89	20.20	0.24	20.44	17.68	617.42	No	
MW-27	11/18/11	635.10	637.67	620.89	605.89	20.33	0.35	20.68	17.84	617.26	No	
MW-27	11/22/11	635.10	637.67	620.89	605.89	20.43	0.50	20.93	17.97	617.13	No	
MW-27	12/01/11	635.10	637.67	620.89	605.89	20.73	0.98	21.71	18.38	616.72	No	
MW-27	01/04/12	635.10	637.67	620.89	605.89	20.93	2.61	23.54	18.95	616.15	No	
MW-27	02/16/12	635.10	637.67	620.89	605.89	21.31	2.35	23.66	19.27	615.83	No	
MW-27	03/13/12	635.10	637.67	620.89	605.89	21.46	2.73	24.19	19.51	615.59	No	
MW-27	04/03/12	635.10	637.67	620.89	605.89	21.58	2.84	24.42	19.65	615.45	No	Spill Buddy Before Reading
MW-27	04/03/12	635.10	637.67	620.89	605.89	22.20	0.65	22.85	19.78	615.32	No	Spill Buddy After Reading
MW-27	04/16/12	635.10	637.67	620.89	605.89	21.33	3.01	24.34	19.44	615.66	No	
MW-27	06/18/12	635.10	637.67	620.89	605.89	20.13	0.69	20.82	17.72	617.38	No	
MW-27	06/26/12	635.10	637.67	620.89	605.89	19.28	0.70	19.98	16.87	618.23	No	
MW-27	07/12/12	635.10	637.67	620.89	605.89	19.57	0.82	20.39	17.19	617.91	No	
MW-27	07/24/12	635.10	637.67	620.89	605.89	19.93	0.65	20.58	17.51	617.59	No	
MW-27	08/09/12	635.10	637.67	620.89	605.89	20.04	0.71	20.75	17.63	617.47	No	Spill Buddy Before Reading
MW-27	08/09/12	635.10	637.67	620.89	605.89	20.29	0.11	20.40	17.74	617.36	No	Spill Buddy After Reading
MW-27	08/17/12	635.10	637.67	620.89	605.89	20.21	0.69	20.90	17.80	617.30	No	
MW-27	09/17/12	635.10	637.67	620.89	605.89	20.57	1.01	21.58	18.23	616.87	No	
MW-27	09/18/12	635.10	637.67	620.89	605.89	20.54	1.01	21.55	18.20	616.90	No	Spill Buddy Before Reading
MW-27	09/18/12	635.10	637.67	620.89	605.89	20.79	0.06	20.85	18.23	616.87	No	Spill Buddy After Reading
MW-27	09/20/12	635.10	637.67	620.89	605.89	20.62	1.06	21.68	18.29	616.81	No	
MW-27	09/30/12	635.10	637.67	620.89	605.89	20.75	1.13	21.88	18.44	616.66	No	
MW-27	10/22/12	635.10	637.67	620.89	605.89	21.13	1.29	22.42	18.85	616.25	No	
MW-27	11/21/12	635.10	637.67	620.89	605.89	21.15	2.09	23.24	19.05	616.05	No	
MW-27	12/17/12	635.10	637.67	620.89	605.89	21.30	2.63	23.93	19.32	615.78	No	
MW-27	12/20/12	635.10	637.67	620.89	605.89	21.30	2.72	24.02	19.34	615.76	No	
MW-27	03/25/13	635.10	637.67	620.89	605.89	21.30	4.24	25.54	19.69	615.41	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-27	05/05/13	635.10	637.67	620.89	605.89	21.81	3.34	25.15	19.99	615.11	No	
MW-27	10/03/13	635.10	637.67	620.89	605.89	21.37	1.82	23.19	19.21	615.89	No	
MW-27	05/22/14	635.10	637.67	620.89	605.89	20.41	0.44	20.85	17.94	617.16	No	
MW-27	10/31/14	635.10	637.67	620.89	605.89	19.65	0.31	19.96	17.15	617.95	No	
MW-27	05/06/15	635.10	637.67	620.89	605.89	21.07	2.19	23.26	18.99	616.11	No	
MW-27	07/10/15	635.10	637.67	620.89	605.89	20.33	0.63	20.96	17.90	617.20	No	
MW-27	10/05/15	635.10	637.67	620.89	605.89	19.82	0.28	20.10	17.31	617.79	No	
MW-27	05/23/16	635.10	637.67	620.89	605.89	16.52	3.08	19.60	14.65	620.45	No	
MW-27	10/03/16	635.10	637.67	620.89	605.89	18.31	1.65	19.96	16.11	618.99	No	
MW-27	06/14/17	635.10	637.67	620.89	605.89	16.70	3.06	19.76	14.82	620.28	No	
MW-27	06/21/17	635.10	637.67	620.89	605.89	17.35	2.34	19.69	15.31	619.79	No	
MW-27	06/22/17	635.10	637.67	620.89	605.89	17.13	2.57	19.70	15.14	619.96	No	
MW-27	06/23/17	635.10	637.67	620.89	605.89	17.25	2.50	19.75	15.24	619.86	No	
MW-27	10/26/17	635.10	637.67	620.89	605.89	14.56	5.34	19.90	13.20	621.90	Yes	
MW-27	05/15/18	635.10	637.67	620.89	605.89	20.45	0.81	21.26	18.06	617.04	No	
MW-27	05/23/18	635.10	637.67	620.89	605.89	20.35	0.80	21.15	17.96	617.14	No	
MW-28	06/30/89	635.70	638.14	624.08	609.08	NP	0.00	21.10	18.66	617.04	No	
MW-28	07/12/89	635.70	638.14	624.08	609.08	NP	0.00	21.59	19.15	616.55	No	
MW-28	07/26/89	635.70	638.14	624.08	609.08	NP	0.00	21.73	19.29	616.41	No	
MW-28	07/27/89	635.70	638.14	624.08	609.08	NP	0.00	21.84	19.40	616.30	No	
MW-28	09/03/89	635.70	638.14	624.08	609.08	NP	0.00	21.95	19.51	616.19	No	
MW-28	11/16/89	635.70	638.14	624.08	609.08	NP	0.00	22.11	19.67	616.03	No	
MW-28	11/29/89	635.70	638.14	624.08	609.08	NP	0.00	22.39	19.95	615.75	No	
MW-28	06/19/90	635.70	638.14	624.08	609.08	NP	0.00	22.01	19.57	616.13	No	
MW-28	06/27/90	635.70	638.14	624.08	609.08	NP	0.00	22.07	19.63	616.07	No	
MW-28	07/05/90	635.70	638.14	624.08	609.08	NP	0.00	22.45	20.01	615.69	No	
MW-28	07/13/90	635.70	638.14	624.08	609.08	NP	0.00	22.45	20.01	615.69	No	
MW-28	07/17/90	635.70	638.14	624.08	609.08	NP	0.00	22.16	19.72	615.98	No	
MW-28	07/25/90	635.70	638.14	624.08	609.08	NP	0.00	22.48	20.04	615.66	No	
MW-28	09/06/90	635.70	638.14	624.08	609.08	NP	0.00	21.83	19.39	616.31	No	
MW-28	01/04/91	635.70	638.14	624.08	609.08	NP	0.00	21.71	19.27	616.43	No	
MW-28	07/09/91	635.70	638.14	624.08	609.08	NP	0.00	18.84	16.40	619.30	No	
MW-28	10/08/91	635.70	638.14	624.08	609.08	NP	0.00	17.71	15.27	620.43	No	
MW-28	01/07/92	635.70	638.14	624.08	609.08	NP	0.00	18.77	16.33	619.37	No	
MW-28	10/14/92	635.70	638.14	624.08	609.08	NP	0.00	18.48	16.04	619.66	No	
MW-28	06/25/93	635.70	638.14	624.08	609.08	NP	0.00	15.49	13.05	622.65	No	
MW-28	10/28/93	635.70	638.14	624.08	609.08	NP	0.00	19.10	16.66	619.04	No	
MW-28	01/29/94	635.70	638.14	624.08	609.08	NP	0.00	20.59	18.15	617.55	No	
MW-28	04/27/94	635.70	638.14	624.08	609.08	NP	0.00	19.67	17.23	618.47	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-28	07/21/94	635.70	638.14	624.08	609.08	NP	0.00	18.64	16.20	619.50	No	
MW-28	10/25/94	635.70	638.14	624.08	609.08	NP	0.00	19.04	16.60	619.10	No	
MW-28	10/27/94	635.70	638.14	624.08	609.08	NP	0.00	18.35	15.91	619.79	No	
MW-28	02/01/95	635.70	638.14	624.08	609.08	NP	0.00	20.96	18.52	617.18	No	
MW-28	04/04/95	635.70	638.14	624.08	609.08	NP	0.00	21.51	19.07	616.63	No	
MW-28	07/12/95	635.70	638.14	624.08	609.08	NP	0.00	19.98	17.54	618.16	No	
MW-28	11/13/95	635.70	638.14	624.08	609.08	NP	0.00	18.52	16.08	619.62	No	
MW-28	03/13/96	635.70	638.14	624.08	609.08	NP	0.00	21.11	18.67	617.03	No	
MW-28	04/22/96	635.70	638.14	624.08	609.08	NP	0.00	19.07	16.63	619.07	No	
MW-28	10/08/96	635.70	638.14	624.08	609.08	NP	0.00	17.82	15.38	620.32	No	
MW-28	04/29/97	635.70	638.14	624.08	609.08	NP	0.00	13.65	11.21	624.49	Yes	
MW-28	11/03/98	635.70	638.14	624.08	609.08	NP	0.00	21.02	18.58	617.12	No	
MW-28	03/02/99	635.70	638.14	624.08	609.08	NP	0.00	21.60	19.16	616.54	No	
MW-28	04/26/00	635.70	638.14	624.08	609.08	NP	0.00	20.17	17.73	617.97	No	
MW-28	10/10/00	635.70	638.14	624.08	609.08	NP	0.00	21.12	18.68	617.02	No	
MW-28	04/24/01	635.70	638.14	624.08	609.08	NP	0.00	20.63	18.19	617.51	No	
MW-28	10/24/01	635.70	638.14	624.08	609.08	NP	0.00	20.98	18.54	617.16	No	
MW-28	01/22/02	635.70	638.14	624.08	609.08	21.09	3.23	24.32	19.38	616.32	No	Deepest measured DTW
MW-28	02/26/02	635.70	638.14	624.08	609.08	NP	0.00	22.15	19.71	615.99	No	
MW-28	03/20/02	635.70	638.14	624.08	609.08	NP	0.00	22.37	19.93	615.77	No	
MW-28	04/23/02	635.70	638.14	624.08	609.08	NP	0.00	21.41	18.97	616.73	No	
MW-28	05/15/02	635.70	638.14	624.08	609.08	NP	0.00	20.49	18.05	617.65	No	
MW-28	08/20/02	635.70	638.14	624.08	609.08	NP	0.00	20.40	17.96	617.74	No	
MW-28	11/05/02	635.70	638.14	624.08	609.08	NP	0.00	19.43	16.99	618.71	No	
MW-28	12/23/02	635.70	638.14	624.08	609.08	NP	0.00	21.22	18.78	616.92	No	
MW-28	01/28/03	635.70	638.14	624.08	609.08	NP	0.00	21.70	19.26	616.44	No	
MW-28	01/28/03	635.70	638.14	624.08	609.08	NP	0.00	22.07	19.63	616.07	No	
MW-28	04/17/03	635.70	638.14	624.08	609.08	NP	0.00	22.48	20.04	615.66	No	
MW-28	06/10/03	635.70	638.14	624.08	609.08	NP	0.00	21.93	19.49	616.21	No	
MW-28	10/20/03	635.70	638.14	624.08	609.08	NP	0.00	22.05	19.61	616.09	No	
MW-28	12/03/03	635.70	638.14	624.08	609.08	NP	0.00	22.39	19.95	615.75	No	
MW-28	04/19/04	635.75	638.31	624.08	609.08	NP	0.00	22.87	20.31	615.44	No	
MW-28	07/28/04	635.75	638.31	624.08	609.08	NP	0.00	21.47	18.91	616.84	No	
MW-28	11/16/04	635.75	638.31	624.08	609.08	NP	0.00	20.34	17.78	617.97	No	
MW-28	04/18/05	635.75	638.31	624.08	609.08	NP	0.00	20.82	18.26	617.49	No	
MW-28	10/11/05	635.75	638.31	624.08	609.08	NP	0.00	20.09	17.53	618.22	No	
MW-28	05/23/06	635.75	638.31	624.08	609.08	NP	0.00	19.23	16.67	619.08	No	
MW-28	10/16/06	635.75	638.31	624.08	609.08	NP	0.00	21.15	18.59	617.16	No	
MW-28	04/23/07	635.75	638.31	624.08	609.08	NP	0.00	22.25	19.69	616.06	No	
MW-28	09/25/07	635.75	638.31	624.08	609.08	NP	0.00	22.16	19.60	616.15	No	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-28	05/01/08	635.75	638.31	624.08	609.08	NP	0.00	20.05	17.49	618.26	No	
MW-28	10/20/08	635.75	638.31	624.08	609.08	NP	0.00	18.38	15.82	619.93	No	
MW-28	04/18/09	635.75	638.31	624.08	609.08	NP	0.00	19.96	17.40	618.35	No	
MW-28	10/11/09	635.75	638.31	624.08	609.08	NP	0.00	20.82	18.26	617.49	No	
MW-28	04/28/10	635.75	638.31	624.08	609.08	NP	0.00	20.97	18.41	617.34	No	
MW-28	10/25/10	635.75	638.31	624.08	609.08	NP	0.00	18.62	16.06	619.69	No	
MW-28	04/25/11	635.75	638.31	624.08	609.08	NP	0.00	19.69	17.13	618.62	No	
MW-28	10/10/11	635.75	638.31	624.08	609.08	NP	0.00	19.85	17.29	618.46	No	
MW-28	01/04/12	635.75	638.31	624.08	609.08	NP	0.00	21.34	18.78	616.97	No	
MW-28	04/16/12	635.75	638.31	624.08	609.08	NP	0.00	22.01	19.45	616.30	No	
MW-28	06/26/12	635.75	638.31	624.08	609.08	NP	0.00	18.39	15.83	619.92	No	
MW-28	09/30/12	635.75	638.31	624.08	609.08	NP	0.00	21.19	18.63	617.12	No	
MW-28	12/17/12	635.75	638.31	624.08	609.08	NP	0.00	21.86	19.30	616.45	No	
MW-28	03/25/13	635.75	638.31	624.08	609.08	NP	0.00	22.94	20.38	615.37	No	
MW-28	05/05/13	635.75	638.31	624.08	609.08	NP	0.00	21.01	18.45	617.30	No	
MW-28	10/03/13	635.75	638.31	624.08	609.08	NP	0.00	21.65	19.09	616.66	No	
MW-30S	06/30/89	629.90	632.91	615.20	605.20	NP	0.00	17.40	14.39	615.51	Yes	
MW-30S	07/12/89	629.90	632.91	615.20	605.20	NP	0.00	17.80	14.79	615.11	No	
MW-30S	07/26/89	629.90	632.91	615.20	605.20	NP	0.00	17.98	14.97	614.93	No	
MW-30S	07/27/89	629.90	632.91	615.20	605.20	NP	0.00	18.12	15.11	614.79	No	
MW-30S	09/03/89	629.90	632.91	615.20	605.20	NP	0.00	18.44	15.43	614.47	No	
MW-30S	11/16/89	629.90	632.91	615.20	605.20	NP	0.00	18.66	15.65	614.25	No	
MW-30S	11/29/89	629.90	632.91	615.20	605.20	NP	0.00	18.77	15.76	614.14	No	
MW-30S	06/01/90	629.90	632.91	615.20	605.20	NP	0.00	18.44	15.43	614.47	No	
MW-30S	06/19/90	629.90	632.91	615.20	605.20	NP	0.00	18.30	15.29	614.61	No	
MW-30S	06/27/90	629.90	632.91	615.20	605.20	NP	0.00	18.53	15.52	614.38	No	
MW-30S	07/05/90	629.90	632.91	615.20	605.20	NP	0.00	18.65	15.64	614.26	No	
MW-30S	07/13/90	629.90	632.91	615.20	605.20	NP	0.00	18.72	15.71	614.19	No	
MW-30S	07/17/90	629.90	632.91	615.20	605.20	NP	0.00	18.56	15.55	614.35	No	
MW-30S	07/25/90	629.90	632.91	615.20	605.20	NP	0.00	18.78	15.77	614.13	No	
MW-30S	08/09/90	629.90	632.91	615.20	605.20	NP	0.00	18.80	15.79	614.11	No	
MW-30S	08/27/90	629.90	632.91	615.20	605.20	NP	0.00	18.67	15.66	614.24	No	
MW-30S	09/06/90	629.90	632.91	615.20	605.20	NP	0.00	18.44	15.43	614.47	No	
MW-30S	01/04/91	629.90	632.91	615.20	605.20	NP	0.00	17.90	14.89	615.01	No	
MW-30S	01/30/91	629.90	632.91	615.20	605.20	NP	0.00	18.20	15.19	614.71	No	
MW-30S	04/24/91	629.90	632.91	615.20	605.20	NP	0.00	18.38	15.37	614.53	No	
MW-30S	07/09/91	629.90	632.91	615.20	605.20	NP	0.00	14.66	11.65	618.25	Yes	
MW-30S	10/08/91	629.90	632.91	615.20	605.20	NP	0.00	14.07	11.06	618.84	Yes	
MW-30S	01/07/92	629.90	632.91	615.20	605.20	NP	0.00	14.94	11.93	617.97	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-30S	10/14/92	629.90	632.91	615.20	605.20	NP	0.00	15.58	12.57	617.33	Yes	
MW-30S	06/25/93	629.90	632.91	615.20	605.20	NP	0.00	10.97	7.96	621.94	Yes	
MW-30S	10/28/93	629.90	632.91	615.20	605.20	NP	0.00	15.78	12.77	617.13	Yes	
MW-30S	01/29/94	629.90	632.91	615.20	605.20	NP	0.00	17.02	14.01	615.89	Yes	
MW-30S	04/27/94	629.90	632.91	615.20	605.20	NP	0.00	15.53	12.52	617.38	Yes	
MW-30S	06/14/94	629.90	632.91	615.20	605.20	NP	0.00	14.78	11.77	618.13	Yes	
MW-30S	07/21/94	629.90	632.91	615.20	605.20	NP	0.00	15.25	12.24	617.66	Yes	
MW-30S	08/30/94	629.90	632.91	615.20	605.20	NP	0.00	16.59	13.58	616.32	Yes	
MW-30S	10/25/94	629.90	632.91	615.20	605.20	NP	0.00	15.85	12.84	617.06	Yes	
MW-30S	10/28/94	629.90	632.91	615.20	605.20	NP	0.00	15.25	12.24	617.66	Yes	
MW-30S	02/01/95	629.90	632.91	615.20	605.20	NP	0.00	18.20	15.19	614.71	No	
MW-30S	04/04/95	629.90	632.91	615.20	605.20	NP	0.00	17.78	14.77	615.13	No	
MW-30S	07/12/95	629.90	632.91	615.20	605.20	NP	0.00	16.61	13.60	616.30	Yes	
MW-30S	08/18/95	629.90	632.91	615.20	605.20	NP	0.00	17.28	14.27	615.63	Yes	
MW-30S	11/13/95	629.90	632.91	615.20	605.20	NP	0.00	14.80	11.79	618.11	Yes	
MW-30S	03/13/96	629.90	632.91	615.20	605.20	NP	0.00	17.55	14.54	615.36	Yes	
MW-30S	04/22/96	629.90	632.91	615.20	605.20	NP	0.00	14.92	11.91	617.99	Yes	
MW-30S	10/08/96	629.90	632.91	615.20	605.20	NP	0.00	14.22	11.21	618.69	Yes	
MW-30S	04/29/97	629.90	632.91	615.20	605.20	NP	0.00	12.70	9.69	620.21	Yes	
MW-30S	11/03/98	629.90	632.91	615.20	605.20	NP	0.00	17.91	14.90	615.00	No	
MW-30S	04/26/00	629.90	632.91	615.20	605.20	NP	0.00	16.24	13.23	616.67	Yes	
MW-30S	10/10/00	629.90	632.91	615.20	605.20	NP	0.00	17.66	14.65	615.25	Yes	
MW-30S	10/24/01	629.90	632.91	615.20	605.20	NP	0.00	17.67	14.66	615.24	Yes	
MW-30S	01/22/02	629.90	632.91	615.20	605.20	NP	0.00	18.11	15.10	614.80	No	
MW-30S	02/26/02	629.90	632.91	615.20	605.20	NP	0.00	18.53	15.52	614.38	No	
MW-30S	04/23/02	629.90	632.91	615.20	605.20	NP	0.00	17.83	14.82	615.08	No	
MW-30S	08/20/02	629.90	632.91	615.20	605.20	NP	0.00	16.52	13.51	616.39	Yes	
MW-30S	09/30/02	629.90	632.91	615.20	605.20	NP	0.00	16.27	13.26	616.64	Yes	
MW-30S	11/05/02	629.90	632.91	615.20	605.20	NP	0.00	15.53	12.52	617.38	Yes	
MW-30S	12/23/02	629.90	632.91	615.20	605.20	NP	0.00	17.42	14.41	615.49	Yes	
MW-30S	01/28/03	629.90	632.91	615.20	605.20	NP	0.00	18.01	15.00	614.90	No	
MW-30S	02/19/03	629.90	632.91	615.20	605.20	NP	0.00	18.28	15.27	614.63	No	
MW-30S	04/17/03	629.90	632.91	615.20	605.20	NP	0.00	18.78	15.77	614.13	No	
MW-30S	10/20/03	629.90	632.91	615.20	605.20	NP	0.00	18.66	15.65	614.25	No	
MW-30S	12/03/03	629.90	632.91	615.20	605.20	NP	0.00	18.89	15.88	614.02	No	
MW-30S	04/19/04	630.10	633.05	615.20	605.20	NP	0.00	19.23	16.28	613.82	No	
MW-30S	07/28/04	630.10	633.05	615.20	605.20	NP	0.00	17.67	14.72	615.38	Yes	
MW-30S	11/16/04	630.10	633.05	615.20	605.20	NP	0.00	16.50	13.55	616.55	Yes	
MW-30S	04/18/05	630.10	633.05	615.20	605.20	NP	0.00	16.50	13.55	616.55	Yes	
MW-30S	10/11/05	630.10	633.05	615.20	605.20	NP	0.00	16.23	13.28	616.82	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-30S	05/23/06	630.10	633.05	615.20	605.20	NP	0.00	15.05	12.10	618.00	Yes	
MW-30S	10/16/06	630.10	633.05	615.20	605.20	NP	0.00	17.73	14.78	615.32	Yes	
MW-30S	04/23/07	630.10	633.05	615.20	605.20	NP	0.00	18.45	15.50	614.60	No	Water low in well
MW-30S	09/25/07	630.10	633.05	615.20	605.20	NP	0.00	18.52	15.57	614.53	No	
MW-30S	05/01/08	630.10	633.05	615.20	605.20	NP	0.00	15.57	12.62	617.48	Yes	
MW-30S	10/20/08	630.10	633.05	615.20	605.20	NP	0.00	14.84	11.89	618.21	Yes	
MW-30S	04/18/09	630.10	633.05	615.20	605.20	NP	0.00	15.87	12.92	617.18	Yes	
MW-30S	08/31/11	630.10	633.05	615.20	605.20	NP	0.00	14.76	11.81	618.29	Yes	
MW-30S	10/10/11	630.10	633.05	615.20	605.20	NP	0.00	16.19	13.24	616.86	Yes	
MW-30S	01/04/12	630.10	633.05	615.20	605.20	NP	0.00	17.78	14.83	615.27	Yes	
MW-30S	04/16/12	630.10	633.05	615.20	605.20	NP	0.00	18.44	15.49	614.61	No	
MW-30S	06/26/12	630.10	633.05	615.20	605.20	NP	0.00	13.68	10.73	619.37	Yes	
MW-30S	09/30/12	630.10	633.05	615.20	605.20	NP	0.00	17.43	14.48	615.62	Yes	
MW-30S	12/17/12	630.10	633.05	615.20	605.20	NP	0.00	18.28	15.33	614.77	No	
MW-30S	03/25/13	630.10	633.05	615.20	605.20	NP	0.00	18.37	15.42	614.68	No	
MW-30S	05/05/13	630.10	633.05	615.20	605.20	NP	0.00	19.14	16.19	613.91	No	
MW-30S	10/01/13	630.10	633.05	615.20	605.20	NP	0.00	17.94	14.99	615.11	No	
MW-30S	05/21/14	630.10	633.05	615.20	605.20	NP	0.00	14.79	11.84	618.26	Yes	
MW-30S	10/30/14	630.10	633.05	615.20	605.20	NP	0.00	15.75	12.80	617.30	Yes	
MW-30S	05/05/15	630.10	633.05	615.20	605.20	NP	0.00	17.49	14.54	615.56	Yes	
MW-30S	10/07/15	630.10	633.05	615.20	605.20	NP	0.00	15.78	12.83	617.27	Yes	OWLD/ 15.72 NWLD
MW-30S	05/23/16	630.10	633.05	615.20	605.20	NP	0.00	13.09	10.14	619.96	Yes	
MW-30S	10/03/16	630.10	633.05	615.20	605.20	NP	0.00	15.09	12.14	617.96	Yes	
MW-30S	06/29/17	630.10	633.05	615.20	605.20	NP	0.00	14.32	11.37	618.73	Yes	
MW-30S	05/14/18	630.10	633.05	615.20	605.20	NP	0.00	16.00	13.05	617.05	Yes	
MW-30S	06/18/18	630.10	633.05	615.20	605.20	NP	0.00	14.20	11.25	618.85	Yes	
MW-30S	06/27/18	630.10	633.05	615.20	605.20	NP	0.00	14.20	11.25	618.85	Yes	
MW-30D	06/14/94	630.00	633.04	578.29	575.29	NP	0.00	16.85	13.81	616.19	Yes	
MW-30D	07/21/94	630.00	633.04	578.29	575.29	NP	0.00	17.12	14.08	615.92	Yes	
MW-30D	10/25/94	630.00	633.04	578.29	575.29	NP	0.00	17.48	14.44	615.56	Yes	
MW-30D	10/28/94	630.00	633.04	578.29	575.29	NP	0.00	17.08	14.04	615.96	Yes	
MW-30D	04/04/95	630.00	633.04	578.29	575.29	NP	0.00	19.24	16.20	613.80	Yes	
MW-30D	07/12/95	630.00	633.04	578.29	575.29	NP	0.00	18.27	15.23	614.77	Yes	
MW-30D	08/18/95	630.00	633.04	578.29	575.29	NP	0.00	18.95	15.91	614.09	Yes	
MW-30D	11/13/95	630.00	633.04	578.29	575.29	NP	0.00	17.03	13.99	616.01	Yes	
MW-30D	04/22/96	630.00	633.04	578.29	575.29	NP	0.00	17.05	14.01	615.99	Yes	
MW-30D	10/08/96	630.00	633.04	578.29	575.29	NP	0.00	16.20	13.16	616.84	Yes	
MW-30D	04/29/97	630.00	633.04	578.29	575.29	NP	0.00	15.30	12.26	617.74	Yes	
MW-30D	11/03/98	630.00	633.04	578.29	575.29	NP	0.00	19.28	16.24	613.76	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-30D	03/02/99	630.00	633.04	578.29	575.29	NP	0.00	19.25	16.21	613.79	Yes	
MW-30D	04/26/00	630.00	633.04	578.29	575.29	NP	0.00	18.23	15.19	614.81	Yes	
MW-30D	10/10/00	630.00	633.04	578.29	575.29	NP	0.00	19.30	16.26	613.74	Yes	
MW-30D	10/24/01	630.00	633.04	578.29	575.29	NP	0.00	19.20	16.16	613.84	Yes	
MW-30D	04/23/02	630.00	633.04	578.29	575.29	NP	0.00	19.28	16.24	613.76	Yes	
MW-30D	11/05/02	630.00	633.04	578.29	575.29	NP	0.00	17.66	14.62	615.38	Yes	
MW-30D	04/17/03	630.00	633.04	578.29	575.29	NP	0.00	20.23	17.19	612.81	Yes	
MW-30D	10/20/03	630.00	633.04	578.29	575.29	NP	0.00	20.03	16.99	613.01	Yes	
MW-30D	04/19/04	630.15	633.15	578.29	575.29	NP	0.00	20.24	17.24	612.91	Yes	
MW-30D	11/16/04	630.15	633.15	578.29	575.29	NP	0.00	18.33	15.33	614.82	Yes	
MW-30D	04/18/05	630.15	633.15	578.29	575.29	NP	0.00	18.31	15.31	614.84	Yes	
MW-30D	10/11/05	630.15	633.15	578.29	575.29	NP	0.00	18.95	15.95	614.20	Yes	
MW-30D	05/23/06	630.15	633.15	578.29	575.29	NP	0.00	17.37	14.37	615.78	Yes	
MW-30D	10/16/06	630.15	633.15	578.29	575.29	NP	0.00	19.13	16.13	614.02	Yes	
MW-30D	04/23/07	630.15	633.15	578.29	575.29	NP	0.00	19.62	16.62	613.53	Yes	
MW-30D	09/25/07	630.15	633.15	578.29	575.29	NP	0.00	19.69	16.69	613.46	Yes	
MW-30D	05/01/08	630.15	633.15	578.29	575.29	NP	0.00	17.63	14.63	615.52	Yes	
MW-30D	10/20/08	630.15	633.15	578.29	575.29	NP	0.00	16.69	13.69	616.46	Yes	
MW-30D	04/18/09	630.15	633.15	578.29	575.29	NP	0.00	17.84	14.84	615.31	Yes	
MW-30D	08/31/11	630.15	633.15	578.29	575.29	NP	0.00	16.58	13.58	616.57	Yes	
MW-30D	10/10/11	630.15	633.15	578.29	575.29	NP	0.00	17.92	14.92	615.23	Yes	
MW-30D	01/04/12	630.15	633.15	578.29	575.29	NP	0.00	19.22	16.22	613.93	Yes	
MW-30D	04/16/12	630.15	633.15	578.29	575.29	NP	0.00	19.50	16.50	613.65	Yes	
MW-30D	06/26/12	630.15	633.15	578.29	575.29	NP	0.00	16.22	13.22	616.93	Yes	
MW-30D	09/30/12	630.15	633.15	578.29	575.29	NP	0.00	18.99	15.99	614.16	Yes	
MW-30D	12/17/12	630.15	633.15	578.29	575.29	NP	0.00	19.60	16.60	613.55	Yes	
MW-30D	03/25/13	630.15	633.15	578.29	575.29	NP	0.00	20.53	17.53	612.62	Yes	
MW-30D	05/05/13	630.15	633.15	578.29	575.29	NP	0.00	19.52	16.52	613.63	Yes	
MW-30D	10/01/13	630.15	633.15	578.29	575.29	NP	0.00	19.17	16.17	613.98	Yes	
MW-30D	05/21/14	630.15	633.15	578.29	575.29	NP	0.00	16.76	13.76	616.39	Yes	
MW-30D	10/30/14	630.15	633.15	578.29	575.29	NP	0.00	17.26	14.26	615.89	Yes	
MW-30D	05/05/15	630.15	633.15	578.29	575.29	NP	0.00	18.93	15.93	614.22	Yes	
MW-30D	10/07/15	630.15	633.15	578.29	575.29	NP	0.00	17.51	14.51	615.64	Yes	
MW-30D	05/23/16	630.15	633.15	578.29	575.29	NP	0.00	15.53	12.53	617.62	Yes	
MW-30D	10/03/16	630.15	633.15	578.29	575.29	NP	0.00	15.68	12.68	617.47	Yes	
MW-30D	06/14/17	630.15	633.15	578.29	575.29	NP	0.00	15.61	12.61	617.54	Yes	
MW-30D	10/03/17	630.15	633.15	578.29	575.29	NP	0.00	14.55	11.55	618.60	Yes	
MW-30D	05/14/18	630.15	633.15	578.29	575.29	NP	0.00	17.74	14.74	615.41	Yes	
MW-30D	06/18/18	630.15	633.15	578.29	575.29	NP	0.00	16.45	13.45	616.70	Yes	
MW-30D	06/27/18	630.15	633.15	578.29	575.29	NP	0.00	16.30	13.30	616.85	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-30DD	07/12/95	630.00	632.98	548.63	545.63	NP	0.00	18.58	15.60	614.40	Yes	
MW-30DD	08/08/95	630.00	632.98	548.63	545.63	NP	0.00	18.80	15.82	614.18	Yes	
MW-30DD	11/13/95	630.00	632.98	548.63	545.63	NP	0.00	17.05	14.07	615.93	Yes	
MW-30DD	04/22/96	630.00	632.98	548.63	545.63	NP	0.00	17.41	14.43	615.57	Yes	
MW-30DD	10/08/96	630.00	632.98	548.63	545.63	NP	0.00	16.69	13.71	616.29	Yes	
MW-30DD	04/29/97	630.00	632.98	548.63	545.63	NP	0.00	16.45	13.47	616.53	Yes	
MW-30DD	11/03/98	630.00	632.98	548.63	545.63	NP	0.00	19.35	16.37	613.63	Yes	
MW-30DD	03/02/99	630.00	632.98	548.63	545.63	NP	0.00	19.12	16.14	613.86	Yes	
MW-30DD	04/26/00	630.00	632.98	548.63	545.63	NP	0.00	18.17	15.19	614.81	Yes	
MW-30DD	10/10/00	630.00	632.98	548.63	545.63	NP	0.00	19.34	16.36	613.64	Yes	
MW-30DD	04/23/02	630.00	632.98	548.63	545.63	NP	0.00	19.37	16.39	613.61	Yes	
MW-30DD	11/05/02	630.00	632.98	548.63	545.63	NP	0.00	17.86	14.88	615.12	Yes	
MW-30DD	04/17/03	630.00	632.98	548.63	545.63	NP	0.00	20.31	17.33	612.67	Yes	
MW-30DD	10/20/03	630.00	632.98	548.63	545.63	NP	0.00	20.10	17.12	612.88	Yes	Very silty
MW-30DD	04/19/04	630.17	633.05	548.63	545.63	NP	0.00	20.08	17.20	612.97	Yes	Very silty
MW-30DD	11/16/04	630.17	633.05	548.63	545.63	NP	0.00	18.36	15.48	614.69	Yes	
MW-30DD	04/18/05	630.17	633.05	548.63	545.63	NP	0.00	18.92	16.04	614.13	Yes	
MW-30DD	10/11/05	630.17	633.05	548.63	545.63	NP	0.00	18.15	15.27	614.90	Yes	
MW-30DD	05/23/06	630.17	633.05	548.63	545.63	NP	0.00	17.53	14.65	615.52	Yes	
MW-30DD	10/16/06	630.17	633.05	548.63	545.63	NP	0.00	19.12	16.24	613.93	Yes	
MW-30DD	04/23/07	630.17	633.05	548.63	545.63	NP	0.00	19.67	16.79	613.38	Yes	
MW-30DD	09/25/07	630.17	633.05	548.63	545.63	NP	0.00	19.78	16.90	613.27	Yes	
MW-30DD	05/01/08	630.17	633.05	548.63	545.63	NP	0.00	17.93	15.05	615.12	Yes	
MW-30DD	10/20/08	630.17	633.05	548.63	545.63	NP	0.00	16.71	13.83	616.34	Yes	
MW-30DD	04/18/09	630.17	633.05	548.63	545.63	NP	0.00	18.05	15.17	615.00	Yes	
MW-30DD	08/31/11	630.17	633.05	548.63	545.63	NP	0.00	16.46	13.58	616.59	Yes	
MW-30DD	10/10/11	630.17	633.05	548.63	545.63	NP	0.00	17.85	14.97	615.20	Yes	
MW-30DD	01/04/12	630.17	633.05	548.63	545.63	NP	0.00	19.34	16.46	613.71	Yes	
MW-30DD	04/16/12	630.17	633.05	548.63	545.63	NP	0.00	19.57	16.69	613.48	Yes	
MW-30DD	06/26/12	630.17	633.05	548.63	545.63	NP	0.00	16.51	13.63	616.54	Yes	
MW-30DD	09/30/12	630.17	633.05	548.63	545.63	NP	0.00	19.13	16.25	613.92	Yes	
MW-30DD	12/17/12	630.17	633.05	548.63	545.63	NP	0.00	19.71	16.83	613.34	Yes	
MW-30DD	03/25/13	630.17	633.05	548.63	545.63	NP	0.00	20.49	17.61	612.56	Yes	
MW-30DD	05/05/13	630.17	633.05	548.63	545.63	NP	0.00	19.58	16.70	613.47	Yes	
MW-30DD	10/01/13	630.17	633.05	548.63	545.63	NP	0.00	19.25	16.37	613.80	Yes	
MW-30DD	05/20/14	630.17	633.05	548.63	545.63	NP	0.00	17.01	14.13	616.04	Yes	
MW-30DD	10/31/14	630.17	633.05	548.63	545.63	NP	0.00	17.53	14.65	615.52	Yes	
MW-30DD	05/04/15	630.17	633.05	548.63	545.63	NP	0.00	19.03	16.15	614.02	Yes	
MW-30DD	10/05/15	630.17	633.05	548.63	545.63	NP	0.00	17.26	14.38	615.79	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-30DD	05/23/16	630.17	633.05	548.63	545.63	NP	0.00	15.71	12.83	617.34	Yes	
MW-30DD	10/03/16	630.17	633.05	548.63	545.63	NP	0.00	16.83	13.95	616.22	Yes	
MW-30DD	06/29/17	630.17	633.05	548.63	545.63	NP	0.00	16.29	13.41	616.76	Yes	
MW-30DD	06/18/18	630.17	633.05	548.63	545.63	NP	0.00	16.70	13.82	616.35	Yes	
MW-30DDD	06/18/18	630.10	632.74	534.10	531.10	NP	0.00	16.38	13.74	616.36	Yes	
MW-30DDD	06/27/18	630.10	632.74	534.10	531.10	NP	0.00	16.27	13.63	616.47	Yes	
MW-33	08/06/91	630.40	632.74	616.84	606.84	NP	0.00	12.78	10.44	619.96	Yes	
MW-33	10/08/91	630.40	632.74	616.84	606.84	NP	0.00	13.22	10.88	619.52	Yes	
MW-33	01/07/92	630.40	632.74	616.84	606.84	NP	0.00	14.29	11.95	618.45	Yes	
MW-33	10/14/92	630.40	632.74	616.84	606.84	NP	0.00	15.49	13.15	617.25	Yes	
MW-33	06/25/93	630.40	632.74	616.84	606.84	NP	0.00	9.70	7.36	623.04	Yes	
MW-33	10/28/93	630.40	632.74	616.84	606.84	NP	0.00	15.78	13.44	616.96	Yes	
MW-33	01/29/94	630.40	632.74	616.84	606.84	NP	0.00	16.86	14.52	615.88	No	
MW-33	04/27/94	630.40	632.74	616.84	606.84	NP	0.00	15.19	12.85	617.55	Yes	
MW-33	07/21/94	630.40	632.74	616.84	606.84	NP	0.00	14.97	12.63	617.77	Yes	
MW-33	10/25/94	630.40	632.74	616.84	606.84	NP	0.00	15.91	13.57	616.83	No	
MW-33	10/28/94	630.40	632.74	616.84	606.84	NP	0.00	15.62	13.28	617.12	Yes	
MW-33	02/01/95	630.40	632.74	616.84	606.84	NP	0.00	17.62	15.28	615.12	No	
MW-33	04/04/95	630.40	632.74	616.84	606.84	NP	0.00	17.55	15.21	615.19	No	
MW-33	07/12/95	630.40	632.74	616.84	606.84	NP	0.00	16.45	14.11	616.29	No	
MW-33	11/13/95	630.40	632.74	616.84	606.84	NP	0.00	14.76	12.42	617.98	Yes	
MW-33	03/13/96	630.40	632.74	616.84	606.84	NP	0.00	17.60	15.26	615.14	No	
MW-33	04/22/96	630.40	632.74	616.84	606.84	NP	0.00	14.37	12.03	618.37	Yes	
MW-33	10/08/96	630.40	632.74	616.84	606.84	NP	0.00	14.29	11.95	618.45	Yes	
MW-33	04/29/97	630.40	632.74	616.84	606.84	NP	0.00	12.35	10.01	620.39	Yes	
MW-33	11/03/98	630.40	632.74	616.84	606.84	NP	0.00	18.09	15.75	614.65	No	
MW-33	03/02/99	630.40	632.74	616.84	606.84	NP	0.00	18.00	15.66	614.74	No	
MW-33	04/26/00	630.40	632.74	616.84	606.84	NP	0.00	15.92	13.58	616.82	No	
MW-33	04/24/01	630.40	632.74	616.84	606.84	NP	0.00	16.57	14.23	616.17	No	
MW-33	10/23/01	630.40	632.74	616.84	606.84	NP	0.00	17.74	15.40	615.00	No	
MW-33	04/23/02	630.40	632.74	616.84	606.84	NP	0.00	17.85	15.51	614.89	No	
MW-33	08/20/02	630.40	632.74	616.84	606.84	NP	0.00	16.47	14.13	616.27	No	
MW-33	11/05/02	630.40	632.74	616.84	606.84	NP	0.00	15.54	13.20	617.20	Yes	
MW-33	12/23/02	630.40	632.74	616.84	606.84	NP	0.00	17.17	14.83	615.57	No	
MW-33	01/28/03	630.40	632.74	616.84	606.84	NP	0.00	17.80	15.46	614.94	No	
MW-33	02/19/03	630.40	632.74	616.84	606.84	NP	0.00	18.18	15.84	614.56	No	
MW-33	04/17/03	630.40	632.74	616.84	606.84	NP	0.00	18.80	16.46	613.94	No	
MW-33	10/20/03	630.40	632.74	616.84	606.84	NP	0.00	18.66	16.32	614.08	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-33	12/03/03	630.40	632.74	616.84	606.84	NP	0.00	18.95	16.61	613.79	No	
MW-33	04/19/04	630.61	632.85	616.84	606.84	NP	0.00	19.00	16.76	613.85	No	
MW-33	07/28/04	630.61	632.85	616.84	606.84	NP	0.00	17.45	15.21	615.40	No	
MW-33	11/16/04	630.61	632.85	616.84	606.84	NP	0.00	16.44	14.20	616.41	No	
MW-33	04/18/05	630.61	632.85	616.84	606.84	NP	0.00	16.48	14.24	616.37	No	
MW-33	10/11/05	630.61	632.85	616.84	606.84	NP	0.00	16.25	14.01	616.60	No	
MW-33	05/23/06	630.61	632.85	616.84	606.84	NP	0.00	14.54	12.30	618.31	Yes	
MW-33	10/16/06	630.61	632.85	616.84	606.84	NP	0.00	17.79	15.55	615.06	No	
MW-33	04/23/07	630.61	632.85	616.84	606.84	NP	0.00	18.24	16.00	614.61	No	
MW-33	09/25/07	630.61	632.85	616.84	606.84	NP	0.00	18.51	16.27	614.34	No	
MW-33	05/01/08	630.61	632.85	616.84	606.84	NP	0.00	14.95	12.71	617.90	Yes	
MW-33	10/20/08	630.61	632.85	616.84	606.84	NP	0.00	14.82	12.58	618.03	Yes	
MW-33	08/31/11	630.61	632.85	616.84	606.84	NP	0.00	14.33	12.09	618.52	Yes	
MW-33	10/10/11	630.61	632.85	616.84	606.84	NP	0.00	15.86	13.62	616.99	Yes	
MW-33	01/04/12	630.61	632.85	616.84	606.84	NP	0.00	17.56	15.32	615.29	No	
MW-33	04/16/12	630.61	632.85	616.84	606.84	NP	0.00	18.23	15.99	614.62	No	
MW-33	06/26/12	630.61	632.85	616.84	606.84	NP	0.00	12.72	10.48	620.13	Yes	
MW-33	09/30/12	630.61	632.85	616.84	606.84	NP	0.00	17.14	14.90	615.71	No	
MW-33	12/17/12	630.61	632.85	616.84	606.84	NP	0.00	18.20	15.96	614.65	No	
MW-33	03/25/13	630.61	632.85	616.84	606.84	NP	0.00	19.10	16.86	613.75	No	
MW-33	05/05/13	630.61	632.85	616.84	606.84	NP	0.00	18.19	15.95	614.66	No	
MW-33	05/20/14	630.61	632.85	616.84	606.84	NP	0.00	13.87	11.63	618.98	Yes	
MW-33	10/29/14	630.61	632.85	616.84	606.84	NP	0.00	15.40	13.16	617.45	Yes	
MW-33	05/06/15	630.61	632.85	616.84	606.84	NP	0.00	17.27	15.03	615.58	No	
MW-33	10/05/05	630.61	632.85	616.84	606.84	NP	0.00	16.76	14.52	616.09	No	
MW-33	05/23/16	630.61	632.85	616.84	606.84	NP	0.00	12.49	10.25	620.36	Yes	
MW-33	10/03/16	630.61	632.85	616.84	606.84	NP	0.00	15.07	12.83	617.78	Yes	
MW-33	06/29/17	630.61	632.85	616.84	606.84	NP	0.00	13.68	11.44	619.17	Yes	
MW-34	08/06/91	627.70	629.37	608.97	598.97	NP	0.00	12.55	10.88	616.82	Yes	
MW-34	10/08/91	627.70	629.37	608.97	598.97	NP	0.00	12.55	10.88	616.82	Yes	
MW-34	01/07/92	627.70	629.37	608.97	598.97	NP	0.00	12.99	11.32	616.38	Yes	
MW-34	10/14/92	627.70	629.37	608.97	598.97	NP	0.00	13.47	11.80	615.90	Yes	
MW-34	06/25/93	627.70	629.37	608.97	598.97	NP	0.00	10.32	8.65	619.05	Yes	
MW-34	10/28/93	627.70	629.37	608.97	598.97	NP	0.00	13.80	12.13	615.57	Yes	
MW-34	01/29/94	627.70	629.37	608.97	598.97	NP	0.00	14.41	12.74	614.96	Yes	
MW-34	04/27/94	627.70	629.37	608.97	598.97	NP	0.00	13.05	11.38	616.32	Yes	
MW-34	07/21/94	627.70	629.37	608.97	598.97	NP	0.00	13.17	11.50	616.20	Yes	
MW-34	10/25/94	627.70	629.37	608.97	598.97	NP	0.00	13.58	11.91	615.79	Yes	
MW-34	10/28/94	627.70	629.37	608.97	598.97	NP	0.00	13.34	11.67	616.03	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-34	04/04/95	627.70	629.37	608.97	598.97	NP	0.00	15.93	14.26	613.44	Yes	
MW-34	11/13/95	627.70	629.37	608.97	598.97	NP	0.00	12.73	11.06	616.64	Yes	
MW-34	04/22/96	627.70	629.37	608.97	598.97	NP	0.00	12.41	10.74	616.96	Yes	
MW-34	10/08/96	627.70	629.37	608.97	598.97	NP	0.00	12.87	11.20	616.50	Yes	
MW-34	04/29/97	627.70	629.37	608.97	598.97	NP	0.00	11.60	9.93	617.77	Yes	
MW-34	11/03/98	627.70	629.37	608.97	598.97	NP	0.00	15.20	13.53	614.17	Yes	
MW-34	03/02/99	627.70	629.37	608.97	598.97	NP	0.00	15.28	13.61	614.09	Yes	
MW-34	04/26/00	627.70	629.37	608.97	598.97	NP	0.00	13.67	12.00	615.70	Yes	
MW-34	10/10/00	627.70	629.37	608.97	598.97	NP	0.00	14.89	13.22	614.48	Yes	
MW-34	10/23/01	627.70	629.37	608.97	598.97	NP	0.00	15.09	13.42	614.28	Yes	
MW-34	04/23/02	627.70	629.37	608.97	598.97	NP	0.00	14.92	13.25	614.45	Yes	
MW-34	11/05/02	627.70	629.37	608.97	598.97	NP	0.00	13.15	11.48	616.22	Yes	
MW-34	04/17/03	627.70	629.37	608.97	598.97	NP	0.00	15.90	14.23	613.47	Yes	
MW-34	10/20/03	627.70	629.37	608.97	598.97	NP	0.00	15.64	13.97	613.73	Yes	
MW-34	04/19/04	627.72	629.45	608.97	598.97	NP	0.00	15.72	13.99	613.73	Yes	
MW-34	11/16/04	627.72	629.45	608.97	598.97	NP	0.00	13.47	11.74	615.98	Yes	
MW-34	04/18/05	627.72	629.45	608.97	598.97	NP	0.00	13.73	12.00	615.72	Yes	
MW-34	10/11/05	627.72	629.45	608.97	598.97	NP	0.00	13.51	11.78	615.94	Yes	
MW-34	05/23/06	627.72	629.45	608.97	598.97	NP	0.00	12.88	11.15	616.57	Yes	
MW-34	10/16/06	627.72	629.45	608.97	598.97	NP	0.00	14.99	13.26	614.46	Yes	
MW-34	04/23/07	627.72	629.45	608.97	598.97	NP	0.00	15.50	13.77	613.95	Yes	
MW-34	09/25/07	627.72	629.45	608.97	598.97	NP	0.00	15.42	13.69	614.03	Yes	
MW-34	05/01/08	627.72	629.45	608.97	598.97	NP	0.00	13.04	11.31	616.41	Yes	
MW-34	10/20/08	627.72	629.45	608.97	598.97	NP	0.00	12.76	11.03	616.69	Yes	
MW-34	04/18/09	627.72	629.45	608.97	598.97	NP	0.00	13.78	12.05	615.67	Yes	
MW-34	10/11/09	627.72	629.45	608.97	598.97	NP	0.00	14.88	13.15	614.57	Yes	
MW-34	04/28/10	627.72	629.45	608.97	598.97	NP	0.00	14.83	13.10	614.62	Yes	
MW-34	10/25/10	627.72	629.45	608.97	598.97	NP	0.00	13.44	11.71	616.01	Yes	
MW-34	04/25/11	627.72	629.45	608.97	598.97	NP	0.00	13.78	12.05	615.67	Yes	
MW-34	10/10/11	627.72	629.45	608.97	598.97	NP	0.00	13.99	12.26	615.46	Yes	
MW-34	01/04/12	627.72	629.45	608.97	598.97	NP	0.00	15.14	13.41	614.31	Yes	
MW-34	04/16/12	627.72	629.45	608.97	598.97	NP	0.00	15.78	14.05	613.67	Yes	
MW-34	06/26/12	627.72	629.45	608.97	598.97	NP	0.00	12.29	10.56	617.16	Yes	
MW-34	09/30/12	627.72	629.45	608.97	598.97	NP	0.00	14.82	13.09	614.63	Yes	
MW-34	12/17/12	627.72	629.45	608.97	598.97	NP	0.00	15.62	13.89	613.83	Yes	
MW-34	05/05/13	627.72	629.45	608.97	598.97	NP	0.00	15.64	13.91	613.81	Yes	
MW-34	10/01/13	627.72	629.45	608.97	598.97	NP	0.00	14.90	13.17	614.55	Yes	
MW-34	05/20/14	627.72	629.45	608.97	598.97	NP	0.00	11.74	10.01	617.71	Yes	
MW-34	10/29/14	627.72	629.45	608.97	598.97	NP	0.00	13.43	11.70	616.02	Yes	
MW-34	05/06/15	627.72	629.45	608.97	598.97	NP	0.00	14.58	12.85	614.87	Yes	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-34	10/06/15	627.72	629.45	608.97	598.97	NP	0.00	13.10	11.37	616.35	Yes	
MW-34	05/23/16	627.72	629.45	608.97	598.97	NP	0.00	12.02	10.29	617.43	Yes	
MW-34	10/03/16	627.72	629.45	608.97	598.97	NP	0.00	13.18	11.45	616.27	Yes	
MW-34	06/29/17	627.72	629.45	608.97	598.97	NP	0.00	12.71	10.98	616.74	Yes	
MW-35	08/06/91	637.20	639.58	619.08	609.08	NP	0.00	16.96	14.58	622.62	Yes	
MW-35	10/08/91	637.20	639.58	619.08	609.08	NP	0.00	16.85	14.47	622.73	Yes	
MW-35	01/07/92	637.20	639.58	619.08	609.08	NP	0.00	17.28	14.90	622.30	Yes	
MW-35	10/14/92	637.20	639.58	619.08	609.08	NP	0.00	17.59	15.21	621.99	Yes	
MW-35	06/25/93	637.20	639.58	619.08	609.08	NP	0.00	14.39	12.01	625.19	Yes	
MW-35	10/28/93	637.20	639.58	619.08	609.08	NP	0.00	18.09	15.71	621.49	Yes	
MW-35	01/29/94	637.20	639.58	619.08	609.08	NP	0.00	19.41	17.03	620.17	Yes	
MW-35	04/27/94	637.20	639.58	619.08	609.08	NP	0.00	17.43	15.05	622.15	Yes	
MW-35	07/21/94	637.20	639.58	619.08	609.08	NP	0.00	17.35	14.97	622.23	Yes	
MW-35	10/25/94	637.20	639.58	619.08	609.08	NP	0.00	17.35	14.97	622.23	Yes	
MW-35	10/28/94	637.20	639.58	619.08	609.08	NP	0.00	16.93	14.55	622.65	Yes	
MW-35	02/01/95	637.20	639.58	619.08	609.08	NP	0.00	19.91	17.53	619.67	Yes	
MW-35	04/04/95	637.20	639.58	619.08	609.08	NP	0.00	20.35	17.97	619.23	Yes	
MW-35	07/12/95	637.20	639.58	619.08	609.08	NP	0.00	18.88	16.50	620.70	Yes	
MW-35	11/13/95	637.20	639.58	619.08	609.08	NP	0.00	17.05	14.67	622.53	Yes	
MW-35	03/13/96	637.20	639.58	619.08	609.08	NP	0.00	20.22	17.84	619.36	Yes	
MW-35	04/22/96	637.20	639.58	619.08	609.08	NP	0.00	17.12	14.74	622.46	Yes	
MW-35	10/08/96	637.20	639.58	619.08	609.08	NP	0.00	16.83	14.45	622.75	Yes	
MW-35	04/29/97	637.20	639.58	619.08	609.08	NP	0.00	13.95	11.57	625.63	Yes	
MW-35	11/03/98	637.20	639.58	619.08	609.08	NP	0.00	19.91	17.53	619.67	Yes	
MW-35	03/02/99	637.20	639.58	619.08	609.08	NP	0.00	21.59	19.21	617.99	No	
MW-35	04/26/00	637.20	639.58	619.08	609.08	NP	0.00	18.59	16.21	620.99	Yes	
MW-35	10/10/00	637.20	639.58	619.08	609.08	NP	0.00	21.90	19.52	617.68	No	
MW-35	10/23/01	637.20	639.58	619.08	609.08	NP	0.00	20.22	17.84	619.36	Yes	
MW-35	01/22/02	637.20	641.16	619.08	609.08	NP	0.00	22.09	18.13	619.07	No	
MW-35	02/26/02	637.20	641.16	619.08	609.08	NP	0.00	22.85	18.89	618.31	No	
MW-35	03/20/02	637.20	641.16	619.08	609.08	NP	0.00	23.07	19.11	618.09	No	
MW-35	04/23/02	637.20	641.16	619.08	609.08	NP	0.00	21.59	17.63	619.57	Yes	
MW-35	05/15/02	637.20	639.58	619.08	609.08	NP	0.00	18.47	16.09	621.11	Yes	
MW-35	08/20/02	637.20	639.58	619.08	609.08	NP	0.00	19.30	16.92	620.28	Yes	
MW-35	09/30/02	637.20	639.58	619.08	609.08	NP	0.00	18.78	16.40	620.80	Yes	
MW-35	11/05/02	637.20	639.58	619.08	609.08	NP	0.00	19.82	17.44	619.76	Yes	
MW-35	12/23/02	637.20	639.58	619.08	609.08	NP	0.00	21.83	19.45	617.75	No	
MW-35	01/28/03	637.20	639.58	619.08	609.08	NP	0.00	22.56	20.18	617.02	No	
MW-35	02/19/03	637.20	639.58	619.08	609.08	NP	0.00	23.12	20.74	616.46	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MW-35	04/17/03	637.20	639.58	619.08	609.08	NP	0.00	21.72	19.34	617.86	No	
MW-35	06/10/03	637.20	641.16	619.08	609.08	NP	0.00	22.07	18.11	619.09	Yes	
MW-35	10/20/03	637.20	641.16	619.08	609.08	NP	0.00	21.27	17.31	619.89	Yes	
MW-35	12/03/03	637.20	641.16	619.08	609.08	NP	0.00	23.21	19.25	617.95	No	
MW-35	04/19/04	637.55	639.74	619.08	609.08	NP	0.00	23.41	21.22	616.33	No	
MW-35	07/28/04	637.55	639.74	619.08	609.08	NP	0.00	20.06	17.87	619.68	Yes	
MW-35	11/16/04	637.55	639.74	619.08	609.08	NP	0.00	20.68	18.49	619.06	No	
MW-35	04/18/05	637.55	639.74	619.08	609.08	NP	0.00	21.63	19.44	618.11	No	
MW-35	10/11/05	637.55	639.74	619.08	609.08	NP	0.00	19.12	16.93	620.62	Yes	
MW-35	05/23/06	637.55	639.74	619.08	609.08	NP	0.00	17.97	15.78	621.77	Yes	
MW-35	10/16/06	637.55	639.74	619.08	609.08	NP	0.00	19.97	17.78	619.77	Yes	
MW-35	04/23/07	637.55	639.74	619.08	609.08	NP	0.00	21.26	19.07	618.48	No	
MW-35	09/25/07	637.55	639.74	619.08	609.08	NP	0.00	20.70	18.51	619.04	No	
MW-35	05/01/08	637.55	639.74	619.08	609.08	NP	0.00	18.73	16.54	621.01	Yes	
MW-35	10/20/08	637.55	639.74	619.08	609.08	NP	0.00	17.16	14.97	622.58	Yes	
MW-35	04/18/09	637.55	639.74	619.08	609.08	NP	0.00	19.34	17.15	620.40	Yes	
MW-35	10/11/09	637.55	639.74	619.08	609.08	NP	0.00	20.20	18.01	619.54	Yes	
MW-35	04/28/10	637.55	639.74	619.08	609.08	NP	0.00	20.26	18.07	619.48	Yes	
MW-35	10/25/10	637.55	639.74	619.08	609.08	NP	0.00	18.24	16.05	621.50	Yes	
MW-35	04/25/11	637.55	639.74	619.08	609.08	NP	0.00	19.61	17.42	620.13	Yes	
MW-35	10/10/11	637.55	639.74	619.08	609.08	NP	0.00	19.75	17.56	619.99	Yes	
MW-35	01/04/12	637.55	639.74	619.08	609.08	NP	0.00	21.18	18.99	618.56	No	
MW-35	04/16/12	637.55	639.74	619.08	609.08	NP	0.00	21.24	19.05	618.50	No	
MW-35	06/26/12	637.55	639.74	619.08	609.08	NP	0.00	17.50	15.31	622.24	Yes	
MW-35	09/30/12	637.55	639.74	619.08	609.08	NP	0.00	21.04	18.85	618.70	No	
MW-35	12/17/12	637.55	639.74	619.08	609.08	NP	0.00	21.53	19.34	618.21	No	
MW-35	03/25/13	637.55	639.74	619.08	609.08	NP	0.00	22.92	20.73	616.82	No	
MW-35	05/05/13	637.55	639.74	619.08	609.08	NP	0.00	21.67	19.48	618.07	No	
MW-35	10/01/13	637.55	639.74	619.08	609.08	NP	0.00	21.10	18.91	618.64	No	
MW-35	05/20/14	637.55	639.74	619.08	609.08	NP	0.00	18.50	16.31	621.24	Yes	
MW-35	10/29/14	637.55	639.74	619.08	609.08	NP	0.00	19.17	16.98	620.57	Yes	
MW-35	05/06/15	637.55	639.74	619.08	609.08	NP	0.00	21.75	19.56	617.99	No	
MW-35	10/06/15	637.55	639.74	619.08	609.08	NP	0.00	18.80	16.61	620.94	Yes	
MW-35	05/23/16	637.55	639.74	619.08	609.08	NP	0.00	16.94	14.75	622.80	Yes	
MW-35	10/03/16	637.55	639.74	619.08	609.08	NP	0.00	18.34	16.15	621.40	Yes	
MW-35	06/29/17	637.55	639.74	619.08	609.08	NP	0.00	17.96	15.77	621.78	Yes	
MW-47	10/03/16	630.30	632.46	618.30	608.30	NP	0.00	16.08	13.92	616.38	No	
MW-47	06/29/17	630.30	632.46	618.30	608.30	NP	0.00	15.90	13.74	616.56	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MWT-2S	10/21/03	630.07	632.65	620.70	605.70	NP	0.00	18.76	16.18	613.89	No	
MWT-2S	01/20/04	630.07	632.65	620.70	605.70	NP	0.00	19.35	16.77	613.30	No	
MWT-2S	04/19/04	630.07	632.65	620.70	605.70	NP	0.00	19.04	16.46	613.61	No	
MWT-2S	07/27/04	630.07	632.65	620.70	605.70	NP	0.00	17.71	15.13	614.94	No	
MWT-2S	11/16/04	630.07	632.65	620.70	605.70	NP	0.00	16.60	14.02	616.05	No	
MWT-2S	04/18/05	630.07	632.65	620.70	605.70	NP	0.00	16.65	14.07	616.00	No	
MWT-2S	10/11/05	630.07	632.65	620.70	605.70	NP	0.00	16.16	13.58	616.49	No	
MWT-2S	05/23/06	630.07	632.65	620.70	605.70	NP	0.00	15.07	12.49	617.58	No	
MWT-2S	10/16/06	630.07	632.65	620.70	605.70	NP	0.00	17.93	15.35	614.72	No	
MWT-2S	04/23/07	630.07	632.65	620.70	605.70	NP	0.00	18.46	15.88	614.19	No	
MWT-2S	09/25/07	630.07	632.52	620.70	605.70	NP	0.00	18.42	15.97	614.10	No	
MWT-2S	05/01/08	630.07	632.52	620.70	605.70	NP	0.00	15.80	13.35	616.72	No	
MWT-2S	10/20/08	630.07	632.52	620.70	605.70	NP	0.00	14.78	12.33	617.74	No	
MWT-2S	08/31/11	630.07	632.52	620.70	605.70	NP	0.00	14.77	12.32	617.75	No	
MWT-2S	10/10/11	630.07	632.52	620.70	605.70	NP	0.00	16.23	13.78	616.29	No	
MWT-2S	01/04/12	630.07	632.52	620.70	605.70	NP	0.00	17.75	15.30	614.77	No	
MWT-2S	04/16/12	630.07	632.52	620.70	605.70	NP	0.00	18.29	15.84	614.23	No	
MWT-2S	06/26/12	630.07	632.52	620.70	605.70	NP	0.00	13.47	11.02	619.05	No	
MWT-2S	09/30/12	630.07	632.52	620.70	605.70	NP	0.00	17.39	14.94	615.13	No	
MWT-2S	12/17/12	630.07	632.52	620.70	605.70	NP	0.00	18.29	15.84	614.23	No	
MWT-2S	03/25/13	630.07	632.52	620.70	605.70	NP	0.00	19.21	16.76	613.31	No	
MWT-2S	05/05/13	630.07	632.52	620.70	605.70	NP	0.00	18.26	15.81	614.26	No	
MWT-2S	05/20/14	630.07	632.52	620.70	605.70	NP	0.00	14.30	11.85	618.22	No	
MWT-2S	10/31/14	630.07	632.52	620.70	605.70	NP	0.00	15.89	13.44	616.63	No	
MWT-2S	05/06/15	630.07	632.52	620.70	605.70	NP	0.00	17.21	14.76	615.31	No	
MWT-2S	10/05/15	630.07	632.52	620.70	605.70	NP	0.00	15.64	13.19	616.88	No	
MWT-2S	05/23/16	630.07	632.52	620.70	605.70	NP	0.00	13.09	10.64	619.43	No	
MWT-2S	10/03/16	630.07	632.52	620.70	605.70	NP	0.00	15.30	12.85	617.22	No	
MWT-2S	06/29/17	630.07	632.52	620.70	605.70	NP	0.00	14.16	11.71	618.36	No	
MWT-2D	10/21/03	630.05	632.47	577.85	572.85	NP	0.00	19.79	17.37	612.68	Yes	
MWT-2D	01/20/04	630.05	632.47	577.85	572.85	NP	0.00	20.45	18.03	612.02	Yes	
MWT-2D	04/19/04	630.05	632.47	577.85	572.85	NP	0.00	19.94	17.52	612.53	Yes	
MWT-2D	07/27/04	630.05	632.47	577.85	572.85	NP	0.00	18.99	16.57	613.48	Yes	
MWT-2D	11/16/04	630.05	632.47	577.85	572.85	NP	0.00	18.14	15.72	614.33	Yes	
MWT-2D	04/18/05	630.05	632.47	577.85	572.85	NP	0.00	18.46	16.04	614.01	Yes	
MWT-2D	10/11/05	630.05	632.47	577.85	572.85	NP	0.00	17.79	15.37	614.68	Yes	
MWT-2D	05/23/06	630.05	632.47	577.85	572.85	NP	0.00	17.18	14.76	615.29	Yes	
MWT-2D	10/16/06	630.05	632.47	577.85	572.85	NP	0.00	18.96	16.54	613.51	Yes	
MWT-2D	04/23/07	630.05	632.47	577.85	572.85	NP	0.00	19.37	16.95	613.10	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MWT-2D	05/01/08	630.05	632.47	577.85	572.85	NP	0.00	17.60	15.18	614.87	Yes	
MWT-2D	10/20/08	630.05	632.47	577.85	572.85	NP	0.00	16.59	14.17	615.88	Yes	
MWT-2D	08/31/11	630.05	632.47	577.85	572.85	NP	0.00	16.47	14.05	616.00	Yes	
MWT-2D	10/10/11	630.05	632.47	577.85	572.85	NP	0.00	17.69	15.27	614.78	Yes	
MWT-2D	01/04/12	630.05	632.47	577.85	572.85	NP	0.00	18.99	16.57	613.48	Yes	
MWT-2D	04/16/12	630.05	632.47	577.85	572.85	NP	0.00	19.23	16.81	613.24	Yes	
MWT-2D	06/26/12	630.05	632.47	577.85	572.85	NP	0.00	16.02	13.60	616.45	Yes	
MWT-2D	09/30/12	630.05	632.47	577.85	572.85	NP	0.00	18.76	16.34	613.71	Yes	
MWT-2D	12/17/12	630.05	632.47	577.85	572.85	NP	0.00	19.37	16.95	613.10	Yes	
MWT-2D	03/25/13	630.05	632.47	577.85	572.85	NP	0.00	20.27	17.85	612.20	Yes	
MWT-2D	10/03/13	630.05	632.47	577.85	572.85	NP	0.00	18.93	16.51	613.54	Yes	
MWT-2D	05/21/14	630.05	632.47	577.85	572.85	NP	0.00	16.53	14.11	615.94	Yes	
MWT-2D	10/30/14	630.05	632.47	577.85	572.85	NP	0.00	17.08	14.66	615.39	Yes	
MWT-2D	05/05/15	630.05	632.47	577.85	572.85	NP	0.00	18.63	16.21	613.84	Yes	
MWT-2D	10/07/15	630.05	630.05	577.85	572.85	NP	0.00	17.02	17.02	613.03	Yes	
MWT-2D	05/23/16	630.05	632.47	577.85	572.85	NP	0.00	15.38	12.96	617.09	Yes	
MWT-2D	10/03/16	630.05	632.47	577.85	572.85	NP	0.00	16.52	14.10	615.95	Yes	
MWT-2D	06/14/17	630.05	632.47	577.85	572.85	NP	0.00	15.47	13.05	617.00	Yes	
MWT-2D	10/03/17	630.05	632.47	577.85	572.85	NP	0.00	14.43	12.01	618.04	Yes	
MWT-2D	06/18/18	630.05	632.47	577.85	572.85	NP	0.00	16.22	13.80	616.25	Yes	
MWT-2D	06/27/18	630.05	632.47	577.85	572.85	NP	0.00	16.12	13.70	616.35	Yes	
MWT-6	10/23/03	635.01	637.51	623.01	613.01	21.98	0.59	22.57	19.61	615.40	No	
MWT-6	04/19/04	635.01	637.51	623.01	613.01	22.03	1.93	23.96	19.97	615.04	No	
MWT-6	11/15/04	635.01	637.51	623.01	613.01	20.34	1.71	22.05	18.23	616.78	No	
MWT-6	04/18/05	635.01	637.51	623.01	613.01	20.35	3.59	23.94	18.66	616.35	No	
MWT-6	10/11/05	635.01	637.51	623.01	613.01	NP	0.00	20.20	17.70	617.31	No	
MWT-6	05/23/06	635.01	637.51	623.01	613.01	NP	0.00	19.50	17.00	618.01	No	Sheen
MWT-6	10/16/06	635.01	637.51	623.01	613.01	20.56	0.12	20.68	18.09	616.92	No	Sheen
MWT-6	04/23/07	635.01	637.51	623.01	613.01	21.61	0.21	21.82	19.16	615.85	No	
MWT-6	09/25/07	635.01	637.40	623.01	613.01	21.56	3.45	25.01	19.95	615.06	No	
MWT-6	05/01/08	635.01	637.40	623.01	613.01	21.33	1.11	22.44	19.19	615.82	No	
MWT-6	10/20/08	635.01	637.40	623.01	613.01	NP	0.00	19.99	17.60	617.41	No	WT rise
MWT-6	04/18/09	635.01	637.40	623.01	613.01	NP	0.00	20.67	18.28	616.73	No	
MWT-6	08/04/09	635.01	637.40	623.01	613.01	NP	0.00	21.05	18.66	616.35	No	
MWT-6	08/05/09	635.01	637.40	623.01	613.01	NP	0.00	21.05	18.66	616.35	No	
MWT-6	08/13/09	635.01	637.40	623.01	613.01	NP	0.00	21.03	18.64	616.37	No	
MWT-6	08/18/09	635.01	637.40	623.01	613.01	NP	0.00	21.05	18.66	616.35	No	
MWT-6	08/26/09	635.01	637.40	623.01	613.01	NP	0.00	20.95	18.56	616.45	No	
MWT-6	09/03/09	635.01	637.40	623.01	613.01	NP	0.00	20.75	18.36	616.65	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MWT-6	09/08/09	635.01	637.40	623.01	613.01	NP	0.00	20.69	18.30	616.71	No	
MWT-6	09/14/09	635.01	637.40	623.01	613.01	NP	0.00	20.64	18.25	616.76	No	
MWT-6	10/11/09	635.01	637.40	623.01	613.01	NP	0.00	21.09	18.70	616.31	No	
MWT-6	10/15/09	635.01	637.40	623.01	613.01	NP	0.00	21.09	18.70	616.31	No	
MWT-6	04/28/10	635.01	637.40	623.01	613.01	NP	0.00	21.35	18.96	616.05	No	
MWT-6	10/25/10	635.01	637.40	623.01	613.01	NP	0.00	19.28	16.89	618.12	No	
MWT-6	04/25/11	635.01	637.40	623.01	613.01	NP	0.00	20.41	18.02	616.99	No	
MWT-6	09/14/11	635.01	637.40	623.01	613.01	NP	0.00	19.43	17.04	617.97	No	
MWT-6	09/23/11	635.01	637.40	623.01	613.01	NP	0.00	19.52	17.13	617.88	No	
MWT-6	09/29/11	635.01	637.40	623.01	613.01	NP	0.00	19.41	17.02	617.99	No	
MWT-6	10/10/11	635.01	637.40	623.01	613.01	NP	0.00	19.62	17.23	617.78	No	
MWT-6	10/21/11	635.01	637.40	623.01	613.01	NP	0.00	19.97	17.58	617.43	No	
MWT-6	10/21/11	635.01	637.40	623.01	613.01	NP	0.00	20.08	17.69	617.32	No	
MWT-6	11/03/11	635.01	637.40	623.01	613.01	NP	0.00	20.23	17.84	617.17	No	
MWT-6	11/09/11	635.01	637.40	623.01	613.01	NP	0.00	20.22	17.83	617.18	No	
MWT-6	11/13/11	635.01	637.40	623.01	613.01	NP	0.00	20.31	17.92	617.09	No	
MWT-6	11/22/11	635.01	637.40	623.01	613.01	NP	0.00	20.42	18.03	616.98	No	
MWT-6	12/01/11	635.01	637.40	623.01	613.01	NP	0.00	20.68	18.29	616.72	No	
MWT-6	01/04/12	635.01	637.40	623.01	613.01	NP	0.00	20.98	18.59	616.42	No	
MWT-6	02/16/12	635.01	637.40	623.01	613.01	NP	0.00	21.56	19.17	615.84	No	
MWT-6	03/13/12	635.01	637.40	623.01	613.01	21.92	0.06	21.98	19.54	615.47	No	
MWT-6	04/16/12	635.01	637.40	623.01	613.01	NP	0.00	21.85	19.46	615.55	No	
MWT-6	06/26/12	635.01	637.40	623.01	613.01	NP	0.00	19.99	17.60	617.41	No	
MWT-6	07/24/12	635.01	637.40	623.01	613.01	NP	0.00	20.17	17.78	617.23	No	
MWT-6	08/19/12	635.01	637.40	623.01	613.01	NP	0.00	20.41	18.02	616.99	No	
MWT-6	09/17/12	635.01	637.40	623.01	613.01	NP	0.00	20.77	18.38	616.63	No	
MWT-6	09/30/12	635.01	637.40	623.01	613.01	NP	0.00	20.92	18.53	616.48	No	
MWT-6	11/21/12	635.01	637.40	623.01	613.01	NP	0.00	21.54	19.15	615.86	No	
MWT-6	12/17/12	635.01	637.40	623.01	613.01	NP	0.00	21.79	19.40	615.61	No	
MWT-6	03/25/13	635.01	637.40	623.01	613.01	22.71	0.09	22.80	20.34	614.67	No	
MWT-6	05/05/13	635.01	637.40	623.01	613.01	NP	0.00	22.51	20.12	614.89	No	
MWT-6	10/01/13	635.01	637.40	623.01	613.01	NP	0.00	21.75	19.36	615.65	No	
MWT-6	05/21/14	635.01	637.40	623.01	613.01	NP	0.00	20.78	18.39	616.62	No	
MWT-6	10/30/14	635.01	637.40	623.01	613.01	NP	0.00	19.35	16.96	618.05	No	
MWT-6	05/06/15	635.01	637.40	623.01	613.01	NP	0.00	21.37	18.98	616.03	No	
MWT-6	10/06/15	635.01	637.40	623.01	613.01	NP	0.00	19.82	17.43	617.58	No	
MWT-6	05/23/16	635.01	637.40	623.01	613.01	NP	0.00	17.19	14.80	620.21	No	
MWT-6	10/03/16	635.01	637.40	623.01	613.01	18.63	0.10	18.73	16.26	618.75	No	
MWT-6	06/14/17	635.01	637.40	623.01	613.01	NP	0.00	16.22	13.83	621.18	No	
MWT-6	06/21/17	635.01	637.40	623.01	613.01	NP	0.00	17.76	15.37	619.64	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
MWT-6	06/22/17	635.01	637.40	623.01	613.01	NP	0.00	17.57	15.18	619.83	No	
MWT-6	06/23/17	635.01	637.40	623.01	613.01	NP	0.00	17.65	15.26	619.75	No	
MWT-6	05/23/18	635.01	637.40	623.01	613.01	20.30	0.13	20.43	17.94	617.07	No	
RW-01	08/28/89	634.80	637.68	618.80	593.80	19.12	0.00	19.12	16.24	618.56	No	
RW-01	11/28/89	634.80	637.68	618.80	593.80	20.62	3.66	24.28	18.57	616.23	No	
RW-01	12/01/89	634.80	637.68	618.80	593.80	20.84	3.32	24.16	18.71	616.09	No	
RW-01	12/02/89	634.80	637.68	618.80	593.80	21.11	2.14	23.25	18.71	616.09	No	
RW-01	05/04/90	634.80	637.68	618.80	593.80	20.35	8.40	28.75	19.37	615.43	No	
RW-01	06/19/90	634.80	637.68	618.80	593.80	20.03	7.05	27.08	18.74	616.06	No	
RW-01	06/27/90	634.80	637.68	618.80	593.80	20.15	6.97	27.12	18.84	615.96	No	
RW-01	07/05/90	634.80	637.68	618.80	593.80	20.26	7.28	27.54	19.02	615.78	No	
RW-01	07/13/90	634.80	637.68	618.80	593.80	20.10	7.88	27.98	19.00	615.80	No	
RW-01	07/17/90	634.80	637.68	618.80	593.80	19.94	8.19	28.13	18.91	615.89	No	
RW-01	07/25/90	634.80	637.68	618.80	593.80	20.10	8.39	28.49	19.12	615.68	No	
RW-01	08/09/90	634.80	637.68	618.80	593.80	20.02	7.08	27.10	18.74	616.06	No	
RW-01	09/06/90	634.80	637.68	618.80	593.80	19.90	6.28	26.18	18.44	616.36	No	
RW-01	01/04/91	634.80	637.68	618.80	593.80	19.31	8.65	27.96	18.38	616.42	No	
RW-01	01/30/91	634.80	637.68	618.80	593.80	21.69	9.57	31.26	20.97	613.83	No	
RW-01	04/24/91	634.80	637.68	618.80	593.80	22.20	6.06	28.26	20.69	614.11	No	
RW-01	06/06/91	634.80	637.68	618.80	593.80	23.30	1.20	24.50	20.69	614.11	No	
RW-01	07/09/91	634.80	637.68	618.80	593.80	20.45	2.63	23.08	18.16	616.64	No	
RW-01	08/06/91	634.80	637.68	618.80	593.80	19.63	2.54	22.17	17.32	617.48	No	
RW-01	09/04/91	634.80	637.68	618.80	593.80	19.87	1.76	21.63	17.39	617.41	No	
RW-01	10/08/91	634.80	637.68	618.80	593.80	18.75	3.60	22.35	16.68	618.12	No	
RW-01	11/08/91	634.80	637.68	618.80	593.80	19.64	1.95	21.59	17.20	617.60	No	
RW-01	12/03/91	634.80	637.68	618.80	593.80	17.55	3.05	20.60	15.36	619.44	Yes	
RW-01	01/07/92	634.80	637.68	618.80	593.80	19.42	1.84	21.26	16.96	617.84	No	
RW-01	02/04/92	634.80	637.68	618.80	593.80	20.45	1.20	21.65	17.84	616.96	No	
RW-01	03/03/92	634.80	637.68	618.80	593.80	20.92	1.20	22.12	18.31	616.49	No	
RW-01	09/24/92	634.80	637.68	618.80	593.80	18.43	2.38	20.81	16.09	618.71	No	
RW-01	10/14/92	634.80	637.68	618.80	593.80	19.52	2.39	21.91	17.18	617.62	No	
RW-01	06/25/93	634.80	637.68	618.80	593.80	16.35	1.66	18.01	13.84	620.96	Yes	
RW-01	07/21/93	634.80	637.68	618.80	593.80	16.84	1.09	17.93	14.21	620.59	Yes	
RW-01	08/17/93	634.80	637.68	618.80	593.80	18.42	3.67	22.09	16.37	618.43	No	
RW-01	09/09/93	634.80	637.68	618.80	593.80	18.96	3.18	22.14	16.80	618.00	No	
RW-01	10/28/93	634.80	637.68	618.80	593.80	19.72	2.02	21.74	17.30	617.50	No	
RW-01	11/24/93	634.80	637.68	618.80	593.80	20.53	1.39	21.92	17.96	616.84	No	
RW-01	12/17/93	634.80	637.68	618.80	593.80	20.40	1.50	21.90	17.86	616.94	No	
RW-01	01/29/94	634.80	637.68	618.80	593.80	20.91	1.14	22.05	18.29	616.51	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-01	02/25/94	634.80	637.68	618.80	593.80	20.84	3.59	24.43	18.77	616.03	No	
RW-01	03/24/94	634.80	637.68	618.80	593.80	21.36	1.04	22.40	18.71	616.09	No	
RW-01	04/27/94	634.80	637.68	618.80	593.80	20.34	2.35	22.69	17.99	616.81	No	
RW-01	05/26/94	634.80	637.68	618.80	593.80	19.39	2.05	21.44	16.97	617.83	No	
RW-01	06/29/94	634.80	637.68	618.80	593.80	18.85	2.10	20.95	16.44	618.36	No	
RW-01	07/27/94	634.80	637.68	618.80	593.80	18.96	2.56	21.52	16.66	618.14	No	
RW-01	08/30/94	634.80	637.68	618.80	593.80	20.32	2.39	22.71	17.98	616.82	No	
RW-01	10/25/94	634.80	637.68	618.80	593.80	19.58	2.55	22.13	17.28	617.52	No	
RW-01	11/02/94	634.80	637.68	618.80	593.80	19.40	0.00	19.40	16.52	618.28	No	
RW-01	04/04/95	634.80	637.68	618.80	593.80	21.60	2.30	23.90	19.24	615.56	No	
RW-01	07/12/95	634.80	637.68	618.80	593.80	20.76	0.22	20.98	17.93	616.87	No	
RW-01	11/14/95	634.80	637.68	618.80	593.80	18.89	2.66	21.55	16.61	618.19	No	
RW-01	03/13/96	634.80	637.68	618.80	593.80	20.70	6.40	27.10	19.27	615.53	No	
RW-01	05/28/96	634.80	637.68	618.80	593.80	18.96	0.06	19.02	16.09	618.71	No	
RW-01	10/08/96	634.80	637.68	618.80	593.80	18.26	0.14	18.40	15.41	619.39	Yes	
RW-01	04/29/97	634.80	637.68	618.80	593.80	16.65	2.55	19.20	14.35	620.45	Yes	
RW-01	06/10/97	634.80	637.68	618.80	593.80	18.62	0.03	18.65	15.75	619.05	Yes	FP bailed 5/22/97
RW-01	11/03/98	634.80	637.68	618.80	593.80	20.81	7.93	28.74	19.72	615.08	No	
RW-01	10/07/99	634.80	637.68	618.80	593.80	17.80	2.92	20.72	15.58	619.22	Yes	
RW-01	11/09/99	634.80	637.68	618.80	593.80	17.72	1.60	19.32	15.20	619.60	Yes	Ferret pump installed
RW-01	12/21/99	634.80	637.68	618.80	593.80	19.65	1.85	21.50	17.19	617.61	No	bailed 20 gal. FP
RW-01	01/27/00	634.80	637.68	618.80	593.80	20.28	2.37	22.65	17.94	616.86	No	Ferret pump operating
RW-01	02/24/00	634.80	637.68	618.80	593.80	20.53	1.05	21.58	17.89	616.91	No	bailed 2 gal. FP
RW-01	03/31/00	634.80	637.68	618.80	593.80	20.71	2.39	23.10	18.37	616.43	No	bailed 3 gal. FP/ instl. pump
RW-01	04/20/00	634.80	637.68	618.80	593.80	20.55	1.20	21.75	17.94	616.86	No	Ferret pump operating
RW-01	04/26/00	634.80	637.68	618.80	593.80	20.40	2.00	22.40	17.97	616.83	No	bailed 5 gal. FP
RW-01	05/31/00	634.80	637.68	618.80	593.80	20.76	1.09	21.85	18.13	616.67	No	bailed 3 gal. FP -instl. Skmmr.
RW-01	06/29/00	634.80	637.68	618.80	593.80	20.37	1.67	22.04	17.87	616.93	No	bailed 4 gal. FP
RW-01	07/26/00	634.80	637.68	618.80	593.80	20.55	1.47	22.02	18.00	616.80	No	bailed 2 gal. FP
RW-01	08/18/00	634.80	637.68	618.80	593.80	20.30	0.55	20.85	17.54	617.26	No	bailed 1 gal. FP- installed skimmer
RW-01	09/27/00	634.80	637.68	618.80	593.80	20.91	3.70	24.61	18.87	615.93	No	skimmer down-bailed 25 gal.FP
RW-01	10/11/00	634.80	637.68	618.80	593.80	20.90	3.55	24.45	18.82	615.98	No	skimmer down-bailed 24 gal.FP
RW-01	11/17/00	634.80	637.68	618.80	593.80	20.74	4.26	25.00	18.82	615.98	No	skimmer down-bailed 27 gal.FP
RW-01	12/12/00	634.80	637.68	618.80	593.80	20.85	3.31	24.16	18.72	616.08	No	skimmer down-bailed 15 gal.FP
RW-01	01/18/01	634.80	637.68	618.80	593.80	21.18	3.16	24.34	19.01	615.79	No	skimmer down-bailed 12 gal.FP
RW-01	04/24/01	634.80	637.68	618.80	593.80	20.81	4.12	24.93	18.86	615.94	No	product abated using vactruck
RW-01	05/23/01	634.80	637.68	618.80	593.80	20.81	0.00	20.81	17.93	616.87	No	skimmer pump operating
RW-01	06/19/01	634.80	637.68	618.80	593.80	20.04	0.20	20.24	17.21	617.59	No	
RW-01	07/26/01	634.80	637.68	618.80	593.80	20.74	0.05	20.79	17.87	616.93	No	
RW-01	08/31/01	634.80	637.68	618.80	593.80	21.11	0.27	21.38	18.29	616.51	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-01	09/26/01	634.80	637.68	618.80	593.80	21.26	0.86	22.12	18.57	616.23	No	
RW-01	10/24/01	634.80	637.68	618.80	593.80	21.02	2.88	23.90	18.79	616.01	No	
RW-01	12/20/01	634.80	637.68	618.80	593.80	21.19	4.70	25.89	19.37	615.43	No	
RW-01	01/22/02	634.80	637.68	618.80	593.80	21.34	4.73	26.07	19.53	615.27	No	
RW-01	02/26/02	634.80	637.68	618.80	593.80	21.57	7.25	28.82	20.33	614.47	No	
RW-01	03/20/02	634.80	637.68	618.80	593.80	21.84	5.76	27.60	20.26	614.54	No	
RW-01	04/24/02	634.80	637.68	618.80	593.80	21.06	5.93	26.99	19.52	615.28	No	
RW-01	05/15/02	634.80	637.68	618.80	593.80	20.88	4.61	25.49	19.04	615.76	No	
RW-01	06/27/02	634.80	637.68	618.80	593.80	21.04	2.66	23.70	18.76	616.04	No	
RW-01	07/25/02	634.80	637.68	618.80	593.80	NP	0.00	21.53	18.65	616.15	No	
RW-01	08/20/02	634.80	637.68	618.80	593.80	20.81	1.69	22.50	18.31	616.49	No	
RW-01	09/30/02	634.80	637.68	618.80	593.80	20.78	0.10	20.88	17.92	616.88	No	
RW-01	11/05/02	634.80	637.68	618.80	593.80	20.38	0.22	20.60	17.55	617.25	No	
RW-01	12/23/02	634.80	637.68	618.80	593.80	21.51	0.10	21.61	18.65	616.15	No	
RW-01	01/28/03	634.80	637.68	618.80	593.80	22.02	0.36	22.38	19.22	615.58	No	
RW-01	02/19/03	634.80	637.68	618.80	593.80	22.46	0.05	22.51	19.59	615.21	No	
RW-01	03/13/03	634.80	637.68	618.80	593.80	22.07	4.64	26.71	20.24	614.56	No	
RW-01	04/17/03	634.80	637.68	618.80	593.80	22.90	0.06	22.96	20.03	614.77	No	
RW-01	05/15/03	634.80	637.68	618.80	593.80	22.87	0.51	23.38	20.11	614.69	No	
RW-01	06/10/03	634.80	637.68	618.80	593.80	22.30	0.98	23.28	19.64	615.16	No	
RW-01	07/07/03	634.80	637.68	618.80	593.80	22.08	1.43	23.51	19.52	615.28	No	
RW-01	07/30/03	634.80	637.68	618.80	593.80	21.71	1.69	23.40	19.21	615.59	No	
RW-01	07/31/03	634.80	637.68	618.80	593.80	21.97	0.63	22.60	19.23	615.57	No	
RW-01	09/08/03	634.80	637.68	618.80	593.80	22.21	2.76	24.97	19.95	614.85	No	
RW-01	10/02/03	634.80	637.68	618.80	593.80	22.83	0.03	22.86	19.96	614.84	No	
RW-01	10/23/03	634.80	637.68	618.80	593.80	NP	0.00	22.92	20.04	614.76	No	
RW-01	12/03/03	634.80	637.68	618.80	593.80	23.04	0.14	23.18	20.19	614.61	No	
RW-01	01/20/04	634.80	637.68	618.80	593.80	23.27	0.23	23.50	20.44	614.36	No	removed skimming pump
RW-01	02/24/04	634.80	637.68	618.80	593.80	22.94	3.54	26.48	20.86	613.94	No	
RW-01	04/19/04	634.77	637.50	618.80	593.80	22.57	5.42	27.99	21.06	613.71	No	
RW-01	07/28/04	634.77	637.50	618.80	593.80	21.87	2.21	24.08	19.64	615.13	No	
RW-01	11/15/04	634.77	637.50	618.80	593.80	20.91	1.72	22.63	18.57	616.20	No	
RW-01	04/18/05	634.77	637.50	618.80	593.80	21.31	4.30	25.61	19.55	615.22	No	
RW-01	10/11/05	634.77	637.50	618.80	593.80	20.74	2.14	22.88	18.49	616.28	No	
RW-01	05/23/06	634.77	637.50	618.80	593.80	19.70	3.77	23.47	17.82	616.95	No	
RW-01	10/16/06	634.77	637.50	618.80	593.80	21.31	4.58	25.89	19.61	615.16	No	
RW-01	04/23/07	634.77	637.50	618.80	593.80	21.75	8.17	29.92	20.87	613.90	No	
RW-01	09/25/07	634.77	637.50	618.80	593.80	20.72	10.27	30.99	20.31	614.46	No	
RW-01	05/01/08	634.77	637.50	618.80	593.80	20.65	2.60	23.25	18.51	616.26	No	
RW-01	10/20/08	634.77	637.50	618.80	593.80	19.10	2.39	21.49	16.91	617.86	No	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-01	04/18/09	634.77	637.50	618.80	593.80	19.30	3.53	22.83	17.37	617.40	No	
RW-01	08/04/09	634.77	637.50	618.80	593.80	20.92	2.58	23.50	18.77	616.00	No	
RW-01	08/05/09	634.77	637.50	618.80	593.80	20.10	1.76	21.86	17.77	617.00	No	
RW-01	08/26/09	634.77	637.50	618.80	593.80	18.82	1.68	20.50	16.47	618.30	No	
RW-01	09/03/09	634.77	637.50	618.80	593.80	19.12	1.68	20.80	16.77	618.00	No	
RW-01	09/08/09	634.77	637.50	618.80	593.80	19.13	1.69	20.82	16.78	617.99	No	
RW-01	09/14/09	634.77	637.50	618.80	593.80	19.06	1.78	20.84	16.73	618.04	No	
RW-01	10/11/09	634.77	637.50	618.80	593.80	19.63	1.35	20.98	17.20	617.57	No	
RW-01	10/15/09	634.77	637.50	618.80	593.80	19.63	1.35	20.98	17.20	617.57	No	
RW-01	04/28/10	634.77	637.50	618.80	593.80	19.19	1.79	20.98	16.86	617.91	No	
RW-01	10/25/10	634.77	637.50	618.80	593.80	19.07	2.82	21.89	16.98	617.79	No	
RW-01	04/25/11	634.77	637.50	618.80	593.80	19.98	3.73	23.71	18.09	616.68	No	
RW-01	09/14/11	634.77	637.50	618.80	593.80	19.84	2.99	22.83	17.79	616.98	No	
RW-01	09/23/11	634.77	637.50	618.80	593.80	19.59	3.05	22.64	17.55	617.22	No	
RW-01	09/29/11	634.77	637.50	618.80	593.80	19.49	3.15	22.64	17.47	617.30	No	
RW-01	10/07/11	634.77	637.50	618.80	593.80	19.24	3.43	22.67	17.28	617.49	No	
RW-01	10/11/11	634.77	637.50	618.80	593.80	19.83	2.91	22.74	17.76	617.01	No	
RW-01	10/21/11	634.77	637.50	618.80	593.80	20.08	2.99	23.07	18.03	616.74	No	
RW-01	10/27/11	634.77	637.50	618.80	593.80	20.20	2.94	23.14	18.13	616.64	No	
RW-01	11/04/11	634.77	637.50	618.80	593.80	20.40	2.93	23.33	18.33	616.44	No	
RW-01	11/09/11	634.77	637.50	618.80	593.80	20.39	2.93	23.32	18.32	616.45	No	
RW-01	11/18/11	634.77	637.50	618.80	593.80	20.51	2.98	23.49	18.45	616.32	No	
RW-01	11/22/11	634.77	637.50	618.80	593.80	20.64	2.94	23.58	18.57	616.20	No	
RW-01	12/01/11	634.77	637.50	618.80	593.80	20.90	2.93	23.83	18.83	615.94	No	
RW-01	01/04/12	634.77	637.50	618.80	593.80	21.25	2.88	24.13	19.17	615.60	No	
RW-01	02/16/12	634.77	637.50	618.80	593.80	21.82	3.05	24.87	19.78	614.99	No	
RW-01	03/13/12	634.77	637.50	618.80	593.80	21.83	3.97	25.80	20.00	614.77	No	
RW-01	04/03/12	634.77	637.50	618.80	593.80	21.56	5.32	26.88	20.03	614.74	No	Spill Buddy Before Reading
RW-01	04/03/12	634.77	637.50	618.80	593.80	26.24	0.06	26.30	23.52	611.25	No	Spill Buddy After Reading
RW-01	04/16/12	634.77	637.50	618.80	593.80	21.74	4.12	25.86	19.94	614.83	No	
RW-01	05/10/12	634.77	637.50	618.80	593.80	20.36	5.49	25.85	18.87	615.90	No	Spill Buddy Before Reading
RW-01	05/10/12	634.77	637.50	618.80	593.80	24.73	0.06	24.79	22.01	612.76	No	Spill Buddy After Reading
RW-01	05/18/12	634.77	637.50	618.80	593.80	21.05	3.19	24.24	19.04	615.73	No	
RW-01	06/18/12	634.77	637.50	618.80	593.80	20.04	2.45	22.49	17.86	616.91	No	Spill Buddy Before Reading
RW-01	06/18/12	634.77	637.50	618.80	593.80	22.02	0.08	22.10	19.31	615.46	No	Spill Buddy After Reading
RW-01	06/26/12	634.77	637.50	618.80	593.80	19.62	0.13	19.75	16.92	617.85	No	
RW-01	07/12/12	634.77	637.50	618.80	593.80	20.05	0.11	20.16	17.34	617.43	No	
RW-01	07/24/12	634.77	637.50	618.80	593.80	20.46	0.17	20.63	17.77	617.00	No	
RW-01	08/17/12	634.77	637.50	618.80	593.80	20.80	0.16	20.96	18.11	616.66	No	
RW-01	09/17/12	634.77	637.50	618.80	593.80	21.33	0.19	21.52	18.64	616.13	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-01	09/30/12	634.77	637.50	618.80	593.80	21.58	0.18	21.76	18.89	615.88	No	
RW-01	11/21/12	634.77	637.50	618.80	593.80	21.67	2.43	24.10	19.49	615.28	No	
RW-01	12/17/12	634.77	637.50	618.80	593.80	21.59	4.38	25.97	19.85	614.92	No	
RW-01	03/25/13	634.77	637.50	618.80	593.80	21.29	10.99	32.28	21.04	613.73	No	
RW-01	04/02/13	634.77	637.50	618.80	593.80	21.84	10.50	32.34	21.48	613.29	No	Spill Buddy Before Reading
RW-01	04/02/13	634.77	637.50	618.80	593.80	30.12	1.66	31.78	27.76	607.01	No	Spill Buddy After Reading
RW-01	04/03/13	634.77	637.50	618.80	593.80	22.29	3.98	26.27	20.46	614.31	No	Spill Buddy Before Reading
RW-01	04/03/13	634.77	637.50	618.80	593.80	25.24	0.82	26.06	22.70	612.07	No	Spill Buddy After Reading
RW-01	04/29/13	634.77	637.50	618.80	593.80	21.54	5.49	27.03	20.05	614.72	No	Spill Buddy Before Reading
RW-01	04/29/13	634.77	637.50	618.80	593.80	24.90	1.94	26.84	22.61	612.16	No	Spill Buddy After Reading
RW-01	05/05/13	634.77	637.50	618.80	593.80	21.92	4.76	26.68	20.27	614.50	No	
RW-01	10/03/13	634.77	637.50	618.80	593.80	21.44	4.07	25.51	19.63	615.14	No	
RW-01	05/22/14	634.77	637.50	618.80	593.80	20.08	2.04	22.12	17.81	616.96	No	
RW-01	10/31/14	634.77	637.50	618.80	593.80	19.80	2.46	22.26	17.63	617.14	No	
RW-01	05/06/15	634.77	637.50	618.80	593.80	21.33	3.85	25.18	19.47	615.30	No	
RW-01	07/10/15	634.77	637.50	618.80	593.80	20.21	3.59	23.80	18.29	616.48	No	
RW-01	10/05/15	634.77	637.50	618.80	593.80	20.14	0.15	20.29	17.44	617.33	No	
RW-01	05/23/16	634.77	637.50	618.80	593.80	16.90	4.28	21.18	15.14	619.63	Yes	
RW-01	10/03/16	634.77	637.50	618.80	593.80	18.29	4.90	23.19	16.67	618.10	No	
RW-01	06/14/17	634.77	637.50	618.80	593.80	16.89	4.85	21.74	15.26	619.51	Yes	
RW-01	06/21/17	634.77	637.50	618.80	593.80	17.43	5.00	22.43	15.83	618.94	Yes	
RW-01	06/22/17	634.77	637.50	618.80	593.80	17.62	2.73	20.35	15.51	619.26	Yes	
RW-01	06/23/17	634.77	637.50	618.80	593.80	17.67	2.58	20.25	15.52	619.25	Yes	
RW-01	06/29/17	634.77	637.50	618.80	593.80	18.05	2.88	20.93	15.97	618.80	No	
RW-01	10/26/17	634.77	637.50	618.80	593.80	14.70	7.65	22.35	13.70	621.07	Yes	
RW-01	05/15/18	634.77	637.50	618.80	593.80	20.26	3.47	23.73	18.31	616.46	No	
RW-01	05/23/18	634.77	637.50	618.80	593.80	20.50	2.10	22.60	18.24	616.53	No	
RW-02	05/04/90	635.60	638.06	614.00	589.00	21.70	8.75	30.45	21.22	614.53	Yes	
RW-02	06/01/90	635.60	638.06	614.00	589.00	20.90	10.30	31.20	20.77	615.00	Yes	
RW-02	06/19/90	635.60	638.06	614.00	589.00	20.73	10.58	31.31	20.66	615.11	Yes	
RW-02	06/27/90	635.60	638.06	614.00	589.00	20.88	10.35	31.23	20.76	615.01	Yes	
RW-02	07/05/90	635.60	638.06	614.00	589.00	21.07	10.42	31.49	20.96	614.80	Yes	
RW-02	07/13/90	635.60	638.06	614.00	589.00	21.05	10.55	31.60	20.97	614.80	Yes	
RW-02	07/17/90	635.60	638.06	614.00	589.00	20.78	10.96	31.74	20.80	614.98	Yes	
RW-02	07/25/90	635.60	638.06	614.00	589.00	21.04	10.84	31.88	21.03	614.75	Yes	
RW-02	08/09/90	635.60	638.06	614.00	589.00	20.87	11.14	32.01	20.93	614.85	Yes	
RW-02	09/06/90	635.60	638.06	614.00	589.00	20.50	10.99	31.49	20.52	615.26	Yes	
RW-02	01/04/91	635.60	638.06	614.00	589.00	20.25	10.88	31.13	20.25	615.53	Yes	
RW-02	01/30/91	635.60	638.06	614.00	589.00	20.58	11.50	32.08	20.72	615.07	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-02	04/24/91	635.60	638.06	614.00	589.00	20.58	9.11	29.69	20.18	615.57	Yes	
RW-02	06/06/91	635.60	638.06	614.00	589.00	22.00	2.16	24.16	20.03	615.61	Yes	
RW-02	07/09/91	635.60	638.06	614.00	589.00	18.30	5.48	23.78	17.08	618.61	Yes	
RW-02	08/06/91	635.60	638.06	614.00	589.00	18.11	2.18	20.29	16.14	619.49	Yes	
RW-02	09/04/91	635.60	638.06	614.00	589.00	18.27	2.21	20.48	16.31	619.33	Yes	
RW-02	10/08/91	635.60	638.06	614.00	589.00	17.40	2.22	19.62	15.44	620.19	Yes	
RW-02	11/08/91	635.60	638.06	614.00	589.00	18.07	1.92	19.99	16.04	619.59	Yes	
RW-02	12/03/91	635.60	638.06	614.00	589.00	16.27	1.90	18.17	14.24	621.39	Yes	
RW-02	01/07/92	635.60	638.06	614.00	589.00	18.25	1.88	20.13	16.21	619.42	Yes	
RW-02	02/04/92	635.60	638.06	614.00	589.00	19.15	1.87	21.02	17.11	618.52	Yes	
RW-02	03/03/92	635.60	638.06	614.00	589.00	19.65	2.02	21.67	17.65	617.99	Yes	
RW-02	09/24/92	635.60	638.06	614.00	589.00	17.30	2.04	19.34	15.30	620.33	Yes	
RW-02	06/25/93	635.60	638.06	614.00	589.00	15.65	1.07	16.72	13.43	622.19	Yes	
RW-02	07/21/93	635.60	638.06	614.00	589.00	16.23	1.08	17.31	14.01	621.60	Yes	
RW-02	08/17/93	635.60	638.06	614.00	589.00	17.77	1.09	18.86	15.56	620.06	Yes	
RW-02	09/09/93	635.60	638.06	614.00	589.00	17.75	0.24	17.99	15.34	620.26	Yes	
RW-02	10/28/93	635.60	638.06	614.00	589.00	17.75	2.00	19.75	15.74	619.89	Yes	
RW-02	11/24/93	635.60	638.06	614.00	589.00	19.71	0.29	20.00	17.32	618.29	Yes	
RW-02	12/17/93	635.60	638.06	614.00	589.00	19.51	0.29	19.80	17.12	618.49	Yes	
RW-02	01/29/94	635.60	638.06	614.00	589.00	20.28	0.16	20.44	17.86	617.75	Yes	
RW-02	02/25/94	635.60	638.06	614.00	589.00	20.64	0.47	21.11	18.29	617.32	Yes	
RW-02	03/24/94	635.60	638.06	614.00	589.00	20.51	0.55	21.06	18.17	617.43	Yes	
RW-02	04/27/94	635.60	638.06	614.00	589.00	19.60	0.82	20.42	17.33	618.29	Yes	
RW-02	05/26/94	635.60	638.06	614.00	589.00	18.51	0.56	19.07	16.18	619.43	Yes	
RW-02	06/29/94	635.60	638.06	614.00	589.00	17.15	0.89	18.04	14.89	620.72	Yes	
RW-02	07/27/94	635.60	638.06	614.00	589.00	18.78	0.89	19.67	16.52	619.09	Yes	
RW-02	08/30/94	635.60	638.06	614.00	589.00	19.09	0.58	19.67	16.76	618.85	Yes	
RW-02	10/25/94	635.60	638.06	614.00	589.00	18.68	0.10	18.78	16.24	619.36	Yes	
RW-02	04/04/95	635.60	638.06	614.00	589.00	20.65	4.80	25.45	19.27	616.40	Yes	
RW-02	07/12/95	635.60	638.06	614.00	589.00	18.70	1.50	20.20	16.58	619.05	Yes	
RW-02	10/07/99	635.60	638.06	614.00	589.00	16.85	3.60	20.45	15.20	620.46	Yes	
RW-02	11/09/99	635.60	638.06	614.00	589.00	17.11	2.84	19.95	15.29	620.35	Yes	
RW-02	12/21/99	635.60	638.06	614.00	589.00	18.95	0.07	19.02	16.51	619.10	Yes	bailed 3 gal. FP
RW-02	01/27/00	635.60	638.06	614.00	589.00	20.02	0.93	20.95	17.77	617.84	Yes	bailed 0.25 gal. FP
RW-02	02/24/00	635.60	638.06	614.00	589.00	20.53	1.05	21.58	18.31	617.31	Yes	bailed 0.3 gal. FP
RW-02	03/31/00	635.60	638.06	614.00	589.00	20.37	0.97	21.34	18.13	617.49	Yes	bailed 1.5 gal. FP
RW-02	04/20/00	635.60	638.06	614.00	589.00	19.89	0.87	20.76	17.63	617.99	Yes	
RW-02	04/26/00	635.60	638.06	614.00	589.00	18.54	8.98	27.52	18.11	617.64	Yes	bailed 11 gal. FP
RW-02	05/31/00	635.60	638.06	614.00	589.00	20.03	0.56	20.59	17.70	617.91	Yes	bailed 1 gal. FP
RW-02	06/29/00	635.60	638.06	614.00	589.00	19.65	0.65	20.30	17.34	618.27	Yes	bailed 1 gal. FP

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-02	07/26/00	635.60	638.06	614.00	589.00	20.00	0.42	20.42	17.63	617.97	Yes	bailed 1 gal. FP
RW-02	08/18/00	635.60	638.06	614.00	589.00	19.87	0.09	19.96	17.43	618.17	Yes	bailed 0.125 gal. FP
RW-02	09/27/00	635.60	638.06	614.00	589.00	20.81	0.75	21.56	18.52	617.09	Yes	bailed 1.5 gal. FP
RW-02	10/11/00	635.60	638.06	614.00	589.00	20.86	0.44	21.30	18.50	617.11	Yes	bailed 1.75 gal. FP
RW-02	11/17/00	635.60	638.06	614.00	589.00	19.61	1.01	20.62	17.38	618.24	Yes	bailed 1.5 gal. FP
RW-02	12/12/00	635.60	638.06	614.00	589.00	20.40	0.02	20.42	17.94	617.66	Yes	bailed 0.1 gal. FP
RW-02	01/18/01	635.60	638.06	614.00	589.00	20.87	0.03	20.90	18.42	617.18	Yes	no product bailed
RW-02	04/24/01	635.60	638.06	614.00	589.00	19.74	6.62	26.36	18.78	616.93	Yes	product abated using vactruck
RW-02	05/23/01	635.60	638.06	614.00	589.00	18.32	6.23	24.55	17.27	618.43	Yes	no product bailed
RW-02	06/19/01	635.60	638.06	614.00	589.00	18.28	6.00	24.28	17.18	618.52	Yes	
RW-02	07/26/01	635.60	638.06	614.00	589.00	19.46	5.63	25.09	18.27	617.42	Yes	
RW-02	08/31/01	635.60	638.06	614.00	589.00	19.67	5.73	25.40	18.50	617.19	Yes	
RW-02	09/26/01	635.60	638.06	614.00	589.00	19.85	5.87	25.72	18.72	616.98	Yes	
RW-02	10/24/01	635.60	638.06	614.00	589.00	19.80	4.10	23.90	18.27	617.40	Yes	
RW-02	12/20/01	635.60	638.06	614.00	589.00	19.96	6.25	26.21	18.91	616.79	Yes	
RW-02	01/22/02	635.60	638.06	614.00	589.00	20.37	6.39	26.76	19.35	616.35	Yes	
RW-02	02/26/02	635.60	638.06	614.00	589.00	20.89	6.86	27.75	19.98	615.73	Yes	
RW-02	03/20/02	635.60	638.06	614.00	589.00	21.08	7.31	28.39	20.27	615.45	Yes	
RW-02	04/24/02	635.60	638.06	614.00	589.00	19.73	8.79	28.52	19.26	616.49	Yes	
RW-02	05/15/02	635.60	638.06	614.00	589.00	19.14	8.88	28.02	18.69	617.06	Yes	
RW-02	06/27/02	635.60	638.06	614.00	589.00	19.37	8.50	27.87	18.83	616.91	Yes	
RW-02	07/25/02	635.60	638.06	614.00	589.00	19.39	8.37	27.76	18.82	616.91	Yes	
RW-02	08/20/02	635.60	638.06	614.00	589.00	19.08	8.42	27.50	18.52	617.21	Yes	
RW-02	09/30/02	635.60	638.06	614.00	589.00	18.23	8.58	26.81	17.71	618.03	Yes	
RW-02	12/23/02	635.60	638.06	614.00	589.00	19.81	7.33	27.14	19.01	616.71	Yes	
RW-02	01/28/03	635.60	638.06	614.00	589.00	20.62	7.47	28.09	19.85	615.87	Yes	
RW-02	02/19/03	635.60	638.06	614.00	589.00	20.97	7.84	28.81	20.28	615.45	Yes	
RW-02	04/17/03	635.60	638.06	614.00	589.00	21.40	8.73	30.13	20.91	614.83	Yes	
RW-02	05/15/03	635.60	638.06	614.00	589.00	21.32	8.94	30.26	20.88	614.87	Yes	
RW-02	06/10/03	635.60	638.06	614.00	589.00	20.72	9.37	30.09	20.38	615.38	Yes	
RW-02	07/31/03	635.60	638.06	614.00	589.00	20.04	9.89	29.93	19.81	615.95	Yes	
RW-02	09/08/03	635.60	638.06	614.00	589.00	24.31	5.99	30.30	23.20	612.49	No	
RW-02	09/11/03	635.60	638.06	614.00	589.00	21.66	1.63	23.29	19.57	616.06	Yes	
RW-02	10/02/03	635.60	638.06	614.00	589.00	21.48	3.56	25.04	19.82	615.83	Yes	
RW-02	10/23/03	635.60	638.06	614.00	589.00	21.50	4.56	26.06	20.07	615.60	Yes	
RW-02	12/03/03	635.60	638.06	614.00	589.00	21.52	5.93	27.45	20.40	615.30	Yes	
RW-02	01/20/04	635.60	638.06	614.00	589.00	21.90	7.29	29.19	21.09	614.63	Yes	started skimming pump
RW-02	02/24/04	635.60	638.06	614.00	589.00	23.43	0.18	23.61	21.01	614.59	Yes	
RW-02	03/22/04	635.60	638.06	614.00	589.00	22.65	4.18	26.83	21.13	614.53	Yes	pump inoperative
RW-02	07/28/04	635.92	638.13	614.00	589.00	21.32	0.67	21.99	19.26	616.67	Yes	pump inoperative

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-02	11/15/04	635.92	638.13	614.00	589.00	17.04	0.42	17.46	14.92	621.00	Yes	
RW-02	04/18/05	635.92	638.13	614.00	589.00	NP	0.00	19.34	17.13	618.79	Yes	
RW-02	10/11/05	635.92	638.13	614.00	589.00	NP	0.00	23.22	21.01	614.91	Yes	21.92
RW-02	05/23/06	635.92	638.13	614.00	589.00	NP	0.00	16.33	14.12	621.80	Yes	
RW-02	10/16/06	635.92	638.13	614.00	589.00	NP	0.00	22.64	20.43	615.49	Yes	
RW-02	09/14/11	635.60	635.38	613.68	588.68	NP	0.00	15.25	15.47	620.13	Yes	
												TFRT System Down on 8/31/11 for well recovery test
RW-02	09/23/11	635.60	635.38	613.68	588.68	NP	0.00	15.33	15.55	620.05	Yes	
RW-02	09/29/11	635.60	635.38	613.68	588.68	NP	0.00	15.87	16.09	619.51	Yes	
RW-02	10/07/11	635.60	635.38	613.68	588.68	NP	0.00	15.85	16.07	619.53	Yes	
RW-02	10/13/11	635.60	635.38	613.68	588.68	NP	0.00	15.76	15.98	619.62	Yes	
RW-02	10/21/11	635.60	635.38	613.68	588.68	NP	0.00	15.64	15.86	619.74	Yes	
RW-02	10/27/11	635.60	635.38	613.68	588.68	NP	0.00	16.06	16.28	619.32	Yes	
RW-02	11/01/11	635.60	635.38	613.68	588.68	NP	0.00	15.95	16.17	619.43	Yes	Conducted 2011 annual well pump maintenance
RW-02	11/09/11	635.60	635.38	613.68	588.68	NP	0.00	16.20	16.42	619.18	Yes	
RW-02	11/18/11	635.60	635.38	613.68	588.68	NP	0.00	16.49	16.71	618.89	Yes	
RW-02	11/30/11	635.60	635.38	613.68	588.68	NP	0.00	16.83	17.05	618.55	Yes	with only EW 4 & EW 5
RW-02	09/18/12	635.60	635.38	613.68	588.68	17.84	0.06	17.90	18.08	617.53	Yes	
RW-02	11/21/12	635.60	635.38	613.68	588.68	18.60	0.10	18.70	18.85	616.76	Yes	
RW-02	03/25/13	635.60	635.38	613.68	588.68	NM	NM	NM			NM	Too Much Snow on Well
RW-02	05/05/13	635.60	635.38	613.68	588.68	17.10	0.84	17.94	17.51	618.10	Yes	
RW-02	10/03/13	635.60	635.38	613.68	588.68	18.44	0.81	19.25	18.85	616.77	Yes	
RW-03	05/04/90	634.00	636.96	612.50	587.50	NP	0.00	22.55	19.59	614.41	Yes	
RW-03	06/01/90	634.00	636.96	612.50	587.50	NP	0.00	22.15	19.19	614.81	Yes	
RW-03	06/19/90	634.00	636.96	612.50	587.50	22.03	0.01	22.04	19.07	614.93	Yes	
RW-03	06/27/90	634.00	636.96	612.50	587.50	NP	0.00	22.18	19.22	614.78	Yes	
RW-03	07/05/90	634.00	636.96	612.50	587.50	NP	0.00	22.30	19.34	614.66	Yes	
RW-03	07/13/90	634.00	636.96	612.50	587.50	NP	0.00	22.18	19.22	614.78	Yes	
RW-03	07/17/90	634.00	636.96	612.50	587.50	NP	0.00	22.08	19.12	614.88	Yes	
RW-03	07/25/90	634.00	636.96	612.50	587.50	NP	0.00	22.18	19.22	614.78	Yes	
RW-03	08/09/90	634.00	636.96	612.50	587.50	21.83	0.33	22.16	18.94	615.06	Yes	
RW-03	09/06/90	634.00	636.96	612.50	587.50	NP	0.00	21.88	18.92	615.08	Yes	
RW-03	01/04/91	634.00	636.96	612.50	587.50	NP	0.00	21.45	18.49	615.51	Yes	
RW-03	01/30/91	634.00	636.96	612.50	587.50	NP	0.00	21.67	18.71	615.29	Yes	
RW-03	04/24/91	634.00	636.96	612.50	587.50	NP	0.00	21.86	18.90	615.10	Yes	
RW-03	07/09/91	634.00	636.96	612.50	587.50	NP	0.00	19.48	16.52	617.48	Yes	
RW-03	10/08/91	634.00	636.96	612.50	587.50	NP	0.00	18.04	15.08	618.92	Yes	
RW-03	01/07/92	634.00	636.96	612.50	587.50	NP	0.00	18.62	15.66	618.34	Yes	
RW-03	10/14/92	634.00	636.96	612.50	587.50	NP	0.00	18.82	15.86	618.14	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-03	06/25/93	634.00	636.96	612.50	587.50	NP	0.00	16.06	13.10	620.90	Yes	
RW-03	10/28/93	634.00	636.96	612.50	587.50	NP	0.00	19.38	16.42	617.58	Yes	
RW-03	01/29/94	634.00	636.96	612.50	587.50	NP	0.00	20.24	17.28	616.72	Yes	
RW-03	04/27/94	634.00	636.96	612.50	587.50	NP	0.00	19.70	16.74	617.26	Yes	
RW-03	07/21/94	634.00	636.96	612.50	587.50	NP	0.00	18.70	15.74	618.26	Yes	
RW-03	10/25/94	634.00	636.96	612.50	587.50	NP	0.00	19.21	16.25	617.75	Yes	
RW-03	02/01/95	634.00	636.96	612.50	587.50	NP	0.00	20.75	17.79	616.21	Yes	
RW-03	04/04/95	634.00	636.96	612.50	587.50	NP	0.00	21.38	18.42	615.58	Yes	
RW-03	07/12/95	634.00	636.96	612.50	587.50	NP	0.00	20.10	17.14	616.86	Yes	
RW-03	11/03/98	634.00	636.96	612.50	587.50	NP	0.00	21.13	18.17	615.83	Yes	
RW-03	03/02/99	634.00	636.96	612.50	587.50	NP	0.00	21.40	18.44	615.56	Yes	
RW-03	10/07/99	634.00	636.96	612.50	587.50	NP	0.00	17.89	14.93	619.07	Yes	
RW-03	11/09/99	634.00	636.96	612.50	587.50	NP	0.00	17.67	14.71	619.29	Yes	
RW-03	12/21/99	634.00	636.96	612.50	587.50	NP	0.00	19.25	16.29	617.71	Yes	
RW-03	01/27/00	634.00	636.96	612.50	587.50	NP	0.00	20.32	17.36	616.64	Yes	
RW-03	02/24/00	634.00	636.96	612.50	587.50	NP	0.00	20.81	17.85	616.15	Yes	
RW-03	03/31/00	634.00	636.96	612.50	587.50	NP	0.00	20.53	17.57	616.43	Yes	
RW-03	04/20/00	634.00	636.96	612.50	587.50	NP	0.00	20.04	17.08	616.92	Yes	
RW-03	04/26/00	634.00	636.96	612.50	587.50	NP	0.00	20.13	17.17	616.83	Yes	
RW-03	05/31/00	634.00	636.96	612.50	587.50	NP	0.00	20.14	17.18	616.82	Yes	
RW-03	06/29/00	634.00	636.96	612.50	587.50	NP	0.00	19.93	16.97	617.03	Yes	
RW-03	07/26/00	634.00	636.96	612.50	587.50	NP	0.00	19.93	16.97	617.03	Yes	
RW-03	08/18/00	634.00	636.96	612.50	587.50	NP	0.00	20.48	17.52	616.48	Yes	
RW-03	09/27/00	634.00	636.96	612.50	587.50	NP	0.00	20.98	18.02	615.98	Yes	
RW-03	10/11/00	634.00	636.96	612.50	587.50	NP	0.00	21.08	18.12	615.88	Yes	
RW-03	11/17/00	634.00	636.96	612.50	587.50	NP	0.00	20.71	17.75	616.25	Yes	
RW-03	12/12/00	634.00	636.96	612.50	587.50	NP	0.00	20.74	17.78	616.22	Yes	
RW-03	01/18/01	634.00	636.96	612.50	587.50	NP	0.00	21.13	18.17	615.83	Yes	
RW-03	06/19/01	634.00	636.96	612.50	587.50	NP	0.00	19.41	16.45	617.55	Yes	
RW-03	08/31/01	634.00	636.96	612.50	587.50	NP	0.00	20.72	17.76	616.24	Yes	
RW-03	02/26/02	634.00	636.96	612.50	587.50	NP	0.00	21.95	18.99	615.01	Yes	
RW-03	03/20/02	634.00	636.96	612.50	587.50	NP	0.00	22.14	19.18	614.82	Yes	
RW-03	08/20/02	634.00	636.96	612.50	587.50	NP	0.00	20.47	17.51	616.49	Yes	
RW-03	08/20/02	634.00	636.96	612.50	587.50	NP	0.00	20.47	17.51	616.49	Yes	
RW-03	06/10/03	634.00	636.96	612.50	587.50	NP	0.00	21.51	18.55	615.45	Yes	
RW-03	12/03/03	634.00	636.96	612.50	587.50	NP	0.00	22.15	19.19	614.81	Yes	
RW-03	04/19/04	634.20	636.75	612.50	587.50	NP	0.00	22.51	19.96	614.24	Yes	
RW-03	07/28/04	634.20	636.75	612.50	587.50	NP	0.00	21.32	18.77	615.43	Yes	
RW-03	07/28/04	634.20	636.75	612.50	587.50	NP	0.00	20.31	17.76	616.44	Yes	
RW-03	11/15/04	634.20	636.75	612.50	587.50	NP	0.00	20.31	17.76	616.44	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-03	04/18/05	634.20	636.75	612.50	587.50	NP	0.00	20.81	18.26	615.94	Yes	
RW-03	10/11/05	634.20	636.75	612.50	587.50	NP	0.00	20.15	17.60	616.60	Yes	
RW-03	05/23/06	634.20	636.75	612.50	587.50	NP	0.00	19.16	16.61	617.59	Yes	
RW-03	10/16/06	634.20	636.75	612.50	587.50	NP	0.00	20.75	18.20	616.00	Yes	
RW-03	04/23/07	634.20	636.75	612.50	587.50	NP	0.00	21.68	19.13	615.07	Yes	
RW-03	09/25/07	634.20	636.75	612.50	587.50	NP	0.00	21.62	19.07	615.13	Yes	
RW-03	05/01/08	634.20	636.75	612.50	587.50	NP	0.00	20.01	17.46	616.74	Yes	
RW-03	10/20/08	634.20	636.75	612.50	587.50	NP	0.00	18.51	15.96	618.24	Yes	
RW-03	04/18/09	634.20	636.75	612.50	587.50	NP	0.00	19.63	17.08	617.12	Yes	
RW-03	10/11/09	634.20	636.75	612.50	587.50	NP	0.00	20.50	17.95	616.25	Yes	
RW-03	04/28/10	634.20	636.75	612.50	587.50	NP	0.00	20.55	18.00	616.20	Yes	
RW-03	10/25/10	634.20	636.75	612.50	587.50	NP	0.00	18.39	15.84	618.36	Yes	
RW-03	04/25/11	634.20	636.75	612.50	587.50	NP	0.00	19.39	16.84	617.36	Yes	
RW-03	09/14/11	634.20	636.75	612.50	587.50	NP	0.00	18.85	16.30	617.90	Yes	
RW-03	09/23/11	634.20	636.75	612.50	587.50	NP	0.00	19.05	16.50	617.70	Yes	
RW-03	09/29/11	634.20	636.75	612.50	587.50	NP	0.00	18.91	16.36	617.84	Yes	
RW-03	10/07/11	634.20	636.75	612.50	587.50	NP	0.00	19.08	16.53	617.67	Yes	
RW-03	10/11/11	634.20	636.75	612.50	587.50	NP	0.00	19.22	16.67	617.53	Yes	
RW-03	10/21/11	634.20	636.75	612.50	587.50	NP	0.00	19.45	16.90	617.30	Yes	
RW-03	10/27/11	634.20	636.75	612.50	587.50	NP	0.00	19.59	17.04	617.16	Yes	
RW-03	11/04/11	634.20	636.75	612.50	587.50	NP	0.00	19.82	17.27	616.93	Yes	
RW-03	11/09/11	634.20	636.75	612.50	587.50	NP	0.00	19.70	17.15	617.05	Yes	
RW-03	11/18/11	634.20	636.75	612.50	587.50	NP	0.00	19.86	17.31	616.89	Yes	
RW-03	11/22/11	634.20	636.75	612.50	587.50	NP	0.00	20.01	17.46	616.74	Yes	
RW-03	12/01/11	634.20	636.75	612.50	587.50	NP	0.00	20.40	17.85	616.35	Yes	
RW-03	01/04/12	634.20	636.75	612.50	587.50	NP	0.00	20.70	18.15	616.05	Yes	
RW-03	02/16/12	634.20	636.75	612.50	587.50	NP	0.00	21.30	18.75	615.45	Yes	
RW-03	03/16/12	634.20	636.75	612.50	587.50	NP	0.00	21.45	18.90	615.30	Yes	
RW-03	04/16/12	634.20	636.75	612.50	587.50	NP	0.00	21.55	19.00	615.20	Yes	
RW-03	05/18/12	634.20	636.75	612.50	587.50	NP	0.00	20.51	17.96	616.24	Yes	
RW-03	06/26/12	634.20	636.75	612.50	587.50	NP	0.00	18.54	15.99	618.21	Yes	
RW-03	07/24/12	634.20	636.75	612.50	587.50	NP	0.00	19.35	16.80	617.40	Yes	
RW-03	08/17/12	634.20	636.75	612.50	587.50	NP	0.00	19.70	17.15	617.05	Yes	
RW-03	09/17/12	634.20	636.75	612.50	587.50	NP	0.00	20.24	17.69	616.51	Yes	
RW-03	09/30/12	634.20	636.75	612.50	587.50	NP	0.00	20.45	17.90	616.30	Yes	
RW-03	11/21/12	634.20	636.75	612.50	587.50	NP	0.00	20.96	18.41	615.79	Yes	
RW-03	12/17/12	634.20	636.75	612.50	587.50	NP	0.00	21.16	18.61	615.59	Yes	
RW-03	03/25/13	634.20	636.75	612.50	587.50	NP	0.00	22.11	19.56	614.64	Yes	
RW-03	05/05/13	634.20	636.75	612.50	587.50	NP	0.00	21.68	19.13	615.07	Yes	
RW-03	10/01/13	634.20	636.75	612.50	587.50	NP	0.00	20.96	18.41	615.79	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-03	05/21/14	634.20	636.75	612.50	587.50	NP	0.00	19.42	16.87	617.33	Yes	
RW-03	10/30/14	634.20	636.75	612.50	587.50	NP	0.00	18.87	16.32	617.88	Yes	
RW-03	05/06/15	634.20	636.75	612.50	587.50	NP	0.00	20.85	18.30	615.90	Yes	
RW-03	10/07/15	634.20	636.75	612.50	587.50	NP	0.00	19.11	16.56	617.64	Yes	
RW-03	05/23/16	634.20	636.75	612.50	587.50	NP	0.00	16.51	13.96	620.24	Yes	
RW-03	10/03/16	634.20	636.75	612.50	587.50	NP	0.00	18.01	15.46	618.74	Yes	
RW-03	06/14/17	634.20	636.75	612.50	587.50	NP	0.00	16.68	14.13	620.07	Yes	
RW-03	06/21/17	634.20	636.75	612.50	587.50	NP	0.00	17.13	14.58	619.62	Yes	
RW-03	06/22/17	634.20	636.75	612.50	587.50	NP	0.00	16.98	14.43	619.77	Yes	
RW-03	06/23/17	634.20	636.75	612.50	587.50	NP	0.00	17.05	14.50	619.70	Yes	
RW-04	06/01/90	634.70	636.48	612.80	587.80	21.52	4.80	26.32	20.82	613.87	Yes	
RW-04	01/04/91	634.70	636.48	612.80	587.80	20.95	2.81	23.76	19.80	614.89	Yes	
RW-04	01/30/91	634.70	636.48	612.80	587.80	21.10	2.45	23.55	19.87	614.82	Yes	
RW-04	04/24/91	634.70	636.48	612.80	587.80	21.20	2.59	23.79	20.00	614.69	Yes	
RW-04	06/06/91	634.70	636.48	612.80	587.80	19.97	2.27	22.24	18.70	615.99	Yes	
RW-04	07/09/91	634.70	636.48	612.80	587.80	19.02	2.20	21.22	17.74	616.96	Yes	
RW-04	08/06/91	634.70	636.48	612.80	587.80	18.13	2.25	20.38	16.86	617.84	Yes	
RW-04	09/04/91	634.70	636.48	612.80	587.80	18.07	2.60	20.67	16.88	617.82	Yes	
RW-04	10/08/91	634.70	636.48	612.80	587.80	17.13	2.70	19.83	15.96	618.73	Yes	
RW-04	11/08/91	634.70	636.48	612.80	587.80	17.66	3.05	20.71	16.57	618.12	Yes	
RW-04	12/03/91	634.70	636.48	612.80	587.80	15.95	3.47	19.42	14.95	619.74	Yes	
RW-04	01/07/92	634.70	636.48	612.80	587.80	17.40	3.47	20.87	16.40	618.29	Yes	
RW-04	02/04/92	634.70	636.48	612.80	587.80	18.15	3.22	21.37	17.10	617.60	Yes	
RW-04	03/03/92	634.70	636.48	612.80	587.80	18.56	3.14	21.70	17.49	617.20	Yes	
RW-04	09/24/92	634.70	636.48	612.80	587.80	16.57	4.98	21.55	15.91	618.77	Yes	
RW-04	10/14/92	634.70	636.48	612.80	587.80	17.60	4.07	21.67	16.74	617.95	Yes	
RW-04	06/25/93	634.70	636.48	612.80	587.80	14.49	4.87	19.36	13.81	620.88	Yes	
RW-04	10/28/93	634.70	636.48	612.80	587.80	18.16	3.47	21.63	17.16	617.53	Yes	
RW-04	01/29/94	634.70	636.48	612.80	587.80	18.87	3.48	22.35	17.88	616.82	Yes	
RW-04	04/27/94	634.70	636.48	612.80	587.80	18.67	3.42	22.09	17.66	617.03	Yes	
RW-04	07/21/94	634.70	636.48	612.80	587.80	17.34	4.22	21.56	16.51	618.18	Yes	
RW-04	10/25/94	634.70	636.48	612.80	587.80	17.95	4.02	21.97	17.08	617.61	Yes	
RW-04	11/02/94	634.70	636.48	612.80	587.80	17.55	3.95	21.50	16.66	618.03	Yes	
RW-04	02/01/95	634.70	636.48	612.80	587.80	14.95	8.25	23.20	15.03	619.65	Yes	
RW-04	04/04/95	634.70	636.48	612.80	587.80	15.60	9.85	25.45	16.04	618.63	Yes	
RW-04	11/14/95	634.70	636.48	612.80	587.80	15.08	5.24	20.32	14.48	620.21	Yes	
RW-04	11/09/99	634.70	636.48	612.80	587.80	15.85	6.23	22.08	15.48	619.21	Yes	bailed 11 gal FP
RW-04	12/21/99	634.70	636.48	612.80	587.80	18.55	1.14	19.69	17.03	617.67	Yes	bailed 2 gal FP
RW-04	01/27/00	634.70	636.48	612.80	587.80	19.30	1.55	20.85	17.87	616.83	Yes	bailed 0.2 gal FP



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-04	02/24/00	634.70	636.48	612.80	587.80	15.60	1.85	17.45	14.24	620.46	Yes	bailed 1.5 gal FP
RW-04	03/31/00	634.70	636.48	612.80	587.80	19.58	0.95	20.53	18.01	616.68	Yes	bailed 0.25 gal FP
RW-04	04/26/00	634.70	636.48	612.80	587.80	18.37	1.70	20.07	16.97	617.72	Yes	bailed 2.5 gal FP
RW-04	05/31/00	634.70	636.48	612.80	587.80	19.49	0.43	19.92	17.81	616.89	Yes	bailed 1 gal FP
RW-04	06/29/00	634.70	636.48	612.80	587.80	19.34	0.43	19.77	17.66	617.04	Yes	bailed 2 gal FP
RW-04	07/26/00	634.70	636.48	612.80	587.80	19.56	0.30	19.86	17.85	616.85	Yes	bailed 0.5 gal FP
RW-04	08/18/00	634.70	636.48	612.80	587.80	20.13	0.13	20.26	18.38	616.32	Yes	bailed 0.125
RW-04	09/27/00	634.70	636.48	612.80	587.80	20.05	1.32	21.37	18.57	616.13	Yes	bailed 3 gal. FP
RW-04	10/11/00	634.70	636.48	612.80	587.80	20.35	0.02	20.37	18.57	616.13	Yes	bailed 3 gal. FP
RW-04	11/17/00	634.70	636.48	612.80	587.80	20.11	0.78	20.89	18.51	616.19	Yes	bailed 0.75 gal. FP
RW-04	12/12/00	634.70	636.48	612.80	587.80	19.92	1.13	21.05	18.40	616.30	Yes	bailed 0.25 gal. FP
RW-04	01/18/01	634.70	636.48	612.80	587.80	20.44	0.92	21.36	18.87	615.83	Yes	bailed 0.25 gal. FP
RW-04	04/24/01	634.70	636.48	612.80	587.80	19.56	1.58	21.14	18.14	616.56	Yes	product abated using vactruck
RW-04	05/23/01	634.70	636.48	612.80	587.80	18.98	2.16	21.14	17.69	617.01	Yes	no product bailed
RW-04	06/19/01	634.70	636.48	612.80	587.80	18.91	0.27	19.18	17.19	617.51	Yes	
RW-04	07/26/01	634.70	636.48	612.80	587.80	19.60	0.28	19.88	17.88	616.82	Yes	
RW-04	08/31/01	634.70	636.48	612.80	587.80	19.98	0.27	20.25	18.26	616.44	Yes	
RW-04	09/26/01	634.70	636.48	612.80	587.80	20.02	0.30	20.32	18.31	616.39	Yes	
RW-04	10/24/01	634.70	636.48	612.80	587.80	19.99	1.08	21.07	18.45	616.24	Yes	
RW-04	02/26/02	634.70	636.48	612.80	587.80	20.35	4.68	25.03	19.63	615.06	Yes	
RW-04	03/20/02	634.70	636.48	612.80	587.80	20.48	5.90	26.38	20.03	614.65	Yes	
RW-04	04/24/02	634.70	636.48	612.80	587.80	19.72	5.65	25.37	19.22	615.47	Yes	
RW-04	05/15/02	634.70	636.48	612.80	587.80	19.43	3.50	22.93	18.44	616.25	Yes	
RW-04	06/27/02	634.70	636.48	612.80	587.80	19.70	3.19	22.89	18.64	616.05	Yes	
RW-04	07/25/02	634.70	636.48	612.80	587.80	19.58	2.12	21.70	18.28	616.42	Yes	
RW-04	08/20/02	634.70	636.48	612.80	587.80	19.53	1.75	21.28	18.15	616.55	Yes	
RW-04	09/30/02	634.70	636.48	612.80	587.80	19.14	1.45	20.59	17.69	617.01	Yes	
RW-04	11/05/02	634.70	636.48	612.80	587.80	18.88	1.42	20.30	17.42	617.28	Yes	
RW-04	12/23/02	634.70	636.48	612.80	587.80	20.81	0.46	21.27	19.13	615.57	Yes	
RW-04	01/28/03	634.70	636.48	612.80	587.80	20.34	1.71	22.05	18.95	615.75	Yes	
RW-04	02/19/03	634.70	636.48	612.80	587.80	20.41	2.43	22.84	19.18	615.52	Yes	
RW-04	04/17/03	634.70	636.48	612.80	587.80	20.77	5.88	26.65	20.32	614.37	Yes	
RW-04	05/15/03	634.70	636.48	612.80	587.80	20.94	4.94	25.88	20.28	614.41	Yes	
RW-04	06/10/03	634.70	636.48	612.80	587.80	20.42	5.84	26.26	19.96	614.73	Yes	
RW-04	10/23/03	634.70	636.48	612.80	587.80	20.67	7.04	27.71	20.48	614.20	Yes	
RW-04	12/03/03	634.70	636.48	612.80	587.80	20.83	7.37	28.20	20.71	613.97	Yes	
RW-04	04/19/04	634.82	636.24	612.80	587.80	21.45	5.73	27.18	21.32	613.48	Yes	
RW-04	07/28/04	634.82	636.24	612.80	587.80	20.61	2.19	22.80	19.68	615.13	Yes	
RW-04	11/15/04	634.82	636.24	612.80	587.80	19.76	1.33	21.09	18.64	616.18	Yes	
RW-04	04/18/05	634.82	636.24	612.80	587.80	20.27	2.77	23.04	19.48	615.34	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-04	10/11/05	634.82	636.24	612.80	587.80	19.38	2.20	21.58	18.46	616.36	Yes	
RW-04	05/23/06	634.82	636.24	612.80	587.80	18.63	2.28	20.91	17.72	617.09	Yes	
RW-04	10/16/06	634.82	636.24	612.80	587.80	19.83	4.02	23.85	19.32	615.49	Yes	
RW-04	04/23/07	634.82	636.24	612.80	587.80	20.25	0.83	21.08	19.02	615.80	Yes	
RW-04	09/25/07	634.82	636.24	612.80	587.80	20.50	7.73	28.23	20.83	613.98	Yes	
RW-04	05/01/08	634.82	636.24	612.80	587.80	19.41	2.47	21.88	18.55	616.27	Yes	
RW-04	10/20/08	634.82	636.24	612.80	587.80	17.75	2.81	20.56	16.96	617.85	Yes	
RW-04	04/18/09	634.82	636.24	612.80	587.80	19.08	2.45	21.53	18.21	616.60	Yes	
RW-04	08/04/09	634.82	636.24	612.80	587.80	19.58	3.44	23.02	18.94	615.88	Yes	
RW-04	08/26/09	634.82	636.24	612.80	587.80	19.39	2.79	22.18	18.60	616.21	Yes	
RW-04	09/03/09	634.82	636.24	612.80	587.80	19.13	2.67	21.80	18.31	616.50	Yes	
RW-04	09/08/09	634.82	636.24	612.80	587.80	19.19	2.61	21.80	18.36	616.45	Yes	
RW-04	09/14/09	634.82	636.24	612.80	587.80	19.25	2.60	21.85	18.42	616.40	Yes	
RW-04	10/11/09	634.82	636.24	612.80	587.80	19.79	2.86	22.65	19.02	615.80	Yes	
RW-04	10/15/09	634.82	636.24	612.80	587.80	19.79	2.86	22.65	19.02	615.80	Yes	
RW-04	04/28/10	634.82	636.24	612.80	587.80	19.67	3.96	23.63	19.14	615.67	Yes	
RW-04	10/25/10	634.82	636.24	612.80	587.80	17.60	3.09	20.69	16.88	617.94	Yes	
RW-04	04/25/11	634.82	636.24	612.80	587.80	18.85	2.59	21.44	18.01	616.80	Yes	
RW-04	09/14/11	634.82	636.24	612.80	587.80	18.08	3.26	21.34	17.40	617.42	Yes	
RW-04	09/23/11	634.82	636.24	612.80	587.80	18.21	3.11	21.32	17.49	617.32	Yes	
RW-04	09/29/11	634.82	636.24	612.80	587.80	18.20	3.03	21.23	17.46	617.35	Yes	
RW-04	10/07/11	634.82	636.24	612.80	587.80	18.41	2.76	21.17	17.61	617.20	Yes	
RW-04	10/11/11	634.82	636.24	612.80	587.80	18.57	2.67	21.24	17.75	617.06	Yes	
RW-04	10/21/11	634.82	636.24	612.80	587.80	18.88	2.47	21.35	18.02	616.80	Yes	
RW-04	10/27/11	634.82	636.24	612.80	587.80	18.99	2.41	21.40	18.11	616.70	Yes	
RW-04	11/04/11	634.82	636.24	612.80	587.80	19.20	2.38	21.58	18.32	616.50	Yes	
RW-04	11/09/11	634.82	636.24	612.80	587.80	19.12	2.36	21.48	18.23	616.58	Yes	
RW-04	11/18/11	634.82	636.24	612.80	587.80	19.26	2.37	21.63	18.38	616.44	Yes	
RW-04	11/22/11	634.82	636.24	612.80	587.80	19.40	2.44	21.84	18.53	616.28	Yes	
RW-04	12/01/11	634.82	636.24	612.80	587.80	19.76	2.46	22.22	18.90	615.92	Yes	
RW-04	01/04/12	634.82	636.24	612.80	587.80	20.05	2.47	22.52	19.19	615.63	Yes	
RW-04	02/16/12	634.82	636.24	612.80	587.80	20.40	3.87	24.27	19.85	614.96	Yes	
RW-04	03/13/12	634.82	636.24	612.80	587.80	20.45	6.55	27.00	20.51	614.30	Yes	
RW-04	04/03/12	634.82	636.24	612.80	587.80	20.37	7.43	27.80	20.63	614.18	Yes	Spill Buddy Before Reading
RW-04	04/03/12	634.82	636.24	612.80	587.80	26.67	0.13	26.80	25.28	609.54	No	Spill Buddy After Reading
RW-04	04/16/12	634.82	636.24	612.80	587.80	20.64	4.76	25.40	20.30	614.51	Yes	
RW-04	05/10/12	634.82	636.24	612.80	587.80	19.76	5.32	25.08	19.54	615.27	Yes	Spill Buddy Before Reading
RW-04	05/10/12	634.82	636.24	612.80	587.80	24.20	0.07	24.27	22.80	612.02	No	Spill Buddy After Reading
RW-04	05/18/12	634.82	636.24	612.80	587.80	19.82	4.53	24.35	19.42	615.39	Yes	
RW-04	05/21/12	634.82	636.24	612.80	587.80	19.92	4.56	24.48	19.53	615.28	Yes	Spill Buddy Before Reading

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-04	05/21/12	634.82	636.24	612.80	587.80	23.95	0.14	24.09	22.56	612.26	No	Spill Buddy After Reading
RW-04	06/18/12	634.82	636.24	612.80	587.80	18.85	2.50	21.35	17.99	616.82	Yes	Spill Buddy Before Reading
RW-04	06/18/12	634.82	636.24	612.80	587.80	20.90	0.10	21.00	19.50	615.32	Yes	Spill Buddy After Reading
RW-04	06/26/12	634.82	636.24	612.80	587.80	18.60	0.20	18.80	17.23	617.59	Yes	
RW-04	07/12/12	634.82	636.24	612.80	587.80	20.05	0.11	20.16	18.65	616.16	Yes	
RW-04	07/24/12	634.82	636.24	612.80	587.80	18.88	2.72	21.60	18.07	616.74	Yes	
RW-04	08/09/12	634.82	636.24	612.80	587.80	18.90	3.45	22.35	18.26	616.55	Yes	Spill Buddy Before Reading
RW-04	08/09/12	634.82	636.24	612.80	587.80	21.29	0.16	21.45	19.91	614.91	Yes	Spill Buddy After Reading
RW-04	08/17/12	634.82	636.24	612.80	587.80	19.33	2.45	21.78	18.46	616.35	Yes	
RW-04	09/17/12	634.82	636.24	612.80	587.80	19.60	4.60	24.20	19.22	615.59	Yes	
RW-04	09/18/12	634.82	636.24	612.80	587.80	19.59	4.59	24.18	19.21	615.60	Yes	Spill Buddy Before Reading
RW-04	09/18/12	634.82	636.24	612.80	587.80	23.60	0.07	23.67	22.20	612.62	No	Spill Buddy After Reading
RW-04	09/30/12	634.82	636.24	612.80	587.80	20.49	0.95	21.44	19.28	615.53	Yes	
RW-04	10/22/12	634.82	636.24	612.80	587.80	20.49	3.07	23.56	19.76	615.05	Yes	
RW-04	11/21/12	634.82	636.24	612.80	587.80	20.22	6.23	26.45	20.21	614.60	Yes	
RW-04	12/17/12	634.82	636.24	612.80	587.80	20.20	8.05	28.25	20.60	614.20	Yes	
RW-04	03/25/13	634.82	636.24	612.80	587.80	20.78	10.02	30.80	21.62	613.18	Yes	
RW-04	04/03/13	634.82	636.24	612.80	587.80	20.85	9.74	30.59	21.63	613.17	Yes	Spill Buddy Before Reading
RW-04	04/03/13	634.82	636.24	612.80	587.80	28.69	0.26	28.95	27.33	607.49	No	Spill Buddy After Reading
RW-04	04/29/13	634.82	636.24	612.80	587.80	20.77	6.31	27.08	20.78	614.03	Yes	Spill Buddy Before Reading
RW-04	04/29/13	634.82	636.24	612.80	587.80	26.38	0.09	26.47	24.98	609.84	No	Spill Buddy After Reading
RW-04	05/05/13	634.82	636.24	612.80	587.80	21.14	2.54	23.68	20.29	614.52	Yes	
RW-04	10/03/13	634.82	636.24	612.80	587.80	20.15	5.10	25.25	19.88	614.93	Yes	
RW-04	05/22/14	634.82	636.24	612.80	587.80	18.99	1.79	20.78	17.97	616.84	Yes	
RW-04	10/31/14	634.82	636.24	612.80	587.80	18.38	4.45	22.83	17.97	616.85	Yes	
RW-04	05/06/15	634.82	636.24	612.80	587.80	19.90	5.62	25.52	19.75	615.06	Yes	
RW-04	07/10/15	634.82	636.24	612.80	587.80	19.24	2.31	21.55	18.34	616.47	Yes	
RW-04	10/05/15	634.82	636.24	612.80	587.80	18.25	2.44	20.69	17.38	617.43	Yes	
RW-04	05/23/16	634.82	636.24	612.80	587.80	15.49	5.89	21.38	15.40	619.41	Yes	
RW-04	10/03/16	634.82	636.24	612.80	587.80	16.89	5.65	22.54	16.75	618.06	Yes	
RW-04	06/14/17	634.82	636.24	612.80	587.80	15.54	5.72	21.26	15.41	619.40	Yes	
RW-04	06/21/17	634.82	636.24	612.80	587.80	16.20	5.16	21.36	15.95	618.86	Yes	
RW-04	06/22/17	634.82	636.24	612.80	587.80	16.80	1.12	17.92	15.63	619.18	Yes	
RW-04	06/23/17	634.82	636.24	612.80	587.80	16.97	0.98	17.95	15.77	619.05	Yes	
RW-04	10/26/17	634.82	636.24	612.80	587.80	14.69	2.53	17.22	13.84	620.97	Yes	
RW-04	05/23/18	634.82	636.24	612.80	587.80	19.40	2.10	21.50	18.45	616.36	Yes	
RW-05	05/04/90	636.00	638.51	613.30	588.30	23.50	0.85	24.35	21.18	614.82	Yes	
RW-05	06/01/90	636.00	638.51	613.30	588.30	23.00	1.45	24.45	20.82	615.18	Yes	
RW-05	06/19/90	636.00	638.51	613.30	588.30	22.95	1.70	24.65	20.82	615.18	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-05	06/27/90	636.00	638.51	613.30	588.30	23.33	0.21	23.54	20.87	615.13	Yes	
RW-05	07/05/90	636.00	638.51	613.30	588.30	23.48	0.40	23.88	21.06	614.94	Yes	
RW-05	07/13/90	636.00	638.51	613.30	588.30	23.38	0.48	23.86	20.98	615.02	Yes	
RW-05	07/17/90	636.00	638.51	613.30	588.30	23.18	0.57	23.75	20.80	615.20	Yes	
RW-05	07/25/90	636.00	638.51	613.30	588.30	23.35	0.65	24.00	20.99	615.01	Yes	
RW-05	08/09/90	636.00	638.51	613.30	588.30	23.20	0.80	24.00	20.87	615.13	Yes	
RW-05	09/06/90	636.00	638.51	613.30	588.30	22.72	2.21	24.93	20.71	615.29	Yes	
RW-05	01/04/91	636.00	638.51	613.30	588.30	22.05	3.20	25.25	20.26	615.74	Yes	
RW-05	01/30/91	636.00	638.51	613.30	588.30	22.22	3.34	25.56	20.46	615.54	Yes	
RW-05	04/24/91	636.00	638.51	613.30	588.30	22.40	3.32	25.72	20.64	615.36	Yes	
RW-05	07/09/91	636.00	638.51	613.30	588.30	20.41	4.17	24.58	18.84	617.16	Yes	
RW-05	10/08/91	636.00	638.51	613.30	588.30	18.62	5.32	23.94	17.31	618.69	Yes	
RW-05	01/07/92	636.00	638.51	613.30	588.30	18.73	5.71	24.44	17.51	618.49	Yes	
RW-05	10/14/92	636.00	638.51	613.30	588.30	18.56	7.16	25.72	17.67	618.33	Yes	
RW-05	06/25/93	636.00	638.51	613.30	588.30	16.28	7.74	24.02	15.52	620.48	Yes	
RW-05	10/28/93	636.00	638.51	613.30	588.30	18.84	7.70	26.54	18.07	617.93	Yes	
RW-05	01/29/94	636.00	638.51	613.30	588.30	20.64	6.99	27.63	19.71	616.29	Yes	
RW-05	04/27/94	636.00	638.51	613.30	588.30	20.50	1.87	22.37	18.41	617.59	Yes	
RW-05	07/21/94	636.00	638.51	613.30	588.30	19.28	0.59	19.87	16.90	619.10	Yes	
RW-05	10/25/94	636.00	638.51	613.30	588.30	19.76	1.15	20.91	17.51	618.49	Yes	
RW-05	02/01/95	636.00	638.51	613.30	588.30	20.95	1.30	22.25	18.73	617.27	Yes	
RW-05	04/04/95	636.00	638.51	613.30	588.30	21.72	1.38	23.10	19.52	616.48	Yes	
RW-05	07/12/95	636.00	638.51	613.30	588.30	20.69	1.56	22.25	18.53	617.47	Yes	
RW-05	11/14/95	636.00	638.51	613.30	588.30	19.32	1.81	21.13	17.22	618.78	Yes	
RW-05	03/13/96	636.00	638.51	613.30	588.30	21.17	2.02	23.19	19.12	616.88	Yes	
RW-05	11/03/98	636.00	638.51	613.30	588.30	21.49	2.90	24.39	19.64	616.36	Yes	
RW-05	03/02/99	636.00	638.51	613.30	588.30	21.52	3.05	24.57	19.70	616.30	Yes	
RW-05	10/07/99	636.00	638.51	613.30	588.30	18.61	1.30	19.91	16.39	619.61	Yes	
RW-05	11/09/99	636.00	638.51	613.30	588.30	18.48	0.87	19.35	16.17	619.83	Yes	bailed 0.25 gal. FP
RW-05	12/21/99	636.00	638.51	613.30	588.30	18.56	0.17	18.73	16.09	619.91	Yes	bailed 0.25 gal. FP
RW-05	01/27/00	636.00	638.51	613.30	588.30	20.78	0.90	21.68	18.47	617.53	Yes	bailed 0.2 gal. FP
RW-05	02/24/00	636.00	638.51	613.30	588.30	21.22	0.72	21.94	18.87	617.13	Yes	bailed 0.25 gal. FP
RW-05	03/31/00	636.00	638.51	613.30	588.30	21.33	0.60	21.93	18.96	617.04	Yes	bailed 0.5 gal. FP
RW-05	04/20/00	636.00	638.51	613.30	588.30	20.61	3.10	23.71	18.80	617.20	Yes	bailed 5 gal. FP
RW-05	04/26/00	636.00	638.51	613.30	588.30	20.97	0.58	21.55	18.59	617.41	Yes	bailed 0.5 gal. FP
RW-05	05/31/00	636.00	638.51	613.30	588.30	21.06	0.36	21.42	18.63	617.37	Yes	bailed 0.5 gal. FP
RW-05	06/29/00	636.00	638.51	613.30	588.30	20.88	0.40	21.28	18.46	617.54	Yes	bailed 1 gal. FP
RW-05	07/26/00	636.00	638.51	613.30	588.30	20.97	0.29	21.26	18.53	617.47	Yes	bailed 0.5 gal. FP
RW-05	08/18/00	636.00	638.51	613.30	588.30	21.26	0.47	21.73	18.86	617.14	Yes	bailed 0.25 gal. FP
RW-05	09/27/00	636.00	638.51	613.30	588.30	21.72	0.31	22.03	19.28	616.72	Yes	bailed 0.5 gal FP

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-05	10/11/00	636.00	638.51	613.30	588.30	21.67	0.07	21.74	19.18	616.82	Yes	bailed 0.01 gal FP
RW-05	11/17/00	636.00	638.51	613.30	588.30	21.61	0.08	21.69	19.12	616.88	Yes	No product bailed
RW-05	12/12/00	636.00	638.51	613.30	588.30	21.48	0.16	21.64	19.01	616.99	Yes	bailed 0.1 gal FP
RW-05	01/18/01	636.00	638.51	613.30	588.30	21.77	0.07	21.84	19.28	616.72	Yes	bailed 0.2 gal FP
RW-05	04/24/01	636.00	638.51	613.30	588.30	21.90	0.20	22.10	19.44	616.56	Yes	product abated using vactruck
RW-05	05/23/01	636.00	638.51	613.30	588.30	20.75	0.12	20.87	18.27	617.73	Yes	no product bailed
RW-05	06/19/01	636.00	638.51	613.30	588.30	20.63	0.14	20.77	18.15	617.85	Yes	
RW-05	07/26/01	636.00	638.51	613.30	588.30	21.25	0.27	21.52	18.80	617.20	Yes	
RW-05	08/31/01	636.00	638.51	613.30	588.30	21.49	0.32	21.81	19.05	616.95	Yes	
RW-05	09/26/01	636.00	638.51	613.30	588.30	21.63	0.31	21.94	19.19	616.81	Yes	
RW-05	10/24/01	636.00	638.51	613.30	588.30	21.66	0.34	22.00	19.23	616.77	Yes	
RW-05	12/20/01	636.00	638.51	613.30	588.30	22.13	0.33	22.46	19.69	616.31	Yes	
RW-05	01/22/02	636.00	638.51	613.30	588.30	22.17	0.36	22.53	19.74	616.26	Yes	
RW-05	02/26/02	636.00	638.51	613.30	588.30	22.59	0.39	22.98	20.17	615.83	Yes	
RW-05	03/20/02	636.00	638.51	613.30	588.30	22.78	0.39	23.17	20.36	615.64	Yes	
RW-05	04/24/02	636.00	638.51	613.30	588.30	22.09	0.42	22.51	19.67	616.33	Yes	
RW-05	05/15/02	636.00	638.51	613.30	588.30	21.84	0.43	22.27	19.43	616.57	Yes	
RW-05	06/27/02	636.00	638.51	613.30	588.30	21.89	0.49	22.38	19.49	616.51	Yes	
RW-05	07/25/02	636.00	638.51	613.30	588.30	21.75	0.53	22.28	19.36	616.64	Yes	
RW-05	08/20/02	636.00	638.51	613.30	588.30	21.74	0.57	22.31	19.36	616.64	Yes	
RW-05	09/30/02	636.00	638.51	613.30	588.30	21.21	0.69	21.90	18.86	617.14	Yes	
RW-05	11/05/02	636.00	638.51	613.30	588.30	21.01	0.83	21.84	18.69	617.31	Yes	
RW-05	12/23/02	636.00	638.51	613.30	588.30	21.74	0.95	22.69	19.44	616.56	Yes	
RW-05	01/28/03	636.00	638.51	613.30	588.30	22.16	1.03	23.19	19.88	616.12	Yes	
RW-05	02/19/03	636.00	638.51	613.30	588.30	22.39	1.04	23.43	20.11	615.89	Yes	
RW-05	04/17/03	636.00	638.51	613.30	588.30	22.90	1.03	23.93	20.62	615.38	Yes	
RW-05	05/15/03	636.00	638.51	613.30	588.30	23.07	1.02	24.09	20.79	615.21	Yes	
RW-05	06/10/03	636.00	638.51	613.30	588.30	22.61	1.00	23.61	20.33	615.67	Yes	
RW-05	10/23/03	636.00	638.51	613.30	588.30	22.89	1.13	24.02	20.64	615.36	Yes	
RW-05	12/03/03	636.00	638.51	613.30	588.30	23.03	1.16	24.19	20.78	615.22	Yes	
RW-05	04/19/04	636.67	638.61	613.30	588.30	23.38	1.45	24.83	21.77	614.90	Yes	
RW-05	07/28/04	636.67	638.61	613.30	588.30	22.32	2.38	24.70	20.92	615.75	Yes	
RW-05	11/15/04	636.67	638.61	613.30	588.30	21.48	2.73	24.21	20.16	616.51	Yes	
RW-05	04/18/05	636.67	638.61	613.30	588.30	21.85	3.01	24.86	20.59	616.08	Yes	
RW-05	10/11/05	636.67	638.61	613.30	588.30	21.09	3.89	24.98	20.03	616.64	Yes	
RW-05	05/23/06	636.67	638.61	613.30	588.30	20.14	5.07	25.21	19.35	617.32	Yes	
RW-05	10/16/06	636.67	638.61	613.30	588.30	21.19	5.85	27.04	20.57	616.10	Yes	
RW-05	04/23/07	636.67	638.61	613.30	588.30	22.09	5.89	27.98	21.48	615.19	Yes	
RW-05	09/25/07	636.67	638.61	613.30	588.30	21.95	6.00	27.95	21.37	615.30	Yes	
RW-05	05/01/08	636.67	638.61	613.30	588.30	20.99	6.26	27.25	20.46	616.21	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-05	10/20/08	636.67	638.61	613.30	588.30	19.05	<b>6.55</b>	25.60	18.59	618.08	Yes	
RW-05	04/18/09	636.67	638.61	613.30	588.30	20.25	<b>7.64</b>	27.89	20.04	616.63	Yes	
RW-05	10/11/09	636.67	638.61	613.30	588.30	21.06	<b>1.13</b>	22.19	19.38	617.29	Yes	
RW-05	04/28/10	636.67	638.61	613.30	588.30	21.59	<b>1.27</b>	22.86	19.94	616.73	Yes	
RW-05	10/25/10	636.67	638.61	613.30	588.30	19.48	<b>0.72</b>	20.20	17.70	618.97	Yes	
RW-05	04/25/11	636.67	638.61	613.30	588.30	20.59	<b>2.14</b>	22.73	19.13	617.54	Yes	
RW-05	09/14/11	636.67	638.61	613.30	588.30	19.68	<b>2.16</b>	21.84	18.23	618.44	Yes	
RW-05	09/23/11	636.67	638.61	613.30	588.30	19.90	<b>2.21</b>	22.11	18.46	618.21	Yes	
RW-05	09/29/11	636.67	638.61	613.30	588.30	19.79	<b>2.25</b>	22.04	18.36	618.31	Yes	
RW-05	10/07/11	636.67	638.61	613.30	588.30	20.00	<b>2.26</b>	22.26	18.57	618.10	Yes	
RW-05	10/11/11	636.67	638.61	613.30	588.30	20.08	<b>2.30</b>	22.38	18.66	618.01	Yes	
RW-05	10/21/11	636.67	638.61	613.30	588.30	20.37	<b>2.35</b>	22.72	18.96	617.71	Yes	
RW-05	10/27/11	636.67	638.61	613.30	588.30	20.47	<b>2.30</b>	22.77	19.05	617.62	Yes	
RW-05	11/01/11	636.67	638.61	613.30	588.30	20.67	<b>2.32</b>	22.99	19.25	617.42	Yes	
RW-05	11/09/11	636.67	638.61	613.30	588.30	20.60	<b>2.33</b>	22.93	19.19	617.48	Yes	
RW-05	11/18/11	636.67	638.61	613.30	588.30	20.70	<b>2.34</b>	23.04	19.29	617.38	Yes	
RW-05	11/22/11	636.67	638.61	613.30	588.30	20.86	<b>2.39</b>	23.25	19.46	617.21	Yes	
RW-05	12/01/11	636.67	638.61	613.30	588.30	21.21	<b>2.35</b>	23.56	19.80	616.87	Yes	
RW-05	01/04/12	636.67	638.61	613.30	588.30	21.43	<b>2.36</b>	23.79	20.02	616.65	Yes	
RW-05	02/16/12	636.67	638.61	613.30	588.30	22.02	<b>2.34</b>	24.36	20.61	616.06	Yes	
RW-05	03/13/12	636.67	638.61	613.30	588.30	22.29	<b>2.35</b>	24.64	20.88	615.79	Yes	
RW-05	04/05/12	636.67	638.61	613.30	588.30	22.28	<b>2.37</b>	24.65	20.88	615.79	Yes	Spill Buddy Before Reading
RW-05	04/05/12	636.67	638.61	613.30	588.30	24.50	<b>0.05</b>	24.55	22.57	614.10	Yes	Spill Buddy After Reading
RW-05	04/16/12	636.67	638.61	613.30	588.30	22.50	<b>0.15</b>	22.65	20.59	616.08	Yes	
RW-05	05/18/12	636.67	638.61	613.30	588.30	21.68	<b>0.27</b>	21.95	19.80	616.87	Yes	
RW-05	06/18/12	636.67	638.61	613.30	588.30	20.73	<b>0.32</b>	21.05	18.86	617.81	Yes	
RW-05	06/26/12	636.67	638.61	613.30	588.30	20.19	<b>0.32</b>	20.51	18.32	618.35	Yes	
RW-05	07/24/12	636.67	638.61	613.30	588.30	20.62	<b>0.38</b>	21.00	18.77	617.90	Yes	
RW-05	08/17/12	636.67	638.61	613.30	588.30	20.95	<b>0.45</b>	21.40	19.11	617.56	Yes	
RW-05	09/17/12	636.67	638.61	613.30	588.30	21.38	<b>0.57</b>	21.95	19.57	617.10	Yes	
RW-05	09/30/12	636.67	638.61	613.30	588.30	21.59	<b>0.59</b>	22.18	19.78	616.89	Yes	
RW-05	11/21/12	636.67	638.61	613.30	588.30	22.02	<b>0.62</b>	22.64	20.22	616.45	Yes	
RW-05	12/17/12	636.67	638.61	613.30	588.30	22.25	<b>0.66</b>	22.91	20.46	616.21	Yes	
RW-05	03/25/13	636.67	638.61	613.30	588.30	23.09	<b>0.83</b>	23.92	21.34	615.33	Yes	
RW-05	05/05/13	636.67	638.61	613.30	588.30	22.72	<b>0.84</b>	23.56	20.97	615.70	Yes	
RW-05	10/03/13	636.67	638.61	613.30	588.30	22.09	<b>1.15</b>	23.24	20.41	616.26	Yes	
RW-05	05/22/14	636.67	638.61	613.30	588.30	20.69	<b>1.53</b>	22.22	19.10	617.57	Yes	
RW-05	10/31/14	636.67	638.61	613.30	588.30	20.15	<b>1.94</b>	22.09	18.65	618.02	Yes	
RW-05	05/06/15	636.67	638.61	613.30	588.30	21.77	<b>2.19</b>	23.96	20.32	616.35	Yes	
RW-05	10/05/15	636.67	638.61	613.30	588.30	19.94	<b>2.50</b>	22.44	18.56	618.11	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-05	10/03/16	636.67	638.61	613.30	588.30	18.83	2.61	21.44	17.48	619.19	Yes	
RW-05	06/29/17	636.67	638.61	613.30	588.30	18.40	2.65	21.05	17.06	619.61	Yes	
RW-06	06/01/90	635.20	637.96	615.00	590.00	20.50	4.70	25.20	18.80	616.33	Yes	
RW-06	01/30/91	635.20	637.96	615.00	590.00	20.47	6.14	26.61	19.10	616.02	Yes	
RW-06	04/24/91	635.20	637.96	615.00	590.00	22.22	3.22	25.44	20.19	614.97	No	
RW-06	06/06/91	635.20	637.96	615.00	590.00	20.51	2.75	23.26	18.37	616.79	Yes	
RW-06	07/09/91	635.20	637.96	615.00	590.00	19.32	3.60	22.92	17.37	617.78	Yes	
RW-06	08/06/91	635.20	637.96	615.00	590.00	18.64	3.40	22.04	16.65	618.50	Yes	
RW-06	09/04/91	635.20	637.96	615.00	590.00	18.66	3.28	21.94	16.64	618.51	Yes	
RW-06	10/08/91	635.20	637.96	615.00	590.00	19.73	1.75	21.48	17.37	617.81	Yes	
RW-06	11/08/91	635.20	637.96	615.00	590.00	20.02	1.95	21.97	17.70	617.47	Yes	
RW-06	12/03/91	635.20	637.96	615.00	590.00	16.40	4.19	20.59	14.59	620.55	Yes	
RW-06	01/07/92	635.20	637.96	615.00	590.00	18.41	2.06	20.47	16.12	619.06	Yes	
RW-06	02/04/92	635.20	637.96	615.00	590.00	19.80	2.05	21.85	17.50	617.67	Yes	
RW-06	03/03/92	635.20	637.96	615.00	590.00	19.67	2.45	22.12	17.46	617.70	Yes	
RW-06	09/24/92	635.20	637.96	615.00	590.00	17.32	3.23	20.55	15.29	619.87	Yes	
RW-06	06/25/93	635.20	637.96	615.00	590.00	15.67	2.58	18.25	13.49	621.67	Yes	
RW-06	07/21/93	635.20	637.96	615.00	590.00	16.52	1.82	18.34	14.17	621.00	Yes	
RW-06	08/17/93	635.20	637.96	615.00	590.00	18.14	2.11	20.25	15.86	619.31	Yes	
RW-06	09/09/93	635.20	637.96	615.00	590.00	19.02	2.11	21.13	16.74	618.43	Yes	
RW-06	10/28/93	635.20	637.96	615.00	590.00	19.53	1.68	21.21	17.15	618.03	Yes	
RW-06	11/24/93	635.20	637.96	615.00	590.00	19.87	1.48	21.35	17.44	617.73	Yes	
RW-06	12/17/93	635.20	637.96	615.00	590.00	19.92	1.10	21.02	17.41	617.78	Yes	
RW-06	01/29/94	635.20	637.96	615.00	590.00	19.83	1.72	21.55	17.46	617.72	Yes	
RW-06	02/25/94	635.20	637.96	615.00	590.00	20.06	2.07	22.13	17.77	617.40	Yes	
RW-06	03/24/94	635.20	637.96	615.00	590.00	20.16	1.92	22.08	17.83	617.34	Yes	
RW-06	04/27/94	635.20	637.96	615.00	590.00	19.57	2.00	21.57	17.26	617.91	Yes	
RW-06	05/26/94	635.20	637.96	615.00	590.00	18.64	1.36	20.00	16.19	618.99	Yes	
RW-06	06/29/94	635.20	637.96	615.00	590.00	18.04	0.97	19.01	15.50	619.69	Yes	
RW-06	07/21/94	635.20	637.96	615.00	590.00	18.96	1.35	20.31	16.50	618.68	Yes	
RW-06	08/30/94	635.20	637.96	615.00	590.00	19.57	1.15	20.72	17.07	618.11	Yes	
RW-06	10/25/94	635.20	637.96	615.00	590.00	18.45	1.53	19.98	16.04	619.14	Yes	
RW-06	11/02/94	635.20	637.96	615.00	590.00	18.35	1.65	20.00	15.96	619.21	Yes	
RW-06	02/01/95	635.20	637.96	615.00	590.00	20.10	0.48	20.58	17.45	617.74	Yes	
RW-06	04/04/95	635.20	637.96	615.00	590.00	20.44	2.16	22.60	18.17	617.00	Yes	
RW-06	07/12/95	635.20	637.96	615.00	590.00	19.73	0.02	19.75	16.97	618.23	Yes	
RW-06	11/13/95	635.20	637.96	615.00	590.00	18.54	0.02	18.56	15.78	619.42	Yes	
RW-06	03/13/96	635.20	637.96	615.00	590.00	19.85	2.30	22.15	17.61	617.56	Yes	
RW-06	05/28/96	635.20	637.96	615.00	590.00	18.45	0.03	18.48	15.70	619.50	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	10/08/96	635.20	637.96	615.00	590.00	17.60	0.02	17.62	14.84	620.36	Yes	
RW-06	04/29/97	635.20	637.96	615.00	590.00	NP	0.00	16.62	13.86	621.34	Yes	
RW-06	06/10/97	635.20	637.96	615.00	590.00	NP	0.00	18.00	15.24	619.96	Yes	
RW-06	03/02/99	635.20	637.96	615.00	590.00	20.38	2.16	22.54	18.11	617.06	Yes	
RW-06	10/07/99	635.20	637.96	615.00	590.00	17.16	1.33	18.49	14.70	620.48	Yes	
RW-06	11/09/99	635.20	637.96	615.00	590.00	18.23	1.69	19.92	15.85	619.32	Yes	bailed 2 gal. FP
RW-06	12/21/99	635.20	637.96	615.00	590.00	18.76	0.12	18.88	16.03	619.17	Yes	
RW-06	01/27/00	635.20	637.96	615.00	590.00	19.95	0.12	20.07	17.22	617.98	Yes	
RW-06	02/24/00	635.20	637.96	615.00	590.00	19.87	1.65	21.52	17.48	617.69	Yes	bailed 2 gal. FP
RW-06	03/31/00	635.20	637.96	615.00	590.00	19.71	2.22	21.93	17.45	617.72	Yes	installed pump from MW-2
RW-06	04/20/00	635.20	637.96	615.00	590.00	18.92	2.96	21.88	16.83	618.33	Yes	bailed 4 gal. FP
RW-06	04/26/00	635.20	637.96	615.00	590.00	19.50	1.47	20.97	17.07	618.11	Yes	
RW-06	05/31/00	635.20	637.96	615.00	590.00	19.65	1.38	21.03	17.20	617.98	Yes	installed skimmer
RW-06	06/20/00	635.20	637.96	615.00	590.00	19.66	0.02	19.68	16.90	618.30	Yes	Skimmer operating
RW-06	07/26/00	635.20	637.96	615.00	590.00	19.86	0.02	19.88	17.10	618.10	Yes	Skimmer operating
RW-06	08/18/00	635.20	637.96	615.00	590.00	19.26	2.14	21.40	16.98	618.19	Yes	bailed 1 gal. FP-installed skimmer
RW-06	09/27/00	635.20	637.96	615.00	590.00	20.42	1.29	21.71	17.95	617.23	Yes	skimmer down-bailed 1.25 gal. FP
RW-06	10/11/00	635.20	637.96	615.00	590.00	20.11	1.88	21.99	17.77	617.40	Yes	skimmer down-bailed 3.75 gal. FP
RW-06	11/17/00	635.20	637.96	615.00	590.00	19.69	2.83	22.52	17.57	617.59	Yes	skimmer down-bailed 6 gal. FP
RW-06	12/12/00	635.20	637.96	615.00	590.00	19.94	1.59	21.53	17.54	617.64	Yes	skimmer down-bailed 3 gal. FP
RW-06	01/18/01	635.20	637.96	615.00	590.00	20.23	1.75	21.98	17.87	617.31	Yes	skimmer down-bailed 4 gal. FP
RW-06	04/24/01	635.20	637.96	615.00	590.00	20.21	3.01	23.22	18.13	617.03	Yes	product abated using vactruck
RW-06	05/23/01	635.20	637.96	615.00	590.00	19.22	1.30	20.52	16.75	618.43	Yes	skimmer down/no product bailed
RW-06	06/19/01	635.20	637.96	615.00	590.00	19.45	0.72	20.17	16.85	618.34	Yes	
RW-06	07/26/01	635.20	637.96	615.00	590.00	20.22	0.99	21.21	17.68	617.50	Yes	
RW-06	08/31/01	635.20	637.96	615.00	590.00	20.41	0.01	20.42	17.65	617.55	Yes	
RW-06	09/26/01	635.20	637.96	615.00	590.00	20.41	0.24	20.65	17.70	617.49	Yes	
RW-06	10/24/01	635.20	637.96	615.00	590.00	20.00	1.45	21.45	17.57	617.61	Yes	
RW-06	12/20/01	635.20	637.96	615.00	590.00	20.58	1.84	22.42	18.24	616.94	Yes	
RW-06	01/22/02	635.20	637.96	615.00	590.00	20.53	1.88	22.41	18.19	616.98	Yes	
RW-06	02/26/02	635.20	637.96	615.00	590.00	21.22	0.89	22.11	18.66	616.53	Yes	
RW-06	03/20/02	635.20	637.96	615.00	590.00	21.60	0.14	21.74	18.87	616.33	Yes	
RW-06	04/24/02	635.20	637.96	615.00	590.00	20.32	2.54	22.86	18.13	617.03	Yes	
RW-06	05/15/02	635.20	637.96	615.00	590.00	20.04	2.29	22.33	17.80	617.37	Yes	
RW-06	06/27/02	635.20	637.96	615.00	590.00	20.44	1.53	21.97	18.03	617.15	Yes	
RW-06	07/25/02	635.20	637.96	615.00	590.00	20.57	0.04	20.61	17.82	617.38	Yes	
RW-06	08/20/02	635.20	637.96	615.00	590.00	20.73	0.15	20.88	18.00	617.19	Yes	
RW-06	09/30/02	635.20	637.96	615.00	590.00	NP	0.00	20.03	17.27	617.93	Yes	
RW-06	11/05/02	635.20	637.96	615.00	590.00	19.89	0.02	19.91	17.13	618.07	Yes	
RW-06	12/23/02	635.20	637.96	615.00	590.00	20.74	0.02	20.76	17.98	617.22	Yes	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	01/28/03	635.20	637.96	615.00	590.00	21.11	0.11	21.22	18.37	616.82	Yes	
RW-06	02/19/03	635.20	637.96	615.00	590.00	21.24	0.31	21.55	18.55	616.65	Yes	
RW-06	03/13/03	635.20	637.96	615.00	590.00	21.27	1.38	22.65	18.82	616.36	Yes	
RW-06	04/17/03	635.20	637.96	615.00	590.00	21.20	2.52	23.72	19.01	616.16	Yes	
RW-06	04/25/03	635.20	637.96	615.00	590.00	21.42	2.64	24.06	19.26	615.91	Yes	
RW-06	05/15/03	635.20	637.96	615.00	590.00	21.44	2.97	24.41	19.35	615.81	Yes	
RW-06	06/10/03	635.20	637.96	615.00	590.00	21.19	2.06	23.25	18.90	616.28	Yes	
RW-06	07/31/03	635.20	637.96	615.00	590.00	20.90	1.95	22.85	18.58	616.59	Yes	
RW-06	10/23/03	635.20	637.96	615.00	590.00	21.14	1.67	22.81	18.76	616.42	Yes	
RW-06	12/03/03	635.20	637.96	615.00	590.00	21.36	2.92	24.28	19.26	615.90	Yes	
RW-06	04/19/04	636.09	638.10	615.00	590.00	21.94	2.35	24.29	20.46	615.60	Yes	
RW-06	07/28/04	636.09	638.10	615.00	590.00	21.02	2.10	23.12	19.48	616.58	Yes	
RW-06	11/15/04	636.09	638.10	615.00	590.00	20.14	1.80	21.94	18.54	617.53	Yes	
RW-06	04/18/05	636.09	638.10	615.00	590.00	20.25	2.67	22.92	18.84	617.21	Yes	
RW-06	10/11/05	636.09	638.10	615.00	590.00	20.00	1.85	21.85	18.41	617.66	Yes	
RW-06	05/23/06	636.09	638.10	615.00	590.00	19.30	1.39	20.69	17.60	618.47	Yes	
RW-06	10/16/06	636.09	638.10	615.00	590.00	20.23	2.15	22.38	18.71	617.35	Yes	
RW-06	04/23/07	636.09	638.10	615.00	590.00	21.03	2.85	23.88	19.66	616.39	Yes	
RW-06	09/25/07	636.09	638.10	615.00	590.00	20.98	2.72	23.70	19.58	616.47	Yes	
RW-06	05/01/08	636.09	638.10	615.00	590.00	19.70	2.13	21.83	18.17	617.89	Yes	
RW-06	10/20/08	636.09	638.10	615.00	590.00	18.36	1.26	19.62	16.63	619.44	Yes	
RW-06	04/18/09	636.09	638.10	615.00	590.00	19.43	1.43	20.86	17.74	618.33	Yes	
RW-06	04/28/10	636.09	638.10	615.00	590.00	19.99	1.80	21.79	18.39	617.68	Yes	
RW-06	10/25/10	636.09	638.10	615.00	590.00	17.95	1.11	19.06	16.19	619.88	Yes	
RW-06	04/25/11	636.09	638.10	615.00	590.00	19.24	0.99	20.23	17.45	618.62	Yes	
RW-06	09/14/11	636.09	638.10	615.00	590.00	18.48	0.97	19.45	16.69	619.39	Yes	
RW-06	09/23/11	636.09	638.10	615.00	590.00	18.69	0.95	19.64	16.89	619.18	Yes	
RW-06	09/29/11	636.09	638.10	615.00	590.00	18.55	0.98	19.53	16.76	619.31	Yes	
RW-06	10/07/11	636.09	638.10	615.00	590.00	18.68	0.97	19.65	16.89	619.19	Yes	
RW-06	10/11/11	636.09	638.10	615.00	590.00	19.03	0.96	19.99	17.24	618.84	Yes	
RW-06	10/21/11	636.09	638.10	615.00	590.00	19.14	0.98	20.12	17.35	618.72	Yes	
RW-06	10/27/11	636.09	638.10	615.00	590.00	19.24	0.98	20.22	17.45	618.62	Yes	
RW-06	11/04/11	636.09	638.10	615.00	590.00	19.49	0.96	20.45	17.70	618.38	Yes	
RW-06	11/09/11	636.09	638.10	615.00	590.00	19.38	0.92	20.30	17.58	618.50	Yes	
RW-06	11/18/11	636.09	638.10	615.00	590.00	19.46	0.96	20.42	17.67	618.41	Yes	
RW-06	11/22/11	636.09	638.10	615.00	590.00	19.62	0.99	20.61	17.83	618.24	Yes	
RW-06	12/01/11	636.09	638.10	615.00	590.00	20.09	0.98	21.07	18.30	617.77	Yes	
RW-06	01/04/12	636.09	638.10	615.00	590.00	20.01	1.82	21.83	18.41	617.65	Yes	
RW-06	02/16/12	636.09	638.10	615.00	590.00	20.46	2.32	22.78	18.97	617.08	Yes	
RW-06	03/13/12	636.09	638.10	615.00	590.00	21.74	1.44	23.18	20.06	616.01	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-06	04/05/12	636.09	638.10	615.00	590.00	20.73	2.48	23.21	19.28	616.78	Yes	Spill Buddy Before Reading
RW-06	04/05/12	636.09	638.10	615.00	590.00	21.76	1.19	22.95	20.02	616.05	Yes	Spill Buddy After Reading
RW-06	04/16/12	636.09	638.10	615.00	590.00	20.70	2.18	22.88	19.18	616.88	Yes	
RW-06	05/18/12	636.09	638.10	615.00	590.00	20.75	4.48	25.23	19.75	616.28	Yes	
RW-06	06/26/12	636.09	638.10	615.00	590.00	18.55	1.10	19.65	16.79	619.29	Yes	
RW-06	07/11/12	636.09	638.10	615.00	590.00	18.79	1.13	19.92	17.04	619.04	Yes	Spill Buddy Before Reading
RW-06	07/11/12	636.09	638.10	615.00	590.00	19.75	0.02	19.77	17.74	618.35	Yes	Spill Buddy After Reading
RW-06	07/24/12	636.09	638.10	615.00	590.00	19.29	0.02	19.31	17.28	618.81	Yes	
RW-06	08/09/12	636.09	638.10	615.00	590.00	19.51	0.03	19.54	17.51	618.58	Yes	
RW-06	08/17/12	636.09	638.10	615.00	590.00	19.68	0.03	19.71	17.68	618.41	Yes	
RW-06	09/17/12	636.09	638.10	615.00	590.00	20.07	0.02	20.09	18.06	618.03	Yes	
RW-06	09/30/12	636.09	638.10	615.00	590.00	20.30	0.04	20.34	18.30	617.79	Yes	
RW-06	11/21/12	636.09	638.10	615.00	590.00	20.20	1.99	22.19	18.64	617.42	Yes	
RW-06	12/17/12	636.09	638.10	615.00	590.00	20.45	2.09	22.54	18.91	617.15	Yes	
RW-06	03/25/13	636.09	638.10	615.00	590.00	21.08	2.90	23.98	19.73	616.32	Yes	
RW-06	05/05/13	636.09	638.10	615.00	590.00	20.83	2.74	23.57	19.44	616.61	Yes	
RW-06	05/16/13	636.09	638.10	615.00	590.00	20.90	2.33	23.23	19.42	616.64	Yes	Spill Buddy Before Reading
RW-06	05/16/13	636.09	638.10	615.00	590.00	22.92	0.05	22.97	20.92	615.17	Yes	Spill Buddy After Reading
RW-06	10/03/13	636.09	638.10	615.00	590.00	20.60	1.58	22.18	18.95	617.12	Yes	
RW-06	05/22/14	636.09	638.10	615.00	590.00	19.29	1.64	20.93	17.65	618.42	Yes	
RW-06	10/31/14	636.09	638.10	615.00	590.00	18.71	1.58	20.29	17.06	619.01	Yes	
RW-06	05/06/15	636.09	638.10	615.00	590.00	20.21	2.01	22.22	18.65	617.41	Yes	
RW-06	10/05/15	636.09	638.10	615.00	590.00	18.38	1.50	19.88	16.71	619.36	Yes	
RW-06	10/03/16	636.09	638.10	615.00	590.00	17.35	1.35	18.70	15.64	620.43	Yes	
RW-06	06/14/17	636.09	638.10	615.00	590.00	16.40	1.26	17.66	14.67	621.40	Yes	
RW-06	06/21/17	636.09	638.10	615.00	590.00	16.81	1.25	18.06	15.08	620.99	Yes	
RW-06	06/22/17	636.09	638.10	615.00	590.00	16.77	0.64	17.41	14.90	621.18	Yes	
RW-06	06/23/17	636.09	638.10	615.00	590.00	16.85	0.66	17.51	14.99	621.09	Yes	
RW-06	10/26/17	636.09	638.10	615.00	590.00	14.85	0.64	15.49	12.98	623.10	Yes	
RW-07	05/04/90	630.70	633.42	611.74	586.74	NP	0.00	18.23	15.51	615.19	Yes	
RW-07	06/01/90	630.70	633.42	611.74	586.74	NP	0.00	18.07	15.35	615.35	Yes	
RW-07	06/19/90	630.70	633.42	611.74	586.74	17.81	0.15	17.96	15.12	615.58	Yes	
RW-07	06/27/90	630.70	633.42	611.74	586.74	NP	0.00	17.97	15.25	615.45	Yes	
RW-07	07/05/90	630.70	633.42	611.74	586.74	18.15	0.01	18.16	15.43	615.27	Yes	
RW-07	07/13/90	630.70	633.42	611.74	586.74	NP	0.00	18.28	15.56	615.14	Yes	
RW-07	07/17/90	630.70	633.42	611.74	586.74	18.15	0.01	18.16	15.43	615.27	Yes	
RW-07	07/25/90	630.70	633.42	611.74	586.74	NP	0.00	18.18	15.46	615.24	Yes	
RW-07	08/09/90	630.70	633.42	611.74	586.74	NP	0.00	17.80	15.08	615.62	Yes	
RW-07	01/04/91	630.70	633.42	611.74	586.74	NP	0.00	17.54	14.82	615.88	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-07	01/30/91	630.70	633.42	611.74	586.74	NP	0.00	18.25	15.53	615.17	Yes	
RW-07	04/24/91	630.70	633.42	611.74	586.74	NP	0.00	17.85	15.13	615.57	Yes	
RW-07	07/09/91	630.70	633.42	611.74	586.74	NP	0.00	16.40	13.68	617.02	Yes	
RW-07	10/08/91	630.70	633.42	611.74	586.74	NP	0.00	15.14	12.42	618.28	Yes	
RW-07	01/07/92	630.70	633.42	611.74	586.74	NP	0.00	15.18	12.46	618.24	Yes	
RW-07	10/14/92	630.70	633.42	611.74	586.74	14.91	0.01	14.92	12.19	618.51	Yes	
RW-07	06/25/93	630.70	633.42	611.74	586.74	NP	0.00	13.74	11.02	619.68	Yes	
RW-07	10/28/93	630.70	633.42	611.74	586.74	NP	0.00	15.44	12.72	617.98	Yes	
RW-07	01/29/94	630.70	633.42	611.74	586.74	NP	0.00	15.87	13.15	617.55	Yes	
RW-07	04/27/94	630.70	633.42	611.74	586.74	NP	0.00	16.09	13.37	617.33	Yes	
RW-07	07/21/94	630.70	633.42	611.74	586.74	NP	0.00	15.02	12.30	618.40	Yes	
RW-07	10/25/94	630.70	633.42	611.74	586.74	NP	0.00	15.32	12.60	618.10	Yes	
RW-07	02/01/95	630.70	633.42	611.74	586.74	NP	0.00	16.50	13.78	616.92	Yes	
RW-07	04/04/95	630.70	633.42	611.74	586.74	NP	0.00	16.75	14.03	616.67	Yes	
RW-07	07/12/95	630.70	633.42	611.74	586.74	NP	0.00	16.09	13.37	617.33	Yes	
RW-07	11/13/95	630.70	633.42	611.74	586.74	NP	0.00	15.19	12.47	618.23	Yes	
RW-07	11/03/98	630.70	633.42	611.74	586.74	NP	0.00	16.78	14.06	616.64	Yes	
RW-07	03/02/99	630.70	633.42	611.74	586.74	NP	0.00	16.93	14.21	616.49	Yes	
RW-07	11/09/99	630.70	633.42	611.74	586.74	NP	0.00	14.50	11.78	618.92	Yes	
RW-07	12/21/99	630.70	633.42	611.74	586.74	NP	0.00	14.15	11.43	619.27	Yes	
RW-07	01/27/00	630.70	633.42	611.74	586.74	NP	0.00	15.97	13.25	617.45	Yes	
RW-07	02/24/00	630.70	633.42	611.74	586.74	NP	0.00	16.21	13.49	617.21	Yes	
RW-07	03/31/00	630.70	633.42	611.74	586.74	NP	0.00	16.28	13.56	617.14	Yes	
RW-07	04/20/00	630.70	633.42	611.74	586.74	NP	0.00	16.20	13.48	617.22	Yes	
RW-07	04/26/00	630.70	633.42	611.74	586.74	NP	0.00	16.28	13.56	617.14	Yes	
RW-07	05/31/00	630.70	633.42	611.74	586.74	NP	0.00	16.32	13.60	617.10	Yes	
RW-07	06/29/00	630.70	633.42	611.74	586.74	NP	0.00	16.10	13.38	617.32	Yes	
RW-07	07/26/00	630.70	633.42	611.74	586.74	NP	0.00	16.10	13.38	617.32	Yes	
RW-07	08/18/00	630.70	633.42	611.74	586.74	NP	0.00	16.42	13.70	617.00	Yes	
RW-07	09/27/00	630.70	633.42	611.74	586.74	NP	0.00	16.62	13.90	616.80	Yes	
RW-07	10/11/00	630.70	633.42	611.74	586.74	NP	0.00	16.65	13.93	616.77	Yes	
RW-07	11/17/00	630.70	633.42	611.74	586.74	NP	0.00	16.58	13.86	616.84	Yes	
RW-07	12/12/00	630.70	633.42	611.74	586.74	NP	0.00	16.53	13.81	616.89	Yes	
RW-07	01/18/01	630.70	633.42	611.74	586.74	16.82	0.02	16.84	14.10	616.60	Yes	
RW-07	05/23/01	630.70	633.42	611.74	586.74	NP	0.00	15.95	13.23	617.47	Yes	
RW-07	06/19/01	630.70	633.42	611.74	586.74	NP	0.00	15.88	13.16	617.54	Yes	
RW-07	07/26/01	630.70	633.42	611.74	586.74	NP	0.00	16.19	13.47	617.23	Yes	
RW-07	08/31/01	630.70	633.42	611.74	586.74	NP	0.00	16.57	13.85	616.85	Yes	
RW-07	09/26/01	630.70	633.42	611.74	586.74	NP	0.00	16.64	13.92	616.78	Yes	
RW-07	12/20/01	630.70	633.42	611.74	586.74	NP	0.00	17.16	14.44	616.26	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
RW-07	01/22/02	630.70	633.42	611.74	586.74	NP	0.00	17.13	14.41	616.29	Yes	
RW-07	02/26/02	630.70	633.42	611.74	586.74	NP	0.00	17.39	14.67	616.03	Yes	
RW-07	03/20/02	630.70	633.42	611.74	586.74	NP	0.00	17.55	14.83	615.87	Yes	
RW-07	04/24/02	630.70	633.42	611.74	586.74	NP	0.00	17.38	14.66	616.04	Yes	
RW-07	05/15/02	630.70	633.42	611.74	586.74	NP	0.00	17.05	14.33	616.37	Yes	
RW-07	06/27/02	630.70	633.42	611.74	586.74	NP	0.00	17.18	14.46	616.24	Yes	
RW-07	07/25/02	630.70	633.42	611.74	586.74	NP	0.00	17.08	14.36	616.34	Yes	
RW-07	08/20/02	630.70	633.42	611.74	586.74	NP	0.00	17.03	14.31	616.39	Yes	
RW-07	09/30/02	630.70	633.42	611.74	586.74	NP	0.00	17.03	14.31	616.39	Yes	
RW-07	11/05/02	630.70	633.42	611.74	586.74	NP	0.00	16.59	13.87	616.83	Yes	
RW-07	12/23/02	630.70	633.42	611.74	586.74	NP	0.00	16.88	14.16	616.54	Yes	
RW-07	01/28/03	630.70	633.42	611.74	586.74	NP	0.00	17.38	14.66	616.04	Yes	
RW-07	02/19/03	630.70	633.42	611.74	586.74	NP	0.00	17.49	14.77	615.93	Yes	
RW-07	04/17/03	630.70	633.42	611.74	586.74	NP	0.00	17.77	15.05	615.65	Yes	
RW-07	10/23/03	630.70	633.42	611.74	586.74	NP	0.00	17.91	15.19	615.51	Yes	
RW-07	12/03/03	630.70	633.42	611.74	586.74	NP	0.00	18.03	15.31	615.39	Yes	
RW-07	04/19/04	631.55	633.20	611.74	586.74	NP	0.00	18.57	16.92	614.63	Yes	
RW-07	07/28/04	631.55	633.20	611.74	586.74	NP	0.00	17.78	16.13	615.42	Yes	
RW-07	11/16/04	631.55	633.20	611.74	586.74	NP	0.00	18.28	16.63	614.92	Yes	
RW-07	04/18/05	631.55	633.20	611.74	586.74	NP	0.00	18.12	16.47	615.08	Yes	
RW-07	10/11/05	631.55	633.20	611.74	586.74	NP	0.00	16.70	15.05	616.50	Yes	
RW-07	05/23/06	631.55	633.20	611.74	586.74	NP	0.00	15.60	13.95	617.60	Yes	
RW-07	10/16/06	631.55	633.20	611.74	586.74	NP	0.00	16.06	14.41	617.14	Yes	
RW-07	04/23/07	631.55	633.20	611.74	586.74	NP	0.00	16.92	15.27	616.28	Yes	No sample - 2" of water around well
RW-07	06/26/07						<b>Abandoned</b>					
EW-01	09/14/11	635.21	634.84	620.71	600.71	NP	0.00	14.61	14.97	620.23	No	TFRT System Down on 8/31/11 for well recovery test
EW-01	09/23/11	635.21	634.84	620.71	600.71	NP	0.00	14.45	14.81	620.39	No	
EW-01	09/29/11	635.21	634.84	620.71	600.71	NP	0.00	14.78	15.14	620.06	No	
EW-01	10/07/11	635.21	634.84	620.71	600.71	NP	0.00	14.67	15.03	620.17	No	
EW-01	10/13/11	635.21	634.84	620.71	600.71	NP	0.00	14.75	15.11	620.09	No	
EW-01	10/21/11	635.21	634.84	620.71	600.71	NP	0.00	14.79	15.15	620.05	No	
EW-01	10/27/11	635.21	634.84	620.71	600.71	NP	0.00	15.11	15.47	619.73	No	
EW-01	11/01/11	635.21	634.84	620.71	600.71	NP	0.00	14.89	15.25	619.95	No	Conducted 2011 annual well pump maintenace
EW-01	11/10/11	635.21	634.84	620.71	600.71	NP	0.00	15.34	15.70	619.50	No	
EW-01	11/18/11	635.21	634.84	620.71	600.71	NP	0.00	15.52	15.88	619.32	No	
EW-01	11/22/11	635.21	634.84	620.71	600.71	NP	0.00	15.75	16.11	619.09	No	
EW-01	11/30/11	635.21	634.84	620.71	600.71	NP	0.00	15.85	16.21	618.99	No	Restarted TFRT system on 11/30/11 with only EW 4 & EW 5
EW-01	09/18/12	635.21	634.84	620.71	600.71	NP	0.00	17.29	17.65	617.55	No	
EW-01	11/21/12	635.21	634.84	620.71	600.71	NP	0.00	18.02	18.38	616.82	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-01	05/05/13	635.21	634.84	620.71	600.71	NP	0.00	18.52	18.88	616.32	No	
EW-01	10/03/13	635.21	634.84	620.71	600.71	NP	0.00	17.91	18.27	616.93	No	
EW-03	09/14/11	635.87	635.08	620.87	600.87	NP	0.00	15.71	16.51	619.37	No	TFRT System Down on 8/31/11 for well recovery test
EW-03	09/23/11	635.87	635.08	620.87	600.87	NP	0.00	15.94	16.74	619.14	No	
EW-03	09/29/11	635.87	635.08	620.87	600.87	NP	0.00	15.76	16.56	619.32	No	
EW-03	10/07/11	635.87	635.08	620.87	600.87	NP	0.00	16.02	16.82	619.06	No	
EW-03	10/13/11	635.87	635.08	620.87	600.87	NP	0.00	13.46	14.26	621.62	Yes	
EW-03	10/21/11	635.87	635.08	620.87	600.87	NP	0.00	16.39	17.19	618.69	No	
EW-03	10/27/11	635.87	635.08	620.87	600.87	NP	0.00	16.48	17.28	618.60	No	
EW-03	11/02/11	635.87	635.08	620.87	600.87	NP	0.00	16.81	17.61	618.27	No	Conducted 2011 annual well pump maintenace
EW-03	11/10/11	635.87	635.08	620.87	600.87	NP	0.00	16.84	17.64	618.24	No	
EW-03	11/18/11	635.87	635.08	620.87	600.87	NP	0.00	16.92	17.72	618.16	No	
EW-03	11/22/11	635.87	635.08	620.87	600.87	NP	0.00	17.02	17.82	618.06	No	
EW-03	12/01/11	635.87	635.08	620.87	600.87	NP	0.00	17.00	17.80	618.08	No	Restarted TFRT system on 11/30/11 with only EW 4 & EW 5
EW-03	09/18/12	635.87	635.08	620.87	600.87	NP	0.00	17.28	18.08	617.80	No	
EW-03	11/21/12	635.87	635.08	620.87	600.87	NP	0.00	17.85	18.65	617.23	No	
EW-03	05/05/13	635.87	635.08	620.87	600.87	NP	0.00	18.41	19.21	616.67	No	
EW-03	10/03/13	635.87	635.08	620.87	600.87	NP	0.00	17.89	18.69	617.19	No	
EW-04	09/14/11	637.11	636.90	622.11	602.11	16.08	3.52	19.60	17.09	620.02	No	TFRT System Down on 8/31/11 for well recovery test
EW-04	09/23/11	637.11	636.90	622.11	602.11	15.63	6.26	21.89	17.26	619.85	No	
EW-04	09/29/11	637.11	636.90	622.11	602.11	16.03	7.15	23.18	17.86	619.25	No	
EW-04	10/07/11	637.11	636.90	622.11	602.11	15.74	8.46	24.20	17.86	619.25	No	
EW-04	10/13/11	637.11	636.90	622.11	602.11	15.88	8.85	24.73	18.09	619.02	No	
EW-04	10/21/11	637.11	636.90	622.11	602.11	15.76	9.51	25.27	18.12	618.99	No	
EW-04	10/27/11	637.11	636.90	622.11	602.11	16.09	9.80	25.89	18.52	618.59	No	
EW-04	11/02/11	637.11	636.90	622.11	602.11	16.15	10.00	26.15	18.62	618.49	No	Conducted 2011 annual well pump maintenace
EW-04	11/10/11	637.11	636.90	622.11	602.11	16.19	10.27	26.46	18.72	618.39	No	
EW-04	11/18/11	637.11	636.90	622.11	602.11	16.22	10.77	26.99	18.87	618.24	No	
EW-04	11/22/11	637.11	636.90	622.11	602.11	16.38	11.08	27.46	19.10	618.01	No	
EW-04	11/30/11	637.11	636.90	622.11	602.11	17.73	10.99	28.72	20.43	616.68	No	Restarted TFRT system on 11/30/11 with only EW 4 & EW 5
EW-04	09/18/12	637.11	636.90	622.11	602.11	18.66	6.24	24.90	20.28	616.83	No	
EW-04	11/21/12	637.11	636.90	622.11	602.11	19.42	6.25	25.67	21.04	616.06	No	
EW-04	03/25/13	637.11	636.90	622.11	602.11	20.58	6.18	26.76	22.19	614.92	No	
EW-04	05/05/13	637.11	636.90	622.11	602.11	20.85	6.13	26.98	22.45	614.66	No	
EW-04	05/16/13	637.11	636.90	622.11	602.11	19.92	5.80	25.72	21.44	615.67	No	Spill Buddy Before Reading
EW-04	05/16/13	637.11	636.90	622.11	602.11	25.33	0.31	25.64	25.61	611.50	No	Spill Buddy After Reading
EW-04	10/03/13	637.11	636.90	622.11	602.11	20.00	1.11	21.11	20.46	616.65	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-05	09/14/11	635.25	634.79	620.25	600.25	16.37	0.03	16.40	16.84	618.41	No	TFRT System Down on 8/31/11 for well recovery test
EW-05	09/23/11	635.25	634.79	620.25	600.25	16.47	0.06	16.53	16.95	618.31	No	
EW-05	09/29/11	635.25	634.79	620.25	600.25	16.43	0.10	16.53	16.92	618.34	No	
EW-05	10/07/11	635.25	634.79	620.25	600.25	16.44	0.08	16.52	16.92	618.33	No	
EW-05	10/13/11	635.25	634.79	620.25	600.25	16.48	0.08	16.56	16.96	618.29	No	
EW-05	10/21/11	635.25	634.79	620.25	600.25	16.88	0.10	16.98	17.37	617.89	No	
EW-05	10/27/11	635.25	634.79	620.25	600.25	17.08	0.12	17.20	17.57	617.68	No	
EW-05	11/01/11	635.25	634.79	620.25	600.25	17.26	0.16	17.42	17.76	617.49	No	Conducted 2011 annual well pump maintenace
EW-05	11/10/11	635.25	634.79	620.25	600.25	17.85	0.25	18.10	18.37	616.88	No	
EW-05	11/18/11	635.25	634.79	620.25	600.25	17.85	0.25	18.10	18.37	616.88	No	with only EW 4 & EW 5
EW-05	11/22/11	635.25	634.79	620.25	600.25	17.97	0.27	18.24	18.49	616.76	No	
EW-05	11/30/11	635.25	634.79	620.25	600.25	17.97	0.27	18.24	18.49	616.76	No	
EW-05	09/18/12	635.25	634.79	620.25	600.25	NP	0.00	17.59	18.05	617.20	No	
EW-05	11/21/12	635.25	634.79	620.25	600.25	18.30	0.02	18.32	18.77	616.48	No	
EW-05	05/05/13	635.25	634.79	620.25	600.25	17.20	0.48	17.68	17.77	617.48	No	
EW-05	10/03/13	635.25	634.79	620.25	600.25	18.08	0.03	18.11	18.55	616.70	No	
EW-05	05/22/14	635.25	634.79	620.25	600.25	16.47	0.26	16.73	16.99	618.26	No	
EW-05	10/31/14	635.25	634.79	620.25	600.25	16.37	0.22	16.59	16.88	618.37	No	
EW-05	05/06/15	635.25	634.79	620.25	600.25	NP	0.00	17.16	17.62	617.63	No	
EW-05	10/05/15	635.25	634.79	620.25	600.25	16.00	0.20	16.20	16.51	618.74	No	
EW-06	07/25/11	636.90	639.00	621.90	601.90	NP	0.00	19.80	17.70	619.20	No	
EW-06	08/18/11	636.90	639.00	621.90	601.90	NP	0.00	19.28	17.18	619.72	No	
EW-06	08/25/11	636.90	639.00	621.90	601.90	NP	0.00	19.78	17.68	619.22	No	
EW-06	09/01/11	636.90	639.00	621.90	601.90	NP	0.00	19.77	17.67	619.23	No	
EW-06	09/08/11	636.90	639.00	621.90	601.90	NP	0.00	20.27	18.17	618.73	No	
EW-06	09/14/11	636.90	639.00	621.90	601.90	NP	0.00	20.65	18.55	618.35	No	
EW-06	09/23/11	636.90	639.00	621.90	601.90	NP	0.00	20.77	18.67	618.23	No	
EW-06	09/29/11	636.90	639.00	621.90	601.90	NP	0.00	20.74	18.64	618.26	No	
EW-06	10/07/11	636.90	639.00	621.90	601.90	NP	0.00	20.77	18.67	618.23	No	
EW-06	10/11/11	636.90	639.00	621.90	601.90	NP	0.00	20.94	18.84	618.06	No	
EW-06	10/21/11	636.90	639.00	621.90	601.90	NP	0.00	21.14	19.04	617.86	No	
EW-06	10/27/11	636.90	639.00	621.90	601.90	NP	0.00	20.56	18.46	618.44	No	
EW-06	11/04/11	636.90	639.00	621.90	601.90	NP	0.00	21.47	19.37	617.53	No	
EW-06	11/09/11	636.90	639.00	621.90	601.90	NP	0.00	21.35	19.25	617.65	No	
EW-06	11/18/11	636.90	639.00	621.90	601.90	NP	0.00	21.51	19.41	617.49	No	
EW-06	11/22/11	636.90	639.00	621.90	601.90	NP	0.00	21.63	19.53	617.37	No	
EW-06	12/01/11	636.90	639.00	621.90	601.90	NP	0.00	22.04	19.94	616.96	No	
EW-06	01/04/12	636.90	639.00	621.90	601.90	NP	0.00	22.34	20.24	616.66	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-06	02/16/12	636.90	639.00	621.90	601.90	NP	0.00	22.85	20.75	616.15	No	
EW-06	03/13/12	636.90	639.00	621.90	601.90	NP	0.00	23.04	20.94	615.96	No	
EW-06	04/16/12	636.90	639.00	621.90	601.90	NP	0.00	23.39	21.29	615.61	No	
EW-06	05/18/12	636.90	639.00	621.90	601.90	22.36	0.45	22.81	20.36	616.54	No	
EW-06	06/26/12	636.90	639.00	621.90	601.90	20.78	0.26	21.04	18.74	618.16	No	
EW-06	07/12/12	636.90	639.00	621.90	601.90	20.93	0.26	21.19	18.89	618.01	No	
EW-06	07/24/12	636.90	639.00	621.90	601.90	21.10	0.59	21.69	19.13	617.77	No	
EW-06	08/09/12	636.90	639.00	621.90	601.90	21.22	0.63	21.85	19.26	617.64	No	Spill Buddy Before Reading
EW-06	08/09/12	636.90	639.00	621.90	601.90	21.48	0.13	21.61	19.41	617.49	No	Spill Buddy After Reading
EW-06	08/17/12	636.90	639.00	621.90	601.90	21.39	0.60	21.99	19.43	617.47	No	
EW-06	09/17/12	636.90	639.00	621.90	601.90	21.75	0.97	22.72	19.87	617.03	No	
EW-06	09/18/12	636.90	639.00	621.90	601.90	21.70	0.65	22.35	19.75	617.15	No	Spill Buddy Before Reading
EW-06	09/18/12	636.90	639.00	621.90	601.90	21.99	0.02	22.01	19.89	617.01	No	Spill Buddy After Reading
EW-06	09/20/12	636.90	639.00	621.90	601.90	21.86	0.40	22.26	19.85	617.05	No	
EW-06	09/30/12	636.90	639.00	621.90	601.90	21.98	0.44	22.42	19.98	616.92	No	
EW-06	10/22/12	636.90	639.00	621.90	601.90	22.37	0.58	22.95	20.40	616.50	No	
EW-06	11/21/12	636.90	639.00	621.90	601.90	22.50	0.44	22.94	20.50	616.40	No	
EW-06	12/17/12	636.90	639.00	621.90	601.90	22.72	0.77	23.49	20.79	616.11	No	
EW-06	12/20/12	636.90	639.00	621.90	601.90	22.71	0.78	23.49	20.79	616.11	No	
EW-06	03/25/13	636.90	639.00	621.90	601.90	23.22	2.22	25.44	21.62	615.28	No	
EW-06	04/03/13	636.90	639.00	621.90	601.90	23.21	2.31	25.52	21.63	615.27	No	Spill Buddy Before Reading
EW-06	04/03/13	636.90	639.00	621.90	601.90	23.94	0.05	23.99	21.85	615.05	No	Spill Buddy After Reading
EW-06	05/05/13	636.90	639.00	621.90	601.90	23.31	1.72	25.03	21.60	615.30	No	
EW-06	10/03/13	636.90	639.00	621.90	601.90	22.59	0.89	23.48	20.69	616.21	No	
EW-06	05/22/14	636.90	639.00	621.90	601.90	21.61	0.37	21.98	19.59	617.31	No	
EW-06	10/31/14	636.90	639.00	621.90	601.90	20.66	0.39	21.05	18.65	618.25	No	
EW-06	05/06/15	636.90	639.00	621.90	601.90	22.18	1.84	24.02	20.50	616.40	No	
EW-06	10/05/15	636.90	639.00	621.90	601.90	20.79	0.29	21.08	18.76	618.14	No	
EW-06	05/23/16	636.90	639.00	621.90	601.90	18.09	0.43	18.52	16.09	620.81	No	
EW-06	10/03/16	636.90	639.00	621.90	601.90	19.59	0.03	19.62	17.50	619.40	No	
EW-06	06/29/17	636.90	639.00	621.90	601.90	19.03	0.32	19.35	17.00	619.90	No	
EW-07	07/25/11	635.40	637.20	620.40	600.40	NP	0.00	18.87	17.07	618.33	No	
EW-07	08/18/11	635.40	637.20	620.40	600.40	NP	0.00	18.51	16.71	618.69	No	
EW-07	08/25/11	635.40	637.20	620.40	600.40	NP	0.00	18.92	17.12	618.28	No	
EW-07	09/01/11	635.40	637.20	620.40	600.40	NP	0.00	19.04	17.24	618.16	No	
EW-07	09/08/11	635.40	637.20	620.40	600.40	NP	0.00	19.52	17.72	617.68	No	
EW-07	09/14/11	635.40	637.20	620.40	600.40	NP	0.00	19.84	18.04	617.36	No	
EW-07	09/23/11	635.40	637.20	620.40	600.40	NP	0.00	20.04	18.24	617.16	No	
EW-07	09/29/11	635.40	637.20	620.40	600.40	NP	0.00	20.04	18.24	617.16	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-07	10/07/11	635.40	637.20	620.40	600.40	NP	0.00	20.18	18.38	617.02	No	
EW-07	10/11/11	635.40	637.20	620.40	600.40	NP	0.00	20.31	18.51	616.89	No	
EW-07	10/21/11	635.40	637.20	620.40	600.40	NP	0.00	20.56	18.76	616.64	No	
EW-07	10/27/11	635.40	637.20	620.40	600.40	NP	0.00	20.66	18.86	616.54	No	
EW-07	11/01/11	635.40	637.20	620.40	600.40	NP	0.00	20.85	19.05	616.35	No	
EW-07	11/09/11	635.40	637.20	620.40	600.40	NP	0.00	20.82	19.02	616.38	No	
EW-07	11/18/11	635.40	637.20	620.40	600.40	NP	0.00	20.98	19.18	616.22	No	
EW-07	11/22/11	635.40	637.20	620.40	600.40	NP	0.00	21.11	19.31	616.09	No	
EW-07	12/01/11	635.40	637.20	620.40	600.40	NP	0.00	21.04	19.24	616.16	No	
EW-07	01/04/12	635.40	637.20	620.40	600.40	NP	0.00	21.75	19.95	615.45	No	
EW-07	02/16/12	635.40	637.20	620.40	600.40	NP	0.00	22.26	20.46	614.94	No	
EW-07	03/13/12	635.40	637.20	620.40	600.40	NP	0.00	22.51	20.71	614.69	No	
EW-07	04/16/12	635.40	637.20	620.40	600.40	NP	0.00	22.40	20.60	614.80	No	
EW-07	05/18/12	635.40	637.20	620.40	600.40	NP	0.00	21.45	19.65	615.75	No	
EW-07	06/26/12	635.40	637.20	620.40	600.40	NP	0.00	19.45	17.65	617.75	No	
EW-07	07/24/12	635.40	637.20	620.40	600.40	NP	0.00	20.20	18.40	617.00	No	
EW-07	08/17/12	635.40	637.20	620.40	600.40	NP	0.00	20.48	18.68	616.72	No	
EW-07	09/17/12	635.40	637.20	620.40	600.40	NP	0.00	20.90	19.10	616.30	No	
EW-07	09/20/12	635.40	637.20	620.40	600.40	NP	0.00	20.94	19.14	616.26	No	
EW-07	09/30/12	635.40	637.20	620.40	600.40	NP	0.00	21.07	19.27	616.13	No	
EW-07	10/22/12	635.40	637.20	620.40	600.40	NP	0.00	21.43	19.63	615.77	No	
EW-07	11/21/12	635.40	637.20	620.40	600.40	NP	0.00	21.60	19.80	615.60	No	
EW-07	12/17/12	635.40	637.20	620.40	600.40	NP	0.00	21.84	20.04	615.36	No	
EW-07	12/20/12	635.40	637.20	620.40	600.40	NP	0.00	21.88	20.08	615.32	No	
EW-07	03/25/13	635.40	637.20	620.40	600.40	NP	0.00	22.70	20.90	614.50	No	
EW-07	05/05/13	635.40	637.20	620.40	600.40	NP	0.00	22.01	20.21	615.19	No	
EW-07	10/03/13	635.40	637.20	620.40	600.40	21.00	4.16	25.16	20.14	615.26	No	
EW-07	05/22/14	635.40	637.20	620.40	600.40	19.69	1.17	20.86	18.15	617.25	No	
EW-07	10/31/14	635.40	637.20	620.40	600.40	19.34	1.01	20.35	17.77	617.63	No	
EW-07	05/06/15	635.40	637.20	620.40	600.40	20.83	1.51	22.34	19.37	616.03	No	
EW-07	10/05/15	635.40	637.20	620.40	600.40	19.14	0.78	19.92	17.52	617.88	No	
EW-07	05/23/16	635.40	637.20	620.40	600.40	NP	0.00	17.73	15.93	619.47	No	
EW-07	10/03/16	635.40	637.20	620.40	600.40	18.19	0.65	18.84	16.54	618.86	No	
EW-07	06/29/17	635.40	637.20	620.40	600.40	17.68	0.67	18.35	16.03	619.37	No	
EW-08	07/25/11	635.30	637.26	620.30	600.30	NP	0.00	17.82	15.86	619.44	No	
EW-08	08/18/11	635.30	637.26	620.30	600.30	NP	0.00	17.30	15.34	619.96	No	
EW-08	08/25/11	635.30	637.26	620.30	600.30	NP	0.00	17.73	15.77	619.53	No	
EW-08	09/01/11	635.30	637.26	620.30	600.30	NP	0.00	17.78	15.82	619.48	No	



**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-08	09/08/11	635.30	637.26	620.30	600.30	NP	0.00	18.25	16.29	619.01	No	
EW-08	09/14/11	635.30	637.26	620.30	600.30	NP	0.00	18.61	16.65	618.65	No	
EW-08	09/23/11	635.30	637.26	620.30	600.30	NP	0.00	18.74	16.78	618.52	No	
EW-08	09/29/11	635.30	637.26	620.30	600.30	NP	0.00	18.77	16.81	618.49	No	
EW-08	10/07/11	635.30	637.26	620.30	600.30	NP	0.00	18.78	16.82	618.48	No	
EW-08	10/11/11	635.30	637.26	620.30	600.30	NP	0.00	18.95	16.99	618.31	No	
EW-08	10/21/11	635.30	637.26	620.30	600.30	NP	0.00	19.16	17.20	618.10	No	
EW-08	10/27/11	635.30	637.26	620.30	600.30	NP	0.00	19.30	17.34	617.96	No	
EW-08	11/04/11	635.30	637.26	620.30	600.30	NP	0.00	19.46	17.50	617.80	No	
EW-08	11/09/11	635.30	637.26	620.30	600.30	NP	0.00	19.39	17.43	617.87	No	
EW-08	11/18/11	635.30	637.26	620.30	600.30	NP	0.00	19.53	17.57	617.73	No	
EW-08	11/22/11	635.30	637.26	620.30	600.30	NP	0.00	19.63	17.67	617.63	No	
EW-08	12/01/11	635.30	637.26	620.30	600.30	NP	0.00	19.99	18.03	617.27	No	
EW-08	01/04/12	635.30	637.26	620.30	600.30	NP	0.00	20.25	18.29	617.01	No	
EW-08	02/16/12	635.30	637.26	620.30	600.30	NP	0.00	20.73	18.77	616.53	No	
EW-08	03/13/12	635.30	637.26	620.30	600.30	NP	0.00	20.95	18.99	616.31	No	
EW-08	04/16/12	635.30	637.26	620.30	600.30	NP	0.00	21.29	19.33	615.97	No	
EW-08	05/18/12	635.30	637.26	620.30	600.30	NP	0.00	20.42	18.46	616.84	No	
EW-08	06/26/12	635.30	637.26	620.30	600.30	NP	0.00	18.86	16.90	618.40	No	
EW-08	07/24/12	635.30	637.26	620.30	600.30	NP	0.00	18.17	16.21	619.09	No	
EW-08	08/19/12	635.30	637.26	620.30	600.30	NP	0.00	19.51	17.55	617.75	No	
EW-08	09/17/12	635.30	637.26	620.30	600.30	NP	0.00	19.57	17.61	617.69	No	
EW-08	09/30/12	635.30	637.26	620.30	600.30	NP	0.00	20.07	18.11	617.19	No	
EW-08	10/22/12	635.30	637.26	620.30	600.30	NP	0.00	20.40	18.44	616.86	No	
EW-08	11/21/12	635.30	637.26	620.30	600.30	NP	0.00	20.53	18.57	616.73	No	
EW-08	12/17/12	635.30	637.26	620.30	600.30	NP	0.00	20.79	18.83	616.47	No	
EW-08	03/25/13	635.30	637.26	620.30	600.30	NP	0.00	21.53	19.57	615.73	No	
EW-08	05/05/13	635.30	637.26	620.30	600.30	NP	0.00	21.38	19.42	615.88	No	
EW-08	10/03/13	635.30	637.26	620.30	600.30	NP	0.00	21.80	19.84	615.46	No	
EW-08	05/21/14	635.30	637.26	620.30	600.30	NP	0.00	18.68	16.72	618.58	No	
EW-08	10/30/14	635.30	637.26	620.30	600.30	NP	0.00	18.51	16.55	618.75	No	
EW-08	05/05/15	635.30	637.26	620.30	600.30	NP	0.00	20.45	18.49	616.81	No	
EW-08	10/06/15	635.30	637.26	620.30	600.30	NP	0.00	18.75	16.79	618.51	No	
EW-08	05/23/16	635.30	637.26	620.30	600.30	NP	0.00	16.31	14.35	620.95	Yes	
EW-08	10/03/16	635.30	637.26	620.30	600.30	NP	0.00	17.60	15.64	619.66	No	
EW-08	06/29/17	635.30	637.26	620.30	600.30	NP	0.00	17.16	15.20	620.10	No	
EW-09	07/25/11	635.20	637.34	620.20	600.20	NP	0.00	18.38	16.24	618.96	No	
EW-09	08/18/11	635.20	637.34	620.20	600.20	NP	0.00	17.96	15.82	619.38	No	
EW-09	08/25/11	635.20	637.34	620.20	600.20	NP	0.00	18.33	16.19	619.01	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-09	09/01/11	635.20	637.34	620.20	600.20	NP	0.00	18.45	16.31	618.89	No	
EW-09	09/08/11	635.20	637.34	620.20	600.20	NP	0.00	18.90	16.76	618.44	No	
EW-09	09/14/11	635.20	637.34	620.20	600.20	NP	0.00	19.24	17.10	618.10	No	
EW-09	09/23/11	635.20	637.34	620.20	600.20	NP	0.00	19.47	17.33	617.87	No	
EW-09	09/29/11	635.20	637.34	620.20	600.20	NP	0.00	19.46	17.32	617.88	No	
EW-09	10/07/11	635.20	637.34	620.20	600.20	NP	0.00	19.62	17.48	617.72	No	
EW-09	10/11/11	635.20	637.34	620.20	600.20	NP	0.00	19.74	17.60	617.60	No	
EW-09	10/21/11	635.20	637.34	620.20	600.20	NP	0.00	19.89	17.75	617.45	No	
EW-09	10/27/11	635.20	637.34	620.20	600.20	NP	0.00	20.14	18.00	617.20	No	
EW-09	11/04/11	635.20	637.34	620.20	600.20	NP	0.00	20.39	18.25	616.95	No	
EW-09	11/09/11	635.20	637.34	620.20	600.20	NP	0.00	20.35	18.21	616.99	No	
EW-09	11/18/11	635.20	637.34	620.20	600.20	NP	0.00	20.56	18.42	616.78	No	
EW-09	11/22/11	635.20	637.34	620.20	600.20	NP	0.00	20.28	18.14	617.06	No	
EW-09	12/01/11	635.20	637.34	620.20	600.20	NP	0.00	20.66	18.52	616.68	No	
EW-09	01/04/12	635.20	637.34	620.20	600.20	NP	0.00	21.37	19.23	615.97	No	
EW-09	02/16/12	635.20	637.34	620.20	600.20	NP	0.00	21.92	19.78	615.42	No	
EW-09	03/13/12	635.20	637.34	620.20	600.20	NP	0.00	22.20	20.06	615.14	No	
EW-09	04/16/12	635.20	637.34	620.20	600.20	NP	0.00	22.05	19.91	615.29	No	
EW-09	05/18/12	635.20	637.34	620.20	600.20	NP	0.00	21.08	18.94	616.26	No	
EW-09	06/26/12	635.20	637.34	620.20	600.20	NP	0.00	19.32	17.18	618.02	No	
EW-09	07/24/12	635.20	637.34	620.20	600.20	NP	0.00	19.89	17.75	617.45	No	
EW-09	08/19/12	635.20	637.34	620.20	600.20	NP	0.00	20.29	18.15	617.05	No	
EW-09	09/17/12	635.20	637.34	620.20	600.20	NP	0.00	20.78	18.64	616.56	No	
EW-09	09/30/12	635.20	637.34	620.20	600.20	NP	0.00	21.03	18.89	616.31	No	
EW-09	11/21/12	635.20	637.34	620.20	600.20	NP	0.00	21.38	19.24	615.96	No	
EW-09	12/17/12	635.20	637.34	620.20	600.20	NP	0.00	21.71	19.57	615.63	No	
EW-09	03/25/13	635.20	637.34	620.20	600.20	NP	0.00	22.57	20.43	614.77	No	
EW-09	05/05/13	635.20	637.34	620.20	600.20	NP	0.00	22.15	20.01	615.19	No	
EW-09	10/03/13	635.20	637.34	620.20	600.20	NP	0.00	21.58	19.44	615.76	No	
EW-09	05/21/14	635.20	637.34	620.20	600.20	NP	0.00	20.01	17.87	617.33	No	
EW-09	10/31/14	635.20	637.34	620.20	600.20	NP	0.00	19.57	17.43	617.77	No	
EW-09	05/05/15	635.20	637.34	620.20	600.20	NP	0.00	21.31	19.17	616.03	No	
EW-09	10/05/15	635.20	637.34	620.20	600.20	NP	0.00	19.23	17.09	618.11	No	
EW-09	05/23/16	635.20	637.34	620.20	600.20	NP	0.00	16.90	14.76	620.44	Yes	
EW-09	10/03/16	635.20	637.34	620.20	600.20	NP	0.00	17.90	15.76	619.44	No	
EW-09	06/29/17	635.20	637.34	620.20	600.20	NP	0.00	17.46	15.32	619.88	No	
EW-10	07/25/11	635.90	637.83	620.90	600.90	NP	0.00	18.21	16.28	619.62	No	
EW-10	08/18/11	635.90	637.83	620.90	600.90	NP	0.00	17.74	15.81	620.09	No	
EW-10	08/25/11	635.90	637.83	620.90	600.90	NP	0.00	18.07	16.14	619.76	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-10	09/01/11	635.90	637.83	620.90	600.90	NP	0.00	18.03	16.10	619.80	No	
EW-10	09/08/11	635.90	637.83	620.90	600.90	NP	0.00	18.54	16.61	619.29	No	
EW-10	09/14/11	635.90	637.83	620.90	600.90	NP	0.00	18.93	17.00	618.90	No	
EW-10	09/23/11	635.90	637.83	620.90	600.90	NP	0.00	19.16	17.23	618.67	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-10	09/29/11	635.90	637.83	620.90	600.90	NP	0.00	19.10	17.17	618.73	No	
EW-10	10/07/11	635.90	637.83	620.90	600.90	NP	0.00	19.24	17.31	618.59	No	
EW-10	10/11/11	635.90	637.83	620.90	600.90	NP	0.00	19.38	17.45	618.45	No	
EW-10	10/21/11	635.90	637.83	620.90	600.90	NP	0.00	19.69	17.76	618.14	No	
EW-10	10/27/11	635.90	637.83	620.90	600.90	NP	0.00	19.83	17.90	618.00	No	
EW-10	11/04/11	635.90	637.83	620.90	600.90	NP	0.00	20.05	18.12	617.78	No	
EW-10	11/09/11	635.90	637.83	620.90	600.90	NP	0.00	19.95	18.02	617.88	No	
EW-10	11/18/11	635.90	637.83	620.90	600.90	NP	0.00	20.12	18.19	617.71	No	
EW-10	11/22/11	635.90	637.83	620.90	600.90	NP	0.00	20.20	18.27	617.63	No	
EW-10	12/01/11	635.90	637.83	620.90	600.90	NP	0.00	20.66	18.73	617.17	No	
EW-10	01/04/12	635.90	637.83	620.90	600.90	NP	0.00	20.85	18.92	616.98	No	
EW-10	02/16/12	635.90	637.83	620.90	600.90	NP	0.00	21.40	19.47	616.43	No	
EW-10	03/13/12	635.90	637.83	620.90	600.90	NP	0.00	21.65	19.72	616.18	No	
EW-10	04/16/12	635.90	637.83	620.90	600.90	NP	0.00	21.59	19.66	616.24	No	
EW-10	05/18/12	635.90	637.83	620.90	600.90	NP	0.00	20.68	18.75	617.15	No	
EW-10	06/26/12	635.90	637.83	620.90	600.90	NP	0.00	19.19	17.26	618.64	No	
EW-10	07/24/12	635.90	637.83	620.90	600.90	NP	0.00	19.54	17.61	618.29	No	
EW-10	08/19/12	635.90	637.83	620.90	600.90	NP	0.00	19.93	18.00	617.90	No	
EW-10	09/17/12	635.90	637.83	620.90	600.90	NP	0.00	20.33	18.40	617.50	No	
EW-10	09/30/12	635.90	637.83	620.90	600.90	NP	0.00	20.55	18.62	617.28	No	
EW-10	11/21/12	635.90	637.83	620.90	600.90	NP	0.00	20.96	19.03	616.87	No	
EW-10	12/17/12	635.90	637.83	620.90	600.90	NP	0.00	21.19	19.26	616.64	No	
EW-10	03/25/13	635.90	637.83	620.90	600.90	NP	0.00	21.97	20.04	615.86	No	
EW-10	05/05/13	635.90	637.83	620.90	600.90	NP	0.00	21.72	19.79	616.11	No	
EW-10	10/13/13	635.90	637.83	620.90	600.90	NP	0.00	21.17	19.24	616.66	No	
EW-10	05/21/14	635.90	637.83	620.90	600.90	NP	0.00	19.97	18.04	617.86	No	
EW-10	10/31/14	635.90	637.83	620.90	600.90	NP	0.00	19.30	17.37	618.53	No	
EW-10	05/05/15	635.90	637.83	620.90	600.90	NP	0.00	21.05	19.12	616.78	No	
EW-10	10/05/15	635.90	637.83	620.90	600.90	NP	0.00	18.98	17.05	618.85	No	
EW-10	05/23/16	635.90	637.83	620.90	600.90	NP	0.00	16.60	14.67	621.23	Yes	
EW-10	10/03/16	635.90	637.83	620.90	600.90	NP	0.00	17.65	15.72	620.18	No	
EW-10	06/29/17	635.90	637.83	620.90	600.90	NP	0.00	17.31	15.38	620.52	No	
EW-11	07/25/11	637.20	639.14	622.20	602.20	18.65	1.84	20.49	17.13	620.07	No	
EW-11	08/18/11	637.20	639.14	622.20	602.20	17.94	3.58	21.52	16.81	620.39	No	
EW-11	08/25/11	637.20	639.14	622.20	602.20	18.28	4.01	22.29	17.25	619.95	No	
EW-11	09/01/11	637.20	639.14	622.20	602.20	18.15	4.05	22.20	17.12	620.08	No	
EW-11	09/08/11	637.20	639.14	622.20	602.20	18.69	4.08	22.77	17.67	619.53	No	
EW-11	09/14/11	637.20	639.14	622.20	602.20	19.10	4.30	23.40	18.13	619.07	No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
EW-11	09/23/11	637.20	639.14	622.20	602.20	19.20	4.66	23.86	18.31	618.89	No	
EW-11	09/29/11	637.20	639.14	622.20	602.20	18.99	5.13	24.12	18.21	618.99	No	
EW-11	10/07/11	637.20	639.14	622.20	602.20	19.15	5.07	24.22	18.36	618.84	No	
EW-11	10/11/11	637.20	639.14	622.20	602.20	19.21	5.16	24.37	18.44	618.76	No	
EW-11	10/21/11	637.20	639.14	622.20	602.20	19.62	4.13	23.75	18.61	618.59	No	
EW-11	10/27/11	637.20	639.14	622.20	602.20	19.70	4.78	24.48	18.84	618.36	No	
EW-11	11/04/11	637.20	639.14	622.20	602.20	19.87	5.03	24.90	19.07	618.13	No	
EW-11	11/09/11	637.20	639.14	622.20	602.20	19.68	5.31	24.99	18.94	618.26	No	
EW-11	11/10/11	637.20	639.14	622.20	602.20	19.80	5.49	25.29	19.10	618.10	No	Before EFR
EW-11	11/10/11	637.20	639.14	622.20	602.20	21.71	0.11	21.82	19.79	617.41	No	After EFR
EW-11	11/13/11	637.20	639.14	622.20	602.20	19.99	2.76	22.75	18.67	618.53	No	EFR Check
EW-11	11/18/11	637.20	639.14	622.20	602.20	20.23	3.07	23.30	18.98	618.22	No	
EW-11	11/22/11	637.20	639.14	622.20	602.20	20.38	3.32	23.70	19.19	618.01	No	
EW-11	12/01/11	637.20	639.14	622.20	602.20	20.71	3.88	24.59	19.65	617.55	No	
EW-11	01/04/12	637.20	639.14	622.20	602.20	20.67	4.96	25.63	19.85	617.35	No	
EW-11	02/16/12	637.20	639.14	622.20	602.20	21.31	4.87	26.18	20.47	616.73	No	
EW-11	03/13/12	637.20	639.14	622.20	602.20	21.68	4.34	26.02	20.72	616.48	No	
EW-11	04/12/12	637.20	639.14	622.20	602.20	21.61	4.06	25.67	20.59	616.61	No	Spill Buddy Before Reading
EW-11	04/12/12	637.20	639.14	622.20	602.20	22.65	0.17	22.82	20.75	616.45	No	Spill Buddy After Reading
EW-11	04/16/12	637.20	639.14	622.20	602.20	22.03	2.56	24.59	20.67	616.53	No	
EW-11	03/13/12	637.20	639.14	622.20	602.20	21.68	4.34	26.02	20.72	616.48	No	
EW-11	04/12/12	637.20	639.14	622.20	602.20	21.61	4.06	25.67	20.59	616.61	No	Spill Buddy Before Reading
EW-11	04/12/12	637.20	639.14	622.20	602.20	22.65	0.17	22.82	20.75	616.45	No	Spill Buddy After Reading
EW-11	04/16/12	637.20	639.14	622.20	602.20	22.03	2.56	24.59	20.67	616.53	No	
EW-11	05/18/12	637.20	639.14	622.20	602.20	19.93	1.75	21.68	18.39	618.81	No	
EW-11	06/26/12	637.20	639.14	622.20	602.20	19.44	3.31	22.75	18.25	618.95	No	
EW-11	06/27/12	637.20	639.14	622.20	602.20	19.44	3.31	22.75	18.25	618.95	No	Installed Portable system 1
EW-11	11/21/12	637.20	639.14	622.20	602.20	21.42	2.40	23.82	20.02	617.18	No	
EW-11	12/17/12	637.20	639.14	622.20	602.20	21.56	3.29	24.85	20.36	616.84	No	
EW-11	03/25/13	637.20	639.14	622.20	602.20	22.38	3.40	25.78	21.21	615.99	No	
EW-11	05/05/13	637.20	639.14	622.20	602.20	22.07	3.37	25.44	20.89	616.31	No	
EW-11	05/16/13	637.20	639.14	622.20	602.20	21.98	3.60	25.58	20.85	616.35	No	Spill Buddy Before Reading
EW-11	05/16/13	637.20	639.14	622.20	602.20	22.92	0.05	22.97	20.99	616.21	No	Spill Buddy After Reading
EW-11	10/03/13	637.20	639.14	622.20	602.20	21.28	4.69	25.97	20.40	616.80	No	
EW-11	05/22/14	637.20	639.14	622.20	602.20	19.96	5.07	25.03	19.17	618.03	No	
EW-11	10/31/14	637.20	639.14	622.20	602.20	19.25	5.11	24.36	18.46	618.74	No	
EW-11	05/06/15	637.20	639.14	622.20	602.20	21.02	4.70	25.72	20.14	617.06	No	
EW-11	10/05/15	637.20	639.14	622.20	602.20	19.29	3.63	22.92	18.17	619.03	No	
EW-11	05/23/16	637.20	639.14	622.20	602.20	16.07	7.92	23.99	15.92	621.28	No	
EW-11	10/03/16	637.20	639.14	622.20	602.20	17.65	5.78	23.43	17.02	620.18	No	
EW-11	06/14/17	637.20	639.14	622.20	602.20	16.42	7.04	23.46	16.07	621.13	No	
EW-11	06/21/17	637.20	639.14	622.20	602.20	16.93	6.39	23.32	16.43	620.77	No	
EW-11	06/22/17	637.20	639.14	622.20	602.20	17.66	1.78	19.44	16.12	621.08	No	
EW-11	06/23/17	637.20	639.14	622.20	602.20	17.78	1.90	19.68	16.27	620.93	No	
EW-11	10/26/17	637.20	639.14	622.20	602.20	14.43	8.41	22.84	14.39	622.81	Yes	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
Tank 1	01/22/02	----	----	----	----	NP	0.00	4.84	----	----	----	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
Tank 1	02/26/02	---	---	---	---	3.81	1.07	4.88	---	---	---	
Tank 1	03/20/02	---	---	---	---	4.29	0.59	4.88	---	---	---	
Tank 1	04/24/02	---	---	---	---	NP	0.00	5.15	---	---	---	Tank Empty
Tank 1	05/15/02	---	---	---	---	3.56	1.34	4.90	---	---	---	
Tank 1	06/27/02	---	---	---	---	3.06	1.82	4.88	---	---	---	
Tank 1	07/25/02	---	---	---	---	2.55	2.34	4.89	---	---	---	
Tank 1	08/20/02	---	---	---	---	2.41	2.48	4.89	---	---	---	
Tank 1	09/30/02	---	---	---	---	2.36	2.53	4.89	---	---	---	
Tank 1	11/05/02	---	---	---	---	2.38	2.49	4.87	---	---	---	
Tank 1	12/23/02	---	---	---	---	2.39	2.50	4.89	---	---	---	
Tank 1	01/28/03	---	---	---	---	2.39	2.52	4.91	---	---	---	
Tank 1	02/19/03	---	---	---	---	2.26	2.65	4.91	---	---	---	
Tank 1	04/17/03	---	---	---	---	1.64	3.27	4.91	---	---	---	
Tank 1	05/15/03	---	---	---	---	4.59	0.43	5.02	---	---	---	
Tank 1	06/10/03	---	---	---	---	4.25	0.78	5.03	---	---	---	
Tank 1	07/30/03	---	---	---	---	4.89	0.12	5.01	---	---	---	
Tank 1	08/12/03	---	---	---	---	4.68	0.33	5.01	---	---	---	
Tank 1	09/08/03	---	---	---	---	4.66	0.35	5.01	---	---	---	
Tank 1	10/02/03	---	---	---	---	4.35	0.70	5.05	---	---	---	
Tank 1	12/03/03	---	---	---	---	3.81	1.22	5.03	---	---	---	
Tank 2	01/22/02	---	---	---	---	4.87	0.08	4.95	---	---	---	
Tank 2	02/26/02	---	---	---	---	4.84	0.10	4.94	---	---	---	
Tank 2	03/20/02	---	---	---	---	4.68	0.26	4.94	---	---	---	
Tank 2	04/24/02	---	---	---	---	NP	0.00	5.05	---	---	---	
Tank 2	05/15/02	---	---	---	---	4.65	0.31	4.96	---	---	---	
Tank 2	06/27/02	---	---	---	---	4.65	0.32	4.97	---	---	---	
Tank 2	07/25/02	---	---	---	---	4.64	0.34	4.98	---	---	---	
Tank 2	08/20/02	---	---	---	---	4.64	0.34	4.98	---	---	---	
Tank 2	09/30/02	---	---	---	---	4.65	0.33	4.98	---	---	---	
Tank 2	11/05/02	---	---	---	---	4.67	0.28	4.95	---	---	---	
Tank 2	12/23/02	---	---	---	---	4.69	0.29	4.98	---	---	---	
Tank 2	01/28/03	---	---	---	---	4.71	0.28	4.99	---	---	---	
Tank 2	02/19/03	---	---	---	---	NM	NM	NM	---	---	---	
Tank 2	04/17/03	---	---	---	---	NM	NM	NM	---	---	---	
Tank 2	05/15/03	---	---	---	---	NM	NM	NM	---	---	---	
Tank 2	06/10/03	---	---	---	---	NM	NM	NM	---	---	---	
Tank 2	10/23/03	---	---	---	---	NM	NM	NM	---	---	---	
Tank 2	10/02/03	---	---	---	---	4.57	0.48	5.05	---	---	---	
Tank 2	01/20/04	---	---	---	---	4.58	0.45	5.03	---	---	---	
Tank 2	07/28/04	---	---	---	---	4.32	0.71	5.03	---	---	---	
VE-1	07/20/11	634.30	636.30	620.30	605.30	NP	0.00	17.24	15.24	619.06	No	
VE-1	09/20/12		636.30			19.33	1.27	20.60	-616.68		No	

**Table 3**  
**Groundwater and LNAPL Gauging Data - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elevation	TOC Elevation	TOS Elevation	BOS Elevation	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Screen Submerged Below Water Table?	Comments/Observations
VE-1	10/22/12	NM										
VE-1	12/20/12		636.30			20.25	1.51	21.76	-615.71		No	
VE-2	07/20/11	634.20	636.20	621.20	606.20	NP	0.00	17.10	15.10	619.10	No	
VE-2	09/20/12		636.20			19.48	2.27	21.75	-616.21		No	
VE-2	10/22/12		636.20			14.60	1.00	15.60	-621.37		No	
VE-2	12/20/12		636.20			20.50	1.30	21.80	-615.41		No	
VE-3	07/20/11	635.00	637.10	623.00	608.00	NP	0.00	17.38	15.28	619.72	No	
VE-3	09/20/12		637.10			20.08	0.19	20.27	-616.98		No	
VE-3	10/22/12	NM										
VE-3	12/20/12		637.10			20.60	2.67	23.27	-615.90		No	
VE-4	07/20/11	634.00	636.10	622.00	607.00	NP	0.00	16.58	14.48	619.52	No	
VE-4	09/20/12		636.10			19.21	1.20	20.41	-616.62		No	
VE-4	10/22/12		636.10			19.86	0.83	20.69	-616.05		No	
VE-4	12/20/12		636.10			19.75	3.89	23.64	-615.47		No	
Dock Tank	06/29/00	----	----	----	----	6.67	0.25	6.92	----	----	----	
Dock Tank	01/22/02	----	----	----	----	6.38	0.51	6.89	----	----	----	
Dock Tank	04/24/02	----	----	----	----	6.35	0.50	6.85	----	----	----	

**UST REMOVED OCTOBER 3, 2002**

**Notes:**

NM = Not Measured

NP = No Product

BTOC = Below Top of Casing

AMSL = Above Mean Sea Level

\* Corrections for free product made using: TOC elevation-[depth to ground water-(product thickness \* product density)]

Average Product Density = 0.77 g/cm3 based on average of 4 NE terminal wells (Table 8) - MW-32, RW-2, RW-4 and RW-6



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWAST-2	10/22/2003	628.28	630.85	623.28	608.28	16.86	4.50	21.36	15.26	613.02	NA	5.71	No	
MWAST-2	12/3/2003	628.28	630.85	623.28	608.28	18.01	4.45	22.46	16.40	611.88	-1.14	4.56	No	
MWAST-2	1/8/2004	628.28	630.85	623.28	608.28	17.65	4.04	21.69	15.95	612.33	0.45	4.92	No	
MWAST-2	1/20/2004	628.28	630.85	623.28	608.28	17.71	3.96	21.67	15.99	612.29	-0.04	4.86	No	
MWAST-2	4/19/2004	628.28	630.85	623.28	608.28	16.51	4.88	21.39	14.99	613.29	1.00	6.06	No	
MWAST-2	7/27/2004	628.28	630.85	623.28	608.28	15.18	5.77	20.95	13.85	614.43	1.14	7.39	No	
MWAST-2	11/15/2004	628.28	630.85	623.28	608.28	13.82	6.52	20.34	12.65	615.63	1.20	8.75	No	
MWAST-2	4/18/2005	628.28	630.85	623.28	608.28	14.22	5.87	20.09	12.91	615.37	-0.26	8.35	No	
MWAST-2	9/9/2005	628.28	630.85	623.28	608.28	15.71	4.80	20.51	14.17	614.11	-1.26	6.86	No	
MWAST-2	10/11/2005	628.28	630.85	623.28	608.28	13.34	6.60	19.94	12.19	616.09	1.98	9.23	No	
MWAST-2	5/23/2006	628.28	630.85	623.28	608.28	12.43	7.21	19.64	11.41	616.87	0.78	10.14	No	
MWAST-2	10/16/2006	628.28	630.85	623.28	608.28	15.85	4.62	20.47	14.27	614.01	-2.86	6.72	No	
MWAST-2	4/23/2007	628.28	630.85	623.28	608.28	15.76	4.74	20.50	14.21	614.07	0.06	6.81	No	
MWAST-2	9/25/2007	628.28	630.72	623.28	608.28	15.74	4.78	20.52	14.33	613.95	-0.12	6.70	No	
MWAST-2	5/1/2008	628.28	630.72	623.28	608.28	12.09	7.53	19.62	11.27	617.01	3.06	10.35	No	
MWAST-2	10/20/2008	628.28	630.72	623.28	608.28	11.84	7.74	19.58	11.06	617.22	0.20	10.60	No	
MWAST-2	4/18/2009	628.28	630.72	623.28	608.28	13.18	6.51	19.69	12.14	616.14	-1.08	9.26	No	
MWAST-2	10/11/2009	628.28	630.72	623.28	608.28	15.21	4.96	20.17	13.84	614.44	-1.70	7.23	No	
MWAST-2	4/28/2010	628.28	630.72	623.28	608.28	14.91	5.07	19.98	13.56	614.72	0.28	7.53	No	
MWAST-2	10/25/2010	628.28	630.72	623.28	608.28	12.54	7.10	19.64	11.63	616.65	1.93	9.90	No	
MWAST-2	4/25/2011	628.28	630.72	623.28	608.28	13.29	6.15	19.44	12.17	616.11	-0.55	9.15	No	
MWAST-2	8/2/2011	628.28	630.72	623.28	608.28	11.6	7.89	19.49	10.86	617.42	1.32	10.84	No	
MWAST-2	9/14/2011	628.28	630.72	623.28	608.28	13.53	6.18	19.71	12.42	615.86	-1.56	8.91	No	
MWAST-2	9/23/2011	628.28	630.72	623.28	608.28	13.89	5.89	19.78	12.72	615.56	-0.30	8.55	No	
MWAST-2	9/29/2011	628.28	630.72	623.28	608.28	13.94	6.04	19.98	12.80	615.48	-0.08	8.50	No	
MWAST-2	10/7/2011	628.28	630.72	623.28	608.28	14.27	5.49	19.76	13.01	615.27	-0.21	8.17	No	
MWAST-2	10/11/2011	628.28	630.72	623.28	608.28	14.58	5.75	20.33	13.38	614.90	-0.37	7.86	No	
MWAST-2	10/21/2011	628.28	630.72	623.28	608.28	14.7	5.38	20.08	13.42	614.86	-0.04	7.74	No	
MWAST-2	10/27/2011	628.28	630.72	623.28	608.28	14.79	5.35	20.14	13.50	614.78	-0.08	7.65	No	
MWAST-2	11/3/2011	628.28	630.72	623.28	608.28	15.06	5.27	20.33	13.75	614.53	-0.25	7.38	No	
MWAST-2	11/9/2011	628.28	630.72	623.28	608.28	15.12	4.81	19.93	13.71	614.57	0.04	7.32	No	
MWAST-2	11/17/2011	628.28	630.72	623.28	608.28	15.47	4.69	20.16	14.04	614.24	-0.32	6.97	No	
MWAST-2	11/22/2011	628.28	630.72	623.28	608.28	15.51	4.62	20.13	14.06	614.22	-0.02	6.93	No	
MWAST-2	12/1/2011	628.28	630.72	623.28	608.28	15.75	4.72	20.47	14.32	613.96	-0.26	6.69	No	
MWAST-2	1/4/2012	628.28	630.72	623.28	608.28	16.32	4.16	20.48	14.77	613.51	-0.45	6.12	No	
MWAST-2	2/16/2012	628.28	630.72	623.28	608.28	17.24	3.28	20.52	15.50	612.78	-0.73	5.20	No	
MWAST-2	3/13/2012	628.28	630.72	623.28	608.28	17.28	3.16	20.44	15.52	612.76	-0.01	5.16	No	
MWAST-2	4/11/2012	628.28	630.72	623.28	608.28	16.49	3.61	20.10	14.83	613.45	0.69	5.95	No	Spill Buddy Before Reading
MWAST-2	4/16/2012	628.28	630.72	623.28	608.28	16.28	3.93	20.21	14.68	613.60	0.14	6.16	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWAST-2	5/18/2012	628.28	630.72	623.28	608.28	14.85	5.03	19.88	13.49	614.79	1.19	7.59	No	
MWAST-2	6/28/2012	628.28	630.72	623.28	608.28	10.77	8.46	19.23	10.15	618.13	3.34	11.67	No	
MWAST-2	7/10/2012	628.28	630.72	623.28	608.28	12.42	6.96	19.38	11.48	616.80	-1.33	10.02	No	Spill Buddy Before Reading
MWAST-2	7/24/2012	628.28	630.72	623.28	608.28	13.77	5.73	19.50	12.56	615.72	-1.09	8.67	No	
MWAST-2	8/17/2012	628.28	630.72	623.28	608.28	14.54	5.12	19.66	13.20	615.08	-0.64	7.90	No	
MWAST-2	8/28/2012	628.28	630.72	623.28	608.28	14.99	4.83	19.82	13.59	614.69	-0.39	7.45	No	Spill Buddy Before Reading
MWAST-2	9/17/2012	628.28	630.72	623.28	608.28	15.7	4.30	20.00	14.18	614.10	-0.60	6.74	No	
MWAST-2	9/28/2012	628.28	630.72	623.28	608.28	16.09	4.00	20.09	14.51	613.77	-0.33	6.35	No	Spill Buddy Before Reading
MWAST-2	9/30/2012	628.28	630.72	623.28	608.28	16.16	3.61	19.77	14.50	613.78	0.01	6.28	No	
MWAST-2	11/21/2012	628.28	630.72	623.28	608.28	16.56	3.70	20.26	14.91	613.37	-0.42	5.88	No	
MWAST-2	12/17/2012	628.28	630.72	623.28	608.28	16.84	3.49	20.33	15.15	613.13	-0.23	5.60	No	
MWAST-2	3/25/2013	628.28	630.72	623.28	608.28	18.1	2.73	20.83	16.25	612.03	-1.10	4.34	No	
MWAST-2	5/5/2013	628.28	630.72	623.28	608.28	15.34	4.89	20.23	13.95	614.33	2.30	7.10	No	
MWAST-2	10/3/2013	628.28	630.72	623.28	608.28	16.1	4.46	20.56	14.62	613.66	-0.67	6.34	No	
MWAST-2	5/22/2014	628.28	630.72	623.28	608.28	11	8.58	19.58	10.40	617.88	4.21	11.44	No	
MWAST-2	10/31/2014	628.28	630.72	623.28	608.28	13.8	6.09	19.89	12.67	615.61	-2.27	8.64	No	
MWAST-2	4/15/2015	628.28	630.72	623.28	608.28	16.3	4.13	20.43	14.75	613.53	-2.08	6.14	No	
MWAST-2	4/22/2015	628.28	630.72	623.28	608.28	15.65	4.55	20.20	14.19	614.09	0.56	6.79	No	
MWAST-2	4/29/2015	628.28	630.72	623.28	608.28	15.37	4.59	19.96	13.92	614.36	0.27	7.07	No	
MWAST-2	5/6/2015	628.28	630.72	623.28	608.28	15.35	4.49	19.84	13.87	614.41	0.04	7.09	No	
MWAST-2	5/12/2015	628.28	630.72	623.28	608.28	14.75	4.98	19.73	13.38	614.90	0.49	7.69	No	
MWAST-2	6/9/2015	628.28	630.72	623.28	608.28	13.22	6.31	19.53	12.14	616.14	1.24	9.22	No	
MWAST-2	10/5/2015	628.28	630.72	623.28	608.28	13.06	6.54	19.60	12.03	616.25	0.11	9.38	No	
MWAST-2	5/23/2016	628.28	630.72	623.28	608.28	10.69	8.85	19.54	10.15	618.13	1.87	11.75	No	
MWAST-2	10/3/2016	628.28	630.72	623.28	608.28	12.97	6.49	19.46	11.92	616.36	-1.77	9.47	No	
MWAST-2	5/22/2017	628.28	630.72	623.28	608.28	9.93	7.50	17.43	9.10	619.18	2.82	12.51	No	
MWAST-2	5/31/2017	628.28	630.72	623.28	608.28	9.31	10.00	19.31	9.02	619.26	0.08	13.13	No	
MWAST-2	6/29/2017	628.28	630.72	623.28	608.28	11.81	7.63	19.44	11.01	617.27	-1.99	10.63	No	
MWAST-2	8/8/2017	628.28	630.72	623.28	608.28	11.66	7.58	19.24	10.85	617.43	0.16	10.78	No	
MWAST-2	8/15/2017	628.28	630.72	623.28	608.28	11.31	5.80	17.11	10.12	618.16	0.73	11.13	No	
MWAST-2	8/22/2017	628.28	630.72	623.28	608.28	11.56	3.39	14.95	9.85	618.43	0.27	10.88	No	
MWAST-2	10/26/2017	628.28	630.72	623.28	608.28	10.16	6.53	16.69	9.12	619.16	1.73	12.28	No	
MWAST-3	10/22/2003	627.34	629.86	622.34	606.21	NP	0.00	16.59	14.07	613.27	NA	7.06	No	
MWAST-3	1/20/2004	627.34	629.86	622.34	606.21	NP	0.00	17.37	14.85	612.49	-0.78	6.28	No	
MWAST-3	4/19/2004	627.34	629.86	622.34	606.21	NP	0.00	16.48	13.96	613.38	0.89	7.17	No	
MWAST-3	7/27/2004	627.34	629.86	622.34	606.21	NP	0.00	15.32	12.80	614.54	1.16	8.33	No	
MWAST-3	11/16/2004	627.34	629.86	622.34	606.21	NP	0.00	14.18	11.66	615.68	1.14	9.47	No	
MWAST-3	4/18/2005	627.34	629.86	622.34	606.21	NP	0.00	14.10	11.58	615.76	0.08	9.55	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWAST-3	9/9/2005	627.34	629.86	622.34	606.21	NP	0.00	15.51	12.99	614.35	-1.41	8.14	No	
MWAST-3	10/11/2005	627.34	629.86	622.34	606.21	NP	0.00	13.75	11.23	616.11	1.76	9.90	No	
MWAST-3	5/23/2006	627.34	629.86	622.34	606.21	NP	0.00	12.80	10.28	617.06	0.95	10.85	No	
MWAST-3	10/16/2006	627.34	629.86	622.34	606.21	NP	0.00	15.79	13.27	614.07	-2.99	7.86	No	
MWAST-3	4/23/2007	627.34	629.86	622.34	606.21	NP	0.00	15.80	13.28	614.06	-0.01	7.85	No	
MWAST-3	9/25/2007	627.34	629.69	622.34	606.21	NP	0.00	15.82	13.47	613.87	-0.19	7.66	No	
MWAST-3	5/1/2008	627.34	629.69	622.34	606.21	NP	0.00	12.38	10.03	617.31	3.44	11.10	No	
MWAST-3	10/20/2008	627.34	629.69	622.34	606.21	NP	0.00	12.36	10.01	617.33	0.02	11.12	No	
MWAST-3	8/31/2011	627.34	629.69	622.34	606.21	NP	0.00	12.49	10.14	617.20	-0.13	10.99	No	
MWAST-3	10/11/2011	627.34	629.69	622.34	606.21	NP	0.00	14.33	11.98	615.36	-1.84	9.15	No	
MWAST-3	1/4/2012	627.34	629.69	622.34	606.21	NP	0.00	15.77	13.42	613.92	-1.44	7.71	No	
MWAST-3	4/16/2012	627.34	629.69	622.34	606.21	NP	0.00	15.88	13.53	613.81	-0.11	7.60	No	
MWAST-3	6/28/2012	627.34	629.69	622.34	606.21	NP	0.00	11.21	8.86	618.48	4.67	12.27	No	
MWAST-3	9/30/2012	627.34	629.69	622.34	606.21	NP	0.00	15.44	13.09	614.25	-4.23	8.04	No	
MWAST-3	12/17/2012	627.34	629.69	622.34	606.21	NP	0.00	16.29	13.94	613.40	-0.85	7.19	No	
MWAST-3	3/25/2013	627.34	629.69	622.34	606.21	NP	0.00	17.30	14.95	612.39	-1.01	6.18	No	
MWAST-3	5/5/2013	627.34	629.69	622.34	606.21	NP	0.00	15.36	13.01	614.33	1.94	8.12	No	
MWAST-3	10/3/2013	627.34	629.69	622.34	606.21	NP	0.00	15.78	13.43	613.91	-0.42	7.70	No	
MWAST-3	5/21/2014	627.34	629.69	622.34	606.21	NP	0.00	11.52	9.17	618.17	4.26	11.96	No	
MWAST-3	10/31/2014	627.34	629.69	622.34	606.21	NP	0.00	13.70	11.35	615.99	-2.18	9.78	No	
MWAST-3	5/6/2015	627.34	629.69	622.34	606.21	NP	0.00	15.10	12.75	614.59	-1.40	8.38	No	
MWAST-3	10/5/2015	627.34	629.69	622.34	606.21	NP	0.00	13.39	11.04	616.30	1.71	10.09	No	
MWAST-3	5/23/2016	627.34	629.69	622.34	606.21	NP	0.00	11.10	8.75	618.59	2.29	12.38	No	
MWAST-3	10/3/2016	627.34	629.69	622.34	606.21	NP	0.00	13.18	10.83	616.51	-2.08	10.30	No	
MWAST-3	6/29/2017	627.34	629.69	622.34	606.21	NP	0.00	12.06	9.71	617.63	1.12	11.42	No	
MWAST-3	5/14/2018	627.34	629.69	622.34	606.21	NP	0.00	13.72	11.37	615.97	-1.66	9.76	No	
MWAST-3	5/30/2018	627.34	629.69	622.34	606.21	NP	0.00	13.52	11.17	616.17	0.20	9.96	No	
MWAST-3	5/18/2018	627.34	629.69	622.34	606.21	NP	0.00	11.85	9.50	617.84	1.67	11.63	No	
MWAST-3	6/19/2018	627.34	629.69	622.34	606.21	NP	0.00	11.85	9.50	617.84	0.00	11.63	No	
MWAST-4	10/23/2003	628.17	630.76	618.17	608.17	15.34	7.20	22.54	14.64	613.53	NA	7.25	No	
MWAST-4	12/3/2003	628.17	630.76	618.17	608.17	15.55	6.99	22.54	14.79	613.38	-0.16	7.04	No	
MWAST-4	1/20/2004	628.17	630.76	618.17	608.17	15.91	6.70	22.61	15.07	613.10	-0.28	6.68	No	
MWAST-4	4/19/2004	628.17	630.76	618.17	608.17	15.86	4.87	20.73	14.55	613.62	0.53	6.73	No	
MWAST-4	7/27/2004	628.17	630.76	618.17	608.17	14.87	3.77	18.64	13.27	614.90	1.28	7.72	No	
MWAST-4	11/15/2004	628.17	630.76	618.17	608.17	13.97	2.41	16.38	12.01	616.16	1.26	8.62	No	
MWAST-4	4/18/2005	628.17	630.76	618.17	608.17	14.08	2.50	16.58	12.14	616.03	-0.13	8.51	No	
MWAST-4	9/9/2005	628.17	630.76	618.17	608.17	14.33	5.84	20.17	13.27	614.90	-1.12	8.26	No	
MWAST-4	10/11/2005	628.17	630.76	618.17	608.17	13.99	1.61	15.60	11.82	616.35	1.45	8.60	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWAST-4	5/23/2006	628.17	630.76	618.17	608.17	12.64	2.17	14.81	10.62	617.55	1.20	9.95	No	
MWAST-4	10/16/2006	628.17	630.76	618.17	608.17	14.64	6.27	20.91	13.69	614.48	-3.07	7.95	No	
MWAST-4	4/23/2007	628.17	630.76	618.17	608.17	15.10	4.81	19.91	13.77	614.40	-0.08	7.49	No	
MWAST-4	9/25/2007	628.17	630.76	618.17	608.17	15.25	5.59	20.84	14.12	614.05	-0.35	7.34	No	
MWAST-4	5/1/2008	628.17	630.76	618.17	608.17	13.42	1.00	14.42	11.09	617.08	3.03	9.17	No	
MWAST-4	10/20/2008	628.17	630.76	618.17	608.17	12.57	1.78	14.35	10.45	617.72	0.65	10.02	No	
MWAST-4	8/31/2011	628.17	630.76	618.17	608.17	12.21	3.01	15.22	10.41	617.76	0.04	10.38	No	
MWAST-4	10/10/2011	628.17	630.76	618.17	608.17	13.65	5.23	18.88	12.43	615.74	-2.02	8.94	No	
MWAST-4	1/4/2012	628.17	630.76	618.17	608.17	14.59	7.05	21.64	13.85	614.32	-1.42	8.00	No	
MWAST-4	4/11/2012	628.17	630.76	618.17	608.17	15.23	6.13	21.36	14.25	613.92	-0.40	7.36	No	Spill Buddy Before Reading
MWAST-4	4/16/2012	628.17	630.76	618.17	608.17	15.24	5.43	20.67	14.07	614.10	0.17	7.35	No	
MWAST-4	6/28/2012	628.17	630.76	618.17	608.17	11.63	1.73	13.36	9.49	618.68	4.58	10.96	Yes	
MWAST-4	7/3/2012	628.17	630.76	618.17	608.17	12.11	1.47	13.58	9.90	618.27	-0.41	10.48	Yes	Spill Buddy Before Reading
MWAST-4	8/28/2012	628.17	630.76	618.17	608.17	14.07	3.86	17.93	12.49	615.68	-2.59	8.52	No	Spill Buddy Before Reading
MWAST-4	9/28/2012	628.17	630.76	618.17	608.17	14.47	6.03	20.50	13.46	614.71	-0.97	8.12	No	Spill Buddy Before Reading
MWAST-4	9/30/2012	628.17	630.76	618.17	608.17	14.50	5.54	20.04	13.36	614.81	0.10	8.09	No	
MWAST-4	11/21/2012	628.17	630.76	618.17	608.17	14.45	7.25	21.70	13.76	614.41	-0.40	8.14	No	
MWAST-4	12/17/2012	628.17	630.76	618.17	608.17	15.14	6.88	22.02	14.35	613.82	-0.59	7.45	No	
MWAST-4	3/25/2013	628.17	630.76	618.17	608.17	15.89	6.70	22.59	15.05	613.12	-0.70	6.70	No	
MWAST-4	4/29/2013	628.17	630.76	618.17	608.17	15.58	3.19	18.77	13.83	614.34	1.23	7.01	No	Spill Buddy Before Reading
MWAST-4	5/5/2013	628.17	630.76	618.17	608.17	15.52	2.41	17.93	13.56	614.61	0.26	7.07	No	
MWAST-4	10/3/2013	628.17	630.76	618.17	608.17	14.93	5.88	20.81	13.88	614.29	-0.32	7.66	No	
MWAST-4	5/22/2014	628.17	630.76	618.17	608.17	12.06	0.66	12.72	9.64	618.53	4.24	10.53	Yes	
MWAST-4	10/31/2014	628.17	630.76	618.17	608.17	13.46	2.87	16.33	11.62	616.55	-1.98	9.13	No	
MWAST-4	4/15/2015	628.17	630.76	618.17	608.17	15.00	6.33	21.33	14.07	614.10	-2.45	7.59	No	
MWAST-4	4/22/2015	628.17	630.76	618.17	608.17	14.78	5.07	19.85	13.52	614.65	0.55	7.81	No	
MWAST-4	4/29/2015	628.17	630.76	618.17	608.17	14.73	4.11	18.84	13.22	614.95	0.30	7.86	No	
MWAST-4	5/6/2015	628.17	630.76	618.17	608.17	14.66	3.98	18.64	13.11	615.06	0.10	7.93	No	
MWAST-4	5/12/2015	628.17	630.76	618.17	608.17	14.58	2.80	17.38	12.72	615.45	0.39	8.01	No	
MWAST-4	6/9/2015	628.17	630.76	618.17	608.17	13.45	1.66	15.11	11.29	616.88	1.43	9.14	No	
MWAST-4	7/10/2015	628.17	630.76	618.17	608.17	15.17	0.29	15.46	12.66	615.51	-1.36	7.42	No	
MWAST-4	7/13/2015	628.17	630.76	618.17	608.17	15.10	0.40	15.50	12.61	615.56	0.04	7.49	No	
MWAST-4	9/10/2015	628.17	630.76	618.17	608.17	15.51	0.19	15.70	12.97	615.20	-0.36	7.08	No	
MWAST-4	10/5/2015	628.17	630.76	618.17	608.17	14.50	0.10	14.60	11.94	616.23	0.68	8.09	No	
MWAST-4	11/3/2015	628.17	630.76	618.17	608.17	14.76	0.28	15.04	12.24	615.93	-0.31	7.83	No	
MWAST-4	4/21/2016	628.17	630.76	618.17	608.17	11.34	2.78	14.12	9.48	618.69	2.77	11.25	Yes	
MWAST-4	6/21/2016	628.17	630.76	618.17	608.17	11.39	0.18	11.57	8.85	619.32	0.63	11.20	Yes	
MWAST-4	5/2/2017	628.17	630.76	618.17	608.17	12.52	1.17	13.69	10.24	617.93	-1.39	10.07	No	
MWAST-4	5/8/2017	628.17	630.76	618.17	608.17	12.67	0.01	12.68	10.08	618.09	0.15	9.92	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWAST-4	5/25/2017	628.17	630.76	618.17	608.17	NP	0.00	10.82	8.23	619.94	1.85	11.77	Yes	
MWAST-4	5/31/2017	628.17	630.76	618.17	608.17	NP	0.00	11.85	9.26	618.91	-1.03	10.74	Yes	
MWAST-4	6/14/2017	628.17	630.76	618.17	608.17	NP	0.00	12.26	9.67	618.50	-0.41	10.33	Yes	
MWAST-4	6/21/2017	628.17	630.76	618.17	608.17	12.58	0.17	12.75	10.03	618.14	-0.36	10.01	No	
MWAST-4	7/7/2017	628.17	630.76	618.17	608.17	12.73	0.03	12.76	10.15	618.02	-0.11	9.86	No	
MWAST-4	7/19/2017	628.17	630.76	618.17	608.17	12.44	0.06	12.50	9.87	618.30	0.28	10.15	Yes	
MWAST-4	8/8/2017	628.17	630.76	618.17	608.17	12.98	0.24	13.22	10.45	617.72	-0.59	9.61	No	
MWAST-4	8/15/2017	628.17	630.76	618.17	608.17	12.39	0.09	12.48	9.82	618.35	0.63	10.20	Yes	
MWAST-4	8/22/2017	628.17	630.76	618.17	608.17	11.98	0.17	12.15	9.43	618.74	0.39	10.61	Yes	
MWAST-4	9/7/2017	628.17	630.76	618.17	608.17	NP	0.00	11.00	8.41	619.76	1.02	11.59	Yes	
MWAST-4	9/14/2017	628.17	630.76	618.17	608.17	11.59	0.05	11.64	9.01	619.16	-0.60	11.00	Yes	
MWAST-4	9/27/2017	628.17	630.76	618.17	608.17	11.80	0.28	12.08	9.28	618.89	-0.27	10.79	Yes	
MWAST-4	10/26/2017	628.17	630.76	618.17	608.17	10.76	0.39	11.15	8.27	619.90	1.01	11.83	Yes	
MWAST-4	5/14/2018	628.17	630.76	618.17	608.17	14.38	1.62	16.00	12.21	615.96	-3.94	8.21	No	
MWAST-4	5/15/2018	628.17	630.76	618.17	608.17	14.96	0.19	15.15	12.42	615.75	-0.21	7.63	No	
MWAST-4	5/23/2018	628.17	630.76	618.17	608.17	14.60	0.60	15.20	12.17	616.00	0.25	7.99	No	
MWAST-4	5/24/2018	628.17	630.76	618.17	608.17	14.55	1.70	16.25	12.41	615.76	-0.24	8.04	No	
MWAST-4	5/30/2018	628.17	630.76	618.17	608.17	14.32	0.36	14.68	11.82	616.35	0.58	8.27	No	
MWAST-4	6/8/2018	628.17	630.76	618.17	608.17	13.89	0.97	14.86	11.55	616.62	0.27	8.70	No	
MWAST-4	6/28/2018	628.17	630.76	618.17	608.17	12.45	1.15	13.60	10.16	618.01	1.39	10.14	No	
MWAST-6	10/23/2003	629.13	632.04	619.13	609.13	17.59	5.53	23.12	15.95	613.18	NA	5.32	No	
MWAST-6	12/3/2003	629.13	632.04	619.13	609.13	17.83	5.17	23.00	16.11	613.02	-0.16	5.08	No	
MWAST-6	1/20/2004	629.13	632.04	619.13	609.13	18.51	4.67	23.18	16.67	612.46	-0.57	4.40	No	
MWAST-6	4/19/2004	629.13	632.04	619.13	609.13	17.85	3.68	21.53	15.79	613.34	0.89	5.06	No	
MWAST-6	7/27/2004	629.13	632.04	619.13	609.13	16.39	4.67	21.06	14.55	614.58	1.23	6.52	No	
MWAST-6	11/15/2004	629.13	632.04	619.13	609.13	15.68	2.10	17.78	13.25	615.88	1.30	7.23	No	
MWAST-6	4/18/2005	629.13	632.04	619.13	609.13	15.07	2.90	17.97	12.83	616.30	0.43	7.84	No	
MWAST-6	9/9/2005	629.13	632.04	619.13	609.13	16.23	4.46	20.69	14.35	614.78	-1.52	6.68	No	
MWAST-6	10/11/2005	629.13	632.04	619.13	609.13	15.58	0.84	16.42	12.86	616.27	1.48	7.33	No	
MWAST-6	5/23/2006	629.13	632.04	619.13	609.13	14.56	1.06	15.62	11.89	617.24	0.97	8.35	No	
MWAST-6	10/16/2006	629.13	632.04	619.13	609.13	16.66	4.57	21.23	14.80	614.33	-2.91	6.25	No	
MWAST-6	4/23/2007	629.13	632.04	619.13	609.13	16.94	4.14	21.08	14.98	614.15	-0.18	5.97	No	
MWAST-6	9/25/2007	629.13	632.04	619.13	609.13	17.05	2.97	20.02	14.82	614.31	0.16	5.86	No	
MWAST-6	5/1/2008	629.13	632.04	619.13	609.13	14.71	1.41	16.12	12.12	617.01	2.70	8.20	No	
MWAST-6	10/20/2008	629.13	632.04	619.13	609.13	13.95	0.92	14.87	11.25	617.88	0.87	8.96	No	
MWAST-6	4/18/2009	629.13	632.04	619.13	609.13	15.42	0.58	16.00	12.64	616.49	-1.39	7.49	No	
MWAST-6	10/11/2009	629.13	632.04	619.13	609.13	16.33	2.59	18.92	14.02	615.11	-1.37	6.58	No	
MWAST-6	4/28/2010	629.13	632.04	619.13	609.13	16.28	2.28	18.56	13.89	615.24	0.12	6.63	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWAST-6	10/25/2010	629.13	632.04	619.13	609.13	14.07	1.31	15.38	11.46	617.67	2.43	8.84	No	
MWAST-6	4/25/2011	629.13	632.04	619.13	609.13	15.31	0.71	16.02	12.56	616.57	-1.10	7.60	No	
MWAST-6	8/2/2011	629.13	632.04	619.13	609.13	13.27	1.03	14.30	10.60	618.53	1.97	9.64	No	
MWAST-6	10/11/2011	629.13	632.04	619.13	609.13	15.93	0.90	16.83	13.23	615.90	-2.63	6.98	No	
MWAST-6	1/4/2012	629.13	632.04	619.13	609.13	17.08	3.29	20.37	14.93	614.20	-1.70	5.83	No	
MWAST-6	4/11/2012	629.13	632.04	619.13	609.13	17.20	4.52	21.72	15.33	613.80	-0.40	5.71	No	Spill Buddy Before Reading
MWAST-6	4/16/2012	629.13	632.04	619.13	609.13	17.38	1.68	19.06	14.86	614.27	0.47	5.53	No	
MWAST-6	6/28/2012	629.13	632.04	619.13	609.13	13.55	1.07	14.62	10.89	618.24	3.97	9.36	No	
MWAST-6	9/30/2012	629.13	632.04	619.13	609.13	16.91	3.33	20.24	14.77	614.36	-3.88	6.00	No	
MWAST-6	11/21/2012	629.13	632.04	619.13	609.13	17.40	4.02	21.42	15.41	613.72	-0.65	5.51	No	
MWAST-6	12/17/2012	629.13	632.04	619.13	609.13	17.66	4.04	21.70	15.68	613.45	-0.26	5.25	No	
MWAST-6	3/25/2013	629.13	632.04	619.13	609.13	18.82	3.08	21.90	16.62	612.51	-0.94	4.09	No	
MWAST-6	5/5/2013	629.13	632.04	619.13	609.13	17.36	1.74	19.10	14.85	614.28	1.77	5.55	No	
MWAST-6	10/3/2013	629.13	632.04	619.13	609.13	17.09	3.61	20.70	15.01	614.12	-0.16	5.82	No	
MWAST-6	5/22/2014	629.13	632.04	619.13	609.13	14.02	0.52	14.54	11.23	617.90	3.78	8.89	No	
MWAST-6	10/31/2014	629.13	632.04	619.13	609.13	15.28	1.73	17.01	12.77	616.36	-1.54	7.63	No	
MWAST-6	4/15/2015	629.13	632.04	619.13	609.13	17.35	3.55	20.90	15.26	613.87	-2.49	5.56	No	
MWAST-6	4/22/2015	629.13	632.04	619.13	609.13	17.31	1.67	18.98	14.78	614.35	0.47	5.60	No	
MWAST-6	4/29/2015	629.13	632.04	619.13	609.13	17.19	1.16	18.35	14.55	614.58	0.24	5.72	No	
MWAST-6	5/6/2015	629.13	632.04	619.13	609.13	17.06	1.10	18.16	14.40	614.73	0.14	5.85	No	
MWAST-6	5/12/2015	629.13	632.04	619.13	609.13	16.83	1.07	17.90	14.17	614.96	0.24	6.08	No	
MWAST-6	6/9/2015	629.13	632.04	619.13	609.13	15.52	0.01	15.53	12.61	616.52	1.55	7.39	No	
MWAST-6	10/5/2015	629.13	632.04	619.13	609.13	15.17	0.28	15.45	12.32	616.81	0.29	7.74	No	
MWAST-6	5/23/2016	629.13	632.04	619.13	609.13	12.80	0.93	13.73	10.10	619.03	2.22	10.11	No	
MWAST-6	10/3/2016	629.13	632.04	619.13	609.13	14.66	1.34	16.00	12.06	617.07	-1.95	8.25	No	
MWAST-6	5/22/2017	629.13	632.04	619.13	609.13	12.90	0.60	13.50	10.13	619.00	1.93	10.01	No	
MWAST-6	5/31/2017	629.13	632.04	619.13	609.13	11.84	1.53	13.37	9.28	619.85	0.85	11.07	Yes	
MWAST-8	10/22/2003	629.55	631.95	623.55	608.40	NP	0.00	18.12	15.72	613.83	NA	5.43	No	
MWAST-8	1/20/2004	629.55	631.95	623.55	608.40	NP	0.00	18.83	16.43	613.12	-0.71	4.72	No	
MWAST-8	4/19/2004	629.55	631.95	623.55	608.40	18.07	0.24	18.31	15.72	613.83	0.71	5.48	No	
MWAST-8	7/27/2004	629.55	631.95	623.55	608.40	16.87	0.26	17.13	14.52	615.03	1.20	6.68	No	
MWAST-8	11/15/2004	629.55	631.95	623.55	608.40	15.73	0.03	15.76	13.34	616.21	1.18	7.82	No	
MWAST-8	4/18/2005	629.55	631.95	623.55	608.40	15.96	0.15	16.11	13.59	615.96	-0.25	7.59	No	
MWAST-8	10/11/2005	629.55	631.95	623.55	608.40	15.50	0.12	15.62	13.12	616.43	0.47	8.05	No	
MWAST-8	5/23/2006	629.55	631.95	623.55	608.40	14.38	0.01	14.39	11.98	617.57	1.14	9.17	No	
MWAST-8	10/16/2006	629.55	631.95	623.55	608.40	17.22	0.33	17.55	14.88	614.67	-2.90	6.33	No	
MWAST-8	4/23/2007	629.55	631.95	623.55	608.40	17.20	0.31	17.51	14.86	614.69	0.02	6.35	No	
MWAST-8	9/25/2007	629.55	631.82	623.55	608.40	17.56	0.33	17.89	15.35	614.20	-0.49	5.86	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWAST-8	5/1/2008	629.55	631.82	623.55	608.40	14.25	0.09	14.34	12.00	617.55	3.36	9.17	No	
MWAST-8	10/20/2008	629.55	631.82	623.55	608.40	13.95	0.18	14.13	11.71	617.84	0.28	9.47	No	
MWAST-8	4/18/2009	629.55	631.82	623.55	608.40	15.01	0.12	15.13	12.76	616.79	-1.05	8.41	No	
MWAST-8	10/11/2009	629.55	631.82	623.55	608.40	16.73	0.31	17.04	14.52	615.03	-1.76	6.69	No	
MWAST-8	4/28/2010	629.55	631.82	623.55	608.40	16.33	0.22	16.55	14.10	615.45	0.42	7.09	No	
MWAST-8	10/25/2010	629.55	631.82	623.55	608.40	14.52	0.08	14.60	12.27	617.28	1.84	8.90	No	
MWAST-8	4/25/2011	629.55	631.82	623.55	608.40	14.96	0.07	15.03	12.70	616.85	-0.44	8.46	No	
MWAST-8	10/11/2011	629.55	631.82	623.55	608.40	15.94	0.13	16.07	13.69	615.86	-0.99	7.48	No	
MWAST-8	1/4/2012	629.55	631.82	623.55	608.40	17.32	0.36	17.68	15.12	614.43	-1.42	6.10	No	
MWAST-8	4/11/2012	629.55	631.82	623.55	608.40	17.60	0.25	17.85	15.38	614.17	-0.26	5.82	No	
MWAST-8	4/16/2012	629.55	631.82	623.55	608.40	17.50	0.03	17.53	15.24	614.31	0.14	5.92	No	
MWAST-8	6/28/2012	629.55	631.82	623.55	608.40	13.01	0.09	13.10	10.76	618.79	4.48	10.41	No	
MWAST-8	9/28/2012	629.55	631.82	623.55	608.40	17.00	0.30	17.30	14.79	614.76	-4.03	6.42	No	Spill Buddy Before Reading
MWAST-8	9/30/2012	629.55	631.82	623.55	608.40	17.03	0.19	17.22	14.80	614.75	-0.01	6.39	No	
MWAST-8	11/21/2012	629.55	631.82	623.55	608.40	17.56	0.29	17.85	15.34	614.21	-0.55	5.86	No	
MWAST-8	12/17/2012	629.55	631.82	623.55	608.40	17.81	0.38	18.19	15.61	613.94	-0.27	5.61	No	
MWAST-8	3/25/2013	629.55	631.82	623.55	608.40	18.72	0.59	19.31	16.56	612.99	-0.95	4.70	No	
MWAST-8	5/5/2013	629.55	631.82	623.55	608.40	17.09	0.13	17.22	14.84	614.71	1.72	6.33	No	
MWAST-8	10/3/2013	629.55	631.82	623.55	608.40	17.34	0.23	17.57	15.11	614.44	-0.27	6.08	No	
MWAST-8	5/22/2014	629.55	631.82	623.55	608.40	NP	0.00	13.35	11.08	618.47	4.03	10.07	No	
MWAST-8	10/31/2014	629.55	631.82	623.55	608.40	15.38	0.09	15.47	13.13	616.42	-2.05	8.04	No	
MWAST-8	4/15/2015	629.55	631.82	623.55	608.40	17.47	0.18	17.65	15.23	614.32	-2.11	5.95	No	
MWAST-8	4/22/2015	629.55	631.82	623.55	608.40	17.02	0.07	17.09	14.76	614.79	0.47	6.40	No	
MWAST-8	4/29/2015	629.55	631.82	623.55	608.40	16.76	0.06	16.82	14.50	615.05	0.26	6.66	No	
MWAST-8	5/6/2015	629.55	631.82	623.55	608.40	16.68	0.07	16.75	14.42	615.13	0.08	6.74	No	
MWAST-8	5/12/2015	629.55	631.82	623.55	608.40	16.32	0.04	16.36	14.06	615.49	0.37	7.10	No	
MWAST-8	6/9/2015	629.55	631.82	623.55	608.40	14.98	0.02	15.00	12.71	616.84	1.34	8.44	No	
MWAST-8	7/10/2015	629.55	631.82	623.55	608.40	15.62	0.02	15.64	13.35	616.20	-0.64	7.80	No	
MWAST-8	7/11/2015	629.55	631.82	623.55	608.40	15.66	0.04	15.70	13.40	616.15	-0.04	7.76	No	
MWAST-8	7/12/2015	629.55	631.82	623.55	608.40	15.62	0.05	15.67	13.36	616.19	0.04	7.80	No	
MWAST-8	7/13/2015	629.55	631.82	623.55	608.40	15.56	0.03	15.59	13.30	616.25	0.06	7.86	No	
MWAST-8	7/15/2015	629.55	631.82	623.55	608.40	15.70	0.03	15.73	13.44	616.11	-0.14	7.72	No	
MWAST-8	7/17/2015	629.55	631.82	623.55	608.40	15.62	0.06	15.68	13.36	616.19	0.07	7.80	No	
MWAST-8	7/18/2015	629.55	631.82	623.55	608.40	15.66	0.06	15.72	13.40	616.15	-0.04	7.76	No	
MWAST-8	7/21/2015	629.55	631.82	623.55	608.40	15.89	0.03	15.92	13.63	615.92	-0.22	7.53	No	
MWAST-8	7/22/2015	629.55	631.82	623.55	608.40	15.92	0.04	15.96	13.66	615.89	-0.03	7.50	No	
MWAST-8	7/23/2015	629.55	631.82	623.55	608.40	15.96	0.03	15.99	13.70	615.85	-0.04	7.46	No	
MWAST-8	7/24/2015	629.55	631.82	623.55	608.40	15.93	0.02	15.95	13.66	615.89	0.03	7.49	No	
MWAST-8	7/25/2015	629.55	631.82	623.55	608.40	16.04	0.02	16.06	13.77	615.78	-0.11	7.38	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWAST-8	7/27/2015	629.55	631.82	623.55	608.40	16.12	0.03	16.15	13.86	615.69	-0.08	7.30	No	
MWAST-8	7/31/2015	629.55	631.82	623.55	608.40	16.27	0.04	16.31	14.01	615.54	-0.15	7.15	No	
MWAST-8	8/4/2015	629.55	631.82	623.55	608.40	16.41	0.03	16.44	14.15	615.40	-0.14	7.01	No	
MWAST-8	8/7/2015	629.55	631.82	623.55	608.40	16.41	0.03	16.44	14.15	615.40	0.00	7.01	No	
MWAST-8	8/12/2015	629.55	631.82	623.55	608.40	16.41	0.02	16.43	14.14	615.41	0.00	7.01	No	
MWAST-8	8/14/2015	629.55	631.82	623.55	608.40	16.44	0.02	16.46	14.17	615.38	-0.03	6.98	No	
MWAST-8	8/15/2015	629.55	631.82	623.55	608.40	16.45	0.02	16.47	14.18	615.37	-0.01	6.97	No	
MWAST-8	8/17/2015	629.55	631.82	623.55	608.40	16.52	0.03	16.55	14.26	615.29	-0.07	6.90	No	
MWAST-8	9/10/2015	629.55	631.82	623.55	608.40	15.95	0.01	15.96	13.68	615.87	0.57	7.47	No	
MWAST-8	9/15/2015	629.55	631.82	623.55	608.40	15.99	0.02	16.01	13.72	615.83	-0.04	7.43	No	
MWAST-8	9/24/2015	629.55	631.82	623.55	608.40	NP	0.00	15.18	12.91	616.64	0.81	8.24	No	
MWAST-8	10/1/2015	629.55	631.82	623.55	608.40	Np	0.00	15.00	12.73	616.82	0.18	8.42	No	
MWAST-8	10/5/2015	629.55	631.82	623.55	608.40	NP	0.00	14.97	12.70	616.85	1.56	8.45	No	
MWAST-8	10/29/2015	629.55	631.82	623.55	608.40	NP	0.00	15.33	13.06	616.49	-0.36	8.09	No	
MWAST-8	11/3/2015	629.55	631.82	623.55	608.40	NP	0.00	15.20	12.93	616.62	0.13	8.22	No	
MWAST-8	4/21/2016	629.55	631.82	623.55	608.40	NP	0.00	12.64	10.37	619.18	2.56	10.78	No	
MWAST-8	4/27/2016	629.55	631.82	623.55	608.40	NP	0.00	11.67	9.40	620.15	0.97	11.75	No	
MWAST-8	5/18/2016	629.55	631.82	623.55	608.40	NP	0.00	12.58	10.31	619.24	-0.91	10.84	No	
MWAST-8	5/23/2016	629.55	631.82	623.55	608.40	NP	0.00	12.72	10.45	619.10	-0.14	10.70	No	
MWAST-8	5/31/2016	629.55	631.82	623.55	608.40	NP	0.00	12.77	10.50	619.05	-0.05	10.65	No	
MWAST-8	6/14/2016	629.55	631.82	623.55	608.40	NP	0.00	12.57	10.30	619.25	0.20	10.85	No	
MWAST-8	6/21/2016	629.55	631.82	623.55	608.40	NP	0.00	12.04	9.77	619.78	0.53	11.38	No	
MWAST-8	7/21/2016	629.55	631.82	623.55	608.40	NP	0.00	12.82	10.55	619.00	-0.78	10.60	No	
MWAST-8	7/25/2016	629.55	631.82	623.55	608.40	NP	0.00	13.26	10.99	618.56	-0.44	10.16	No	
MWAST-8	9/2/2016	629.55	631.82	623.55	608.40	NP	0.00	14.58	12.31	617.24	-1.32	8.84	No	
MWAST-8	10/3/2016	629.55	631.82	623.55	608.40	NP	0.00	14.72	12.45	617.10	-0.14	8.70	No	
MWAST-8	10/13/2016	629.55	631.82	623.55	608.40	NP	0.00	14.98	12.71	616.84	-0.26	8.44	No	
MWAST-8	5/18/2017	629.55	631.82	623.55	608.40	NP	0.00	12.79	10.52	619.03	2.19	10.63	No	
MWAST-8	5/31/2017	629.55	631.82	623.55	608.40	NP	0.00	11.52	9.25	620.30	1.27	11.90	No	
MWAST-8	5/30/2018	629.55	631.82	623.55	608.40	NP	0.00	15.12	12.85	616.70	-3.60	8.30	No	
MWAST-8	6/18/2018	629.55	631.82	623.55	608.40	NP	0.00	13.40	11.13	618.42	-1.88	10.02	No	
MWAST-8	6/27/2018	629.55	631.82	623.55	608.40	NP	0.00	13.66	11.39	618.16	1.46	9.76	No	
MWAST-9	10/22/2003	629.27	631.60	621.27	605.80	NP	0.00	17.70	15.37	613.90	NA	8.10	No	
MWAST-9	1/20/2004	629.27	631.60	621.27	605.80	NP	0.00	18.46	16.13	613.14	-0.76	7.34	No	
MWAST-9	4/19/2004	629.27	631.60	621.27	605.80	NP	0.00	17.89	15.56	613.71	0.57	7.91	No	
MWAST-9	7/27/2004	629.27	631.60	621.27	605.80	NP	0.00	16.48	14.15	615.12	1.41	9.32	No	
MWAST-9	11/16/2004	629.27	631.60	621.27	605.80	NP	0.00	15.29	12.96	616.31	1.19	10.51	No	
MWAST-9	4/18/2005	629.27	631.60	621.27	605.80	NP	0.00	15.18	12.85	616.42	0.11	10.62	No	



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWAST-9	10/11/2005	629.27	631.60	621.27	605.80	NP	0.00	14.91	12.58	616.69	0.27	10.89	No	
MWAST-9	5/23/2006	629.27	631.60	621.27	605.80	NP	0.00	13.86	11.53	617.74	1.05	11.94	No	
MWAST-9	10/16/2006	629.27	631.60	621.27	605.80	NP	0.00	16.88	14.55	614.72	-3.02	8.92	No	
MWAST-9	4/23/2007	629.27	631.60	621.27	605.80	NP	0.00	17.14	14.81	614.46	-0.26	8.66	No	
MWAST-9	9/25/2007	629.27	631.43	621.27	605.80	NP	0.00	17.50	15.34	613.93	-0.53	8.13	No	
MWAST-9	5/1/2008	629.27	631.43	621.27	605.80	NP	0.00	15.55	13.39	615.88	1.95	10.08	No	
MWAST-9	10/20/2008	629.27	631.43	621.27	605.80	NP	0.00	14.76	12.60	616.67	0.79	10.87	No	
MWAST-9	8/31/2011	629.27	631.43	621.27	605.80	NP	0.00	13.83	11.67	617.60	0.93	11.80	No	
MWAST-9	10/11/2011	629.27	631.43	621.27	605.80	NP	0.00	15.41	13.25	616.02	-1.58	10.22	No	
MWAST-9	1/4/2012	629.27	631.43	621.27	605.80	NP	0.00	16.95	14.79	614.48	-1.54	8.68	No	
MWAST-9	4/16/2012	629.27	631.43	621.27	605.80	NP	0.00	17.34	15.18	614.09	-0.39	8.29	No	
MWAST-9	6/28/2012	629.27	631.43	621.27	605.80	NP	0.00	12.52	10.36	618.91	4.82	13.11	No	
MWAST-9	9/30/2012	629.27	631.43	621.27	605.80	NP	0.00	16.60	14.44	614.83	-4.08	9.03	No	
MWAST-9	12/17/2012	629.27	631.43	621.27	605.80	NP	0.00	17.52	15.36	613.91	-0.92	8.11	No	
MWAST-9	3/25/2013	629.27	631.43	621.27	605.80	NP	0.00	18.52	16.36	612.91	-1.00	7.11	No	
MWAST-9	5/5/2013	629.27	631.43	621.27	605.80	NP	0.00	16.81	14.65	614.62	1.71	8.82	No	
MWAST-9	10/3/2013	629.27	631.43	621.27	605.80	NP	0.00	17.01	14.85	614.42	-0.20	8.62	No	
MWAST-9	5/21/2014	629.27	631.43	621.27	605.80	NP	0.00	13.02	10.86	618.41	3.99	12.61	No	
MWAST-9	10/31/2014	629.27	631.43	621.27	605.80	NP	0.00	14.92	12.76	616.51	-1.90	10.71	No	
MWAST-9	5/6/2015	629.27	631.43	621.27	605.80	NP	0.00	16.34	14.18	615.09	-1.42	9.29	No	
MWAST-9	7/10/2015	629.27	631.43	621.27	605.80	15.17	0.03	15.20	13.02	616.25	1.16	10.46	No	
MWAST-9	10/5/2015	629.27	631.43	621.27	605.80	NP	0.00	14.56	12.40	616.87	0.62	11.07	No	
MWAST-9	5/23/2016	629.27	631.43	621.27	605.80	NP	0.00	12.12	9.96	619.31	2.44	13.51	No	
MWAST-9	10/3/2016	629.27	631.43	621.27	605.80	NP	0.00	14.29	12.13	617.14	-2.17	11.34	No	
MWAST-9	6/29/2017	629.27	631.43	621.27	605.80	NP	0.00	15.10	12.94	616.33	-0.81	10.53	No	
MWAST-9	5/14/2018	629.27	631.43	621.27	605.80	NP	0.00	14.94	12.78	616.49		10.69	No	
MWM-2	10/21/2003	626.14	628.94	613.14	597.36	NP	0.00	18.39	15.59	610.55	NA	13.19	No	
MWM-2	1/20/2004	626.14	628.94	613.14	597.36	NP	0.00	19.16	16.36	609.78	-0.77	12.42	No	
MWM-2	4/19/2004	626.14	628.94	613.14	597.36	NP	0.00	17.38	14.58	611.56	1.78	14.20	No	
MWM-2	11/18/2004							<b>Well Damaged</b>						
MWM-2	4/18/2005							<b>Well Damaged</b>						
MWM-2	8/1/2005							<b>Well Repaired August 2005</b>						
MWM-2	10/11/2005	626.14	628.94	613.14	597.36	NP	0.00	15.98	13.18	612.96	NA	15.60	No	
MWM-2	5/23/2006	626.14	628.94	613.14	597.36	NP	0.00	14.94	12.14	614.00	1.04	16.64	Yes	
MWM-2	10/16/2006	626.14	628.94	613.14	597.36	NP	0.00	17.56	14.76	611.38	-2.62	14.02	No	
MWM-2	4/23/2007	626.14	628.94	613.14	597.36	NP	0.00	17.75	14.95	611.19	-0.19	13.83	No	
MWM-2	9/25/2007	626.14	628.94	613.14	597.36	NP	0.00	17.36	14.56	611.58	0.39	14.22	No	
MWM-2	5/1/2008	626.14	628.94	613.14	597.36	NP	0.00	15.65	12.85	613.29	1.71	15.93	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWM-2	10/20/2008	626.14	628.94	613.14	597.36	NP	0.00	14.59	11.79	614.35	1.06	16.99	Yes	
MWM-2	8/31/2011	626.14	628.94	613.14	597.36	NP	0.00	15.19	12.39	613.75	-0.60	16.39	Yes	
MWM-2	10/11/2011	626.14	628.94	613.14	597.36	NP	0.00	17.13	14.33	611.81	-1.94	14.45	No	
MWM-2	1/4/2012	626.14	628.94	613.14	597.36	NP	0.00	17.88	15.08	611.06	-0.75	13.70	No	
MWM-2	4/16/2012	626.14	628.94	613.14	597.36	NP	0.00	17.05	14.25	611.89	0.83	14.53	No	
MWM-2	6/28/2012	626.14	628.94	613.14	597.36	NP	0.00	13.57	10.77	615.37	3.48	18.01	Yes	
MWM-2	9/30/2012	626.14	628.94	613.14	597.36	NP	0.00	17.66	14.86	611.28	-4.09	13.92	No	
MWM-2	12/17/2012	626.14	628.94	613.14	597.36	NP	0.00	18.10	15.30	610.84	-0.44	13.48	No	
MWM-2	3/25/2013	626.14	628.94	613.14	597.36	NP	0.00	19.01	16.21	609.93	-0.91	12.57	No	
MWM-2	5/5/2013	626.14	628.94	613.14	597.36	NP	0.00	16.37	13.57	612.57	2.64	15.21	No	
MWM-2	10/1/2013	626.14	628.94	613.14	597.36	NP	0.00	17.49	14.69	611.45	-1.12	14.09	No	
MWM-2	5/21/2014	626.14	628.94	613.14	597.36	NP	0.00	18.57	15.77	610.37	-1.08	13.01	No	
MWM-2	10/30/2014	626.14	628.94	613.14	597.36	NP	0.00	15.58	12.78	613.36	2.99	16.00	Yes	
MWM-2	5/6/2015	626.14	628.94	613.14	597.36	NP	0.00	16.53	13.73	612.41	-0.95	15.05	No	
MWM-2	10/5/2015	626.14	628.94	613.14	597.36	NP	0.00	15.34	12.54	613.60	1.19	16.24	Yes	
MWM-2	5/23/2016	626.14	628.94	613.14	597.36	NP	0.00	13.98	11.18	614.96	1.36	17.60	Yes	
MWM-2	10/3/2016	626.14	628.94	613.14	597.36	NP	0.00	15.43	12.63	613.51	-1.45	16.15	Yes	
MWM-2	6/29/2017	626.14	628.94	613.14	597.36	NP	0.00	14.39	11.59	614.55	1.04	17.19	Yes	
MWM-2D	10/3/2016	626.11	629.06	573.11	568.11	NP	0.00	15.14	12.19	613.92	NA	45.81	Yes	
MWM-2D	6/13/2017	626.11	629.06	573.11	568.11	NP	0.00	12.24	9.29	616.82	2.90	48.71	Yes	
MWM-2D	10/3/2017	626.11	629.06	573.11	568.11	NP	0.00	12.84	9.89	616.22	-0.60	48.11	Yes	
MWM-2D	6/18/2018	626.11	629.06	573.11	568.11	NP	0.00	14.60	11.65	614.46	-1.76	46.35	Yes	
MWM-3	10/23/2003	627.18	629.68	612.18	597.18	16.45	12.62	29.07	16.85	610.33	NA	16.05	No	
MWM-3	1/20/2004	627.18	629.68	612.18	597.18	17.30	11.51	28.81	17.44	609.74	-0.59	15.20	No	
MWM-3	4/19/2004	627.18	629.68	612.18	597.18	15.18	13.80	28.98	15.85	611.33	1.59	17.32	No	
MWM-3	7/27/2004	627.18	629.68	612.18	597.18	14.72	14.37	29.09	15.52	611.66	0.33	17.78	No	
MWM-3	11/15/2004	627.18	629.68	612.18	597.18	13.44	15.95	29.39	14.61	612.57	0.92	19.06	Yes	
MWM-3	4/18/2005	627.18	629.68	612.18	597.18	13.37	16.13	29.50	14.58	612.60	0.03	19.13	Yes	
MWM-3	9/9/2005	627.18	629.68	612.18	597.18	15.38	13.86	29.24	16.07	611.11	-1.49	17.12	No	
MWM-3	10/11/2005	627.18	629.68	612.18	597.18	12.96	16.42	29.38	14.23	612.95	1.83	19.54	Yes	
MWM-3	5/23/2006	627.18	629.68	612.18	597.18	12.20	17.63	29.83	13.75	613.43	0.48	20.30	Yes	
MWM-3	10/16/2006	627.18	629.68	612.18	597.18	15.60	13.60	29.20	16.23	610.95	-2.47	16.90	No	
MWM-3	4/23/2007	627.18	629.68	612.18	597.18	14.61	14.67	29.28	15.48	611.70	0.74	17.89	No	
MWM-3	9/25/2007	627.18	629.68	612.18	597.18	15.60	13.40	29.00	16.18	611.00	-0.70	16.90	No	
MWM-3	5/1/2008	627.18	629.68	612.18	597.18	12.16	17.53	29.69	13.69	613.49	2.49	20.34	Yes	
MWM-3	8/31/2011	627.18	629.68	612.18	597.18	12.51	17.02	29.53	13.92	613.26	-0.23	19.99	Yes	
MWM-3	10/21/2011	627.18	629.68	612.18	597.18	15.30	10.30	25.60	15.17	612.01	-1.25	17.20	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWM-3	10/27/2011	627.18	629.68	612.18	597.18	14.90	13.30	28.20	15.46	611.72	-0.29	17.60	No	
MWM-3	11/3/2011	627.18	629.68	612.18	597.18	15.11	13.12	28.23	15.62	611.56	-0.17	17.39	No	
MWM-3	11/9/2011	627.18	629.68	612.18	597.18	15.07	13.38	28.45	15.64	611.54	-0.02	17.43	No	
MWM-3	11/10/2011	627.18	629.68	612.18	597.18	15.34	13.11	28.45	15.85	611.33	-0.21	17.16	No	Before EFR
MWM-3	11/10/2011	627.18	629.68	612.18	597.18	20.62	0.07	20.69	18.14	609.04	-2.28	11.88	No	After EFR
MWM-3	11/13/2011	627.18	629.68	612.18	597.18	15.12	12.91	28.03	15.59	611.59	2.55	17.38	No	EFR Check
MWM-3	11/17/2011	627.18	629.68	612.18	597.18	15.32	13.04	28.36	15.82	611.36	-0.23	17.18	No	
MWM-3	11/22/2011	627.18	629.68	612.18	597.18	15.36	13.12	28.48	15.87	611.31	-0.06	17.14	No	
MWM-3	11/29/2011	627.18	629.68	612.18	597.18	15.42	13.10	28.52	15.93	611.25	-0.06	17.08	No	Reading before system start up
MWM-3	1/4/2012	627.18	629.68	612.18	597.18	16.13	12.27	28.40	16.45	610.73	-0.52	16.37	No	
MWM-3	2/16/2012	627.18	629.68	612.18	597.18	16.77	10.58	27.35	16.70	610.48	-0.25	15.73	No	
MWM-3	3/13/2012	627.18	629.68	612.18	597.18	16.68	11.58	28.26	16.84	610.34	-0.14	15.82	No	
MWM-3	4/16/2012	627.18	629.68	612.18	597.18	15.28	12.90	28.18	15.74	611.44	1.10	17.22	No	
MWM-3	6/11/2012	627.18	629.68	612.18	597.18	12.58	16.22	28.80	13.81	613.37	1.94	19.92	Yes	Reading before install of well pumps for Barge system expansion to C. Reiss property.
MWM-3	6/21/2012	627.18	629.68	612.18	597.18	14.30	1.70	16.00	12.19	614.99	1.62	18.20	Yes	Connected to System
MWM-3	6/28/2012	627.18	629.68	612.18	597.18	15.22	0.16	15.38	12.76	614.42	-0.57	17.28	Yes	Connected to System
MWM-3	12/17/2012	627.18	629.68	612.18	597.18	17.21	7.27	24.48	16.38	610.80	-3.62	15.29	No	System down for winter; interface probe could not bypass pump to gauge DTW.
<b>Well connected to Barge Dock Skimmer system - Phase 2</b>														
MWM-3	3/25/2013	627.18	629.68	612.18	597.18	18.22	6.13	24.35	17.13	610.05	-0.75	14.28	No	Probe hit pump at 24.35' still indicated LNAPL
MWM-3	5/5/2013	627.18	629.68	612.18	597.18	15.12	9.53	24.65	14.81	612.37	2.32	17.38	Yes	Probe hit pump at 24.65' still indicated LNAPL
MWM-3	5/22/2014	627.18	629.68	612.18	597.18	15.21	0.16	15.37	12.75	614.43	2.06	17.29	Yes	
MWM-3	10/31/2014	627.18	629.68	612.18	597.18	17.25	0.13	17.38	14.78	612.40	-2.03	15.25	Yes	
MWM-3	3/17/2015	627.18	629.68	612.18	597.18	16.59	7.61	24.20	15.84	611.34	-1.06	15.91	No	
MWM-3	5/6/2015	627.18	629.68	612.18	597.18	18.05	0.12	18.17	15.58	611.60	-0.80	14.45	No	
MWM-3	6/25/2015	627.18	629.68	612.18	597.18	17.30	0.13	17.43	14.83	612.35	0.75	15.20	Yes	
MWM-3	7/13/2015	627.18	629.68	612.18	597.18	17.20	0.12	17.32	14.73	612.45	0.85	15.30	Yes	
MWM-3	10/1/2015	627.18	629.68	612.18	597.18	14.80	0.12	14.92	12.33	614.85	2.40	17.70	Yes	
MWM-3	10/5/2015	627.18	629.68	612.18	597.18	16.88	0.07	16.95	14.40	612.78	-2.07	15.62	Yes	
MWM-3	4/21/2016	627.18	629.68	612.18	597.18	11.75	10.92	22.67	11.76	615.42	2.64	20.75	Yes	
MWM-3	5/2/2017	627.18	629.68	612.18	597.18	12.81	13.06	25.87	13.31	613.87	-1.55	19.69	Yes	
MWM-3	5/31/2017	627.18	629.68	612.18	597.18	15.41	0.18	15.59	12.95	614.23	0.36	17.09	Yes	
MWM-3	6/14/2017	627.18	629.68	612.18	597.18	15.37	0.15	15.52	12.90	614.28	0.05	17.13	Yes	
MWM-3	06/29/17	627.18	629.68	612.18	597.18	15.86	0.10	15.96	13.38	613.80	-0.48	16.64	Yes	
MWM-3	7/12/2017	627.18	629.68	612.18	597.18	15.46	0.15	15.61	12.99	614.19	0.39	17.04	Yes	
MWM-3	07/19/17	627.18	629.68	612.18	597.18	15.45	0.14	15.59	12.98	614.20	0.01	17.05	Yes	
MWM-3	7/26/2017	627.18	629.68	612.18	597.18	15.63	0.24	15.87	13.19	613.99	-0.20	16.87	Yes	
MWM-3	07/27/17	627.18	629.68	612.18	597.18	15.75	0.17	15.92	13.29	613.89	-0.10	16.75	Yes	
MWM-3	8/4/2017	627.18	629.68	612.18	597.18	15.88	0.19	16.07	13.42	613.76	-0.13	16.62	Yes	
MWM-3	08/08/17	627.18	629.68	612.18	597.18	15.99	0.15	16.14	13.52	613.66	-0.10	16.51	Yes	
MWM-3	8/15/2017	627.18	629.68	612.18	597.18	15.43	0.16	15.59	12.97	614.21	0.56	17.07	Yes	
MWM-3	08/22/17	627.18	629.68	612.18	597.18	15.16	0.18	15.34	12.70	614.48	0.27	17.34	Yes	
MWM-3	8/30/2017	627.18	629.68	612.18	597.18	14.35	0.14	14.49	11.88	615.30	0.82	18.15	Yes	
MWM-3	09/07/17	627.18	629.68	612.18	597.18	14.52	0.18	14.70	12.06	615.12	-0.18	17.98	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWM-3	9/14/2017	627.18	629.68	612.18	597.18	15.09	-0.07	15.02	12.57	614.66	-0.46	17.48	Yes	
MWM-3	9/27/2017	627.18	629.68	612.18	597.18	15.06	0.14	15.20	12.59	614.59	-0.07	17.44	Yes	
MWM-3	10/12/2017	627.18	629.68	612.18	597.18	14.22	0.11	14.33	11.75	615.43	0.85	18.28	Yes	
MWM-3	10/26/17	627.18	629.68	612.18	597.18	14.55	0.13	14.68	12.08	615.10	-0.33	17.95	Yes	
MWM-3	05/14/18	627.18	629.68	612.18	597.18	NP	0.00	14.11	11.61	615.57	0.47	18.39	Yes	
MWM-3	05/15/18	627.18	629.68	612.18	597.18	17.06	0.14	17.20	14.59	612.59	-2.98	15.44	Yes	
MWM-3	05/23/18	627.18	629.68	612.18	597.18	17.40	0.30	17.70	14.97	612.21	-0.38	15.10	Yes	
MWM-3	05/24/18	627.18	629.68	612.18	597.18	17.25	0.15	17.40	14.78	612.40	0.18	15.25	Yes	
MWM-3	05/30/18	627.18	629.68	612.18	597.18	NP	0.00	16.81	14.31	612.87	0.47	15.69	Yes	
MWM-3	06/08/18	627.18	629.68	612.18	597.18	16.44	0.02	16.46	13.94	613.24	0.37	16.06	Yes	
MWM-3	06/12/18	627.18	629.68	612.18	597.18	16.47	0.18	16.65	14.01	613.17	-0.07	16.03	Yes	
MWM-3	06/19/18	627.18	629.68	612.18	597.18									
MWM-3	06/28/18	627.18	629.68	612.18	597.18									
						<b>PUMP OBSTRUCTION</b>								
						<b>PUMP OBSTRUCTION</b>								
MWM-4	10/22/2003	626.69	629.47	621.69	605.67	NP	0.00	17.00	14.22	612.47	NA	6.80	No	
MWM-4	1/20/2004	626.69	629.47	621.69	605.67	NP	0.00	17.79	15.01	611.68	-0.79	6.01	No	
MWM-4	4/19/2004	626.69	629.47	621.69	605.67	NP	0.00	16.37	13.59	613.10	1.42	7.43	No	
MWM-4	7/27/2004	626.69	629.47	621.69	605.67	NP	0.00	15.67	12.89	613.80	0.70	8.13	No	
MWM-4	11/18/2004	626.69	629.47	621.69	605.67	NP	0.00	14.59	11.81	614.88	1.08	9.21	No	
MWM-4	4/18/2005	626.69	629.47	621.69	605.67	NP	0.00	14.40	11.62	615.07	0.19	9.40	No	
MWM-4	10/11/2005	626.69	629.47	621.69	605.67	NP	0.00	13.96	11.18	615.51	0.44	9.84	No	
MWM-4	5/23/2006	626.69	629.47	621.69	605.67	NP	0.00	13.15	10.37	616.32	0.81	10.65	No	
MWM-4	10/16/2006	626.69	629.47	621.69	605.67	NP	0.00	16.18	13.40	613.29	-3.03	7.62	No	
MWM-4	4/23/2007	626.69	629.47	621.69	605.67	NP	0.00	15.59	12.81	613.88	0.59	8.21	No	
MWM-4	9/25/2007	626.69	629.30	621.69	605.67	NP	0.00	16.05	13.44	613.25	-0.63	7.58	No	
MWM-4	5/1/2008	626.69	629.30	621.69	605.67	NP	0.00	12.62	10.01	616.68	3.43	11.01	No	
MWM-4	10/20/2008	626.69	629.30	621.69	605.67	NP	0.00	12.85	10.24	616.45	-0.23	10.78	No	
MWM-4	8/31/2011	626.69	629.30	621.69	605.67	NP	0.00	13.11	10.50	616.19	-0.26	10.52	No	
MWM-4	10/11/2011	626.69	629.30	621.69	605.67	NP	0.00	15.26	12.65	614.04	-2.15	8.37	No	
MWM-4	1/4/2012	626.69	629.30	621.69	605.67	NP	0.00	16.21	13.60	613.09	-0.95	7.42	No	
MWM-4	4/16/2012	626.69	629.30	621.69	605.67	NP	0.00	15.81	13.20	613.49	0.40	7.82	No	
MWM-4	6/28/2012	626.69	629.30	621.69	605.67	NP	0.00	11.49	8.88	617.81	4.32	12.14	No	
MWM-4	9/30/2012	626.69	629.30	621.69	605.67	NP	0.00	15.89	13.28	613.41	-4.40	7.74	No	
MWM-4	12/17/2012	626.69	629.30	621.69	605.67	NP	0.00	16.68	14.07	612.62	-0.79	6.95	No	
MWM-4	3/25/2013	626.69	629.30	621.69	605.67	NP	0.00	17.31	14.70	611.99	-0.63	6.32	No	
MWM-4	5/5/2013	626.69	629.30	621.69	605.67	NP	0.00	15.35	12.74	613.95	1.96	8.28	No	
MWM-4	10/3/2013	626.69	629.30	621.69	605.67	NP	0.00	16.12	13.51	613.18	-0.77	7.51	No	
MWM-4	5/20/2014	626.69	629.30	621.69	605.67	NP	0.00	11.71	9.10	617.59	4.41	11.92	No	
MWM-4	10/31/2014	626.69	629.30	621.69	605.67	NP	0.00	14.09	11.48	615.21	-2.38	9.54	No	
MWM-4	5/6/2015	626.69	629.30	621.69	605.67	NP	0.00	15.25	12.64	614.05	-1.16	8.38	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWM-4	10/5/2015	626.69	629.30	621.69	605.67	NP	0.00	13.72	11.11	615.58	1.53	9.91	No	
MWM-4	5/23/2016	626.69	629.30	621.69	605.67	NP	0.00	11.68	9.07	617.62	2.04	11.95	No	
MWM-4	10/3/2016	626.69	629.30	621.69	605.67	NP	0.00	13.59	10.98	615.71	-1.91	10.04	No	
MWM-4	5/18/2017	626.69	629.30	621.69	605.67	NP	0.00	11.50	8.89	617.80	2.09	12.13	No	
MWM-4	5/31/2017	626.69	629.30	621.69	605.67	NP	0.00	10.33	7.72	618.97	1.17	13.30	No	
MWM-6	10/23/2003	626.20	628.84	611.20	596.20	17.66	0.22	17.88	15.07	611.13	NA	14.98	No	
MWM-6	1/20/2004	626.20	628.84	611.20	596.20	18.07	0.93	19.00	15.66	610.54	-0.58	14.57	No	
MWM-6	4/19/2004	626.20	628.84	611.20	596.20	16.96	1.13	18.09	14.60	611.60	1.06	15.68	Yes	
MWM-6	7/27/2004	626.20	628.84	611.20	596.20	16.36	1.13	17.49	14.00	612.20	0.60	16.28	Yes	
MWM-6	11/15/2004	626.20	628.84	611.20	596.20	16.51	0.10	16.61	13.89	612.31	0.10	16.13	Yes	
MWM-6	4/18/2005	626.20	628.84	611.20	596.20	15.69	0.58	16.27	13.19	613.01	0.70	16.95	Yes	
MWM-6	10/11/2005	626.20	628.84	611.20	596.20	15.20	1.42	16.62	12.91	613.29	0.28	17.44	Yes	
MWM-6	5/23/2006	626.20	628.84	611.20	596.20	14.70	1.01	15.71	12.31	613.89	0.60	17.94	Yes	
MWM-6	10/16/2006	626.20	628.84	611.20	596.20	16.72	1.01	17.73	14.33	611.87	-2.02	15.92	Yes	
MWM-6	4/23/2007	626.20	628.84	611.20	596.20	16.57	0.92	17.49	14.16	612.04	0.17	16.07	Yes	
MWM-6	9/25/2007	626.20	628.84	611.20	596.20	17.05	0.90	17.95	14.63	611.57	-0.48	15.59	Yes	
MWM-6	5/1/2008	626.20	628.84	611.20	596.20	14.91	0.91	15.82	12.49	613.71	2.14	17.73	Yes	
MWM-6	10/20/2008	626.20	628.84	611.20	596.20	14.28	0.91	15.19	11.86	614.34	0.63	18.36	Yes	
MWM-6	8/31/2011	626.20	628.84	611.20	596.20	14.40	0.83	15.23	11.96	614.24	-0.10	18.24	Yes	
MWM-6	10/11/2011	626.20	628.84	611.20	596.20	15.78	0.50	16.28	13.26	612.94	-1.30	16.86	Yes	
MWM-6	1/4/2012	626.20	628.84	611.20	596.20	17.00	0.52	17.52	14.49	611.71	-1.22	15.64	Yes	
MWM-6	4/12/2012	626.20	628.84	611.20	596.20	17.17	0.48	17.65	14.65	611.55	-0.16	15.47	Yes	Spill Buddy Before Reading
MWM-6	4/16/2012	626.20	628.84	611.20	596.20	16.86	0.02	16.88	14.22	611.98	0.42	15.78	Yes	
MWM-6	6/28/2012	626.20	628.84	611.20	596.20	13.80	0.04	13.84	11.17	615.03	3.06	18.84	Yes	
MWM-6	9/30/2012	626.20	628.84	611.20	596.20	16.89	0.02	16.91	14.25	611.95	-3.09	15.75	Yes	
MWM-6	12/17/2012	626.20	628.84	611.20	596.20	17.38	0.02	17.40	14.74	611.46	-0.49	15.26	Yes	
MWM-6	3/25/2013	626.20	628.84	611.20	596.20	18.21	0.04	18.25	15.58	610.62	-0.83	14.43	No	
MWM-6	5/5/2013	626.20	628.84	611.20	596.20	16.61	0.02	16.63	13.97	612.23	1.60	16.03	Yes	
MWM-6	10/3/2013	626.20	628.84	611.20	596.20	NP	0.00	16.87	14.23	611.97	-0.26	15.77	Yes	
MWM-6	5/21/2014	626.20	628.84	611.20	596.20	NP	0.00	14.08	11.44	614.76	2.79	18.56	Yes	
MWM-6	7/30/2014	626.20	628.84	611.20	596.20	15.15	0.01	15.16	12.51	613.69	-1.07	17.49	Yes	
MWM-6	10/31/2014	626.20	628.84	611.20	596.20	NP	0.00	15.21	12.57	613.63	-0.06	17.43	Yes	
MWM-6	4/15/2015	626.20	628.84	611.20	596.20	NP	0.00	16.85	14.21	611.99	-1.64	15.79	Yes	
MWM-6	4/22/2015	626.20	628.84	611.20	596.20	NP	0.00	16.46	13.82	612.38	0.39	16.18	Yes	
MWM-6	4/29/2015	626.20	628.84	611.20	596.20	NP	0.00	16.35	13.71	612.49	0.11	16.29	Yes	
MWM-6	5/6/2015	626.20	628.84	611.20	596.20	NP	0.00	16.33	13.69	612.51	0.02	16.31	Yes	
MWM-6	5/12/2015	626.20	628.84	611.20	596.20	NP	0.00	16.02	13.38	612.82	0.31	16.62	Yes	
MWM-6	6/9/2015	626.20	628.84	611.20	596.20	NP	0.00	15.21	12.57	613.63	0.81	17.43	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWM-6	10/5/2015	626.20	628.84	611.20	596.20	15.20	0.10	15.30	12.58	613.62	-0.01	17.44	Yes	
MWM-6	5/18/2016	626.20	628.84	611.20	596.20	13.69	0.19	13.88	11.10	615.10	1.49	18.95	Yes	
MWM-6	5/23/2016	626.20	628.84	611.20	596.20	13.85	0.13	13.98	11.24	614.96	-0.15	18.79	Yes	
MWM-6	5/31/2016	626.20	628.84	611.20	596.20	13.74	0.16	13.90	11.14	615.06	0.10	18.90	Yes	
MWM-6	6/14/2016	626.20	628.84	611.20	596.20	13.67	0.13	13.80	11.06	615.14	0.08	18.97	Yes	
MWM-6	6/21/2016	626.20	628.84	611.20	596.20	13.35	0.16	13.51	10.75	615.45	0.31	19.29	Yes	
MWM-6	7/15/2016	626.20	628.84	611.20	596.20	13.68	0.12	13.80	11.07	615.13	-0.01	18.96	Yes	
MWM-6	7/25/2016	626.20	628.84	611.20	596.20	14.08	0.13	14.21	11.47	614.73	-0.40	18.56	Yes	
MWM-6	8/26/2016	626.20	628.84	611.20	596.20	14.90	0.20	15.10	12.31	613.89	-0.84	17.74	Yes	
MWM-6	9/2/2016	626.20	628.84	611.20	596.20	14.96	0.23	15.19	12.38	613.82	-0.07	17.68	Yes	
MWM-6	10/3/2016	626.20	628.84	611.20	596.20	15.01	0.30	15.31	12.44	613.76	-0.07	17.63	Yes	
MWM-6	10/6/2016	626.20	628.84	611.20	596.20	15.10	0.30	15.40	12.53	613.67	-0.16	17.54	Yes	
MWM-6	10/13/2016	626.20	628.84	611.20	596.20	15.17	0.33	15.50	12.61	613.59	-0.08	17.47	Yes	
MWM-6	5/2/2017	626.20	628.84	611.20	596.20	13.92	0.53	14.45	11.41	614.79	1.20	18.72	Yes	
MWM-6	5/8/2017	626.20	628.84	611.20	596.20	13.95	0.55	14.50	11.44	614.76	-0.03	18.69	Yes	
MWM-6	5/18/2017	626.20	628.84	611.20	596.20	13.66	0.28	13.94	11.09	615.11	0.36	18.98	Yes	
MWM-6	5/25/2017	626.20	628.84	611.20	596.20	12.90	0.30	13.20	10.33	615.87	0.76	19.74	Yes	
MWM-6	5/31/2017	626.20	628.84	611.20	596.20	12.86	0.29	13.15	10.29	615.91	0.04	19.78	Yes	
MWM-6	9/7/2017	626.20	628.84	611.20	596.20	12.75	0.35	13.10	10.20	616.00	0.10	19.89	Yes	
MWM-6	9/14/2017	626.20	628.84	611.20	596.20	13.21	0.28	13.49	10.64	615.56	-0.44	19.43	Yes	
MWM-6	5/14/2018	626.20	628.84	611.20	596.20	15.32	0.58	15.90	12.82	613.38	-2.18	17.32	Yes	
MWM-6	5/15/2018	626.20	628.84	611.20	596.20	15.75	0.20	15.95	13.16	613.04	-0.34	16.89	Yes	
MWM-6	5/23/2018	626.20	628.84	611.20	596.20	15.63	0.20	15.83	13.04	613.16	0.12	17.01	Yes	
MWM-7	10/22/2003	625.01	627.53	616.01	600.86	NP	0.00	16.97	14.45	610.56	NA	9.70	No	
MWM-7	1/20/2004	625.01	627.53	616.01	600.86	NP	0.00	17.67	15.15	609.86	-0.70	9.00	No	
MWM-7	4/19/2004	625.01	627.53	616.01	600.86	NP	0.00	16.35	13.83	611.18	1.32	10.32	No	
MWM-7	7/27/2004	625.01	627.53	616.01	600.86	NP	0.00	15.89	13.37	611.64	0.46	10.78	No	
MWM-7	11/16/2004	625.01	627.53	616.01	600.86	NP	0.00	15.12	12.60	612.41	0.77	11.55	No	
MWM-7	4/18/2005	625.01	627.53	616.01	600.86	NP	0.00	15.13	12.61	612.40	-0.01	11.54	No	
MWM-7	10/11/2005	625.01	627.53	616.01	600.86	NP	0.00	14.68	12.16	612.85	0.45	11.99	No	
MWM-7	5/23/2006	625.01	627.53	616.01	600.86	NP	0.00	14.28	11.76	613.25	0.40	12.39	No	
MWM-7	10/16/2006	625.01	627.53	616.01	600.86	NP	0.00	16.38	13.86	611.15	-2.10	10.29	No	
MWM-7	4/23/2007	625.01	627.53	616.01	600.86	NP	0.00	15.91	13.39	611.62	0.47	10.76	No	
MWM-7	9/25/2007	625.01	627.36	616.01	600.86	NP	0.00	16.12	13.77	611.24	-0.38	10.38	No	
MWM-7	5/1/2008	625.01	627.36	616.01	600.86	NP	0.00	14.12	11.77	613.24	2.00	12.38	No	
MWM-7	10/20/2008	625.01	627.36	616.01	600.86	NP	0.00	13.62	11.27	613.74	0.50	12.88	No	
MWM-7	8/31/2011	625.01	627.36	616.01	600.86	NP	0.00	13.89	11.54	613.47	-0.27	12.61	No	
MWM-7	10/11/2011	625.01	627.36	616.01	600.86	NP	0.00	15.23	12.88	612.13	-1.34	11.27	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWM-7	1/4/2012	625.01	627.36	616.01	600.86	NP	0.00	16.33	13.98	611.03	-1.10	10.17	No	
MWM-7	4/16/2012	625.01	627.36	616.01	600.86	NP	0.00	15.81	13.46	611.55	0.52	10.69	No	
MWM-7	6/28/2012	625.01	627.36	616.01	600.86	NP	0.00	12.79	10.44	614.57	3.02	13.71	No	
MWM-7	9/30/2012	625.01	627.36	616.01	600.86	NP	0.00	16.04	13.69	611.32	-3.25	10.46	No	
MWM-7	12/17/2012	625.01	627.36	616.01	600.86	NP	0.00	16.53	14.18	610.83	-0.49	9.97	No	
MWM-7	3/25/2013	625.01	627.36	616.01	600.86	NP	0.00	17.37	15.02	609.99	-0.84	9.13	No	
MWM-7	5/5/2013	625.01	627.36	616.01	600.86	NP	0.00	15.45	13.10	611.91	1.92	11.05	No	
MWM-7	10/1/2013	625.01	627.36	616.01	600.86	NP	0.00	15.95	13.60	611.41	-0.50	10.55	No	
MWM-7	5/21/2014	625.01	627.36	616.01	600.86	NP	0.00	12.95	10.60	614.41	3.00	13.55	No	
MWM-7	10/29/2014	625.01	627.36	616.01	600.86	NP	0.00	14.23	11.88	613.13	-1.28	12.27	No	
MWM-7	5/6/2015	625.01	627.36	616.01	600.86	NP	0.00	15.28	12.93	612.08	-1.05	11.22	No	
MWM-7	10/6/2015	625.01	627.36	616.01	600.86	NP	0.00	14.11	11.76	613.25	1.17	12.39	No	
MWM-7	5/23/2016	625.01	627.36	616.01	600.86	NP	0.00	12.81	10.46	614.55	1.30	13.69	No	
MWM-7	10/3/2016	625.01	627.36	616.01	600.86	NP	0.00	13.99	11.64	613.37	-1.18	12.51	No	
MWM-7	6/29/2017	625.01	627.36	616.01	600.86	NP	0.00	13.15	10.80	614.21	0.84	13.35	No	
MWM-7D	7/31/2009	622.11	623.93	570.11	665.11	NP	0.00	11.49	9.67	612.44	NA	-52.67	Yes	
MWM-7D	10/11/2009	622.11	623.93	570.11	565.11	NP	0.00	12.49	10.67	611.44	NA	46.33	Yes	
MWM-7D	4/28/2010	622.11	623.93	570.11	565.11	NP	0.00	12.63	10.81	611.30	-0.14	46.19	Yes	
MWM-7D	10/25/2010	622.11	623.93	570.11	565.11	NP	0.00	11.36	9.54	612.57	1.27	47.46	Yes	
MWM-7D	4/25/2011	622.11	623.93	570.11	565.11	NP	0.00	11.91	10.09	612.02	-0.55	46.91	Yes	
MWM-7D	10/11/2011	622.11	623.93	570.11	565.11	NP	0.00	12.10	10.28	611.83	-0.19	46.72	Yes	
MWM-7D	1/4/2012	622.11	623.93	570.11	565.11	NP	0.00	13.23	11.41	610.70	-1.13	45.59	Yes	
MWM-7D	4/16/2012	622.11	623.93	570.11	565.11	NP	0.00	13.03	11.21	610.90	0.20	45.79	Yes	
MWM-7D	6/28/2012	622.11	623.93	570.11	565.11	NP	0.00	10.45	8.63	613.48	2.58	48.37	Yes	
MWM-7D	9/30/2012	622.11	623.93	570.11	565.11	NP	0.00	12.99	11.17	610.94	-2.54	45.83	Yes	
MWM-7D	12/17/2012	622.11	623.93	570.11	565.11	NP	0.00	13.44	11.62	610.49	-0.45	45.38	Yes	
MWM-7D	3/25/2013	622.11	623.93	570.11	565.11	NP	0.00	14.21	12.39	609.72	-0.77	44.61	Yes	
MWM-7D	5/5/2013	622.11	623.93	570.11	565.11	NP	0.00	12.88	11.06	611.05	1.33	45.94	Yes	
MWM-7D	10/1/2013	622.11	623.93	570.11	565.11	NP	0.00	12.84	11.02	611.09	0.04	45.98	Yes	
MWM-7D	5/21/2014	622.11	623.93	570.11	565.11	NP	0.00	10.71	8.89	613.22	2.13	48.11	Yes	
MWM-7D	10/30/2014	622.11	623.93	570.11	565.11	NP	0.00	11.28	9.46	612.65	-0.57	47.54	Yes	
MWM-7D	5/5/2015	622.11	623.93	570.11	565.11	NP	0.00	12.39	10.57	611.54	-1.11	46.43	Yes	
MWM-7D	10/6/2015	622.11	623.93	570.11	565.11	NP	0.00	11.20	9.38	612.73	1.19	47.62	Yes	
MWM-7D	5/23/2016	622.11	623.93	570.11	565.11	NP	0.00	10.17	8.35	613.76	1.03	48.65	Yes	
MWM-7D	10/3/2016	622.11	623.93	570.11	565.11	NP	0.00	10.98	9.16	612.95	-0.81	47.84	Yes	
MWM-7D	6/14/2017	622.11	623.93	570.11	565.11	NP	0.00	10.20	8.38	613.73	0.78	48.62	Yes	
MWM-7D	10/3/2017	622.11	623.93	570.11	565.11	NP	0.00	9.26	7.44	614.67	0.94	49.56	Yes	
MWM-7D	6/18/2018	622.11	623.93	570.11	565.11	NP	0.00	10.70	8.88	613.23	-1.44	48.12	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWM-7D	6/27/2018	622.11	623.93	570.11	565.11	NP	0.00	10.72	8.90	613.21	-0.02	48.10	Yes	
MWM-9	10/22/2003	622.08	624.40	611.08	596.50	NP	0.00	12.97	10.65	611.43	NA	14.93	Yes	
MWM-9	1/20/2004	622.08	624.40	611.08	596.50	NP	0.00	13.65	11.33	610.75	-0.68	14.25	No	
MWM-9	4/19/2004	622.08	624.40	611.08	596.50	NP	0.00	12.83	10.51	611.57	0.82	15.07	Yes	
MWM-9	7/27/2004	622.08	624.40	611.08	596.50	NP	0.00	12.02	9.70	612.38	0.81	15.88	Yes	
MWM-9	11/16/2004	Well Abandoned due to Hallett Dock Construction												
MWM-9R S	7/31/2009	625.43	627.59	616.43	601.43		0.00							
MWM-9R S	10/11/2009	625.43	627.59	616.43	601.43	NP	0.00	14.82	12.66	612.77	NA	11.34	No	
MWM-9R S	4/28/2010	625.43	627.59	616.43	601.43	NP	0.00	14.89	12.73	612.70	-0.07	11.27	No	
MWM-9R S	10/25/2010	625.43	627.59	616.43	601.43	NP	0.00	13.45	11.29	614.14	1.44	12.71	No	
MWM-9R S	4/25/2011	625.43	627.59	616.43	601.43	NP	0.00	13.97	11.81	613.62	-0.52	12.19	No	
MWM-9R S	10/11/2011	625.43	627.59	616.43	601.43	NP	0.00	14.19	12.03	613.40	-0.22	11.97	No	
MWM-9R S	1/4/2012	625.43	627.59	616.43	601.43	NP	0.00	15.47	13.31	612.12	-1.28	10.69	No	
MWM-9R S	4/16/2012	625.43	627.59	616.43	601.43	NP	0.00	15.37	13.21	612.22	0.10	10.79	No	
MWM-9R S	6/28/2012	625.43	627.59	616.43	601.43	NP	0.00	12.44	10.28	615.15	2.93	13.72	No	
MWM-9R S	9/30/2012	625.43	627.59	616.43	601.43	NP	0.00	15.20	13.04	612.39	-2.76	10.96	No	
MWM-9R S	12/17/2012	625.43	627.59	616.43	601.43	NP	0.00	15.73	13.57	611.86	-0.53	10.43	No	
MWM-9R S	3/25/2013	625.43	627.59	616.43	601.43	NP	0.00	16.58	14.42	611.01	-0.85	9.58	No	
MWM-9R S	5/5/2013	625.43	627.59	616.43	601.43	NP	0.00	15.22	13.06	612.37	1.36	10.94	No	
MWM-9R S	10/1/2013	625.43	627.59	616.43	601.43	NP	0.00	15.15	12.99	612.44	0.07	11.01	No	
MWM-9R S	5/20/2014	625.43	627.59	616.43	601.43	NP	0.00	12.80	10.64	614.79	2.35	13.36	No	
MWM-9R S	10/29/2014	625.43	627.59	616.43	601.43	NP	0.00	13.45	11.29	614.14	-0.65	12.71	No	
MWM-9R S	5/6/2015	625.43	627.59	616.43	601.43	NP	0.00	14.76	12.60	612.83	-1.31	11.40	No	
MWM-9R S	10/5/2015	625.43	627.59	616.43	601.43	NP	0.00	13.32	11.16	614.27	1.44	12.84	No	
MWM-9R S	5/23/2016	625.43	627.59	616.43	601.43	NP	0.00	12.06	9.90	615.53	1.26	14.10	No	
MWM-9R S	10/3/2016	625.43	627.59	616.43	601.43	NP	0.00	13.04	10.88	614.55	-0.98	13.12	No	
MWM-9R S	6/29/2017	625.43	627.59	616.43	601.43	NP	0.00	12.44	10.28	615.15	0.60	13.72	No	
MWM-9R D	7/31/2009	625.15	626.93	573.15	568.15		0.00							
MWM-9R D	10/11/2009	625.15	626.93	573.15	568.15	NP	0.00	14.41	12.63	612.52	NA	44.37	Yes	
MWM-9R D	4/28/2010	625.15	626.93	573.15	568.15	NP	0.00	14.54	12.76	612.39	-0.13	44.24	Yes	
MWM-9R D	10/25/2010	625.15	626.93	573.15	568.15	NP	0.00	13.19	11.41	613.74	1.35	45.59	Yes	
MWM-9R D	4/25/2011	625.15	626.93	573.15	568.15	NP	0.00	13.72	11.94	613.21	-0.53	45.06	Yes	
MWM-9R D	10/11/2011	625.15	626.93	573.15	568.15	NP	0.00	13.89	12.11	613.04	-0.17	44.89	Yes	
MWM-9R D	1/4/2012	625.15	626.93	573.15	568.15	NP	0.00	15.00	13.22	611.93	-1.11	43.78	Yes	
MWM-9R D	4/16/2012	625.15	626.93	573.15	568.15	NP	0.00	15.03	13.25	611.90	-0.03	43.75	Yes	
MWM-9R D	6/28/2012	625.15	626.93	573.15	568.15	NP	0.00	12.23	10.45	614.70	2.80	46.55	Yes	



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWM-9R D	9/30/2012	625.15	626.93	573.15	568.15	NP	0.00	14.74	12.96	612.19	-2.51	44.04	Yes	
MWM-9R D	12/17/2012	625.15	626.93	573.15	568.15	NP	0.00	15.32	13.54	611.61	-0.58	43.46	Yes	
MWM-9R D	3/25/2013	625.15	626.93	573.15	568.15	NP	0.00	16.10	14.32	610.83	-0.78	42.68	Yes	
MWM-9R D	5/5/2013	625.15	626.93	573.15	568.15	NP	0.00	14.89	13.11	612.04	1.21	43.89	Yes	
MWM-9R D	10/1/2013	625.15	626.93	573.15	568.15	NP	0.00	14.79	13.01	612.14	0.10	43.99	Yes	
MWM-9R D	5/21/2014	625.15	626.93	573.15	568.15	NP	0.00	12.58	10.80	614.35	2.21	46.20	Yes	
MWM-9R D	10/30/2014	625.15	626.93	573.15	568.15	NP	0.00	13.09	11.31	613.84	-0.51	45.69	Yes	
MWM-9R D	5/5/2015	625.15	626.93	573.15	568.15	NP	0.00	14.36	12.58	612.57	-1.27	44.42	Yes	
MWM-9R D	10/7/2015	625.15	626.93	573.15	568.15	NP	0.00	13.03	11.25	613.90	1.33	45.75	Yes	
MWM-9R D	5/23/2016	625.15	626.93	573.15	568.15	NP	0.00	11.65	9.87	615.28	1.38	47.13	Yes	
MWM-9R D	10/3/2016	625.15	626.93	573.15	568.15	NP	0.00	12.61	10.83	614.32	-0.96	46.17	Yes	
MWM-9R D	6/14/2017	625.15	626.93	573.15	568.15	NP	0.00	11.60	9.82	615.33	1.01	47.18	Yes	
MWM-9R D	10/3/2017	625.15	626.93	573.15	568.15	NP	0.00	10.85	9.07	616.08	0.75	47.93	Yes	
MWM-9R D	6/18/2018	625.15	626.93	573.15	568.15	NP	0.00	12.37	10.59	614.56	-1.52	46.41	Yes	
MWM-9R D	6/27/2018	625.15	626.93	573.15	568.15	NP	0.00	12.34	10.56	614.59	0.03	46.44	Yes	
MWM-10 S	7/31/2009	618.59	620.51	609.59	594.59		0.00							
MWM-10 S	10/11/2009	618.59	620.51	609.59	594.59	NP	0.00	3.93	2.01	616.58	NA	21.99	Yes	
MWM-10 S	4/28/2010	618.59	620.51	609.59	594.59	NP	0.00	3.70	1.78	616.81	0.23	22.22	Yes	
MWM-10 S	10/25/2010	618.59	620.51	609.59	594.59	NP	0.00	3.17	1.25	617.34	0.53	22.75	Yes	
MWM-10 S	4/25/2011	618.59	620.51	609.59	594.59	NP	0.00	3.27	1.35	617.24	-0.10	22.65	Yes	
MWM-10 S	10/11/2011	618.59	620.51	609.59	594.59	NP	0.00	4.52	2.60	615.99	-1.25	21.40	Yes	
MWM-10 S	1/4/2012	618.59	620.51	609.59	594.59	NP	0.00	5.75	3.83	614.76	-1.23	20.17	Yes	
MWM-10 S	4/16/2012	618.59	620.51	609.59	594.59	NP	0.00	3.51	1.59	617.00	2.24	22.41	Yes	
MWM-10 S	6/28/2012	618.59	620.51	609.59	594.59	NP	0.00	3.53	1.61	616.98	-0.02	22.39	Yes	
MWM-10 S	9/30/2012	618.59	620.51	609.59	594.59	NP	0.00	6.76	4.84	613.75	-3.23	19.16	Yes	
MWM-10 S	12/17/2012	618.59	620.51	609.59	594.59	NP	0.00	5.01	3.09	615.50	1.75	20.91	Yes	
MWM-10 S	3/25/2013	618.59	620.51	609.59	594.59	NP	0.00	6.99	5.07	613.52	-1.98	18.93	Yes	
MWM-10 S	5/5/2013	618.59	620.51	609.59	594.59	NP	0.00	3.43	1.51	617.08	3.56	22.49	Yes	
MWM-10 S	10/1/2013	618.59	620.51	609.59	594.59	NP	0.00	4.88	2.96	615.63	-1.45	21.04	Yes	
MWM-10 S	5/20/2014	618.59	620.51	609.59	594.59	NP	0.00	3.15	1.23	617.36	1.73	22.77	Yes	
MWM-10 S	10/29/2014	618.59	620.51	609.59	594.59	NP	0.00	4.19	2.27	616.32	-1.04	21.73	Yes	
MWM-10 S	5/6/2015	618.59	620.51	609.59	594.59	NP	0.00	4.00	2.08	616.51	0.19	21.92	Yes	
MWM-10 S	10/5/2015	618.59	620.51	609.59	594.59	NP	0.00	4.05	2.13	616.46	-0.05	21.87	Yes	
MWM-10 S	5/23/2016	618.59	620.51	609.59	594.59	NP	0.00	4.03	2.11	616.48	0.02	21.89	Yes	
MWM-10 S	10/3/2016	618.59	620.51	609.59	594.59	NP	0.00	4.56	2.64	615.95	-0.53	21.36	Yes	
MWM-10 S	6/29/2017	618.59	620.51	609.59	594.59	NP	0.00	9.28	7.36	611.23	-4.72	16.64	Yes	
MWM-10 D	7/31/2009	618.86	620.82	566.87	561.87		0.00							

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWM-10 D	10/11/2009	618.86	620.82	566.87	561.87	NP	0.00	10.89	8.94	609.93	NA	48.06	Yes	
MWM-10 D	4/28/2010	618.86	620.82	566.87	561.87	NP	0.00	10.99	9.04	609.83	-0.10	47.96	Yes	
MWM-10 D	10/25/2010	618.86	620.82	566.87	561.87	NP	0.00	9.92	7.97	610.90	1.07	49.03	Yes	
MWM-10 D	4/25/2011	618.86	620.82	566.87	561.87	NP	0.00	10.32	8.37	610.50	-0.40	48.63	Yes	
MWM-10 D	10/11/2011	618.86	620.82	566.87	561.87	NP	0.00	10.57	8.62	610.25	-0.25	48.38	Yes	
MWM-10 D	1/4/2012	618.86	620.82	566.87	561.87	NP	0.00	11.63	9.68	609.19	-1.06	47.32	Yes	
MWM-10 D	4/16/2012	618.86	620.82	566.87	561.87	NP	0.00	11.22	9.27	609.60	0.41	47.73	Yes	
MWM-10 D	6/28/2012	618.86	620.82	566.87	561.87	NP	0.00	8.93	6.98	611.89	2.29	50.02	Yes	
MWM-10 D	9/30/2012	618.86	620.82	566.87	561.87	NP	0.00	11.41	9.46	609.41	-2.48	47.54	Yes	
MWM-10 D	12/17/2012	618.86	620.82	566.87	561.87	NP	0.00	11.77	9.82	609.05	-0.36	47.18	Yes	
MWM-10 D	3/25/2013	618.86	620.82	566.87	561.87	NP	0.00	12.46	10.51	608.36	-0.69	46.49	Yes	
MWM-10 D	5/5/2013	618.86	620.82	566.87	561.87	NP	0.00	11.02	9.07	609.80	1.44	47.93	Yes	
MWM-10 D	10/1/2013	618.86	620.82	566.87	561.87	NP	0.00	11.21	9.26	609.61	-0.19	47.74	Yes	
MWM-10 D	5/21/2014	618.86	620.82	566.87	561.87	NP	0.00	9.04	7.09	611.78	2.17	49.91	Yes	
MWM-10 D	10/30/2014	618.86	620.82	566.87	561.87	NP	0.00	9.66	7.71	611.16	-0.62	49.29	Yes	
MWM-10 D	5/5/2015	618.86	620.82	566.87	561.87	NP	0.00	10.64	8.69	610.18	-0.98	48.31	Yes	
MWM-10 D	10/6/2015	618.86	620.82	566.87	561.87	NP	0.00	9.50	7.55	611.32	1.14	49.45	Yes	
MWM-10 D	5/23/2016	618.86	620.82	566.87	561.87	NP	0.00	8.74	6.79	612.08	0.76	50.21	Yes	
MWM-10 D	10/3/2016	618.86	620.82	566.87	561.87	NP	0.00	9.38	7.43	611.44	-0.64	49.57	Yes	
MWM-10 D	6/14/2017	618.86	620.82	566.87	561.87	NP	0.00	8.65	6.70	612.17	0.73	50.30	Yes	
MWM-10 D	10/3/2017	618.86	620.82	566.87	561.87	NP	0.00	7.78	5.83	613.04	0.87	51.17	Yes	
MWM-10 D	6/18/2018	618.86	620.82	566.87	561.87	NP	0.00	8.90	6.95	611.92	-1.12	50.05	Yes	
MWM-10 D	6/27/2018	618.86	620.82	566.87	561.87	NP	0.00	8.99	7.04	611.83	-0.09	49.96	Yes	
MW-17	09/08/88	630.50	633.00	616.50	606.50	NP	0.00	19.26	16.76	613.74	NA	7.24	No	
MW-17	09/20/88	630.50	633.00	616.50	606.50	NP	0.00	19.74	17.24	613.26	-0.48	6.76	No	
MW-17	04/27/89	630.50	633.00	616.50	606.50	NP	0.00	19.28	16.78	613.72	0.46	7.22	No	
MW-17	05/18/89	630.50	633.00	616.50	606.50	NP	0.00	18.81	16.31	614.19	0.47	7.69	No	
MW-17	06/30/89	630.50	633.00	616.50	606.50	NP	0.00	18.10	15.60	614.90	0.71	8.40	No	
MW-17	07/12/89	630.50	633.00	616.50	606.50	NP	0.00	18.25	15.75	614.75	-0.15	8.25	No	
MW-17	07/26/89	630.50	633.00	616.50	606.50	NP	0.00	18.59	16.09	614.41	-0.34	7.91	No	
MW-17	07/27/89	630.50	633.00	616.50	606.50	NP	0.00	18.64	16.14	614.36	-0.05	7.86	No	
MW-17	09/03/89	630.50	633.00	616.50	606.50	NP	0.00	18.98	16.48	614.02	-0.34	7.52	No	
MW-17	11/28/89	630.50	633.00	616.50	606.50	NP	0.00	19.43	16.93	613.57	-0.45	7.07	No	
MW-17	06/01/90	630.50	633.00	616.50	606.50	NP	0.00	19.41	16.91	613.59	0.02	7.09	No	
MW-17	06/19/90	630.50	633.00	616.50	606.50	NP	0.00	19.28	16.78	613.72	0.13	7.22	No	
MW-17	06/27/90	630.50	633.00	616.50	606.50	NP	0.00	19.30	16.80	613.70	-0.02	7.20	No	
MW-17	07/05/90	630.50	633.00	616.50	606.50	NP	0.00	19.35	16.85	613.65	-0.05	7.15	No	
MW-17	07/17/90	630.50	633.00	616.50	606.50	NP	0.00	19.39	16.89	613.61	-0.04	7.11	No	
MW-17	07/25/90	630.50	633.00	616.50	606.50	NP	0.00	19.46	16.96	613.54	-0.07	7.04	No	
MW-17	08/09/90	630.50	633.00	616.50	606.50	NP	0.00	19.50	17.00	613.50	-0.04	7.00	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-17	08/27/90	630.50	633.00	616.50	606.50	NP	0.00	19.45	16.95	613.55	0.05	7.05	No	
MW-17	09/06/90	630.50	633.00	616.50	606.50	NP	0.00	19.18	16.68	613.82	0.27	7.32	No	
MW-17	01/04/91	630.50	633.00	616.50	606.50	NP	0.00	18.42	15.92	614.58	0.76	8.08	No	
MW-17	01/30/91	630.50	633.00	616.50	606.50	NP	0.00	18.93	16.43	614.07	-0.51	7.57	No	
MW-17	04/24/91	630.50	633.00	616.50	606.50	NP	0.00	18.95	16.45	614.05	-0.02	7.55	No	
MW-17	07/09/91	630.50	633.00	616.50	606.50	NP	0.00	15.95	13.45	617.05	3.00	10.55	Yes	
MW-17	10/08/91	630.50	633.00	616.50	606.50	NP	0.00	14.76	12.26	618.24	1.19	11.74	Yes	
MW-17	01/07/92	630.50	633.00	616.50	606.50	NP	0.00	15.44	12.94	617.56	-0.68	11.06	Yes	
MW-17	10/14/92	630.50	633.00	616.50	606.50	NP	0.00	15.61	13.11	617.39	-0.17	10.89	Yes	
MW-17	06/25/93	630.50	633.00	616.50	606.50	NP	0.00	11.52	9.02	621.48	4.09	14.98	Yes	
MW-17	10/28/93	630.50	633.00	616.50	606.50	NP	0.00	15.95	13.45	617.05	-4.43	10.55	Yes	
MW-17	01/29/94	630.50	633.00	616.50	606.50	NP	0.00	16.91	14.41	616.09	-0.96	9.59	No	
MW-17	04/27/94	630.50	633.00	616.50	606.50	NP	0.00	15.78	13.28	617.22	1.13	10.72	Yes	
MW-17	07/21/94	630.50	633.00	616.50	606.50	NP	0.00	15.58	13.08	617.42	0.20	10.92	Yes	
MW-17	10/25/94	630.50	633.00	616.50	606.50	NP	0.00	16.11	13.61	616.89	-0.53	10.39	Yes	
MW-17	10/28/94	630.50	633.00	616.50	606.50	NP	0.00	15.29	12.79	617.71	0.82	11.21	Yes	
MW-17	02/01/95	630.50	633.00	616.50	606.50	NP	0.00	17.71	15.21	615.29	-2.42	8.79	No	
MW-17	04/04/95	630.50	633.00	616.50	606.50	NP	0.00	17.75	15.25	615.25	-0.04	8.75	No	
MW-17	07/12/95	630.50	633.00	616.50	606.50	NP	0.00	16.69	14.19	616.31	1.06	9.81	No	
MW-17	11/13/95	630.50	633.00	616.50	606.50	NP	0.00	15.17	12.67	617.83	1.52	11.33	Yes	
MW-17	03/13/96	630.50	633.00	616.50	606.50	NP	0.00	17.47	14.97	615.53	-2.30	9.03	No	
MW-17	04/22/96	630.50	633.00	616.50	606.50	NP	0.00	15.30	12.80	617.70	2.17	11.20	Yes	
MW-17	10/08/96	630.50	633.00	616.50	606.50	NP	0.00	14.35	11.85	618.65	0.95	12.15	Yes	
MW-17	04/29/97	630.50	633.00	616.50	606.50	NP	0.00	13.02	10.52	619.98	1.33	13.48	Yes	
MW-17	11/03/98	630.50	633.00	616.50	606.50	NP	0.00	17.69	15.19	615.31	-4.67	8.81	No	
MW-17	03/02/99	630.50	633.00	616.50	606.50	NP	0.00	17.89	15.39	615.11	-0.20	8.61	No	
MW-17	04/26/00	630.50	633.00	616.50	606.50	NP	0.00	16.53	14.03	616.47	1.36	9.97	No	
MW-17	10/10/00	630.50	633.00	616.50	606.50	NP	0.00	12.03	9.53	620.97	4.50	14.47	Yes	
MW-17	04/24/01	630.50	633.00	616.50	606.50	NP	0.00	17.01	14.51	615.99	-4.98	9.49	No	
MW-17	10/23/01	630.50	633.00	616.50	606.50	NP	0.00	17.52	15.02	615.48	-0.51	8.98	No	
MW-17	01/22/02	630.50	633.00	616.50	606.50	NP	0.00	18.26	15.76	614.74	-0.74	8.24	No	
MW-17	02/26/02	630.50	633.00	616.50	606.50	NP	0.00	18.35	15.85	614.65	-0.09	8.15	No	
MW-17	03/20/02	630.50	633.00	616.50	606.50	NP	0.00	18.54	16.04	614.46	-0.28	#VALUE!	No	
MW-17	04/23/02	630.50	633.00	615.50	606.50	NP	0.00	19.95	17.45	613.05	-1.41	6.55	No	
MW-17	05/15/02	630.50	633.00	615.50	606.50	NP	0.00	16.84	14.34	616.16	3.11	9.66	Yes	
MW-17	08/20/02	630.50	633.00	615.50	606.50	NP	0.00	16.78	14.28	616.22	0.06	9.72	Yes	
MW-17	09/30/02	630.50	633.00	615.50	606.50	NP	0.00	16.49	13.99	616.51	0.29	10.01	Yes	
MW-17	11/05/02	630.50	633.00	615.50	606.50	NP	0.00	15.95	13.45	617.05	0.54	10.55	Yes	
MW-17	12/23/02	630.50	633.00	615.50	606.50	NP	0.00	17.39	14.89	615.61	-1.44	9.11	Yes	
MW-17	01/28/03	630.50	633.00	615.50	606.50	NP	0.00	17.79	15.29	615.21	-0.40	8.71	No	
MW-17	02/19/03	630.50	633.00	615.50	606.50	NP	0.00	18.06	15.56	614.94	-0.27	8.44	No	
MW-17	04/17/03	630.50	633.00	615.50	606.50	NP	0.00	18.63	16.13	614.37	-0.57	7.87	No	
MW-17	06/10/03	630.50	633.00	615.50	606.50	NP	0.00	18.02	15.52	614.98	0.61	8.48	No	
MW-17	10/20/03	630.50	633.00	615.50	606.50	NP	0.00	18.57	16.07	614.43	-0.55	7.93	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-17	12/03/03	630.50	633.00	615.50	606.50	NP	0.00	19.12	16.62	613.88	-0.55	7.38	No	
MW-17	04/19/04	630.70	633.35	615.50	606.50	NP	0.00	19.57	16.92	613.78	-0.10	7.28	No	
MW-17	07/28/04	630.70	633.35	615.50	606.50	NP	0.00	17.74	15.09	615.61	1.83	9.11	Yes	
MW-17	11/16/04	630.70	633.35	615.50	606.50	NP	0.00	16.90	14.25	616.45	0.84	9.95	Yes	
MW-17	04/18/05	630.70	633.35	615.50	606.50	NP	0.00	17.25	14.60	616.10	-0.35	9.60	Yes	
MW-17	10/11/05	630.70	633.35	615.50	606.50	NP	0.00	16.25	13.60	617.10	1.00	10.60	Yes	
MW-17	05/23/06	630.70	633.35	615.50	606.50	NP	0.00	15.79	13.14	617.56	0.46	11.06	Yes	
MW-17	10/16/06	630.70	633.35	615.50	606.50	NP	0.00	17.06	14.41	616.29	-1.27	9.79	Yes	
MW-17	04/23/07	630.70	633.35	615.50	606.50	NP	0.00	18.53	15.88	614.82	-1.47	8.32	No	
MW-17	09/25/07	630.70	633.35	615.50	606.50	NP	0.00	18.39	15.74	614.96	0.14	8.46	No	
MW-17	05/01/08	630.70	633.35	615.50	606.50	NP	0.00	16.64	13.99	616.71	1.75	10.21	Yes	
MW-17	10/20/08	630.70	633.35	615.50	606.50	NP	0.00	14.98	12.33	618.37	1.66	11.87	Yes	
MW-17	04/18/09	630.70	633.35	615.50	606.50	NP	0.00	16.23	13.58	617.12	-1.25	10.62	Yes	
MW-17	08/31/11	630.70	633.35	615.50	606.50	NP	0.00	14.89	12.24	618.46	1.34	11.96	Yes	
MW-17	10/10/11	630.70	633.35	615.50	606.50	NP	0.00	16.19	13.54	617.16	-1.30	10.66	Yes	
MW-17	01/04/12	630.70	633.35	615.50	606.50	NP	0.00	17.49	14.84	615.86	-1.30	9.36	Yes	
MW-17	04/16/12	630.70	633.35	615.50	606.50	NP	0.00	18.22	15.57	615.13	-0.73	8.63	No	
MW-17	06/26/12	630.70	633.35	615.50	606.50	NP	0.00	14.52	11.87	618.83	3.70	12.33	Yes	
MW-17	09/30/12	630.70	633.35	615.50	606.50	NP	0.00	17.27	14.62	616.08	-2.75	9.58	Yes	
MW-17	12/17/12	630.70	633.35	615.50	606.50	NP	0.00	17.98	15.33	615.37	-0.71	8.87	No	
MW-17	03/25/13	630.70	633.35	615.50	606.50	NP	0.00	19.39	16.74	613.96	-1.41	9.03	No	
MW-17	05/05/13	630.70	633.35	615.50	606.50	NP	0.00	18.58	15.93	614.77	0.81	26.85	No	
MW-17	10/03/13	630.70	633.35	615.50	606.50	NP	0.00	17.82	15.17	615.53	0.76	19.14	Yes	
MW-17	05/20/14	Broken and repaired on June 18th, TOC needs to be re-surveyed												
MW-17	07/14/14	630.70	632.88	615.50	606.50	-	-	-	-	-	-	-	-	-
MW-17	07/30/14	630.70	632.88	615.50	606.50	NP	0.00	15.72	13.54	617.16	1.63	18.05	Yes	
MW-17	10/29/14	630.70	632.88	615.50	606.50	NP	0.00	15.71	13.53	617.17	0.01	19.04	Yes	
MW-17	05/06/15	630.70	632.88	615.50	606.50	NP	0.00	17.39	15.21	615.49	-1.68	16.80	No	
MW-17	10/05/15	630.70	632.88	615.50	606.50	NP	0.00	15.26	13.08	617.62	2.13	16.76	Yes	
MW-17	05/23/16	630.70	632.88	615.50	606.50	NP	0.00	13.30	11.12	619.58	1.96	15.99	Yes	
MW-17	10/03/16	630.70	632.88	615.50	606.50	NP	0.00	14.97	12.79	617.91	-1.67	17.70	Yes	
MW-17	06/29/17	630.70	632.88	615.50	606.50	NP	0.00	14.25	12.07	618.63	0.72	16.97	Yes	
MW-31	06/30/89	633.20	635.20	614.50	604.50	NP	0.00	19.60	17.60	615.60	NA	11.10	Yes	
MW-31	07/12/89	633.20	635.20	614.50	604.50	NP	0.00	19.99	17.99	615.21	-0.39	10.71	Yes	
MW-31	07/26/89	633.20	635.20	614.50	604.50	NP	0.00	20.23	18.23	614.97	-0.24	10.47	Yes	
MW-31	07/27/89	633.20	635.20	614.50	604.50	NP	0.00	20.37	18.37	614.83	-0.14	10.33	Yes	
MW-31	09/03/89	633.20	635.20	614.50	604.50	NP	0.00	20.54	18.54	614.66	-0.17	10.16	Yes	
MW-31	11/29/89	633.20	635.20	614.50	604.50	NP	0.00	21.26	19.26	613.94	-0.72	9.44	No	
MW-31	12/01/89	633.20	635.20	614.50	604.50	NP	0.00	20.61	18.61	614.59	0.65	10.09	Yes	
MW-31	06/19/90	633.20	635.20	614.50	604.50	NP	0.00	20.46	18.46	614.74	0.15	10.24	Yes	
MW-31	06/27/90	633.20	635.20	614.50	604.50	NP	0.00	20.70	18.70	614.50	-0.24	10.00	No	
MW-31	07/05/90	633.20	635.20	614.50	604.50	NP	0.00	20.88	18.88	614.32	-0.18	9.82	No	
MW-31	07/13/90	633.20	635.20	614.50	604.50	NP	0.00	20.89	18.89	614.31	-0.01	9.81	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-31	07/17/90	633.20	635.20	614.50	604.50	NP	0.00	20.73	18.73	614.47	0.16	9.97	No	
MW-31	07/25/90	633.20	635.20	614.50	604.50	NP	0.00	20.94	18.94	614.26	-0.21	9.76	No	
MW-31	08/09/90	633.20	635.20	614.50	604.50	NP	0.00	20.96	18.96	614.24	-0.02	9.74	No	
MW-31	08/14/90	633.20	635.20	614.50	604.50	NP	0.00	21.01	19.01	614.19	-0.05	9.69	No	
MW-31	08/27/90	633.20	635.20	614.50	604.50	NP	0.00	20.67	18.67	614.53	0.34	10.03	Yes	
MW-31	09/06/90	633.20	635.20	614.50	604.50	NP	0.00	20.27	18.27	614.93	0.40	10.43	Yes	
MW-31	01/04/91	633.20	635.20	614.50	604.50	NP	0.00	20.19	18.19	615.01	0.08	10.51	Yes	
MW-31	01/30/91	633.20	635.20	614.50	604.50	NP	0.00	20.53	18.53	614.67	-0.34	10.17	Yes	
MW-31	04/24/91	633.20	635.20	614.50	604.50	NP	0.00	20.32	18.32	614.88	0.21	10.38	Yes	
MW-31	07/09/91	633.20	635.20	614.50	604.50	NP	0.00	17.12	15.12	618.08	3.20	13.58	Yes	
MW-31	10/08/91	633.20	635.20	614.50	604.50	NP	0.00	16.38	14.38	618.82	0.74	14.32	Yes	
MW-31	01/07/92	633.20	635.20	614.50	604.50	NP	0.00	17.24	15.24	617.96	-0.86	13.46	Yes	
MW-31	10/14/92	633.20	635.20	614.50	604.50	NP	0.00	17.60	15.60	617.60	-0.36	13.10	Yes	
MW-31	06/25/93	633.20	635.20	614.50	604.50	NP	0.00	14.07	12.07	621.13	3.53	16.63	Yes	
MW-31	10/28/93	633.20	635.20	614.50	604.50	NP	0.00	17.95	15.95	617.25	-3.88	12.75	Yes	
MW-31	01/29/94	633.20	635.20	614.50	604.50	NP	0.00	18.19	16.19	617.01	-0.24	12.51	Yes	
MW-31	04/27/94	633.20	635.20	614.50	604.50	NP	0.00	17.95	15.95	617.25	0.24	12.75	Yes	
MW-31	07/21/94	633.20	635.20	614.50	604.50	NP	0.00	17.47	15.47	617.73	0.48	13.23	Yes	
MW-31	10/25/94	633.20	635.20	614.50	604.50	NP	0.00	17.98	15.98	617.22	-0.51	12.72	Yes	
MW-31	10/28/94	633.20	635.20	614.50	604.50	NP	0.00	17.49	15.49	617.71	0.49	13.21	Yes	
MW-31	02/01/95	633.20	635.20	614.50	604.50	NP	0.00	20.39	18.39	614.81	-2.90	10.31	Yes	
MW-31	04/04/95	633.20	635.20	614.50	604.50	NP	0.00	20.03	18.03	615.17	0.36	10.67	Yes	
MW-31	07/12/95	633.20	635.20	614.50	604.50	NP	0.00	18.77	16.77	616.43	1.26	11.93	Yes	
MW-31	11/13/95	633.20	635.20	614.50	604.50	NP	0.00	17.13	15.13	618.07	1.64	13.57	Yes	
MW-31	03/13/96	633.20	635.20	614.50	604.50	NP	0.00	19.81	17.81	615.39	-2.68	10.89	Yes	
MW-31	04/22/96	633.20	635.20	614.50	604.50	NP	0.00	17.43	15.43	617.77	2.38	13.27	Yes	
MW-31	10/08/96	633.20	635.20	614.50	604.50	NP	0.00	16.56	14.56	618.64	0.87	14.14	Yes	
MW-31	04/29/97	633.20	635.20	614.50	604.50	NP	0.00	15.30	13.30	619.90	1.26	15.40	Yes	
MW-31	11/03/98	633.20	635.20	614.50	604.50	NP	0.00	19.93	17.93	615.27	-4.63	10.77	Yes	
MW-31	03/02/99	633.20	635.20	614.50	604.50	NP	0.00	20.03	18.03	615.17	-0.10	10.67	Yes	
MW-31	04/26/00	633.20	635.20	614.50	604.50	NP	0.00	18.63	16.63	616.57	1.40	12.07	Yes	
MW-31	10/10/00	633.20	635.20	614.50	604.50	NP	0.00	19.83	17.83	615.37	-1.20	10.87	Yes	
MW-31	04/24/01	633.20	635.20	614.50	604.50	NP	0.00	18.94	16.94	616.26	0.89	11.76	Yes	
MW-31	10/23/01	633.20	635.20	614.50	604.50	NP	0.00	19.67	17.67	615.53	-0.73	11.03	Yes	
MW-31	04/23/02	633.20	635.20	614.50	604.50	NP	0.00	19.80	17.80	615.40	-0.13	10.90	Yes	
MW-31	11/05/02	633.20	635.20	614.50	604.50	NP	0.00	19.64	17.64	615.56	0.16	11.06	Yes	
MW-31	04/17/03	633.20	635.20	614.50	604.50	NP	0.00	20.90	18.90	614.30	-1.26	9.80	No	
MW-31	10/20/03	633.20	635.20	614.50	604.50	NP	0.00	20.59	18.59	614.61	0.31	10.11	Yes	
MW-31	04/19/04	633.17	635.11	614.50	604.50	NP	0.00	21.15	19.21	613.96	-0.65	9.46	No	
MW-31	11/16/04	633.17	635.11	614.50	604.50	NP	0.00	18.51	16.57	616.60	2.64	12.10	Yes	
MW-31	04/18/05	633.17	635.11	614.50	604.50	NP	0.00	18.79	16.85	616.32	-0.28	11.82	Yes	
MW-31	10/11/05	633.17	635.11	614.50	604.50	NP	0.00	18.18	16.24	616.93	0.61	12.43	Yes	
MW-31	05/23/06	633.17	635.11	614.50	604.50	NP	0.00	17.40	15.46	617.71	0.78	13.21	Yes	
MW-31	10/16/06	633.17	635.11	614.50	604.50	NP	0.00	19.59	17.65	615.52	-2.19	11.02	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-31	04/23/07	633.17	635.11	614.50	604.50	NP	0.00	20.33	18.39	614.78	-0.74	10.28	Yes	
MW-31	09/25/07	633.17	634.94	614.50	604.50	NP	0.00	19.95	18.18	614.99	0.21	10.49	Yes	
MW-31	05/01/08	633.17	634.94	614.50	604.50	NP	0.00	18.17	16.40	616.77	1.78	12.27	Yes	
MW-31	10/20/08	633.17	634.94	614.50	604.50	NP	0.00	16.24	14.47	618.70	1.93	14.20	Yes	
MW-31	04/18/09	633.17	634.94	614.50	604.50	NP	0.00	17.57	15.80	617.37	-1.33	12.87	Yes	
MW-31	10/11/09	633.17	634.94	614.50	604.50	NP	0.00	18.86	17.09	616.08	-1.29	11.58	Yes	
MW-31	04/28/10	633.17	634.94	614.50	604.50	NP	0.00	18.79	17.02	616.15	0.07	11.65	Yes	
MW-31	10/25/10	633.17	634.94	614.50	604.50	NP	0.00	16.76	14.99	618.18	2.03	13.68	Yes	
MW-31	04/25/11	633.17	634.94	614.50	604.50	NP	0.00	17.49	15.72	617.45	-0.73	12.95	Yes	
MW-31	10/10/11	633.17	634.94	614.50	604.50	NP	0.00	17.78	16.01	617.16	-0.29	12.66	Yes	
MW-31	01/04/12	633.17	634.94	614.50	604.50	NP	0.00	19.42	17.65	615.52	-1.64	11.02	Yes	
MW-31	04/16/12	633.17	634.94	614.50	604.50	NP	0.00	19.98	18.21	614.96	-0.56	10.46	Yes	
MW-31	06/26/12	633.17	634.94	614.50	604.50	NP	0.00	15.69	13.92	619.25	4.29	14.75	Yes	
MW-31	09/30/12	633.17	634.94	614.50	604.50	NP	0.00	19.09	17.32	615.85	-3.40	11.35	Yes	
MW-31	12/17/12	633.17	634.94	614.50	604.50	NP	0.00	19.89	18.12	615.05	-0.80	10.55	Yes	
MW-31	03/25/13	633.17	634.94	614.50	604.50	NP	0.00	20.84	19.07	614.10	-0.95	9.60	No	
MW-31	05/05/13	633.17	634.94	614.50	604.50	NP	0.00	19.83	18.06	615.11	1.01	10.61	Yes	
MW-31	10/03/13	633.17	634.94	614.50	604.50	NP	0.00	19.47	17.70	615.47	0.36	10.97	Yes	
MW-31	05/20/14	633.17	634.94	614.50	604.50	NP	0.00	16.60	14.83	618.34	2.87	13.84	Yes	
MW-31	10/31/14	633.17	634.94	614.50	604.50	NP	0.00	17.47	15.70	617.47	-0.87	12.97	Yes	
MW-31	05/04/15	633.17	634.94	614.50	604.50	NP	0.00	19.26	17.49	615.68	-1.79	11.18	Yes	
MW-31	10/05/15	633.17	634.94	614.50	604.50	NP	0.00	16.93	15.16	618.01	2.33	13.51	Yes	
MW-31	05/23/16	633.17	634.94	614.50	604.50	NP	0.00	14.91	13.14	620.03	2.02	15.53	Yes	
MW-31	10/03/16	633.17	634.94	614.50	604.50	NP	0.00	16.54	14.77	618.40	-1.63	13.90	Yes	
MW-31	06/29/17	633.17	634.94	614.50	604.50	NP	0.00	15.90	14.13	619.04	0.64	14.54	Yes	
MW-32	08/06/91	631.30	634.08	617.18	607.18	15.43	0.55	15.98	12.77	618.53	NA	11.47	Yes	
MW-32	09/04/91	631.30	634.08	617.18	607.18	15.91	0.25	16.16	13.19	618.12	-0.42	10.99	Yes	
MW-32	10/08/91	631.30	634.08	617.18	607.18	15.26	0.22	15.48	12.53	618.77	0.66	11.64	Yes	
MW-32	11/08/91	631.30	634.08	617.18	607.18	15.92	0.17	16.09	13.18	618.12	-0.65	10.98	Yes	
MW-32	12/03/91	631.30	634.08	617.18	607.18	13.97	0.05	14.02	11.20	620.10	1.98	12.93	Yes	
MW-32	01/07/92	631.30	634.08	617.18	607.18	16.06	0.28	16.34	13.34	617.96	-2.14	10.84	Yes	
MW-32	02/04/92	631.30	634.08	617.18	607.18	16.95	0.65	17.60	14.32	616.99	-0.97	9.95	No	
MW-32	03/03/92	631.30	634.08	617.18	607.18	17.40	0.92	18.32	14.83	616.48	-0.51	9.50	No	
MW-32	09/24/92	631.30	634.08	617.18	607.18	15.10	0.70	15.80	12.48	618.83	2.35	11.80	Yes	
MW-32	10/14/92	631.30	634.08	617.18	607.18	16.56	0.06	16.62	13.79	617.51	-1.32	10.34	Yes	
MW-32	06/25/93	631.30	634.08	617.18	607.18	12.24	0.00	12.24	9.46	621.84	4.33	14.66	Yes	
MW-32	10/28/93	631.30	634.08	617.18	607.18	17.15	0.66	17.81	14.52	616.79	-5.05	9.75	No	
MW-32	01/29/94	631.30	634.08	617.18	607.18	17.66	1.44	19.10	15.21	616.11	-0.68	9.24	No	
MW-32	04/27/94	631.30	634.08	617.18	607.18	16.73	0.00	16.73	13.95	617.35	1.24	10.17	Yes	
MW-32	07/21/94	631.30	634.08	617.18	607.18	15.92	1.83	17.75	13.55	617.77	0.42	10.98	Yes	
MW-32	10/25/94	631.30	634.08	617.18	607.18	16.61	1.12	17.73	14.08	617.23	-0.54	10.29	Yes	
MW-32	02/01/95	631.30	634.08	617.18	607.18	17.82	2.61	20.43	15.63	615.71	-1.53	9.08	No	
MW-32	04/04/95	631.30	634.08	617.18	607.18	18.31	1.74	20.05	15.92	615.40	-0.31	8.59	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-32	07/12/95	631.30	634.08	617.18	607.18	17.38	1.60	18.98	14.96	616.36	0.96	9.52	No	
MW-32	11/13/95	631.30	634.08	617.18	607.18	15.58	1.72	17.30	13.19	618.13	1.77	11.32	Yes	
MW-32	03/13/96	631.30	634.08	617.18	607.18	18.00	2.59	20.59	15.80	615.53	-2.60	8.90	No	
MW-32	10/08/96	631.30	634.08	617.18	607.18	14.47	3.21	17.68	12.42	618.93	3.40	12.43	Yes	
MW-32	04/29/97	631.30	634.08	617.18	607.18	12.91	4.44	17.35	11.13	620.23	1.30	13.99	Yes	
MW-32	06/10/97	631.30	634.08	617.18	607.18	15.14	2.25	17.39	12.87	618.46	-1.76	11.76	Yes	
MW-32	11/03/98	631.30	634.08	617.18	607.18	18.24	2.96	21.20	16.13	615.21	-3.25	8.66	No	
MW-32	03/02/99	631.30	634.08	617.18	607.18	18.44	2.81	21.25	16.29	615.04	-0.17	8.46	No	
MW-32	10/07/99	631.30	634.08	617.18	607.18	14.22	3.34	17.56	12.19	619.15	4.11	12.68	Yes	
MW-32	11/09/99	631.30	634.08	617.18	607.18	13.85	3.81	17.66	11.93	619.42	0.27	13.05	Yes	
MW-32	12/21/99	631.30	634.08	617.18	607.18	16.52	1.23	17.75	14.02	617.30	-2.12	10.38	Yes	
MW-32	01/27/00	631.30	634.08	617.18	607.18	17.22	2.78	20.00	15.07	616.27	-1.03	9.68	No	
MW-32	02/24/00	631.30	634.08	617.18	607.18	17.70	3.05	20.75	15.61	615.73	-0.54	9.20	No	
MW-32	03/31/00	631.30	634.08	617.18	607.18	17.44	2.24	19.68	15.17	616.16	0.43	9.46	No	
MW-32	04/26/00	631.30	634.08	617.18	607.18	17.27	0.90	18.17	14.69	616.62	0.45	9.63	No	
MW-32	05/31/00	631.30	634.08	617.18	607.18	17.28	0.98	18.26	14.72	616.59	-0.03	9.62	No	
MW-32	06/29/00	631.30	634.08	617.18	607.18	17.10	0.65	17.75	14.47	616.84	0.25	9.80	No	
MW-32	07/26/00	631.30	634.08	617.18	607.18	17.39	1.82	19.21	15.02	616.30	-0.54	9.51	No	
MW-32	08/18/00	631.30	634.08	617.18	607.18	17.58	1.76	19.34	15.20	616.13	-0.18	9.32	No	
MW-32	09/27/00	631.30	634.08	617.18	607.18	17.90	3.02	20.92	15.80	615.54	-0.59	9.00	No	
MW-32	10/11/00	631.30	634.08	617.18	607.18	17.00	4.25	21.25	15.18	616.18	0.64	9.90	No	
MW-32	12/12/00	631.30	634.08	617.18	607.18	17.89	2.13	20.02	15.59	615.74	-0.44	9.01	No	
MW-32	01/18/01	631.30	634.08	617.18	607.18	18.47	2.14	20.61	16.17	615.16	-0.58	8.43	No	
MW-32	04/24/01	631.30	634.08	617.18	607.18	17.66	2.33	19.99	15.41	615.92	0.77	9.24	No	
MW-32	05/23/01	631.30	634.08	617.18	607.18	16.38	0.60	16.98	13.74	617.57	1.65	10.52	Yes	
MW-32	06/19/01	631.30	634.08	617.18	607.18	16.41	1.11	17.52	13.88	617.43	-0.14	10.49	Yes	
MW-32	07/26/01	631.30	634.08	617.18	607.18	17.32	2.56	19.88	15.12	616.22	-1.22	9.58	No	
MW-32	08/31/01	631.30	634.08	617.18	607.18	17.64	2.84	20.48	15.50	615.84	-0.38	9.26	No	
MW-32	09/26/01	631.30	634.08	617.18	607.18	17.88	2.98	20.86	15.77	615.57	-0.27	9.02	No	
MW-32	10/24/01	631.30	634.08	617.18	607.18	18.00	3.11	21.11	15.92	615.42	-0.15	8.90	No	
MW-32	12/20/01	631.30	634.08	617.18	607.18	18.22	3.15	21.37	16.15	615.19	-0.23	8.68	No	
MW-32	01/22/02	631.30	634.08	617.18	607.18	17.45	4.08	21.53	15.59	615.76	0.57	9.45	No	
MW-32	02/26/02	631.30	634.08	617.18	607.18	19.91	1.77	21.68	17.53	613.79	-1.97	6.99	No	
MW-32	03/20/02	631.30	634.08	617.18	607.18	19.09	2.86	21.95	16.96	614.38	-1.38	7.81	No	
MW-32	04/24/02	631.30	634.08	617.18	607.18	18.42	2.63	21.05	16.23	615.10	0.72	8.48	No	
MW-32	05/15/02	631.30	634.08	617.18	607.18	17.75	2.13	19.88	15.45	615.88	0.78	9.15	No	
MW-32	06/27/02	631.30	634.08	617.18	607.18	17.63	2.00	19.63	15.30	616.03	0.15	9.27	No	
MW-32	07/25/02	631.30	634.08	617.18	607.18	17.68	1.64	19.32	15.27	616.05	0.03	9.22	No	
MW-32	08/20/02	631.30	634.08	617.18	607.18	17.52	1.39	18.91	15.05	616.26	0.21	9.38	No	
MW-32	09/30/02	631.30	634.08	617.18	607.18	17.28	0.46	17.74	14.60	616.70	0.44	9.62	No	
MW-32	11/05/02	631.30	634.08	617.18	607.18	16.75	0.80	17.55	14.15	617.16	0.46	10.15	No	
MW-32	12/23/02	631.30	634.08	617.18	607.18	17.75	2.97	20.72	15.64	615.70	-1.46	9.15	No	
MW-32	01/28/03	631.30	634.08	617.18	607.18	18.37	3.11	21.48	16.29	615.05	-0.65	8.53	No	
MW-32	02/19/03	631.30	634.08	617.18	607.18	18.63	3.13	21.76	16.56	614.78	-0.26	8.27	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-32	04/17/03	631.30	634.08	617.18	607.18	19.22	3.06	22.28	17.13	614.21	-0.58	7.68	No	
MW-32	05/15/03	631.30	634.08	617.18	607.18	19.11	3.04	22.15	17.02	614.32	0.11	7.79	No	
MW-32	06/10/03	631.30	634.08	617.18	607.18	18.68	2.44	21.12	16.45	614.88	0.56	8.22	No	
MW-32	10/23/03	631.30	634.08	617.18	607.18	19.15	2.95	22.10	17.04	614.30	-0.58	7.75	No	
MW-32	12/03/03	631.30	634.08	617.18	607.18	19.28	3.13	22.41	17.21	614.13	-0.17	7.62	No	
MW-32	04/19/04	631.31	634.31	617.18	607.18	19.73	2.97	22.70	17.40	613.95	-0.19	7.40	No	
MW-32	07/28/04	631.31	634.31	617.18	607.18	18.48	2.12	20.60	15.96	615.38	1.43	8.65	No	
MW-32	11/15/04	631.31	634.31	617.18	607.18	17.17	0.41	17.58	14.26	617.05	1.67	9.96	No	
MW-32	04/18/05	631.31	634.31	617.18	607.18	17.88	1.20	19.08	15.15	616.18	-0.88	9.25	No	
MW-32	09/09/05	631.31	634.31	617.18	607.18	20.37	1.70	22.07	17.75	613.58	-2.60	6.76	No	
MW-32	10/11/05	631.31	634.31	617.18	607.18	17.51	1.07	18.58	14.75	616.57	2.99	9.62	No	
MW-32	05/23/06	631.31	634.31	617.18	607.18	16.47	0.64	17.11	13.61	617.70	1.13	10.66	Yes	
MW-32	10/16/06	631.31	634.31	617.18	607.18	18.36	2.75	21.11	15.98	615.37	-2.34	8.77	No	
MW-32	04/23/07	631.31	634.31	617.18	607.18	19.25	2.78	22.03	16.88	614.47	-0.90	7.88	No	
MW-32	09/25/07	631.31	634.14	617.18	607.18	19.22	2.98	22.20	17.06	614.29	-0.18	7.74	No	
MW-32	05/01/08	631.31	634.14	617.18	607.18	NP	0.00	17.39	14.56	616.75	2.46	9.57	No	
MW-32	10/20/08	631.31	634.14	617.18	607.18	15.92	1.40	17.32	13.41	617.92	1.17	11.04	Yes	
MW-32	04/18/09	631.31	634.14	617.18	607.18	NP	0.00	17.35	14.52	616.79	-1.13	9.61	No	
MW-32	08/31/11	631.31	634.14	617.18	607.18	15.63	1.79	17.42	13.20	618.13	1.34	11.33	Yes	
MW-32	10/10/11	631.31	634.14	617.18	607.18	17.22	0.81	18.03	14.57	616.75	-1.38	9.74	No	
MW-32	01/04/12	631.31	634.14	617.18	607.18	18.26	2.94	21.20	16.09	615.26	-1.49	8.70	No	
MW-32	04/05/12	631.31	634.14	617.18	607.18	19.08	2.97	22.05	16.92	614.43	-0.83	7.88	No	
MW-32	04/05/12	631.31	634.14	617.18	607.18	19.47	1.13	20.60	16.90	614.43	0.00	7.49	No	
MW-32	04/16/12	631.31	634.14	617.18	607.18	19.08	2.95	22.03	16.92	614.43	0.00	7.88	No	
MW-32	06/26/12	631.31	634.14	617.18	607.18	14.99	2.23	17.22	12.66	618.68	4.24	11.97	Yes	
MW-32	09/28/12	631.31	634.14	617.18	607.18	18.15	2.24	20.39	15.83	615.51	-3.16	8.81	No	
MW-32	09/28/12	631.31	634.14	617.18	607.18	18.45	0.79	19.24	15.80	615.52	0.01	8.51	No	
MW-32	09/30/12	631.31	634.14	617.18	607.18	18.11	2.23	20.34	15.78	615.56	0.03	8.85	No	
MW-32	11/21/12	631.31	634.14	617.18	607.18	18.57	2.83	21.40	16.38	614.97	-0.59	8.39	No	
MW-32	12/17/12	631.31	634.14	617.18	607.18	18.78	2.95	21.73	16.62	614.73	-0.24	8.18	No	
MW-32	03/25/13	631.31	634.14	617.18	607.18	19.52	3.42	22.94	17.46	613.89	-0.84	7.44	No	
MW-32	05/05/13	631.31	634.14	617.18	607.18	19.32	2.75	22.07	17.11	614.24	0.34	7.64	No	
MW-32	10/03/13	631.31	634.14	617.18	607.18	18.75	2.28	21.03	16.43	614.91	0.67	8.21	No	
MW-32	05/22/14	631.31	634.14	617.18	607.18	16.34	0.85	17.19	13.70	617.62	2.71	10.62	Yes	
MW-32	06/18/14	631.31	634.14	617.18	607.18	15.61	1.96	17.57	13.22	618.11	0.49	11.35	Yes	
MW-32	10/31/14	631.31	634.14	617.18	607.18	17.00	0.25	17.25	14.23	617.09	-1.03	9.96	No	
MW-32	05/06/15	631.31	634.14	617.18	607.18	18.32	2.44	20.76	16.04	615.30	-1.79	8.64	No	
MW-32	09/10/15	631.31	634.14	617.18	607.18	17.73	1.07	18.80	15.14	616.18	0.88	9.23	No	
MW-32	09/14/15	631.31	634.14	617.18	607.18	17.66	0.65	18.31	14.98	616.34	0.16	9.30	No	
MW-32	10/01/15	631.31	634.14	617.18	607.18	16.92	0.21	17.13	14.14	617.18	0.83	10.04	No	
MW-32	10/05/15	631.31	634.14	617.18	607.18	16.73	0.40	17.13	13.99	617.33	0.15	10.23	Yes	
MW-32	10/29/15	631.31	634.14	617.18	607.18	17.17	0.37	17.54	14.42	616.89	-0.43	9.79	No	
MW-32	04/11/16	631.31	634.14	617.18	607.18	13.86	3.71	17.57	11.87	619.49	2.60	13.10	Yes	
MW-32	05/23/16													pump obstruction



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-32	07/15/16	631.31	634.14	617.18	607.18	14.11	3.24	17.35	12.01	619.34	-0.15	12.85	Yes	
MW-32	07/21/16	631.31	634.14	617.18	607.18	13.61	3.71	17.32	11.62	619.74	0.40	13.35	Yes	
MW-32	07/25/16	631.31	634.14	617.18	607.18	14.56	1.69	16.25	12.11	619.22	-0.52	12.40	Yes	
MW-32	08/01/16	631.31	634.14	617.18	607.18	15.02	2.12	17.14	12.67	618.67	-0.55	11.94	Yes	
MW-32	8/9/2016	631.31	634.14	617.18	607.18	15.22	1.98	17.20	12.84	618.50	-0.17	11.74	Yes	
MW-32	08/18/16	631.31	634.14	617.18	607.18	15.55	1.60	17.15	13.08	618.25	-0.25	11.41	Yes	
MW-32	08/26/16	631.31	634.14	617.18	607.18	16.10	0.99	17.09	13.49	617.83	-0.42	10.86	Yes	
MW-32	10/03/16	631.31	634.14	617.18	607.18	16.16	0.94	17.10	13.54	617.78	-0.05	10.80	Yes	
MW-32	05/02/17	631.31	634.14	617.18	607.18	14.86	2.38	17.24	12.57	618.77	0.99	12.10	Yes	
MW-32	05/31/17	631.31	634.14	617.18	607.18	12.56	4.22	16.78	10.68	620.68	1.91	14.40	Yes	
MW-32	06/14/17	631.31	634.14	617.18	607.18	14.40	1.58	15.98	11.93	619.40	-1.28	12.56	Yes	
MW-32	06/29/17	631.31	634.14	617.18	607.18	15.27	1.57	16.84	12.79	618.54	-0.87	11.69	Yes	
MW-32	7/7/2017	631.31	634.14	617.18	607.18	14.84	1.87	16.71	12.43	618.90	0.37	12.12	Yes	
MW-32	07/12/17	631.31	634.14	617.18	607.18	14.40	2.28	16.68	12.08	619.26	0.35	12.56	Yes	
MW-32	7/19/2017	631.31	634.14	617.18	607.18	14.33	2.36	16.69	12.03	619.31	0.05	12.63	Yes	
MW-32	07/26/17	631.31	634.14	617.18	607.18	14.37	1.84	16.21	11.96	619.38	0.07	12.59	Yes	
MW-32	7/27/2017	631.31	634.14	617.18	607.18	14.53	1.83	16.36	12.11	619.22	-0.16	12.43	Yes	
MW-32	08/04/17	631.31	634.14	617.18	607.18	15.01	1.49	16.50	12.52	618.81	-0.41	11.95	Yes	
MW-32	8/8/2017	631.31	634.14	617.18	607.18	15.10	1.30	16.40	12.56	618.76	-0.05	11.86	Yes	
MW-32	08/15/17	631.31	634.14	617.18	607.18	14.28	1.34	15.62	11.75	619.58	0.81	12.68	Yes	
MW-32	8/30/2017	631.31	634.14	617.18	607.18	12.12	3.80	15.92	10.15	621.21	1.64	14.84	Yes	
MW-32	09/07/17	631.31	634.14	617.18	607.18	12.06	2.24	14.30	9.74	621.60	0.39	14.90	Yes	
MW-32	9/19/2017	631.31	634.14	617.18	607.18	14.05	1.12	15.17	11.47	619.85	-1.75	12.91	Yes	
MW-32	09/27/17	631.31	634.14	617.18	607.18	14.09	1.36	15.45	11.57	619.76	-0.09	12.87	Yes	
MW-32	10/12/2017	631.31	634.14	617.18	607.18	12.22	1.27	13.49	9.68	621.65	1.89	14.74	Yes	
MW-32	10/26/17	631.31	634.14	617.18	607.18	12.94	0.55	13.49	10.23	621.08	-0.57	14.02	Yes	
MW-32	05/14/18	631.31	634.14	617.18	607.18	NP	0.00	17.50	14.67	616.64	-4.44	9.46	No	
MW-32	05/23/18	631.31	634.14	617.18	607.18	17.59	0.22	17.81	14.81	616.50	-0.14	9.37	No	
MW-32	05/24/18	631.31	634.14	617.18	607.18	17.58	0.12	17.70	14.78	616.53	0.03	9.38	No	
MW-32	05/30/18	631.31	634.14	617.18	607.18	NP	0.00	17.25	14.42	616.89	0.36	9.71	No	
MW-36S	7/26/2011	617.30	619.32	607.30	592.30	NP	0.00	7.71	5.69	611.61	NA	19.31	Yes	
MW-36S	10/11/2011	617.30	619.32	607.30	592.30	NP	0.00	8.74	6.72	610.58	-1.03	18.28	Yes	
MW-36S	1/4/2012	617.30	619.32	607.30	592.30	NP	0.00	9.59	7.57	609.73	-0.85	17.43	Yes	
MW-36S	4/16/2012	617.30	619.32	607.30	592.30	NP	0.00	8.33	6.31	610.99	1.26	18.69	Yes	
MW-36S	6/28/2012	617.30	619.32	607.30	592.30	NP	0.00	7.34	5.32	611.98	0.99	19.68	Yes	
MW-36S	9/30/2012	617.30	619.32	607.30	592.30	NP	0.00	9.58	7.56	609.74	-2.24	17.44	Yes	
MW-36S	12/17/2012	617.30	619.32	607.30	592.30	NP	0.00	9.62	7.60	609.70	-0.04	17.40	Yes	
MW-36S	3/25/2013	617.30	619.32	607.30	592.30	NP	0.00	10.39	8.37	608.93	-0.77	16.63	Yes	
MW-36S	5/5/2013	617.30	619.32	607.30	592.30	NP	0.00	8.68	6.66	610.64	1.71	18.34	Yes	
MW-36S	10/3/2013	617.30	619.32	607.30	592.30	NP	0.00	9.41	7.39	609.91	-0.73	17.61	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-36S	5/20/2014	617.30	619.32	607.30	592.30	NP	0.00	7.08	5.06	612.24	2.33	19.94	Yes	
MW-36S	10/31/2014	617.30	619.32	607.30	592.30	NP	0.00	8.08	6.06	611.24	-1.00	18.94	Yes	
MW-36S	5/4/2015	617.30	619.32	607.30	592.30	NP	0.00	8.52	6.50	610.80	-0.44	18.50	Yes	
MW-36S	10/5/2015	617.30	619.32	607.30	592.30	NP	0.00	7.69	5.67	611.63	0.83	19.33	Yes	
MW-36S	5/23/2016	617.30	619.32	607.30	592.30	NP	0.00	7.31	5.29	612.01	0.38	19.71	Yes	
MW-36S	10/3/2016	617.30	619.32	607.30	592.30	NP	0.00	7.78	5.76	611.54	-0.47	19.24	Yes	
MW-36D	7/26/2011	617.00	619.07	567.00	562.00	NP	0.00	7.85	5.78	611.22	NA	49.22	Yes	
MW-36D	10/11/2011	617.00	619.07	567.00	562.00	NP	0.00	9.03	6.96	610.04	-1.18	48.04	Yes	
MW-36D	1/4/2012	617.00	619.07	567.00	562.00	NP	0.00	9.89	7.82	609.18	-0.86	47.18	Yes	
MW-36D	4/16/2012	617.00	619.07	567.00	562.00	NP	0.00	9.65	7.58	609.42	0.24	47.42	Yes	
MW-36D	6/28/2012	617.00	619.07	567.00	562.00	NP	0.00	7.58	5.51	611.49	2.07	49.49	Yes	
MW-36D	9/30/2012	617.00	619.07	567.00	562.00	NP	0.00	9.69	7.62	609.38	-2.11	47.38	Yes	
MW-36D	12/17/2012	617.00	619.07	567.00	562.00	NP	0.00	10.02	7.95	609.05	-0.33	47.05	Yes	
MW-36D	3/25/2013	617.00	619.07	567.00	562.00	NP	0.00	10.72	8.65	608.35	-0.70	46.35	Yes	
MW-36D	5/5/2013	617.00	619.07	567.00	562.00	NP	0.00	9.54	7.47	609.53	1.18	47.53	Yes	
MW-36D	10/1/2013	617.00	619.07	567.00	562.00	NP	0.00	9.52	7.45	609.55	0.02	47.55	Yes	
MW-36D	5/21/2014	617.00	619.07	567.00	562.00	NP	0.00	7.54	5.47	611.53	1.98	49.53	Yes	
MW-36D	10/30/2014	617.00	619.07	567.00	562.00	NP	0.00	8.02	5.95	611.05	-0.48	49.05	Yes	
MW-36D	5/5/2015	617.00	619.07	567.00	562.00	NP	0.00	8.99	6.92	610.08	-0.97	48.08	Yes	
MW-36D	10/7/2015	617.00	619.07	567.00	562.00	NP	0.00	7.96	5.89	611.11	1.03	49.11	Yes	
MW-36D	5/23/2016	617.00	619.07	567.00	562.00	NP	0.00	7.20	5.13	611.87	0.76	49.87	Yes	
MW-36D	10/3/2016	617.00	619.07	567.00	562.00	NP	0.00	7.69	5.62	611.38	-0.49	49.38	Yes	
MW-36D	6/14/2017	617.00	619.07	567.00	562.00	NP	0.00	7.07	5.00	612.00	0.62	50.00	Yes	
MW-36D	10/3/2017	617.00	619.07	567.00	562.00	NP	0.00	6.20	4.13	612.87	0.87	50.87	Yes	
MW-36D	6/18/2018	617.00	619.07	567.00	562.00	NP	0.00	7.35	5.28	611.72	-1.15	49.72	Yes	
MW-36D	6/27/2018	617.00	619.07	567.00	562.00	NP	0.00	7.45	5.38	611.62	-0.10	49.62	Yes	
MW-36DD	10/10/2011	616.80	618.81	538.80	536.80	NP	0.00	8.52	6.51	610.29	NA	73.49	Yes	
MW-36DD	1/4/2012	616.80	618.81	538.80	536.80	NP	0.00	9.58	7.57	609.23	-1.06	72.43	Yes	
MW-36DD	4/16/2012	616.80	618.81	538.80	536.80	NP	0.00	9.41	7.40	609.40	0.17	72.60	Yes	
MW-36DD	6/28/2012	616.80	618.81	538.80	536.80	NP	0.00	7.24	5.23	611.57	2.17	74.77	Yes	
MW-36DD	9/30/2012	616.80	618.81	538.80	536.80	NP	0.00	9.34	7.33	609.47	-2.10	72.67	Yes	
MW-36DD	12/17/2012	616.80	618.81	538.80	536.80	NP	0.00	9.73	7.72	609.08	-0.39	72.28	Yes	
MW-36DD	3/25/2013	616.80	618.81	538.80	536.80	NP	0.00	10.40	8.39	608.41	-0.67	71.61	Yes	
MW-36DD	5/5/2013	616.80	618.81	538.80	536.80	NP	0.00	9.27	7.26	609.54	1.13	72.74	Yes	
MW-36DD	10/1/2013	616.80	618.81	538.80	536.80	NP	0.00	9.01	7.00	609.80	0.26	73.00	Yes	
MW-36DD	5/20/2014	616.80	618.81	538.80	536.80	NP	0.00	7.34	5.33	611.47	1.67	74.67	Yes	
MW-36DD	10/29/2014	616.80	618.81	538.80	536.80	NP	0.00	7.65	5.64	611.16	-0.31	74.36	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-36DD	5/4/2015	616.80	618.81	538.80	536.80	NP	0.00	8.72	6.71	610.09	-1.07	73.29	Yes	
MW-36DD	10/5/2015	616.80	618.81	538.80	536.80	NP	0.00	7.57	5.56	611.24	1.15	74.44	Yes	
MW-36DD	5/23/2016	616.80	618.81	538.80	536.80	NP	0.00	6.84	4.83	611.97	0.73	75.17	Yes	
MW-36DD	10/3/2016	616.80	618.81	538.80	536.80	NP	0.00	7.33	5.32	611.48	-0.49	74.68	Yes	
MW-36DD	6/18/2018	616.80	618.81	538.80	536.80	NP	0.00	7.08	5.07	611.73	0.25	74.93	Yes	
MW-37S	7/26/2011	614.40	616.42	604.40	589.40	NP	0.00	5.62	3.60	610.80	NA	21.40	Yes	
MW-37S	10/11/2011	614.40	616.42	604.40	589.40	NP	0.00	6.56	4.54	609.86	-0.94	20.46	Yes	
MW-37S	1/4/2012	614.40	616.42	604.40	589.40	NP	0.00	7.32	5.30	609.10	-0.76	19.70	Yes	
MW-37S	4/16/2012	614.40	616.42	604.40	589.40	NP	0.00	5.12	3.10	611.30	2.20	21.90	Yes	
MW-37S	6/28/2012	614.40	616.42	604.40	589.40	NP	0.00	5.19	3.17	611.23	-0.07	21.83	Yes	
MW-37S	9/30/2012	614.40	616.42	604.40	589.40	NP	0.00	7.57	5.55	608.85	-2.38	19.45	Yes	
MW-37S	12/17/2012	614.40	616.42	604.40	589.40	NP	0.00	7.19	5.17	609.23	0.38	19.83	Yes	
MW-37S	3/25/2013	614.40	616.42	604.40	589.40	NP	0.00	7.99	5.97	608.43	-0.80	19.03	Yes	
MW-37S	5/5/2013	614.40	616.42	604.40	589.40	NP	0.00	5.94	3.92	610.48	2.05	21.08	Yes	
MW-37S	10/3/2013	614.40	616.42	604.40	589.40	NP	0.00	7.20	5.18	609.22	-1.26	19.82	Yes	
MW-37S	5/20/2014	614.40	616.42	604.40	589.40	NP	0.00	4.56	2.54	611.86	2.64	22.46	Yes	
MW-37S	10/31/2014	614.40	616.42	604.40	589.40	NP	0.00	5.89	3.87	610.53	-1.33	21.13	Yes	
MW-37S	5/4/2015	614.40	616.42	604.40	589.40	NP	0.00	6.00	3.98	610.42	-0.11	21.02	Yes	
MW-37S	10/5/2015	614.40	616.42	604.40	589.40	NP	0.00	5.43	3.41	610.99	0.57	21.59	Yes	
MW-37S	5/23/2016	614.40	616.42	604.40	589.40	NP	0.00	5.44	3.42	610.98	-0.01	21.58	Yes	
MW-37S	10/3/2016	614.40	616.42	604.40	589.40	NP	0.00	5.65	3.63	610.77	-0.21	21.37	Yes	
MW-37S	6/29/2017	614.40	616.42	604.40	589.40	NP	0.00	4.69	2.67	611.73	0.96	22.33	Yes	
MW-37D	7/26/2011	614.80	617.05	564.80	559.80	NP	0.00	6.79	4.54	610.26	NA	50.46	Yes	
MW-37D	10/11/2011	614.80	617.05	564.80	559.80	NP	0.00	7.78	5.53	609.27	-0.99	49.47	Yes	
MW-37D	1/4/2012	614.80	617.05	564.80	559.80	NP	0.00	8.79	6.54	608.26	-1.01	48.46	Yes	
MW-37D	4/16/2012	614.80	617.05	564.80	559.80	NP	0.00	8.41	6.16	608.64	0.38	48.84	Yes	
MW-37D	6/28/2012	614.80	617.05	564.80	559.80	NP	0.00	6.47	4.22	610.58	1.94	50.78	Yes	
MW-37D	9/30/2012	614.80	617.05	564.80	559.80	NP	0.00	8.51	6.26	608.54	-2.04	48.74	Yes	
MW-37D	12/17/2012	614.80	617.05	564.80	559.80	NP	0.00	8.86	6.61	608.19	-0.35	48.39	Yes	
MW-37D	3/25/2013	614.80	617.05	564.80	559.80	NP	0.00	9.53	7.28	607.52	-0.67	47.72	Yes	
MW-37D	5/5/2013	614.80	617.05	564.80	559.80	NP	0.00	8.28	6.03	608.77	1.25	48.97	Yes	
MW-37D	10/1/2013	614.80	617.05	564.80	559.80	NP	0.00	8.28	6.03	608.77	0.00	48.97	Yes	
MW-37D	5/21/2014	614.80	617.05	564.80	559.80	NP	0.00	6.45	4.20	610.60	1.83	50.80	Yes	
MW-37D	10/30/2014	614.80	617.05	564.80	559.80	NP	0.00	6.88	4.63	610.17	-0.43	50.37	Yes	
MW-37D	5/5/2015	614.80	617.05	564.80	559.80	NP	0.00	7.75	5.50	609.30	-0.87	49.50	Yes	
MW-37D	10/7/2015	614.80	617.05	564.80	559.80	NP	0.00	6.82	4.57	610.23	0.93	50.43	Yes	
MW-37D	5/23/2016	614.80	617.05	564.80	559.80	NP	0.00	6.14	3.89	610.91	0.68	51.11	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-37D	10/3/2016	614.80	617.05	564.80	559.80	NP	0.00	6.59	4.34	610.46	-0.45	50.66	Yes	
MW-37D	6/14/2017	614.80	617.05	564.80	559.80	NP	0.00	6.05	3.80	611.00	0.54	51.20	Yes	
MW-37D	10/3/2017	614.80	617.05	564.80	559.80	NP	0.00	5.15	2.90	611.90	0.90	52.10	Yes	
MW-37D	6/18/2018	614.80	617.05	564.80	559.80	NP	0.00	6.17	3.92	610.88	-1.02	51.08	Yes	
MW-37D	6/27/2018	614.80	617.05	564.80	559.80	NP	0.00	6.35	4.10	610.70	-0.18	50.90	Yes	
MW-37DD	10/11/2011	614.60	616.48	536.60	534.60	NP	0.00	7.06	5.18	609.42	NA	74.82	Yes	
MW-37DD	1/4/2012	614.60	616.48	536.60	534.60	NP	0.00	8.11	6.23	608.37	-1.05	73.77	Yes	
MW-37DD	4/16/2012	614.60	616.48	536.60	534.60	NP	0.00	7.82	5.94	608.66	0.29	74.06	Yes	
MW-37DD	6/28/2012	614.60	616.48	536.60	534.60	NP	0.00	5.78	3.90	610.70	2.04	76.10	Yes	
MW-37DD	9/30/2012	614.60	616.48	536.60	534.60	NP	0.00	7.86	5.98	608.62	-2.08	74.02	Yes	
MW-37DD	12/17/2012	614.60	616.48	536.60	534.60	NP	0.00	8.18	6.30	608.30	-0.32	73.70	Yes	
MW-37DD	3/25/2013	614.60	616.48	536.60	534.60	NP	0.00	8.84	6.96	607.64	-0.66	73.04	Yes	
MW-37DD	5/5/2013	614.60	616.48	536.60	534.60	NP	0.00	7.67	5.79	608.81	1.17	74.21	Yes	
MW-37DD	10/1/2013	614.60	616.48	536.60	534.60	NP	0.00	7.45	5.57	609.03	0.22	74.43	Yes	
MW-37DD	5/21/2014	614.60	616.48	536.60	534.60	NP	0.00	5.80	3.92	610.68	1.65	76.08	Yes	
MW-37DD	10/29/2014	614.60	616.48	536.60	534.60	NP	0.00	6.15	4.27	610.33	-0.35	75.73	Yes	
MW-37DD	5/5/2015	614.60	616.48	536.60	534.60	NP	0.00	7.12	5.24	609.36	-0.97	74.76	Yes	
MW-37DD	10/6/2015	614.60	616.48	536.60	534.60	NP	0.00	6.03	4.15	610.45	1.09	75.85	Yes	
MW-37DD	5/23/2016	614.60	616.48	536.60	534.60	NP	0.00	5.42	3.54	611.06	0.61	76.46	Yes	
MW-37DD	10/3/2016	614.60	616.48	536.60	534.60	NP	0.00	5.86	3.98	610.62	-0.44	76.02	Yes	
MW-37DD	6/29/2017	614.60	616.48	536.60	534.60	NP	0.00	5.46	3.58	611.02	0.40	76.42	Yes	
MW-37DD	10/12/2017	614.60	616.48	536.60	534.60	NP	0.00	4.38	2.50	612.10	1.08	77.50	Yes	
MW-37DD	6/18/2018	614.60	616.48	536.60	534.60	NP	0.00	5.53	3.65	610.95	-1.15	76.35	Yes	
MW-37DD	6/27/2018	614.60	616.48	536.60	534.60	NP	0.00	5.62	3.74	610.86	-0.09	76.26	Yes	
MW-37DDD	6/18/2018	614.60	617.16	530.60	527.60	NP	0.00	6.35	3.79	610.81	0.00	83.21	Yes	
MW-37DDD	6/27/2018	614.60	617.16	530.60	527.60	NP	0.00	6.43	3.87	610.73	-0.08	83.13	Yes	
MW-38S	7/26/2011	610.90	612.96	600.90	585.90	NP	0.00	4.95	2.89	608.01	NA	22.11	Yes	
MW-38S	10/11/2011	610.90	612.96	600.90	585.90	NP	0.00	6.09	4.03	606.87	-1.14	20.97	Yes	
MW-38S	1/4/2012	610.90	612.96	600.90	585.90	NP	0.00	6.94	4.88	606.02	-0.85	20.12	Yes	
MW-38S	4/16/2012	610.90	612.96	600.90	585.90	NP	0.00	4.38	2.32	608.58	2.56	22.68	Yes	
MW-38S	6/28/2012	610.90	612.96	600.90	585.90	NP	0.00	4.39	2.33	608.57	-0.01	22.67	Yes	
MW-38S	9/30/2012	610.90	612.96	600.90	585.90	NP	0.00	7.03	4.97	605.93	-2.64	20.03	Yes	
MW-38S	12/17/2012	610.90	612.96	600.90	585.90	NP	0.00	6.42	4.36	606.54	0.61	20.64	Yes	
MW-38S	3/25/2013	610.90	612.96	600.90	585.90	NP	0.00	7.29	5.23	605.67	-0.87	19.77	Yes	
MW-38S	5/5/2013	610.90	612.96	600.90	585.90	NP	0.00	4.83	2.77	608.13	2.46	22.23	Yes	
MW-38S	10/3/2013	610.90	612.96	600.90	585.90	NP	0.00	6.43	4.37	606.53	-1.60	20.63	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-38S	5/20/2014	610.90	612.96	600.90	585.90	NP	0.00	3.79	1.73	609.17	2.64	23.27	Yes	
MW-38S	10/31/2014	610.90	612.96	600.90	585.90	NP	0.00	5.62	3.56	607.34	-1.83	21.44	Yes	
MW-38S	5/4/2015	610.90	612.96	600.90	585.90	NP	0.00	5.38	3.32	607.58	0.24	21.68	Yes	
MW-38S	10/5/2015	610.90	612.96	600.90	585.90	NP	0.00	5.13	3.07	607.83	0.25	21.93	Yes	
MW-38S	5/23/2016	610.90	612.96	600.90	585.90	NP	0.00	5.33	3.27	607.63	-0.20	21.73	Yes	
MW-38S	10/3/2016	610.90	612.96	600.90	585.90	NP	0.00	5.41	3.35	607.55	-0.08	21.65	Yes	
MW-38S	6/29/2017	610.90	612.96	600.90	585.90	NP	0.00	4.28	2.22	608.68	1.13	22.78	Yes	
MW-38S	10/3/2017	610.90	612.96	600.90	585.90	NP	0.00	3.25	1.19	609.71	1.03	23.81	Yes	
MW-38D	7/26/2011	610.90	612.78	560.90	555.90	NP	0.00	3.63	1.75	609.15	NA	53.25	Yes	
MW-38D	10/11/2011	610.90	612.78	560.90	555.90	NP	0.00	4.54	2.66	608.24	-0.91	52.34	Yes	
MW-38D	1/4/2012	610.90	612.78	560.90	555.90	NP	0.00	5.64	3.76	607.14	-1.10	51.24	Yes	
MW-38D	4/16/2012	610.90	612.78	560.90	555.90	NP	0.00	5.07	3.19	607.71	0.57	51.81	Yes	
MW-38D	6/28/2012	610.90	612.78	560.90	555.90	NP	0.00	3.19	1.31	609.59	1.88	53.69	Yes	
MW-38D	9/30/2012	610.90	612.78	560.90	555.90	NP	0.00	5.36	3.48	607.42	-2.17	51.52	Yes	
MW-38D	12/17/2012	610.90	612.78	560.90	555.90	NP	0.00	5.65	3.77	607.13	-0.29	51.23	Yes	
MW-38D	3/25/2013	610.90	612.78	560.90	555.90	NP	0.00	6.24	4.36	606.54	-0.59	50.64	Yes	
MW-38D	5/5/2013	610.90	612.78	560.90	555.90	NP	0.00	4.88	3.00	607.90	1.36	52.00	Yes	
MW-38D	10/1/2013	610.90	612.78	560.90	555.90	NP	0.00	4.28	2.40	608.50	0.60	52.60	Yes	
MW-38D	5/20/2014	610.90	612.78	560.90	555.90	NP	0.00	3.05	1.17	609.73	1.23	53.83	Yes	
MW-38D	10/29/2014	610.90	612.78	560.90	555.90	NP	0.00	3.59	1.71	609.19	-0.54	53.29	Yes	
MW-38D	5/4/2015	610.90	612.78	560.90	555.90	NP	0.00	4.40	2.52	608.38	-0.81	52.48	Yes	
MW-38D	10/5/2015	610.90	612.78	560.90	555.90	NP	0.00	3.51	1.63	609.27	0.89	53.37	Yes	
MW-38D	5/23/2016	610.90	612.78	560.90	555.90	NP	0.00	3.02	1.14	609.76	0.49	53.86	Yes	
MW-38D	10/3/2016	610.90	612.78	560.90	555.90	NP	0.00	3.41	1.53	609.37	-0.39	53.47	Yes	
MW-38D	6/29/2017	610.90	612.78	560.90	555.90	NP	0.00	2.91	1.03	609.87	0.50	53.97	Yes	
MW-38D	10/3/2017	610.90	612.78	560.90	555.90	NP	0.00	1.99	0.11	610.79	0.92	54.89	Yes	
MW-38D	6/18/2018	610.90	612.78	560.90	555.90	NP	0.00	2.95	1.07	609.83	-0.96	53.93	Yes	
MW-38DD	6/18/2018	610.90	613.48	537.90	534.90	NP	0.00	3.28	0.70	610.20	610.20	75.30	Yes	
MW-40S	7/26/2011	606.90	609.00	596.90	581.90	NP	0.00	2.48	0.38	606.52	NA	24.62	Yes	
MW-40S	10/11/2011	606.90	609.00	596.90	581.90	NP	0.00	6.38	4.28	602.62	-3.90	20.72	Yes	
MW-40S	1/4/2012	606.90	609.00	596.90	581.90	NP	0.00	7.07	4.97	601.93	-0.69	20.03	Yes	
MW-40S	4/16/2012	606.90	609.00	596.90	581.90	NP	0.00	4.64	2.54	604.36	2.43	22.46	Yes	
MW-40S	6/28/2012	606.90	609.00	596.90	581.90	NP	0.00	6.73	4.63	602.27	-2.09	20.37	Yes	
MW-40S	9/30/2012	606.90	609.00	596.90	581.90	NP	0.00	7.51	5.41	601.49	-0.78	19.59	Yes	
MW-40S	12/17/2012	606.90	609.00	596.90	581.90	NP	0.00	6.48	4.38	602.52	1.03	20.62	Yes	
MW-40S	3/25/2013	606.90	609.00	596.90	581.90	NP	0.00	7.15	5.05	601.85	-0.67	19.95	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-40S	5/5/2013	606.90	609.00	596.90	581.90	NP	0.00	5.02	2.92	603.98	2.13	22.08	Yes	
MW-40S	10/3/2013	606.90	609.00	596.90	581.90	NP	0.00	5.81	3.71	603.19	-0.79	21.29	Yes	
MW-40S	5/20/2014	606.90	609.00	596.90	581.90	NP	0.00	4.83	2.73	604.17	0.98	22.27	Yes	
MW-40S	10/31/2014	606.90	609.00	596.90	581.90	NP	0.00	5.38	3.28	603.62	-0.55	21.72	Yes	
MW-40S	5/4/2015	606.90	609.00	596.90	581.90	NP	0.00	5.80	3.70	603.20	-0.42	21.30	Yes	
MW-40S	10/5/2015	606.90	609.00	596.90	581.90	NP	0.00	5.11	3.01	603.89	0.69	21.99	Yes	
MW-40S	5/23/2016	606.90	609.00	596.90	581.90	NP	0.00	5.71	3.61	603.29	-0.60	21.39	Yes	
MW-40S	10/3/2016	606.90	609.00	596.90	581.90	NP	0.00	5.33	3.23	603.67	0.38	21.77	Yes	
MW-40S	6/29/2017	606.90	609.00	596.90	581.90	NP	0.00	5.03	2.93	603.97	0.30	22.07	Yes	
MW-40S	10/3/2017	606.90	609.00	596.90	581.90	NP	0.00	4.00	1.90	605.00	1.03	23.10	Yes	
MW-40D	7/26/2011	607.00	608.80	557.00	552.00	NP	0.00	4.95	3.15	603.85	NA	51.85	Yes	
MW-40D	10/11/2011	607.00	608.80	557.00	552.00	NP	0.00	3.11	1.31	605.69	1.84	53.69	Yes	
MW-40D	1/4/2012	607.00	608.80	557.00	552.00	NP	0.00	3.82	2.02	604.98	-0.71	52.98	Yes	
MW-40D	4/16/2012	607.00	608.80	557.00	552.00	NP	0.00	3.40	1.60	605.40	0.42	53.40	Yes	
MW-40D	6/28/2012	607.00	608.80	557.00	552.00	NP	0.00	1.98	0.18	606.82	1.42	54.82	Yes	
MW-40D	9/30/2012	607.00	608.80	557.00	552.00	NP	0.00	3.51	1.71	605.29	-1.53	53.29	Yes	
MW-40D	12/17/2012	607.00	608.80	557.00	552.00	NP	0.00	3.92	2.12	604.88	-0.41	52.88	Yes	
MW-40D	3/26/2013	607.00	608.80	557.00	552.00	NP	0.00	4.46	2.66	604.34	-0.54	52.34	Yes	
MW-40D	5/6/2013	607.00	608.80	557.00	552.00	NP	0.00	3.27	1.47	605.53	1.19	53.53	Yes	
MW-40D	10/1/2013	607.00	608.80	557.00	552.00	NP	0.00	2.96	1.16	605.84	0.31	53.84	Yes	
MW-40D	5/20/2014	607.00	608.80	557.00	552.00	NP	0.00	1.56	-0.24	607.24	1.40	55.24	Yes	
MW-40D	10/29/2014	607.00	608.80	557.00	552.00	NP	0.00	1.89	0.09	606.91	-0.33	54.91	Yes	
MW-40D	5/4/2015	607.00	608.80	557.00	552.00	NP	0.00	2.56	0.76	606.24	-0.67	54.24	Yes	
MW-40D	10/5/2015	607.00	608.80	557.00	552.00	NP	0.00	1.85	0.05	606.95	0.71	54.95	Yes	
MW-40D	5/23/2016	607.00	608.80	557.00	552.00	NP	0.00	1.74	-0.06	607.06	0.11	55.06	Yes	
MW-40D	10/3/2016	607.00	608.80	557.00	552.00	NP	0.00	1.79	-0.01	607.01	-0.05	55.01	Yes	
MW-40D	6/29/2017	607.00	608.80	557.00	552.00	NP	0.00	1.36	-0.44	607.44	0.43	55.44	Yes	
MW-40D	10/3/2017	607.00	608.80	557.00	552.00	NP	0.00	0.50	-1.30	608.30	0.86	56.30	Yes	
MW-40D	6/18/2018	607.00	608.80	557.00	552.00	NP	0.00	1.42	-0.38	607.38	-0.92	55.38	Yes	
MW-41S	7/26/2011	608.70	610.68	598.70	583.70	NP	0.00	6.12	4.14	604.56	NA	20.86	Yes	
MW-41S	10/11/2011	608.70	610.68	598.70	583.70	NP	0.00	6.89	4.91	603.79	-0.77	20.09	Yes	
MW-41S	1/4/2012	608.70	610.68	598.70	583.70	NP	0.00	7.41	5.43	603.27	-0.52	19.57	Yes	
MW-41S	4/16/2012	608.70	610.68	598.70	583.70	NP	0.00	5.71	3.73	604.97	1.70	21.27	Yes	
MW-41S	6/28/2012	608.70	610.68	598.70	583.70	NP	0.00	5.48	3.50	605.20	0.23	21.50	Yes	
MW-41S	9/30/2012	608.70	610.68	598.70	583.70	NP	0.00	7.54	5.56	603.14	-2.06	19.44	Yes	
MW-41S	12/17/2012	608.70	610.68	598.70	583.70	NP	0.00	7.45	5.47	603.23	0.09	19.53	Yes	
MW-41S	3/26/2013	608.70	610.68	598.70	583.70	NP	0.00	7.54	5.56	603.14	-0.09	19.44	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-41S	5/6/2013	608.70	610.68	598.70	583.70	NP	0.00	6.02	4.04	604.66	1.52	20.96	Yes	
MW-41S	10/3/2013	608.70	610.68	598.70	583.70	NP	0.00	6.81	4.83	603.87	-0.79	20.17	Yes	
MW-41S	5/20/2014	608.70	610.68	598.70	583.70	NP	0.00	4.94	2.96	605.74	1.87	22.04	Yes	
MW-41S	10/31/2014	608.70	610.68	598.70	583.70	NP	0.00	5.69	3.71	604.99	-0.75	21.29	Yes	
MW-41S	5/4/2015	608.70	610.68	598.70	583.70	NP	0.00	5.99	4.01	604.69	-0.30	20.99	Yes	
MW-41S	10/5/2015	608.70	610.68	598.70	583.70	NP	0.00	5.51	3.53	605.17	0.48	21.47	Yes	
MW-41S	5/23/2016	608.70	610.68	598.70	583.70	NP	0.00	5.75	3.77	604.93	-0.24	21.23	Yes	
MW-41S	10/3/2016	608.70	610.68	598.70	583.70	NP	0.00	5.67	3.69	605.01	0.08	21.31	Yes	
MW-41S	6/29/2017	608.70	610.68	598.70	583.70	NP	0.00	5.26	3.28	605.42	0.41	21.72	Yes	
MW-41S	10/3/2017	608.70	610.68	598.70	583.70	NP	0.00	4.20	2.22	606.48	1.06	22.78	Yes	
MW-41D	7/26/2011	609.00	610.86	559.00	554.00	NP	0.00	9.56	7.70	601.30	NA	47.30	Yes	
MW-41D	10/11/2011	609.00	610.86	559.00	554.00	NP	0.00	3.82	1.96	607.04	5.74	53.04	Yes	
MW-41D	1/4/2012	609.00	610.86	559.00	554.00	NP	0.00	4.75	2.89	606.11	-0.93	52.11	Yes	
MW-41D	4/16/2012	609.00	610.86	559.00	554.00	NP	0.00	4.40	2.54	606.46	0.35	52.46	Yes	
MW-41D	6/28/2012	609.00	610.86	559.00	554.00	NP	0.00	2.77	0.91	608.09	1.63	54.09	Yes	
MW-41D	9/30/2012	609.00	610.86	559.00	554.00	NP	0.00	4.51	2.65	606.35	-1.74	52.35	Yes	
MW-41D	12/17/2012	609.00	610.86	559.00	554.00	NP	0.00	4.82	2.96	606.04	-0.31	52.04	Yes	
MW-41D	3/26/2013	609.00	610.86	559.00	554.00	NP	0.00	5.33	3.47	605.53	-0.51	51.53	Yes	
MW-41D	5/6/2013	609.00	610.86	559.00	554.00	NP	0.00	4.28	2.42	606.58	1.05	52.58	Yes	
MW-41D	10/1/2013	609.00	610.86	559.00	554.00	NP	0.00	3.88	2.02	606.98	0.40	52.98	Yes	
MW-41D	5/21/2014	609.00	610.86	559.00	554.00	NP	0.00	2.57	0.71	608.29	1.31	54.29	Yes	
MW-41D	10/29/2014	609.00	610.86	559.00	554.00	NP	0.00	4.81	2.95	606.05	-2.24	52.05	Yes	
MW-41D	5/4/2015	609.00	610.86	559.00	554.00	NP	0.00	3.60	1.74	607.26	1.21	53.26	Yes	
MW-41D	10/6/2015	609.00	610.86	559.00	554.00	NP	0.00	2.76	0.90	608.10	0.84	54.10	Yes	
MW-41D	5/23/2016	609.00	610.86	559.00	554.00	NP	0.00	2.41	0.55	608.45	0.35	54.45	Yes	
MW-41D	10/3/2016	609.00	610.86	559.00	554.00	NP	0.00	2.55	0.69	608.31	-0.14	54.31	Yes	
MW-41D	6/29/2017	609.00	610.86	559.00	554.00	NP	0.00	2.20	0.34	608.66	0.35	54.66	Yes	
MW-41D	10/3/2017	609.00	610.86	559.00	554.00	NP	0.00	1.37	-0.49	609.49	0.83	55.49	Yes	
MW-41D	6/18/2018	609.00	610.86	559.00	554.00	NP	0.00	2.32	0.46	608.54	-0.95	54.54	Yes	
MW-41DD	6/18/2018	609.00	611.62	538.00	535.00	NP	0.00	3.58	0.96	608.04	608.04	73.04	Yes	
MW-45S	6/28/2012	620.00	622.38	600.00	590.00	NP	0.00	9.15	6.77	613.23	613.23	23.23	Yes	
MW-45S	9/30/2012	620.00	622.38	600.00	590.00	NP	0.00	11.38	9.00	611.00	-2.23	21.00	Yes	
MW-45S	12/17/2012	620.00	622.38	600.00	590.00	NP	0.00	11.67	9.29	610.71	-0.29	20.71	Yes	
MW-45S	3/25/2013	620.00	622.38	600.00	590.00	NP	0.00	12.45	10.07	609.93	-0.78	19.93	Yes	
MW-45S	5/6/2013	620.00	622.38	600.00	590.00	NP	0.00	10.87	8.49	611.51	1.58	21.51	Yes	
MW-45S	10/3/2013	620.00	622.38	600.00	590.00	NP	0.00	11.35	8.97	611.03	-0.48	21.03	Yes	
MW-45S	5/20/2014	620.00	622.38	600.00	590.00	NP	0.00	9.08	6.70	613.30	2.27	23.30	Yes	
MW-45S	10/31/2014	620.00	622.38	600.00	590.00	NP	0.00	9.85	7.47	612.53	-0.77	22.53	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-45S	5/4/2015	620.00	622.38	600.00	590.00	NP	0.00	10.56	8.18	611.82	-0.71	21.82	Yes	
MW-45S	10/5/2015	620.00	622.38	600.00	590.00	NP	0.00	9.54	7.16	612.84	1.02	22.84	Yes	
MW-45S	5/23/2016	620.00	622.38	600.00	590.00	NP	0.00	8.89	6.51	613.49	0.65	23.49	Yes	
MW-45S	10/3/2016	620.00	622.38	600.00	590.00	NP	0.00	9.50	7.12	612.88	-0.61	22.88	Yes	
MW-45S	6/29/2017	620.00	622.38	600.00	590.00	NP	0.00	8.94	6.56	613.44	0.56	23.44	Yes	
MW-45S	10/3/2017	620.00	622.38	600.00	590.00	NP	0.00	7.79	5.41	614.59	1.15	24.59	Yes	
MW-45D	6/28/2012	619.80	622.28	564.80	559.80	NP	0.00	9.97	7.49	612.31	612.31	52.51	Yes	
MW-45D	9/30/2012	619.80	622.28	564.80	559.80	NP	0.00	12.13	9.65	610.15	-2.16	50.35	Yes	
MW-45D	12/17/2012	619.80	622.28	564.80	559.80	NP	0.00	12.56	10.08	609.72	-0.43	49.92	Yes	
MW-45D	3/25/2013	619.80	622.28	564.80	559.80	NP	0.00	13.24	10.76	609.04	-0.68	49.24	Yes	
MW-45D	5/6/2013	619.80	622.28	564.80	559.80	NP	0.00	12.14	9.66	610.14	1.10	50.34	Yes	
MW-45D	10/1/2013	619.80	622.28	564.80	559.80	NP	0.00	11.98	9.50	610.30	0.16	50.50	Yes	
MW-45D	5/21/2014	619.80	622.28	564.80	559.80	NP	0.00	10.12	7.64	612.16	1.86	52.36	Yes	
MW-45D	10/30/2014	619.80	622.28	564.80	559.80	NP	0.00	10.49	8.01	611.79	-0.37	51.99	Yes	
MW-45D	5/5/2015	619.80	622.28	564.80	559.80	NP	0.00	11.57	9.09	610.71	-1.08	50.91	Yes	
MW-45D	10/6/2015	619.80	622.28	564.80	559.80	NP	0.00	10.41	7.93	611.87	1.16	52.07	Yes	
MW-45D	5/23/2016	619.80	622.28	564.80	559.80	NP	0.00	9.56	7.08	612.72	0.85	52.92	Yes	
MW-45D	10/3/2016	619.80	622.28	564.80	559.80	NP	0.00	10.12	7.64	612.16	-0.56	52.36	Yes	
MW-45D	6/29/2017	619.80	622.28	564.80	559.80	NP	0.00	9.70	7.22	612.58	0.42	52.78	Yes	
MW-45D	10/3/2017	619.80	622.28	564.80	559.80	NP	0.00	8.57	6.09	613.71	1.13	53.91	Yes	
MW-45D	6/18/2018	619.80	622.28	564.80	559.80	NP	0.00	9.82	7.34	612.46	-1.25	52.66	Yes	
MW-45D	6/27/2018	619.80	622.28	564.80	559.80	NP	0.00	9.85	7.37	612.43	-0.03	52.63	Yes	
MW-46S	6/28/2012	625.77	627.95	605.77	595.77	NP	0.00	15.46	13.28	612.49	612.49	16.72	Yes	
MW-46S	9/30/2012	625.77	627.95	605.77	595.77	NP	0.00	17.45	15.27	610.50	-1.99	14.73	Yes	
MW-46S	12/17/2012	625.77	627.95	605.77	595.77	NP	0.00	17.59	15.41	610.36	-0.14	14.59	Yes	
MW-46S	3/25/2013	625.77	627.95	605.77	595.77	NP	0.00	18.19	16.01	609.76	-0.60	13.99	Yes	
MW-46S	5/6/2013	625.77	627.95	605.77	595.77	NP	0.00	16.59	14.41	611.36	1.60	15.59	Yes	
MW-46S	10/3/2013	625.77	627.95	605.77	595.77	NP	0.00	17.29	15.11	610.66	-0.70	14.89	Yes	
MW-46S	5/20/2014	625.77	627.95	605.77	595.77	NP	0.00	15.28	13.10	612.67	2.01	16.90	Yes	
MW-46S	10/31/2014	625.77	627.95	605.77	595.77	NP	0.00	16.09	13.91	611.86	-0.81	16.09	Yes	
MW-46S	5/4/2015	625.77	627.95	605.77	595.77	NP	0.00	16.31	14.13	611.64	-0.22	15.87	Yes	
MW-46S	10/5/2015	625.77	627.95	605.77	595.77	NP	0.00	16.27	14.09	611.68	0.04	15.91	Yes	
MW-46S	5/23/2016	625.77	627.95	605.77	595.77	NP	0.00	15.75	13.57	612.20	0.52	16.43	Yes	
MW-46S	10/3/2016	625.77	627.95	605.77	595.77	NP	0.00	15.76	13.58	612.19	-0.01	16.42	Yes	
MW-46S	6/29/2017	625.77	627.95	605.77	595.77	NP	0.00	15.23	13.05	612.72	0.53	16.95	Yes	
MW-46S	10/3/2017	625.77	627.95	605.77	595.77	NP	0.00	14.32	12.14	613.63	0.91	17.86	Yes	
MW-46D	6/28/2012	625.77	628.05	567.77	562.77	NP	0.00	16.16	13.88	611.89	611.89	49.12	Yes	
MW-46D	9/30/2012	625.77	628.05	567.77	562.77	NP	0.00	17.97	15.69	610.08	-1.81	47.31	Yes	
MW-46D	12/17/2012	625.77	628.05	567.77	562.77	NP	0.00	18.37	16.09	609.68	-0.40	46.91	Yes	
MW-46D	3/25/2013	625.77	628.05	567.77	562.77	NP	0.00	18.94	16.66	609.11	-0.57	46.34	Yes	
MW-46D	5/6/2013	625.77	628.05	567.77	562.77	NP	0.00	17.88	15.60	610.17	1.06	47.40	Yes	
MW-46D	10/1/2013	625.77	628.05	567.77	562.77	NP	0.00	17.60	15.32	610.45	0.28	47.68	Yes	
MW-46D	5/20/2014	625.77	628.05	567.77	562.77	NP	0.00	16.09	13.81	611.96	1.51	49.19	Yes	
MW-46D	10/29/2014	625.77	628.05	567.77	562.77	NP	0.00	16.36	14.08	611.69	-0.27	48.92	Yes	
MW-46D	5/4/2015	625.77	628.05	567.77	562.77	NP	0.00	17.30	15.02	610.75	-0.94	47.98	Yes	
MW-46D	10/5/2015	625.77	628.05	567.77	562.77	NP	0.00	16.32	14.04	611.73	0.98	48.96	Yes	



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MW-46D	5/23/2016	625.77	628.05	567.77	562.77	NP	0.00	15.26	12.98	612.79	1.06	50.02	Yes	
MW-46D	10/3/2016	625.77	628.05	567.77	562.77	NP	0.00	16.09	13.81	611.96	-0.83	49.19	Yes	
MW-46D	6/29/2017	625.77	628.05	567.77	562.77	NP	0.00	15.72	13.44	612.33	0.37	49.56	Yes	
MW-46D	10/3/2017	625.77	628.05	567.77	562.77	NP	0.00	14.81	12.53	613.24	0.91	50.47	Yes	
MW-46D	6/18/2018	625.77	628.05	567.77	562.77	NP	0.00	15.90	13.62	612.15	-1.09	49.38	Yes	
MW-48S	10/3/2016	623.30	625.79	608.30	593.30	NP	0.00	14.76	12.27	611.03	NA	17.73	Yes	
MW-48S	6/13/2017	623.30	625.79	608.30	593.30	NP	0.00	12.98	10.49	612.81	1.78	19.51	Yes	
MW-48S	10/3/2017	623.30	625.79	608.30	593.30	NP	0.00	12.04	9.55	613.75	0.94	20.45	Yes	
MW-48S	6/18/2018	623.30	625.79	608.30	593.30	NP	0.00	12.70	10.21	613.09	NA	19.79	Yes	
MW-48D	10/3/2016	623.24	625.75	569.24	564.24	NP	0.00	14.02	11.51	611.73	NA	47.49	Yes	
MW-48D	6/14/2017	623.24	625.75	569.24	564.24	NP	0.00	13.10	10.59	612.65	0.92	48.41	Yes	
MW-48D	10/3/2017	623.24	625.75	569.24	564.24	NP	0.00	12.19	9.68	613.56	0.91	49.32	Yes	
MW-48D	6/18/2018	623.24	625.75	569.24	564.24	NP	0.00	13.20	10.69	612.55	NA	48.31	Yes	
MW-49S	10/3/2016	620.49	622.66	610.99	600.99	NP	0.00	13.49	11.32	609.17	NA	8.18	No	
MW-49S	6/13/2017	620.49	622.66	610.99	600.99	NP	0.00	11.60	9.43	611.06	1.89	10.07	Yes	
MW-49S	10/3/2017	620.49	622.66	610.99	600.99	NP	0.00	11.79	9.62	610.87	-0.19	9.88	No	
MW-49S	6/18/2018	620.49	622.66	610.99	600.99	NP	0.00	12.12	9.95	610.54	NA	9.55	No	
MW-49D	10/3/2016	620.61	622.98	567.61	562.61	NP	0.00	13.46	11.09	609.52	NA	46.91	Yes	
MW-49D	6/13/2017	620.61	622.98	567.61	562.61	NP	0.00	12.66	10.29	610.32	0.80	47.71	Yes	
MW-49D	10/3/2017	620.61	622.98	567.61	562.61	NP	0.00	11.30	8.93	611.68	1.36	49.07	Yes	
MW-49D	6/18/2018	620.61	622.98	567.61	562.61	NP	0.00	12.77	10.40	610.21	NA	47.60	Yes	
MW-50D	6/18/2018	626.07	628.62	563.07	560.07	NP	0.00	16.65	14.10	611.97	NA	51.90	Yes	
MW-51D	6/18/2018	625.43	627.43	562.43	559.43	NP	0.00	14.98	12.98	612.45	NA	53.02	Yes	
MW-52D	6/18/2018	632.28	634.83	575.28	572.28	NP	0.00	18.35	15.80	616.48	NA	44.20	Yes	
MW-52DD	6/18/2018	632.85	635.65	548.85	544.85	NP	0.00	19.52	16.72	616.13	NA	71.28	Yes	
LRMW-1	2/8/2001	627.37	629.07	616.58	606.58	15.44	5.77	21.21	14.98	612.39	NA	7.05	No	
LRMW-1	2/23/2001	627.37	629.07	616.58	606.58	15.87	5.32	21.19	15.31	612.06	-0.33	6.62	No	
LRMW-1	4/24/2001	627.37	629.07	616.58	606.58	11.30	9.52	20.82	11.65	615.72	3.67	11.19	No	
LRMW-1	5/23/2001	627.37	629.07	616.58	606.58	10.61	10.46	21.07	11.16	616.21	0.49	11.88	No	
LRMW-1	10/24/2001	627.37	629.07	616.58	606.58	14.60	6.52	21.12	14.30	613.07	-3.14	7.89	No	
LRMW-1	12/20/2001	627.40	629.07	616.58	606.58	14.09	7.07	21.16	13.94	613.46	0.39	8.40	No	
LRMW-1	1/22/2002	627.40	629.07	616.58	606.58	15.28	5.97	21.25	14.89	612.51	-0.95	7.21	No	
LRMW-1	4/24/2002	627.40	629.07	616.58	606.58	13.19	8.08	21.27	13.26	614.14	1.64	9.30	No	
LRMW-1	5/15/2002	627.40	629.07	616.58	606.58	11.97	9.15	21.12	12.27	615.13	0.99	10.52	No	
LRMW-1	6/27/2002	627.40	629.07	616.58	606.58	12.29	8.84	21.13	12.52	614.88	-0.25	10.20	No	
LRMW-1	7/25/2002	627.40	629.07	616.58	606.58	12.91	8.18	21.09	13.00	614.40	-0.48	9.58	No	
LRMW-1	8/20/2002	627.40	629.07	616.58	606.58	12.11	8.92	21.03	12.36	615.04	0.64	10.38	No	
LRMW-1	9/9/2002	627.40	629.07	616.58	606.58	12.31	8.73	21.04	12.52	614.88	-0.16	10.18	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-1	9/30/2002	627.40	629.07	616.58	606.58	12.18	<b>8.84</b>	21.02	12.41	614.99	0.11	10.31	No	
LRMW-1	11/5/2002	627.40	629.07	616.58	606.58	11.76	<b>9.27</b>	21.03	12.08	615.32	0.33	10.73	No	
LRMW-1	12/23/2002	627.40	629.07	616.58	606.58	14.12	<b>7.16</b>	21.28	13.99	613.41	-1.91	8.37	No	
LRMW-1	1/28/2003	627.40	629.07	616.58	606.58	15.35	<b>5.99</b>	21.34	14.97	612.43	-0.98	7.14	No	
LRMW-1	2/19/2003	627.40	629.07	616.58	606.58	15.95	<b>5.11</b>	21.06	15.38	612.02	-0.41	6.54	No	
LRMW-1	4/17/2003	627.40	629.07	616.58	606.58	16.08	<b>4.82</b>	20.90	15.45	611.95	-0.07	6.41	No	
LRMW-1	5/15/2003	627.40	629.07	616.58	606.58	14.68	<b>6.15</b>	20.83	14.33	613.07	1.11	7.81	No	
LRMW-1	6/10/2003	627.40	629.07	616.58	606.58	14.28	<b>6.44</b>	20.72	13.99	613.41	0.34	8.21	No	
LRMW-1	7/30/2003	627.40	629.07	616.58	606.58	14.22	<b>6.40</b>	20.62	13.93	613.47	0.07	8.27	No	
LRMW-1	9/10/2003	627.40	629.07	616.58	606.58	15.75	<b>5.08</b>	20.83	15.17	612.23	-1.25	6.74	No	
LRMW-1	10/23/2003	627.40	629.07	616.58	606.58	15.88	<b>4.98</b>	20.86	15.28	612.12	-0.11	6.61	No	
LRMW-1	12/3/2003	626.53	629.03	616.54	606.54	16.08	<b>4.59</b>	20.67	14.57	611.96	-0.16	6.41	No	
LRMW-1	1/8/2004	626.53	629.03	616.54	606.54	16.78	<b>4.08</b>	20.86	15.16	611.37	-0.59	5.71	No	
LRMW-1	4/19/2004	626.53	629.03	616.54	606.54	15.06	<b>5.94</b>	21.00	13.84	612.69	1.32	7.43	No	
LRMW-1	7/27/2004	626.53	629.03	616.54	606.54	14.16	<b>6.35</b>	20.51	13.02	613.51	0.81	8.33	No	
LRMW-1	11/15/2004	626.53	629.03	616.54	606.54	12.69	<b>7.66</b>	20.35	11.84	614.69	1.19	9.80	No	
LRMW-1	4/18/2005	626.53	629.03	616.54	606.54	12.78	<b>7.68</b>	20.46	11.93	614.60	-0.09	9.71	No	
LRMW-1	9/9/2005	626.53	629.03	616.54	606.54	14.89	<b>5.48</b>	20.37	13.57	612.96	-1.64	7.60	No	
LRMW-1	10/11/2005	626.53	629.03	616.54	606.54	14.38	<b>5.56</b>	19.94	13.07	613.46	0.49	8.11	No	
LRMW-1	5/23/2006	626.53	629.03	616.54	606.54	11.24	<b>9.01</b>	20.25	10.68	615.85	2.40	11.25	No	
LRMW-1	10/16/2006	626.53	629.03	616.54	606.54	14.90	<b>5.35</b>	20.25	13.55	612.98	-2.87	7.59	No	
LRMW-1	4/23/2007	626.53	629.03	616.54	606.54	14.27	<b>6.36</b>	20.63	13.14	613.39	0.41	8.22	No	
LRMW-1	9/25/2007	626.53	629.03	616.54	606.54	14.68	<b>5.60</b>	20.28	13.38	613.15	-0.25	7.81	No	
LRMW-1	5/1/2008	626.53	629.03	616.54	606.54	11.06	<b>8.73</b>	19.79	10.44	616.09	2.95	11.43	No	
LRMW-1	10/20/2008	626.53	629.03	616.54	606.54	11.84	<b>7.99</b>	19.83	11.06	615.47	-0.62	10.65	No	
LRMW-1	4/18/2009	626.53	629.03	616.54	606.54	13.82	<b>5.94</b>	19.76	12.60	613.93	-1.54	8.67	No	
LRMW-1	4/28/2010	626.53	629.03	616.54	606.54	13.86	<b>6.28</b>	20.14	12.71	613.82	-0.11	8.63	No	
LRMW-1	10/25/2010	626.53	629.03	616.54	606.54	11.78	<b>8.13</b>	19.91	11.03	615.50	1.68	10.71	No	
LRMW-1	4/25/2011	626.53	629.03	616.54	606.54	12.44	<b>7.08</b>	19.52	11.46	615.07	-0.43	10.05	No	
LRMW-1	9/14/2011	626.53	629.03	616.54	606.54	12.87	<b>7.05</b>	19.92	11.88	614.65	-0.42	9.62	No	
LRMW-1	9/23/2011	626.53	629.03	616.54	606.54	13.22	<b>6.71</b>	19.93	12.16	614.37	-0.28	9.27	No	
LRMW-1	9/29/2011	626.53	629.03	616.54	606.54	13.34	<b>6.59</b>	19.93	12.26	614.27	-0.09	9.15	No	
LRMW-1	10/7/2011	626.53	629.03	616.54	606.54	13.96	<b>5.97</b>	19.93	12.74	613.79	-0.49	8.53	No	
LRMW-1	10/11/2011	626.53	629.03	616.54	606.54	14.15	<b>5.73</b>	19.88	12.88	613.65	-0.14	8.34	No	
LRMW-1	10/21/2011	626.53	629.03	616.54	606.54	13.97	<b>5.97</b>	19.94	12.75	613.78	0.13	8.52	No	
LRMW-1	10/27/2011	626.53	629.03	616.54	606.54	14.10	<b>5.87</b>	19.97	12.86	613.67	-0.11	8.39	No	
LRMW-1	11/3/2011	626.53	629.03	616.54	606.54	14.42	<b>5.56</b>	19.98	13.11	613.42	-0.25	8.07	No	
LRMW-1	11/9/2011	626.53	629.03	616.54	606.54	14.37	<b>5.60</b>	19.97	13.07	613.46	0.04	8.12	No	
LRMW-1	11/17/2011	626.53	629.03	616.54	606.54	14.73	<b>5.29</b>	20.02	13.37	613.16	-0.29	7.76	No	
LRMW-1	11/22/2011	626.53	629.03	616.54	606.54	14.78	<b>5.24</b>	20.02	13.41	613.12	-0.04	7.71	No	
LRMW-1	12/1/2011	626.53	629.03	616.54	606.54	15.03	<b>5.04</b>	20.07	13.61	612.92	-0.21	7.46	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-1	1/4/2012	626.53	629.03	616.54	606.54	15.60	4.51	20.11	14.07	612.46	-0.46	6.89	No	
LRMW-1	2/16/2012	626.53	629.03	616.54	606.54	16.50	3.61	20.11	14.78	611.75	-0.71	5.99	No	
LRMW-1	3/13/2012	626.53	629.03	616.54	606.54	18.37	1.70	20.07	16.24	610.29	-1.46	4.12	No	
LRMW-1	4/12/2012	626.53	629.03	616.54	606.54	15.41	4.63	20.04	13.90	612.63	2.33	7.08	No	Spill Buddy Before Reading
LRMW-1	4/16/2012	626.53	629.03	616.54	606.54	15.54	2.73	18.27	13.63	612.90	0.28	6.95	No	
LRMW-1	5/18/2012	626.53	629.03	616.54	606.54	14.52	3.01	17.53	12.67	613.86	0.96	7.97	No	
LRMW-1	6/28/2012	626.53	629.03	616.54	606.54	11.00	4.08	15.08	9.38	617.15	3.29	11.49	Yes	
LRMW-1	7/10/2012	626.53	629.03	616.54	606.54	12.57	3.11	15.68	10.74	615.79	-1.36	9.92	No	Spill Buddy Before Reading
LRMW-1	7/24/2012	626.53	629.03	616.54	606.54	14.26	1.02	15.28	11.98	614.55	-1.24	8.23	No	
LRMW-1	8/17/2012	626.53	629.03	616.54	606.54	14.87	1.06	15.93	12.60	613.93	-0.62	7.62	No	
LRMW-1	8/28/2012	626.53	629.03	616.54	606.54	15.22	1.12	16.34	12.96	613.57	-0.36	7.27	No	Spill Buddy Before Reading
LRMW-1	9/17/2012	626.53	629.03	616.54	606.54	16.03	0.45	16.48	13.63	612.90	-0.67	6.46	No	
LRMW-1	9/28/2012	626.53	629.03	616.54	606.54	16.32	0.45	16.77	13.92	612.61	-0.29	6.17	No	Spill Buddy Before Reading
LRMW-1	9/30/2012	626.53	629.03	616.54	606.54	16.40	0.20	16.60	13.94	612.59	-0.03	6.09	No	
LRMW-1	11/21/2012	626.53	629.03	616.54	606.54	16.66	0.26	16.92	14.22	612.31	-0.27	5.83	No	
LRMW-1	12/17/2012	626.53	629.03	616.54	606.54	16.84	0.26	17.10	14.40	612.13	-0.18	5.65	No	
LRMW-1	3/25/2013	626.53	629.03	616.54	606.54	17.91	0.31	18.22	15.48	611.05	-1.08	4.58	No	
LRMW-1	5/6/2013	626.53	629.03	616.54	606.54	15.32	0.18	15.50	12.86	613.67	2.62	7.17	No	
LRMW-1	10/3/2013	626.53	629.03	616.54	606.54	16.31	0.25	16.56	13.86	612.67	-1.01	6.18	No	
LRMW-1	5/22/2014	626.53	629.03	616.54	606.54	12.01	0.23	12.24	9.56	616.97	4.30	10.48	Yes	
LRMW-1	10/31/2014	626.53	629.03	616.54	606.54	14.53	0.16	14.69	12.06	614.47	-2.50	7.96	No	
LRMW-1	4/15/2015	626.53	629.03	616.54	606.54	16.27	0.18	16.45	13.81	612.72	-1.74	6.22	No	
LRMW-1	4/22/2015	626.53	629.03	616.54	606.54	15.63	0.09	15.72	13.15	613.38	0.66	6.86	No	
LRMW-1	4/29/2015	626.53	629.03	616.54	606.54	15.42	0.09	15.51	12.94	613.59	0.21	7.07	No	
LRMW-1	5/6/2015	626.53	629.03	616.54	606.54	15.43	0.09	15.52	12.95	613.58	-0.01	7.06	No	
LRMW-1	5/12/2015	626.53	629.03	616.54	606.54	14.80	0.07	14.87	12.32	614.21	0.63	7.69	No	
LRMW-1	6/9/2015	626.53	629.03	616.54	606.54	NP	0.00	13.73	11.23	615.30	1.09	8.76	No	
LRMW-1	10/5/2015	626.53	629.03	616.54	606.54	NP	0.00	13.80	11.30	615.23	-0.07	8.69	No	
LRMW-1	5/23/2016	626.53	629.03	616.54	606.54	NP	0.00	12.19	9.69	616.84	1.61	10.30	Yes	
LRMW-1	10/3/2016	626.53	629.03	616.54	606.54	NP	0.00	13.88	11.38	615.15	-1.69	8.61	No	
LRMW-1	5/2/2017	626.53	629.03	616.54	606.54	NP	0.00	12.03	9.53	617.00	1.85	10.46	Yes	
LRMW-1	5/22/2017	626.53	629.03	616.54	606.54	NP	0.00	10.89	8.39	618.14	1.14	11.60	Yes	
LRMW-1	5/31/2017	626.53	629.03	616.54	606.54	NP	0.00	11.00	8.50	618.03	-0.11	11.49	Yes	
LRMW-1	8/8/2017	626.53	629.03	616.54	606.54	NP	0.00	12.80	10.30	616.23	-1.80	9.69	No	
LRMW-1	8/15/2017	626.53	629.03	616.54	606.54	NP	0.00	12.05	9.55	616.98	0.75	10.44	Yes	
LRMW-1	5/30/2018	626.53	629.03	616.54	606.54	NP	0.00	13.82	11.32	615.21	-1.77	8.67	No	
LRMW-1	6/18/2018	626.53	629.03	616.54	606.54	NP	0.00	12.34	9.84	616.69	1.48	10.15	Yes	
LRMW-1	6/27/2018	626.53	629.03	616.54	606.54	NP	0.00	12.75	10.25	616.28	-0.41	9.74	No	
LRMW-2	2/8/2001	626.30	629.37	616.70	606.70	15.87	5.25	21.12	13.93	612.37	NA	6.80	No	
LRMW-2	2/23/2001	626.30	629.37	616.70	606.70	16.31	4.87	21.18	14.29	612.01	-0.36	6.36	No	
LRMW-2	4/24/2001	626.30	629.37	616.70	606.70	11.91	8.79	20.70	10.73	615.57	3.56	10.76	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-2	5/23/2001	626.30	629.37	616.70	606.70	11.04	<b>10.08</b>	21.12	10.14	616.16	0.59	11.63	No	
LRMW-2	10/24/2001	626.30	629.37	616.70	606.70	15.02	<b>6.05</b>	21.07	13.25	613.05	-3.11	7.65	No	
LRMW-2	12/20/2001	626.30	629.37	616.70	606.70	14.49	<b>6.82</b>	21.31	12.89	613.41	0.36	8.18	No	
LRMW-2	1/22/2002	626.30	629.37	616.70	606.70	15.53	<b>5.79</b>	21.32	13.70	612.60	-0.82	7.14	No	
LRMW-2	4/24/2002	626.30	629.37	616.70	606.70	13.67	<b>7.64</b>	21.31	12.24	614.06	1.46	9.00	No	
LRMW-2	5/15/2002	626.30	629.37	616.70	606.70	12.45	<b>8.72</b>	21.17	11.25	615.05	0.99	10.22	No	
LRMW-2	6/27/2002	626.30	629.37	616.70	606.70	12.77	<b>8.33</b>	21.10	11.49	614.81	-0.24	9.90	No	
LRMW-2	7/25/2002	626.30	629.37	616.70	606.70	13.33	<b>7.82</b>	21.15	11.94	614.36	-0.45	9.34	No	
LRMW-2	8/20/2002	626.30	629.37	616.70	606.70	12.58	<b>8.48</b>	21.06	11.33	614.97	0.61	10.09	No	
LRMW-2	9/9/2002	626.30	629.37	616.70	606.70	12.77	<b>8.31</b>	21.08	11.49	614.81	-0.15	9.90	No	
LRMW-2	9/30/2002	626.30	629.37	616.70	606.70	12.58	<b>8.45</b>	21.03	11.33	614.97	0.16	10.09	No	
LRMW-2	11/5/2002	626.30	629.37	616.70	606.70	12.20	<b>8.80</b>	21.00	11.02	615.28	0.30	10.47	No	
LRMW-2	12/23/2002	626.30	629.37	616.70	606.70	14.54	<b>6.70</b>	21.24	12.91	613.39	-1.89	8.13	No	
LRMW-2	1/28/2003	626.30	629.37	616.70	606.70	15.75	<b>5.53</b>	21.28	13.87	612.43	-0.96	6.92	No	
LRMW-2	2/19/2003	626.30	629.37	616.70	606.70	16.43	<b>4.33</b>	20.76	14.29	612.01	-0.42	6.24	No	
LRMW-2	4/17/2003	626.30	629.37	616.70	606.70	16.61	<b>3.89</b>	20.50	14.38	611.92	-0.09	6.06	No	
LRMW-2	5/15/2003	626.30	629.37	616.70	606.70	15.35	<b>5.03</b>	20.38	13.36	612.94	1.02	7.32	No	
LRMW-2	6/10/2003	626.30	629.37	616.70	606.70	14.83	<b>5.45</b>	20.28	12.93	613.37	0.43	7.84	No	
LRMW-2	7/30/2003	626.30	629.37	616.70	606.70	14.72	<b>5.56</b>	20.28	12.84	613.46	0.09	7.95	No	
LRMW-2	9/10/2003	626.30	629.37	616.70	606.70	16.23	<b>4.24</b>	20.47	14.07	612.23	-1.23	6.44	No	
LRMW-2	10/23/2003	626.30	629.37	616.70	606.70	16.38	<b>4.07</b>	20.45	14.18	612.12	-0.11	6.29	No	
LRMW-2	12/3/2003	626.93	629.41	616.74	606.74	16.57	<b>3.66</b>	20.23	14.88	612.05	-0.06	6.10	No	
LRMW-2	1/8/2004	626.93	629.41	616.74	606.74	17.23	<b>3.31</b>	20.54	15.46	611.47	-0.58	5.44	No	
LRMW-2	4/19/2004	626.93	629.41	616.74	606.74	15.55	<b>5.19</b>	20.74	14.19	612.74	1.28	7.12	No	
LRMW-2	7/27/2004	626.93	629.41	616.74	606.74	14.67	<b>5.37</b>	20.04	13.34	613.59	0.84	8.00	No	
LRMW-2	11/15/2004	626.93	629.41	616.74	606.74	13.28	<b>6.36</b>	19.64	12.17	614.76	1.18	9.39	No	
LRMW-2	4/18/2005	626.93	629.41	616.74	606.74	13.31	<b>6.67</b>	19.98	12.26	614.67	-0.10	9.36	No	
LRMW-2	9/9/2005	626.93	629.41	616.74	606.74	15.30	<b>4.71</b>	20.01	13.83	613.10	-1.57	7.37	No	
LRMW-2	10/11/2005	626.93	629.41	616.74	606.74	13.28	<b>5.81</b>	19.09	12.05	614.88	1.78	9.39	No	
LRMW-2	5/23/2006	626.93	629.41	616.74	606.74	11.88	<b>7.62</b>	19.50	11.04	615.89	1.01	10.79	No	
LRMW-2	10/16/2006	626.93	629.41	616.74	606.74	15.38	<b>4.46</b>	19.84	13.86	613.07	-2.82	7.29	No	
LRMW-2	4/23/2007	626.93	629.41	616.74	606.74	15.04	<b>4.64</b>	19.68	13.56	613.37	0.30	7.63	No	
LRMW-2	9/25/2007	626.93	629.28	616.61	606.61	15.39	<b>3.86</b>	19.25	13.87	613.06	-0.31	7.28	No	
LRMW-2	5/1/2008	626.93	629.28	616.61	606.61	11.80	<b>7.35</b>	19.15	11.03	615.90	2.84	10.87	No	
LRMW-2	10/20/2008	626.93	629.28	616.61	606.61	12.13	<b>6.59</b>	18.72	11.20	615.73	-0.17	10.54	No	
LRMW-2	4/18/2009	626.93	629.28	616.61	606.61	13.22	<b>5.59</b>	18.81	12.07	614.86	-0.88	9.45	No	
LRMW-2	10/11/2009	626.93	629.28	616.61	606.61	14.70	<b>4.95</b>	19.65	13.41	613.52	-1.34	7.97	No	
LRMW-2	4/28/2010	626.93	629.28	616.61	606.61	14.44	<b>4.96</b>	19.40	13.16	613.77	0.26	8.23	No	
LRMW-2	10/25/2010	626.93	629.28	616.61	606.61	12.12	<b>7.34</b>	19.46	11.35	615.58	1.81	10.55	No	
LRMW-2	4/25/2011	626.93	629.28	616.61	606.61	12.73	<b>6.01</b>	18.74	11.67	615.26	-0.32	9.94	No	
LRMW-2	9/14/2011	626.93	629.28	616.61	606.61	13.01	<b>7.07</b>	20.08	12.18	614.75	-0.51	9.66	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-2	9/23/2011	626.93	629.28	616.61	606.61	13.47	6.26	19.73	12.47	614.46	-0.29	9.20	No	
LRMW-2	9/29/2011	626.93	629.28	616.61	606.61	13.60	6.04	19.64	12.55	614.38	-0.08	9.07	No	
LRMW-2	10/7/2011	626.93	629.28	616.61	606.61	13.87	5.71	19.58	12.75	614.18	-0.20	8.80	No	
LRMW-2	10/11/2011	626.93	629.28	616.61	606.61	14.39	5.60	19.99	13.24	613.69	-0.50	8.28	No	
LRMW-2	10/21/2011	626.93	629.28	616.61	606.61	14.25	5.36	19.61	13.05	613.88	0.19	8.42	No	
LRMW-2	10/27/2011	626.93	629.28	616.61	606.61	14.40	5.74	20.14	13.28	613.65	-0.23	8.27	No	
LRMW-2	11/3/2011	626.93	629.28	616.61	606.61	14.68	5.09	19.77	13.42	613.51	-0.14	7.99	No	
LRMW-2	11/9/2011	626.93	629.28	616.61	606.61	14.67	4.90	19.57	13.37	613.56	0.05	8.00	No	
LRMW-2	11/17/2011	626.93	629.28	616.61	606.61	15.02	4.71	19.73	13.68	613.25	-0.31	7.65	No	
LRMW-2	11/22/2011	626.93	629.28	616.61	606.61	15.07	4.56	19.63	13.70	613.23	-0.02	7.60	No	
LRMW-2	12/1/2011	626.93	629.28	616.61	606.61	15.30	4.52	19.82	13.92	613.01	-0.22	7.37	No	
LRMW-2	1/4/2012	626.93	629.28	616.61	606.61	15.90	3.86	19.76	14.38	612.55	-0.46	6.77	No	
LRMW-2	2/16/2012	626.93	629.28	616.61	606.61	16.80	2.94	19.74	15.08	611.85	-0.70	5.87	No	
LRMW-2	3/13/2012	626.93	629.28	616.61	606.61	16.78	2.67	19.45	15.00	611.93	0.08	5.89	No	
LRMW-2	4/11/2012	626.93	629.28	616.61	606.61	15.85	3.55	19.40	14.26	612.67	0.74	6.82	No	Spill Buddy Before Reading
LRMW-2	4/16/2012	626.93	629.28	616.61	606.61	16.02	1.29	17.31	13.95	612.98	0.32	6.65	No	
LRMW-2	5/18/2012	626.93	629.28	616.61	606.61	14.77	2.46	17.23	12.95	613.98	1.00	7.90	No	
LRMW-2	6/28/2012	626.93	629.28	616.61	606.61	11.15	4.19	15.34	9.70	617.23	3.25	11.52	Yes	
LRMW-2	7/10/2012	626.93	629.28	616.61	606.61	12.71	3.53	16.24	11.12	615.81	-1.42	9.96	No	Spill Buddy Before Reading
LRMW-2	7/24/2012	626.93	629.28	616.61	606.61	14.45	0.90	15.35	12.29	614.64	-1.17	8.22	No	
LRMW-2	8/17/2012	626.93	629.28	616.61	606.61	14.92	1.48	16.40	12.89	614.04	-0.59	7.75	No	
LRMW-2	8/28/2012	626.93	629.28	616.61	606.61	15.21	1.74	16.95	13.23	613.70	-0.35	7.46	No	Spill Buddy Before Reading
LRMW-2	9/17/2012	626.93	629.28	616.61	606.61	15.99	1.03	17.02	13.86	613.07	-0.63	6.68	No	
LRMW-2	9/28/2012	626.93	629.28	616.61	606.61	16.27	1.28	17.55	14.20	612.73	-0.33	6.40	No	Spill Buddy Before Reading
LRMW-2	9/30/2012	626.93	629.28	616.61	606.61	16.43	0.43	16.86	14.17	612.76	0.02	6.24	No	
LRMW-2	11/21/2012	626.93	629.28	616.61	606.61	16.60	1.10	17.70	14.49	612.44	-0.31	6.07	No	
LRMW-2	12/17/2012	626.93	629.28	616.61	606.61	16.72	1.37	18.09	14.66	612.27	-0.18	5.95	No	
LRMW-2	3/25/2013	626.93	629.28	616.61	606.61	17.75	1.69	19.44	15.76	611.17	-1.10	4.92	No	
LRMW-2	5/6/2013	626.93	629.28	616.61	606.61	15.10	1.99	17.09	13.18	613.75	2.59	7.57	No	
LRMW-2	10/3/2013	626.93	629.28	616.61	606.61	15.96	2.55	18.51	14.16	612.77	-0.98	6.71	No	
LRMW-2	5/22/2014	626.93	629.28	616.61	606.61	11.28	4.33	15.61	9.86	617.07	4.30	11.39	Yes	
LRMW-2	10/31/2014	626.93	629.28	616.61	606.61	13.87	3.78	17.65	12.33	614.60	-2.47	8.80	No	
LRMW-2	5/6/2015	626.93	629.28	616.61	606.61	14.82	3.73	18.55	13.27	613.66	-0.94	7.85	No	
LRMW-2	10/5/2015	626.93	629.28	616.61	606.61	12.90	5.00	17.90	11.62	615.31	1.65	9.77	No	
LRMW-2	5/23/2016	626.93	629.28	616.61	606.61	11.35	4.58	15.93	9.98	616.95	1.64	11.32	Yes	
LRMW-2	10/3/2016	626.93	629.28	616.61	606.61	12.90	5.12	18.02	11.65	615.28	-1.67	9.77	No	
LRMW-2	5/2/2017	626.93	629.28	616.61	606.61	10.88	7.03	17.91	10.04	616.89	1.61	11.79	Yes	
LRMW-2	5/22/2017	626.93	629.28	616.61	606.61	10.64	2.22	12.86	8.77	618.16	1.27	12.03	Yes	
LRMW-2	5/25/2017	626.93	629.28	616.61	606.61	10.64	2.25	12.89	8.77	618.16	-0.01	12.03	Yes	
LRMW-2	5/31/2017	626.93	629.28	616.61	606.61	11.20	0.35	11.55	8.93	618.00	-0.15	11.47	Yes	
LRMW-2	6/21/2017	626.93	629.28	616.61	606.61	12.90	0.28	13.18	10.61	616.32	-1.68	9.77	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-2	8/8/2017	626.93	629.28	616.61	606.61	13.02	0.70	13.72	10.82	616.11	-0.21	9.65	No	
LRMW-2	8/15/2017	626.93	629.28	616.61	606.61	12.31	0.89	13.20	10.15	616.78	0.67	10.36	Yes	
LRMW-2	10/26/2017	626.93	629.28	616.61	606.61	11.47	0.41	11.88	9.21	617.72	1.40	11.20	Yes	
LRMW-3	2/8/2001	627.38	630.47	617.99	607.99	NP	0.00	17.35	14.26	613.12	NA	5.13	No	
LRMW-3	2/23/2001	627.38	630.47	617.99	607.99	17.35	0.06	17.41	14.27	613.11	-0.01	5.13	No	
LRMW-3	4/24/2001	627.38	630.47	617.99	607.99	14.45	0.01	14.46	11.36	616.02	2.91	8.03	No	
LRMW-3	5/23/2001	627.38	630.47	617.99	607.99	NP	0.00	13.67	10.58	616.80	0.78	8.81	No	
LRMW-3	10/24/2001	627.38	630.47	617.99	607.99	16.67	1.09	17.76	13.81	613.57	-3.23	5.81	No	
LRMW-3	12/20/2001	627.40	630.47	617.99	607.99	16.37	0.17	16.54	13.34	614.06	0.50	6.11	No	
LRMW-3	1/22/2002	627.40	630.47	617.99	607.99	17.14	0.17	17.31	14.11	613.29	-0.77	5.34	No	
LRMW-3	4/24/2002	627.40	630.47	617.99	607.99	15.43	1.81	17.24	12.75	614.65	1.36	7.05	No	
LRMW-3	5/15/2002	627.40	630.47	617.99	607.99	14.30	2.22	16.52	11.71	615.69	1.04	8.18	No	
LRMW-3	6/27/2002	627.40	630.47	617.99	607.99	14.39	2.75	17.14	11.91	615.49	-0.20	8.09	No	
LRMW-3	7/25/2002	627.40	630.47	617.99	607.99	14.75	2.91	17.66	12.31	615.09	-0.39	7.73	No	
LRMW-3	8/20/2002	627.40	630.47	617.99	607.99	14.15	3.01	17.16	11.73	615.67	0.58	8.33	No	
LRMW-3	9/30/2002	627.40	630.47	617.99	607.99	14.10	3.05	17.15	11.69	615.71	0.04	8.38	No	
LRMW-3	11/5/2002	627.40	630.47	617.99	607.99	13.73	3.08	16.81	11.32	616.08	0.36	8.75	No	
LRMW-3	12/23/2002	627.40	630.47	617.99	607.99	15.45	3.15	18.60	13.06	614.34	-1.74	7.03	No	
LRMW-3	1/28/2003	627.40	630.47	617.99	607.99	16.37	4.13	20.50	14.19	613.21	-1.13	6.11	No	
LRMW-3	2/19/2003	627.40	630.47	617.99	607.99	16.77	3.72	20.49	14.50	612.90	-0.31	5.71	No	
LRMW-3	4/17/2003	627.40	630.47	617.99	607.99	17.00	3.65	20.65	14.71	612.69	-0.21	5.48	No	
LRMW-3	5/15/2003	627.40	630.47	617.99	607.99	15.77	4.74	20.51	13.72	613.68	1.00	6.71	No	
LRMW-3	6/10/2003	627.40	630.47	617.99	607.99	15.19	5.45	20.64	13.29	614.11	0.43	7.29	No	
LRMW-3	7/30/2003	627.40	630.47	617.99	607.99	14.93	5.75	20.68	13.10	614.30	0.20	7.55	No	
LRMW-3	10/23/2003	627.40	630.47	617.99	607.99	16.69	3.86	20.55	14.45	612.95	-1.35	5.79	No	
LRMW-3	12/3/2003	628.06	630.45	617.97	607.97	16.90	3.63	20.53	15.29	612.77	-0.18	5.58	No	
LRMW-3	1/8/2004	628.06	630.45	617.97	607.97	17.53	3.23	20.76	15.83	612.23	-0.54	4.95	No	
LRMW-3	4/19/2004	628.06	630.45	617.97	607.97	16.28	4.35	20.63	14.82	613.24	1.01	6.20	No	
LRMW-3	7/27/2004	628.06	630.45	617.97	607.97	14.87	5.80	20.67	13.73	614.33	1.10	7.61	No	
LRMW-3	11/15/2004	628.06	630.45	617.97	607.97	13.49	7.65	21.14	12.74	615.32	0.98	8.99	No	
LRMW-3	4/18/2005	628.06	630.45	617.97	607.97	13.79	6.18	19.97	12.73	615.33	0.02	8.69	No	
LRMW-3	9/9/2005	628.06	630.45	617.97	607.97	15.40	4.89	20.29	14.06	614.00	-1.33	7.08	No	
LRMW-3	10/11/2005	628.06	630.45	617.97	607.97	12.87	7.23	20.10	12.03	616.03	2.03	9.61	No	
LRMW-3	5/23/2006	628.06	630.45	617.97	607.97	11.90	8.06	19.96	11.24	616.82	0.79	10.58	No	
LRMW-3	10/16/2006	628.06	630.45	617.97	607.97	15.52	4.72	20.24	14.14	613.92	-2.90	6.96	No	
LRMW-3	4/23/2007	628.06	630.45	617.97	607.97	15.40	4.79	20.19	14.04	614.02	0.10	7.08	No	
LRMW-3	9/25/2007	628.06	630.45	617.97	607.97	16.40	1.93	18.33	14.42	613.64	-0.39	6.08	No	
LRMW-3	5/1/2008	628.06	630.45	617.97	607.97	12.20	6.28	18.48	11.16	616.90	3.27	10.28	No	
LRMW-3	10/20/2008	628.06	630.45	617.97	607.97	12.48	6.89	19.37	11.57	616.49	-0.41	10.00	No	
LRMW-3	4/18/2009	628.06	630.45	617.97	607.97	13.66	5.63	19.29	12.48	615.58	-0.91	8.82	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-3	10/11/2009	628.06	630.45	617.97	607.97	14.93	5.40	20.33	13.70	614.36	-1.22	7.55	No	
LRMW-3	4/28/2010	628.06	630.45	617.97	607.97	14.54	5.61	20.15	13.36	614.70	0.34	7.94	No	
LRMW-3	10/25/2010	628.06	630.45	617.97	607.97	12.29	7.46	19.75	11.50	616.56	1.85	10.19	No	
LRMW-3	4/25/2011	628.06	630.45	617.97	607.97	12.84	7.01	19.85	11.96	616.10	-0.45	9.64	No	
LRMW-3	9/14/2011	628.06	630.45	617.97	607.97	13.09	7.20	20.29	12.25	615.81	-0.29	9.39	No	
LRMW-3	9/23/2011	628.06	630.45	617.97	607.97	13.51	6.60	20.11	12.54	615.52	-0.29	8.97	No	
LRMW-3	9/29/2011	628.06	630.45	617.97	607.97	13.63	6.42	20.05	12.62	615.44	-0.08	8.85	No	
LRMW-3	10/7/2011	628.06	630.45	617.97	607.97	13.97	5.98	19.95	12.86	615.20	-0.25	8.51	No	
LRMW-3	10/11/2011	628.06	630.45	617.97	607.97	14.26	6.28	20.54	13.22	614.84	-0.35	8.22	No	
LRMW-3	10/21/2011	628.06	630.45	617.97	607.97	14.38	5.75	20.13	13.23	614.83	-0.01	8.10	No	
LRMW-3	10/27/2011	628.06	630.45	617.97	607.97	14.49	5.65	20.14	13.31	614.75	-0.09	7.99	No	
LRMW-3	11/3/2011	628.06	630.45	617.97	607.97	14.79	5.45	20.24	13.57	614.49	-0.26	7.69	No	
LRMW-3	11/9/2011	628.06	630.45	617.97	607.97	14.81	5.21	20.02	13.54	614.52	0.03	7.67	No	
LRMW-3	11/17/2011	628.06	630.45	617.97	607.97	15.15	5.07	20.22	13.85	614.21	-0.31	7.33	No	
LRMW-3	11/22/2011	628.06	630.45	617.97	607.97	15.22	4.90	20.12	13.88	614.18	-0.03	7.26	No	
LRMW-3	12/1/2011	628.06	630.45	617.97	607.97	15.43	5.14	20.57	14.14	613.92	-0.26	7.05	No	
LRMW-3	1/4/2012	628.06	630.45	617.97	607.97	16.02	4.46	20.48	14.59	613.47	-0.44	6.46	No	
LRMW-3	2/16/2012	628.06	630.45	617.97	607.97	16.94	3.57	20.51	15.32	612.74	-0.73	5.54	No	
LRMW-3	3/13/2012	628.06	630.45	617.97	607.97	16.99	3.39	20.38	15.33	612.73	-0.01	5.49	No	
LRMW-3	4/11/2012	628.06	630.45	617.97	607.97	16.21	3.89	20.10	14.66	613.40	0.67	6.27	No	Spill Buddy Before Reading
LRMW-3	4/16/2012	628.06	630.45	617.97	607.97	16.09	3.64	19.73	14.48	613.58	0.17	6.39	No	
LRMW-3	5/18/2012	628.06	630.45	617.97	607.97	14.45	5.49	19.94	13.24	614.82	1.24	8.03	No	
LRMW-3	6/28/2012	628.06	630.45	617.97	607.97	10.26	9.55	19.81	9.92	618.14	3.32	12.22	Yes	
LRMW-3	7/10/2012	628.06	630.45	617.97	607.97	11.97	7.86	19.83	11.27	616.79	-1.35	10.51	No	Spill Buddy Before Reading
LRMW-3	7/24/2012	628.06	630.45	617.97	607.97	13.62	5.36	18.98	12.38	615.68	-1.11	8.86	No	
LRMW-3	8/17/2012	628.06	630.45	617.97	607.97	14.18	5.71	19.89	13.02	615.04	-0.64	8.30	No	
LRMW-3	8/28/2012	628.06	630.45	617.97	607.97	14.64	5.15	19.79	13.36	614.70	-0.34	7.84	No	Spill Buddy Before Reading
LRMW-3	9/17/2012	628.06	630.45	617.97	607.97	15.43	4.50	19.93	14.01	614.05	-0.65	7.05	No	
LRMW-3	9/28/2012	628.06	630.45	617.97	607.97	15.84	4.08	19.92	14.33	613.73	-0.32	6.64	No	Spill Buddy Before Reading
LRMW-3	9/30/2012	628.06	630.45	617.97	607.97	16.44	1.54	17.98	14.38	613.68	-0.05	6.04	No	
LRMW-3	11/21/2012	628.06	630.45	617.97	607.97	16.35	3.59	19.94	14.73	613.33	-0.35	6.13	No	
LRMW-3	12/17/2012	628.06	630.45	617.97	607.97	16.61	3.40	20.01	14.95	613.11	-0.22	5.87	No	
LRMW-3	3/25/2013	628.06	630.45	617.97	607.97	17.91	2.51	20.42	16.06	612.00	-1.11	4.57	No	
LRMW-3	5/6/2013	628.06	630.45	617.97	607.97	15.10	4.64	19.74	13.71	614.35	2.35	7.38	No	
LRMW-3	10/3/2013	628.06	630.45	617.97	607.97	15.95	4.16	20.11	14.45	613.61	-0.75	6.53	No	
LRMW-3	5/22/2014	628.06	630.45	617.97	607.97	10.56	9.22	19.78	10.15	617.91	4.30	11.92	No	
LRMW-3	10/31/2014	628.06	630.45	617.97	607.97	13.43	6.66	20.09	12.47	615.59	-2.32	9.05	No	
LRMW-3	4/15/2015	628.06	630.45	617.97	607.97	16.00	4.25	20.25	14.52	613.54	-2.05	6.48	No	
LRMW-3	4/22/2015	628.06	630.45	617.97	607.97	15.29	4.81	20.10	13.93	614.13	0.59	7.19	No	
LRMW-3	4/29/2015	628.06	630.45	617.97	607.97	15.02	4.85	19.87	13.67	614.39	0.26	7.46	No	
LRMW-3	5/6/2015	628.06	630.45	617.97	607.97	15.13	4.26	19.39	13.66	614.40	0.02	7.35	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-3	5/12/2015	628.06	630.45	617.97	607.97	14.33	5.54	19.87	13.13	614.93	0.52	8.15	No	
LRMW-3	6/9/2015	628.06	630.45	617.97	607.97	12.78	7.00	19.78	11.89	616.17	1.24	9.70	No	
LRMW-3	10/5/2015	628.06	630.45	617.97	607.97	12.66	7.10	19.76	11.80	616.26	0.10	9.82	No	
LRMW-3	5/23/2016	628.06	630.45	617.97	607.97	10.30	9.44	19.74	9.94	618.12	1.86	12.18	Yes	
LRMW-3	10/3/2016	628.06	630.45	617.97	607.97	12.57	7.18	19.75	11.72	616.34	-1.78	9.91	No	
LRMW-3	5/22/2017	628.06	630.45	617.97	607.97	8.78	10.85	19.63	8.72	619.34	3.00	13.70	Yes	
LRMW-3	5/31/2017	628.06	630.45	617.97	607.97	9.85	6.58	16.43	8.87	619.19	-0.15	12.63	Yes	
LRMW-3	6/29/2017	628.06	630.45	617.97	607.97	11.92	5.97	17.89	10.81	617.25	-1.94	10.56	No	
LRMW-3	8/8/2017	628.06	630.45	617.97	607.97	11.42	7.53	18.95	10.65	617.41	0.16	11.06	No	
LRMW-3	8/15/2017	628.06	630.45	617.97	607.97	11.66	3.29	14.95	9.98	618.08	0.67	10.82	Yes	
LRMW-3	8/22/2017	628.06	630.45	617.97	607.97	11.35	3.28	14.63	9.66	618.40	0.31	11.13	Yes	
LRMW-3	10/26/2017	628.06	630.45	617.97	607.97	8.91	10.68	19.59	8.81	619.25	2.00	13.57	Yes	
LRMW-4	2/8/2001	625.47	628.75	616.08	606.08	15.17	5.20	20.37	13.05	612.42	NA	7.50	No	
LRMW-4	2/23/2001	625.47	628.75	616.08	606.08	15.60	4.85	20.45	13.40	612.07	-0.35	7.07	No	
LRMW-4	4/24/2001	625.47	628.75	616.08	606.08	11.23	11.27	22.50	10.47	615.00	2.94	11.44	No	
LRMW-4	5/23/2001	625.47	628.75	616.08	606.08	10.34	10.16	20.50	9.33	616.14	1.14	12.33	Yes	
LRMW-4	10/24/2001	625.47	628.75	616.08	606.08	14.35	6.12	20.47	12.44	613.03	-3.11	8.32	No	
LRMW-4	12/20/2001	625.50	628.75	616.08	606.08	13.81	6.85	20.66	12.09	613.41	0.38	8.86	No	
LRMW-4	1/22/2002	625.50	628.75	616.08	606.08	14.81	5.94	20.75	12.89	612.61	-0.80	7.86	No	
LRMW-4	4/24/2002	625.50	628.75	616.08	606.08	12.98	7.65	20.63	11.44	614.06	1.45	9.69	No	
LRMW-4	5/15/2002	625.50	628.75	616.08	606.08	11.75	8.78	20.53	10.46	615.04	0.98	10.92	No	
LRMW-4	6/27/2002	625.50	628.75	616.08	606.08	12.07	8.38	20.45	10.69	614.81	-0.23	10.60	No	
LRMW-4	7/25/2002	625.50	628.75	616.08	606.08	12.63	7.92	20.55	11.15	614.35	-0.46	10.04	No	
LRMW-4	8/20/2002	625.50	628.75	616.08	606.08	11.88	8.54	20.42	10.54	614.96	0.61	10.79	No	
LRMW-4	9/9/2002	625.50	628.75	616.08	606.08	12.04	8.43	20.47	10.67	614.83	-0.14	10.63	No	
LRMW-4	9/30/2002	625.50	628.75	616.08	606.08	11.91	8.54	20.45	10.57	614.93	0.11	10.76	No	
LRMW-4	11/5/2002	625.50	628.75	616.08	606.08	11.48	8.99	20.47	10.24	615.26	0.33	11.19	No	
LRMW-4	12/23/2002	625.50	628.75	616.08	606.08	13.86	6.70	20.56	12.11	613.39	-1.87	8.81	No	
LRMW-4	1/28/2003	625.50	628.75	616.08	606.08	15.06	5.45	20.51	13.03	612.47	-0.92	7.61	No	
LRMW-4	2/19/2003	625.50	628.75	616.08	606.08	15.67	4.60	20.27	13.45	612.05	-0.42	7.00	No	
LRMW-4	4/17/2003	625.50	628.75	616.08	606.08	15.89	4.06	19.95	13.55	611.95	-0.10	6.78	No	
LRMW-4	5/15/2003	625.50	628.75	616.08	606.08	14.52	5.32	19.84	12.46	613.04	1.09	8.15	No	
LRMW-4	6/10/2003	625.50	628.75	616.08	606.08	14.08	5.79	19.87	12.12	613.38	0.33	8.59	No	
LRMW-4	7/30/2003	625.50	628.75	616.08	606.08	13.97	5.91	19.88	12.04	613.46	0.08	8.70	No	
LRMW-4	9/10/2003	625.50	628.75	616.08	606.08	15.46	4.61	20.07	13.24	612.26	-1.20	7.21	No	
LRMW-4	10/23/2003	625.50	628.75	616.08	606.08	15.61	4.44	20.05	13.35	612.15	-0.11	7.06	No	
LRMW-4	12/3/2003	625.49	628.70	616.03	606.03	15.84	3.98	19.82	13.52	611.97	-0.18	6.83	No	
LRMW-4	1/8/2004	625.49	628.70	616.03	606.03	16.53	3.42	19.95	14.08	611.41	-0.56	6.14	No	
LRMW-4	4/19/2004	625.49	628.70	616.03	606.03	14.86	5.22	20.08	12.82	612.67	1.27	7.81	No	
LRMW-4	7/27/2004	625.49	628.70	616.03	606.03	13.91	5.78	19.69	11.99	613.50	0.82	8.76	No	



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-4	11/15/2004	625.49	628.70	616.03	606.03	12.46	7.21	19.67	10.86	614.63	1.13	10.21	No	
LRMW-4	4/18/2005	625.49	628.70	616.03	606.03	12.55	7.04	19.59	10.91	614.58	-0.05	10.12	No	
LRMW-4	9/9/2005	625.49	628.70	616.03	606.03	14.57	4.91	19.48	12.46	613.03	-1.54	8.10	No	
LRMW-4	10/11/2005	625.49	628.70	616.03	606.03	11.80	7.70	19.50	10.31	615.18	2.15	10.87	No	
LRMW-4	5/23/2006	625.49	628.70	616.03	606.03	11.22	7.95	19.17	9.79	615.70	0.52	11.45	No	
LRMW-4	10/16/2006	625.49	628.70	616.03	606.03	14.62	4.81	19.43	12.49	613.00	-2.70	8.05	No	
LRMW-4	4/23/2007	625.49	628.70	616.03	606.03	14.09	5.58	19.67	12.13	613.36	0.36	8.58	No	
LRMW-4	9/25/2007	625.49	628.53	615.86	605.86	14.38	4.97	19.35	12.45	613.04	-0.32	8.29	No	
LRMW-4	5/1/2008	625.49	628.53	615.86	605.86	10.74	7.97	18.71	9.48	616.01	2.97	11.93	Yes	
LRMW-4	10/20/2008	625.49	628.53	615.86	605.86	11.03	7.78	18.81	9.73	615.76	-0.25	11.64	No	
LRMW-4	8/31/2011	625.49	628.53	615.86	605.86	11.26	7.55	18.81	9.91	615.58	-0.18	11.41	No	
LRMW-4	9/14/2011	625.49	628.53	615.86	605.86	12.50	6.34	18.84	10.88	614.61	-0.97	10.17	No	
LRMW-4	9/23/2011	625.49	628.53	615.86	605.86	12.84	5.99	18.83	11.14	614.35	-0.26	9.83	No	
LRMW-4	9/29/2011	625.49	628.53	615.86	605.86	12.95	5.97	18.92	11.24	614.25	-0.11	9.72	No	
LRMW-4	10/7/2011	625.49	628.53	615.86	605.86	13.22	5.63	18.85	11.44	614.05	-0.19	9.45	No	
LRMW-4	10/11/2011	625.49	628.53	615.86	605.86	13.77	4.98	18.75	11.84	613.65	-0.40	8.90	No	
LRMW-4	10/21/2011	625.49	628.53	615.86	605.86	13.62	5.22	18.84	11.75	613.74	0.10	9.05	No	
LRMW-4	10/27/2011	625.49	628.53	615.86	605.86	13.76	5.09	18.85	11.86	613.63	-0.11	8.91	No	
LRMW-4	11/3/2011	625.49	628.53	615.86	605.86	14.08	4.77	18.85	12.11	613.38	-0.25	8.59	No	
LRMW-4	11/9/2011	625.49	628.53	615.86	605.86	14.02	4.82	18.84	12.06	613.43	0.05	8.65	No	
LRMW-4	11/17/2011	625.49	628.53	615.86	605.86	14.40	4.45	18.85	12.35	613.14	-0.30	8.27	No	
LRMW-4	11/22/2011	625.49	628.53	615.86	605.86	14.43	4.47	18.90	12.39	613.10	-0.03	8.24	No	
LRMW-4	12/1/2011	625.49	628.53	615.86	605.86	14.72	4.25	18.97	12.63	612.86	-0.24	7.95	No	
LRMW-4	1/4/2012	625.49	628.53	615.86	605.86	15.25	3.77	19.02	13.05	612.44	-0.42	7.42	No	
LRMW-4	2/16/2012	625.49	628.53	615.86	605.86	16.13	2.91	19.04	13.74	611.75	-0.69	6.54	No	
LRMW-4	3/13/2012	625.49	628.53	615.86	605.86	16.05	2.84	18.89	13.64	611.85	0.10	6.62	No	
LRMW-4	4/12/2012	625.49	628.53	615.86	605.86	15.10	3.94	19.04	12.94	612.55	0.70	7.57	No	Spill Buddy Before Reading
LRMW-4	4/16/2012	625.49	628.53	615.86	605.86	14.76	4.18	18.94	12.65	612.84	0.29	7.91	No	
LRMW-4	5/18/2012	625.49	628.53	615.86	605.86	13.40	5.68	19.08	11.63	613.86	1.02	9.27	No	
LRMW-4	6/28/2012	625.49	628.53	615.86	605.86	9.34	9.50	18.84	8.42	617.07	3.21	13.33	Yes	
LRMW-4	7/10/2012	625.49	628.53	615.86	605.86	11.05	7.90	18.95	9.78	615.71	-1.35	11.62	No	Spill Buddy Before Reading
LRMW-4	7/24/2012	625.49	628.53	615.86	605.86	12.52	6.43	18.95	10.92	614.57	-1.14	10.15	No	
LRMW-4	8/17/2012	625.49	628.53	615.86	605.86	13.34	5.56	18.90	11.54	613.95	-0.63	9.33	No	
LRMW-4	8/28/2012	625.49	628.53	615.86	605.86	13.80	5.04	18.84	11.89	613.60	-0.34	8.87	No	Spill Buddy Before Reading
LRMW-4	9/17/2012	625.49	628.53	615.86	605.86	14.01	4.89	18.90	12.06	613.43	-0.18	8.66	No	
LRMW-4	9/28/2012	625.49	628.53	615.86	605.86	15.02	3.86	18.88	12.84	612.65	-0.78	7.65	No	Spill Buddy Before Reading
LRMW-4	9/30/2012	625.49	628.53	615.86	605.86	15.07	3.60	18.67	12.83	612.66	0.01	7.60	No	
LRMW-4	11/21/2012	625.49	628.53	615.86	605.86	15.42	3.40	18.82	13.14	612.35	-0.31	7.25	No	
LRMW-4	12/17/2012	625.49	628.53	615.86	605.86	15.66	3.17	18.83	13.33	612.16	-0.19	7.01	No	
LRMW-4	3/25/2013	625.49	628.53	615.86	605.86	17.03	1.77	18.80	14.39	611.10	-1.06	5.64	No	
LRMW-4	5/6/2013	625.49	628.53	615.86	605.86	13.82	4.91	18.73	11.88	613.61	2.51	8.85	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-4	10/3/2013	625.49	628.53	615.86	605.86	15.04	3.71	18.75	12.83	612.66	-0.95	7.63	No	
LRMW-4	5/22/2014	625.49	628.53	615.86	605.86	9.61	5.84	15.45	7.88	617.61	4.95	13.06	Yes	
LRMW-4	10/31/2014	625.49	628.53	615.86	605.86	12.75	5.74	18.49	10.99	614.50	-3.12	9.92	No	
LRMW-4	4/15/2015	625.49	628.53	615.86	605.86	14.95	3.55	18.50	12.70	612.79	-1.71	7.72	No	
LRMW-4	4/22/2015	625.49	628.53	615.86	605.86	14.24	4.17	18.41	12.13	613.36	0.57	8.43	No	
LRMW-4	4/29/2015	625.49	628.53	615.86	605.86	14.28	2.97	17.25	11.90	613.59	0.23	8.39	No	
LRMW-4	5/6/2015	625.49	628.53	615.86	605.86	14.33	2.82	17.15	11.92	613.57	-0.02	8.34	No	
LRMW-4	5/12/2015	625.49	628.53	615.86	605.86	13.23	5.06	18.29	11.32	614.17	0.60	9.44	No	
LRMW-4	6/9/2015	625.49	628.53	615.86	605.86	11.81	6.57	18.38	10.24	615.25	1.08	10.86	No	
LRMW-4	10/5/2015	625.49	628.53	615.86	605.86	12.00	5.85	17.85	10.27	615.22	-0.03	10.67	No	
LRMW-4	5/23/2016	625.49	628.53	615.86	605.86	9.70	8.90	18.60	8.65	616.84	1.62	12.97	Yes	
LRMW-4	10/3/2016	625.49	628.53	615.86	605.86	11.87	6.81	18.68	10.35	615.14	-1.70	10.80	No	
LRMW-4	5/2/2017	625.49	628.53	615.86	605.86	9.73	8.93	18.66	8.69	616.80	1.67	12.94	Yes	
LRMW-4	5/18/2017	625.49	628.53	615.86	605.86	10.02	7.48	17.50	8.65	616.84	0.03	12.65	Yes	
LRMW-4	5/22/2017	625.49	628.53	615.86	605.86	9.38	4.80	14.18	7.41	618.08	1.24	13.29	Yes	
LRMW-4	5/25/2017	625.49	628.53	615.86	605.86	9.99	3.16	13.15	7.66	617.83	-0.24	12.68	Yes	
LRMW-4	5/31/2017	625.49	628.53	615.86	605.86	9.54	4.29	13.83	7.46	618.03	0.20	13.13	Yes	
LRMW-4	6/29/2017	625.49	628.53	615.86	605.86	10.56	7.97	18.53	9.30	616.19	-1.84	12.11	Yes	
LRMW-4	7/7/2017	625.49	628.53	615.86	605.86	10.88	4.02	14.90	8.74	616.75	0.56	11.79	Yes	
LRMW-4	7/12/2017	625.49	628.53	615.86	605.86	11.12	2.44	13.56	8.63	616.86	0.11	11.55	Yes	
LRMW-4	7/19/2017	625.49	628.53	615.86	605.86	11.13	2.13	13.26	8.57	616.92	0.06	11.54	Yes	
LRMW-4	7/26/2017	625.49	628.53	615.86	605.86	11.34	2.35	13.69	8.83	616.66	-0.26	11.33	Yes	
LRMW-4	8/4/2017	625.49	628.53	615.86	605.86	11.83	1.52	13.35	9.13	616.36	-0.30	10.84	Yes	
LRMW-4	8/8/2017	625.49	628.53	615.86	605.86	11.91	1.69	13.60	9.25	616.24	-0.12	10.76	Yes	
LRMW-4	8/15/2017	625.49	628.53	615.86	605.86	11.07	2.16	13.23	8.51	616.98	0.73	11.60	Yes	
LRMW-4	8/22/2017	625.49	628.53	615.86	605.86	10.84	1.88	12.72	8.22	617.27	0.29	11.83	Yes	
LRMW-4	10/26/2017	625.49	628.53	615.86	605.86	9.51	5.16	14.67	7.62	617.87	1.68	13.16	Yes	
LRMW-5	2/8/2001	626.05	629.37	615.90	605.90	17.03	0.07	17.10	13.73	612.32	NA	6.44	No	
LRMW-5	2/23/2001	626.05	629.37	615.90	605.90	17.35	0.16	17.51	14.06	611.99	-0.34	6.12	No	
LRMW-5	4/24/2001	626.05	629.37	615.90	605.90	15.12	0.10	15.22	11.82	614.23	2.24	8.35	No	
LRMW-5	5/23/2001	626.05	629.37	615.90	605.90	14.51	0.31	14.82	11.26	614.79	0.56	8.96	No	
LRMW-5	10/24/2001	626.05	629.37	615.90	605.90	15.83	2.20	18.03	12.98	613.07	-1.73	7.64	No	
LRMW-5	12/20/2001	626.10	629.37	615.90	605.90	15.09	1.93	17.02	12.23	613.87	0.80	8.38	No	
LRMW-5	1/22/2002	626.10	629.37	615.90	605.90	15.89	2.14	18.03	13.08	613.02	-0.85	7.58	No	
LRMW-5	4/24/2002	626.10	629.37	615.90	605.90	14.29	0.94	15.23	11.22	614.88	1.86	9.18	No	
LRMW-5	5/15/2002	626.10	629.37	615.90	605.90	13.74	0.32	14.06	10.54	615.56	0.68	9.73	No	
LRMW-5	6/27/2002	626.10	629.37	615.90	605.90	13.93	0.45	14.38	10.76	615.34	-0.22	9.54	No	
LRMW-5	7/25/2002	626.10	629.37	615.90	605.90	14.43	1.14	15.57	11.40	614.70	-0.65	9.04	No	
LRMW-5	8/20/2002	626.10	629.37	615.90	605.90	NP	0.00	14.55	11.28	614.82	0.12	8.92	No	
LRMW-5	9/30/2002	626.10	629.37	615.90	605.90	14.06	0.67	14.73	10.93	615.17	0.35	9.41	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-5	11/5/2002	626.10	629.37	615.90	605.90	13.66	0.42	14.08	10.48	615.62	0.45	9.81	No	
LRMW-5	12/23/2002	626.10	629.37	615.90	605.90	14.97	2.25	17.22	12.18	613.92	-1.70	8.50	No	
LRMW-5	1/28/2003	626.10	629.37	615.90	605.90	15.84	2.44	18.28	13.09	613.01	-0.91	7.63	No	
LRMW-5	2/19/2003	626.10	629.37	615.90	605.90	16.56	2.38	18.94	13.80	612.30	-0.71	6.91	No	
LRMW-5	4/17/2003	626.10	629.37	615.90	605.90	16.78	1.93	18.71	13.92	612.18	-0.12	6.69	No	
LRMW-5	5/15/2003	626.10	629.37	615.90	605.90	15.38	2.16	17.54	12.57	613.53	1.35	8.09	No	
LRMW-5	6/10/2003	626.10	629.37	615.90	605.90	14.99	2.50	17.49	12.26	613.84	0.32	8.48	No	
LRMW-5	7/30/2003	626.10	629.37	615.90	605.90	15.01	2.59	17.60	12.30	613.80	-0.04	8.46	No	
LRMW-5	9/10/2003	626.10	629.37	615.90	605.90	16.39	2.92	19.31	13.75	612.35	-1.45	7.08	No	
LRMW-5	10/23/2003	626.10	629.37	615.90	605.90	16.66	2.73	19.39	13.98	612.12	-0.23	6.81	No	
LRMW-5	12/3/2003	626.69	629.37	615.90	605.90	16.72	2.72	19.44	14.62	612.07	-0.06	6.75	No	
LRMW-5	1/8/2004	626.69	629.37	615.90	605.90	17.30	2.66	19.96	15.19	611.50	-0.57	6.17	No	
LRMW-5	2/24/2004	626.69	629.37	615.90	605.90	17.89	2.59	20.48	15.77	610.92	-0.57	5.58	No	
LRMW-5	4/19/2004	626.69	629.37	615.90	605.90	15.30	3.51	18.81	13.37	613.32	2.39	8.17	No	
LRMW-5	7/27/2004	626.69	629.37	615.90	605.90	14.65	3.65	18.30	12.75	613.94	0.62	8.82	No	
LRMW-5	11/16/2004	626.69	629.37	615.90	605.90	13.96	2.40	16.36	11.80	614.89	0.96	9.51	No	
LRMW-5	4/18/2005	626.69	629.37	615.90	605.90	13.48	2.11	15.59	11.25	615.44	0.54	9.99	No	
LRMW-5	9/9/2005	626.69	629.37	615.90	605.90	15.06	5.50	20.56	13.56	613.13	-2.31	8.41	No	
LRMW-5	10/11/2005	626.69	629.37	615.90	605.90	13.54	1.97	15.51	11.28	615.41	2.28	9.93	No	
LRMW-5	5/23/2006	626.69	629.37	615.90	605.90	11.11	7.65	18.76	10.07	616.62	1.21	12.36	Yes	
LRMW-5	10/16/2006	626.69	629.37	615.90	605.90	15.33	4.93	20.26	13.71	612.98	-3.64	8.14	No	
LRMW-5	4/23/2007	626.69	629.37	615.90	605.90	13.92	4.67	18.59	12.24	614.45	1.47	9.55	No	
LRMW-5	9/25/2007	626.69	629.20	615.73	605.73	14.44	4.58	19.02	12.91	613.78	-0.67	9.03	No	
LRMW-5	5/1/2008	626.69	629.20	615.73	605.73	10.91	6.38	17.29	9.77	616.92	3.14	12.56	Yes	
LRMW-5	10/20/2008	626.69	629.20	615.73	605.73	10.97	7.60	18.57	10.09	616.60	-0.32	12.50	Yes	
LRMW-5	4/18/2009	626.69	629.20	615.73	605.73	11.31	7.30	18.61	10.37	616.32	-0.28	12.16	Yes	
LRMW-5	10/11/2009	626.69	629.20	615.73	605.73	14.74	2.85	17.59	12.84	613.85	-2.47	8.73	No	
LRMW-5	4/28/2010	626.69	629.20	615.73	605.73	13.31	3.79	17.10	11.61	615.08	1.23	10.16	No	
LRMW-5	10/25/2010	626.69	629.20	615.73	605.73	12.13	4.42	16.55	10.57	616.12	1.04	11.34	Yes	
LRMW-5	4/25/2011	626.69	629.20	615.73	605.73	11.97	3.83	15.80	10.28	616.41	0.29	11.50	Yes	
LRMW-5	9/14/2011	626.69	629.20	615.73	605.73	13.09	3.85	16.94	11.41	615.28	-1.12	10.38	No	
LRMW-5	9/23/2011	626.69	629.20	615.73	605.73	13.28	4.86	18.14	11.81	614.88	-0.41	10.19	No	
LRMW-5	9/29/2011	626.69	629.20	615.73	605.73	13.34	5.02	18.36	11.91	614.78	-0.09	10.13	No	
LRMW-5	10/7/2011	626.69	629.20	615.73	605.73	13.53	5.66	19.19	12.24	614.45	-0.33	9.94	No	
LRMW-5	10/11/2011	626.69	629.20	615.73	605.73	13.61	5.86	19.47	12.36	614.33	-0.12	9.86	No	
LRMW-5	10/21/2011	626.69	629.20	615.73	605.73	13.77	6.07	19.84	12.56	614.13	-0.21	9.70	No	
LRMW-5	10/27/2011	626.69	629.20	615.73	605.73	13.91	6.02	19.93	12.69	614.00	-0.13	9.56	No	
LRMW-5	11/3/2011	626.69	629.20	615.73	605.73	14.22	5.83	20.05	12.96	613.73	-0.27	9.25	No	
LRMW-5	11/9/2011	626.69	629.20	615.73	605.73	14.26	5.69	19.95	12.97	613.72	-0.01	9.21	No	
LRMW-5	11/17/2011	626.69	629.20	615.73	605.73	14.63	5.50	20.13	13.30	613.39	-0.33	8.84	No	
LRMW-5	11/22/2011	626.69	629.20	615.73	605.73	14.65	5.37	20.02	13.29	613.40	0.01	8.82	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-5	12/1/2011	626.69	629.20	615.73	605.73	14.94	5.12	20.06	13.53	613.16	-0.24	8.53	No	
LRMW-5	1/4/2012	626.69	629.20	615.73	605.73	15.52	4.43	19.95	13.96	612.73	-0.43	7.95	No	
LRMW-5	2/16/2012	626.69	629.20	615.73	605.73	16.44	3.45	19.89	14.67	612.02	-0.71	7.03	No	
LRMW-5	3/13/2012	626.69	629.20	615.73	605.73	16.51	3.12	19.63	14.67	612.02	0.00	6.96	No	
LRMW-5	4/12/2012	626.69	629.20	615.73	605.73	15.25	3.79	19.04	13.55	613.14	1.12	8.22	No	Cannot get Spill Buddy in Well
LRMW-5	4/16/2012	626.69	629.20	615.73	605.73	15.05	3.84	18.89	13.37	613.32	0.19	8.42	No	
LRMW-5	5/18/2012	626.69	629.20	615.73	605.73	13.68	3.92	17.60	12.01	614.68	1.35	9.79	No	
LRMW-5	6/28/2012	626.69	629.20	615.73	605.73	10.71	3.83	14.54	9.02	617.67	2.99	12.76	Yes	
LRMW-5	7/24/2012	626.69	629.20	615.73	605.73	13.19	4.10	17.29	11.56	615.13	-2.54	10.28	No	
LRMW-5	8/17/2012	626.69	629.20	615.73	605.73	13.58	5.71	19.29	12.30	614.39	-0.74	9.89	No	
LRMW-5	8/28/2012	626.69	629.20	615.73	605.73	14.28	5.71	19.99	13.00	613.69	-0.70	9.19	No	Hand Bail before reading
LRMW-5	8/28/2012	626.69	629.20	615.73	605.73	19.36	1.02	20.38	17.07	609.62	-4.07	4.11	No	Hand Bail after reading
LRMW-5	9/17/2012	626.69	629.20	615.73	605.73	15.41	2.53	17.94	13.44	613.25	3.63	8.06	No	
LRMW-5	9/30/2012	626.69	629.20	615.73	605.73	15.80	2.49	18.29	13.82	612.87	-0.38	7.67	No	
LRMW-5	11/21/2012	626.69	629.20	615.73	605.73	16.32	2.20	18.52	14.28	612.41	-0.46	7.15	No	
LRMW-5	12/17/2012	626.69	629.20	615.73	605.73	16.64	2.04	18.68	14.57	612.12	-0.29	6.83	No	
LRMW-5	3/25/2013	626.69	629.20	615.73	605.73	17.52	1.94	19.46	15.43	611.26	-0.86	5.95	No	
LRMW-5	5/6/2013	626.69	629.20	615.73	605.73	14.53	2.43	16.96	12.54	614.15	2.88	8.94	No	
LRMW-5	10/3/2013	626.69	629.20	615.73	605.73	15.53	3.39	18.92	13.75	612.94	-1.21	7.94	No	
LRMW-5	5/22/2014	626.69	629.20	615.73	605.73	10.85	3.11	13.96	9.01	617.68	4.74	12.62	Yes	
LRMW-5	10/31/2014	626.69	629.20	615.73	605.73	13.30	3.78	17.08	11.60	615.09	-2.59	10.17	No	
LRMW-5	4/15/2015	626.69	629.20	615.73	605.73	14.35	5.24	19.59	12.97	613.72	-1.36	9.12	No	
LRMW-5	4/22/2015	626.69	629.20	615.73	605.73	14.45	1.15	15.60	12.19	614.50	0.78	9.02	No	
LRMW-5	4/29/2015	626.69	629.20	615.73	605.73	14.37	0.18	14.55	11.90	614.79	0.29	9.10	No	
LRMW-5	5/6/2015	626.69	629.20	615.73	605.73	14.38	0.20	14.58	11.91	614.78	-0.01	9.09	No	
LRMW-5	5/12/2015	626.69	629.20	615.73	605.73	13.83	0.12	13.95	11.35	615.34	0.57	9.64	No	
LRMW-5	6/9/2015	626.69	629.20	615.73	605.73	12.83	0.40	13.23	10.41	616.28	0.94	10.64	Yes	
LRMW-5	10/5/2015	626.69	629.20	615.73	605.73	13.25	0.27	13.52	10.80	615.89	-0.39	10.22	Yes	
LRMW-5	5/23/2016	626.69	629.20	615.73	605.73	10.80	2.89	13.69	8.91	617.78	1.89	12.67	Yes	
LRMW-5	10/3/2016	626.69	629.20	615.73	605.73	14.13	1.19	15.32	11.88	614.81	-2.96	9.34	No	
LRMW-5	5/2/2017	626.69	629.20	615.73	605.73	10.63	3.44	14.07	8.86	617.83	3.02	12.84	Yes	
LRMW-5	5/22/2017	626.69	629.20	615.73	605.73	9.65	3.40	13.05	7.87	618.82	0.99	13.82	Yes	
LRMW-5	5/31/2017	626.69	629.20	615.73	605.73	9.92	2.38	12.30	7.92	618.77	-0.05	13.55	Yes	
LRMW-5	6/22/2017	626.69	629.20	615.73	605.73	11.89	0.66	12.55	9.52	617.17	-1.60	11.58	Yes	
LRMW-5	6/29/2017	626.69	629.20	615.73	605.73	NP	0.00	15.09	12.58	614.11	-3.06	8.38	No	
LRMW-5	10/26/2017	626.69	629.20	615.73	605.73	10.10	3.04	13.14	8.24	618.45	4.34	13.37	Yes	
LRMW-6	2/8/2001	628.97	632.50	619.36	609.36	NP	0.00	19.47	15.94	613.03	NA	3.67	No	
LRMW-6	2/22/2001	628.97	632.50	619.36	609.36	NP	0.00	19.55	16.02	612.95	-0.08	3.59	No	
LRMW-6	5/23/2001	628.97	632.50	619.36	609.36	NP	0.00	15.70	12.17	616.80	3.85	7.44	No	
LRMW-6	10/24/2001	628.97	632.50	619.36	609.36	NP	0.00	18.82	15.29	613.68	-3.12	4.32	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-6	12/20/2001	629.00	632.50	619.36	609.36	NP	0.00	18.44	14.94	614.06	0.38	4.70	No	
LRMW-6	1/22/2002	629.00	632.50	619.36	609.36	NP	0.00	19.26	15.76	613.24	-0.82	3.88	No	
LRMW-6	5/15/2002	629.00	632.50	619.36	609.36	NP	0.00	16.87	13.37	615.63	2.39	6.27	No	
LRMW-6	6/27/2002	629.00	632.50	619.36	609.36	NP	0.00	17.11	13.61	615.39	-0.24	6.03	No	
LRMW-6	7/25/2002	629.00	632.50	619.36	609.36	NP	0.00	17.53	14.03	614.97	-0.42	5.61	No	
LRMW-6	8/20/2002	629.00	632.50	619.36	609.36	NP	0.00	16.94	13.44	615.56	0.59	6.20	No	
LRMW-6	9/30/2002	629.00	632.50	619.36	609.36	NP	0.00	16.90	13.40	615.60	0.04	6.24	No	
LRMW-6	11/5/2002	629.00	632.50	619.36	609.36	NP	0.00	17.90	14.40	614.60	-1.00	5.24	No	
LRMW-6	12/23/2002	629.00	632.50	619.36	609.36	NP	0.00	18.45	14.95	614.05	-0.55	4.69	No	
LRMW-6	1/28/2003	629.00	632.50	619.36	609.36	NP	0.00	19.38	15.88	613.12	-0.93	3.76	No	
LRMW-6	2/19/2003	629.00	632.50	619.36	609.36	NP	0.00	18.94	15.44	613.56	0.44	4.20	No	
LRMW-6	4/17/2003	629.00	632.50	619.36	609.36	NP	0.00	23.14	19.64	609.36	-4.20	0.00	No	
LRMW-6	5/15/2003	629.00	632.50	619.36	609.36	NP	0.00	18.99	15.49	613.51	4.15	4.15	No	
LRMW-6	6/10/2003	629.00	632.50	619.36	609.36	NP	0.00	18.57	15.07	613.93	0.42	4.57	No	
LRMW-6	7/30/2003	629.00	632.50	619.36	609.36	NP	0.00	18.40	14.90	614.10	0.17	4.74	No	
LRMW-6	10/22/2003	629.00	632.50	619.36	609.36	NP	0.00	19.68	16.18	612.82	-1.28	3.46	No	
LRMW-6	12/3/2003	629.30	632.45	619.31	609.31	NP	0.00	19.89	16.74	612.56	-0.26	3.25	No	
LRMW-6	1/8/2004	629.30	632.45	619.31	609.31	NP	0.00	20.43	17.28	612.02	-0.54	2.71	No	
LRMW-6	4/19/2004	629.30	632.45	619.31	609.31	NP	0.00	19.41	16.26	613.04	1.02	3.73	No	
LRMW-6	7/27/2004	629.30	632.45	619.31	609.31	NP	0.00	18.32	15.17	614.13	1.09	4.82	No	
LRMW-6	11/18/2004	629.30	632.45	619.31	609.31	NP	0.00	17.12	13.97	615.33	1.20	6.02	No	
LRMW-6	4/18/2005	629.30	632.45	619.31	609.31	NP	0.00	16.92	13.77	615.53	0.20	6.22	No	
LRMW-6	10/11/2005	629.30	632.45	619.31	609.31	NP	0.00	16.56	13.41	615.89	0.36	6.58	No	
LRMW-6	5/23/2006	629.30	632.45	619.31	609.31	NP	0.00	15.77	12.62	616.68	0.79	7.37	No	
LRMW-6	10/16/2006	629.30	632.45	619.31	609.31	NP	0.00	18.54	15.39	613.91	-2.77	4.60	No	
LRMW-6	4/23/2007	629.30	632.45	619.31	609.31	NP	0.00	18.34	15.19	614.11	0.20	4.80	No	
LRMW-6	9/25/2007	629.30	632.32	619.18	609.18	NP	0.00	18.71	15.69	613.61	-0.50	4.43	No	
LRMW-6	5/1/2008	629.30	632.32	619.18	609.18	NP	0.00	15.43	12.41	616.89	3.28	7.71	No	
LRMW-6	10/20/2008	629.30	632.32	619.18	609.18	NP	0.00	15.28	12.26	617.04	0.15	7.86	No	
LRMW-6	4/18/2009	629.30	632.32	619.18	609.18	NP	0.00	16.22	13.20	616.10	-0.94	6.92	No	
LRMW-6	10/11/2009	629.30	632.32	619.18	609.18	NP	0.00	17.99	14.97	614.33	-1.77	5.15	No	
LRMW-6	4/28/2010	629.30	632.32	619.18	609.18	NP	0.00	17.62	14.60	614.70	0.37	5.52	No	
LRMW-6	10/25/2010	629.30	632.32	619.18	609.18	NP	0.00	15.99	12.97	616.33	1.63	7.15	No	
LRMW-6	4/25/2011	629.30	632.32	619.18	609.18	NP	0.00	16.05	13.03	616.27	-0.06	7.09	No	
LRMW-6	9/14/2011	629.30	632.32	619.18	609.18	NP	0.00	16.75	13.73	615.57	-0.70	6.39	No	
LRMW-6	9/23/2011	629.30	632.32	619.18	609.18	NP	0.00	17.02	14.00	615.30	-0.27	6.12	No	
LRMW-6	9/29/2011	629.30	632.32	619.18	609.18	NP	0.00	17.02	14.00	615.30	0.00	6.12	No	
LRMW-6	10/7/2011	629.30	632.32	619.18	609.18	NP	0.00	17.21	14.19	615.11	-0.19	5.93	No	
LRMW-6	10/11/2011	629.30	632.32	619.18	609.18	NP	0.00	17.23	14.21	615.09	-0.02	5.91	No	
LRMW-6	10/21/2011	629.30	632.32	619.18	609.18	NP	0.00	17.58	14.56	614.74	-0.35	5.56	No	
LRMW-6	10/27/2011	629.30	632.32	619.18	609.18	NP	0.00	17.66	14.64	614.66	-0.08	5.48	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-6	11/3/2011	629.30	632.32	619.18	609.18	NP	0.00	17.96	14.94	614.36	-0.30	5.18	No	
LRMW-6	11/9/2011	629.30	632.32	619.18	609.18	NP	0.00	17.90	14.88	614.42	0.06	5.24	No	
LRMW-6	11/17/2011	629.30	632.32	619.18	609.18	NP	0.00	18.25	15.23	614.07	-0.35	4.89	No	
LRMW-6	11/22/2011	629.30	632.32	619.18	609.18	NP	0.00	18.22	15.20	614.10	0.03	4.92	No	
LRMW-6	12/1/2011	629.30	632.32	619.18	609.18	NP	0.00	18.36	15.34	613.96	-0.14	4.78	No	
LRMW-6	1/4/2012	629.30	632.32	619.18	609.18	NP	0.00	18.92	15.90	613.40	-0.56	4.22	No	
LRMW-6	2/16/2012	629.30	632.32	619.18	609.18	NP	0.00	19.71	16.69	612.61	-0.79	3.43	No	
LRMW-6	3/13/2012	629.30	632.32	619.18	609.18	NP	0.00	19.78	16.76	612.54	-0.07	3.36	No	
LRMW-6	4/16/2012	629.30	632.32	619.18	609.18	NP	0.00	18.34	15.32	613.98	1.44	4.80	No	
LRMW-6	5/18/2012	629.30	632.32	619.18	609.18	NP	0.00	17.48	14.46	614.84	0.86	5.66	No	
LRMW-6	6/28/2012	629.30	632.32	619.18	609.18	NP	0.00	14.33	11.31	617.99	3.15	8.81	No	
LRMW-6	7/24/2012	629.30	632.32	619.18	609.18	NP	0.00	16.81	13.79	615.51	-2.48	6.33	No	
LRMW-6	8/17/2012	629.30	632.32	619.18	609.18	NP	0.00	17.44	14.42	614.88	-0.63	5.70	No	
LRMW-6	9/17/2012	629.30	632.32	619.18	609.18	NP	0.00	18.45	15.43	613.87	-1.01	4.69	No	
LRMW-6	9/30/2012	629.30	632.32	619.18	609.18	NP	0.00	18.75	15.73	613.57	-0.30	4.39	No	
LRMW-6	11/21/2012	629.30	632.32	619.18	609.18	NP	0.00	18.83	15.81	613.49	-0.08	4.31	No	
LRMW-6	12/17/2012	629.30	632.32	619.18	609.18	NP	0.00	18.97	15.95	613.35	-0.14	4.17	No	
LRMW-6	3/25/2013	629.30	632.32	619.18	609.18	NP	0.00	20.39	17.37	611.93	-1.42	2.75	No	
LRMW-6	5/6/2013	629.30	632.32	619.18	609.18	NP	0.00	17.69	14.67	614.63	2.70	5.45	No	
LRMW-6	10/3/2013	629.30	632.32	619.18	609.18	NP	0.00	18.73	15.71	613.59	-1.04	4.41	No	
LRMW-6	5/21/2014	629.30	632.32	619.18	609.18	NP	0.00	14.52	11.50	617.80	4.21	8.62	No	
LRMW-6	10/31/2014	629.30	632.32	619.18	609.18	NP	0.00	16.93	13.91	615.39	-2.41	6.21	No	
LRMW-6	5/6/2015	629.30	632.32	619.18	609.18	NP	0.00	17.84	14.82	614.48	-0.91	5.30	No	
LRMW-6	10/5/2015	629.30	632.32	619.18	609.18	NP	0.00	16.17	13.15	616.15	1.67	6.97	No	
LRMW-6	5/23/2016	629.30	632.32	619.18	609.18	NP	0.00	14.27	11.25	618.05	1.90	8.87	No	
LRMW-6	10/3/2016	629.30	632.32	619.18	609.18	NP	0.00	15.98	12.96	616.34	-1.71	7.16	No	
LRMW-6	8/8/2017	629.30	632.32	619.18	609.18	NP	0.00	15.06	12.04	617.26	0.92	8.08	No	
LRMW-6	8/15/2017	629.30	632.32	619.18	609.18	NP	0.00	14.28	11.26	618.04	0.78	8.86	No	
LRMW-6	5/30/2018	629.30	632.32	619.18	609.18	NP	0.00	16.22	13.20	616.10	-1.94	6.92	No	
LRMW-6	6/18/2018	629.30	632.32	619.18	609.18	NP	0.00	14.86	11.84	617.46	1.36	8.28	No	
LRMW-7	7/27/2011	627.00	629.06	611.00	596.00	11.02	6.90	17.92	10.44	616.56	NA	22.04	Yes	
LRMW-7	7/28/2011	627.00	629.06	611.00	596.00	10.64	8.54	19.18	10.41	616.59	0.03	22.42	Yes	
LRMW-7	8/1/2011	627.00	629.06	611.00	596.00	10.80	8.98	19.78	10.67	616.33	-0.25	22.26	Yes	
LRMW-7	8/18/2011	627.00	629.06	611.00	596.00	9.98	9.72	19.70	10.01	616.99	0.66	23.08	Yes	
LRMW-7	8/25/2011	627.00	629.06	611.00	596.00	10.73	8.95	19.68	10.59	616.41	-0.58	22.33	Yes	
LRMW-7	9/1/2011	627.00	629.06	611.00	596.00	11.23	8.56	19.79	11.01	615.99	-0.42	21.83	Yes	
LRMW-7	9/8/2011	627.00	629.06	611.00	596.00	11.99	7.73	19.72	11.59	615.41	-0.58	21.07	Yes	
LRMW-7	9/14/2011	627.00	629.06	611.00	596.00	12.64	7.03	19.67	12.09	614.91	-0.50	20.42	Yes	
LRMW-7	9/23/2011	627.00	629.06	611.00	596.00	12.92	6.96	19.88	12.36	614.64	-0.26	20.14	Yes	
LRMW-7	9/29/2011	627.00	629.06	611.00	596.00	13.09	6.79	19.88	12.49	614.51	-0.13	19.97	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-7	10/7/2011	627.00	629.06	611.00	596.00	13.32	6.41	19.73	12.64	614.36	-0.15	19.74	Yes	
LRMW-7	10/11/2011	627.00	629.06	611.00	596.00	13.65	6.31	19.96	12.95	614.05	-0.31	19.41	Yes	
LRMW-7	10/21/2011	627.00	629.06	611.00	596.00	13.85	5.11	18.96	12.89	614.11	0.06	19.21	Yes	
LRMW-7	10/27/2011	627.00	629.06	611.00	596.00	14.01	5.29	19.30	13.09	613.91	-0.20	19.05	Yes	
LRMW-7	11/3/2011	627.00	629.06	611.00	596.00	14.29	5.16	19.45	13.34	613.66	-0.25	18.77	Yes	
LRMW-7	11/9/2011	627.00	629.06	611.00	596.00	14.22	5.24	19.46	13.29	613.71	0.05	18.84	Yes	
LRMW-7	11/10/2011	627.00	629.06	611.00	596.00	14.41	5.19	19.60	13.47	613.53	-0.18	18.65	Yes	Before EFR
LRMW-7	11/10/2011	627.00	629.06	611.00	596.00	16.12	0.03	16.15	14.07	612.93	-0.60	16.94	Yes	After EFR
LRMW-7	11/13/2011	627.00	629.06	611.00	596.00	14.58	3.85	18.43	13.35	613.65	0.72	18.48	Yes	
LRMW-7	11/17/2011	627.00	629.06	611.00	596.00	14.75	4.29	19.04	13.61	613.39	-0.26	18.31	Yes	
LRMW-7	11/22/2011	627.00	629.06	611.00	596.00	14.73	4.51	19.24	13.64	613.36	-0.03	18.33	Yes	
LRMW-7	12/1/2011	627.00	629.06	611.00	596.00	14.91	4.63	19.54	13.84	613.16	-0.21	18.15	Yes	
LRMW-7	1/4/2012	627.00	629.06	611.00	596.00	15.35	4.70	20.05	14.30	612.70	-0.46	17.71	Yes	
LRMW-7	2/16/2012	627.00	629.06	611.00	596.00	16.22	4.06	20.28	15.03	611.97	-0.73	16.84	Yes	
LRMW-7	3/13/2012	627.00	629.06	611.00	596.00	16.12	3.84	19.96	14.89	612.11	0.15	16.94	Yes	
LRMW-7	4/12/2012	627.00	629.06	611.00	596.00	15.19	4.77	19.96	14.15	612.85	0.73	17.87	Yes	Spill Buddy Before Reading
LRMW-7	4/16/2012	627.00	629.06	611.00	596.00	14.94	4.49	19.43	13.84	613.16	0.31	18.12	Yes	
LRMW-7	5/18/2012	627.00	629.06	611.00	596.00	13.44	6.71	20.15	12.82	614.18	1.02	19.62	Yes	
LRMW-7	6/28/2012	627.00	629.06	611.00	596.00	9.27	10.58	19.85	9.48	617.52	3.34	23.79	Yes	
LRMW-7	7/2/2012	627.00	629.06	611.00	596.00	10.07	9.89	19.96	10.13	616.87	-0.65	22.99	Yes	Installed Portable System 2 on LRMW 7, gauge before starting portable system.
LRMW-7	11/21/2012	627.00	629.06	611.00	596.00	17.04	2.33	19.37	15.48	611.52	-5.35	16.02	Yes	
LRMW-7	12/17/2012	627.00	629.06	611.00	596.00	15.79	3.78	19.57	14.54	612.46	0.94	17.27	Yes	
LRMW-7	3/25/2013	627.00	629.06	611.00	596.00	17.12	2.97	20.09	15.70	611.30	-1.16	15.94	Yes	
LRMW-7	4/29/2013	627.00	629.06	611.00	596.00	14.19	4.99	19.18	13.20	613.80	2.50	18.87	Yes	Spill Buddy Before Reading
LRMW-7	5/6/2013	627.00	629.06	611.00	596.00	13.90	6.02	19.92	13.13	613.87	0.07	19.16	Yes	
LRMW-7	10/3/2013	627.00	629.06	611.00	596.00	15.04	4.77	19.81	14.00	613.00	-0.87	18.02	Yes	
LRMW-7	5/22/2014	627.00	629.06	611.00	596.00	9.58	9.81	19.39	9.63	617.37	4.38	23.48	Yes	
LRMW-7	10/31/2014	627.00	629.06	611.00	596.00	12.76	7.02	19.78	12.21	614.79	-2.58	20.30	Yes	
LRMW-7	4/15/2015	627.00	629.06	611.00	596.00	16.19	3.14	19.33	14.80	612.20	-2.60	16.87	Yes	
LRMW-7	4/22/2015	627.00	629.06	611.00	596.00	14.57	3.97	18.54	13.36	613.64	1.44	18.49	Yes	
LRMW-7	4/29/2015	627.00	629.06	611.00	596.00	14.25	4.35	18.60	13.12	613.88	0.24	18.81	Yes	
LRMW-7	5/6/2015	627.00	629.06	611.00	596.00	14.21	4.61	18.82	13.14	613.86	-0.02	18.85	Yes	
LRMW-7	5/12/2015	627.00	629.06	611.00	596.00	13.35	5.59	18.94	12.49	614.51	0.65	19.71	Yes	
LRMW-7	6/9/2015	627.00	629.06	611.00	596.00	11.74	7.79	19.53	11.35	615.65	1.14	21.32	Yes	
LRMW-7	10/5/2015	627.00	629.06	611.00	596.00	11.89	7.27	19.16	11.39	615.61	-0.04	21.17	Yes	
LRMW-7	5/23/2016	627.00	629.06	611.00	596.00	9.60	10.30	19.90	9.75	617.25	1.64	23.46	Yes	
LRMW-7	10/3/2016	627.00	629.06	611.00	596.00	11.81	7.91	19.72	11.45	615.55	-1.70	21.25	Yes	
LRMW-7	5/2/2017	627.00	629.06	611.00	596.00	9.80	9.36	19.16	9.75	617.25	1.70	23.26	Yes	
LRMW-7	5/8/2017	627.00	629.06	611.00	596.00	10.17	8.53	18.70	9.94	617.06	-0.19	22.89	Yes	
LRMW-7	5/18/2017	627.00	629.06	611.00	596.00	9.65	9.45	19.10	9.62	617.38	0.32	23.41	Yes	
LRMW-7	5/22/2017	627.00	629.06	611.00	596.00	8.34	10.25	18.59	8.48	618.52	1.14	24.72	Yes	
LRMW-7	5/25/2017	627.00	629.06	611.00	596.00	8.42	9.93	18.35	8.49	618.51	-0.01	24.64	Yes	
LRMW-7	5/31/2017	627.00	629.06	611.00	596.00	8.24	11.13	19.37	8.57	618.43	-0.08	24.82	Yes	
LRMW-7	6/21/2017	627.00	629.06	611.00	596.00	10.23	9.36	19.59	10.18	616.82	-1.61	22.83	Yes	
LRMW-7	6/22/2017	627.00	629.06	611.00	596.00	11.42	4.30	15.72	10.28	616.72	-0.10	21.64	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-7	6/29/2017	627.00	629.06	611.00	596.00	10.67	8.17	18.84	10.37	616.63	-0.08	22.39	Yes	
LRMW-7	7/7/2017	627.00	629.06	611.00	596.00	9.93	9.02	18.95	9.81	617.19	0.56	23.13	Yes	
LRMW-7	7/12/2017	627.00	629.06	611.00	596.00	9.75	9.52	19.27	9.74	617.26	0.07	23.31	Yes	
LRMW-7	7/19/2017	627.00	629.06	611.00	596.00	9.62	9.65	19.27	9.63	617.37	0.10	23.44	Yes	
LRMW-7	7/26/2017	627.00	629.06	611.00	596.00	9.95	9.19	19.14	9.86	617.14	-0.23	23.11	Yes	
LRMW-7	7/27/2017	627.00	629.06	611.00	596.00	11.51	3.45	14.96	10.19	616.81	-0.33	21.55	Yes	
LRMW-7	8/4/2017	627.00	629.06	611.00	596.00	10.52	8.18	18.70	10.22	616.78	-0.03	22.54	Yes	
LRMW-7	8/8/2017	627.00	629.06	611.00	596.00	11.35	5.16	16.51	10.40	616.60	-0.18	21.71	Yes	
LRMW-7	8/15/2017	627.00	629.06	611.00	596.00	9.79	8.64	18.43	9.59	617.41	0.81	23.27	Yes	
LRMW-7	8/22/2017						<b>Portable Skimmer System Installed</b>							
LRMW-7	8/22/2017	627.00	629.06	611.00	596.00	9.36	9.24	18.60	9.29	617.71	0.30	23.70	Yes	
LRMW-7	9/7/2017	627.00	629.06	611.00	596.00	8.35	10.99	19.34	8.65	618.35	0.63	24.71	Yes	
LRMW-7	9/19/2017	627.00	629.06	611.00	596.00	10.28	7.04	17.32	9.73	617.27	-1.08	22.78	Yes	
LRMW-7	9/27/2017	627.00	629.06	611.00	596.00	11.47	0.16	11.63	9.44	617.56	0.29	21.59	Yes	
LRMW-7	10/12/2017	627.00	629.06	611.00	596.00	10.48	0.30	10.78	8.48	618.52	0.96	22.58	Yes	
LRMW-7	10/26/2017	627.00	629.06	611.00	596.00	11.01	0.06	11.07	8.96	618.04	-0.48	22.05	Yes	
LRMW-7	5/14/2018	627.00	629.06	611.00	596.00	12.26	7.36	19.62	11.78	615.22	-2.82	20.80	Yes	
LRMW-7	5/15/2018	627.00	629.06	611.00	596.00	13.49	2.96	16.45	12.07	614.93	-0.28	19.57	Yes	Portable system restarted
LRMW-7	5/23/2018	627.00	629.06	611.00	596.00	14.45	0.12	14.57	12.42	614.58	-0.35	18.61	Yes	
LRMW-7	5/24/2018	627.00	629.06	611.00	596.00	14.40	0.15	14.55	12.37	614.63	0.04	18.66	Yes	
LRMW-7	5/30/2018	627.00	629.06	611.00	596.00	13.64	0.79	14.43	11.75	615.25	0.62	19.42	Yes	
LRMW-7	6/8/2018	627.00	629.06	611.00	596.00	13.20	0.01	13.21	11.14	615.86	0.61	19.86	Yes	
LRMW-7	6/12/2018	627.00	629.06	611.00	596.00	13.35	0.05	13.40	11.30	615.70	-0.16	19.71	Yes	
LRMW-7	6/15/2018	627.00	629.06	611.00	596.00	12.71	2.52	15.23	11.19	615.81	0.11	20.35	Yes	
LRMW-7	6/19/2018	627.00	629.06	611.00	596.00	11.72	1.54	13.26	9.99	617.01	1.20	21.34	Yes	
LRMW-7	6/27/2018	627.00	629.06	611.00	596.00	12.76	0.24	13.00	10.75	616.25	-0.76	20.30	Yes	
LRMW-7	6/28/2018	627.00	629.06	611.00	596.00	12.76	0.24	13.00	10.75	616.25	0.00	20.30	Yes	
LRMW-7	7/10/2018	627.00	629.06	611.00	596.00	12.88	0.03	12.91	10.83	616.17	-0.07	20.18	Yes	
LRMW-8	7/21/2011	626.80	629.96	608.80	588.80	NP	0.00	13.62	10.46	616.34	NA	27.54	Yes	
LRMW-8	7/28/2011	626.80	629.96	608.80	588.80	NP	0.00	13.65	10.49	616.31	-0.03	27.51	Yes	
LRMW-8	8/18/2011	626.80	629.96	608.80	588.80	NP	0.00	13.37	10.21	616.59	0.28	27.79	Yes	
LRMW-8	8/25/2011	626.80	629.96	608.80	588.80	NP	0.00	13.94	10.78	616.02	-0.57	27.22	Yes	
LRMW-8	9/1/2011	626.80	629.96	608.80	588.80	NP	0.00	14.36	11.20	615.60	-0.42	26.80	Yes	
LRMW-8	9/8/2011	626.80	629.96	608.80	588.80	NP	0.00	14.94	11.78	615.02	-0.58	26.22	Yes	
LRMW-8	9/14/2011	626.80	629.96	608.80	588.80	NP	0.00	15.41	12.25	614.55	-0.47	25.75	Yes	
LRMW-8	9/23/2011	626.80	629.96	608.80	588.80	NP	0.00	15.68	12.52	614.28	-0.27	25.48	Yes	
LRMW-8	9/29/2011	626.80	629.96	608.80	588.80	NP	0.00	15.78	12.62	614.18	-0.10	25.38	Yes	
LRMW-8	10/7/2011	626.80	629.96	608.80	588.80	NP	0.00	15.95	12.79	614.01	-0.17	25.21	Yes	
LRMW-8	10/11/2011	626.80	629.96	608.80	588.80	NP	0.00	16.24	13.08	613.72	-0.29	24.92	Yes	
LRMW-8	10/21/2011	626.80	629.96	608.80	588.80	NP	0.00	16.25	13.09	613.71	-0.01	24.91	Yes	
LRMW-8	10/27/2011	626.80	629.96	608.80	588.80	NP	0.00	16.37	13.21	613.59	-0.12	24.79	Yes	
LRMW-8	11/3/2011	626.80	629.96	608.80	588.80	NP	0.00	16.63	13.47	613.33	-0.26	24.53	Yes	
LRMW-8	11/9/2011	626.80	629.96	608.80	588.80	NP	0.00	16.58	13.42	613.38	0.05	24.58	Yes	
LRMW-8	11/17/2011	626.80	629.96	608.80	588.80	NP	0.00	16.88	13.72	613.08	-0.30	24.28	Yes	
LRMW-8	11/22/2011	626.80	629.96	608.80	588.80	NP	0.00	16.89	13.73	613.07	-0.01	24.27	Yes	



**Table 4  
Groundwater and LNAPL Gauging Data - Barge Dock  
Former Amoco Terminal  
Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-8	12/1/2011	626.80	629.96	608.80	588.80	NP	0.00	17.11	13.95	612.85	-0.22	24.05	Yes	
LRMW-8	1/4/2012	626.80	629.96	608.80	588.80	NP	0.00	17.57	14.41	612.39	-0.46	23.59	Yes	
LRMW-8	2/16/2012	626.80	629.96	608.80	588.80	NP	0.00	18.29	15.13	611.67	-0.72	22.87	Yes	
LRMW-8	3/13/2012	626.80	629.96	608.80	588.80	18.00	0.38	18.38	14.92	611.88	0.21	23.16	Yes	
LRMW-8	4/16/2012	626.80	629.96	608.80	588.80	16.83	0.69	17.52	13.82	612.98	1.10	24.33	Yes	
LRMW-8	5/18/2012	626.80	629.96	608.80	588.80	15.87	0.70	16.57	12.86	613.94	0.96	25.29	Yes	
LRMW-8	6/28/2012	626.80	629.96	608.80	588.80	12.60	0.69	13.29	9.59	617.21	3.27	28.56	Yes	
LRMW-8	7/24/2012	626.80	629.96	608.80	588.80	15.24	0.71	15.95	12.23	614.57	-2.64	25.92	Yes	
LRMW-8	8/17/2012	626.80	629.96	608.80	588.80	15.79	0.94	16.73	12.83	613.97	-0.60	25.37	Yes	
LRMW-8	8/28/2012	626.80	629.96	608.80	588.80	16.18	1.03	17.21	13.24	613.56	-0.41	24.98	Yes	Spill Buddy Before Reading
LRMW-8	9/17/2012	626.80	629.96	608.80	588.80	16.91	0.47	17.38	13.85	612.95	-0.61	24.25	Yes	
LRMW-8	9/28/2012	626.80	629.96	608.80	588.80	17.23	0.56	17.79	14.19	612.61	-0.34	23.93	Yes	Spill Buddy Before Reading
LRMW-8	9/30/2012	626.80	629.96	608.80	588.80	17.34	0.11	17.45	14.20	612.60	-0.01	23.82	Yes	
LRMW-8	11/21/2012	626.80	629.96	608.80	588.80	17.04	2.32	19.36	14.38	612.42	-0.17	24.12	Yes	
LRMW-8	12/17/2012	626.80	629.96	608.80	588.80	16.94	3.28	20.22	14.48	612.32	-0.11	24.22	Yes	
LRMW-8	3/25/2013	626.80	629.96	608.80	588.80	17.69	4.80	22.49	15.56	611.24	-1.08	23.47	Yes	
LRMW-8	5/6/2013	626.80	629.96	608.80	588.80	14.60	6.19	20.79	12.77	614.03	2.79	26.56	Yes	
LRMW-8	10/3/2013	626.80	629.96	608.80	588.80	15.70	5.95	21.65	13.82	612.98	-1.05	25.46	Yes	
LRMW-8	5/22/2014	626.80	629.96	608.80	588.80	10.90	7.94	18.84	9.45	617.35	4.37	30.26	Yes	
LRMW-8	10/31/2014	626.80	629.96	608.80	588.80	13.49	8.07	21.56	12.06	614.74	-2.62	27.67	Yes	
LRMW-8	4/15/2015	626.80	629.96	608.80	588.80	15.57	6.85	22.42	13.88	612.92	-1.82	25.59	Yes	
LRMW-8	4/22/2015	626.80	629.96	608.80	588.80	16.35	0.75	17.10	13.35	613.45	0.53	24.81	Yes	
LRMW-8	4/29/2015	626.80	629.96	608.80	588.80	16.25	0.25	16.50	13.14	613.66	0.21	24.91	Yes	
LRMW-8	5/6/2015	626.80	629.96	608.80	588.80	16.30	0.23	16.53	13.19	613.61	-0.05	24.86	Yes	
LRMW-8	5/12/2015	626.80	629.96	608.80	588.80	15.61	0.22	15.83	12.50	614.30	0.69	25.55	Yes	
LRMW-8	6/9/2015	626.80	629.96	608.80	588.80	14.59	0.15	14.74	11.46	615.34	1.04	26.57	Yes	
LRMW-8	10/5/2015	626.80	629.96	608.80	588.80	14.63	0.29	14.92	11.53	615.27	-0.07	26.53	Yes	
LRMW-8	5/23/2016	626.80	629.96	608.80	588.80	13.05	0.34	13.39	9.96	616.84	1.57	28.11	Yes	
LRMW-8	10/3/2016	626.80	629.96	608.80	588.80	14.72	0.32	15.04	11.63	615.17	-1.67	26.44	Yes	
LRMW-8	5/2/2017	626.80	629.96	608.80	588.80	12.92	0.51	13.43	9.87	616.93	1.76	28.24	Yes	
LRMW-8	5/18/2017	626.80	629.96	608.80	588.80	12.77	0.51	13.28	9.72	617.08	0.15	28.39	Yes	
LRMW-8	5/31/2017	626.80	629.96	608.80	588.80	11.82	0.50	12.32	8.77	618.03	0.95	29.34	Yes	
LRMW-8	6/22/2017	626.80	629.96	608.80	588.80	13.45	0.50	13.95	10.40	616.40	-1.63	27.71	Yes	
LRMW-9	7/28/2011	625.40	627.26	606.40	586.40	11.45	0.02	11.47	9.59	615.81	NA	29.41	Yes	
LRMW-9	8/18/2011	625.40	627.26	606.40	586.40	11.17	0.04	11.21	9.32	616.08	0.28	29.69	Yes	
LRMW-9	8/25/2011	625.40	627.26	606.40	586.40	11.73	0.05	11.78	9.88	615.52	-0.56	29.13	Yes	
LRMW-9	9/1/2011	625.40	627.26	606.40	586.40	12.14	0.02	12.16	10.28	615.12	-0.40	28.72	Yes	
LRMW-9	9/8/2011	625.40	627.26	606.40	586.40	12.74	0.04	12.78	10.89	614.51	-0.60	28.12	Yes	
LRMW-9	9/14/2011	625.40	627.26	606.40	586.40	13.20	0.05	13.25	11.35	614.05	-0.46	27.66	Yes	
LRMW-9	9/23/2011	625.40	627.26	606.40	586.40	13.45	0.05	13.50	11.60	613.80	-0.25	27.41	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-9	9/29/2011	625.40	627.26	606.40	586.40	13.56	0.05	13.61	11.71	613.69	-0.11	27.30	Yes	
LRMW-9	10/7/2011	625.40	627.26	606.40	586.40	13.74	0.05	13.79	11.89	613.51	-0.18	27.12	Yes	
LRMW-9	10/11/2011	625.40	627.26	606.40	586.40	13.96	0.03	13.99	12.11	613.29	-0.22	26.90	Yes	
LRMW-9	10/21/2011	625.40	627.26	606.40	586.40	13.98	0.06	14.04	12.13	613.27	-0.03	26.88	Yes	
LRMW-9	10/27/2011	625.40	627.26	606.40	586.40	14.01	0.03	14.04	12.16	613.24	-0.02	26.85	Yes	
LRMW-9	11/3/2011	625.40	627.26	606.40	586.40	14.36	0.06	14.42	12.51	612.89	-0.36	26.50	Yes	
LRMW-9	11/9/2011	625.40	627.26	606.40	586.40	14.33	0.05	14.38	12.48	612.92	0.03	26.53	Yes	
LRMW-9	11/17/2011	625.40	627.26	606.40	586.40	14.61	0.06	14.67	12.76	612.64	-0.28	26.25	Yes	
LRMW-9	11/22/2011	625.40	627.26	606.40	586.40	14.64	0.05	14.69	12.79	612.61	-0.03	26.22	Yes	
LRMW-9	12/1/2011	625.40	627.26	606.40	586.40	14.81	0.06	14.87	12.96	612.44	-0.17	26.05	Yes	
LRMW-9	1/4/2012	625.40	627.26	606.40	586.40	15.30	0.04	15.34	13.45	611.95	-0.49	25.56	Yes	
LRMW-9	2/16/2012	625.40	627.26	606.40	586.40	16.01	0.04	16.05	14.16	611.24	-0.71	24.85	Yes	
LRMW-9	3/13/2012	625.40	627.26	606.40	586.40	15.78	0.03	15.81	13.93	611.47	0.23	25.08	Yes	
LRMW-9	4/16/2012	625.40	627.26	606.40	586.40	NP	0.00	14.59	12.73	612.67	1.20	26.27	Yes	
LRMW-9	5/18/2012	625.40	627.26	606.40	586.40	13.70	0.03	13.73	11.85	613.55	0.88	27.16	Yes	
LRMW-9	6/28/2012	625.40	627.26	606.40	586.40	10.45	0.03	10.48	8.60	616.80	3.25	30.41	Yes	
LRMW-9	7/24/2012	625.40	627.26	606.40	586.40	13.11	0.04	13.15	11.26	614.14	-2.66	27.75	Yes	
LRMW-9	8/17/2012	625.40	627.26	606.40	586.40	13.73	0.07	13.80	11.89	613.51	-0.63	27.13	Yes	
LRMW-9	8/28/2012	625.40	627.26	606.40	586.40	14.13	0.02	14.15	12.27	613.13	-0.39	26.73	Yes	
LRMW-9	9/17/2012	625.40	627.26	606.40	586.40	14.75	0.04	14.79	12.90	612.50	-0.62	26.11	Yes	
LRMW-9	9/30/2012	625.40	627.26	606.40	586.40	15.05	0.03	15.08	13.20	612.20	-0.30	25.81	Yes	
LRMW-9	11/21/2012	625.40	627.26	606.40	586.40	15.29	0.03	15.32	13.44	611.96	-0.24	25.57	Yes	
LRMW-9	12/17/2012	625.40	627.26	606.40	586.40	15.40	0.02	15.42	13.54	611.86	-0.11	25.46	Yes	
LRMW-9	3/25/2013	625.40	627.26	606.40	586.40	NP	0.00	16.59	14.73	610.67	-1.19	24.27	Yes	
LRMW-9	5/6/2013	625.40	627.26	606.40	586.40	NP	0.00	13.75	11.89	613.51	2.84	27.11	Yes	
LRMW-9	10/3/2013	625.40	627.26	606.40	586.40	NP	0.00	14.85	12.99	612.41	-1.10	26.01	Yes	
LRMW-9	5/21/2014	625.40	627.26	606.40	586.40	NP	0.00	10.55	8.69	616.71	4.30	30.31	Yes	
LRMW-9	7/30/2014	625.40	627.26	606.40	586.40	NP	0.00	13.84	11.98	613.42	-3.29	27.02	Yes	
LRMW-9	10/31/2014	625.40	627.26	606.40	586.40	NP	0.00	13.19	11.33	614.07	0.65	27.67	Yes	
LRMW-9	4/15/2015	625.40	627.26	606.40	586.40	NP	0.00	14.80	12.94	612.46	-1.61	26.06	Yes	
LRMW-9	4/22/2015	625.40	627.26	606.40	586.40	NP	0.00	14.10	12.24	613.16	0.70	26.76	Yes	
LRMW-9	4/29/2015	625.40	627.26	606.40	586.40	NP	0.00	13.91	12.05	613.35	0.19	26.95	Yes	
LRMW-9	5/5/2015	625.40	627.26	606.40	586.40	NP	0.00	14.03	12.17	613.23	-0.12	26.83	Yes	
LRMW-9	5/12/2015	625.40	627.26	606.40	586.40	NP	0.00	13.20	11.34	614.06	0.83	27.66	Yes	
LRMW-9	6/9/2015	625.40	627.26	606.40	586.40	NP	0.00	12.21	10.35	615.05	0.99	28.65	Yes	
LRMW-9	10/5/2015	625.40	627.26	606.40	586.40	NP	0.00	12.30	10.44	614.96	-0.09	28.56	Yes	
LRMW-9	5/23/2016	625.40	627.26	606.40	586.40	NP	0.00	10.78	8.92	616.48	1.52	30.08	Yes	
LRMW-9	10/3/2016	625.40	627.26	606.40	586.40	NP	0.00	12.41	10.55	614.85	-1.63	28.45	Yes	
LRMW-9	5/2/2017	625.40	627.26	606.40	586.40	NP	0.00	9.54	7.68	617.72	2.87	31.32	Yes	
LRMW-9	5/31/2017	625.40	627.26	606.40	586.40	NP	0.00	10.59	8.73	616.67	-1.05	30.27	Yes	
LRMW-9	6/22/2017	625.40	627.26	606.40	586.40	NP	0.00	11.19	9.33	616.07	-0.60	29.67	Yes	





**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
LRMW-11	5/6/2013	623.90	626.14	598.90	583.90	15.56	1.02	16.58	13.58	610.32	3.03	26.68	Yes	
LRMW-11	10/3/2013	623.90	626.14	598.90	583.90	17.26	1.55	18.81	15.41	608.49	-1.83	24.98	Yes	
LRMW-11	5/22/2014	623.90	626.14	598.90	583.90	13.09	2.19	15.28	11.40	612.50	4.01	29.15	Yes	
LRMW-11	10/31/2014	623.90	626.14	598.90	583.90	15.54	2.77	18.31	13.99	609.91	-2.60	26.70	Yes	
LRMW-11	4/15/2015	623.90	626.14	598.90	583.90	16.15	3.20	19.35	14.71	609.19	-0.72	26.09	Yes	
LRMW-11	4/22/2015	623.90	626.14	598.90	583.90	16.18	0.24	16.42	14.00	609.90	0.71	26.06	Yes	
LRMW-11	4/29/2015	623.90	626.14	598.90	583.90	16.10	0.22	16.32	13.92	609.98	0.09	26.14	Yes	
LRMW-11	5/6/2015	623.90	626.14	598.90	583.90	16.19	0.21	16.40	14.00	609.90	-0.09	26.05	Yes	
LRMW-11	5/12/2015	623.90	626.14	598.90	583.90	15.57	0.21	15.78	13.38	610.52	0.62	26.67	Yes	
LRMW-11	6/9/2015	623.90	626.14	598.90	583.90	15.06	0.21	15.27	12.87	611.03	0.51	27.18	Yes	
LRMW-11	10/5/2015	623.90	626.14	598.90	583.90	15.43	0.30	15.73	13.27	610.63	-0.39	26.81	Yes	
LRMW-11	5/23/2016	623.90	626.14	598.90	583.90	14.59	0.58	15.17	12.50	611.40	0.77	27.65	Yes	
LRMW-11	10/3/2016	623.90	626.14	598.90	583.90	15.82	0.83	16.65	13.79	610.11	-1.29	26.42	Yes	
LRMW-11	5/22/2017	623.90	626.14	598.90	583.90	14.34	1.20	15.54	12.40	611.50	1.39	27.90	Yes	
LRMW-11	5/31/2017	623.90	626.14	598.90	583.90	13.34	1.22	14.56	11.41	612.49	0.99	28.90	Yes	
LRMW-11	6/22/2017	623.90	626.14	598.90	583.90	14.83	0.44	15.27	12.70	611.20	-1.29	27.41	Yes	
MWRR-1	10/22/2003	618.12	620.46	613.12	598.03	NP	0.00	14.22	11.88	606.24	NA	8.21	No	
MWRR-1	1/20/2004	618.12	620.46	613.12	598.03	NP	0.00	14.95	12.61	605.51	-0.73	7.48	No	
MWRR-1	4/19/2004	618.12	620.46	613.12	598.03	NP	0.00	12.30	9.96	608.16	2.65	10.13	No	
MWRR-1	7/27/2004	618.12	620.46	613.12	598.03	NP	0.00	12.89	10.55	607.57	-0.59	9.54	No	
MWRR-1	11/18/2004	618.12	620.46	613.12	598.03	NP	0.00	12.29	9.95	608.17	0.60	10.14	No	
MWRR-1	4/18/2005	618.12	620.46	613.12	598.03	NP	0.00	11.82	9.48	608.64	0.47	10.61	No	
MWRR-1	10/11/2005	618.12	620.46	613.12	598.03	NP	0.00	11.59	9.25	608.87	0.23	10.84	No	
MWRR-1	5/23/2006	618.12	620.46	613.12	598.03	NP	0.00	11.75	9.41	608.71	-0.16	10.68	No	
MWRR-1	10/16/2006	618.12	620.46	613.12	598.03	NP	0.00	13.93	11.59	606.53	-2.18	8.50	No	
MWRR-1	4/23/2007	618.12	620.46	613.12	598.03	NP	0.00	11.96	9.62	608.50	1.97	10.47	No	
MWRR-1	9/25/2007	618.12	620.29	613.12	598.03	NP	0.00	11.93	9.76	608.36	-0.14	10.33	No	
MWRR-1	5/1/2008	618.12	620.29	613.12	598.03	NP	0.00	11.17	9.00	609.12	0.76	11.09	No	
MWRR-1	10/20/2008	618.12	620.29	613.12	598.03	NP	0.00	11.42	9.25	608.87	-0.25	10.84	No	
MWRR-1	8/31/2011	618.12	620.29	613.12	598.03	NP	0.00	12.35	10.18	607.94	-0.93	9.91	No	
MWRR-1	10/11/2011	618.12	620.29	613.12	598.03	NP	0.00	13.36	11.19	606.93	-1.01	8.90	No	
MWRR-1	1/4/2012	618.12	620.29	613.12	598.03	NP	0.00	14.41	12.24	605.88	-1.05	7.85	No	
MWRR-1	4/16/2012	618.12	620.29	613.12	598.03	NP	0.00	11.91	9.74	608.38	2.50	10.35	No	
MWRR-1	6/28/2012	618.12	620.29	613.12	598.03	NP	0.00	10.58	8.41	609.71	1.33	11.68	No	
MWRR-1	9/30/2012	618.12	620.29	613.12	598.03	NP	0.00	14.28	12.11	606.01	-3.70	7.98	No	
MWRR-1	12/17/2012	618.12	620.29	613.12	598.03	NP	0.00	14.27	12.10	606.02	0.01	7.99	No	
MWRR-1	3/25/2013	618.12	620.29	613.12	598.03	NP	0.00	14.95	12.78	605.34	-0.68	7.31	No	
MWRR-1	5/6/2013	618.12	620.29	613.12	598.03	NP	0.00	11.72	9.55	608.57	3.23	10.54	No	
MWRR-1	10/1/2013	618.12	620.29	613.12	598.03	NP	0.00	13.84	11.67	606.45	-2.12	8.42	No	
MWRR-1	5/21/2014	618.12	620.29	613.12	598.03	NP	0.00	10.54	8.37	609.75	3.30	11.72	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWRR-1	10/31/2014	618.12	620.29	613.12	598.03	NP	0.00	12.42	10.25	607.87	-1.88	9.84	No	
MWRR-1	5/5/2015	618.12	620.29	613.12	598.03	NP	0.00	12.40	10.23	607.89	0.02	9.86	No	
MWRR-1	10/6/2015	618.12	620.29	613.12	598.03	NP	0.00	11.82	9.65	608.47	0.58	10.44	No	
MWRR-1	5/23/2016	618.12	620.29	613.12	598.03	NP	0.00	11.47	9.30	608.82	0.35	10.79	No	
MWRR-1	10/3/2016	618.12	620.29	613.12	598.03	NP	0.00	12.34	10.17	607.95	-0.87	9.92	No	
MWRR-1	6/29/2017	618.12	620.29	613.12	598.03	NP	0.00	11.09	8.92	609.20	1.25	11.17	No	
MWRR-1D	6/18/2018	618.12	620.82	568.12	565.12	NP	0.00	7.40	4.70	613.42		48.30	Yes	
MWRR-1D	6/27/2018	618.12	620.82	568.12	565.12	NP	0.00	14.08	11.38	606.74	-6.68	41.62	Yes	
MWRR-2	10/22/2003	622.93	625.90	617.05	602.05	NP	0.00	18.77	15.80	607.13	NA	5.08	No	
MWRR-2	1/20/2004	622.93	625.90	617.05	602.05	NP	0.00	19.24	16.27	606.66	-0.47	4.61	No	
MWRR-2	4/19/2004	622.93	625.90	617.05	602.05	NP	0.00	16.92	13.95	608.98	2.32	6.93	No	
MWRR-2	7/27/2004	622.93	625.90	617.05	602.05	NP	0.00	17.25	14.28	608.65	-0.33	6.60	No	
MWRR-2	11/16/2004	622.93	625.90	617.05	602.05	NP	0.00	16.73	13.76	609.17	0.52	7.12	No	
MWRR-2	4/18/2005	622.93	625.90	617.05	602.05	NP	0.00	16.11	13.14	609.79	0.62	7.74	No	
MWRR-2	10/11/2005	622.93	625.90	617.05	602.05	NP	0.00	17.01	14.04	608.89	-0.90	6.84	No	
MWRR-2	5/23/2006	622.93	625.90	617.05	602.05	NP	0.00	16.03	13.06	609.87	0.98	7.82	No	
MWRR-2	10/16/2006	622.93	625.90	617.05	602.05	NP	0.00	18.47	15.50	607.43	-2.44	5.38	No	
MWRR-2	4/23/2007	622.93	625.90	617.05	602.05	NP	0.00	16.73	13.76	609.17	1.74	7.12	No	
MWRR-2	9/25/2007	622.93	625.73	617.05	602.05	NP	0.00	18.00	15.20	607.73	-1.44	5.68	No	
MWRR-2	5/1/2008	622.93	625.73	617.05	602.05	NP	0.00	15.14	12.34	610.59	2.86	8.54	No	
MWRR-2	10/20/2008	622.93	625.73	617.05	602.05	NP	0.00	16.21	13.41	609.52	-1.07	7.47	No	
MWRR-2	4/18/2009	622.93	625.73	617.05	602.05	NP	0.00	16.26	13.46	609.47	-0.05	7.42	No	
MWRR-2	10/11/2009	622.93	625.73	617.05	602.05	NP	0.00	18.11	15.31	607.62	-1.85	5.57	No	
MWRR-2	4/28/2010	622.93	625.73	617.05	602.05	NP	0.00	17.32	14.52	608.41	0.79	6.36	No	
MWRR-2	10/25/2010	622.93	625.73	617.05	602.05	NP	0.00	17.04	14.24	608.69	0.28	6.64	No	
MWRR-2	4/25/2011	622.93	625.73	617.05	602.05	NP	0.00	16.28	13.48	609.45	0.76	7.40	No	
MWRR-2	10/11/2011	622.93	625.73	617.05	602.05	NP	0.00	18.16	15.36	607.57	-1.88	5.52	No	
MWRR-2	1/4/2012	622.93	625.73	617.05	602.05	NP	0.00	19.08	16.28	606.65	-0.92	4.60	No	
MWRR-2	4/16/2012	622.93	625.73	617.05	602.05	NP	0.00	18.14	15.34	607.59	0.94	5.54	No	
MWRR-2	6/28/2012	622.93	625.73	617.05	602.05	NP	0.00	14.98	12.18	610.75	3.16	8.70	No	
MWRR-2	9/30/2012	622.93	625.73	617.05	602.05	NP	0.00	18.86	16.06	606.87	-3.88	4.82	No	
MWRR-2	12/17/2012	622.93	625.73	617.05	602.05	NP	0.00	19.20	16.40	606.53	-0.34	4.48	No	
MWRR-2	3/25/2013	622.93	625.73	617.05	602.05	NP	0.00	19.25	16.45	606.48	-0.05	4.43	No	
MWRR-2	5/6/2013	622.93	625.73	617.05	602.05	NP	0.00	16.39	13.59	609.34	2.86	7.29	No	
MWRR-2	10/3/2013	622.93	625.73	617.05	602.05	NP	0.00	18.77	15.97	606.96	-2.38	4.91	No	
MWRR-2	5/21/2014	622.93	625.73	617.05	602.05	NP	0.00	14.40	11.60	611.33	4.37	9.28	No	
MWRR-2	10/31/2014	622.93	625.73	617.05	602.05	NP	0.00	17.55	14.75	608.18	-3.15	6.13	No	
MWRR-2	5/5/2015	622.93	625.73	617.05	602.05	NP	0.00	17.38	14.58	608.35	0.17	6.30	No	
MWRR-2	10/6/2015	622.93	625.73	617.05	602.05	NP	0.00	17.00	14.20	608.73	0.38	6.68	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWRR-2	5/23/2016	622.93	625.73	617.05	602.05	NP	0.00	16.22	13.42	609.51	0.78	7.46	No	
MWRR-2	10/3/2016	622.93	625.73	617.05	602.05	NP	0.00	17.50	14.70	608.23	-1.28	6.18	No	
MWRR-2	6/29/2017	622.93	625.73	617.05	602.05	NP	0.00	16.55	13.75	609.18	0.95	7.13	No	
MWRR-4	10/21/2003	623.27	626.13	613.27	603.27	NP	0.00	18.85	15.99	607.28	NA	4.01	No	
MWRR-4	12/3/2003	623.27	626.13	613.27	603.27	18.65	1.45	20.10	16.09	607.18	-0.10	4.21	No	
MWRR-4	1/20/2004	623.27	626.13	613.27	603.27	18.97	2.50	21.47	16.62	606.65	-0.54	3.89	No	
MWRR-4	4/19/2004	623.27	626.13	613.27	603.27	NP	0.00	17.12	14.26	609.01	2.36	5.74	No	
MWRR-4	7/27/2004	623.27	626.13	613.27	603.27	17.06	0.10	17.16	14.22	609.05	0.04	5.80	No	
MWRR-4	11/15/2004	623.27	626.13	613.27	603.27	16.41	0.03	16.44	13.56	609.71	0.66	6.45	No	
MWRR-4	4/18/2005	623.27	626.13	613.27	603.27	16.26	0.01	16.27	13.40	609.87	0.15	6.60	No	
MWRR-4	10/11/2005	623.27	626.13	613.27	603.27	NP	0.00	16.71	13.85	609.42	-0.45	6.15	No	
MWRR-4	5/23/2006	623.27	626.13	613.27	603.27	NP	0.00	15.98	13.12	610.15	0.73	6.88	No	
MWRR-4	10/16/2006	623.27	626.13	613.27	603.27	18.29	0.94	19.23	15.62	607.65	-2.50	4.57	No	
MWRR-4	4/23/2007	623.27	626.13	613.27	603.27	NP	0.00	16.70	13.84	609.43	1.78	6.16	No	
MWRR-4	9/25/2007	623.27	626.13	613.27	603.27	NP	0.00	17.44	14.58	608.69	-0.74	5.42	No	
MWRR-4	5/1/2008	623.27	626.13	613.27	603.27	NP	0.00	15.77	12.91	610.36	1.67	7.09	No	
MWRR-4	10/20/2008	623.27	626.13	613.27	603.27	NP	0.00	16.09	13.23	610.04	-0.32	6.77	No	
MWRR-4	4/18/2009	623.27	626.13	613.27	603.27	NP	0.00	16.27	13.41	609.86	-0.18	6.59	No	
MWRR-4	10/11/2009	623.27	626.13	613.27	603.27	NP	0.00	18.00	15.14	608.13	-1.73	4.86	No	
MWRR-4	4/28/2010	623.27	626.13	613.27	603.27	NP	0.00	17.38	14.52	608.75	0.62	5.48	No	
MWRR-4	10/25/2010	623.27	626.13	613.27	603.27	NP	0.00	16.68	13.82	609.45	0.70	6.18	No	
MWRR-4	4/25/2011	623.27	626.13	613.27	603.27	NP	0.00	16.41	13.55	609.72	0.27	6.45	No	
MWRR-4	10/11/2011	623.27	626.13	613.27	603.27	NP	0.00	18.06	15.20	608.07	-1.65	4.80	No	
MWRR-4	1/4/2012	623.27	626.13	613.27	603.27	19.10	0.29	19.39	16.30	606.97	-1.10	3.76	No	
MWRR-4	4/16/2012	623.27	626.13	613.27	603.27	NP	0.00	18.04	15.18	608.09	1.12	4.82	No	
MWRR-4	6/28/2012	623.27	626.13	613.27	603.27	NP	0.00	15.12	12.26	611.01	2.92	7.74	No	
MWRR-4	9/30/2012	623.27	626.13	613.27	603.27	18.90	0.13	19.03	16.07	607.20	-3.81	3.96	No	
MWRR-4	12/17/2012	623.27	626.13	613.27	603.27	18.90	2.13	21.03	16.48	606.79	-0.41	3.96	No	
MWRR-4	3/25/2013	623.27	626.13	613.27	603.27	19.26	2.93	22.19	17.00	606.27	-0.52	3.60	No	
MWRR-4	5/6/2013	623.27	626.13	613.27	603.27	NP	0.00	16.67	13.81	609.46	3.19	6.19	No	
MWRR-4	10/3/2013	623.27	626.13	613.27	603.27	19.60	0.26	19.86	16.79	606.48	-2.98	3.26	No	
MWRR-4	5/22/2014	623.27	626.13	613.27	603.27	NP	0.00	14.85	11.99	611.28	4.80	8.01	No	
MWRR-4	10/31/2014	623.27	626.13	613.27	603.27	NP	0.00	17.27	14.41	608.86	-2.42	5.59	No	
MWRR-4	4/15/2015	623.27	626.13	613.27	603.27	NP	0.00	18.13	15.27	608.00	-0.86	4.73	No	
MWRR-4	4/22/2015	623.27	626.13	613.27	603.27	NP	0.00	17.44	14.58	608.69	0.69	5.42	No	
MWRR-4	4/29/2015	623.27	626.13	613.27	603.27	NP	0.00	17.12	14.26	609.01	0.32	5.74	No	
MWRR-4	5/6/2015	623.27	626.13	613.27	603.27	NP	0.00	17.27	14.41	608.86	-0.15	5.59	No	
MWRR-4	5/12/2015	623.27	626.13	613.27	603.27	NP	0.00	16.85	13.99	609.28	0.42	6.01	No	
MWRR-4	6/9/2015	623.27	626.13	613.27	603.27	NP	0.00	16.15	13.29	609.98	0.70	6.71	No	
MWRR-4	10/6/2015	623.27	626.13	613.27	603.27	NP	0.00	16.51	13.65	609.62	-0.36	6.35	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWRR-4	5/23/2016	623.27	626.13	613.27	603.27	NP	0.00	15.82	12.96	610.31	0.69	7.04	No	
MWRR-4	10/3/2016	623.27	626.13	613.27	603.27	NP	0.00	17.04	14.18	609.09	-1.22	5.82	No	
MWRR-4	5/22/2017	623.27	626.13	613.27	603.27	NP	0.00	15.12	12.26	611.01	1.92	7.74	No	
MWRR-4	5/31/2017	623.27	626.13	613.27	603.27	NP	0.00	15.00	12.14	611.13	0.12	7.86	No	
MWRR-4	6/22/2017	623.27	626.13	613.27	603.27	NP	0.00	15.97	13.11	610.16	-0.97	6.89	No	
MWRR-4	5/30/2018	623.27	626.13	613.27	603.27	NP	0.00	16.28	13.42	609.85	-0.31	6.58	No	
MWRR-4	6/18/2018	623.27	626.13	613.27	603.27	NP	0.00	15.79	12.93	610.34	0.49	7.07	No	
MWRR-8	10/22/2003	622.90	624.62	613.82	598.82	17.94	0.04	17.98	16.23	606.67	NA	7.86	No	
MWRR-8	1/20/2004	622.90	624.62	613.82	598.82	18.43	0.02	18.45	16.71	606.19	-0.49	7.37	No	
MWRR-8	4/19/2004	622.90	624.62	613.82	598.82	16.14	0.06	16.20	14.43	608.47	2.28	9.66	No	
MWRR-8	7/27/2004	622.90	624.62	613.82	598.82	16.37	0.23	16.60	14.69	608.21	-0.26	9.43	No	
MWRR-8	11/15/2004	622.90	624.62	613.82	598.82	15.74	0.01	15.75	14.02	608.88	0.67	10.06	No	
MWRR-8	4/18/2005	622.90	624.62	613.82	598.82	15.37	0.01	15.38	13.65	609.25	0.37	10.43	No	
MWRR-8	10/11/2005	622.90	624.62	613.82	598.82	15.77	0.04	15.81	14.06	608.84	-0.41	10.03	No	
MWRR-8	5/23/2006	622.90	624.62	613.82	598.82	15.34	0.02	15.36	13.62	609.28	0.43	10.46	No	
MWRR-8	10/16/2006	622.90	624.62	613.82	598.82	17.46	0.29	17.75	15.79	607.11	-2.17	8.34	No	
MWRR-8	4/23/2007	622.90	624.62	613.82	598.82	15.82	0.22	16.04	14.14	608.76	1.65	9.98	No	
MWRR-8	9/25/2007	622.90	624.45	613.82	598.82	17.32	0.60	17.92	15.88	607.02	-1.74	8.31	No	
MWRR-8	5/1/2008	622.90	624.45	613.82	598.82	14.56	0.09	14.65	13.03	609.87	2.86	11.07	No	
MWRR-8	10/20/2008	622.90	624.45	613.82	598.82	15.39	0.13	15.52	13.86	609.04	-0.84	10.24	No	
MWRR-8	4/18/2009	622.90	624.45	613.82	598.82	15.31	0.07	15.38	13.77	609.13	0.09	10.32	No	
MWRR-8	10/11/2009	622.90	624.45	613.82	598.82	16.98	0.52	17.50	15.53	607.37	-1.75	8.65	No	
MWRR-8	4/28/2010	622.90	624.45	613.82	598.82	16.34	0.45	16.79	14.87	608.03	0.65	9.29	No	
MWRR-8	10/25/2010	622.90	624.45	613.82	598.82	15.80	0.02	15.82	14.25	608.65	0.62	9.83	No	
MWRR-8	4/25/2011	622.90	624.45	613.82	598.82	15.38	0.07	15.45	13.84	609.06	0.41	10.25	No	
MWRR-8	10/11/2011	622.90	624.45	613.82	598.82	17.05	0.49	17.54	15.59	607.31	-1.75	8.58	No	
MWRR-8	1/4/2012	622.90	624.45	613.82	598.82	18.03	0.34	18.37	16.54	606.36	-0.95	7.60	No	
MWRR-8	4/16/2012	622.90	624.45	613.82	598.82	16.65	1.03	17.68	15.29	607.61	1.25	8.98	No	
MWRR-8	6/28/2012	622.90	624.45	613.82	598.82	14.43	0.36	14.79	12.95	609.95	2.35	11.20	No	
MWRR-8	7/26/2012	622.90	624.45	613.82	598.82	16.07	1.19	17.26	14.74	608.16	-1.80	9.56	No	Spill Buddy Before Reading
MWRR-8	8/28/2012	622.90	624.45	613.82	598.82	17.22	0.63	17.85	15.79	607.11	-1.04	8.41	No	Spill Buddy Before Reading
MWRR-8	9/28/2012	622.90	624.45	613.82	598.82	17.89	0.26	18.15	16.39	606.51	-0.60	7.74	No	Spill Buddy Before Reading
MWRR-8	9/30/2012	622.90	624.45	613.82	598.82	17.92	0.02	17.94	16.37	606.53	0.02	7.71	No	
MWRR-8	11/21/2012	622.90	624.45	613.82	598.82	17.98	0.15	18.13	16.46	606.44	-0.08	7.65	No	
MWRR-8	12/17/2012	622.90	624.45	613.82	598.82	17.98	0.20	18.18	16.47	606.43	-0.01	7.65	No	
MWRR-8	3/25/2013	622.90	624.45	613.82	598.82	18.09	1.28	19.37	16.78	606.12	-0.31	7.54	No	
MWRR-8	5/6/2013	622.90	624.45	613.82	598.82	15.39	0.63	16.02	13.96	608.94	2.82	10.24	No	
MWRR-8	10/3/2013	622.90	624.45	613.82	598.82	17.44	1.06	18.50	16.09	606.81	-2.13	8.19	No	
MWRR-8	5/22/2014	622.90	624.45	613.82	598.82	13.92	0.72	14.64	12.51	610.39	3.58	11.71	No	
MWRR-8	6/18/2014	622.90	624.45	613.82	598.82	14.54	0.87	15.41	13.15	609.75	-0.65	11.09	No	



**Table 4  
Groundwater and LNAPL Gauging Data - Barge Dock  
Former Amoco Terminal  
Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWRR-8	10/31/2014	622.90	624.45	613.82	598.82	16.28	<b>1.87</b>	18.15	15.08	607.82	-1.93	9.35	No	
MWRR-8	4/15/2015	622.90	624.45	613.82	598.82	16.54	<b>1.50</b>	18.04	15.27	607.63	-0.19	9.09	No	
MWRR-8	4/22/2015	622.90	624.45	613.82	598.82	16.21	<b>0.18</b>	16.39	14.69	608.21	0.58	9.42	No	
MWRR-8	4/29/2015	622.90	624.45	613.82	598.82	16.07	<b>0.21</b>	16.28	14.56	608.34	0.13	9.56	No	
MWRR-8	5/6/2015	622.90	624.45	613.82	598.82	16.17	<b>0.28</b>	16.45	14.67	608.23	-0.11	9.46	No	
MWRR-8	5/12/2015	622.90	624.45	613.82	598.82	15.81	<b>0.04</b>	15.85	14.27	608.63	0.41	9.82	No	
MWRR-8	6/9/2015	622.90	624.45	613.82	598.82	15.43	<b>0.05</b>	15.48	13.89	609.01	0.38	10.20	No	
MWRR-8	10/5/2015	622.90	624.45	613.82	598.82	15.77	<b>0.08</b>	15.85	14.24	608.66	-0.35	9.86	No	
MWRR-8	5/23/2016	622.90	624.45	613.82	598.82	15.26	<b>0.06</b>	15.32	13.72	609.18	0.51	10.37	No	
MWRR-8	10/3/2016	622.90	624.45	613.82	598.82	16.27	<b>0.38</b>	16.65	14.79	608.11	-1.07	9.36	No	
MWRR-8	5/22/2017	622.90	624.45	613.82	598.82	14.04	<b>0.00</b>	14.04	12.49	610.41	2.30	11.59	No	
MWRR-8	5/31/2017	622.90	624.45	613.82	598.82	14.12	<b>0.04</b>	14.16	12.58	610.32	-0.09	11.51	No	
MWRR-8	6/22/2017	622.90	624.45	613.82	598.82	15.43	<b>0.19</b>	15.62	13.92	608.98	-1.34	10.20	No	
MWRR-8	5/30/2018	622.90	624.45	613.82	598.82	15.40	<b>0.05</b>	15.45	13.86	609.04	0.06	10.23	No	
MWOW-1	10/21/2003	607.38	610.16	604.38	599.38	5.58	<b>0.17</b>	5.75	2.83	604.55	NA	5.20	Yes	
MWOW-1	1/20/2004	607.38	610.16	604.38	599.38	6.11	<b>0.24</b>	6.35	3.37	604.01	-0.54	4.67	No	
MWOW-1	4/19/2004	607.38	610.16	604.38	599.38	4.27	<b>0.13</b>	4.40	1.51	605.87	1.86	6.51	Yes	
MWOW-1	7/27/2004	607.38	610.16	604.38	599.38	5.01	<b>0.20</b>	5.21	2.26	605.12	-0.75	5.77	Yes	
MWOW-1	11/15/2004	607.38	610.16	604.38	599.38	4.53	<b>0.31</b>	4.84	1.80	605.58	0.46	6.25	Yes	
MWOW-1	4/18/2005	607.38	610.16	604.38	599.38	4.33	<b>0.31</b>	4.64	1.60	605.78	0.20	6.45	Yes	
MWOW-1	10/11/2005	607.38	610.16	604.38	599.38	4.29	<b>0.25</b>	4.54	1.55	605.83	0.05	6.49	Yes	
MWOW-1	5/23/2006	607.38	610.16	604.38	599.38	4.61	<b>0.35</b>	4.96	1.89	605.49	-0.34	6.17	Yes	
MWOW-1	10/16/2006	607.38	610.16	604.38	599.38	5.06	<b>0.02</b>	5.08	2.28	605.10	-0.40	5.72	Yes	
MWOW-1	4/23/2007	607.38	610.16	604.38	599.38	NP	<b>0.00</b>	4.10	1.32	606.06	0.96	6.68	Yes	
MWOW-1	9/25/2007	607.38	609.99	604.38	599.38	4.25	<b>0.02</b>	4.27	1.64	605.74	-0.32	6.36	Yes	
MWOW-1	5/1/2008	607.38	609.99	604.38	599.38	4.31	<b>0.05</b>	4.36	1.71	605.67	-0.06	6.30	Yes	
MWOW-1	10/20/2008	607.38	609.99	604.38	599.38	4.28	<b>0.74</b>	5.02	1.79	605.59	-0.08	6.33	Yes	
MWOW-1	4/18/2009	607.38	609.99	604.38	599.38	4.42	<b>0.26</b>	4.68	1.85	605.53	-0.06	6.19	Yes	
MWOW-1	10/11/2009	607.38	609.99	604.38	599.38	5.64	<b>0.03</b>	5.67	3.03	604.35	-1.18	4.97	No	
MWOW-1	4/28/2010	607.38	609.99	604.38	599.38	4.85	<b>0.54</b>	5.39	2.33	605.05	0.71	5.76	Yes	
MWOW-1	10/25/2010	607.38	609.99	604.38	599.38	4.32	<b>0.66</b>	4.98	1.82	605.56	0.51	6.29	Yes	
MWOW-1	4/25/2011	607.38	609.99	604.38	599.38	4.48	<b>0.71</b>	5.19	1.99	605.39	-0.17	6.13	Yes	
MWOW-1	10/11/2011	607.38	609.99	604.38	599.38	5.99	<b>0.14</b>	6.13	3.40	603.98	-1.42	4.62	No	
MWOW-1	1/4/2012	607.38	609.99	604.38	599.38	6.61	<b>0.31</b>	6.92	4.05	603.33	-0.65	4.00	No	
MWOW-1	4/16/2012	607.38	609.99	604.38	599.38	4.59	<b>0.26</b>	4.85	2.02	605.36	2.03	6.02	Yes	
MWOW-1	6/28/2012	607.38	609.99	604.38	599.38	4.70	<b>0.40</b>	5.10	2.16	605.22	-0.13	5.91	Yes	
MWOW-1	7/26/2012	607.38	609.99	604.38	599.38	5.79	<b>0.21</b>	6.00	3.21	604.17	-1.06	4.82	No	Spill Buddy Before Reading
MWOW-1	8/28/2012	607.38	609.99	604.38	599.38	6.64	<b>0.21</b>	6.85	4.06	603.32	-0.85	3.97	No	Spill Buddy Before Reading
MWOW-1	9/28/2012	607.38	609.99	604.38	599.38	7.15	<b>0.22</b>	7.37	4.58	602.80	-0.51	3.46	No	Spill Buddy Before Reading
MWOW-1	9/30/2012	607.38	609.99	604.38	599.38	7.14	<b>0.16</b>	7.30	4.56	602.82	0.02	3.47	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWOW-1	11/21/2012	607.38	609.99	604.38	599.38	NP	0.00	6.33	3.72	603.66	0.84	4.28	No	
MWOW-1	12/17/2012	607.38	609.99	604.38	599.38	NP	0.00	6.14	3.53	603.85	0.19	4.47	No	
MWOW-1	3/25/2013	607.38	609.99	604.38	599.38	NP	0.00	6.48	3.87	603.51	-0.34	4.13	No	
MWOW-1	5/6/2013	607.38	609.99	604.38	599.38	4.70	0.05	4.75	2.10	605.28	1.77	5.91	Yes	
MWOW-1	10/3/2013	607.38	609.99	604.38	599.38	NP	0.00	6.51	3.90	603.48	-1.80	4.10	No	
MWOW-1	5/21/2014	607.38	609.99	604.38	599.38	NP	0.00	4.75	2.14	605.24	1.76	5.86	Yes	
MWOW-1	7/30/2014	607.38	609.99	604.38	599.38	6.00	0.01	6.01	3.39	603.99	-1.25	4.61	No	
MWOW-1	10/31/2014	607.38	609.99	604.38	599.38	5.50	0.03	5.53	2.89	604.49	0.50	5.11	Yes	
MWOW-1	4/15/2015	607.38	609.99	604.38	599.38	4.93	0.05	4.98	2.33	605.05	0.57	5.68	Yes	
MWOW-1	4/22/2015	607.38	609.99	604.38	599.38	4.70	0.03	4.73	2.09	605.29	0.23	5.91	Yes	
MWOW-1	4/29/2015	607.38	609.99	604.38	599.38	4.86	0.01	4.87	2.25	605.13	-0.16	5.75	Yes	
MWOW-1	5/6/2015	607.38	609.99	604.38	599.38	5.03	0.01	5.04	2.42	604.96	-0.17	5.58	Yes	
MWOW-1	5/12/2015	607.38	609.99	604.38	599.38	NP	0.00	4.78	2.17	605.21	0.25	5.83	Yes	
MWOW-1	6/9/2015	607.38	609.99	604.38	599.38	NP	0.00	5.02	2.41	604.97	-0.24	5.59	Yes	
MWOW-1	10/6/2015	607.38	609.99	604.38	599.38	5.19	0.09	5.28	2.59	604.79	-0.18	5.42	Yes	
MWOW-1	5/23/2016	607.38	609.99	604.38	599.38	5.39	0.10	5.49	2.80	604.58	-0.20	5.22	Yes	
MWOW-1	10/3/2016	607.38	609.99	604.38	599.38	5.41	0.13	5.54	2.82	604.56	-0.02	5.20	Yes	
MWOW-1	5/22/2017	607.38	609.99	604.38	599.38	4.89	0.07	4.96	2.29	605.09	0.53	5.72	Yes	
MWOW-1	5/31/2017	607.38	609.99	604.38	599.38	5.03	0.09	5.12	2.43	604.95	-0.14	5.58	Yes	
MWOW-1	6/22/2017	607.38	609.99	604.38	599.38	5.64	0.10	5.74	3.05	604.33	-0.61	4.97	No	
MWOW-1	5/30/2018	607.38	609.99	604.38	599.38	5.21	0.04	5.25	2.61	604.77	0.44	5.40	Yes	
MWOW-2	10/21/2003	607.81	610.22	604.24	599.24	NP	0.00	5.01	2.60	605.21	NA	5.97	Yes	
MWOW-2	1/20/2004	607.81	610.22	604.24	599.24	NP	0.00	5.81	3.40	604.41	-0.80	5.17	Yes	
MWOW-2	4/19/2004	607.81	610.22	604.24	599.24	NP	0.00	3.34	0.93	606.88	2.47	7.64	Yes	
MWOW-2	7/27/2004	607.81	610.22	604.24	599.24	NP	0.00	4.28	1.87	605.94	-0.94	6.70	Yes	
MWOW-2	11/18/2004	607.81	610.22	604.24	599.24	NP	0.00	3.60	1.19	606.62	0.68	7.38	Yes	
MWOW-2	4/18/2005	607.81	610.22	604.24	599.24	NP	0.00	3.43	1.02	606.79	0.17	7.55	Yes	
MWOW-2	10/11/2005	607.81	610.22	604.24	599.24	NP	0.00	3.17	0.76	607.05	0.26	7.81	Yes	
MWOW-2	5/23/2006	607.81	610.22	604.24	599.24	NP	0.00	3.65	1.24	606.57	-0.48	7.33	Yes	
MWOW-2	10/16/2006	607.81	610.22	604.24	599.24	NP	0.00	4.98	2.57	605.24	-1.33	6.00	Yes	
MWOW-2	4/23/2007	607.81	610.22	604.24	599.24	NP	0.00	3.69	1.28	606.53	1.29	7.29	Yes	
MWOW-2	9/25/2007	607.81	609.88	604.24	599.24	NP	0.00	3.35	1.28	606.53	0.00	7.29	Yes	
MWOW-2	5/1/2008	607.81	609.88	604.24	599.24	NP	0.00	4.96	2.89	604.92	-1.61	5.68	Yes	
MWOW-2	10/20/2008	607.81	609.88	604.24	599.24	NP	0.00	5.05	2.98	604.83	-0.09	5.59	Yes	
MWOW-2	8/31/2011	607.81	609.88	604.24	599.24	NP	0.00	5.93	3.86	603.95	-0.88	4.71	No	
MWOW-2	10/11/2011	607.81	609.88	604.24	599.24	NP	0.00	5.68	3.61	604.20	0.25	4.96	No	
MWOW-2	1/4/2012	607.81	609.88	604.24	599.24	NP	0.00	5.22	3.15	604.66	0.46	5.42	Yes	
MWOW-2	4/16/2012	607.81	609.88	604.24	599.24	NP	0.00	2.69	0.62	607.19	2.53	7.95	Yes	
MWOW-2	6/28/2012	607.81	609.88	604.24	599.24	NP	0.00	2.32	0.25	607.56	0.37	8.32	Yes	
MWOW-2	9/30/2012	607.81	609.88	604.24	599.24	NP	0.00	5.32	3.25	604.56	-3.00	5.32	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWOW-2	12/17/2012	607.81	609.88	604.24	599.24	NP	0.00	4.79	2.72	605.09	0.53	5.85	Yes	
MWOW-2	3/25/2013	607.81	609.88	604.24	599.24	NP	0.00	19.25	17.18	590.63	-14.46	-8.61	No	
MWOW-2	5/6/2013	607.81	609.88	604.24	599.24	NP	0.00	2.86	0.79	607.02	16.39	7.78	Yes	
MWOW-2	10/1/2013	607.81	609.88	604.24	599.24	NP	0.00	4.63	2.56	605.25	-1.77	6.01	Yes	
MWOW-2	5/20/2014	607.81	609.88	604.24	599.24	NP	0.00	2.06	-0.01	607.82	2.57	8.58	Yes	
MWOW-2	10/31/2014	607.81	609.88	604.24	599.24	NP	0.00	3.58	1.51	606.30	-1.52	7.06	Yes	
MWOW-2	5/4/2015	607.81	609.88	604.24	599.24	NP	0.00	3.65	1.58	606.23	-0.07	6.99	Yes	
MWOW-2	10/6/2015	607.81	609.88	604.24	599.24	NP	0.00	3.38	1.31	606.50	0.27	7.26	Yes	
MWOW-2	5/23/2016	607.81	609.88	604.24	599.24	NP	0.00	3.50	1.43	606.38	-0.12	7.14	Yes	
MWOW-2	10/3/2016	607.81	609.88	604.24	599.24	NP	0.00	3.85	1.78	606.03	-0.35	6.79	Yes	
MWOW-2	6/29/2017	607.81	609.88	604.24	599.24	NP	0.00	3.02	0.95	606.86	0.83	7.62	Yes	
MWOW-2D	6/18/2018	607.81	610.74	572.81	569.81	NP	0.00	2.62	-0.31	608.12	608.12	38.31	Yes	
MWOW-3	10/21/2003	622.65	625.53	616.73	601.73	NP	0.00	18.89	16.01	606.64	NA	4.91	No	
MWOW-3	1/20/2004	622.65	625.53	616.73	601.73	NP	0.00	19.38	16.50	606.15	-0.49	4.42	No	
MWOW-3	4/19/2004	622.65	625.53	616.73	601.73	NP	0.00	17.06	14.18	608.47	2.32	6.74	No	
MWOW-3	7/27/2004	622.65	625.53	616.73	601.73	NP	0.00	17.56	14.68	607.97	-0.50	6.24	No	
MWOW-3	11/16/2004	622.65	625.53	616.73	601.73	NP	0.00	17.04	14.16	608.49	0.52	6.76	No	
MWOW-3	4/18/2005	622.65	625.53	616.73	601.73	NP	0.00	16.33	13.45	609.20	0.71	7.47	No	
MWOW-3	10/11/2005	622.65	625.53	616.73	601.73	NP	0.00	16.86	13.98	608.67	-0.53	6.94	No	
MWOW-3	5/23/2006	622.65	625.53	616.73	601.73	NP	0.00	16.55	13.67	608.98	0.31	7.25	No	
MWOW-3	10/16/2006	622.65	625.53	616.73	601.73	NP	0.00	18.56	15.68	606.97	-2.01	5.24	No	
MWOW-3	4/23/2007	622.65	625.53	616.73	601.73	NP	0.00	16.89	14.01	608.64	1.67	6.91	No	
MWOW-3	9/25/2007	622.65	625.36	616.73	601.73	NP	0.00	17.34	14.63	608.02	-0.62	6.29	No	
MWOW-3	5/1/2008	622.65	625.36	616.73	601.73	NP	0.00	15.57	12.86	609.79	1.77	8.06	No	
MWOW-3	10/20/2008	622.65	625.36	616.73	601.73	NP	0.00	16.51	13.80	608.85	-0.94	7.12	No	
MWOW-3	4/18/2009	622.65	625.36	616.73	601.73	NP	0.00	16.42	13.71	608.94	0.09	7.21	No	
MWOW-3	10/11/2009	622.65	625.36	616.73	601.73	NP	0.00	18.13	15.42	607.23	-1.71	5.50	No	
MWOW-3	4/28/2010	622.65	625.36	616.73	601.73	NP	0.00	17.48	14.77	607.88	0.65	6.15	No	
MWOW-3	10/25/2010	622.65	625.36	616.73	601.73	NP	0.00	16.48	13.77	608.88	1.00	7.15	No	
MWOW-3	4/25/2011	622.65	625.36	616.73	601.73	NP	0.00	16.05	13.34	609.31	0.43	7.58	No	
MWOW-3	10/11/2011	622.65	625.36	616.73	601.73	NP	0.00	19.29	16.58	606.07	-3.24	4.34	No	
MWOW-3	1/4/2012	622.65	625.36	616.73	601.73	NP	0.00	19.13	16.42	606.23	0.16	4.50	No	
MWOW-3	4/16/2012	622.65	625.36	616.73	601.73	NP	0.00	17.76	15.05	607.60	1.37	5.87	No	
MWOW-3	6/28/2012	622.65	625.36	616.73	601.73	NP	0.00	15.72	13.01	609.64	2.04	7.91	No	
MWOW-3	9/30/2012	622.65	625.36	616.73	601.73	NP	0.00	19.03	16.32	606.33	-3.31	4.60	No	
MWOW-3	12/17/2012	622.65	625.36	616.73	601.73	NP	0.00	19.02	16.31	606.34	0.01	4.61	No	
MWOW-3	3/25/2013	622.65	625.36	616.73	601.73	NP	0.00	19.20	16.49	606.16	-0.18	4.43	No	
MWOW-3	5/6/2013	622.65	625.36	616.73	601.73	NP	0.00	16.62	13.91	608.74	2.58	7.01	No	
MWOW-3	10/1/2013	622.65	625.36	616.73	601.73	NP	0.00	18.84	16.13	606.52	-2.22	4.79	No	

**Table 4  
Groundwater and LNAPL Gauging Data - Barge Dock  
Former Amoco Terminal  
Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWOW-3	5/21/2014	622.65	625.36	616.73	601.73	NP	0.00	15.25	12.54	610.11	3.59	8.38	No	
MWOW-3	7/30/2014	622.65	625.36	616.73	601.73	NP	0.00	17.64	14.93	607.72	-2.39	5.99	No	
MWOW-3	10/31/2014	622.65	625.36	616.73	601.73	NP	0.00	17.76	15.05	607.60	-0.12	5.87	No	
MWOW-3	4/15/2015	622.65	625.36	616.73	601.73	NP	0.00	17.98	15.27	607.38	-0.22	5.65	No	
MWOW-3	4/22/2015	622.65	625.36	616.73	601.73	NP	0.00	17.34	14.63	608.02	0.64	6.29	No	
MWOW-3	4/29/2015	622.65	625.36	616.73	601.73	NP	0.00	17.34	14.63	608.02	0.00	6.29	No	
MWOW-3	5/5/2015	622.65	625.36	616.73	601.73	NP	0.00	17.51	14.80	607.85	-0.17	6.12	No	
MWOW-3	5/12/2015	622.65	625.36	616.73	601.73	NP	0.00	16.92	14.21	608.44	0.59	6.71	No	
MWOW-3	6/9/2015	622.65	625.36	616.73	601.73	NP	0.00	16.79	14.08	608.57	0.13	6.84	No	
MWOW-3	10/6/2015	622.65	625.36	616.73	601.73	NP	0.00	17.27	14.56	608.09	-0.48	6.36	No	
MWOW-3	5/24/2016	622.65	625.36	616.73	601.73	NP	0.00	16.69	13.98	608.67	0.58	6.94	No	
MWOW-3	10/3/2016	622.65	625.36	616.73	601.73	NP	0.00	17.65	14.94	607.71	-0.96	5.98	No	
MWOW-3	5/22/2017	622.65	625.36	616.73	601.73	NP	0.00	15.21	12.50	610.15	2.44	8.42	No	
MWOW-3	5/31/2017	622.65	625.36	616.73	601.73	NP	0.00	15.35	12.64	610.01	-0.14	8.28	No	
MWOW-3	6/22/2017	622.65	625.36	616.73	601.73	NP	0.00	16.89	14.18	608.47	-1.54	6.74	No	
MWOW-5	10/21/2003	622.52	625.13	615.43	600.43	18.23	0.08	18.31	15.63	606.89	NA	6.47	No	
MWOW-5	1/20/2004	622.52	625.13	615.43	600.43	18.68	0.21	18.89	16.10	606.42	-0.47	6.02	No	
MWOW-5	4/19/2004	622.52	625.13	615.43	600.43	NP	0.00	14.66	12.05	610.47	4.05	10.04	No	
MWOW-5	7/27/2004	622.52	625.13	615.43	600.43	NP	0.00	14.61	12.00	610.52	0.05	10.09	No	
MWOW-5	11/15/2004	622.52	625.13	615.43	600.43	15.89	0.01	15.90	13.28	609.24	-1.28	8.81	No	
MWOW-5	4/18/2005	622.52	625.13	615.43	600.43	14.16	0.03	14.19	11.55	610.97	1.73	10.54	No	
MWOW-5	10/11/2005	622.52	625.13	615.43	600.43	NP	0.00	14.54	11.93	610.59	-0.38	10.16	No	
MWOW-5	5/23/2006	622.52	625.13	615.43	600.43	14.16	0.03	14.19	11.55	610.97	0.38	10.54	No	
MWOW-5	10/16/2006	622.52	625.13	615.43	600.43	17.36	0.10	17.46	14.77	607.75	-3.21	7.34	No	
MWOW-5	4/23/2007	622.52	625.13	615.43	600.43	13.34	0.02	13.36	10.73	611.79	4.03	11.36	No	
MWOW-5	9/25/2007	622.52	624.96	615.43	600.43	16.95	0.07	17.02	14.52	608.00	-3.79	7.58	No	
MWOW-5	5/1/2008	622.52	624.96	615.43	600.43	16.23	0.07	16.30	13.80	608.72	0.72	8.30	No	
MWOW-5	10/20/2008	622.52	624.96	615.43	600.43	12.80	0.05	12.85	10.37	612.15	3.43	11.73	No	
MWOW-5	4/18/2009	622.52	624.96	615.43	600.43	14.15	0.06	14.21	11.72	610.80	-1.35	10.38	No	
MWOW-5	10/11/2009	622.52	624.96	615.43	600.43	16.46	0.18	16.64	14.05	608.47	-2.33	8.07	No	
MWOW-5	4/28/2010	622.52	624.96	615.43	600.43	14.59	0.09	14.68	12.16	610.36	1.88	9.94	No	
MWOW-5	10/25/2010	622.52	624.96	615.43	600.43	15.41	0.07	15.48	12.98	609.54	-0.82	9.12	No	
MWOW-5	4/25/2011	622.52	624.96	615.43	600.43	13.22	0.08	13.30	10.79	611.73	2.19	11.31	No	
MWOW-5	10/11/2011	622.52	624.96	615.43	600.43	13.22	1.08	14.30	10.95	611.57	-0.16	11.31	No	
MWOW-5	1/4/2012	622.52	624.96	615.43	600.43	18.60	0.50	19.10	16.24	606.28	-5.29	5.93	No	
MWOW-5	4/16/2012	622.52	624.96	615.43	600.43	15.82	0.07	15.89	13.39	609.13	2.85	8.71	No	
MWOW-5	6/28/2012	622.52	624.96	615.43	600.43	13.69	0.06	13.75	11.26	611.26	2.13	10.84	No	
MWOW-5	7/26/2012	622.52	624.96	615.43	600.43	16.19	0.12	16.31	13.77	608.75	-2.51	8.34	No	Spill Buddy Before Reading
MWOW-5	8/28/2012	622.52	624.96	615.43	600.43	17.45	0.35	17.80	15.07	607.45	-1.30	7.08	No	Spill Buddy Before Reading
MWOW-5	9/28/2012	622.52	624.96	615.43	600.43	18.15	0.27	18.42	15.75	606.77	-0.69	6.38	No	Spill Buddy Before Reading

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MWOW-5	9/30/2012	622.52	624.96	615.43	600.43	18.04	0.15	18.19	15.62	606.90	0.13	6.49	No	
MWOW-5	11/21/2012	622.52	624.96	615.43	600.43	18.20	0.19	18.39	15.79	606.73	-0.17	6.33	No	
MWOW-5	12/17/2012	622.52	624.96	615.43	600.43	18.17	0.16	18.33	15.76	606.76	0.03	6.36	No	
MWOW-5	3/25/2013	622.52	624.96	615.43	600.43	17.85	0.23	18.08	15.45	607.07	0.31	6.68	No	
MWOW-5	5/6/2013	622.52	624.96	615.43	600.43	14.42	0.07	14.49	11.99	610.53	3.46	10.11	No	
MWOW-5	10/3/2013	622.52	624.96	615.43	600.43	17.87	0.15	18.02	15.45	607.07	-3.46	6.66	No	
MWOW-5	5/22/2014	622.52	624.96	615.43	600.43	13.07	0.04	13.11	10.64	611.88	4.82	11.46	No	
MWOW-5	6/18/2014	622.52	624.96	615.43	600.43	14.02	0.05	14.07	11.59	610.93	-0.95	10.51	No	
MWOW-5	10/31/2014	622.52	624.96	615.43	600.43	16.84	0.01	16.85	14.40	608.12	-2.81	7.69	No	
MWOW-5	4/15/2015	622.52	624.96	615.43	600.43	NP	0.00	16.61	14.17	608.35	0.23	7.92	No	
MWOW-5	4/22/2015	622.52	624.96	615.43	600.43	NP	0.00	15.93	13.49	609.03	0.68	8.60	No	
MWOW-5	4/29/2015	622.52	624.96	615.43	600.43	NP	0.00	15.64	13.20	609.32	0.29	8.89	No	
MWOW-5	5/6/2015	622.52	624.96	615.43	600.43	15.72	0.01	15.73	13.28	609.24	-0.08	8.81	No	
MWOW-5	5/12/2015	622.52	624.96	615.43	600.43	NP	0.00	15.29	12.85	609.67	0.43	9.24	No	
MWOW-5	6/9/2015	622.52	624.96	615.43	600.43	14.57	0.02	14.59	12.13	610.39	0.72	9.96	No	
MWOW-5	10/5/2015	622.52	624.96	615.43	600.43	15.39	0.02	15.41	12.95	609.57	-0.82	9.14	No	
MWOW-5	5/23/2016	622.52	624.96	615.43	600.43	14.61	0.02	14.63	12.17	610.35	0.78	9.92	No	
MWOW-5	10/3/2016	622.52	624.96	615.43	600.43	NP	0.00	17.29	14.85	607.67	-2.68	7.24	No	
MWOW-5	5/22/2017	622.52	624.96	615.43	600.43	14.76	0.03	14.79	12.32	610.20	2.53	9.77	No	
MWOW-5	5/31/2017	622.52	624.96	615.43	600.43	13.30	0.10	13.40	10.88	611.64	1.45	11.23	No	
MWOW-5	6/22/2017	622.52	624.96	615.43	600.43	15.02	0.07	15.09	12.59	609.93	-1.72	9.51	No	
MWOW-5	5/30/2018	622.52	624.96	615.43	600.43	14.94	0.03	14.97	12.50	610.02	0.09	9.59	No	
RWAST-1	10/11/2009	628.35	629.81	618.35	598.35	NP	0.00	15.02	13.56	614.79	NA	16.44	No	
RWAST-1	4/28/2010	628.35	629.81	618.35	598.35	NP	0.00	14.68	13.22	615.13	0.34	16.78	No	
RWAST-1	10/25/2010	628.35	629.81	618.35	598.35	NP	0.00	12.79	11.33	617.02	1.89	18.67	No	
RWAST-1	4/25/2011	628.35	629.81	618.35	598.35	NP	0.00	13.29	11.83	616.52	-0.50	18.17	No	
RWAST-1	10/11/2011	628.35	629.81	618.35	598.35	NP	0.00	14.31	12.85	615.50	-1.02	17.15	No	
RWAST-1	1/4/2012	628.35	629.81	618.35	598.35	NP	0.00	15.79	14.33	614.02	-1.48	15.67	No	
RWAST-1	2/16/2012	628.35	629.81	618.35	598.35	NP	0.00	16.47	15.01	613.34	-0.68	14.99	No	
RWAST-1	3/13/2012	628.35	629.81	618.35	598.35	NP	0.00	16.54	15.08	613.27	-0.07	14.92	No	
RWAST-1	4/16/2012	628.35	629.81	618.35	598.35	NP	0.00	15.86	14.40	613.95	0.68	15.60	No	
RWAST-1	6/28/2012	628.35	629.81	618.35	598.35	NP	0.00	11.30	9.84	618.51	4.56	20.16	Yes	
RWAST-1	9/30/2012	628.35	629.81	618.35	598.35	NP	0.00	15.49	14.03	614.32	-4.19	15.97	No	
RWAST-1	11/21/2012	628.35	629.81	618.35	598.35	NP	0.00	15.96	14.50	613.85	-0.47	15.50	No	
RWAST-1	12/17/2012	628.35	629.81	618.35	598.35	NP	0.00	16.22	14.76	613.59	-0.26	15.24	No	
RWAST-1	3/25/2013	628.35	629.81	618.35	598.35	NP	0.00	17.26	15.80	612.55	-1.04	14.20	No	
RWAST-1	5/6/2013	628.35	629.81	618.35	598.35	NP	0.00	15.23	13.77	614.58	2.03	16.23	No	
RWAST-1	5/23/2016	628.35	629.81	618.35	598.35	NP	0.00	11.08	9.62	618.73	4.15	20.38	Yes	
RWAST-1	10/3/2016	628.35	629.81	618.35	598.35	NP	0.00	12.91	11.45	616.90	-1.83	18.55	No	
RWAST-1	6/29/2017	628.35	629.81	618.35	598.35	NP	0.00	11.91	10.45	617.90	1.00	19.55	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
RWAST-1	5/30/2018	628.35	629.81	618.35	598.35	NP	0.00	13.28	11.82	616.53	-1.37	18.18	No	
RWAST-1	6/18/2018	628.35	629.81	618.35	598.35	NP	0.00	11.67	10.21	618.14	1.61	19.79	No	
RWAST-1	6/27/2018	628.35	629.81	618.35	598.35	NP	0.00	11.90	10.44	617.91	-0.23	19.56	No	
RWAST-2	10/11/2011	629.37	631.54	615.37	600.37	NP	0.00	15.58	13.41	615.96	NA	15.59	Yes	
RWAST-2	1/4/2012	629.37	631.54	615.37	600.37	NP	0.00	17.19	15.02	614.35	-1.61	13.98	No	
RWAST-2	2/16/2012	629.37	631.54	615.37	600.37	NP	0.00	17.89	15.72	613.65	-0.70	13.28	No	
RWAST-2	3/13/2012	629.37	631.54	615.37	600.37	17.99	0.43	18.42	15.91	613.46	-0.19	13.18	No	
RWAST-2	4/16/2012	629.37	631.54	615.37	600.37	16.46	3.70	20.16	15.08	614.29	0.83	14.71	No	
RWAST-2	6/28/2012	629.37	631.54	615.37	600.37	11.79	3.75	15.54	10.43	618.94	4.66	19.38	Yes	
RWAST-2	7/3/2012	629.37	631.54	615.37	600.37	12.38	3.73	16.11	11.01	618.36	-0.59	18.79	Yes	Spill Buddy Before Reading
RWAST-2	8/28/2012	629.37	631.54	615.37	600.37	15.95	0.04	15.99	13.79	615.58	-2.78	15.22	Yes	
RWAST-2	9/28/2012	629.37	631.54	615.37	600.37	16.83	0.06	16.89	14.67	614.70	-0.88	14.34	No	Spill Buddy Before Reading
RWAST-2	9/30/2012	629.37	631.54	615.37	600.37	16.83	0.01	16.84	14.66	614.71	0.01	14.34	No	
RWAST-2	11/21/2012	629.37	631.54	615.37	600.37	17.44	0.33	17.77	15.34	614.03	-0.68	13.73	No	
RWAST-2	12/17/2012	629.37	631.54	615.37	600.37	17.44	1.90	19.34	15.68	613.69	-0.34	13.73	No	
RWAST-2	3/25/2013	629.37	631.54	615.37	600.37	17.21	6.31	23.52	16.40	612.97	-0.72	13.96	No	
RWAST-2	4/29/2013	629.37	631.54	615.37	600.37	15.79	5.31	21.10	14.76	614.61	1.63	15.38	No	Spill Buddy Before Reading
RWAST-2	5/6/2013	629.37	631.54	615.37	600.37	16.37	1.99	18.36	14.63	614.74	0.13	14.80	No	
RWAST-2	10/3/2013	629.37	631.54	615.37	600.37	16.51	2.61	19.12	14.90	614.47	-0.27	14.66	No	
RWAST-2	5/22/2014	629.37	631.54	615.37	600.37	12.14	3.59	15.73	10.74	618.63	4.16	19.03	Yes	
RWAST-2	10/31/2014	629.37	631.54	615.37	600.37	14.23	3.55	17.78	12.82	616.55	-2.08	16.94	Yes	
RWAST-2	4/15/2015	629.37	631.54	615.37	600.37	15.98	5.64	21.62	15.02	614.35	-2.20	15.19	No	
RWAST-2	4/22/2015	629.37	631.54	615.37	600.37	16.04	3.13	19.17	14.54	614.83	0.48	15.13	No	
RWAST-2	4/29/2015	629.37	631.54	615.37	600.37	15.26	2.07	17.33	13.53	615.84	1.01	15.91	Yes	
RWAST-2	5/6/2015	629.37	631.54	615.37	600.37	16.22	0.93	17.15	14.25	615.12	-0.72	14.95	No	
RWAST-2	5/12/2015	629.37	631.54	615.37	600.37	15.76	1.14	16.90	13.83	615.54	0.41	15.41	Yes	
RWAST-2	6/9/2015	629.37	631.54	615.37	600.37	14.60	0.25	14.85	12.48	616.89	1.35	16.57	Yes	
RWAST-2	7/10/2015	629.37	631.54	615.37	600.37	15.33	0.06	15.39	13.17	616.20	-0.69	15.84	Yes	
RWAST-2	7/13/2015	629.37	631.54	615.37	600.37	15.25	0.09	15.34	13.10	616.27	0.07	15.92	Yes	
RWAST-2	7/15/2015	629.37	631.54	615.37	600.37	15.42	0.03	15.45	13.26	616.11	-0.16	15.75	Yes	
RWAST-2	7/17/2015	629.37	631.54	615.37	600.37	15.35	0.04	15.39	13.19	616.18	0.07	15.82	Yes	
RWAST-2	7/18/2015	629.37	631.54	615.37	600.37	15.38	0.03	15.41	13.22	616.15	-0.03	15.79	Yes	
RWAST-2	7/21/2015	629.37	631.54	615.37	600.37	15.60	0.04	15.64	13.44	615.93	-0.22	15.57	Yes	
RWAST-2	7/22/2015	629.37	631.54	615.37	600.37	15.65	0.04	15.69	13.49	615.88	-0.05	15.52	Yes	
RWAST-2	7/23/2015	629.37	631.54	615.37	600.37	15.70	0.06	15.76	13.54	615.83	-0.05	15.47	Yes	
RWAST-2	7/25/2015	629.37	631.54	615.37	600.37	15.78	0.01	15.79	13.61	615.76	-0.07	15.39	Yes	
RWAST-2	7/27/2015	629.37	631.54	615.37	600.37	15.87	0.02	15.89	13.70	615.67	-0.09	15.30	Yes	
RWAST-2	7/24/2015	629.37	631.54	615.37	600.37	15.64	0.02	15.66	13.47	615.90	0.23	15.53	Yes	
RWAST-2	7/31/2015	629.37	631.54	615.37	600.37	16.01	0.01	16.02	13.84	615.53	-0.37	15.16	Yes	
RWAST-2	8/4/2015	629.37	631.54	615.37	600.37	16.16	0.01	16.17	13.99	615.38	-0.15	15.01	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
RWAST-2	8/7/2015	629.37	631.54	615.37	600.37	16.13	0.01	16.14	13.96	615.41	0.03	15.04	Yes	
RWAST-2	8/12/2015	629.37	631.54	615.37	600.37	16.13	0.00	16.13	13.96	615.41	0.00	15.04	Yes	
RWAST-2	8/14/2015	629.37	631.54	615.37	600.37	16.18	0.00	16.18	14.01	615.36	-0.05	14.99	No	
RWAST-2	8/15/2015	629.37	631.54	615.37	600.37	16.18	0.03	16.21	14.02	615.35	-0.01	14.99	No	
RWAST-2	8/17/2015	629.37	631.54	615.37	600.37	16.26	0.01	16.27	14.09	615.28	-0.08	14.91	No	
RWAST-2	9/10/2015	629.37	631.54	615.37	600.37	NP	0.00	15.67	13.50	615.87	0.59	15.50	Yes	
RWAST-2	9/14/2015	629.37	631.54	615.37	600.37	NP	0.00	15.73	13.56	615.81	-0.06	15.44	Yes	
RWAST-2	9/24/2015	629.37	631.54	615.37	600.37	NP	0.00	15.06	12.89	616.48	0.67	16.11	Yes	
RWAST-2	10/1/2015	629.37	631.54	615.37	600.37	NP	0.00	14.73	12.56	616.81	0.33	16.44	Yes	
RWAST-2	10/5/2015	629.37	631.54	615.37	600.37	NP	0.00	14.70	12.53	616.84	1.56	16.47	Yes	
RWAST-2	10/29/2015	629.37	631.54	615.37	600.37	NP	0.00	15.07	12.90	616.47	-0.37	16.10	Yes	
RWAST-2	11/3/2015	629.37	631.54	615.37	600.37	NP	0.00	14.90	12.73	616.64	0.17	16.27	Yes	
RWAST-2	4/21/2016	629.37	631.54	615.37	600.37	NP	0.00	12.26	10.09	619.28	2.64	18.91	Yes	
RWAST-2	4/27/2016	629.37	631.54	615.37	600.37	NP	0.00	11.31	9.14	620.23	0.95	19.86	Yes	
RWAST-2	5/18/2016	629.37	631.54	615.37	600.37	NP	0.00	12.19	10.02	619.35	-0.88	18.98	Yes	
RWAST-2	5/23/2016	629.37	631.54	615.37	600.37	NP	0.00	12.35	10.18	619.19	-0.16	18.82	Yes	
RWAST-2	5/31/2016	629.37	631.54	615.37	600.37	NP	0.00	12.41	10.24	619.13	-0.06	18.76	Yes	
RWAST-2	6/14/2016	629.37	631.54	615.37	600.37	NP	0.00	12.21	10.04	619.33	0.20	18.96	Yes	
RWAST-2	6/21/2016	629.37	631.54	615.37	600.37	NP	0.00	11.76	9.59	619.78	0.45	19.41	Yes	
RWAST-2	7/21/2016	629.37	631.54	615.37	600.37	NP	0.00	12.50	10.33	619.04	-0.74	18.67	Yes	
RWAST-2	7/25/2016	629.37	631.54	615.37	600.37	NP	0.00	12.94	10.77	618.60	-0.44	18.23	Yes	
RWAST-2	9/2/2016	629.37	631.54	615.37	600.37	NP	0.00	14.28	12.11	617.26	-1.34	16.89	Yes	
RWAST-2	10/3/2016	629.37	631.54	615.37	600.37	NP	0.00	14.42	12.25	617.12	-0.14	16.75	Yes	
RWAST-2	10/13/2016	629.37	631.54	615.37	600.37	NP	0.00	14.68	12.51	616.86	-0.26	16.49	Yes	
RWAST-2	5/18/2017	629.37	631.54	615.37	600.37	NP	0.00	12.63	10.46	618.91	2.05	18.54	Yes	
RWAST-2	5/31/2017	629.37	631.54	615.37	600.37	NP	0.00	11.11	8.94	620.43	1.52	20.06	Yes	
RWAST-2	5/14/2018	629.37	631.54	615.37	600.37	NP	0.00	15.02	12.85	616.52	-3.91	16.15	Yes	
RWAST-2	5/30/2018	629.37	631.54	615.37	600.37	NP	0.00	14.80	12.63	616.74	0.22	16.37	Yes	
RWAST-2	6/18/2018	629.37	631.54	615.37	600.37	NP	0.00	13.12	10.95	618.42	1.68	18.05	Yes	
RWAST-2	6/27/2018	629.37	631.54	615.37	600.37	NP	0.00	13.34	11.17	618.20	-0.22	17.83	Yes	
RW-08	09/10/15	631.12	630.82	621.12	601.12	NP	0.00	14.93	15.23	615.89	NA	14.77	No	
RW-08	09/14/15	631.12	630.82	621.12	601.12	NP	0.00	14.79	15.09	616.03	0.14	14.91	No	
RW-08	10/01/15	631.12	630.82	621.12	601.12	NP	0.00	14.01	14.31	616.81	0.78	15.69	No	
RW-08	10/05/15	631.12	630.82	621.12	601.12	NP	0.00	13.88	14.18	616.94	0.13	15.82	No	
RW-08	04/11/16	631.12	630.82	621.12	601.12	NP	0.00	12.29	12.59	618.53	1.59	17.41	No	
RW-08	05/23/16	631.12	630.82	621.12	601.12	NP	0.00	11.74	12.04	619.08	0.55	17.96	No	
RW-08	10/03/16	631.12	630.82	621.12	601.12	13.43	0.09	13.52	13.75	617.37	-1.71	16.27	No	
RW-08	05/02/17	631.12	630.82	621.12	601.12	NP	0.00	12.71	13.01	618.11	0.74	16.99	No	
RW-08	05/18/17	631.12	630.82	621.12	601.12	NP	0.00	12.33	12.63	618.49	0.38	17.37	No	
RW-08	05/22/17	631.12	630.82	621.12	601.12	10.45	0.51	10.96	10.87	620.25	1.76	19.25	No	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
RW-08	05/25/17	631.12	630.82	621.12	601.12	NP	0.00	10.75	11.05	620.07	-0.18	18.95	No	
RW-08	05/31/17	631.12	630.82	621.12	601.12	NP	0.00	10.73	11.03	620.09	0.02	18.97	No	
RW-08	08/30/17	631.12	630.82	621.12	601.12	NP	0.00	10.10	10.40	620.72	0.63	19.60	No	
RW-08	09/19/17	631.12	630.82	621.12	601.12	11.51	0.02	11.53	11.81	619.31	-1.41	18.19	No	
RW-08	05/14/18	631.12	630.82	621.12	601.12	14.56	0.08	14.64	14.88	616.24	-3.06	15.14	No	
RW-08	05/23/18	631.12	630.82	621.12	601.12	14.62	0.08	14.70	14.94	616.18	-0.06	15.08	No	
RW-08	05/30/18	631.12	630.82	621.12	601.12	14.27	0.04	14.31	14.58	616.54	0.36	15.43	No	
RW-09	09/10/15	631.17	631.02	621.17	601.17	NP	0.00	15.28	15.43	615.74	NA	14.57	No	
RW-09	09/14/15	631.17	631.02	621.17	601.17	NP	0.00	15.18	15.33	615.84	0.10	14.67	No	
RW-09	10/01/15	631.17	631.02	621.17	601.17	NP	0.00	14.40	14.55	616.62	0.78	15.45	No	
RW-09	10/05/15	631.17	631.02	621.17	601.17	NP	0.00	14.30	14.45	616.72	0.10	15.55	No	
RW-09	04/11/16	631.17	631.02	621.17	601.17	13.66	1.66	15.32	14.18	616.99	0.27	16.19	No	
RW-09	05/23/16	631.17	631.02	621.17	601.17	11.15	5.13	16.28	12.46	618.71	1.73	18.70	No	
RW-09	07/15/16	631.17	631.02	621.17	601.17	11.94	0.24	12.18	12.14	619.03	0.31	17.91	No	
RW-09	07/21/16	631.17	631.02	621.17	601.17	11.97	0.30	12.27	12.19	618.98	-0.04	17.88	No	
RW-09	07/25/16	631.17	631.02	621.17	601.17	12.18	0.44	12.62	12.43	618.74	-0.24	17.67	No	
RW-09	08/01/16	631.17	631.02	621.17	601.17	12.63	1.22	13.85	13.06	618.11	-0.63	17.22	No	
RW-09	08/09/16	631.17	631.02	621.17	601.17	12.79	1.36	14.15	13.25	617.92	-0.19	17.06	No	
RW-09	08/18/16	631.17	631.02	621.17	601.17	13.23	0.16	13.39	13.42	617.75	-0.17	16.62	No	
RW-09	08/29/16	631.17	631.02	621.17	601.17	13.59	0.35	13.94	13.82	617.35	-0.40	16.26	No	
RW-09	09/02/16	631.17	631.02	621.17	601.17	13.76	0.02	13.78	13.91	617.26	-0.10	16.09	No	
RW-09	09/20/16	631.17	631.02	621.17	601.17	13.26	0.74	14.00	13.58	617.59	0.34	16.59	No	
RW-09	10/03/16	631.17	631.02	621.17	601.17	13.60	0.94	14.54	13.96	617.21	-0.39	16.25	No	
RW-09	10/06/16	631.17	631.02	621.17	601.17	13.80	1.01	14.81	14.18	616.99	-0.22	16.05	No	
RW-09	10/13/16	631.17	631.02	621.17	601.17	13.86	1.03	14.89	14.24	616.93	-0.06	15.99	No	
RW-09	05/02/17	631.17	631.02	621.17	601.17	12.94	0.70	13.64	13.25	617.92	0.99	16.91	No	
RW-09	05/18/17	631.17	631.02	621.17	601.17	12.39	0.29	12.68	12.61	618.56	0.64	17.46	No	
RW-09	05/22/17	631.17	631.02	621.17	601.17	NP	0.00	10.96	11.11	620.06	1.50	18.89	No	
RW-09	05/25/17	631.17	631.02	621.17	601.17	10.81	0.26	11.07	11.02	620.15	0.09	19.04	No	
RW-09	05/31/17	631.17	631.02	621.17	601.17	10.81	0.24	11.05	11.01	620.16	0.00	19.04	No	
RW-09	08/30/17	631.17	631.02	621.17	601.17	10.20	0.30	10.50	10.42	620.75	0.60	19.65	No	
RW-09	09/19/17	631.17	631.02	621.17	601.17	11.71	0.32	12.03	11.93	619.24	-1.51	18.14	No	
RW-09	05/14/18	631.17	631.02	621.17	601.17	14.72	0.48	15.20	14.98	616.19	-3.05	15.13	No	
RW-09	05/23/18	631.17	631.02	621.17	601.17	14.85	0.48	15.33	15.11	616.06	-0.13	15.00	No	
RW-09	05/24/18	631.17	631.02	621.17	601.17	14.85	0.40	15.25	15.09	616.08	0.02	15.00	No	
RW-09	05/30/18	631.17	631.02	621.17	601.17	14.49	0.37	14.86	14.72	616.45	0.37	15.36	No	
MRW-1	2/19/2003	626.10	630.41	610.10	605.10	17.39	0.13	17.52	13.11	612.99	NA	7.92	Yes	
MRW-1	3/13/2003	626.10	630.41	610.10	605.10	17.72	0.11	17.83	13.43	612.67	-0.33	7.59	Yes	
MRW-1	4/9/2003	626.10	630.41	610.10	605.10	17.55	0.02	17.57	13.24	612.86	0.19	7.76	Yes	



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-1	4/18/2003	626.10	630.41	610.10	605.10	17.55	0.04	17.59	13.25	612.85	0.00	7.76	Yes	
MRW-1	4/25/2003	626.10	630.41	610.10	605.10	17.1	0.04	17.14	12.80	613.30	0.45	8.21	Yes	
MRW-1	5/15/2003	626.10	630.41	610.10	605.10	16.45	0.20	16.65	12.18	613.92	0.62	8.86	Yes	
MRW-1	6/10/2003	626.10	630.41	610.10	605.10	16.11	0.18	16.29	11.84	614.26	0.34	9.20	Yes	
MRW-1	7/2/2003	626.10	630.41	610.10	605.10	15.74	0.42	16.16	11.52	614.58	0.32	9.57	Yes	
MRW-1	7/7/2003	626.10	630.41	610.10	605.10	15.65	0.70	16.35	11.49	614.61	0.03	9.66	Yes	
MRW-1	7/30/2003	626.10	630.41	610.10	605.10	15.73	0.70	16.43	11.57	614.53	-0.08	9.58	Yes	
MRW-1	8/12/2003	626.10	630.41	610.10	605.10	16.24	0.98	17.22	12.14	613.96	-0.57	9.07	Yes	
MRW-1	9/8/2003	626.10	630.41	610.10	605.10	16.1	4.80	20.90	12.82	613.28	-0.68	9.21	Yes	
MRW-1	10/2/2003	626.10	630.41	610.10	605.10	16.97	0.15	17.12	12.69	613.41	0.13	8.34	Yes	
MRW-1	10/20/2003	626.10	630.41	610.10	605.10	17.02	0.13	17.15	12.74	613.36	-0.05	8.29	Yes	
MRW-1	12/3/2003	626.10	630.41	610.10	605.10	17.54	0.04	17.58	13.24	612.86	-0.50	7.77	Yes	
MRW-1	1/8/2004	626.10	630.41	610.10	605.10	17.93	0.48	18.41	13.72	612.38	-0.48	7.38	Yes	
MRW-1	1/20/2004	626.10	630.41	610.10	605.10	18.05	0.28	18.33	13.80	612.30	-0.08	7.26	Yes	
MRW-1	2/24/2004	626.10	630.41	610.10	605.10	18.42	0.02	18.44	14.11	611.99	-0.31	6.89	Yes	
MRW-1	3/22/2004	626.10	630.41	610.10	605.10	18.04	0.05	18.09	13.74	612.36	0.37	7.27	Yes	
MRW-1	4/19/2004	626.10	630.41	610.10	605.10	16.9	0.12	17.02	12.62	613.48	1.12	8.41	Yes	
MRW-1	5/18/2004	626.10	630.41	610.10	605.10	16.27	0.09	16.36	11.98	614.12	0.64	9.04	Yes	
MRW-1	6/17/2004	626.10	630.41	610.10	605.10	15.4	0.10	15.50	11.11	614.99	0.87	9.91	Yes	
MRW-1	6/28/2004	626.10	630.41	610.10	605.10	15.96	0.03	15.99	11.66	614.44	-0.54	9.35	Yes	
MRW-1	7/27/2004	626.10	630.41	610.10	605.10	15.98	0.07	16.05	11.69	614.41	-0.03	9.33	Yes	
MRW-1	8/24/2004	626.10	630.41	610.10	605.10	16.03	0.84	16.87	11.90	614.20	-0.22	9.28	Yes	
MRW-1	9/8/2004	626.10	630.41	610.10	605.10	15.9	0.61	16.51	11.72	614.38	0.18	9.41	Yes	
MRW-1	9/9/2004	626.10	630.41	610.10	605.10	15.87	0.24	16.11	11.61	614.49	0.11	9.44	Yes	
MRW-1	9/28/2004	626.10	630.41	610.10	605.10	15.14	0.26	15.40	10.89	615.21	0.73	10.17	Yes	
MRW-1	10/20/2004	626.10	630.41	610.10	605.10	15.58	0.01	15.59	11.27	614.83	-0.39	9.73	Yes	
MRW-1	11/23/2004	626.10	630.41	610.10	605.10	15.04	0.71	15.75	10.88	615.22	0.39	10.27	Yes	
MRW-1	1/5/2005	626.10	630.41	610.10	605.10	15.94	0.74	16.68	11.79	614.31	-0.91	9.37	Yes	
MRW-1	2/26/2005	626.10	630.41	610.10	605.10	16.76	0.16	16.92	12.48	613.62	-0.70	8.55	Yes	
MRW-1	3/29/2005	626.10	630.41	610.10	605.10	NP	0.00							
MRW-1	4/29/2005	626.10	630.41	610.10	605.10	14.87	0.40	15.27	10.65	615.45	1.84	10.44	Yes	
MRW-1	5/31/2005	626.10	630.41	610.10	605.10	14.22	0.34	14.56	9.98	616.12	0.66	11.09	Yes	
MRW-1	6/28/2005	626.10	630.41	610.10	605.10	13.63	0.38	14.01	9.40	616.70	0.58	11.68	Yes	
MRW-1	7/28/2005	626.10	630.41	610.10	605.10	14.88	0.44	15.32	10.66	615.44	-1.26	10.43	Yes	
MRW-1	8/11/2005	626.10	630.41	610.10	605.10	15.39	0.12	15.51	11.11	614.99	-0.44	9.92	Yes	
MRW-1	9/1/2005	626.10	630.41	610.10	605.10	16.12	0.26	16.38	11.87	614.23	-0.76	9.19	Yes	
MRW-1	9/16/2005	626.10	630.41	610.10	605.10	16.23	0.19	16.42	11.96	614.14	-0.09	9.08	Yes	
MRW-1	10/6/2005	626.10	630.41	610.10	605.10	14.63	0.21	14.84	10.37	615.73	1.60	10.68	Yes	
MRW-1	10/24/2005	626.10	630.41	610.10	605.10	14.61	0.18	14.79	10.34	615.76	0.03	10.70	Yes	
MRW-1	11/23/2005	626.10	630.41	610.10	605.10	13.99	0.12	14.11	9.71	616.39	0.63	11.32	Yes	
MRW-1	12/14/2005	626.10	630.41	610.10	605.10	14.37	0.17	14.54	10.10	616.00	-0.39	10.94	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-1	1/5/2006	626.10	630.41	610.10	605.10	15.05	0.93	15.98	10.94	615.16	-0.84	10.26	Yes	
MRW-1	1/19/2006	626.10	630.41	610.10	605.10	14.75	1.50	16.25	10.76	615.34	0.18	10.56	Yes	
MRW-1	1/30/2006	626.10	630.41	610.10	605.10	14.51	3.46	17.97	10.94	615.16	-0.18	10.80	Yes	
MRW-1	1/31/2006	626.10	630.41	610.10	605.10	14.4	3.57	17.97	10.86	615.24	0.09	10.91	Yes	
MRW-1	2/3/2006	626.10	630.41	610.10	605.10	15.26	0.27	15.53	11.01	615.09	-0.15	10.05	Yes	
MRW-1	2/9/2006	626.10	630.41	610.10	605.10	15.22	0.22	15.44	10.96	615.14	0.05	10.09	Yes	
MRW-1	2/16/2006	626.10	630.41	610.10	605.10	15.69	0.16	15.85	11.41	614.69	-0.46	9.62	Yes	
MRW-1	2/28/2006	626.10	630.41	610.10	605.10	15.92	0.38	16.30	11.69	614.41	-0.28	9.39	Yes	
MRW-1	3/16/2006	626.10	630.41	610.10	605.10	15.86	0.47	16.33	11.65	614.45	0.04	9.45	Yes	
MRW-1	3/27/2006	626.10	630.41	610.10	605.10	15.37	0.33	15.70	11.13	614.97	0.52	9.94	Yes	
MRW-1	4/14/2006	626.10	630.41	610.10	605.10	14.48	0.39	14.87	10.25	615.85	0.88	10.83	Yes	
MRW-1	5/6/2006	626.10	630.41	610.10	605.10	14.4	0.32	14.72	10.16	615.94	0.10	10.91	Yes	
MRW-1	6/1/2006	626.10	630.41	610.10	605.10	13.64	0.36	14.00	9.41	616.69	0.75	11.67	Yes	
MRW-1	6/29/2006	626.10	630.41	610.10	605.10	14.9	0.49	15.39	10.70	615.40	-1.29	10.41	Yes	
MRW-1	7/17/2006	626.10	630.41	610.10	605.10	15.77	0.36	16.13	11.54	614.56	-0.84	9.54	Yes	
MRW-1	8/24/2006	626.10	630.41	610.10	605.10	16.13	0.16	16.29	11.85	614.25	-0.32	9.18	Yes	
MRW-1	9/1/2006	626.10	630.41	610.10	605.10	16.12	0.26	16.38	11.87	614.23	-0.01	9.19	Yes	
MRW-1	9/14/2006	626.10	630.41	610.10	605.10	NP	0.00	16.77	12.46	613.64	-0.59	8.54	Yes	
MRW-1	9/16/2006	626.10	630.41	610.10	605.10	16.23	0.19	16.42	11.96	614.14	0.50	9.08	Yes	
MRW-1	9/28/2006	626.10	630.41	610.10	605.10	16.44	0.24	16.68	12.18	613.92	-0.22	8.87	Yes	
MRW-1	11/2/2006	626.10	630.41	610.10	605.10	16.63	0.29	16.92	12.38	613.72	-0.20	8.68	Yes	
MRW-1	11/21/2006	626.10	630.41	610.10	605.10	16.58	0.17	16.75	12.31	613.79	0.08	8.73	Yes	
MRW-1	12/14/2006	626.10	630.41	610.10	605.10	16.46	0.36	16.82	12.23	613.87	0.08	8.85	Yes	
MRW-1	12/28/2006	626.10	630.41	610.10	605.10	16.89	1.12	18.01	12.82	613.28	-0.59	8.42	Yes	
MRW-1	1/4/2007	626.10	630.41	610.10	605.10	16.15	0.70	16.85	11.99	614.11	0.83	9.16	Yes	
MRW-1	1/18/2007	626.10	630.41	610.10	605.10	16.74	0.24	16.98	12.48	613.62	-0.49	8.57	Yes	
MRW-1	2/1/2007	626.10	630.41	610.10	605.10	17.22	0.20	17.42	12.95	613.15	-0.47	8.09	Yes	
MRW-1	2/22/2007	626.10	630.41	610.10	605.10	17.84	0.26	18.10	13.59	612.51	-0.63	7.47	Yes	
MRW-1	3/15/2007	626.10	630.41	610.10	605.10	17.64	0.21	17.85	13.38	612.72	0.21	7.67	Yes	
MRW-1	3/29/2007	626.10	630.41	610.10	605.10	17.07	0.25	17.32	12.81	613.29	0.56	8.24	Yes	
MRW-1	4/13/2007	626.10	630.41	610.10	605.10	16.35	0.23	16.58	12.09	614.01	0.72	8.96	Yes	
MRW-1	4/29/2007	626.10	630.41	610.10	605.10	15.59	0.31	15.90	11.35	614.75	0.74	9.72	Yes	
MRW-1	5/10/2007	626.10	630.41	610.10	605.10	15.7	0.28	15.98	11.45	614.65	-0.10	9.61	Yes	
MRW-1	11/21/2012	626.10	630.41	610.10	605.10	16.97	0.18	17.15	12.70	613.40	-1.25	8.34	Yes	Pump currently Shut Down
MRW-1	12/17/2012	626.10	630.41	610.10	605.10	17.15	0.21	17.36	12.89	613.21	-0.19	8.16	Yes	Pump currently Shut Down
<b>Well connected to Barge Dock Skimmer system</b>														
MRW-1	3/25/2013	626.10	630.41	610.10	605.10	18.24	0.15	18.39	13.96	612.14	-1.08	7.07	Yes	
MRW-1	5/6/2013	626.10	630.41	610.10	605.10	15.73	0.13	15.86	11.45	614.65	2.51	9.58	Yes	
MRW-1	5/5/2014	626.10	630.41	610.10	605.10	13.2	0.15	13.35	8.92	617.18	2.53	12.11	Yes	
MRW-1	7/14/2014	626.10	630.41	610.10	605.10	13.48	0.17	13.65	9.21	616.89	-0.28	11.83	Yes	
MRW-1	7/18/2014	626.10	630.41	610.10	605.10	13.75	0.13	13.88	9.47	616.63	-0.26	11.56	Yes	

**Table 4  
Groundwater and LNAPL Gauging Data - Barge Dock  
Former Amoco Terminal  
Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-1	7/23/2014	626.10	630.41	610.10	605.10	14.14	0.13	14.27	9.86	616.24	-0.39	11.17	Yes	
MRW-1	9/4/2014	626.10	630.41	610.10	605.10	12.56	0.34	12.90	8.32	617.78	1.53	12.75	Yes	
MRW-1	2/19/2015	626.10	630.41	610.10	605.10	16.47	0.20	16.67	12.20	613.90	-3.88	8.84	Yes	
MRW-1	4/13/2015	626.10	630.41	610.10	605.10	16.7	0.24	16.94	12.44	613.66	-0.24	8.61	Yes	
MRW-1	4/17/2015	626.10	630.41	610.10	605.10	16.4	0.15	16.55	12.12	613.98	0.32	8.91	Yes	
MRW-1	4/24/2015	626.10	630.41	610.10	605.10	15.89	0.14	16.03	11.61	614.49	0.51	9.42	Yes	
MRW-1	4/28/2015	626.10	630.41	610.10	605.10	15.72	0.14	15.86	11.44	614.66	0.17	9.59	Yes	
MRW-1	4/13/2015	626.10	630.41	610.10	605.10	16.7	0.24	16.94	12.44	613.66	-1.00	8.61	Yes	
MRW-1	4/17/2015	626.10	630.41	610.10	605.10	16.4	0.15	16.55	12.12	613.98	0.32	8.91	Yes	
MRW-1	4/22/2015	626.10	630.41	610.10	605.10	15.99	0.12	16.11	11.71	614.39	0.42	9.32	Yes	
MRW-1	4/28/2015	626.10	630.41	610.10	605.10	15.72	0.14	15.86	11.44	614.66	0.27	9.59	Yes	
MRW-1	5/5/2015	Pulled and removed pumps - system shut down - moved to bailing wells												
MRW-1	5/9/2015	626.10	630.41	610.10	605.10	15.63	0.12	15.75	11.35	614.75	0.09	9.68	Yes	Bailed 1 Cup
MRW-1	5/12/2015	626.10	630.41	610.10	605.10	15.13	0.13	15.26	10.85	615.25	0.50	10.18	Yes	
MRW-1	5/15/2015	626.10	630.41	610.10	605.10	14.54	0.11	14.65	10.25	615.85	0.59	10.77	Yes	Bailed <0.25 gallons
MRW-1	5/22/2015	626.10	630.41	610.10	605.10	14.1	0.14	14.24	9.82	616.28	0.43	11.21	Yes	Bailed <0.25 gallons
MRW-1	5/28/2015	626.10	630.41	610.10	605.10	13.86	0.12	13.98	9.58	616.52	0.24	11.45	Yes	Bailed <0.25 gallons
MRW-1	6/5/2015	626.10	630.41	610.10	605.10	14.16	0.16	14.32	9.88	616.22	-0.31	11.15	Yes	Bailed <0.25 gallons
MRW-1	6/9/2015	626.10	630.41	610.10	605.10	14.01	0.13	14.14	9.73	616.37	0.16	11.30	Yes	Bailed <0.25 gallons
MRW-1	6/13/2015	626.10	630.41	610.10	605.10	14.45	0.11	14.56	10.16	615.94	-0.44	10.86	Yes	Bailed <0.25 gallons (trace)
MRW-1	6/19/2015	626.10	630.41	610.10	605.10	14.81	0.12	14.93	10.53	615.57	-0.36	10.50	Yes	Bailed a trace amount of LNAPL
MRW-1	6/25/2015	626.10	630.41	610.10	605.10	14.75	0.11	14.86	10.46	615.64	0.06	10.56	Yes	Bailed a trace amount of LNAPL
MRW-1	7/2/2015	626.10	630.41	610.10	605.10	14.98	0.08	15.06	10.69	615.41	-0.22	10.33	Yes	Bailed a trace amount of LNAPL
MRW-1	7/7/2015	626.10	630.41	610.10	605.10	14.71	0.10	14.81	10.42	615.68	0.27	10.60	Yes	No LNAPL bailed
MRW-1	7/13/2015	626.10	630.41	610.10	605.10	14.56	0.10	14.66	10.27	615.83	0.15	10.75	Yes	No LNAPL bailed
MRW-1	7/21/2015	626.10	630.41	610.10	605.10	15.12	0.10	15.22	10.83	615.27	-0.56	10.19	Yes	
MRW-1	7/27/2015	626.10	630.41	610.10	605.10	15.53	0.09	15.62	11.24	614.86	-0.41	9.78	Yes	
MRW-1	7/31/2015	626.10	630.41	610.10	605.10	15.72	0.09	15.81	11.43	614.67	-0.19	9.59	Yes	
MRW-1	8/7/2015	626.10	630.41	610.10	605.10	15.68	0.09	15.77	11.39	614.71	0.04	9.63	Yes	
MRW-1	8/14/2015	626.10	630.41	610.10	605.10	15.71	0.08	15.79	11.42	614.68	-0.03	9.60	Yes	
MRW-1	8/24/2015	626.10	630.41	610.10	605.10	15.21	0.09	15.30	10.92	615.18	0.50	10.10	Yes	
MRW-1	9/10/2015	626.10	630.41	610.10	605.10	14.86	0.10	14.96	10.57	615.53	0.35	10.45	Yes	
MRW-1	9/24/2015	626.10	630.41	610.10	605.10	14.15	0.09	14.24	9.86	616.24	0.71	11.16	Yes	
MRW-1	10/1/2015	626.10	630.41	610.10	605.10	13.96	0.10	14.06	9.67	616.43	0.19	11.35	Yes	
MRW-1	10/29/2015	626.10	630.41	610.10	605.10	14.34	0.10	14.44	10.05	616.05	0.52	10.97	Yes	
MRW-1	11/3/2015	626.10	630.41	610.10	605.10	14.21	0.12	14.33	9.93	616.17	0.13	11.10	Yes	
MRW-1	10/3/2016	626.10	630.41	610.10	605.10	14.06	0.09	14.15	9.77	616.33	0.16	11.25	Yes	
MRW-1	5/2/2017	626.10	630.41	610.10	605.10	12.44	0.11	12.55	8.15	617.95	1.62	12.87	Yes	
MRW-1	5/22/2017	626.10	630.41	610.10	605.10	11.13	0.06	11.19	6.83	619.27	1.32	14.18	Yes	
MRW-1	5/31/2017	626.10	630.41	610.10	605.10	11.21	0.07	11.28	6.92	619.18	-0.08	14.10	Yes	
MRW-1	5/2/2017	626.10	630.41	610.10	605.10	12.44	0.11	12.55	8.15	617.95	-1.24	12.87	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-1	5/22/2017	626.10	630.41	610.10	605.10	11.13	0.06	11.19	6.83	619.27	1.32	14.18	Yes	
MRW-1	5/31/2017	626.10	630.41	610.10	605.10	11.21	0.07	11.28	6.92	619.18	-0.08	14.10	Yes	
MRW-1	8/8/2017	626.10	630.41	610.10	605.10	13.03	0.08	13.11	8.74	617.36	-1.82	12.28	Yes	
MRW-1	8/15/2017	626.10	630.41	610.10	605.10	12.26	0.07	12.33	7.97	618.13	0.77	13.05	Yes	
MRW-1	5/14/2018	626.10	630.41	610.10	605.10	14.44	0.06	14.50	10.14	615.96	-2.18	10.87	Yes	
MRW-2	2/19/2003	627.00	630.85	610.00	605.00	NP	0.00	17.38	13.53	613.47	NA	8.47	Yes	
MRW-2	3/13/2003	627.00	630.85	610.00	605.00	NP	0.00	17.71	13.86	613.14	-0.33	8.14	Yes	
MRW-2	4/9/2003	627.00	630.85	610.00	605.00	17.45	0.37	17.82	13.68	613.32	0.18	8.40	Yes	
MRW-2	4/18/2003	627.00	630.85	610.00	605.00	17.4	0.50	17.90	13.66	613.34	0.02	8.45	Yes	
MRW-2	4/25/2003	627.00	630.85	610.00	605.00	16.97	0.91	17.88	13.32	613.68	0.34	8.88	Yes	
MRW-2	5/15/2003	627.00	630.85	610.00	605.00	16.56	0.24	16.80	12.76	614.24	0.55	9.29	Yes	
MRW-2	6/10/2003	627.00	630.85	610.00	605.00	16.18	0.07	16.25	12.35	614.65	0.42	9.67	Yes	
MRW-2	7/2/2003	627.00	630.85	610.00	605.00	15.87	0.18	16.05	12.06	614.94	0.29	9.98	Yes	
MRW-2	7/7/2003	627.00	630.85	610.00	605.00	15.88	0.15	16.03	12.06	614.94	0.00	9.97	Yes	
MRW-2	7/30/2003	627.00	630.85	610.00	605.00	15.87	0.41	16.28	12.11	614.89	-0.05	9.98	Yes	
MRW-2	8/12/2003	627.00	630.85	610.00	605.00	16.21	1.09	17.30	12.59	614.41	-0.49	9.64	Yes	
MRW-2	9/8/2003	627.00	630.85	610.00	605.00	16.57	2.51	19.08	13.26	613.74	-0.67	9.28	Yes	
MRW-2	10/2/2003	627.00	630.85	610.00	605.00	17.04	0.51	17.55	13.30	613.70	-0.04	8.81	Yes	
MRW-2	10/20/2003	627.00	630.85	610.00	605.00	17.16	0.25	17.41	13.36	613.64	-0.06	8.69	Yes	
MRW-2	12/3/2003	627.00	630.85	610.00	605.00	17.24	1.12	18.36	13.63	613.37	-0.27	8.61	Yes	
MRW-2	1/8/2004	627.00	630.85	610.00	605.00	17.31	3.02	20.33	14.11	612.89	-0.48	8.54	Yes	
MRW-2	1/20/2004	627.00	630.85	610.00	605.00	17.67	1.70	19.37	14.19	612.81	-0.08	8.18	Yes	
MRW-2	2/24/2004	627.00	630.85	610.00	605.00	18.16	1.22	19.38	14.57	612.43	-0.39	7.69	Yes	
MRW-2	3/22/2004	627.00	630.85	610.00	605.00	17.94	0.72	18.66	14.24	612.76	0.33	7.91	Yes	
MRW-2	4/19/2004	627.00	630.85	610.00	605.00	16.77	1.38	18.15	13.22	613.78	1.03	9.08	Yes	
MRW-2	5/18/2004	627.00	630.85	610.00	605.00	16.39	0.41	16.80	12.63	614.37	0.59	9.46	Yes	
MRW-2	6/17/2004	627.00	630.85	610.00	605.00	15.18	1.38	16.56	11.63	615.37	1.00	10.67	Yes	
MRW-2	6/28/2004	627.00	630.85	610.00	605.00	15.91	0.60	16.51	12.19	614.81	-0.56	9.94	Yes	
MRW-2	7/27/2004	627.00	630.85	610.00	605.00	15.72	1.16	16.88	12.12	614.88	0.07	10.13	Yes	
MRW-2	8/24/2004	627.00	630.85	610.00	605.00	16.14	0.42	16.56	12.38	614.62	-0.26	9.71	Yes	
MRW-2	9/8/2004	627.00	630.85	610.00	605.00	15.99	0.45	16.44	12.24	614.76	0.14	9.86	Yes	
MRW-2	9/9/2004	627.00	630.85	610.00	605.00	15.95	0.23	16.18	12.15	614.85	0.09	9.90	Yes	
MRW-2	9/28/2004	627.00	630.85	610.00	605.00	15.17	0.51	15.68	11.43	615.57	0.72	10.68	Yes	
MRW-2	10/20/2004	627.00	630.85	610.00	605.00	15.61	0.02	15.63	11.76	615.24	-0.33	10.24	Yes	
MRW-2	11/23/2004	627.00	630.85	610.00	605.00	14.88	0.88	15.76	11.22	615.78	0.55	10.97	Yes	
MRW-2	1/5/2005	627.00	630.85	610.00	605.00	15.89	1.03	16.92	12.26	614.74	-1.04	9.96	Yes	
MRW-2	2/26/2005	627.00	630.85	610.00	605.00	17.64	0.24	17.88	13.84	613.16	-1.58	8.21	Yes	
MRW-2	3/29/2005	627.00	630.85	610.00	605.00	NP	0.00	NP	NP	NP	NP	NP	NP	
MRW-2	4/29/2005	627.00	630.85	610.00	605.00	15.92	NP	NP	NP	NP	NP	NP	NP	
MRW-2	5/31/2005	627.00	630.85	610.00	605.00	14.28	0.06	14.34	10.44	616.56	3.40	11.57	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-2	6/28/2005	627.00	630.85	610.00	605.00	13.66	<b>0.16</b>	13.82	9.84	617.16	0.60	12.19	Yes	
MRW-2	7/28/2005	627.00	630.85	610.00	605.00	14.94	<b>0.14</b>	15.08	11.12	615.88	-1.28	10.91	Yes	
MRW-2	8/11/2005	627.00	630.85	610.00	605.00	15.39	<b>0.04</b>	15.43	11.55	615.45	-0.43	10.46	Yes	
MRW-2	9/1/2005	627.00	630.85	610.00	605.00	16.12	<b>0.06</b>	16.18	12.28	614.72	-0.73	9.73	Yes	
MRW-2	9/16/2005	627.00	630.85	610.00	605.00	16.21		-						
MRW-2	10/6/2005	627.00	630.85	610.00	605.00	14.76	<b>0.07</b>	14.83	10.93	616.07	1.36	11.09	Yes	
MRW-2	10/24/2005	627.00	630.85	610.00	605.00	14.62	<b>0.06</b>	14.68	10.78	616.22	0.14	11.23	Yes	
MRW-2	11/23/2005	627.00	630.85	610.00	605.00	14	<b>0.08</b>	14.08	10.17	616.83	0.62	11.85	Yes	
MRW-2	12/14/2005	627.00	630.85	610.00	605.00	14.34	<b>0.07</b>	14.41	10.51	616.49	-0.34	11.51	Yes	
MRW-2	1/5/2006	627.00	630.85	610.00	605.00	NP	<b>0.00</b>	15.29	11.44	615.56	-0.93	10.56	Yes	
MRW-2	1/19/2006	627.00	630.85	610.00	605.00	14.26	<b>0.06</b>	14.32	10.42	616.58	1.02	11.59	Yes	
MRW-2	1/30/2006	627.00	630.85	610.00	605.00	15.28	<b>0.05</b>	15.33	11.44	615.56	-1.02	10.57	Yes	
MRW-2	2/3/2006	627.00	630.85	610.00	605.00	15.32	<b>0.07</b>	15.39	11.49	615.51	-0.04	10.53	Yes	
MRW-2	2/9/2006	627.00	630.85	610.00	605.00	15.2	<b>0.05</b>	15.25	11.36	615.64	0.12	10.65	Yes	
MRW-2	2/16/2006	627.00	630.85	610.00	605.00	15.62	<b>0.04</b>	15.66	11.78	615.22	-0.42	10.23	Yes	
MRW-2	2/28/2006	627.00	630.85	610.00	605.00	15.93	<b>0.11</b>	16.04	12.10	614.90	-0.33	9.92	Yes	
MRW-2	3/16/2006	627.00	630.85	610.00	605.00	15.98	<b>0.33</b>	16.31	12.20	614.80	-0.10	9.87	Yes	
MRW-2	3/27/2006	627.00	630.85	610.00	605.00	15.37	<b>0.31</b>	15.68	11.59	615.41	0.61	10.48	Yes	
MRW-2	4/14/2006	627.00	630.85	610.00	605.00	14.54	<b>0.31</b>	14.85	10.76	616.24	0.83	11.31	Yes	
MRW-2	5/6/2006	627.00	630.85	610.00	605.00	14.47	<b>0.27</b>	14.74	10.68	616.32	0.08	11.38	Yes	
MRW-2	6/1/2006	627.00	630.85	610.00	605.00	13.69	<b>0.23</b>	13.92	9.89	617.11	0.79	12.16	Yes	
MRW-2	6/29/2006	627.00	630.85	610.00	605.00	NP	<b>0.00</b>	15.00	11.15	615.85	-1.26	10.85	Yes	
MRW-2	7/17/2006	627.00	630.85	610.00	605.00	15.67	<b>0.12</b>	15.79	11.85	615.15	-0.70	10.18	Yes	
MRW-2	8/24/2006	627.00	630.85	610.00	605.00	16.09	<b>0.16</b>	16.25	12.27	614.73	-0.43	9.76	Yes	
MRW-2	9/1/2006	627.00	630.85	610.00	605.00	16.12	<b>0.06</b>	16.18	12.28	614.72	-0.01	9.73	Yes	
MRW-2	9/14/2006	627.00	630.85	610.00	605.00	NP	<b>0.00</b>	16.69	12.84	614.16	-0.56	9.16	Yes	
MRW-2	9/28/2006	627.00	630.85	610.00	605.00	16.42	<b>0.10</b>	16.52	12.59	614.41	0.25	9.43	Yes	
MRW-2	11/2/2006	627.00	630.85	610.00	605.00	16.45	<b>0.11</b>	16.56	12.62	614.38	-0.03	9.40	Yes	
MRW-2	11/21/2006	627.00	630.85	610.00	605.00	16.64	<b>0.42</b>	17.06	12.88	614.12	-0.26	9.21	Yes	
MRW-2	12/14/2006	627.00	630.85	610.00	605.00	16.33	<b>0.77</b>	17.10	12.65	614.35	0.23	9.52	Yes	
MRW-2	12/28/2006	627.00	630.85	610.00	605.00	16.75	<b>2.00</b>	18.75	13.33	613.67	-0.68	9.10	Yes	
MRW-2	1/4/2007	627.00	630.85	610.00	605.00	16.08	<b>1.52</b>	17.60	12.56	614.44	0.77	9.77	Yes	
MRW-2	1/18/2007	627.00	630.85	610.00	605.00	NP	<b>0.00</b>	16.88	13.03	613.97	-0.47	8.97	Yes	
MRW-2	2/1/2007	627.00	630.85	610.00	605.00	17.2	<b>0.15</b>	17.35	13.38	613.62	-0.35	8.65	Yes	
MRW-2	2/22/2007	627.00	630.85	610.00	605.00	17.82	<b>0.16</b>	17.98	14.00	613.00	-0.62	8.03	Yes	
MRW-2	3/15/2007	627.00	630.85	610.00	605.00	17.56	<b>0.66</b>	18.22	13.85	613.15	0.15	8.29	Yes	
MRW-2	3/29/2007	627.00	630.85	610.00	605.00	16.95	<b>1.15</b>	18.10	13.35	613.65	0.50	8.90	Yes	
MRW-2	4/13/2007	627.00	630.85	610.00	605.00	16.37	<b>0.51</b>	16.88	12.63	614.37	0.72	9.48	Yes	
MRW-2	4/29/2007	627.00	630.85	610.00	605.00	15.74	<b>0.56</b>	16.30	12.01	614.99	0.62	10.11	Yes	
MRW-2	5/10/2007	627.00	630.85	610.00	605.00	15.86	<b>0.36</b>	16.22	12.09	614.91	-0.08	9.99	Yes	
MRW-2	11/21/2012	627.00	630.85	610.00	605.00	16.9	<b>0.28</b>	17.18	13.11	613.89	-1.02	8.95	Yes	Pump currently Shut Down



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-2	5/2/2017	627.00	630.85	610.00	605.00	12.37	<b>0.09</b>	12.46	8.54	618.46	1.72	13.48	Yes	
MRW-2	5/22/2017	627.00	630.85	610.00	605.00	10.98	<b>0.09</b>	11.07	7.15	619.85	1.39	14.87	Yes	
MRW-2	5/31/2017	627.00	630.85	610.00	605.00	11.08	<b>0.08</b>	11.16	7.25	619.75	-0.10	14.77	Yes	
MRW-2	8/8/2017	627.00	630.85	610.00	605.00	12.92	<b>0.08</b>	13.00	9.09	617.91	-1.84	12.93	Yes	
MRW-2	8/15/2017	627.00	630.85	610.00	605.00	12.16	<b>0.09</b>	12.25	8.33	618.67	0.76	13.69	Yes	
MRW-2	5/14/2018	627.00	630.85	610.00	605.00	14.5	<b>0.06</b>	14.56	10.66	616.34	-2.33	11.35	Yes	
MRW-3	2/19/2003	625.70	632.11	610.70	605.70	17.61	<b>0.94</b>	18.55	11.41	614.29	NA	8.80	Yes	
MRW-3	3/13/2003	625.70	632.11	610.70	605.70	17.93	<b>0.73</b>	18.66	11.68	614.02	-0.27	8.48	Yes	
MRW-3	4/9/2003	625.70	632.11	610.70	605.70	17.57	<b>1.12</b>	18.69	11.41	614.29	0.27	8.84	Yes	
MRW-3	4/18/2003	625.70	632.11	610.70	605.70	17.52	<b>1.13</b>	18.65	11.36	614.34	0.05	8.89	Yes	
MRW-3	4/25/2003	625.70	632.11	610.70	605.70	17.35	<b>2.97</b>	20.32	11.60	614.10	-0.24	9.06	Yes	
MRW-3	5/15/2003	625.70	632.11	610.70	605.70	16.23	<b>2.87</b>	19.10	10.46	615.24	1.14	10.18	Yes	
MRW-3	6/10/2003	625.70	632.11	610.70	605.70	16.58	<b>0.37</b>	16.95	10.25	615.45	0.21	9.83	Yes	
MRW-3	7/2/2003	625.70	632.11	610.70	605.70	14.67	<b>6.30</b>	20.97	9.67	616.03	0.59	11.74	Yes	
MRW-3	7/7/2003	625.70	632.11	610.70	605.70	15.82	<b>5.09</b>	20.91	10.55	615.15	-0.88	10.59	Yes	
MRW-3	7/30/2003	625.70	632.11	610.70	605.70	16	<b>1.25</b>	17.25	9.87	615.83	0.68	10.41	Yes	
MRW-3	8/12/2003	625.70	632.11	610.70	605.70	16.77	<b>0.07</b>	16.84	10.38	615.32	-0.51	9.64	Yes	
MRW-3	9/8/2003	625.70	632.11	610.70	605.70	17.24	<b>1.00</b>	18.24	11.05	614.65	-0.68	9.17	Yes	
MRW-3	10/2/2003	625.70	632.11	610.70	605.70	16.9	<b>2.75</b>	19.65	11.10	614.60	-0.05	9.51	Yes	
MRW-3	10/20/2003	625.70	632.11	610.70	605.70	16.42	<b>4.72</b>	21.14	11.06	614.64	0.04	9.99	Yes	
MRW-3	12/3/2003	625.70	632.11	610.70	605.70	17.66	<b>0.64</b>	18.30	11.39	614.31	-0.33	8.75	Yes	
MRW-3	1/8/2004	625.70	632.11	610.70	605.70	17.51	<b>2.82</b>	20.33	11.73	613.97	-0.34	8.90	Yes	
MRW-3	1/20/2004	625.70	632.11	610.70	605.70	17.54	<b>3.46</b>	21.00	11.90	613.80	-0.17	8.87	Yes	
MRW-3	2/24/2004	625.70	632.11	610.70	605.70	18.44	<b>1.26</b>	19.70	12.31	613.39	-0.41	7.97	Yes	
MRW-3	3/22/2004	625.70	632.11	610.70	605.70	17.44	<b>3.72</b>	21.16	11.86	613.84	0.45	8.97	Yes	
MRW-3	4/19/2004	625.70	632.11	610.70	605.70	15.88	<b>5.41</b>	21.29	10.68	615.02	1.18	10.53	Yes	
MRW-3	5/18/2004	625.70	632.11	610.70	605.70	15.98	<b>4.62</b>	20.60	10.60	615.10	0.08	10.43	Yes	
MRW-3	6/17/2004	625.70	632.11	610.70	605.70	14.38	<b>6.09</b>	20.47	9.33	616.37	1.27	12.03	Yes	
MRW-3	6/28/2004	625.70	632.11	610.70	605.70	16	<b>1.10</b>	17.10	9.84	615.86	-0.51	10.41	Yes	
MRW-3	7/27/2004	625.70	632.11	610.70	605.70	16.76	<b>0.07</b>	16.83	10.37	615.33	-0.53	9.65	Yes	
MRW-3	8/24/2004	625.70	632.11	610.70	605.70	15.41	<b>5.44</b>	20.85	10.22	615.48	0.15	11.00	Yes	
MRW-3	9/8/2004	625.70	632.11	610.70	605.70	16.41	<b>0.04</b>	16.45	10.01	615.69	0.21	10.00	Yes	
MRW-3	9/9/2004	625.70	632.11	610.70	605.70	16.18	<b>0.41</b>	16.59	9.86	615.84	0.15	10.23	Yes	
MRW-3	9/28/2004	625.70	632.11	610.70	605.70	15.24	<b>1.27</b>	16.51	9.11	616.59	0.75	11.17	Yes	
MRW-3	10/20/2004	625.70	632.11	610.70	605.70	15.87	<b>0.06</b>	15.93	9.47	616.23	-0.36	10.54	Yes	
MRW-3	11/23/2004	625.70	632.11	610.70	605.70	13.83	<b>6.47</b>	20.30	8.87	616.83	0.61	12.58	Yes	
MRW-3	1/5/2005	625.70	632.11	610.70	605.70	16.1	<b>1.16</b>	17.26	9.95	615.75	-1.08	10.31	Yes	
MRW-3	2/26/2005	625.70	632.11	610.70	605.70	17.1	<b>0.30</b>	17.40	10.76	614.94	-0.81	9.31	Yes	
MRW-3	3/29/2005	625.70	632.11	610.70	605.70	NP	<b>0.00</b>	NP						
MRW-3	4/29/2005	625.70	632.11	610.70	605.70	15.05	<b>0.74</b>	15.79	8.81	616.89	1.95	11.36	Yes	

**Table 4  
Groundwater and LNAPL Gauging Data - Barge Dock  
Former Amoco Terminal  
Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-3	5/31/2005	625.70	632.11	610.70	605.70	14.2	<b>1.50</b>	15.70	8.13	617.57	0.68	12.21	Yes	
MRW-3	6/28/2005	625.70	632.11	610.70	605.70	13.78	<b>0.94</b>	14.72	7.58	618.12	0.55	12.63	Yes	
MRW-3	7/28/2005	625.70	632.11	610.70	605.70	14.67	<b>2.85</b>	17.52	8.90	616.80	-1.32	11.74	Yes	
MRW-3	8/11/2005	625.70	632.11	610.70	605.70	14.96	<b>5.02</b>	19.98	9.67	616.03	-0.77	11.45	Yes	
MRW-3	9/1/2005	625.70	632.11	610.70	605.70	16.37	<b>0.56</b>	16.93	10.09	615.61	-0.41	10.04	Yes	
MRW-3	9/16/2005	625.70	632.11	610.70	605.70	15.6	<b>3.64</b>	19.24	10.00	615.70	0.08	10.81	Yes	
MRW-3	10/6/2005	625.70	632.11	610.70	605.70	13.34	<b>7.19</b>	20.53	8.54	617.16	1.47	13.07	Yes	
MRW-3	10/24/2005	625.70	632.11	610.70	605.70	13.2	<b>7.54</b>	20.74	8.47	617.23	0.06	13.21	Yes	
MRW-3	11/23/2005	625.70	632.11	610.70	605.70	12.38	<b>8.42</b>	20.80	7.85	617.85	0.62	14.03	Yes	
MRW-3	12/14/2005	625.70	632.11	610.70	605.70	12.43	<b>8.50</b>	20.93	7.92	617.78	-0.07	13.98	Yes	
MRW-3	1/5/2006	625.70	632.11	610.70	605.70	13.96		-						
MRW-3	1/19/2006	625.70	632.11	610.70	605.70	14	<b>7.15</b>	21.15	9.19	616.51	-1.27	12.41	Yes	
MRW-3	1/30/2006	625.70	632.11	610.70	605.70	13.95	<b>7.18</b>	21.13	9.14	616.56	0.04	12.46	Yes	
MRW-3	2/3/2006	625.70	632.11	610.70	605.70	14.95	<b>4.14</b>	19.09	9.46	616.24	-0.32	11.46	Yes	
MRW-3	2/9/2006	625.70	632.11	610.70	605.70	15.44	<b>1.88</b>	17.32	9.45	616.25	0.01	10.97	Yes	
MRW-3	2/16/2006	625.70	632.11	610.70	605.70	15.85	<b>1.30</b>	17.15	9.73	615.97	-0.28	10.56	Yes	
MRW-3	2/28/2006	625.70	632.11	610.70	605.70	16.15	<b>0.67</b>	16.82	9.89	615.81	-0.16	10.26	Yes	
MRW-3	3/16/2006	625.70	632.11	610.70	605.70	16.2	<b>0.58</b>	16.78	9.92	615.78	-0.03	10.21	Yes	
MRW-3	3/27/2006	625.70	632.11	610.70	605.70	15.33	<b>1.47</b>	16.80	9.25	616.45	0.67	11.08	Yes	
MRW-3	4/14/2006	625.70	632.11	610.70	605.70	14.47	<b>1.44</b>	15.91	8.38	617.32	0.87	11.94	Yes	
MRW-3	5/6/2006	625.70	632.11	610.70	605.70	14.48	<b>0.67</b>	15.15	8.22	617.48	0.16	11.93	Yes	
MRW-3	6/1/2006	625.70	632.11	610.70	605.70	13.65	<b>1.55</b>	15.20	7.59	618.11	0.63	12.76	Yes	
MRW-3	6/29/2006	625.70	632.11	610.70	605.70	14.68	<b>2.92</b>	17.60	8.92	616.78	-1.34	11.73	Yes	
MRW-3	7/17/2006	625.70	632.11	610.70	605.70	15.66	<b>1.56</b>	17.22	9.60	616.10	-0.68	10.75	Yes	
MRW-3	8/24/2006	625.70	632.11	610.70	605.70	16.37	<b>0.61</b>	16.98	10.10	615.60	-0.50	10.04	Yes	
MRW-3	9/1/2006	625.70	632.11	610.70	605.70	16.37	<b>0.56</b>	16.93	10.09	615.61	0.01	10.04	Yes	
MRW-3	9/14/2006	625.70	632.11	610.70	605.70	16.92	<b>0.48</b>	17.40	10.62	615.08	-0.53	9.49	Yes	
MRW-3	9/16/2006	625.70	632.11	610.70	605.70	15.6	<b>3.64</b>	19.24	10.00	615.70	0.61	10.81	Yes	
MRW-3	9/28/2006	625.70	632.11	610.70	605.70	16.55	<b>1.07</b>	17.62	10.38	615.32	-0.38	9.86	Yes	
MRW-3	11/2/2006	625.70	632.11	610.70	605.70	16.9	<b>0.08</b>	16.98	10.51	615.19	-0.13	9.51	Yes	
MRW-3	11/21/2006	625.70	632.11	610.70	605.70	16.62	<b>2.20</b>	18.82	10.70	615.00	-0.19	9.79	Yes	
MRW-3	12/14/2006	625.70	632.11	610.70	605.70	16.29	<b>3.16</b>	19.45	10.59	615.11	0.12	10.12	Yes	
MRW-3	12/28/2006	625.70	632.11	610.70	605.70	16.47		-						
MRW-3	1/4/2007	625.70	632.11	610.70	605.70	16.53	<b>0.85</b>	17.38	10.31	615.39	0.28	9.88	Yes	
MRW-3	1/18/2007	625.70	632.11	610.70	605.70	16.31	<b>1.31</b>	17.62	10.19	615.51	0.12	10.10	Yes	
MRW-3	2/1/2007	625.70	632.11	610.70	605.70	16.55	<b>1.27</b>	17.82	10.42	615.28	-0.23	9.86	Yes	
MRW-3	2/22/2007	625.70	632.11	610.70	605.70	17.52	<b>3.31</b>	20.83	11.85	613.85	-1.43	8.89	Yes	
MRW-3	3/15/2007	625.70	632.11	610.70	605.70	17.32	<b>1.24</b>	18.56	11.19	614.51	0.66	9.09	Yes	
MRW-3	3/29/2007	625.70	632.11	610.70	605.70	16.63	<b>2.98</b>	19.61	10.89	614.81	0.30	9.78	Yes	
MRW-3	4/13/2007	625.70	632.11	610.70	605.70	15.41	<b>5.33</b>	20.74	10.19	615.51	0.70	11.00	Yes	
MRW-3	4/29/2007	625.70	632.11	610.70	605.70	15.19	<b>3.93</b>	19.12	9.66	616.04	0.53	11.22	Yes	



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-3	5/10/2007	625.70	632.11	610.70	605.70	15.58	2.34	17.92	9.69	616.01	-0.03	10.83	Yes	
MRW-3	12/17/2012	625.70	632.11	610.70	605.70	17.5	0.17	17.67	11.13	614.57	-1.44	8.91	Yes	
<b>I connected to Barge Dock Skimmer system</b>														
MRW-3	3/25/2013	625.70	632.11	610.70	605.70	18.55	0.05	18.60	12.15	613.55	-1.02	7.86	Yes	Currently running on barge system
MRW-3	5/5/2013	625.70	632.11	610.70	605.70	15.8	0.89	16.69	9.58	616.12	2.57	10.61	Yes	
MRW-3	5/31/2013	625.70	632.11	610.70	605.70	14.52	2.20	16.72	8.58	617.12	1.00	11.89	Yes	
MRW-3	6/27/2013	625.70	632.11	610.70	605.70	12.87	4.61	17.48	7.45	618.25	1.13	13.54	Yes	
MRW-3	7/29/2013	625.70	632.11	610.70	605.70	14.76	4.29	19.05	9.27	616.43	-1.82	11.65	Yes	
MRW-3	8/29/2013	625.70	632.11	610.70	605.70	15.1	4.48	19.58	9.65	616.05	-0.38	11.31	Yes	
MRW-3	9/27/2013	625.70	632.11	610.70	605.70	15.9	3.85	19.75	10.32	615.38	-0.66	10.51	Yes	
MRW-3	11/1/2013	625.70	632.11	610.70	605.70	15.74	1.34	17.08	9.62	616.08	0.70	10.67	Yes	
MRW-3	12/31/2013	625.70	632.11	610.70	605.70	16.52	3.50	20.02	10.86	614.84	-1.24	9.89	Yes	
MRW-3	1/10/2014	625.70	632.11	610.70	605.70	16.5	3.41	19.91	10.82	614.88	0.04	9.91	Yes	
MRW-3	2/5/2014	625.70	632.11	610.70	605.70	17.88	1.33	19.21	11.76	613.94	-0.93	8.53	Yes	
MRW-3	2/23/2014	625.70	632.11	610.70	605.70	17.82	1.30	19.12	11.69	614.01	0.07	8.59	Yes	
MRW-3	3/11/2014	625.70	632.11	610.70	605.70	17.71	1.41	19.12	11.60	614.10	0.09	8.70	Yes	
MRW-3	3/26/2014	625.70	632.11	610.70	605.70	16.91	1.49	18.40	10.82	614.88	0.78	9.50	Yes	
MRW-3	3/31/2014	625.70	632.11	610.70	605.70	16.56	2.59	19.15	10.71	614.99	0.11	9.85	Yes	
MRW-3	4/18/2014	625.70	632.11	610.70	605.70	14.02	5.26	19.28	8.74	616.96	1.97	12.39	Yes	
MRW-3	5/5/2014	625.70	632.11	610.70	605.70	12.18	6.04	18.22	7.07	618.63	1.67	14.23	Yes	
MRW-3	5/20/2014	625.70	632.11	610.70	605.70	10.98	7.58	18.56	6.20	619.50	0.87	15.43	Yes	
MRW-3	6/5/2014	625.70	632.11	610.70	605.70	11.4	5.94	17.34	6.27	619.43	-0.07	15.01	Yes	
MRW-3	6/17/2014	625.70	632.11	610.70	605.70	11.49	5.58	17.07	6.28	619.42	-0.01	14.92	Yes	
MRW-3	6/26/2014	625.70	632.11	610.70	605.70	12.26	4.98	17.24	6.92	618.78	-0.64	14.15	Yes	
MRW-3	7/12/2014	625.70	632.11	610.70	605.70	13.32	2.07	15.39	7.35	618.35	-0.43	13.09	Yes	
MRW-3	7/14/2014	625.70	632.11	610.70	605.70	13.29	2.30	15.59	7.37	618.33	-0.02	13.12	Yes	
MRW-3	7/18/2014	625.70	632.11	610.70	605.70	14.05	0.20	14.25	7.68	618.02	-0.31	12.36	Yes	
MRW-3	7/23/2014	625.70	632.11	610.70	605.70	14.49	0.08	14.57	8.10	617.60	-0.41	11.92	Yes	
MRW-3	7/30/2014	625.70	632.11	610.70	605.70	14.81	0.04	14.85	8.41	617.29	-0.31	11.60	Yes	
MRW-3	8/2/2014	625.70	632.11	610.70	605.70	14.86	0.36	15.22	8.53	617.17	-0.12	11.55	Yes	
MRW-3	8/7/2014	625.70	632.11	610.70	605.70	15.1	0.21	15.31	8.74	616.96	-0.21	11.31	Yes	
MRW-3	8/14/2014	625.70	632.11	610.70	605.70	15.2	0.41	15.61	8.88	616.82	-0.14	11.21	Yes	
MRW-3	8/22/2014	625.70	632.11	610.70	605.70	13.38	2.27	15.65	7.46	618.24	1.42	13.03	Yes	
MRW-3	8/27/2014	625.70	632.11	610.70	605.70	12.86	1.16	14.02	6.70	619.00	0.76	13.55	Yes	
MRW-3	9/1/2014	625.70	632.11	610.70	605.70	12.8	0.79	13.59	6.56	619.14	0.14	13.61	Yes	
MRW-3	9/4/2014	625.70	632.11	610.70	605.70	12.67	0.74	13.41	6.42	619.28	0.14	13.74	Yes	
MRW-3	9/11/2014	625.70	632.11	610.70	605.70	13.51	0.02	13.53	7.10	618.60	-0.69	12.90	Yes	
MRW-3	9/18/2014	625.70	632.11	610.70	605.70	NP	0.00	13.89	7.48	618.22	-0.38	12.52	Yes	
MRW-3	9/25/2014	625.70	632.11	610.70	605.70	NP	0.00	14.06	7.65	618.05	-0.17	12.35	Yes	
MRW-3	10/2/2014	625.70	632.11	610.70	605.70	13.93	0.46	14.39	7.62	618.08	0.03	12.48	Yes	
MRW-3	10/9/2014	625.70	632.11	610.70	605.70	14	0.29	14.29	7.65	618.05	-0.03	12.41	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-3	10/16/2014	625.70	632.11	610.70	605.70	14.03	0.26	14.29	7.68	618.02	-0.02	12.38	Yes	
MRW-3	10/23/2014	625.70	632.11	610.70	605.70	NP	0.00	14.54	8.13	617.57	-0.45	11.87	Yes	
MRW-3	10/31/2014	625.70	632.11	610.70	605.70	14.97	0.14	15.11	8.59	617.11	-0.46	11.44	Yes	
MRW-3	11/6/2014	625.70	632.11	610.70	605.70	14.98	0.30	15.28	8.63	617.07	-0.04	11.43	Yes	
MRW-3	11/13/2014	625.70	632.11	610.70	605.70	15.29	0.10	15.39	8.90	616.80	-0.27	11.12	Yes	
MRW-3	11/25/2014	625.70	632.11	610.70	605.70	15.72	0.03	15.75	9.32	616.38	-0.41	10.69	Yes	
MRW-3	12/4/2014	625.70	632.11	610.70	605.70	NP	0.00	15.83	9.42	616.28	-0.10	10.58	Yes	
MRW-3	12/15/2014	625.70	632.11	610.70	605.70	15.82	0.24	16.06	9.46	616.24	-0.04	10.59	Yes	
MRW-3	12/28/2014	625.70	632.11	610.70	605.70	15.08	0.93	16.01	8.87	616.83	0.59	11.33	Yes	
MRW-3	1/10/2015	625.70	632.11	610.70	605.70	15.61	0.60	16.21	9.33	616.37	-0.46	10.80	Yes	
MRW-3	1/24/2015	625.70	632.11	610.70	605.70	16.09	0.12	16.21	9.71	615.99	-0.38	10.32	Yes	
MRW-3	2/3/2015	625.70	632.11	610.70	605.70	16.47	0.05	16.52	10.07	615.63	-0.36	9.94	Yes	
MRW-3	2/12/2015	625.70	632.11	610.70	605.70	16.79	0.05	16.84	10.39	615.31	-0.32	9.62	Yes	
MRW-3	2/19/2015	625.70	632.11	610.70	605.70	16.75	0.36	17.11	10.42	615.28	-0.03	9.66	Yes	
MRW-3	2/24/2015	625.70	632.11	610.70	605.70	16.09	2.99	19.08	10.32	615.38	0.09	10.32	Yes	
MRW-3	3/14/2015	625.70	632.11	610.70	605.70	16.4	2.66	19.06	10.56	615.14	-0.24	10.01	Yes	
MRW-3	3/23/2015	625.70	632.11	610.70	605.70	16.43	2.79	19.22	10.62	615.08	-0.06	9.98	Yes	
MRW-3	4/3/2015	625.70	632.11	610.70	605.70	16.75	2.30	19.05	10.83	614.87	-0.21	9.66	Yes	
MRW-3	4/13/2015	625.70	632.11	610.70	605.70	16.49	2.54	19.03	10.63	615.07	0.21	9.92	Yes	
MRW-3	4/17/2015	625.70	632.11	610.70	605.70	16.45	2.59	19.04	10.60	615.10	0.03	9.96	Yes	
MRW-3	4/20/2015	625.70	632.11	610.70	605.70	15.44	3.60	19.04	9.80	615.90	0.79	10.97	Yes	
MRW-3	4/22/2015	625.70	632.11	610.70	605.70	15.68	3.21	18.89	9.96	615.74	-0.16	10.73	Yes	
MRW-3	4/24/2015	625.70	632.11	610.70	605.70	15.34	3.68	19.02	9.72	615.98	0.24	11.07	Yes	
MRW-3	4/28/2015	625.70	632.11	610.70	605.70	15.29	3.13	18.42	9.55	616.15	0.17	11.12	Yes	
MRW-3	4/29/2015	625.70	632.11	610.70	605.70	15.57	2.79	18.36	9.76	615.94	-0.21	10.84	Yes	
MRW-3	5/9/2015	625.70	632.11	610.70	605.70	17.42	0.66	18.08	11.15	614.55	-1.39	8.99	Yes	Bailed 5 gallons
MRW-3	5/12/2015	625.70	632.11	610.70	605.70	14.42	3.78	18.20	8.82	616.88	2.33	11.99	Yes	
MRW-3	5/15/2015	625.70	632.11	610.70	605.70	13.98	3.22	17.20	8.26	617.44	0.56	12.43	Yes	Bailed 4 gallons
MRW-3	5/22/2015	625.70	632.11	610.70	605.70	13.18	4.62	17.80	7.76	617.94	0.50	13.23	Yes	Bailed 6 gallons
MRW-3	5/28/2015	625.70	632.11	610.70	605.70	12.78	5.31	18.09	7.51	618.19	0.25	13.63	Yes	Bailed 7.5 gallons
MRW-3	6/5/2015	625.70	632.11	610.70	605.70	13.04	5.56	18.60	7.82	617.88	-0.31	13.37	Yes	Bailed 8 gallons
MRW-3	6/9/2015	625.70	632.11	610.70	605.70	13.06	4.93	17.99	7.71	617.99	0.12	13.35	Yes	Bailed 8 gallons
MRW-3	6/13/2015	625.70	632.11	610.70	605.70	13.86	3.44	17.30	8.19	617.51	-0.48	12.55	Yes	Bailed 4.5 gallons
MRW-3	6/19/2015	625.70	632.11	610.70	605.70	13.96	4.79	18.75	8.58	617.12	-0.39	12.45	Yes	Bailed 6.5 gallons
MRW-3	6/25/2015	625.70	632.11	610.70	605.70	13.81	5.08	18.89	8.49	617.21	0.09	12.60	Yes	Bailed 9.1 gallons
MRW-3	7/2/2015	625.70	632.11	610.70	605.70	14.18	4.89	19.07	8.82	616.88	-0.33	12.23	Yes	Bailed 7 gallons
MRW-3	7/7/2015	625.70	632.11	610.70	605.70	13.85	5.06	18.91	8.53	617.17	0.29	12.56	Yes	Bailed 9 gallons
MRW-3	7/13/2015	625.70	632.11	610.70	605.70	13.66	5.97	19.63	8.53	617.17	-0.01	12.75	Yes	Bailed 7 gallons
MRW-3	7/21/2015	625.70	632.11	610.70	605.70	14.35	4.75	19.10	8.96	616.74	-0.43	12.06	Yes	
MRW-3	7/27/2015	625.70	632.11	610.70	605.70	14.97	3.47	18.44	9.31	616.39	-0.34	11.44	Yes	
MRW-3	7/31/2015	625.70	632.11	610.70	605.70	15.26	3.66	18.92	9.64	616.06	-0.33	11.15	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-3	8/7/2015	625.70	632.11	610.70	605.70	15.08	4.07	19.15	9.54	616.16	0.09	11.33	Yes	
MRW-3	8/14/2015	625.70	632.11	610.70	605.70	15.04	4.27	19.31	9.55	616.15	0.00	11.37	Yes	
MRW-3	8/24/2015	625.70	632.11	610.70	605.70	14.34	5.02	19.36	9.01	616.69	0.54	12.07	Yes	
MRW-3	9/10/2015	625.70	632.11	610.70	605.70	13.87	5.61	19.48	8.67	617.03	0.34	12.54	Yes	
MRW-3	9/24/2015	625.70	632.11	610.70	605.70	13.02	6.29	19.31	7.96	617.74	0.70	13.39	Yes	
MRW-3	10/1/2015	625.70	632.11	610.70	605.70	12.81	6.51	19.32	7.80	617.90	0.16	13.60	Yes	
MRW-3	10/29/2015	625.70	632.11	610.70	605.70	13.16	6.40	19.56	8.13	617.57	0.54	13.25	Yes	
MRW-3	11/3/2015	625.70	632.11	610.70	605.70	13.18	5.98	19.16	8.05	617.65	0.07	13.23	Yes	
MRW-3	10/3/2016	625.70	632.11	610.70	605.70	12.78	7.24	20.02	7.93	617.77	0.13	13.63	Yes	
MRW-3	5/2/2017	625.70	632.11	610.70	605.70	10.67	9.34	20.01	6.27	619.43	1.66	15.74	Yes	
MRW-3	5/8/2017	625.70	632.11	610.70	605.70	11.49	5.91	17.40	6.35	619.35	-0.08	14.92	Yes	
MRW-3	5/18/2017	625.70	632.11	610.70	605.70	10.67	8.59	19.26	6.11	619.59	0.24	15.74	Yes	
MRW-3	5/22/2017	625.70	632.11	610.70	605.70	9.96	6.49	16.45	4.94	620.76	1.16	16.45	Yes	
MRW-3	5/25/2017	625.70	632.11	610.70	605.70	10.36	4.64	15.00	4.95	620.75	0.00	16.05	Yes	
MRW-3	5/31/2017	625.70	632.11	610.70	605.70	9.86	7.26	17.12	5.01	620.69	-0.06	16.55	Yes	
MRW-3	6/21/2017	625.70	632.11	610.70	605.70	11.28	8.49	19.77	6.69	619.01	-1.68	15.13	Yes	
MRW-3	6/22/2017	625.70	632.11	610.70	605.70	12.18	4.27	16.45	6.69	619.01	0.01	14.23	Yes	
MRW-3	6/29/2017	625.70	632.11	610.70	605.70	11.76	6.98	18.74	6.85	618.85	-0.16	14.65	Yes	
MRW-3	7/7/2017	625.70	632.11	610.70	605.70	11.13	7.26	18.39	6.28	619.42	0.57	15.28	Yes	
MRW-3	7/12/2017	625.70	632.11	610.70	605.70	11.52	5.26	16.78	6.24	619.46	0.04	14.89	Yes	
MRW-3	7/19/2017	625.70	632.11	610.70	605.70	10.97	7.35	18.32	6.14	619.56	0.10	15.44	Yes	
MRW-3	7/26/2017	625.70	632.11	610.70	605.70	11.35	6.69	18.04	6.38	619.32	-0.24	15.06	Yes	
MRW-3	7/27/2017	625.70	632.11	610.70	605.70	12.53	2.35	14.88	6.62	619.08	-0.25	13.88	Yes	
MRW-3	8/4/2017	625.70	632.11	610.70	605.70	11.68	6.83	18.51	6.74	618.96	-0.11	14.73	Yes	
MRW-3	8/8/2017	625.70	632.11	610.70	605.70	12.44	3.81	16.25	6.85	618.85	-0.11	13.97	Yes	
MRW-3	8/15/2017	625.70	632.11	610.70	605.70	11.06	6.62	17.68	6.07	619.63	0.78	15.35	Yes	
MRW-3	8/22/2017	625.70	632.11	610.70	605.70	10.84	6.37	17.21	5.80	619.90	0.27	15.57	Yes	
MRW-3							Connected to portable skimming system							
MRW-3	8/30/2017	625.70	632.11	610.70	605.70	11.19	2.36	13.55	5.29	620.41	0.51	15.22	Yes	
MRW-3	9/7/2017	625.70	632.11	610.70	605.70	12.83	0.10	12.93	6.44	619.26	-1.15	13.58	Yes	
MRW-3	9/14/2017	625.70	632.11	610.70	605.70	15.02	0.07	15.09	8.63	617.07	-2.18	11.39	Yes	
MRW-3	9/19/2017	625.70	632.11	610.70	605.70	12.7	1.22	13.92	6.55	619.15	2.07	13.71	Yes	
MRW-3	9/27/2017	625.70	632.11	610.70	605.70	15.06	0.14	15.20	8.68	617.02	-2.13	11.35	Yes	
MRW-3	10/12/2017	625.70	632.11	610.70	605.70	11.42	0.35	11.77	5.09	620.61	3.59	14.99	Yes	
MRW-3	10/26/2017	625.70	632.11	610.70	605.70	12.02	0.04	12.06	5.62	620.08	-0.53	14.39	Yes	
MRW-3	5/14/2018	625.70	632.11	610.70	605.70	13.17	6.92	20.09	8.25	617.45	-2.63	13.24	Yes	
MRW-3	5/15/2018	625.70	632.11	610.70	605.70	13.97	4.05	18.02	8.43	617.27	-0.18	12.44	Yes	Portable system restarted
MRW-3	5/23/2018	625.70	632.11	610.70	605.70	15.47	0.98	16.45	9.27	616.43	-0.84	10.94	Yes	
MRW-3	5/24/2018	625.70	632.11	610.70	605.70	15.26	0.69	15.95	9.00	616.70	0.27	11.15	Yes	
MRW-3	5/30/2018	625.70	632.11	610.70	605.70	14.49	1.26	15.75	8.35	617.35	0.65	11.92	Yes	
MRW-3	6/8/2018	625.70	632.11	610.70	605.70	13.99	0.47	14.46	7.68	618.02	0.67	12.42	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-3	6/12/2018	625.70	632.11	610.70	605.70	14.2	0.23	14.43	7.84	617.86	0.51	12.21	Yes	
MRW-3	6/15/2018	625.70	632.11	610.70	605.70	14.5	0.00	14.50	8.09	617.61	-0.25	11.91	Yes	System turned off 6/15-6/19
MRW-3	6/19/2018	625.70	632.11	610.70	605.70	12.1	3.39	15.49	6.42	619.28	1.42	14.31	Yes	
MRW-3	6/27/2018	625.70	632.11	610.70	605.70	13.35	0.85	14.20	7.12	618.58	-0.70	13.06	Yes	
MRW-3	6/28/2018	625.70	632.11	610.70	605.70	13.35	0.85	14.20	7.12	618.58	0.00	13.06	Yes	
MRW-4	10/11/2009	625.69	628.21	615.69	595.69	14.85	0.21	15.06	12.38	613.31	NA	17.67	No	
MRW-4	4/28/2010	625.69	628.21	615.69	595.69	14.30	0.72	15.02	11.93	613.76	0.44	18.22	No	
MRW-4	10/25/2010	625.69	628.21	615.69	595.69	12.60	1.18	13.78	10.33	615.36	1.60	19.92	No	
MRW-4	4/25/2011	625.69	628.21	615.69	595.69	12.76	1.63	14.39	10.59	615.10	-0.26	19.76	No	
MRW-4	10/11/2011	625.69	628.21	615.69	595.69	14.18	2.00	16.18	12.09	613.60	-1.50	18.34	No	
MRW-4	1/4/2012	625.69	628.21	615.69	595.69	15.38	2.23	17.61	13.34	612.35	-1.25	17.14	No	
MRW-4	4/16/2012	625.69	628.21	615.69	595.69	14.84	2.38	17.22	12.83	612.86	0.51	17.68	No	
MRW-4	6/28/2012	625.69	628.21	615.69	595.69	10.37	3.53	13.90	8.61	617.08	4.22	22.15	Yes	
MRW-4	7/10/2012	625.69	628.21	615.69	595.69	11.94	2.76	14.70	10.01	615.68	-1.40	20.58	No	Spill Buddy Before Reading
MRW-4	7/24/2012	625.69	628.21	615.69	595.69	13.64	0.31	13.95	11.19	614.50	-1.17	18.88	No	
MRW-4	8/19/2012	625.69	628.21	615.69	595.69	14.24	0.38	14.62	11.80	613.89	-0.62	18.28	No	
MRW-4	8/28/2012	625.69	628.21	615.69	595.69	14.63	0.46	15.09	12.21	613.48	-0.41	17.89	No	Spill Buddy Before Reading
MRW-4	9/17/2012	625.69	628.21	615.69	595.69	15.31	0.18	15.49	12.83	612.86	-0.62	17.21	No	
MRW-4	9/28/2012	625.69	628.21	615.69	595.69	15.60	0.20	15.80	13.12	612.57	-0.29	16.92	No	Spill Buddy Before Reading
MRW-4	9/30/2012	625.69	628.21	615.69	595.69	15.62	0.08	15.70	13.12	612.57	0.01	16.90	No	
MRW-4	11/21/2012	625.69	628.21	615.69	595.69	15.90	0.21	16.11	13.43	612.26	-0.31	16.62	No	
MRW-4	12/17/2012	625.69	628.21	615.69	595.69	16.06	0.21	16.27	13.59	612.10	-0.16	16.46	No	
MRW-4	3/25/2013	625.69	628.21	615.69	595.69	17.11	0.37	17.48	14.67	611.02	-1.08	15.41	No	
MRW-4	5/5/2013	625.69	628.21	615.69	595.69	14.49	0.30	14.79	12.03	613.66	2.64	18.03	No	
MRW-4	4/15/2015	625.69	628.21	615.69	595.69	15.22	1.39	16.61	13.00	612.69	-0.96	17.30	No	
MRW-4	4/22/2015	625.69	628.21	615.69	595.69	14.77	0.41	15.18	12.34	613.35	0.66	17.75	No	
MRW-4	4/29/2015	625.69	628.21	615.69	595.69	14.58	0.32	14.90	12.13	613.56	0.21	17.94	No	
MRW-4	5/12/2015	625.69	628.21	615.69	595.69	13.95	0.35	14.30	11.51	614.18	0.62	18.57	No	
MRW-4	6/9/2015	625.69	628.21	615.69	595.69	12.87	0.43	13.30	10.44	615.25	1.06	19.65	No	
MRW-4	5/23/2016	625.69	628.21	615.69	595.69	11.19	1.20	12.39	8.93	616.76	1.51	21.33	Yes	
MRW-4	10/3/2016	625.69	628.21	615.69	595.69	12.90	1.02	13.92	10.60	615.09	-1.67	19.62	No	
MRW-4	5/18/2017	625.69	628.21	615.69	595.69	11.17	0.57	11.74	8.77	616.92	1.83	21.35	Yes	
MRW-4	5/31/2017	625.69	628.21	615.69	595.69	10.20	0.37	10.57	7.76	617.93	1.01	22.32	Yes	
MRW-4	8/8/2017	625.69	628.21	615.69	595.69	11.96	0.45	12.41	9.54	616.15	-1.78	20.56	Yes	
MRW-4	8/15/2017	625.69	628.21	615.69	595.69	11.20	0.50	11.70	8.79	616.90	0.75	21.32	Yes	
MRW-5	10/12/2011	625.10	627.88	610.12	595.12	12.51	6.57	19.08	11.20	613.90	NA	20.25	Yes	
MRW-5	10/21/2011	625.10	627.88	610.12	595.12	12.70	6.52	19.22	11.37	613.73	-0.18	20.06	Yes	
MRW-5	10/27/2011	625.10	627.88	610.12	595.12	12.85	6.38	19.23	11.49	613.61	-0.12	19.91	Yes	
MRW-5	11/3/2011	625.10	627.88	610.12	595.12	13.15	6.14	19.29	11.74	613.36	-0.25	19.61	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-5	11/9/2011	625.10	627.88	610.12	595.12	13.11	6.13	19.24	11.70	613.40	0.04	19.65	Yes	
MRW-5	11/17/2011	625.10	627.88	610.12	595.12	13.47	5.80	19.27	11.98	613.12	-0.29	19.29	Yes	
MRW-5	11/29/2011	625.10	627.88	610.12	595.12	13.80	5.00	18.80	12.14	612.97	-0.15	18.96	Yes	Reading after portable system removal
MRW-5	12/1/2011	625.10	627.88	610.12	595.12	14.13	7.63	21.76	13.05	612.05	-0.92	18.63	Yes	
MRW-5	1/4/2012	625.10	627.88	610.12	595.12	14.37	4.93	19.30	12.69	612.41	0.36	18.39	Yes	
MRW-5	2/16/2012	625.10	627.88	610.12	595.12	15.24	4.10	19.34	13.37	611.73	-0.68	17.52	Yes	
MRW-5	3/13/2012	625.10	627.88	610.12	595.12	15.09	4.26	19.35	13.26	611.84	0.11	17.67	Yes	
MRW-5	4/16/2012	625.10	627.88	610.12	595.12	13.74	5.65	19.39	12.22	612.88	1.04	19.02	Yes	
MRW-5	6/19/2012	625.10	627.88	610.12	595.12	9.82	9.72	19.54	9.21	615.89	3.01	22.94	Yes	Reading before install of well pumps for Barge system expansion.
MRW-5	6/21/2012	625.10	627.88	610.12	595.12	10.70	0.65	11.35	8.06	617.04	1.14	22.06	Yes	Connected to System
MRW-5	6/22/2012	625.10	627.88	610.12	595.12	8.40	10.53	18.93	7.97	617.13	0.10	24.36	Yes	Connected to System
MRW-5	6/28/2012	625.10	627.88	610.12	595.12	11.14	0.25	11.39	8.42	616.68	-0.45	21.62	Yes	Connected to System
MRW-5	12/17/2012	625.10	627.88	610.12	595.12	15.25	3.90	19.15	13.34	611.76	-4.92	17.51	Yes	
<b>Well connected to Barge Dock Skimmer system - Phase 2</b>														
MRW-5	3/25/2013	625.10	627.88	610.12	595.12	16.55	2.84	19.39	14.40	610.70	-1.06	16.21	Yes	
MRW-5	5/5/2013	625.10	627.88	610.12	595.12	13.27	6.12	19.39	11.85	613.25	2.55	19.49	Yes	
MRW-5	3/17/2015	625.10	627.88	610.12	595.12	14.75	4.22	18.97	12.91	612.19	1.49	18.01	Yes	
MRW-5	6/25/2015	625.10	627.88	610.12	595.12	13.64	0.26	13.90	10.92	614.18	0.94	19.12	Yes	
MRW-5	7/10/2015	625.10	627.88	610.12	595.12	13.55	0.36	13.91	10.85	614.25	0.07	19.21	Yes	
MRW-5	7/13/2015	625.10	627.88	610.12	595.12	13.50	0.37	13.87	10.80	614.30	0.05	19.26	Yes	
MRW-5	9/10/2015	625.10	627.88	610.12	595.12	13.79	0.29	14.08	11.07	614.03	-0.27	18.97	Yes	
MRW-5	9/24/2015	625.10	627.88	610.12	595.12	13.28	0.02	13.30	10.50	614.60	0.57	19.48	Yes	
MRW-5	10/1/2015	625.10	627.88	610.12	595.12	12.97	0.26	13.23	10.25	614.85	0.26	19.79	Yes	
MRW-5	10/14/2015	625.10	627.88	610.12	595.12	13.49	0.35	13.84	10.79	614.31	-0.54	19.27	Yes	
MRW-5	3/7/2016	625.10	627.88	610.12	595.12	10.74	0.25	10.99	8.02	617.08	2.77	22.02	Yes	
MRW-5	4/21/2016	625.10	627.88	610.12	595.12	8.94	9.82	18.76	8.35	616.75	-0.33	23.82	Yes	
MRW-5	5/18/2016	625.10	627.88	610.12	595.12	10.98	1.13	12.11	8.45	616.65	-0.10	21.78	Yes	
MRW-5	5/25/2016	625.10	627.88	610.12	595.12	11.40	0.32	11.72	8.69	616.41	-0.24	21.36	Yes	
MRW-5	5/31/2016	625.10	627.88	610.12	595.12	11.29	0.29	11.58	8.57	616.53	0.12	21.47	Yes	
MRW-5	6/14/2016	625.10	627.88	610.12	595.12	11.18	0.28	11.46	8.46	616.64	0.11	21.58	Yes	
MRW-5	6/21/2016	625.10	627.88	610.12	595.12	10.66	0.19	10.85	7.92	617.18	0.54	22.10	Yes	
MRW-5	7/6/2016	625.10	627.88	610.12	595.12	10.17	7.51	17.68	9.06	616.04	-1.14	22.59	Yes	Pre system start
MRW-5	7/7/2016	625.10	627.88	610.12	595.12	11.07	3.10	14.17	8.98	616.12	0.08	21.69	Yes	
MRW-5	7/15/2016	625.10	627.88	610.12	595.12	11.08	0.27	11.35	8.36	616.74	0.10	21.68	Yes	
MRW-5	7/25/2016	625.10	627.88	610.12	595.12	11.75	0.44	12.19	9.07	616.03	-0.71	21.01	Yes	
MRW-5	8/26/2016	625.10	627.88	610.12	595.12	12.96	0.37	13.33	10.26	614.84	-1.19	19.80	Yes	
MRW-5	9/2/2016	625.10	627.88	610.12	595.12	12.85	0.50	13.35	10.18	614.92	0.08	19.91	Yes	
MRW-5	10/3/2016	625.10	627.88	610.12	595.12	13.04	0.30	13.34	10.33	614.77	-0.15	19.72	Yes	
MRW-5	10/6/2016	625.10	627.88	610.12	595.12	13.18	0.34	13.52	10.48	614.62	-0.15	19.58	Yes	
MRW-5	10/13/2016	625.10	627.88	610.12	595.12	13.24	0.33	13.57	10.53	614.57	-0.06	19.52	Yes	
MRW-5	5/2/2017	625.10	627.88	610.12	595.12	9.37	9.38	18.75	8.68	616.42	1.85	23.39	Yes	
MRW-5	5/8/2017	625.10	627.88	610.12	595.12	11.51	0.31	11.82	8.80	616.30	-0.12	21.25	Yes	
MRW-5	5/18/2017	625.10	627.88	610.12	595.12	11.19	0.31	11.50	8.48	616.62	0.32	21.57	Yes	
MRW-5	5/25/2017	625.10	627.88	610.12	595.12	10.09	0.31	10.40	7.38	617.72	1.10	22.67	Yes	
MRW-5	5/31/2017	625.10	627.88	610.12	595.12	10.14	0.33	10.47	7.43	617.67	-0.05	22.62	Yes	
MRW-5	6/14/2017	625.10	627.88	610.12	595.12	11.30	0.26	11.56	8.58	616.52	-1.14	21.46	Yes	
MRW-5	6/21/2017	625.10	627.88	610.12	595.12	11.76	0.64	12.40	9.12	615.98	-0.54	21.00	Yes	
MRW-5	06/29/17	625.10	627.88	610.12	595.12	11.96	0.26	12.22	9.24	615.86	-0.12	20.80	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-5	7/7/2017	625.10	627.88	610.12	595.12	11.45	0.30	11.75	8.74	616.36	0.50	21.31	Yes	
MRW-5	07/12/17	625.10	627.88	610.12	595.12	11.44	0.22	11.66	8.71	616.39	0.03	21.32	Yes	
MRW-5	7/19/2017	625.10	627.88	610.12	595.12	11.33	0.30	11.63	8.62	616.48	0.09	21.43	Yes	
MRW-5	07/26/17	625.10	627.88	610.12	595.12	11.56	0.30	11.86	8.85	616.25	-0.23	21.20	Yes	
MRW-5	7/27/2017	625.10	627.88	610.12	595.12	11.73	0.30	12.03	9.02	616.08	-0.17	21.03	Yes	
MRW-5	08/04/17	625.10	627.88	610.12	595.12	11.88	0.30	12.18	9.17	615.93	-0.15	20.88	Yes	
MRW-5	8/8/2017	625.10	627.88	610.12	595.12	12.01	0.31	12.32	9.30	615.80	-0.13	20.75	Yes	
MRW-5	08/15/17	625.10	627.88	610.12	595.12	11.28	0.20	11.48	8.54	616.56	0.75	21.48	Yes	
MRW-5	8/22/2017	625.10	627.88	610.12	595.12	10.97	0.36	11.33	8.27	616.83	0.27	21.79	Yes	
MRW-5	08/30/17	625.10	627.88	610.12	595.12	10.01	0.02	10.03	7.23	617.87	1.04	22.75	Yes	
MRW-5	9/7/2017	625.10	627.88	610.12	595.12	10.28	0.33	10.61	7.57	617.53	-0.34	22.48	Yes	
MRW-5	09/14/17	625.10	627.88	610.12	595.12	10.91	0.59	11.50	8.26	616.84	-0.69	21.85	Yes	
MRW-5	9/19/2017	625.10	627.88	610.12	595.12	11.03	1.82	12.85	8.66	616.44	-0.39	21.73	Yes	
MRW-5	09/27/17	625.10	627.88	610.12	595.12	10.91	0.28	11.19	8.19	616.91	0.46	21.85	Yes	
MRW-5	10/12/2017	625.10	627.88	610.12	595.12	9.88	0.29	10.17	7.16	617.94	1.03	22.88	Yes	
MRW-5	10/26/2017	625.10	627.88	610.12	595.12	10.34	0.30	10.64	7.63	617.47	-0.46	22.42	Yes	
MRW-5	5/14/2018	625.10	627.88	610.12	595.12	11.75	7.08	18.83	10.55	614.55	-2.92	21.01	Yes	
MRW-5	5/15/2018	625.10	627.88	610.12	595.12	13.41	0.31	13.72	10.70	614.40	-0.15	19.35	Yes	
MRW-5	5/23/2018	625.10	627.88	610.12	595.12	13.70	0.30	14.00	10.99	614.11	-0.29	19.06	Yes	
MRW-5	5/24/2018	625.10	627.88	610.12	595.12	13.64	0.27	13.91	10.92	614.18	0.07	19.12	Yes	
MRW-5	5/30/2018	625.10	627.88	610.12	595.12	13.03	0.23	13.26	10.30	614.80	0.62	19.73	Yes	
MRW-5	6/8/2018	625.10	627.88	610.12	595.12	12.49	0.30	12.79	9.78	615.32	0.52	20.27	Yes	
MRW-5	6/12/2018	625.10	627.88	610.12	595.12	12.64	0.28	12.92	9.92	615.18	-0.15	20.12	Yes	
MRW-5	6/15/2018	625.10	627.88	610.12	595.12	12.71	0.29	13.00	9.99	615.11	-0.07	20.05	Yes	
MRW-5	6/19/2018	625.10	627.88	610.12	595.12	11.68	0.01	11.69	8.90	616.20	1.09	21.08	Yes	
MRW-5	6/28/2018	625.10	627.88	610.12	595.12	12.95	0.97	13.92	10.39	614.71	-1.48	19.81	Yes	
MRW-6	10/12/2011	625.90	628.27	610.86	595.86	13.64	5.54	19.18	12.46	613.44	NA	18.77	Yes	
MRW-6	10/21/2011	625.90	628.27	610.86	595.86	13.12	8.58	21.70	12.59	613.31	-0.13	19.29	Yes	
MRW-6	10/27/2011	625.90	628.27	610.86	595.86	13.26	8.47	21.73	12.71	613.19	-0.12	19.15	Yes	
MRW-6	11/3/2011	625.90	628.27	610.86	595.86	13.53	8.19	21.72	12.92	612.98	-0.21	18.88	Yes	
MRW-6	11/7/2011	625.90	628.27	610.86	595.86	13.63	8.07	21.70	12.99	612.91	-0.07	18.78	Yes	System start reading
MRW-6	11/9/2011	625.90	628.27	610.86	595.86	15.61	0.08	15.69	13.26	612.64	-0.26	16.80	Yes	
MRW-6	11/18/2011	625.90	628.27	610.86	595.86	15.55	0.39	15.94	13.26	612.64	-0.01	16.86	Yes	Reading after system removal.
MRW-6	11/22/2011	625.90	628.27	610.86	595.86	14.02	7.31	21.33	13.22	612.68	0.04	18.39	Yes	
MRW-6	12/1/2011	625.90	628.27	610.86	595.86	13.32	5.86	19.18	12.21	613.69	1.01	19.09	Yes	
MRW-6	1/4/2012	625.90	628.27	610.86	595.86	14.70	7.09	21.79	13.85	612.05	-1.64	17.71	Yes	
MRW-6	2/16/2012	625.90	628.27	610.86	595.86	15.89	5.38	21.27	14.68	611.22	-0.82	16.52	Yes	
MRW-6	3/13/2012	625.90	628.27	610.86	595.86	15.34	6.61	21.95	14.39	611.51	0.29	17.07	Yes	
MRW-6	4/16/2012	625.90	628.27	610.86	595.86	13.92	8.12	22.04	13.29	612.61	1.10	18.49	Yes	
MRW-6	6/19/2012	625.90	628.27	610.86	595.86	10.26	11.84	22.10	10.43	615.47	2.86	22.15	Yes	Reading before install of well pumps for Barge system expansion.
MRW-6	6/21/2012	625.90	628.27	610.86	595.86	11.53	0.52	12.05	9.27	616.63	1.16	20.88	Yes	Connected to System

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-6	6/22/2012	625.90	628.27	610.86	595.86	9.70	8.31	18.01	9.12	616.78	0.16	22.71	Yes	Connected to System
MRW-6	6/28/2012	625.90	628.27	610.86	595.86	11.82	0.25	12.07	9.50	616.40	-0.39	20.59	Yes	Connected to System
MRW-6	12/17/2012	625.90	628.27	610.86	595.86	15.33	6.12	21.45	14.27	611.63	-4.77	17.08	Yes	
<b>Well connected to Barge Dock Skimmer system - Phase 2</b>														
MRW-6	3/25/2013	625.90	628.27	610.86	595.86	16.60	4.94	21.54	15.29	610.61	-1.02	15.81	No	
MRW-6	5/5/2013	625.90	628.27	610.86	595.86	13.36	8.31	21.67	12.78	613.12	2.52	19.05	Yes	
MRW-6	3/17/2015	625.90	628.27	610.86	595.86	14.89	6.03	20.92	13.82	612.08	1.48	17.52	Yes	
MRW-6	6/25/2015	625.90	628.27	610.86	595.86	13.64	0.26	13.90	11.33	614.57	2.49	18.77	Yes	
MRW-6	7/10/2015	625.90	628.27	610.86	595.86	14.24	0.29	14.53	11.93	613.97	0.84	18.17	Yes	
MRW-6	7/13/2015	625.90	628.27	610.86	595.86	14.21	0.28	14.49	11.90	614.00	0.03	18.20	Yes	
MRW-6	9/10/2015	625.90	628.27	610.86	595.86	14.51	0.29	14.80	12.20	613.70	-0.88	17.90	Yes	
MRW-6	9/24/2015	625.90	628.27	610.86	595.86	13.77	0.19	13.96	11.44	614.46	0.76	18.64	Yes	
MRW-6	10/1/2015	625.90	628.27	610.86	595.86	13.64	0.32	13.96	11.34	614.56	0.56	18.77	Yes	
MRW-6	10/14/2015	625.90	628.27	610.86	595.86	14.08	0.45	14.53	11.81	614.09	-0.47	18.33	Yes	
MRW-6	4/21/2016	625.90	628.27	610.86	595.86	9.59	10.52	20.11	9.48	616.42	2.42	22.82	Yes	
MRW-6	5/18/2016	625.90	628.27	610.86	595.86	11.78	0.89	12.67	9.60	616.30	-0.12	20.63	Yes	
MRW-6	5/25/2016	625.90	628.27	610.86	595.86	12.17	0.30	12.47	9.86	616.04	-0.26	20.24	Yes	
MRW-6	5/31/2016	625.90	628.27	610.86	595.86	12.07	0.29	12.36	9.76	616.14	0.10	20.34	Yes	
MRW-6	6/7/2016	625.90	628.27	610.86	595.86	11.54	0.27	11.81	9.23	616.67	0.53	20.87	Yes	
MRW-6	6/14/2016	625.90	628.27	610.86	595.86	11.83	0.45	12.28	9.56	616.34	-0.33	20.58	Yes	
MRW-6	6/21/2016	625.90	628.27	610.86	595.86	11.51	0.28	11.79	9.20	616.70	0.36	20.90	Yes	
MRW-6	7/6/2016	625.90	628.27	610.86	595.86	11.84	3.60	15.44	10.24	615.66	-1.04	20.57	Yes	Pre system start
MRW-6	7/7/2016	625.90	628.27	610.86	595.86	12.65	0.33	12.98	10.35	615.55	-0.11	19.76	Yes	
MRW-6	7/15/2016	625.90	628.27	610.86	595.86	11.89	0.30	12.19	9.58	616.32	-0.03	20.52	Yes	
MRW-6	7/25/2016	625.90	628.27	610.86	595.86	12.55	0.37	12.92	10.26	615.64	-0.68	19.86	Yes	
MRW-6	7/25/2016	625.90	628.27	610.86	595.86	13.52	2.68	16.20	11.73	614.17	-1.47	18.89	Yes	water level dropped below skimming pump
MRW-6	9/2/2016	625.90	628.27	610.86	595.86	13.64	0.33	13.97	11.34	614.56	0.38	18.77	Yes	
MRW-6	10/3/2016	625.90	628.27	610.86	595.86	13.76	0.34	14.10	11.46	614.44	-0.12	18.65	Yes	
MRW-6	10/6/2016	625.90	628.27	610.86	595.86	13.90	0.33	14.23	11.60	614.30	-0.14	18.51	Yes	
MRW-6	10/13/2016	625.90	628.27	610.86	595.86	13.95	0.35	14.30	11.66	614.24	-0.05	18.46	Yes	
MRW-6	5/2/2017	625.90	628.27	610.86	595.86	9.99	10.05	20.04	9.78	616.12	1.88	22.42	Yes	
MRW-6	5/8/2017	625.90	628.27	610.86	595.86	12.29	0.33	12.62	9.99	615.91	-0.21	20.12	Yes	
MRW-6	5/18/2017	625.90	628.27	610.86	595.86	11.91	0.29	12.20	9.60	616.30	0.39	20.50	Yes	
MRW-6	5/25/2017	625.90	628.27	610.86	595.86	10.92	0.32	11.24	8.62	617.28	0.98	21.49	Yes	
MRW-6	5/31/2017	625.90	628.27	610.86	595.86	10.93	0.34	11.27	8.63	617.27	-0.01	21.48	Yes	
MRW-6	6/14/2017	625.90	628.27	610.86	595.86	12.07	0.29	12.36	9.76	616.14	-1.13	20.34	Yes	
MRW-6	6/21/2017	625.90	628.27	610.86	595.86	12.51	0.43	12.94	10.23	615.67	-0.47	19.90	Yes	
MRW-6	6/29/2017	625.90	628.27	610.86	595.86	12.72	0.26	12.98	10.41	615.49	-0.17	19.69	Yes	
MRW-6	7/7/2017	625.90	628.27	610.86	595.86	12.27	0.29	12.56	9.96	615.94	0.44	20.14	Yes	
MRW-6	07/12/17	625.90	628.27	610.86	595.86	12.22	0.27	12.49	9.91	615.99	0.05	20.19	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-6	7/19/2017	625.90	628.27	610.86	595.86	12.15	0.33	12.48	9.85	616.05	0.06	20.26	Yes	
MRW-6	07/26/17	625.90	628.27	610.86	595.86	12.40	0.28	12.68	10.09	615.81	-0.24	20.01	Yes	
MRW-6	7/27/2017	625.90	628.27	610.86	595.86	12.50	0.29	12.79	10.19	615.71	-0.10	19.91	Yes	
MRW-6	08/04/17	625.90	628.27	610.86	595.86	12.66	0.34	13.00	10.36	615.54	-0.17	19.75	Yes	
MRW-6	8/8/2017	625.90	628.27	610.86	595.86	12.78	0.30	13.08	10.47	615.43	-0.11	19.63	Yes	
MRW-6	08/15/17	625.90	628.27	610.86	595.86	12.11	0.29	12.40	9.80	616.10	0.67	20.30	Yes	
MRW-6	8/22/2017	625.90	628.27	610.86	595.86	11.82	0.34	12.16	9.52	616.38	0.28	20.59	Yes	
MRW-6	08/30/17	625.90	628.27	610.86	595.86	NP	0.00	10.96	8.59	617.31	0.93	21.45	Yes	
MRW-6	9/7/2017	625.90	628.27	610.86	595.86	11.12	0.36	11.48	8.83	617.07	-0.24	21.29	Yes	
MRW-6	09/14/17	625.90	628.27	610.86	595.86	11.68	0.41	12.09	9.40	616.50	-0.57	20.73	Yes	
MRW-6	9/19/2017	625.90	628.27	610.86	595.86	12.11	0.47	12.58	9.84	616.06	-0.44	20.30	Yes	
MRW-6	09/27/17	625.90	628.27	610.86	595.86	11.71	0.28	11.99	9.40	616.50	0.44	20.70	Yes	
MRW-6	10/12/2017	625.90	628.27	610.86	595.86	10.72	0.29	11.01	8.41	617.49	0.99	21.69	Yes	
MRW-6	10/26/2017	625.90	628.27	610.86	595.86	11.15	0.34	11.49	8.85	617.05	-0.44	21.26	Yes	
MRW-6	5/14/2018	625.90	628.27	610.86	595.86	12.26	8.05	20.31	11.62	614.28	-2.77	20.15	Yes	
MRW-6	5/15/2018	625.90	628.27	610.86	595.86	14.10	0.31	14.41	11.80	614.10	-0.18	18.31	Yes	
MRW-6	5/23/2018	625.90	628.27	610.86	595.86	14.33	0.36	14.69	12.04	613.86	-0.24	18.08	Yes	
MRW-6	5/24/2018	625.90	628.27	610.86	595.86	14.30	0.30	14.60	11.99	613.91	0.04	18.11	Yes	
MRW-6	5/30/2018	625.90	628.27	610.86	595.86	13.76	0.28	14.04	11.45	614.45	0.54	18.65	Yes	
MRW-6	6/8/2018	625.90	628.27	610.86	595.86	13.28	0.29	13.57	10.97	614.93	0.48	19.13	Yes	
MRW-6	6/12/2018	625.90	628.27	610.86	595.86	13.39	0.33	13.72	11.09	614.81	-0.12	19.02	Yes	
MRW-6	6/19/2018	625.90	628.27	610.86	595.86	12.46	0.01	12.47	10.09	615.81	1.00	19.95	Yes	
MRW-6	6/28/2018	625.90	628.27	610.86	595.86	12.75	0.40	13.15	10.47	615.43	-0.37	19.66	Yes	
MRW-7	10/11/2011	627.30	629.77	608.30	593.30	16.65	3.02	19.67	14.83	612.47	NA	19.82	Yes	
MRW-7	10/12/2011	627.30	629.77	608.30	593.30	14.46	12.71	27.17	14.72	612.58	0.11	22.01	Yes	
MRW-7	10/28/2011	627.30	629.77	608.30	593.30	14.98	11.50	26.48	14.98	612.32	-0.26	21.49	Yes	
MRW-7	11/3/2011	627.30	629.77	608.30	593.30	15.09	11.91	27.00	15.18	612.12	-0.20	21.38	Yes	
MRW-7	11/9/2011	627.30	629.77	608.30	593.30	15.02	12.19	27.21	15.17	612.13	0.01	21.45	Yes	
MRW-7	11/10/2011	627.30	629.77	608.30	593.30	15.03	12.27	27.30	15.20	612.10	-0.03	21.44	Yes	Before EFR
MRW-7	11/10/2011	627.30	629.77	608.30	593.30	20.80	0.30	21.10	18.39	608.91	-3.20	15.67	Yes	After EFR
MRW-7	11/13/2011	627.30	629.77	608.30	593.30	15.06	12.09	27.15	15.19	612.11	3.21	21.41	Yes	EFR Check
MRW-7	11/17/2011	627.30	629.77	608.30	593.30	15.28	11.96	27.24	15.38	611.92	-0.19	21.19	Yes	
MRW-7	11/22/2011	627.30	629.77	608.30	593.30	15.33	11.94	27.27	15.43	611.87	-0.05	21.14	Yes	
MRW-7	12/1/2011	627.30	629.77	608.30	593.30	15.54	11.68	27.22	15.58	611.72	-0.15	20.93	Yes	
MRW-7	1/4/2012	627.30	629.77	608.30	593.30	16.12	11.15	27.27	16.05	611.25	-0.47	20.35	Yes	
MRW-7	2/16/2012	627.30	629.77	608.30	593.30	16.88	10.39	27.27	16.64	610.66	-0.60	19.59	Yes	
MRW-7	3/13/2012	627.30	629.77	608.30	593.30	16.68	10.56	27.24	16.48	610.82	0.16	19.79	Yes	
MRW-7	4/16/2012	627.30	629.77	608.30	593.30	15.21	12.03	27.24	15.32	611.98	1.15	21.26	Yes	
MRW-7	6/11/2012	627.30	629.77	608.30	593.30	12.56	14.72	27.28	13.25	614.05	2.07	23.91	Yes	Reading before install of well pumps for Barge system expansion.
MRW-7	6/21/2012	627.30	629.77	608.30	593.30	12.91	5.98	18.89	11.72	615.58	1.53	23.56	Yes	Connected to System



**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-7	6/22/2012	627.30	629.77	608.30	593.30	14.08	0.70	14.78	11.76	615.54	-0.04	22.39	Yes	Connected to System
MRW-7	6/28/2012	627.30	629.77	608.30	593.30	14.65	0.19	14.84	12.22	615.08	-0.46	21.82	Yes	Connected to System
MRW-7	12/17/2012	627.30	629.77	608.30	593.30	17.11	8.93	26.04	16.56	610.74	-4.34	19.36	Yes	
<b>Well connected to Barge Dock Skimmer system - Phase 2</b>														
MRW-7	3/25/2013	627.30	629.77	608.30	593.30	18.15	8.44	26.59	17.49	609.81	-0.93	18.32	Yes	
MRW-7	5/5/2013	627.30	629.77	608.30	593.30	15.04	11.41	26.45	15.02	612.28	2.47	21.43	Yes	
MRW-7	3/17/2015	627.30	629.77	608.30	593.30	16.43	9.46	25.89	15.99	611.31	1.50	20.04	Yes	
MRW-7	6/25/2015	627.30	629.77	608.30	593.30	16.78	0.19	16.97	14.35	612.95	1.64	19.69	Yes	
MRW-7	7/10/2015	627.30	629.77	608.30	593.30	16.77	0.26	17.03	14.36	612.94	0.67	19.70	Yes	
MRW-7	7/13/2015	627.30	629.77	608.30	593.30	16.73	0.22	16.95	14.31	612.99	0.05	19.74	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-7	9/10/2015	627.30	629.77	608.30	593.30	17.02	0.24	17.26	14.60	612.70	-0.25	19.45	Yes	
MRW-7	9/24/2015	627.30	629.77	608.30	593.30	16.29	0.18	16.47	13.86	613.44	0.49	20.18	Yes	
MRW-7	10/1/2015	627.30	629.77	608.30	593.30	16.22	0.27	16.49	13.81	613.49	0.50	20.25	Yes	
MRW-7	10/14/2015	627.30	629.77	608.30	593.30	16.73	0.26	16.99	14.32	612.98	-0.01	19.74	Yes	
MRW-7	4/21/2016	627.30	629.77	608.30	593.30	15.40	0.25	15.65	12.98	614.32	1.32	21.07	Yes	
MRW-7	5/18/2016	627.30	629.77	608.30	593.30	14.56	0.83	15.39	12.27	615.03	0.72	21.91	Yes	
MRW-7	5/25/2016	627.30	629.77	608.30	593.30	14.93	0.21	15.14	12.51	614.79	-0.24	21.54	Yes	
MRW-7	5/31/2016	627.30	629.77	608.30	593.30	14.81	0.23	15.04	12.39	614.91	0.12	21.66	Yes	
MRW-7	6/7/2016	627.30	629.77	608.30	593.30	14.36	0.22	14.58	11.94	615.36	0.45	22.11	Yes	
MRW-7	6/14/2016	627.30	629.77	608.30	593.30	14.71	0.28	14.99	12.30	615.00	-0.36	21.76	Yes	
MRW-7	6/21/2016	627.30	629.77	608.30	593.30	14.39	0.20	14.59	11.96	615.34	0.34	22.08	Yes	
MRW-7	7/6/2016	627.30	629.77	608.30	593.30	12.45	12.64	25.09	12.70	614.60	-0.73	24.02	Yes	Pre system start
MRW-7	7/7/2016	627.30	629.77	608.30	593.30	13.48	8.80	22.28	12.90	614.40	-0.20	22.99	Yes	
MRW-7	7/15/2016	627.30	629.77	608.30	593.30	14.70	0.25	14.95	12.28	615.02	0.70	21.77	Yes	
MRW-7	7/25/2016	627.30	629.77	608.30	593.30	15.29	0.30	15.59	12.88	614.42	-0.60	21.18	Yes	
MRW-7	8/26/2016	627.30	629.77	608.30	593.30	16.19	0.54	16.73	13.84	613.46	-0.95	20.28	Yes	
MRW-7	9/2/2016	627.30	629.77	608.30	593.30	16.26	0.21	16.47	13.84	613.46	0.00	20.21	Yes	
MRW-7	10/3/2016	627.30	629.77	608.30	593.30	16.38	0.22	16.60	13.96	613.34	-0.12	20.09	Yes	
MRW-7	10/6/2016	627.30	629.77	608.30	593.30	16.46	0.29	16.75	14.05	613.25	-0.10	20.01	Yes	
MRW-7	10/13/2016	627.30	629.77	608.30	593.30	16.55	0.27	16.82	14.14	613.16	-0.09	19.92	Yes	
MRW-7	5/2/2017	627.30	629.77	608.30	593.30	11.96	13.31	25.27	12.35	614.95	1.79	24.51	Yes	
MRW-7	5/8/2017	627.30	629.77	608.30	593.30	14.97	0.27	15.24	12.56	614.74	-0.21	21.50	Yes	
MRW-7	5/18/2017	627.30	629.77	608.30	593.30	14.57	0.25	14.82	12.15	615.15	0.40	21.90	Yes	
MRW-7	5/25/2017	627.30	629.77	608.30	593.30	13.79	0.24	14.03	11.37	615.93	0.78	22.68	Yes	
MRW-7	5/31/2017	627.30	629.77	608.30	593.30	13.76	0.27	14.03	11.35	615.95	0.02	22.71	Yes	
MRW-7	6/14/2017	627.30	629.77	608.30	593.30	14.79	0.23	15.02	12.37	614.93	-1.02	21.68	Yes	
MRW-7	6/21/2017	627.30	629.77	608.30	593.30	15.79	0.23	16.02	13.37	613.93	-1.00	20.68	Yes	
MRW-7	6/29/2017	627.30	629.77	608.30	593.30	15.35	0.22	15.57	12.93	614.37	0.44	21.12	Yes	
MRW-7	7/7/2017	627.30	629.77	608.30	593.30	15.02	0.21	15.23	12.60	614.70	0.33	21.45	Yes	
MRW-7	07/12/17	627.30	629.77	608.30	593.30	14.94	0.21	15.15	12.52	614.78	0.08	21.53	Yes	
MRW-7	7/19/2017	627.30	629.77	608.30	593.30	14.91	0.22	15.13	12.49	614.81	0.03	21.56	Yes	
MRW-7	07/26/17	627.30	629.77	608.30	593.30	15.10	0.26	15.36	12.69	614.61	-0.20	21.37	Yes	
MRW-7	7/27/2017	627.30	629.77	608.30	593.30	15.20	0.25	15.45	12.78	614.52	-0.10	21.27	Yes	
MRW-7	08/04/17	627.30	629.77	608.30	593.30	15.38	0.24	15.62	12.96	614.34	-0.18	21.09	Yes	
MRW-7	8/8/2017	627.30	629.77	608.30	593.30	15.48	0.25	15.73	13.06	614.24	-0.10	20.99	Yes	
MRW-7	08/15/17	627.30	629.77	608.30	593.30	14.96	0.11	15.07	12.51	614.79	0.55	21.51	Yes	
MRW-7	8/22/2017	627.30	629.77	608.30	593.30	14.58	0.42	15.00	12.20	615.10	0.31	21.89	Yes	
MRW-7	08/30/17	627.30	629.77	608.30	593.30	13.71	0.10	13.81	11.26	616.04	0.94	22.76	Yes	
MRW-7	9/7/2017	627.30	629.77	608.30	593.30	13.94	0.28	14.22	11.53	615.77	-0.27	22.53	Yes	
MRW-7	09/14/17	627.30	629.77	608.30	593.30	14.47	0.27	14.74	12.06	615.24	-0.53	22.00	Yes	
MRW-7	9/19/2017	627.30	629.77	608.30	593.30	14.75	0.74	15.49	12.44	614.86	-0.38	21.72	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-7	09/27/17	627.30	629.77	608.30	593.30	14.43	<b>0.32</b>	14.75	12.03	615.27	0.41	22.04	Yes	
MRW-7	10/12/2017	627.30	629.77	608.30	593.30	13.54	<b>0.25</b>	13.79	11.12	616.18	0.91	22.93	Yes	
MRW-7	10/26/2017	627.30	629.77	608.30	593.30	13.94	<b>0.32</b>	14.26	11.54	615.76	-0.42	22.53	Yes	
MRW-7	5/14/2018	627.30	629.77	608.30	593.30	14.03	<b>11.31</b>	25.34	13.99	613.31	-2.45	22.44	Yes	
MRW-7	5/15/2018	627.30	629.77	608.30	593.30	16.59	<b>0.21</b>	16.80	14.17	613.13	-0.18	19.88	Yes	
MRW-7	5/23/2018	627.30	629.77	608.30	593.30	16.80	<b>0.28</b>	17.08	14.39	612.91	-0.23	19.67	Yes	
MRW-7	5/24/2018	627.30	629.77	608.30	593.30	16.76	<b>0.24</b>	17.00	14.34	612.96	0.05	19.71	Yes	
MRW-7	5/30/2018	627.30	629.77	608.30	593.30	16.28	<b>0.20</b>	16.48	13.85	613.45	0.49	20.19	Yes	
MRW-7	6/8/2018	627.30	629.77	608.30	593.30	15.85	<b>0.19</b>	16.04	13.42	613.88	0.43	20.62	Yes	
MRW-7	6/12/2018	627.30	629.77	608.30	593.30	16.00	<b>0.23</b>	16.23	13.58	613.72	-0.16	20.47	Yes	
MRW-7	6/19/2018	627.30	629.77	608.30	593.30	14.99	<b>0.01</b>	15.00	12.52	614.78	1.06	21.48	Yes	
MRW-7	6/28/2018	627.30	629.77	608.30	593.30	15.25	<b>0.95</b>	16.20	12.98	614.32	-0.46	21.22	Yes	

**Table 4  
Groundwater and LNAPL Gauging Data - Barge Dock  
Former Amoco Terminal  
Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-8	10/11/2011	627.30	629.50	610.37	595.37	14.29	<b>12.22</b>	26.51	14.72	612.58	NA	19.84	Yes	
MRW-8	10/12/2011	627.30	629.50	610.37	595.37	13.74	<b>13.97</b>	27.71	14.54	612.76	0.17	20.39	Yes	
MRW-8	10/21/2011	627.30	629.50	610.37	595.37	14.06	<b>13.95</b>	28.01	14.86	612.44	-0.32	20.07	Yes	
MRW-8	10/27/2011	627.30	629.50	610.37	595.37	16.85	<b>3.35</b>	20.20	15.37	611.93	-0.51	17.28	Yes	
MRW-8	10/27/2011	627.30	629.50	610.37	595.37	16.20	<b>5.31</b>	21.51	15.14	612.16	0.23	17.93	Yes	
MRW-8	11/3/2011	627.30	629.50	610.37	595.37	14.69	<b>12.74</b>	27.43	15.23	612.07	-0.09	19.44	Yes	
MRW-8	11/9/2011	627.30	629.50	610.37	595.37	14.89	<b>12.61</b>	27.50	15.40	611.90	-0.17	19.24	Yes	
MRW-8	11/10/2011	627.30	629.50	610.37	595.37	14.66	<b>12.94</b>	27.60	15.24	612.06	0.16	19.47	Yes	Before EFR
MRW-8	11/10/2011	627.30	629.50	610.37	595.37	18.04	<b>0.30</b>	18.34	15.90	611.40	-0.66	16.09	Yes	After EFR (12:25)
MRW-8	11/10/2011	627.30	629.50	610.37	595.37	17.45	<b>2.50</b>	19.95	15.79	611.51	0.12	16.68	Yes	After EFR (13:30)
MRW-8	11/13/2011	627.30	629.50	610.37	595.37	14.65	<b>12.64</b>	27.29	15.17	612.13	0.62	19.48	Yes	
MRW-8	11/17/2011	627.30	629.50	610.37	595.37	14.89	<b>12.61</b>	27.50	15.40	611.90	-0.23	19.24	Yes	
MRW-8	11/22/2011	627.30	629.50	610.37	595.37	14.94	<b>12.63</b>	27.57	15.45	611.85	-0.05	19.19	Yes	
MRW-8	12/1/2011	627.30	629.50	610.37	595.37	15.09	<b>12.48</b>	27.57	15.57	611.73	-0.12	19.04	Yes	
MRW-8	1/4/2012	627.30	629.50	610.37	595.37	15.70	<b>11.77</b>	27.47	16.03	611.27	-0.46	18.43	Yes	
MRW-8	2/16/2012	627.30	629.50	610.37	595.37	16.44	<b>10.95</b>	27.39	16.59	610.71	-0.56	17.69	Yes	
MRW-8	3/13/2012	627.30	629.50	610.37	595.37	16.31	<b>11.03</b>	27.34	16.48	610.82	0.11	17.82	Yes	
MRW-8	4/16/2012	627.30	629.50	610.37	595.37	14.84	<b>12.64</b>	27.48	15.36	611.94	1.12	19.29	Yes	
MRW-8	6/11/2012	627.30	629.50	610.37	595.37	12.22	<b>15.77</b>	27.99	13.41	613.89	1.95	21.91	Yes	Reading before install of well pumps for Barge system expansion.
MRW-8	6/21/2012	627.30	629.50	610.37	595.37	14.66	<b>0.24</b>	14.90	12.51	614.79	0.90	19.47	Yes	Connected to System
MRW-8	6/22/2012	627.30	629.50	610.37	595.37	11.08	<b>14.98</b>	26.06	12.10	615.20	0.41	23.05	Yes	Connected to System
MRW-8	6/28/2012	627.30	629.50	610.37	595.37	14.84	<b>0.17</b>	15.01	12.68	614.62	-0.58	19.29	Yes	Connected to System
MRW-8	12/17/2012	627.30	629.50	610.37	595.37	16.90	<b>9.38</b>	26.28	16.72	610.58	-4.04	17.23	Yes	
<b>Well connected to Barge Dock Skimmer system - Phase 2</b>														
MRW-8	3/25/2013	627.30	629.50	610.37	595.37	18.40	<b>8.25</b>	26.65	17.97	609.33	-1.26	15.73	No	
MRW-8	5/5/2013	627.30	629.50	610.37	595.37	14.96	<b>10.97</b>	25.93	15.12	612.18	2.86	19.17	Yes	
MRW-8	3/17/2015	627.30	629.50	610.37	595.37	16.15	<b>8.15</b>	24.30	15.70	611.60	-0.58	17.98	Yes	
MRW-8	6/25/2015	627.30	629.50	610.37	595.37	16.44	<b>0.22</b>	16.66	14.29	613.01	1.41	17.69	Yes	
MRW-8	7/10/2015	627.30	629.50	610.37	595.37	16.37	<b>0.17</b>	16.54	14.21	613.09	0.08	17.76	Yes	
MRW-8	7/13/2015	627.30	629.50	610.37	595.37	16.36	<b>0.16</b>	16.52	14.19	613.11	0.01	17.77	Yes	
MRW-8	9/10/2015	627.30	629.50	610.37	595.37	16.60	<b>0.24</b>	16.84	14.45	612.85	-0.26	17.53	Yes	
MRW-8	9/24/2015	627.30	629.50	610.37	595.37	16.04	<b>0.18</b>	16.22	13.88	613.42	0.57	18.09	Yes	
MRW-8	10/1/2015	627.30	629.50	610.37	595.37	15.86	<b>0.17</b>	16.03	13.70	613.60	0.18	18.27	Yes	
MRW-8	10/14/2015	627.30	629.50	610.37	595.37	16.25	<b>0.30</b>	16.55	14.11	613.19	-0.42	17.88	Yes	
MRW-8	4/21/2016	627.30	629.50	610.37	595.37	11.31	<b>14.16</b>	25.47	12.15	615.15	1.96	22.82	Yes	
MRW-8	5/18/2016	627.30	629.50	610.37	595.37	14.60	<b>0.49</b>	15.09	12.51	614.79	-0.35	19.53	Yes	
MRW-8	5/25/2016	627.30	629.50	610.37	595.37	14.82	<b>0.21</b>	15.03	12.67	614.63	-0.16	19.31	Yes	
MRW-8	5/31/2016	627.30	629.50	610.37	595.37	14.67	<b>0.25</b>	14.92	12.52	614.78	0.14	19.46	Yes	
MRW-8	6/7/2016	627.30	629.50	610.37	595.37	14.38	<b>0.12</b>	14.50	12.21	615.09	0.32	19.75	Yes	
MRW-8	6/14/2016	627.30	629.50	610.37	595.37	14.64	<b>0.20</b>	14.84	12.48	614.82	-0.28	19.49	Yes	
MRW-8	6/21/2016	627.30	629.50	610.37	595.37	14.29	<b>0.22</b>	14.51	12.14	615.16	0.35	19.84	Yes	
MRW-8	7/6/2016	627.30	629.50	610.37	595.37	12.51	<b>11.19</b>	23.70	12.71	614.59	-0.58	21.62	Yes	Pre system start
MRW-8	7/7/2016	627.30	629.50	610.37	595.37	12.51	<b>11.19</b>	23.70	12.71	614.59	0.00	21.62	Yes	
MRW-8	7/15/2016	627.30	629.50	610.37	595.37	14.60	<b>0.24</b>	14.84	12.45	614.85	0.26	19.53	Yes	
MRW-8	7/25/2016	627.30	629.50	610.37	595.37	15.06	<b>0.30</b>	15.36	12.92	614.38	-0.47	19.07	Yes	
MRW-8	8/26/2016	627.30	629.50	610.37	595.37	15.92	<b>0.37</b>	16.29	13.80	613.50	-0.88	18.21	Yes	
MRW-8	9/2/2016	627.30	629.50	610.37	595.37	16.00	<b>0.22</b>	16.22	13.85	613.45	-0.05	18.13	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-8	10/3/2016	627.30	629.50	610.37	595.37	16.03	0.25	16.28	13.88	613.42	-0.04	18.10	Yes	
MRW-8	10/6/2016	627.30	629.50	610.37	595.37	16.10	0.22	16.32	13.95	613.35	-0.06	18.03	Yes	
MRW-8	10/13/2016	627.30	629.50	610.37	595.37	16.20	0.25	16.45	14.05	613.25	-0.11	17.93	Yes	
MRW-8	5/2/2017	627.30	629.50	610.37	595.37	11.74	13.72	25.46	12.49	614.81	1.57	22.39	Yes	
MRW-8	5/8/2017	627.30	629.50	610.37	595.37	14.90	0.28	15.18	12.76	614.54	-0.27	19.23	Yes	
MRW-8	5/18/2017	627.30	629.50	610.37	595.37	14.55	0.20	14.75	12.39	614.91	0.37	19.58	Yes	
MRW-8	5/25/2017	627.30	629.50	610.37	595.37	13.73	0.20	13.93	11.57	615.73	0.82	20.40	Yes	
MRW-8	5/31/2017	627.30	629.50	610.37	595.37	13.71	0.26	13.97	11.57	615.73	0.01	20.42	Yes	
MRW-8	6/14/2017	627.30	629.50	610.37	595.37	14.60	0.25	14.85	12.45	614.85	-0.89	19.53	Yes	
MRW-8	6/21/2017	627.30	629.50	610.37	595.37	14.98	0.29	15.27	12.84	614.46	-0.39	19.15	Yes	
MRW-8	6/29/2017	627.30	629.50	610.37	595.37	15.13	0.22	15.35	12.98	614.32	-0.13	19.00	Yes	
MRW-8	7/7/2017	627.30	629.50	610.37	595.37	14.80	0.26	15.06	12.66	614.64	0.32	19.33	Yes	
MRW-8	07/12/17	627.30	629.50	610.37	595.37	14.71	0.20	14.91	12.55	614.75	0.10	19.42	Yes	
MRW-8	7/19/2017	627.30	629.50	610.37	595.37	14.66	0.22	14.88	12.51	614.79	0.05	19.47	Yes	
MRW-8	07/26/17	627.30	629.50	610.37	595.37	14.77	0.22	14.99	12.62	614.68	-0.11	19.36	Yes	
MRW-8	7/27/2017	627.30	629.50	610.37	595.37	14.88	0.22	15.10	12.73	614.57	-0.11	19.25	Yes	
MRW-8	08/04/17	627.30	629.50	610.37	595.37	15.09	0.17	15.26	12.93	614.37	-0.20	19.04	Yes	
MRW-8	8/8/2017	627.30	629.50	610.37	595.37	15.13	0.22	15.35	12.98	614.32	-0.05	19.00	Yes	
MRW-8	08/15/17	627.30	629.50	610.37	595.37	14.56	0.21	14.77	12.41	614.89	0.57	19.57	Yes	
MRW-8	8/22/2017	627.30	629.50	610.37	595.37	14.28	0.25	14.53	12.13	615.17	0.27	19.85	Yes	
MRW-8	08/30/17	627.30	629.50	610.37	595.37	13.47	0.18	13.65	11.31	615.99	0.83	20.66	Yes	
MRW-8	9/7/2017	627.30	629.50	610.37	595.37	13.64	0.29	13.93	11.50	615.80	-0.19	20.49	Yes	
MRW-8	09/14/17	627.30	629.50	610.37	595.37	14.11	0.27	14.38	11.97	615.33	-0.47	20.02	Yes	
MRW-8	9/19/2017	627.30	629.50	610.37	595.37	14.38	0.69	15.07	12.33	614.97	-0.36	19.75	Yes	
MRW-8	09/27/17	627.30	629.50	610.37	595.37	14.17	0.25	14.42	12.02	615.28	0.30	19.96	Yes	
MRW-8	10/12/2017	627.30	629.50	610.37	595.37	13.26	0.25	13.51	11.11	616.19	0.91	20.87	Yes	
MRW-8	10/26/2017	627.30	629.50	610.37	595.37	14.69	0.22	14.91	12.54	614.76	-1.42	19.44	Yes	
MRW-8	5/23/2018	627.30	629.50	610.37	595.37	16.50	0.28	16.78	14.36	612.94	-1.82	17.63	Yes	
MRW-8	5/24/2018	627.30	629.50	610.37	595.37	16.46	0.24	16.70	14.31	612.99	0.05	17.67	Yes	
MRW-8	5/30/2018	627.30	629.50	610.37	595.37	16.06	0.22	16.28	13.91	613.39	0.40	18.07	Yes	
MRW-8	6/8/2018	627.30	629.50	610.37	595.37	15.78	0.08	15.86	13.60	613.70	0.31	18.35	Yes	
MRW-8	6/12/2018	627.30	629.50	610.37	595.37	15.67	0.25	15.92	13.52	613.78	0.07	18.46	Yes	
MRW-8	6/19/2018	627.30	629.50	610.37	595.37	14.81	0.17	14.98	12.65	614.65	0.88	19.32	Yes	
MRW-8	6/28/2018	627.30	629.50	610.37	595.37	15.18	2.02	17.20	13.41	613.89	-0.77	18.95	Yes	
MRW-9	10/11/2011	626.50	629.04	609.50	594.50	13.22	13.68	26.90	13.62	612.88	NA	21.32	Yes	
MRW-9	10/12/2011	626.50	629.04	609.50	594.50	13.12	13.78	26.90	13.54	612.96	0.08	21.42	Yes	
MRW-9	10/21/2011	626.50	629.04	609.50	594.50	13.44	13.40	26.84	13.78	612.72	-0.24	21.10	Yes	
MRW-9	10/27/2011	626.50	629.04	609.50	594.50	13.55	13.34	26.89	13.88	612.62	-0.10	20.99	Yes	
MRW-9	2/16/2012	626.50	629.04	609.50	594.50	15.90	9.95	25.85	15.50	611.00	-1.62	18.64	Yes	
MRW-9	3/13/2012	626.50	629.04	609.50	594.50	15.70	10.25	25.95	15.36	611.14	0.14	18.84	Yes	
MRW-9	4/16/2012	626.50	629.04	609.50	594.50	14.34	11.86	26.20	14.35	612.15	1.01	20.20	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-9	6/11/2012	626.50	629.04	609.50	594.50	11.95	14.21	26.16	12.46	614.04	1.89	22.59	Yes	Reading before install of well pumps for Barge system expansion.
MRW-9	6/21/2012	626.50	629.04	609.50	594.50	14.10	1.05	15.15	11.79	614.71	0.68	20.44	Yes	Connected to System
MRW-9	6/22/2012	626.50	629.04	609.50	594.50	14.10	0.23	14.33	11.61	614.89	0.18	20.44	Yes	Connected to System
MRW-9	6/28/2012	626.50	629.04	609.50	594.50	14.24	0.29	14.53	11.76	614.74	-0.15	20.30	Yes	Connected to System
MRW-9	12/17/2012	626.50	629.04	609.50	594.50	16.05	7.90	23.95	15.21	611.29	-3.45	18.49	Yes	
	<b>Well connected to Barge Dock Skimmer system - Phase 2</b>													
MRW-9	3/25/2013	626.50	629.04	609.50	594.50	17.20	8.29	25.49	16.44	610.06	-1.23	17.34	Yes	
MRW-9	5/5/2013	626.50	629.04	609.50	594.50	14.45	10.72	25.17	14.21	612.29	2.23	20.09	Yes	
	<b>Skimmer pump removed from well 77/15</b>													
MRW-9	7/13/2013	626.50	629.04	609.50	594.50	15.13	0.02	15.15	12.59	613.91	1.62	19.41	Yes	
MRW-9	3/17/2015	626.50	629.04	609.50	594.50	17.02	0.11	17.13	14.50	612.00	-1.91	17.52	Yes	
MRW-9	6/25/2015	626.50	629.04	609.50	594.50	15.61	0.04	15.65	13.08	613.42	1.43	18.93	Yes	
MRW-9	9/10/2015	626.50	629.04	609.50	594.50	15.34	0.02	15.36	12.80	613.70	0.27	19.20	Yes	
MRW-9	10/1/2015	626.50	629.04	609.50	594.50	14.64	0.02	14.66	12.10	614.40	0.70	19.90	Yes	
MRW-9	10/14/2015	626.50	629.04	609.50	594.50	14.99	0.02	15.01	12.45	614.05	-0.35	19.55	Yes	
MRW-9	5/18/2016	626.50	629.04	609.50	594.50	13.15	0.01	13.16	10.61	615.89	1.98	21.39	Yes	
MRW-9	5/23/2016	626.50	629.04	609.50	594.50	NP	0.00	13.29	10.75	615.75	-0.14	21.25	Yes	
MRW-9	5/31/2016	626.50	629.04	609.50	594.50	13.22	0.01	13.23	10.68	615.82	0.07	21.32	Yes	
MRW-9	6/14/2016	626.50	629.04	609.50	594.50	13.10	0.01	13.11	10.56	615.94	0.12	21.44	Yes	
MRW-9	6/21/2016	626.50	629.04	609.50	594.50	12.79	0.02	12.81	10.25	616.25	0.31	21.75	Yes	
MRW-9	7/6/2016	626.50	629.04	609.50	594.50	13.46	0.01	13.47	10.92	615.58	-0.67	21.08	Yes	
MRW-9	7/7/2016	626.50	629.04	609.50	594.50	13.51	0.01	13.52	10.97	615.53	-0.05	21.03	Yes	
MRW-9	7/15/2016	626.50	629.04	609.50	594.50	NP	0.00	13.13	10.59	615.91	0.09	21.41	Yes	
MRW-9	7/25/2016	626.50	629.04	609.50	594.50	NP	0.00	13.41	10.87	615.63	-0.28	21.13	Yes	
MRW-9	8/26/2016	626.50	629.04	609.50	594.50	NP	0.00	14.29	11.75	614.75	-0.88	20.25	Yes	
MRW-9	9/2/2016	626.50	629.04	609.50	594.50	NP	0.00	14.37	11.83	614.67	-0.08	20.17	Yes	
MRW-9	10/3/2016	626.50	629.04	609.50	594.50	NP	0.00	14.44	11.90	614.60	-0.07	20.10	Yes	
MRW-9	10/6/2016	626.50	629.04	609.50	594.50	NP	0.00	14.53	11.99	614.51	-0.16	20.01	Yes	
MRW-9	10/13/2016	626.50	629.04	609.50	594.50	NP	0.00	14.62	12.08	614.42	-0.09	19.92	Yes	
MRW-9	5/2/2017	626.50	629.04	609.50	594.50	NP	0.00	13.69	11.15	615.35	0.93	20.85	Yes	
MRW-9	5/8/2017	626.50	629.04	609.50	594.50	NP	0.00	13.66	11.12	615.38	0.03	20.88	Yes	
MRW-9	5/18/2017	626.50	629.04	609.50	594.50	NP	0.00	13.36	10.82	615.68	0.30	21.18	Yes	
MRW-9	5/25/2017	626.50	629.04	609.50	594.50	NP	0.00	12.50	9.96	616.54	0.86	22.04	Yes	
MRW-9	5/31/2017	626.50	629.04	609.50	594.50	NP	0.00	12.46	9.92	616.58	0.04	22.08	Yes	
MRW-9	9/7/2017	626.50	629.04	609.50	594.50	NP	0.00	12.20	9.66	616.84	0.26	22.34	Yes	
MRW-9	9/14/2017	626.50	629.04	609.50	594.50	NP	0.00	12.01	9.47	617.03	0.19	22.53	Yes	
MRW-9	9/19/2017	626.50	629.04	609.50	594.50	NP	0.00	13.02	10.48	616.02	-1.01	21.52	Yes	
MRW-9	9/27/2017	626.50	629.04	609.50	594.50	NP	0.00	12.81	10.27	616.23	0.21	21.73	Yes	
MRW-9	5/14/2018	626.50	629.04	609.50	594.50	NP	0.00	15.18	12.64	613.86	-2.37	19.36	Yes	
MRW-9	5/23/2018	626.50	629.04	609.50	594.50	NP	0.00	15.28	12.74	613.76	-0.10	19.26	Yes	
MRW-9	5/30/2018	626.50	629.04	609.50	594.50	NP	0.00	14.85	12.31	614.19	0.43	19.69	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-9	6/8/2018	626.50	629.04	609.50	594.50	NP	0.00	14.47	11.93	614.57	0.38	20.07	Yes	
MRW-10	10/11/2011	626.90	629.30	609.85	594.85	13.41	13.39	26.80	13.89	613.01	NA	21.04	Yes	
MRW-10	10/12/2011	626.90	629.30	609.85	594.85	13.37	13.54	26.91	13.88	613.02	0.01	21.08	Yes	
MRW-10	10/21/2011	626.90	629.30	609.85	594.85	13.56	13.42	26.98	14.04	612.86	-0.16	20.89	Yes	
MRW-10	10/27/2011	626.90	629.30	609.85	594.85	13.75	13.15	26.90	14.18	612.72	-0.13	20.70	Yes	
MRW-10	11/7/2011	626.90	629.30	609.85	594.85	16.18	3.72	19.90	14.58	612.32	-0.40	18.27	Yes	
MRW-10	11/9/2011	626.90	629.30	609.85	594.85	14.32	11.62	25.94	14.42	612.48	0.16	20.13	Yes	
MRW-10	11/10/2011	626.90	629.30	609.85	594.85	14.55	11.55	26.10	14.63	612.27	-0.21	19.90	Yes	Before EFR
MRW-10	11/10/2011	626.90	629.30	609.85	594.85	20.35	0.17	20.52	17.99	608.91	-3.35	14.10	No	After EFR
MRW-10	11/13/2011	626.90	629.30	609.85	594.85	14.21	11.93	26.14	14.37	612.53	3.61	20.24	Yes	
MRW-10	11/17/2011	626.90	629.30	609.85	594.85	14.44	11.91	26.35	14.60	612.30	-0.23	20.01	Yes	
MRW-10	11/22/2011	626.90	629.30	609.85	594.85	14.48	11.94	26.42	14.65	612.25	-0.05	19.97	Yes	
MRW-10	12/1/2011	626.90	629.30	609.85	594.85	14.64	11.80	26.44	14.78	612.12	-0.13	19.81	Yes	
MRW-10	2/16/2012	626.90	629.30	609.85	594.85	16.06	9.99	26.05	15.81	611.09	-1.03	18.39	Yes	
MRW-10	3/13/2012	626.90	629.30	609.85	594.85	15.95	10.16	26.11	15.73	611.17	0.07	18.50	Yes	
MRW-10	4/16/2012	626.90	629.30	609.85	594.85	14.60	11.76	26.36	14.73	612.17	1.01	19.85	Yes	
MRW-10	6/11/2012	626.90	629.30	609.85	594.85	12.18	14.43	26.61	12.88	614.02	1.85	22.27	Yes	Reading before install of well pumps for Barge system expansion.
MRW-10	6/21/2012	626.90	629.30	609.85	594.85	15.20	0.06	15.26	12.81	614.09	0.07	19.25	Yes	Connected to System
MRW-10	6/22/2012	626.90	629.30	609.85	594.85	11.24	4.49	15.73	9.80	617.10	3.01	23.21	Yes	Connected to System - LNAPL**measure
MRW-10	6/28/2012	626.90	629.30	609.85	594.85	14.55	0.25	14.80	12.20	614.70	-2.40	19.90	Yes	Connected to System - LNAPL**measure
MRW-10	12/17/2012	626.90	629.30	609.85	594.85	16.33	8.68	25.01	15.79	611.11	-3.59	18.12	Yes	
<b>Well connected to Barge Dock Skimmer system - Phase 2</b>														
MRW-10	3/25/2013	626.90	629.30	609.85	594.85	17.44	7.61	25.05	16.68	610.22	-0.88	17.01	Yes	
MRW-10	5/5/2013	626.90	629.30	609.85	594.85	14.72	11.09	25.81	14.70	612.20	1.97	19.73	Yes	
MRW-10	3/17/2015	626.90	629.30	609.85	594.85	17.30	0.15	17.45	14.93	611.97	1.74	17.15	Yes	
MRW-10	6/25/2015	626.90	629.30	609.85	594.85	15.85	0.17	16.02	13.49	613.41	1.45	20.73	Yes	
MRW-10	7/13/2015	626.90	629.30	609.85	594.85	15.74	0.15	15.89	13.37	613.53	1.33	18.71	Yes	
<b>Skimmer pump removed from well 8/19/15</b>														
MRW-10	9/10/2015	626.90	629.30	609.85	594.85	15.60	0.03	15.63	13.21	613.69	0.17	21.73	Yes	
MRW-10	10/1/2015	626.90	629.30	609.85	594.85	14.90	0.02	14.92	12.50	614.40	0.98	19.55	Yes	
MRW-10	10/14/2015	626.90	629.30	609.85	594.85	15.25	0.02	15.27	12.85	614.05	-0.35	22.73	Yes	
MRW-10	4/21/2016	626.90	629.30	609.85	594.85	13.48	0.14	13.62	11.11	615.79	2.27	20.97	Yes	Connected to System
MRW-10	5/18/2016	626.90	629.30	609.85	594.85	13.37	0.15	13.52	11.00	615.90	0.10	21.08	Yes	
MRW-10	5/23/2016	626.90	629.30	609.85	594.85	13.52	0.12	13.64	11.15	615.75	-0.14	20.93	Yes	
MRW-10	5/31/2016	626.90	629.30	609.85	594.85	13.43	0.14	13.57	11.06	615.84	0.09	21.02	Yes	
MRW-10	6/14/2016	626.90	629.30	609.85	594.85	13.33	0.13	13.46	10.96	615.94	0.10	21.12	Yes	
MRW-10	6/21/2016	626.90	629.30	609.85	594.85	13.02	0.14	13.16	10.65	616.25	0.31	21.43	Yes	
MRW-10	7/6/2016	626.90	629.30	609.85	594.85	13.69	0.10	13.79	11.31	615.59	-0.66	20.76	Yes	
MRW-10	7/7/2016	626.90	629.30	609.85	594.85	13.75	0.01	13.76	11.35	615.55	-0.04	20.70	Yes	
MRW-10	7/15/2016	626.90	629.30	609.85	594.85	13.36	0.32	13.68	11.03	615.87	0.12	21.09	Yes	
MRW-10	7/25/2016	626.90	629.30	609.85	594.85	13.64	0.12	13.76	11.27	615.63	-0.24	20.81	Yes	
MRW-10	8/26/2016	626.90	629.30	609.85	594.85	14.56	0.10	14.66	12.18	614.72	-0.92	19.89	Yes	
MRW-10	9/2/2016	626.90	629.30	609.85	594.85	14.61	0.11	14.72	12.23	614.67	-0.05	19.84	Yes	
MRW-10	10/3/2016	626.90	629.30	609.85	594.85	14.69	0.11	14.80	12.31	614.59	-0.08	19.76	Yes	
MRW-10	10/6/2016	626.90	629.30	609.85	594.85	14.77	0.12	14.89	12.40	614.50	-0.16	19.68	Yes	
MRW-10	10/13/2016	626.90	629.30	609.85	594.85	14.87	0.10	14.97	12.49	614.41	-0.10	19.58	Yes	
MRW-10	5/2/2017	626.90	629.30	609.85	594.85	13.85	0.21	14.06	11.50	615.40	1.00	20.60	Yes	

**Table 4**  
**Groundwater and LNAPL Gauging Data - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Well ID	Date	Ground Elev.	TOC Elev.	TOS Elev.	BOS Elev.	Depth to Product (feet BTOC)	Free Product Thickness (feet)	Depth to Water (feet BTOC)	Corrected DTW (feet bgs)	Corrected GW Elevation	Change in Corrected GW Elevation	Liquid in Well (feet)	Screen Submerged Below Water Table? (YES/NO)	Comment
MRW-10	5/8/2017	626.90	629.30	609.85	594.85	12.34	1.51	13.85	10.26	616.64	1.23	22.11	Yes	
MRW-10	5/18/2017	626.90	629.30	609.85	594.85	13.54	0.23	13.77	11.19	615.71	-0.92	20.91	Yes	
MRW-10	5/25/2017	626.90	629.30	609.85	594.85	12.69	0.25	12.94	10.34	616.56	0.85	21.76	Yes	
MRW-10	5/31/2017	626.90	629.30	609.85	594.85	12.63	0.25	12.88	10.28	616.62	0.06	21.82	Yes	
MRW-10	9/7/2017	626.90	629.30	609.85	594.85	12.39	0.27	12.66	10.05	616.85	0.24	22.06	Yes	
MRW-10	9/14/2017	626.90	629.30	609.85	594.85	12.80	0.22	13.02	10.45	616.45	-0.40	21.65	Yes	
MRW-10	9/19/2017	626.90	629.30	609.85	594.85	13.20	0.30	13.50	10.86	616.04	-0.42	21.25	Yes	
MRW-10	9/27/2017	626.90	629.30	609.85	594.85	12.98	0.23	13.21	10.63	616.27	0.24	21.47	Yes	
MRW-10	5/14/2018	626.90	629.30	609.85	594.85	15.28	0.32	15.60	12.95	613.95	-2.32	19.17	Yes	
MRW-10	5/15/2018	626.90	629.30	609.85	594.85	15.66	0.29	15.95	13.32	613.58	-0.37	18.79	Yes	
MRW-10	5/23/2018	626.90	629.30	609.85	594.85	15.44	0.31	15.75	13.11	613.79	0.22	19.01	Yes	
MRW-10	5/30/2018	626.90	629.30	609.85	594.85	15.01	0.32	15.33	12.68	614.22	0.43	19.44	Yes	
MRW-10	6/8/2018	626.90	629.30	609.85	594.85	14.63	0.32	14.95	12.30	614.60	0.38	19.82	Yes	
MWBD-1	10/9/2013	603.06	606.04	598.06	583.06	NP	0.00	5.15	2.17	600.89	NA	17.83	Yes	
MWBD-1	5/20/2014	603.06	606.04	598.06	583.06	NP	0.00	3.35	0.37	602.69	1.80	19.63	Yes	
MWBD-1	10/29/2014	603.06	606.04	598.06	583.06	NP	0.00	4.61	1.63	601.43	-1.26	18.37	Yes	
MWBD-1	5/4/2015	603.06	606.04	598.06	583.06	NP	0.00	4.95	1.97	601.09	-0.34	18.03	Yes	
MWBD-1	10/6/2015	603.06	606.04	598.06	583.06	NP	0.00	4.48	1.50	601.56	0.47	18.50	Yes	
MWBD-1	5/23/2016	603.06	606.04	598.06	583.06	NP	0.00	4.84	1.86	601.20	-0.36	18.14	Yes	
MWBD-1	10/3/2016	603.06	606.04	598.06	583.06	NP	0.00	4.73	1.75	601.31	0.11	18.25	Yes	
MWBD-1	6/29/2017	603.06	606.04	598.06	583.06	NP	0.00	3.98	1.00	602.06	0.75	19.00	Yes	
MWBD-1D	10/29/2014	603.12	605.42	553.12	548.12	NP	0.00	3.63	1.33	601.79	NA	53.67	Yes	
MWBD-1D	5/5/2015	603.12	605.42	553.12	548.12	NP	0.00	4.18	1.88	601.24	-0.55	53.12	Yes	
MWBD-1D	10/6/2015	603.12	605.42	553.12	548.12	NP	0.00	3.69	1.39	601.73	0.49	53.61	Yes	
MWBD-1D	5/23/2016	603.12	605.42	553.12	548.12	NP	0.00	3.82	1.52	601.60	-0.13	53.48	Yes	
MWBD-1D	10/3/2016	603.12	605.42	553.12	548.12	NP	0.00	3.70	1.40	601.72	0.12	53.60	Yes	
MWBD-1D	6/14/2017	603.12	605.42	553.12	548.12	NP	0.00	3.47	1.17	601.95	0.23	53.83	Yes	
MWBD-1D	10/3/2017	603.12	605.42	553.12	548.12	NP	0.00	2.66	0.36	602.76	0.81	54.64	Yes	
MWBD-1D	6/18/2018	603.12	605.42	553.12	548.12	NP	0.00	3.45	1.15	601.97	-0.79	53.85	Yes	
MWBD-1DD	6/18/2018	603.12	605.31	538.12	535.12	NP	0.00	1.35	-0.84	603.96	603.96	68.84	Yes	

**Notes:**

\* Corrections for free product made using: TOC elevation-[depth to ground water-(product thickness \* product density)]

Product density numbers used in column T

MW-45S & D and MW-46S & D not yet surveyed for elevations

MM = Not Measured

BOS = Bottom of Screen

BTOC = Below Top of Casing

NA = Not Applicable

NP = No Free Product



**Table 5  
Groundwater Analytical Results - Terminal  
Former Amoco Terminal  
Superior, Wisconsin**

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
	<b>Sample Date</b>																		
MW-1			03/88 to 06/90 - No free product present in the well.																
MW-1			06/90 to 10/05 - The well was not sampled due to the presence of free product.																
MW-1	10/12/2005		<b>660</b>	<20	570	<b>5000</b>	<b>2320</b>	29	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	+10
MW-1	05/23/06		<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>
MW-1	10/16/06		<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>
MW-1	04/23/07		<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>
MW-1	09/25/07		<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>
MW-2	03/88 to 12/89		No free product present in the well.																
MW-2	05/90 to 06/07		The well was not sampled due to the presence of free product.																
MW-2	6/26/2007		<b>Abandoned</b>																
MW-3	3/23/1988		<b>30</b>	30	20	50	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-3	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	3.50	141	NM	NM	NM	0.07
MW-3	10/21/2003		<b>230</b>	17	23	42	22.2	<4.0	NA	NA	490	NA	NA	3.70	-107	NM	NM	NM	NM
MW-3	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.24	009	NM	NM	NM	NM
MW-3	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	680	NA	1.90	067	NM	NM	NM	0.10
MW-3	4/19/2005		1.7	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.1	-010	NM	NM	NM	NM
MW-3	10/12/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	4.74	-089	NM	753	7.42	1.0
MW-3	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	3.6	-052	NM	840	7.40	1.0
MW-3	10/22/2006		4.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	6.1	-227	NM	NM	6.87	7.0
MW-3	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	NA	NA	NA	1.04	-169.8	NM	NM	6.97	3.0
MW-3	9/29/2007		3.9	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.28	-059.1	NM	NM	7.05	5.0
MW-3	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.94	249.4	NM	NM	6.32	1.0
MW-3	10/25/2008		1.7	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.25	101.4	NM	NM	6.80	2.0
MW-3	10/14/2009		2.9	<2.0	<2.0	<6.0	<2.0	<2.0	NA	NA	NA	NA	NA	4.51	163.0	NM	NM	7.34	NM
MW-3	10/17/2011		<b>18.2</b>	1.2	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.89	-201.0	7.91	969	7.85	NM
MW-3	10/3/2012		<b>29.9</b>	2.2	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-3	10/2/2013		<b>11.3</b>	1.1	<0.34	<1.0	NA	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-3	10/30/2014		<b>7.8</b>	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-3	10/6/2015		<b>9.8</b>	2.2	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-3	10/5/2016		<b>7.6</b>	0.68J	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-4S	3/23/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-4S	9/21/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	<10	NM	NM	NM	NM	NM	NM
MW-4S	4/27/1989		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-4S	8/29/1990		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-4S	1/31/1991		<1.0	<1.0	4.0	<2.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-4S	7/10/1991		<1.0	<1.0	2.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-4S	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1.0	NM	NM	NM	NM	NM	NM
MW-4S	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1.0	NM	NM	NM	NM	NM	NM
MW-4S	6/25/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	92	<100	NA	NM	NM	NM	NM	NM	NM
MW-4S	10/28/1993		<1.0	<1.0	4.2	<2.0	<1.0	<4.0	<1.6	NA	200	<140	NA	NM	NM	NM	NM	NM	NM
MW-4S	4/27/1994		1.2	<1.0	3.8	<2.0	1.2	<4.0	<1.5	NA	230	270	NA	NM	NM	NM	NM	NM	NM
MW-4S	10/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	110	260	NA	NM	NM	NM	NM	NM	NM
MW-4S	4/4/1995		1.4	1.7	<1.0	<2.0	1	<4.0	<1.6	NA	98	460	NA	NM	NM	NM	NM	NM	NM
MW-4S	11/14/1995		<1.0	<1.0	3.4	<2.0	<1.0	<4.0	NA	NA	160	440	NA	NM	NM	NM	NM	NM	NM
MW-4S	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<0.24	NA	160	320	NA	NM	NM	NM	NM	NM	NM
MW-4S	11/5/1997		<1.0	<1.0	<1.0	<2.0	2.3	<4.0	NA	NA	170	300	NA	0.90	062	6.9	700	7.04	NM
MW-4S	11/3/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<100	470	NA	3.07	NM	8.9	1010	6.89	NM
MW-4S	3/3/1999		<1.0	<1.0	3.4	3.3	NA	<4.0	NA	NA	140	NA	NA	3.25	NM	7.0	NM	NM	NM
MW-4S	3/3/1999	D	<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	230	NA	NM	NM	NM	NM	NM	NM
MW-4S	8/17/1999		<1.0	<1.0	3.6	<3.0	NA	<4.0	NA	NA	170	330	NA	NM	NM	NM	NM	NM	NM
MW-4S	4/26/2000		0.357	<0.40	4.16	<0.55	<0.40	<0.30	NA	NA	204	752	NA	0.70	-048	NM	NM	NM	NM
MW-4S	10/10/2000		0.86	<0.20	11	0.46	1.7	<0.16	<1.1	NA	330	730	NA	1.40	-008	NM	NM	NM	4.00
MW-4S	4/24/2001		0.19	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	100	430	NA	0.70	155	NM	NM	NM	NM
MW-4S	10/23/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	57	270	NA	4.10	-019	NM	NM	NM	1.50
MW-4S	4/23/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	110	NA	2.30	177	NM	NM	NM	3.00
MW-4S	11/6/2002		0.18	<0.20	<0.22	<0.23	<0.29	<0.16	<0.46	NA	<50	350	NA	NM	NM	NM	NM	NM	NM
MW-4S	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	0.20	-001	NM	NM	NM	2.55
MW-4S	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	10.70	017	NM	NM	NM	NM
MW-4S	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	2.19	103	NM	NM	NM	NM
MW-4S	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	66 J	860	NA	1.00	-77	NM	NM	NM	4.00
MW-4S	4/19/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.7	-85	NM	NM	NM	NM
MW-4S	10/12/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.4	-149	NM	863	7.26	10
MW-4S	5/23/2006		<1.0	<1.0	1.1	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.5	-126	NM	851	7.23	1.0
MW-4S	10/22/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	4	-49.8	NM	NM	6.81	8.0
MW-4S	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	NA	NA	NA	0.52	-210.0	NM	NM	6.87	10.0
MW-4S	9/25/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.04	-66.6	NM	NM	7.2	10.0
MW-4S	5/7/2008		<1.0	<1.0	11.6	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.62	-32.1	NM	NM	6.26	10.0
MW-4S	10/25/2008		<1.0	<1.0	1.9	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.16	-52.5	NM	NM	6.9	10.0
MW-4S	10/14/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-4D	7/21/1994		<1.0	<1.0	<1.0	<2.0	NA	NA	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-4D	10/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-4D	4/6/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-4D	11/14/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	100	NA	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-4D	4/22/1996		<1.0	<1.0	<1.0	2.0	1.2	<4.0	<2.5	NA	<50	110	NA	NM	NM	NM	NM	NM	NM
MW-4D	11/5/1997		1.5	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	<100	NA	0.70	046	6.7	400	7.92	NM
MW-4D	11/3/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<100	<100	NA	0.15	NM	8.1	735	7.2	NM
MW-4D	8/17/1999		<1.0	<1.0	<1.0	<3.0	NA	<4.0	NA	NA	<100	<100	NA	2.70	NM	6.4	NM	NM	NM
MW-4D	4/26/2000		<0.15	<0.40	<0.50	<0.55	<0.40	<0.30	NA	NA	<50	<100	NA	0.20	-018	NM	NM	NM	NM
MW-4D	10/10/2000		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	180	NA	0.50	002	NM	NM	NM	3.00
MW-4D	10/23/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	270	NA	0.70	039	NM	NM	NM	0.60
MW-4D	4/23/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	0.96	114	NM	NM	NM	1.00
MW-4D	11/6/2002		<0.13	<0.20	<0.22	0.53	<0.29	<0.16	<0.46	NA	<50	160	NA	NM	NM	NM	NM	NM	NM
MW-4D	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	0.20	-014	NM	NM	NM	0.36
MW-4D	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	4.00	-065	NM	NM	NM	NM
MW-4D	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.82	104	NM	NM	NM	NM
MW-4D	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	930	NA	0.80	-90	NM	NM	NM	1.00
MW-4D	4/19/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.9	-080	NM	NM	NM	NM
MW-4D	10/12/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.67	-264	NM	435	8.72	2.0
MW-4D	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.8	-150	NM	602	7.61	1.0
MW-4D	10/22/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	5.5	-313.5	NM	NM	8.54	2.0
MW-4D	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	NA	NA	NA	0.51	-226.9	NM	NM	8.04	2.0
MW-4D	9/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.02	-206.6	NM	NM	8.26	1.0
MW-4D	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.3	200.2	NM	NM	9.15	5.0
MW-4D	10/25/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.66	-250.4	NM	NM	8.26	1.0
MW-4D	10/14/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-5	3/23/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-5	9/21/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	<10	NM	NM	NM	NM	NM	NM
MW-5	4/27/1989		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-5	8/29/1990		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-5	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-5	1/8/1992		1.0	5.0	<1.0	5.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-5	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-5	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	<100	NA	4.50	NM	6.9	NM	NM	NM
MW-5	8/17/1999		<1.0	<1.0	<1.0	<3.0	NA	<4.0	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-5	8/18/2000		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	4.10	087	NM	NM	NM	<1
MW-5	10/10/2000		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	3.90	158	NM	NM	NM	0.30
MW-5	4/24/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	<100	NA	2.10	139	NM	NM	NM	NM
MW-5	10/23/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	<100	NA	4.00	088	NM	NM	NM	0.10
MW-5	4/23/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	2.63	105	NM	NM	NM	0.10
MW-5	11/6/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<0.46	NA	<50	160	NA	NM	NM	NM	NM	NM	NM
MW-5	4/15/2003		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

**Table 5**  
**Groundwater Analytical Results - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>MW-5</b>	<b>8/28/2003</b>		<b>Abandoned</b>																
MW-6	3/23/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-6	9/21/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	<10	NM	NM	NM	NM	NM	NM
MW-6	4/27/1989		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-6	8/29/1990		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-6	8/29/1990	D	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.5	<b>8.5</b>	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-6	1/31/1991		3.0	<1.0	<1.0	<2.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-6	1/31/1991	D	2.6	<1.0	<1.0	NA	NA	NA	<1.5	<b>9.5</b>	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-6	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-6	7/10/1991	D	<1.0	<1.0	<1.0	<1.0	NA	NA	<1.5	2.0	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-6	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-6	1/8/1992	D	<1.0	<1.0	<1.0	<2.0	NA	NA	<1.5	4.2	NA	NA	10	NM	NM	NM	NM	NM	NM
MW-6	10/14/1992		<b>32</b>	<1.0	55	10	NA	<20	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-6	6/25/1993		<b>65</b>	4.2	160	17	14.3	<8	8.5	NA	570	180	NA	NM	NM	NM	NM	NM	NM
MW-6	10/28/1993		<b>38</b>	5.1	200	25	25.5	<8	10	NA	830	<100	NA	NM	NM	NM	NM	NM	NM
MW-6	4/27/1994		<b>14</b>	<1.0	100	4.4	9.6	<4.0	<1.5	NA	470	220	NA	NM	NM	NM	NM	NM	NM
MW-6	10/27/1994		<b>180</b>	4.7	120	22	22.2	<4.0	3.3	NA	920	180	NA	NM	NM	NM	NM	NM	NM
MW-6	4/4/1995		4.6	<1.0	11	<2.0	<1.0	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-6	11/15/1995		<b>140</b>	6.1	93	11	16.1	<4.0	NA	NA	730	310	NA	NM	NM	NM	NM	NM	NM
MW-6	4/22/1996		<b>100</b>	2.0	93	5.6	16.9	<4.0	0.72	NA	820	110	NA	NM	NM	NM	NM	NM	NM
MW-6	4/29/1997		<b>450</b>	13.0	500	31	57.8	<8.0	8.4	NA	2200	640	NA	NM	NM	NM	NM	NM	NM
MW-6	11/5/1997		<b>200</b>	1.5	170	27	31.4	<4.0	NA	NA	980	410	NA	1.00	044	7.1	800	7.29	NM
MW-6	11/3/1998		<b>13</b>	<1.0	15	<2.0	<1.0	<4.0	NA	NA	<100	<100	NA	0.73	NM	7.2	1040	6.95	NM
MW-6	3/3/1999		<b>8.9</b>	<1.0	13	2.1	NA	<4.0	NA	NA	<100	<100	NA	2.86	NM	5.8	NM	NM	NM
MW-6	8/17/1999		<b>200</b>	5.0	150	23	NA	5.4	NA	NA	930	170	NA	NM	NM	NM	NM	NM	NM
MW-6	4/26/2000		<b>65</b>	5.49	88.8	17.28	8.02	2.11	NA	NA	342	441	NA	2.20	042	NM	NM	NM	NM
MW-6	10/10/2000		<b>46</b>	0.76	62	7.9	4.57	<0.25	4.2	<0.25	280	270	NA	1.20	100	NM	NM	NM	0.20
MW-6	4/24/2001		<b>20</b>	0.33	27	1.3	0.81	<0.16	NA	NA	110	990	NA	0.60	159	NM	NM	NM	NM
MW-6	10/23/2001		<b>13</b>	<0.20	15	0.57	0.40	<0.16	NA	NA	58	NA	NA	1.20	018	NM	NM	NM	0.10
MW-6	4/23/2002		<b>9.8</b>	0.39	11	0.45	<0.29	<0.16	<1.1	NA	<50	130	NA	1.96	084	NM	NM	NM	0.20
MW-6	11/7/2002		<b>46</b>	1.50	60	23	10.05	<0.16	4.3	NA	270	380	NA	NM	NM	NM	NM	NM	NM
MW-6	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.38	093	NM	NM	NM	0.09
MW-6	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.00	047	NM	NM	NM	NM
MW-6	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	2.09	254	NM	NM	NM	NM
MW-6	11/18/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	<100	190	NA	1.30	55	NM	NM	NM	0.00
MW-6	4/19/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.0	82	NM	NM	NM	NM
MW-6	10/12/2005		3.3	0.60 J	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-6	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters						
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>		
MW-6	5/06 to 9/07		Well Damaged Unable to Sample																	
MW-6	9/25/2007		Well Damaged Unable to Sample																	
MW-6	7/29/2009		Abandoned																	
MW-6R	10/14/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA							
MW-7	3/23/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-7	9/21/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	<10	NM	NM	NM	NM	NM	NM	
MW-7	4/27/1989		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-7	8/29/1990		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-7	1/31/1991		<1.0	20	<1.0	30	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	
MW-7	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	
MW-7	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	
MW-7	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	
MW-7	6/25/1993		<1.0	<1.0	<1.0	<2.0	1.5	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	
MW-7	10/28/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<110	NA	NM	NM	NM	NM	NM	NM	
MW-7	4/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	
MW-7	10/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	
MW-7	4/4/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	
MW-7	4/4/1995	D	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	
MW-7	11/14/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	
MW-7	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<2.4	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	
MW-7	4/29/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.0	NA	<50	270	NA	NM	NM	NM	NM	NM	NM	
MW-7	11/5/1997		2.8	<1.0	2.8	<2.0	<1.0	<4.0	NA	NA	52	<110	NA	1.20	050	7.3	200	7.3	NM	
MW-7	11/3/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.44	NM	8.2	288	6.95	NM	
MW-7	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	<100	NA	0.60	NM	5.1	NM	NM	NM	
MW-7	8/17/1999		<1.0	35	<1.0	<3.0	NA	<4.0	NA	NA	<100	110	NA	NM	NM	NM	NM	NM	NM	
MW-7	4/26/2000		<0.15	8.17	<0.5	0.631	0.748	<0.3	NA	NA	<50	233	NA	2.80	062	NM	NM	NM	NM	
MW-7	10/10/2000		<0.13	0.22	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	190	NA	5.00	177	NM	NM	NM	0.30	
MW-7	4/24/2001		<0.13	13	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	4100	NA	8.00	147	NM	NM	NM	NM	
MW-7	10/23/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	100	NA	2.30	075	NM	NM	NM	NM	
MW-7	10/23/2001	D	<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	
MW-7	4/23/2002		<0.13	0.26	<0.22	0.46	<0.29	<0.16	<1.1	NA	<50	<100	NA	0.89	-003	NM	NM	NM	NM	
MW-7	4/23/2002	D	<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	NA	NA	NM	NM	NM	NM	NM	NM	
MW-7	11/7/2002		1.6	<0.20	<0.22	0.55	<0.29	<0.16	<0.46	NA	57	200	NA	NM	NM	NM	NM	NM	NM	
MW-7	8/28/2003		Abandoned																	
MW-8	3/23/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-8	9/21/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	<10	NM	NM	NM	NM	NM	NM	

**Table 5**  
**Groundwater Analytical Results - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethyl-benzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	--	--	--	--	--	--	--	--	--
MW-8	4/27/1989		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-8	8/29/1990		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-8	1/31/1991		<1.0	<1.0	<1.0	<2.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-8	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-8	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-8	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-8	6/25/1993		<1.0	<1.0	<1.0	<2.0	3.5	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-8	10/28/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<40	<1.6	NA	<50	<120	NA	NM	NM	NM	NM	NM	NM
MW-8	4/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-8	10/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-8	4/4/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-8	11/14/1995		<1.0	3.4	2.1	12	4.4	<4.0	NA	NA	53	<100	NA	NM	NM	NM	NM	NM	NM
MW-8	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<0.24	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-8	10/8/1996		<0.5	<2	<2	<3	<2.0	<2	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-8	4/29/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	180	NA	NM	NM	NM	NM	NM	NM
MW-8	11/5/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	<110	NA	1.30	057	7.1	800	7.19	NM
MW-8	11/3/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<100	<110	NA	2.98	NM	7.7	930	NM	NM
MW-8	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	<100	NA	4.53	NM	5.3	NM	NM	NM
MW-8	8/17/1999		<1.0	<1.0	<1.0	<3.0	NA	<4.0	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-8	4/26/2000		<0.15	<0.40	<0.50	<0.55	<0.40	<0.30	NA	NA	<50	138	NA	0.20	134	NM	NM	NM	NM
MW-8	10/10/2000		0.29	0.72	<0.22	0.34	<0.29	<0.16	<1.1	NA	<50	790	NA	1.20	132	NM	NM	NM	0.30
MW-8	4/24/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	<100	NA	3.80	209	NM	NM	NM	NM
MW-8	10/23/2001		<0.13	<0.20	<0.22	0.28	0.41	<0.16	NA	NA	<50	<100	NA	3.70	097	NM	NM	NM	0.10
MW-8	4/23/2002		<0.13	<0.20	<0.22	0.41	<0.29	<0.16	<1.1	NA	<50	880	NA	3.53	241	NM	NM	NM	0.20
MW-8	11/7/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<0.46	NA	<50	150	NA	NM	NM	NM	NM	NM	NM
<b>MW-8</b>	<b>8/18/2003</b>		<b>Abandoned</b>																
MW-9	3/23/1988		<b>370</b>	170	<b>14000</b>	1500	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-9	9/21/1988		<b>610</b>	44	290	1200	NA	NA	NA	NA	NA	NA	10300	NM	NM	NM	NM	NM	NM
MW-9	4/27/1989		<b>2610</b>	<b>1280</b>	<b>1600</b>	<b>3650</b>	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-9	8/29/1990		<b>13800</b>	<b>14200</b>	<b>5710</b>	1910	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-9	1/31/1991		<b>1240</b>	701	<b>1300</b>	<b>2230</b>	NA	<b>1700</b>	NA	NA	NA	NA	210000	NM	NM	NM	NM	NM	NM
MW-9	1/31/1991	D	<50	<50	670	NA	NA	NA	86	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-9	7/10/1991		<b>627</b>	255	<b>794</b>	1130	NA	<b>750</b>	NA	NA	NA	NA	69000	NM	NM	NM	NM	NM	NM
MW-9	1/8/1992		<b>961</b>	508	<b>1090</b>	1950	NA	<b>1310</b>	NA	NA	NA	NA	136000	NM	NM	NM	NM	NM	NM
MW-9	10/14/1992		<b>56</b>	222	<b>738</b>	843	NA	40	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-9	3/3/1999		<100	<100	520	480	NA	<400	NA	NA	11000	9700	NA	1.98	NM	7.2	NM	NM	NM
MW-9	8/17/1999		<b>99</b>	86	<b>920</b>	760	NA	<40	NA	NA	16000	5300	NA	NM	NM	NM	NM	NM	NM
MW-9	8/18/2000		<b>74</b>	31	530	400	<b>860</b>	<16	<b>340</b>	NA	89000	4600	NA	0.70	-057	NM	NM	NM	6.00

**Table 5**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-9	10/10/2000		<550	<40	<91	<1500	<b>1600</b>	<32	<220	NA	536000	4800	NA	2.40	173	NM	NM	NM	3.00
MW-9	10/21/2003		<b>290</b>	54	<b>830</b>	1100	<b>1000</b>	<4.0	NA	NA	9300	NA	NA	6.31	086	NM	NM	NM	NM
MW-9	4/20/2004		<b>320</b>	27	690	650	<b>830</b>	22	NA	NA	8000	NA	NA	2.21	191	NM	NM	NM	NM
MW-9	11/18/2004		<b>256</b>	14.6	542	585	<b>627</b>	<5.0	<b>159</b>	NA	5650	6900	NA	1.00	44	NM	NM	NM	0.00
MW-9	4/19/2005		<b>186</b>	2.2	241	42.6	216.1	<1.0	81.3	NA	NA	NA	NA	1.3	-10	NM	NM	NM	NM
MW-9	10/12/2005		<b>380</b>	31	570	287	440	9.9 J	<b>170</b>	NA	NA	NA	NA	0.94	-122	NM	920	7.61	2.0
MW-9	5/23/2006		<b>307</b>	12.0	588	304	447	<5.0	<b>190</b>	NA	NA	NA	NA	1.1	-118	NM	886	7.58	1.0
MW-9	5/23/2006	D	<b>339</b>	<50.0	658	<150	<b>559</b>	<50.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-9	10/22/2006		<b>237</b>	12.5	442	204	292	<10.0	<b>149</b>	NA	NA	NA	NA	10.10	-143.5	NM	NM	6.9	3.00
MW-9	4/29/2007		<b>319</b>	17.0	554	213	263	<1.0	<b>190</b>	NA	NA	NA	NA	0.38	-132.3	NM	NM	7.07	5.00
MW-9	9/25/2007		<b>314</b>	13.7	443	256	313	<5.0	<b>167</b>	NA	NA	NA	NA	0.06	-10.4	NM	NM	7.01	3.00
MW-9	5/7/2008		<b>314</b>	17.5	521	357	340	<5.0	<b>201</b>	NA	NA	NA	NA	2.45	8.2	NM	NM	6.48	5.00
MW-9	10/25/2008		<b>311</b>	17.9	487	301	330	<5.0	<b>169</b>	NA	NA	NA	NA	0.57	-19.2	NM	NM	7.05	10.00
MW-9	10/27/2010		<b>239</b>	15.6	461	296	319	<5.0	<b>150</b>	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-9	10/17/2011		<b>209</b>	13.0	358	225	260	<1.0	<b>118</b>	NA	NA	NA	NA	2.77	-176	7.67	1001	7.97	NM
MW-9	10/3/2012		<b>198</b>	14.0	376	294	325	<5.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	3/23/1988		<b>230</b>	<1.0	90	40	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	9/21/1988		<b>80</b>	11	3.0	15	NA	NA	NA	NA	NA	NA	600	NM	NM	NM	NM	NM	NM
MW-10	4/27/1989		<b>260</b>	42	18	45	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	8/29/1990		<b>235</b>	27	69	63	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	1/31/1991		<b>69</b>	7.0	15	17	NA	30	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-10	7/10/1991		<b>26</b>	13	31	22	NA	30	NA	NA	NA	NA	2000	NM	NM	NM	NM	NM	NM
MW-10	1/8/1992		<b>3.0</b>	<1.0	17	11	NA	30	NA	NA	NA	NA	2000	NM	NM	NM	NM	NM	NM
MW-10	10/14/1992		<b>11</b>	7.0	21	10	NA	<20	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	3/3/1999		<b>110</b>	7.9	35	25	NA	<4.0	NA	NA	1000	350	NA	3.32	NM	7.5	NM	NM	NM
MW-10	8/17/1999		<b>5.3</b>	4.1	6	3	NA	<4.0	NA	NA	330	<100	NA	NM	NM	NM	NM	NM	NM
MW-10	8/18/2000		<b>48</b>	12	49	43	36	<0.8	18	NA	1400	1000	NA	2.40	-096	NM	NM	NM	10+
MW-10	10/10/2000		<b>140</b>	31	120	130	103	<1.6	76	NA	2800	860	NA	2.10	106	NM	NM	NM	10.00
MW-10	10/21/2003		<b>72</b>	11	79	50	27	<4.0	NA	NA	910	NA	NA	1.10	-120	NM	NM	NM	NM
MW-10	4/20/2004		<b>400</b>	46	210	150	149	21	NA	NA	2900	NA	NA	2.40	056	NM	NM	NM	NM
MW-10	11/18/2004		<b>90.6</b>	3.0	61.6	31.0	41.5	<1.0	21.9	NA	1100	830	NA	1.10	-134	NM	NM	NM	4.00
MW-10	4/19/2005		<b>7.6</b>	<1.0	2.9	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.2	-040	NM	NM	NM	NM
MW-10	10/12/2005		4.3	<1.0	0.61 J	<3.0	<1.0	<1.0	1.5	NA	NA	NA	NA	1.85	-090	NM	996	7.66	+10
MW-10	10/12/2005	D	<b>10</b>	0.91 J	1.2	<3.0	<1.0	<1.0	1.4	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	5/23/2006		<b>6.7</b>	<1.0	3.7	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.9	-087	NM	1015	7.60	+10
MW-10	5/23/2006	D	<b>6.6</b>	<1.0	3.6	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	10/22/2006		<b>12.1</b>	0.73 J	8.5	3.2	1.3	<1.0	1.2	NA	NA	NA	<1000	6.80	-98.2	NM	NM	7.07	10.00
MW-10	10/22/2006	D	<b>12.2</b>	0.76 J	8.9	3.0	1.5	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethyl-benzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-10	4/29/2007		24.1	<1.0	8.7	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.14	-94.2	NM	NM	7.18	10.00
MW-10	4/29/2007	D	24.4	<1.0	8.7	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	10/1/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	0.25	-23.6	NM	NM	7.16	5.00
MW-10	5/10/2008		<1.0	<1.0	5.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.95	-32.4	NM	NM	6.52	NM
MW-10	5/10/2008	D	<1.0	<1.0	4.7	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	10/28/2008		4.0	<1.0	4.2	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.86	0.86	NM	NM	6.97	4.00
MW-10	10/14/2009		4.3	<1.0	1.9	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	1.54	-39	NM	NM	7.21	NM
MW-10	10/27/2010		1.1	1.6	1.8	3.0	1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	10/17/2011		6.4	<1.0	1.7	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	2.67	-187	8.47	895	7.99	NM
MW-10	10/3/2012		9.3	<1.0	1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	10/3/2012	D	9.0	<1.0	1.1	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	5/21/2014		<1.0	<1.0	5.0	<3.0	1.7	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	5/21/2014	D	<1.0	<1.0	5.1	<3.0	<2.8	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	5/4/2015		22.2	0.72J	5.2	3.2	<1.62	0.77J	1.3	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-10	10/5/2016		3.1	<0.39	2.3	2.3J	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-11	3/23/1988		70	<1.0	7.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-11	9/21/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	10	NM	NM	NM	NM	NM	NM
MW-11	4/27/1989		147	19	18	19	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-11	8/29/1990		69	3.0	24	9.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-11	1/31/1991		125	14	40	12	NA	20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-11	7/10/1991		87	10	20	9.0	NA	30	NA	NA	NA	NA	2000	NM	NM	NM	NM	NM	NM
MW-11	1/8/1992		24	<1.0	3.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-11	10/14/1992		180	10	100	6.0	NA	<20	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-11	3/3/1999		18	<1.0	4.5	<2.0	NA	<4.0	NA	NA	<100	<100	NA	4.50	NM	7.2	NM	NM	NM
MW-11	8/17/1999		3.7	<1.0	3.3	<3.0	NA	<4.0	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-11	8/18/2000		16	0.35	0.51	0.7	0.25	<0.16	<1.1	NA	73	<100	NA	0.50	036	NM	NM	NM	6.00
MW-11	10/10/2000		73	3.6	23	11	4.5	<0.16	3.8	NA	510	310	NA	3.10	140	NM	NM	NM	1.00
MW-11	8/18/2003		Abandoned																
MW-12			03/88 to 12/89 - No free product present in the well.																
MW-12			05/90 to present - The well was not sampled due to the presence of free product.																
MW-13	3/23/1988		<1.0	<1.0	<1.0	10	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-13	9/21/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	<10	NM	NM	NM	NM	NM	NM
MW-13	4/27/1989		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-13	8/29/1990		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-13	1/31/1991		<1.0	<1.0	<1.0	<2.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-13	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM



**Table 5**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethyl-benzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	--	--	--	--	--	--	--	--	--
MW-13	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-13	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-13	8/18/2000		0.16	0.21	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	7.30	173	NM	NM	NM	1.00
<b>MW-13</b>	<b>8/18/2003</b>		<b>Abandoned</b>																
MW-14			09/88 to 12/89 - No free product present in the well.																
MW-14			05/90 to present - The well was not sampled due to the presence of free product.																
MW-15S	9/21/1988		<b>18</b>	16	7.0	16	NA	NA	NA	NA	NA	NA	510	NM	NM	NM	NM	NM	NM
MW-15S	4/27/1989		<b>36</b>	2.0	5.0	6.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	8/29/1990		4.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	1/31/1991		2.0	3.0	<1.0	2.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-15S	1/31/1991	D	1.9	1.8	<1.0	NA	NA	NA	<1.5	<0.20	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-15S	7/10/1991	D	<1.0	<1.0	<1.0	<1.0	NA	NA	<1.5	<0.20	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-15S	1/8/1992	D	<1.0	<1.0	<1.0	<2.0	NA	NA	<1.5	<0.2	NA	NA	86	NM	NM	NM	NM	NM	NM
MW-15S	10/14/1992		1.0	2.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	10/14/1992	D	1.4	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	58	<100	NA	NM	NM	NM	NM	NM	NM
MW-15S	6/25/1993		3.3	2.1	<1.0	2.4	5.1	<4.0	<1.6	NA	89	<100	NA	NM	NM	NM	NM	NM	NM
MW-15S	10/28/1993		1.4	<1.0	<1.0	<2.0	4.0	<4.0	<1.5	NA	54	<100	NA	NM	NM	NM	NM	NM	NM
MW-15S	4/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	130	<100	NA	NM	NM	NM	NM	NM	NM
MW-15S	10/27/1994		1.4	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	52	230	NA	NM	NM	NM	NM	NM	NM
MW-15S	4/5/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	370	NA	NM	NM	NM	NM	NM	NM
MW-15S	11/14/1995		3.1	1.4	1.7	<2.0	1.2	<4.0	NA	NA	110	580	NA	NM	NM	NM	NM	NM	NM
MW-15S	04/22/96		1.6	<1.0	<1.0	<2.0	<1.0	<4.0	<0.26	NA	<50	650	NA	NM	NM	NM	NM	NM	NM
MW-15S	10/8/1996		1	<2	<2	<3	<2.0	2	NA	NA	180	600	NA	NM	NM	NM	NM	NM	NM
MW-15S	4/29/1997		<b>7.6</b>	1.8	1.5	12	3.5	<4.0	<1.0	NA	170	120	NA	NM	NM	NM	NM	NM	NM
MW-15S	11/5/1997		1.1	<1.0	<1.0	<2.0	1.3	<4.0	NA	NA	79	99	NA	1.30	027	7.3	800	7.58	NM
MW-15S	11/3/1998		<b>12</b>	3	3.2	<2.0	<1.0	13	NA	NA	170	470	NA	0.88	NM	7.7	937	NM	NM
MW-15S	3/3/1999		<b>7.4</b>	<1.0	1.6	<2.0	NA	<4.0	NA	NA	<100	510	NA	2.80	NM	5.8	NM	NM	NM
MW-15S	8/17/1999		<b>6.5</b>	2.6	3	<3.0	NA	<4.0	NA	NA	200	410	NA	NM	NM	NM	NM	NM	NM
MW-15S	4/26/2000		<0.15	<0.40	<0.50	<0.55	<0.40	<0.30	NA	NA	50.7	744	NA	0.20	080	NM	NM	NM	NM
MW-15S	10/10/2000		<b>5.7</b>	0.52	8.3	2.7	22.6	<0.16	1.7	NA	270	360	NA	0.10	028	NM	NM	NM	6.00
MW-15S	10/23/2001		3.1	<0.20	1.2	0.30	0.35	<0.16	NA	NA	71	400	NA	1.00	-002	NM	NM	NM	1.50
MW-15S	4/23/2002		0.73	<0.20	<0.22	0.72	0.49	<0.16	<1.1	NA	<50	490	NA	2.75	174	NM	NM	NM	0.30
MW-15S	1/7/2002		1.6	<0.20	<0.22	0.55	<0.29	<0.16	<0.46	NA	57	200	NA	NM	NM	NM	NM	NM	NM
MW-15S	4/15/2003		3.2	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	0.30	066	NM	NM	NM	0.73
MW-15S	10/21/2003		<b>33</b>	3.1	25	<3.0	<1.0	<4.0	NA	NA	390	NA	NA	1.80	056	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-15S	4/20/2004		<b>14</b>	<1.0	7.9	<3.0	<1.0	<4.0	NA	NA	110	NA	NA	1.63	121	NM	NM	NM	NM
MW-15S	11/18/2004		1.7	<1.0	1.5	<3.0	<1.0	<1.0	<1.0	NA	<100	490	NA	1.30	097	NM	NM	NM	0.10
MW-15S	4/19/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.5	50	NM	NM	NM	NM
MW-15S	10/12/2005		1.4	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	10/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	9/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	10/25/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	4/20/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	10/15/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	10/27/2010		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15S	10/17/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	3.34	-254	7.89	1001	7.97	NM
MW-15S	10/3/2012		<b>16.7</b>	1.1	22.5	3.4	5.4	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	7/21/1994		<1.0	<1.0	<1.0	<2.0	NA	NA	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-15D	10/28/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-15D	4/6/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-15D	11/14/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-15D	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.2	NA	<50	150	NA	NM	NM	NM	NM	NM	NM
MW-15D	10/8/1996		<0.5	<2	<2	<3	<2.0	<2	NA	NA	<100	2300	NA	NM	NM	NM	NM	NM	NM
MW-15D	4/29/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.0	NA	<50	430	NA	NM	NM	NM	NM	NM	NM
MW-15D	11/5/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	240	NA	1.00	045	7	900	7.04	NM
MW-15D	11/3/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<100	<100	NA	0.17	NM	7.3	890	NM	NM
MW-15D	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	<100	NA	3.79	NM	6	NM	NM	NM
MW-15D	8/17/1999		<1.0	<1.0	<1.0	<3.0	NA	<4.0	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-15D	4/26/2000		<0.15	<0.40	<0.50	<0.55	<0.40	<0.3	NA	NA	<50	<100	NA	0.10	-014	NM	NM	NM	NM
MW-15D	10/10/2000		0.13	<0.20	<0.22	0.58	<0.29	<0.16	<1.1	NA	<50	560	NA	0.20	132	NM	NM	NM	8.00
MW-15D	10/23/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	140	NA	1.20	-120	NM	NM	NM	3.00
MW-15D	4/23/2002		2.60	0.45	0.48	1.10	0.55	<0.16	2.1	NA	<50	<100	NA	1.35	-012	NM	NM	NM	3.00
MW-15D	1/7/2002		0.31	<0.20	<0.22	0.58	<0.29	<0.16	<0.46	NA	<50	130	NA	NM	NM	NM	NM	NM	NM
MW-15D	4/15/2003		<b>9.6</b>	1.5	1.4	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	0.20	-046	NM	NM	NM	0.80
MW-15D	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	0.70	-046	NM	NM	NM	NM
MW-15D	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.50	064	NM	NM	NM	NM
MW-15D	11/18/2004		<b>7.1</b>	0.57 J	<1.0	<3.0	<1.0	<1.0	<1.0	NA	53.2 J	88 J	NA	2.00	-103	NM	NM	NM	0.60
MW-15D	4/19/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.8	-80	NM	NM	NM	NM
MW-15D	10/12/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethyl-benzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-15D	10/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	9/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	10/25/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	4/20/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	10/14/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	10/27/2010		25.1	2.5	2.6	4.2	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	10/17/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.62	-223	7.8	822	8.38	NM
MW-15D	10/3/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-15D	10/3/2012	D	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-16	9/21/1988		770	3400	710	2800	NA	NA	NA	NA	NA	NA	37000	NM	NM	NM	NM	NM	NM
MW-16	4/27/1989		1540	2380	358	3410	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-16	7/11/1989		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NM	NM	NM	NM
MW-16	8/29/1990		195	2340	360	3130	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-16	8/29/1990	D	1000	3400	660	3500	NA	<100	45	<20	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-16	1/31/1991		169	2869	599	3410	NA	510	NA	NA	NA	NA	47000	NM	NM	NM	NM	NM	NM
MW-16	1/31/1991	D	1200	4200	670	NA	NA	NA	120	<40	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-16	7/10/1991		689	4260	817	3800	NA	550	NA	NA	NA	NA	57000	NM	NM	NM	NM	NM	NM
MW-16	7/10/1991	D	360	3200	660	2800	NA	NA	<7.5	24	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-16			08/91 to present - The well was not sampled due to the presence of free product.																
P-17DD	9/13/2011		<2.0	<2.0	<2.0	<6.0	<2.0	<2.0	<8.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-18	9/21/1988		55	<1.0	1	9	NA	NA	NA	NA	NA	NA	330	NM	NM	NM	NM	NM	NM
MW-18	4/27/1989		641	27	7.0	31	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-18	8/29/1990		308	11	10	17	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-18	1/31/1991		166	13	<1.0	15	NA	80	NA	NA	NA	NA	3000	NM	NM	NM	NM	NM	NM
MW-18	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-18	1/8/1992		57	3.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-18	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-18	8/18/2000		0.62	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	4.50	190	NM	NM	NM	1.00
MW-18	8/18/2003		Abandoned																
MW-19	7/11/1989		3.0	<2.0	9.0	9.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-19	8/29/1990		<2.0	<2.0	9.0	36	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-19	8/29/1990	D	2.3	<1.0	6.3	35	NA	<1.0	23	<0.20	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-19	1/31/1991		<1.0	<1.0	3.0	3.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters						
			Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Xylenes µg/L	Total TMBs µg/L	MTBE µg/L	Naphthalene µg/L	1,2-DCA µg/L	GRO µg/L	DRO µg/L	THC µg/L	DO ppm	REDOX milli Volts	Temp °C	Conductivity µmhos/cm	pH pH units	Soluble Iron ppm	
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	--	--	--	--	--	--	--			
MW-19	7/10/1991		1.0	1.0	7.0	28	NA	<20	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-19	7/10/1991	D	2.2	<1.0	8.8	22	NA	NA	33	<0.20	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-19	1/8/1992		2.0	<1.0	7.0	56	NA	<20	NA	NA	NA	NA	2000	NM	NM	NM	NM	NM	NM	NM
MW-19	1/8/1992	D	2.4	<2.0	9.4	51	NA	NA	37	<0.40	NA	NA	1900	NM	NM	NM	NM	NM	NM	NM
MW-19	10/14/1992		1.0	1	2.0	25	NA	<20	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	10/14/1992	D	1.8	<1.0	3.2	32	60	<4.0	NA	NA	600	420	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	6/25/1993		2.0	<1.0	4.5	48	90	<4.0	18	NA	540	330	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	10/28/1993		1.9	<1.0	2.1	31	66	<4.0	27	NA	450	190	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	4/27/1994		1.6	<1.0	1.8	19	45.7	<4.0	23	NA	380	460	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	10/28/1994		2.2	<1.0	1.7	43	105	<4.0	33	NA	790	660	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	4/4/1995		2.6	2.1	6.8	59	136	4.3	30	NA	950	1200	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	11/14/1995		2.8	<1.0	2.5	62	158	<4.0	NA	NA	960	1900	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	4/22/1996		1.9	<1.0	2.3	63	172	<4.0	36	NA	13000	1800	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	10/8/1996		2	<2	2	61	147	3	NA	NA	910	2100	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	4/29/1997		2.3	<1.0	3.2	59	114	<4.0	44	NA	420	220	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	11/5/1997		1.2	<1.0	<1.0	5	27	12	NA	NA	280	98	NA	0.50	021	7.4	1009	7.34	NM	NM
MW-19	11/5/1998		<5.0	<5.0	<5.0	19	199	<20	NA	NA	620	1500	NA	3.23	NM	7.3	1200	6.84	NM	NM
MW-19	3/3/1999		2.2	<1.0	2.1	29	NA	<4.0	NA	NA	<100	1900	NA	3.70	NM	7.2	NM	NM	NM	NM
MW-19	8/17/1999		3.3	2.5	<1.0	8.3	NA	<4.0	NA	NA	920	1500	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	4/26/2000		0.871	<2.0	<2.50	6.2	122	<1.50	NA	NA	597	2670	NA	0.70	-073	NM	NM	NM	NM	NM
MW-19	10/10/2000		3.6	<2.0	<2.2	9.5	137	<1.6	<b>100</b>	NA	840	2300	NA	0.50	032	NM	NM	NM	NM	10.00
MW-19	4/24/2001		2.2	1.3	2.0	8.5	135	3.0	76	NA	820	2400	NA	1.70	170	NM	NM	NM	NM	NM
MW-19	10/23/2001		1.1	0.27	0.94	3.8	92	<0.32	NA	NA	650	2600	NA	1.70	-118	NM	NM	NM	NM	7.50
MW-19	4/23/2002		0.23	<0.20	<0.22	0.32	5.5	0.29	3.3	NA	56	360	NA	1.02	-023	NM	NM	NM	NM	8.00
MW-19	11/8/2002		1.3	<0.20	0.69	2.2	133	1.4	59	NA	730	1300	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	4/15/2003		1.0	<1.0	<1.0	<3.0	94	<4.0	NA	NA	380	NA	NA	1.30	000	NM	NM	NM	NM	>3.3
<b>MW-19</b>	<b>10/21/2003</b>		<b>Abandoned - replaced (as MW-19 again) per city request due to new road construction.</b>																	
MW-19	10/21/2003		<b>6.7</b>	<1.0	2.5	14	95	<4.0	NA	NA	470	NA	NA	5.31	014	NM	NM	NM	NM	NM
MW-19	4/20/2004		4.6	<1.0	3.9	<3.0	29	<4.0	NA	NA	430	NA	NA	2.06	119	NM	NM	NM	NM	NM
MW-19	11/17/2004		1.8	<1.0	1.1	19.9	235.3	<1.0	12.2	NA	883	2400	NA	1.50	-6.3	NM	NM	NM	NM	2.00
MW-19	11/17/2004	D	0.84 J	<1.0	<1.0	19.6	217.9	<4.0	NA	NA	992	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-19	4/19/2005		<1.0	<1.0	<1.0	13.1	254.1	<1.0	7.6	NA	NA	NA	NA	1.0	8	NM	NM	NM	NM	NM
MW-19	4/19/2005	D	1.2	<1.0	<1.0	11.5	242.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
<b>MW-19</b>	<b>9/7/2005</b>		<b>Abandoned - replaced with MW-19R per city request due to retention pond re-construction.</b>																	
MW-19R	10/12/2005		<b>320</b>	12	150	148.9	248	3.0	<b>270</b>	NA	NA	NA	NA	1.40	-114	NM	1182	7.36	+10	
MW-19R	10/12/2005	D	<b>320</b>	13	150	148.4	236	2.0 J	<b>260</b>	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-19R	05/23/06		No sample collected due to presence of product																	
MW-19R	10/16/06		No sample collected due to presence of product																	

**Table 5**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters						
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>		
MW-19R	04/23/07		No sample collected due to presence of product																	
MW-19R	09/25/07		No sample collected due to presence of product																	
MW-19R	05/01/08		No sample collected due to presence of product																	
MW-19R	10/20/08		No sample collected due to presence of product																	
MW-20	7/11/1989		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-20	8/29/1990		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-20	1/31/1991		<1.0	<1.0	<1.0	<2.0	NA	<20	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM	
MW-20	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM	
MW-20	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM	
MW-20	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM	
MW-20	6/25/1993		1.4	2.1	1.8	5.8	5.5	<4.0	<1.6	NA	130	<100	NA	NM	NM	NM	NM	NM	NM	
MW-20	10/28/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	83	<100	NA	NM	NM	NM	NM	NM	NM	
MW-20	4/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	79	110	NA	NM	NM	NM	NM	NM	NM	
MW-20	10/28/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	84	470	NA	NM	NM	NM	NM	NM	NM	
MW-20	4/4/1995		<1.0	<1.0	1.2	<2.0	<1.0	<4.0	<1.8	NA	60	360	NA	NM	NM	NM	NM	NM	NM	
MW-20	11/14/1995		<1.0	<1.0	<1.0	<2.0	2.1	<4.0	NA	NA	220	2900	NA	NM	NM	NM	NM	NM	NM	
MW-20	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<0.24	NA	130	440	NA	NM	NM	NM	NM	NM	NM	
MW-20	10/8/1996		0.6	<2	<2	<3	2	<2	NA	NA	200	770	NA	NM	NM	NM	NM	NM	NM	
MW-20	4/29/1997		<1.0	<1.0	1.2	<2.0	1.2	6.5	<1.0	NA	290	590	NA	NM	NM	NM	NM	NM	NM	
MW-20	11/5/1997		<1.0	<1.0	1.4	<2.0	3	<4.0	NA	NA	100	54	NA	0.90	-007	7.9	762	7.36	NM	
MW-20	11/5/1998		<5.0	<5.0	<5.0	<1.0	<5.0	<20	NA	NA	<500	360	NA	0.53	NM	8	900	6.86	NM	
MW-20	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	<100	NA	2.86	NM	7.3	NM	NM	NM	
MW-20	8/17/1999		<1.0	1.3	5.8	<3.0	NA	<4.0	NA	NA	130	1400	NA	NM	NM	NM	NM	NM	NM	
MW-20	4/26/2000		0.518	<0.40	4.92	1.631	5.61	<0.30	NA	NA	264	1600	NA	0.20	-024	NM	NM	NM	NM	
MW-20	10/10/2000		0.72	0.25	6.5	2.50	7.1	<0.16	17	NA	260	760	NA	0.50	030	NM	NM	NM	10.00	
<b>MW-20</b>	<b>8/18/2003</b>		<b>Abandoned</b>																	
MW-21	7/11/1989		1970	31	27	50	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-21	8/29/1990		45	<2.0	<2.0	7.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-21	1/31/1991		750	3.0	<1.0	5.0	NA	<20	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM	
MW-21	7/10/1991		85	1.0	<1.0	3.0	NA	<20	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM	
MW-21	1/8/1992		1570	37	34	78	NA	50	NA	NA	NA	7000	NM	NM	NM	NM	NM	NM	NM	
MW-21	8/18/2000		74	<0.20	<0.22	0.82	<0.29	<0.16	<1.1	NA	100	<100	NA	5.60	207	NM	NM	NM	<1.0	
MW-21	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	6.36	167	NM	NM	NM	NM	
MW-21	11/16/2004		<b>Well Damaged</b>																	
MW-21	4/19/2005		1.8	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.8	-72	NM	NM	NM	NM	
MW-21	10/12/2005		40	1.1	2.0	2.7	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-21	5/23/2006		2840	82.1	181	161	40.6	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	

**Table 5**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-21	10/22/2006		1300	20.7	40.9	40.4	2.01 J	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-21	4/29/2007		59.3	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-21	6/26/2007		Abandoned																
MW-22			06/89 to present - The well was not sampled due to the presence of free product.																
MW-23			06/89 to present - The well was not sampled due to the presence of free product.																
MW-24			06/89 to present - The well was not sampled due to the presence of free product.																
MW-25			06/89 to present - The well was not sampled due to the presence of free product.																
MW-26			06/89 to present - The well was not sampled due to the presence of free product.																
MW-27			06/89 to present - The well was not sampled due to the presence of free product.																
MW-28	7/11/1989		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-28	8/29/1990		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-28	8/29/1990	D	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.5	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-28	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-28	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-28	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-28	6/25/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-28	10/28/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<140	NA	NM	NM	NM	NM	NM	NM
MW-28	4/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-28	10/28/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-28	4/5/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-28	11/15/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-28	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<0.26	NA	<50	110	NA	NM	NM	NM	NM	NM	NM
MW-28	10/8/1996		4	33	18	75	33	<2	NA	NA	360	250	NA	NM	NM	NM	NM	NM	NM
MW-28	4/29/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.0	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-28	11/5/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	<110	NA	0.80	043	6.9	111	7.44	NM
MW-28	11/3/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<100	<100	NA	0.62	NM	8.3	1290	NM	NM
MW-28	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	<100	NA	2.51	NM	8.1	NM	NM	NM
MW-28	8/17/1999		<1.0	<1.0	<1.0	<3.0	NA	<4.0	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-28	4/26/2000		<0.15	<0.40	<0.50	<0.55	<0.40	<0.30	NA	NA	<50	<100	NA	0.30	083	NM	NM	NM	NM
MW-28	10/10/2000		<0.13	<0.20	<0.22	<0.23	<0.29	<0.13	<1.1	NA	<50	450	NA	0.60	253	NM	NM	NM	0.40
MW-28	4/24/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	250	NA	0.90	213	NM	NM	NM	NM
MW-28	10/23/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	<100	NA	1.50	-006	NM	NM	NM	0.20

**Table 5**  
**Groundwater Analytical Results - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-28	4/23/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	2.67	136	NM	NM	NM	0.30
MW-28	11/6/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<0.46	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-28	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.30	177	NM	NM	NM	0.13
MW-28	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.70	105	NM	NM	NM	NM
MW-28	4/20/2004		<1.0	<1.0	<1.0	<3.0	1.1	<4.0	NA	NA	<100	NA	NA	3.31	270	NM	NM	NM	NM
MW-28	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	210	NA	2.70	107	NM	NM	NM	0.10
MW-28	4/19/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.1	50	NM	NM	NM	NM
MW-28	10/12/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.8	-122	NM	1174	7.78	0.2
MW-28	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.1	-100	NM	1098	7.72	0.2
MW-28	10/22/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	9.9	118	NM	NM	7.22	0.0
MW-28	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	NA	NA	NA	1.59	95.2	NM	NM	7.13	1.0
MW-28	9/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.55	51.6	NM	NM	7.42	1.0
MW-28	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.06	235.9	NM	NM	6.86	1.0
MW-28	10/25/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	3.22	153.3	NM	NM	7.05	0.0
MW-28	4/20/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-28	10/14/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.28	154	NM	NM	7.57	NM
MW-28	10/27/2010		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-28	10/13/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.09	37	9.35	1354	8.06	NM
MW-28	10/3/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-28	5/7/2013		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	1.74	359.6	9.3	1666	6.89	NM
MW-30S	7/11/1989		<b>2670</b>	282	80	368	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	8/29/1990		<b>1850</b>	293	30	374	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	8/29/1990	D	<b>1700</b>	250	23	280	NA	9.8	<b>150</b>	0.90	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	1/31/1991		<b>578</b>	73	3.0	840	NA	<b>160</b>	NA	NA	NA	NA	7000	NM	NM	NM	NM	NM	NM
MW-30S	1/31/1991	D	<b>850</b>	100	<25	NA	NA	NA	75	<5.0	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	7/10/1991		<b>904</b>	59	<1.0	90	NA	<b>160</b>	NA	NA	NA	9000	NM	NM	NM	NM	NM	NM	NM
MW-30S	7/10/1991	D	<b>1400</b>	<100	<100	<100	NA	NA	<1.5	<20	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	1/8/1992		<b>68</b>	<1.0	<1.0	10	NA	<b>60</b>	NA	NA	NA	2000	NM	NM	NM	NM	NM	NM	NM
MW-30S	1/8/1992	D	<b>130</b>	2.6	<1.0	4.6	NA	NA	2.0	<0.40	NA	NA	1500	NM	NM	NM	NM	NM	NM
MW-30S	10/14/1992		<b>28</b>	6	<1.0	1	NA	<20	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30S	10/14/1992	D	<b>36</b>	1.3	1.4	3.7	1.3	<4.0	NA	NA	490	<100	NA	NM	NM	NM	NM	NM	NM
MW-30S	6/25/1993		<b>230</b>	42	2.5	69	12.5	<8.0	3.5	NA	1400	<100	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/28/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	15	NA	<50	<110	NA	NM	NM	NM	NM	NM	NM
MW-30S	4/27/1994		<b>890</b>	35	24	47	28	<20	22	NA	3600	270	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/28/1994		<b>830</b>	46	43	59	33	<8.0	27	NA	4200	240	NA	NM	NM	NM	NM	NM	NM
MW-30S	4/6/1995		<b>2200</b>	140	70	110	48	<20	<b>190</b>	NA	8900	1400	NA	NM	NM	NM	NM	NM	NM
MW-30S	11/15/1995		<b>1800</b>	140	200	220	165	<40	NA	NA	7500	950	NA	NM	NM	NM	NM	NM	NM
MW-30S	4/22/1996		<b>1800</b>	170	150	250	182	<40	<b>100 E</b>	NA	8200	720	NA	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-30S	10/8/1996		600	44	68	67	53	43	NA	NA	3900	640	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/8/1996	D	780	41	67	70	49	61	NA	NA	3400	350	NA	NM	NM	NM	NM	NM	NM
MW-30S	4/29/1997		600	33	62	62	39	33	37	NA	4600	370	NA	NM	NM	NM	NM	NM	NM
MW-30S	11/5/1997		150	5.4	24	17	10.5	7.5	NA	NA	1700	1300	NA	0.90	028	7	432	7.52	NM
MW-30S	11/3/1998		3100	660	300	1400	396	210	NA	NA	13000	150	NA	0.25	NM	6.5	970	7.03	NM
MW-30S	3/3/1999		3600	580	400	1200	NA	1200	NA	NA	14000	2000	NA	3.05	NM	6	NM	NM	NM
MW-30S	8/17/1999		1500	180	230	310	NA	800	NA	NA	9000	1700	NA	1.00	NM	9.2	NM	NM	NM
MW-30S	4/26/2000		1130	73.9	124	73	60.1	<1.50	NA	NA	3660	1800	NA	0.30	-084	NM	NM	NM	NM
MW-30S	10/10/2000		1100	64	120	73	54	<0.16	100	NA	5400	1400	NA	0.20	099	NM	NM	NM	0.40
MW-30S	4/24/2001	D	1400	87	160	99	73	<0.16	150	NA	6400	1600	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/23/2001		1300	190	200	300	175	<4.9	NA	NA	6900	2700	NA	1.00	170	NM	NM	NM	0.10
MW-30S	4/23/2002		2900	810	300	920	306	<3.2	330	NA	11000	2500	NA	1.53	063	NM	NM	NM	0.20
MW-30S	11/6/2002		1400	140	200	220	164	<4.0	220	NA	5900	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	11/7/2002	D	1300	120	160	170	126	<7.5	170	NA	5100	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	4/15/2003		1900	180	180	320	175	<4.0	NA	NA	6300	NA	NA	0.30	171	NM	NM	NM	0.22
MW-30S	4/15/2003	D	1500	160	160	280	160	<4.0	NA	NA	<5000	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/21/2003		1700	200	180	340	162	<4.0	NA	NA	6800	NA	NA	1.94	-060	NM	NM	NM	NM
MW-30S	10/21/2003	D	1900	280	230	420	207	<40	NA	NA	6400	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	4/20/2004		2700	1700	380	1100	357	150	NA	NA	12000	NA	NA	1.42	120	NM	NM	NM	NM
MW-30S	4/20/2004	D	2800	320	360	700	145	100	NA	NA	13000	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	11/17/2004		1520	410	143	326	223.4	<1.0	<50	NA	11100	440	NA	1.50	-13	NM	NM	NM	4.00
MW-30S	4/20/2005		2640	656	304	550	298.7	<1.0	390	NA	NA	NA	NA	2.0	169	NM	NM	NM	NM
MW-30S	10/11/2005		1500	120	230	209	187	32	240	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	5/23/2006		1130	36.9	191	<75.0	72.9	<25.0	221	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/24/2006		496	30.5	153	61.9	70.2	<10.0	122	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	4/30/2007		1300	806	183	712	202.9	<1.0	159	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/1/2007		1620	1090	263	858	289.2	<10	209	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	5/10/2008		725	88.7	65.1	90	102	<5.0	140	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/28/2008		1110	41.5	86.8	74.7	66.0	<10.0	109	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/18/2011		726	58.2	79.5	89.6	70.5	<1.0	93.4	NA	NA	NA	NA	2.36	-81	6.82	593	8.17	NM
MW-30S	4/17/2012		253	105	66.8	107	36.1	<1.0	NA	NA	NA	NA	NA	3.50	52.2	7.00	778	7.12	NM
MW-30S	10/2/2012		336	45	16.1	44.1	31.1	<2.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/2/2012	D	348	45.9	16.7	44.3	32.2	<2.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	5/7/2013		3230	2180	393	1240	413.6	<5.0	382	NA	NA	NA	NA	3.28	231.3	8.2	969	7.14	NM
MW-30S	10/2/2013		1140	567	133	286	129.8	8.9J	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	5/21/2014		1710	806	190	494	198.3	<2.0	212	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/30/2014		1120	403	158	241	122.9	<4.8	144	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	5/5/2015		1530	578	243	530	215.9	<9.7	241	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/7/2015		1190	415	201	366	176.7	<9.7	211	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM



**Table 5**  
**Groundwater Analytical Results - Terminal**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	umhos/cm	pH units
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	--	--	--	--	--	--	--	--	--
MW-30S	5/24/2016		1230	507	205	363	180.8	<2.4	194	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	10/5/2016		1420	923	205	740	196.4	<9.7	199	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30S	6/27/2018		685	126	184	184.7	110.3	18.7	120	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	7/21/1994		1500	55	<20	50	NA	NA	190	NA	4800	1.0	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/28/1994		2000	110	49	100	42	<20	170	NA	8200	720	NA	NM	NM	NM	NM	NM	NM
MW-30D	4/6/1995		2500	390	300	540	363	<80	180	NA	9900	1200	NA	NM	NM	NM	NM	NM	NM
MW-30D	11/15/1995		1500	120	90	100	71	<40	NA	NA	5500	1500	NA	NM	NM	NM	NM	NM	NM
MW-30D	4/22/1996		2400	110	89	100	44	<40	NA	NA	8500	1200	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/8/1996		1800	100	73	86	54	180	NA	NA	6800	1500	NA	NM	NM	NM	NM	NM	NM
MW-30D	4/29/1997		2000	110	63	110	42	180	120	NA	9400	1100	NA	NM	NM	NM	NM	NM	NM
MW-30D	11/5/1997		2300	130	72	110	27	1300	NA	NA	10000	1200	NA	0.40	026	6.7	762	7.55	NM
MW-30D	11/3/1998		2500	100	88	100	<20	180	NA	NA	10000	120	NA	0.10	NM	6.5	950	6.96	NM
MW-30D	3/3/1999		2500	140	110	150	NA	1700	NA	NA	12000	920	NA	3.23	NM	5.2	NM	NM	NM
MW-30D	8/17/1999		1600	98	84	100	NA	1600	NA	NA	8600	1100	NA	NM	NM	NM	NM	NM	NM
MW-30D	4/26/2000		2180	106	70.5	82.6	33.5	<3.0	NA	NA	7180	1530	NA	0.10	029	NM	NM	NM	NM
MW-30D	10/10/2000		2400	96	83	90	39	<3.2	260	NA	10000	950	NA	0.40	110	NM	NM	NM	2.00
MW-30D	10/10/2000	D	2400	96	79	85	37	<3.2	240	NA	9600	840	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/23/2001		720	29	11	39	21	<3.2	NA	NA	3500	1300	NA	1.20	-132	NM	NM	NM	>10
MW-30D	4/23/2002		1600	120	83	96	46	<1.6	270	NA	10000	1600	NA	1.58	017	NM	NM	NM	1.00
MW-30D	11/7/2002		880	32	16	34	16	<2.0	110	NA	4200	970	NA	NM	NM	NM	NM	NM	NM
MW-30D	4/15/2003		1600	62	32	65	16	<40	NA	NA	6700	NA	NA	0.20	-110	NM	NM	NM	>3.30
MW-30D	10/21/2003		1100	51	25	42	18.1	<4.0	NA	NA	4200	NA	NA	1.70	-148	NM	NM	NM	NM
MW-30D	4/21/2004		990	44	34	59	56	<40	NA	NA	4300	NA	NA	2.23	-022	NM	NM	NM	NM
MW-30D	11/17/2004		2140	113	84.9	99.3	37	<1.0	299	NA	8360	1400	NA	0.90	-217	NM	NM	NM	0.90
MW-30D	4/20/2005		671	34.1	21.1	26.2	9.7	<1.0	61.6	NA	NA	NA	NA	1.5	176	NM	NM	NM	NM
MW-30D	10/11/2005		170	13	4.9	16.3	7.4	<1.0	23	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	5/23/2006		2420	84.3	72.9	<150	<50.0	<50.0	241	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/24/2006		2080	102	83	88	23.3 J	<25.0	233	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	4/30/2007		1750	71.9	70.3	71.4	26.8	<1.0	216	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/1/2007		1450	60	53.1	55.4	17.8	<10	153	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	5/10/2008		2170	107	117	105	39.4	<10	312	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/28/2008		2040	105	139	80.2	24	<2.0	186	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/18/2011		1220	81.4	94	67.7	20.2	<1.0	129	NA	NA	NA	NA	0.86	-157	8.03	724	7.96	NM
MW-30D	4/17/2012		1260	52.2	54.7	44.5	24.4	<10.0	NA	NA	NA	NA	NA	3.60	8.9	7.5	973	6.95	NM
MW-30D	10/2/2012		1460	60.2	62.2	58.7	18.3	<10.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	5/7/2013		1350	57.6	47.7	49.2	15.2	<10.0	128	NA	NA	NA	NA	0.31	91.5	8.5	866	7	NM
MW-30D	10/2/2013		1700	88.6	62.6	64.3J	<25.1J	<9.3	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	5/22/2014		1930	107	74.3	63.1	<22.6	<10	190	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethyl-benzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	umhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	--	--	--	--	--	--	--	--	--
MW-30D	10/30/2014		2160	120	85.8	77.3	<18.2J	<9.7	161	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	5/5/2015		2120	113	85.4	82.3	24.1J	<12.1	231	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/7/2015		2560	118	80.7	93.3J	<41.7	<24.2	229	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	5/24/2016		2180	90.7	62.7	75.2	16.3J	<4.8	203	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/6/2016		2120	81.2	54.9	65.9	<18.1	<9.7	178	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	6/14/2017		2070	80.1	58.1	70.4	<20.8	25.3	196	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	10/4/2017		1850	70.9	46.6	64.3	13.3	17.9	202	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30D	6/27/2018		1930	72.7	59.2	62.4	9.4J	<8.0	200	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	6/2/1995		0.5	<0.6	<0.8	<1.3	<0.7	<1.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-30DD	8/18/1995		1.2	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	600	NA	NM	NM	NM	NM	NM	NM
MW-30DD	11/15/1995		5.2	7.1	1.6	18	13.2	<4.0	2.9	NA	200	290	NA	NM	NM	NM	NM	NM	NM
MW-30DD	4/22/1996		4.1	<1.0	<1.0	<2.0	<1.0	<4.0	<0.31	NA	<50	<150	NA	NM	NM	NM	NM	NM	NM
MW-30DD	10/8/1996		33	2	3	6	3	3	NA	NA	170	240	NA	NM	NM	NM	NM	NM	NM
MW-30DD	4/29/1997		430	35	26	49	27.5	26	18	NA	2200	850	NA	NM	NM	NM	NM	NM	NM
MW-30DD	11/5/1997		660	45	28	56	35	41	NA	NA	4100	240	NA	0.50	001	8.1	500	7.01	NM
MW-30DD	11/3/1998		140	7.6	5.7	8.3	4.3	78	NA	NA	400	<140	NA	1.67	NM	6.3	583	8.55	NM
MW-30DD	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	<100	NA	1.86	NM	6	NM	NM	NM
MW-30DD	8/17/1999		<1.0	<1.0	<1.0	<3.0	NA	<4.0	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-30DD	4/26/2000		0.444	<0.40	<0.50	<0.55	<0.40	<0.30	NA	NA	<50	<100	NA	0.10	032	NM	NM	NM	NM
MW-30DD	10/10/2000		1.44	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	0.20	113	NM	NM	NM	2.00
MW-30DD	10/23/2001		64	6	3.9	6.9	3.54	0.21	NA	NA	180	100	NA	1.30	126	NM	NM	NM	2.00
MW-30DD	4/23/2002		0.84	0.37	0.34	1.0	0.28	<0.16	<1.1	NA	<50	<100	NA	0.64	-137	NM	NM	NM	2.00
MW-30DD	11/7/2002		0.81	0.5	0.49	1.0	0.6	<0.16	<0.46	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-30DD	4/15/2003		14	4.6	1.4	3.2	<1.0	<4.0	NA	NA	<100	NA	NA	0.20	146	NM	NM	NM	3.00
MW-30DD	10/21/2003		15	1.9	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	0.16	-153	NM	NM	NM	NM
MW-30DD	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	2.94	015	NM	NM	NM	NM
MW-30DD	11/17/2004		15.1	1.4	<1.0	<3.0	<1.0	<1.0	<1.0	NA	75 J	100	NA	0.80	-183	NM	NM	NM	6.00
MW-30DD	11/18/2004	D	73.7	1.2	<1.0	<3.0	1.3	8.6	NA	NA	73.7 J	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	4/20/2005		17.5	2.2	1.5	<3.0	<1.0	<1.0	5.6	NA	NA	NA	NA	0.2	-001	NM	NM	NM	NM
MW-30DD	4/20/2005	D	18.2	2.2	1.1	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	10/11/2005		1700	86	66	68	16 J	<25	170	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	10/11/2005	D	1400	76	59	59	25.5 J	<10	140	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	5/23/2006		7.5	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	5/23/2006	D	10.1	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	10/24/2006		90.9	4.8	2.4	6.1	2.26 J	<1.0	15.4	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	10/24/2006	D	90.2	4.9	2.3	5.7	2.03 J	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	4/30/2007		2.9	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-30DD	4/30/2007	D	2.7	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters						
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-30DD	10/1/2007		2.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DD	5/10/2008		<b>78.0</b>	7.3	1.8	6.6	2.7	<1.0	12.9	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DD	5/10/2008	D	<b>74.8</b>	7.1	1.8	6.4	2.8	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DD	10/28/2008		<b>41.0</b>	3.8	2.2	3.7	<1.0	<1.0	5.5	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DD	10/18/2011		<b>50.2</b>	2.6	3.3	7.1	3.5	<1.0	5.9	NA	NA	NA	NA	0.64	-255	7.22	735	8.4	NM	
MW-30DD	4/17/2012		<1.0	<1.0	<1.0	<3.0	1.0	<1.0	NA	NA	NA	NA	NA	0.18	-091	7.3	947	7.65	NM	
MW-30DD	4/17/2012	D	<1.0	<1.0	<1.0	<3.0	1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-30DD	10/2/2012		4.2	<1.0	<1.0	<3.0	1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DD	5/7/2013		1.1	<1.0	<1.0	<3.0	1.0	<1.0	<4.0	NA	NA	NA	NA	0.07	-39.5	8.9	871	7.62	NM	
MW-30DD	10/2/2013		<0.34	<0.34	<0.34	<1.0	<0.37	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DD	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DD	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DD	5/24/2016		<0.40	<0.39	<0.39	<1.3	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DD	6/19/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-30DDD	6/27/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
P-31D	9/13/2011		<1.0	<1.0	<1.0	<3.0	<1.0	12.5	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	8/6/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM
MW-33	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM
MW-33	1/8/1992	D	<1.0	<1.0	<1.0	<1.0	NA	NA	<1.5	NA	NA	NA	<10	NM	NM	NM	NM	NM	NM	NM
MW-33	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM	NM
MW-33	10/14/1992	D	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	6/25/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	10/28/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<120	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	4/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	10/28/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	4/6/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	320	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	11/15/1995		<1.0	<1.0	<1.0	4.8	<1.0	<4.0	NA	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<0.24	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	10/8/1996		0.6	<2	<2	<3	<2.0	<2	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	4/29/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM	NM
MW-33	11/5/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	53	<100	NA	2.40	023	8	528	7.57	NM	
MW-33	11/3/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<100	<100	NA	5.36	NM	6.8	643	7.21	NM	
MW-33	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	<100	NA	5.05	NM	6.2	NM	NM	NM	
MW-33	8/17/1999		<1.0	<1.0	<1.0	<3.0	NA	<4.0	NA	NA	<100	<100	NA	3.50	NM	8	NM	NM	NM	
MW-33	4/26/2000		<0.15	<0.40	<0.50	<0.55	<0.40	<0.30	NA	NA	<50	<100	NA	3.30	123	NM	NM	NM	NM	
MW-33	10/10/2000		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	5.00	259	NM	NM	NM	0.40	



**Table 5**  
**Groundwater Analytical Results - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
NR 140 ES -->			5	800	700	2000	480	60	100	5	--	--	--	--	--	--	--	--	--
MW-34	4/23/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	2.46	141	NM	NM	NM	0.10
MW-34	11/7/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<0.46	NA	<50	130	NA	NM	NM	NM	NM	NM	NM
MW-34	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	0.70	059	NM	NM	NM	0.0
MW-34	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	3.60	-055	NM	NM	NM	NM
MW-34	4/20/2004		<1.0	<1.0	<1.0	<3.0	2.1	<4.0	NA	NA	<100	NA	NA	1.67	164	NM	NM	NM	NM
MW-34	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	130	NA	1.50	078	NM	NM	NM	0.10
MW-34	4/20/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.1	171	NM	NM	NM	NM
MW-34	10/11/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/24/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	9/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/25/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	4/20/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/14/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/27/2010		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/20/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.56	-81	7.28	690	8.3	NM
MW-34	10/2/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/2/2013		<0.34	<0.34	<0.34	<1.0	<0.69	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/2/2013	D	<0.34	<0.34	<0.34	<1.0	<0.69	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/29/2014		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/29/2014	D	<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-34	10/5/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
P-34D	9/13/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-35	8/6/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-35	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-35	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NA	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-35	6/25/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-35	10/28/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NA	<50	<130	NA	NM	NM	NM	NM	NM	NM
MW-35	4/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-35	10/28/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-35	4/6/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-35	11/15/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-35	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<0.24	NA	<50	190	NA	NM	NM	NM	NM	NM	NM
MW-35	10/8/1996		<0.5	<2	<2	<3	<2.0	<2	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-35	4/29/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.0	NA	<50	180	NA	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters						
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MW-35	11/5/1997		2.3	2.3	2.4	6.8	5.2	9.5	NA	NA	76	<110	NA	2.10	065	2.9	1157	6.73	NM	
MW-35	11/3/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NA	<100	<100	NA	1.26	NM	7.7	1340	6.52	NM	
MW-35	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NA	<100	<100	NA	3.49	NM	6.7	NM	NM	NM	
MW-35	8/17/1999		<1.0	<1.0	1.0	<3.0	NA	<4.0	NA	NA	<100	<100	NA	NM	NM	NM	NM	NM	NM	
MW-35	4/26/2000		<0.15	<0.40	<0.50	0.215	0.6	<0.3	NA	NA	<50	519	NA	0.10	191	NM	NM	NM	NM	
MW-35	10/10/2000		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	110	NA	0.90	280	NM	NM	NM	0.40	
MW-35	4/24/2001		<0.13	<0.20	<0.22	0.340	<0.29	<0.16	NA	NA	<50	230	NA	2.60	178	NM	NM	NM	NM	
MW-35	10/23/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NA	<50	110	NA	2.90	-018	NM	NM	NM	0.00	
MW-35	4/23/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	NA	<50	<100	NA	3.73	164	NM	NM	NM	0.30	
MW-35	11/6/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<0.46	NA	<50	<100	NA	NA	NA	NA	NA	NA	NA	
MW-35	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	0.50	191	NA	NA	NA	0.07	
MW-35	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.60	055	NA	NA	NA	NM	
MW-35	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	1.68	224	NA	NA	NA	NM	
MW-35	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	350	NA	2.30	153	NA	NA	NA	0.00	
MW-35	4/20/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	4.2	120	NA	NA	NA	NM	
MW-35	10/12/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	3.9	-083	NA	1055	7.02	0.2	
MW-35	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	3.6	-066	NM	1026	7.40	0.1	
MW-35	10/22/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	33	229	NM	NM	6.60	0.0	
MW-35	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	NA	NA	NA	10.52	184.5	NM	NM	6.73	0.0	
MW-35	9/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.15	056.5	NM	NM	6.73	1.0	
MW-35	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	5.15	256.4	NM	NM	6.32	1.0	
MW-35	10/25/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	3.95	163.0	NM	NM	6.42	1.0	
MW-35	4/20/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-35	10/14/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.96	166.0	NM	NM	6.96	NM	
MW-35	10/27/2010		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-35	10/13/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.81	56	7.88	1064	7.76	NM	
MW-35	10/3/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-35	10/2/2013		<0.34	<0.34	<0.34	<1.0	<0.69	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-35	10/29/2014		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-35	10/6/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MW-47	10/4/2016		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWT-6	10/23/03		Not sampled due to presence of product																	
MWT-6	04/19/04		Not sampled due to presence of product																	
MWT-6	11/15/04		Not sampled due to presence of product																	
MWT-6	04/18/05		Not sampled due to presence of product																	
MWT-6	10/12/2005		340	480	390	1380	680	<5.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWT-6	05/23/06		Not sampled																	

**Table 5**  
**Groundwater Analytical Results - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	--	--	--	--	--	--	--	--	
MWT-6	10/16/06		Not sampled due to presence of product																
MWT-6	04/23/07		Not sampled due to presence of product																
MWT-6	09/25/07		Not sampled due to presence of product																
MWT-6	10/30/08		278	208	138	1730	867	<5.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWT-6	10/03/12		63	31.6	75	548	469	<2.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWT-6	10/2/2013		49.8	12.80	71.6	325	326	1.7	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWT-6	10/30/2014		52.1	4.4	47.6	247	428	2.0	135	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWT-6	10/6/2015		59.8	14.2	63.0	205	273	2.2	95.8	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWT-2S	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	2.40	139	NM	NM	NM	NM
MWT-2S	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NA	<100	NA	NA	2.14	193	NM	NM	NM	NM
MWT-2S	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	<100	160	NA	3.00	140	NM	NM	NM	0.10
MWT-2S	4/20/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	2.7	209	NM	NM	NM	NM
MWT-2S	10/11/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	5.63	37.5	NM	617	7.85	0.1
MWT-2S	10/25/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	14.8	146.2	NM	NM	7.16	1.0
MWT-2S	5/1/2007		4.1	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	4.39	80.9	NM	NM	7.18	1.0
MWT-2S	9/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	1.95	18.1	NM	NM	7.36	1.0
MWT-2S	5/10/2008		6.2	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	1.85	248.4	NM	NM	6.43	1.0
MWT-2S	10/28/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	2.27	95.9	NM	NM	7.04	0.0
MWT-2D	10/21/2003		1500	67	11	87	46	<4.0	NA	NA	3600	NA	NA	0.60	047	NM	NM	NM	NM
MWT-2D	4/13/2004		85	7.4	1.0	<3.0	6.0	<4.0	NA	NA	860	NA	NA	4.04	177	NM	NM	NM	NM
MWT-2D	11/17/2004		1820	92.3	32.0	132	74.2	<1.0	83.2	NA	4580	1400	NA	2.40	127	NM	NM	NM	0.00
MWT-2D	11/18/2004	D	1720	99.8	29.0	132	70.2	67.8	NA	NA	4270	NA	NA	NM	NM	NM	NM	NM	NM
MWT-2D	4/20/2005		4510	153	158	340	182.8	<1.0	226	NA	NA	NA	NA	0.80	231	NM	NM	NM	NM
MWT-2D	10/11/2005		4700	220	120	300	179	<50	220	NA	NA	NA	NA	1.35	-6.2	NM	828	7.94	0.1
MWT-2D	10/25/2006		5740	273	184	310	187.6	<10.0	245	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWT-2D	5/1/2007		4790	258	150	337	185.2	<25.0	241	NA	NA	NA	NA	0.52	-116.4	NM	NM	7.06	0.00
MWT-2D	9/29/2007		3910	215	55.3	305	154.9	<25.0	NA	NA	NA	NA	NA	0.16	-4.6	NM	NM	7.18	0.00
MWT-2D	5/10/2008		5060	227	43.6	252	105.3	<25.0	<100	NA	NA	NA	NA	0.55	77.5	NM	NM	6.53	1.00
MWT-2D	10/28/2008		5080	214	41.0	250	102.7	<5.0	72.3	NA	NA	NA	NA	0.79	-36.4	NM	NM	6.96	0.00
MWT-2D	10/17/2011		2800	174	75.0	261	138.5	<1.0	129	NA	NA	NA	NA	0.65	-99	7.33	922	7.94	NM
MWT-2D	4/17/2012		3230	159	137	226	118.7	<25.0	NA	NA	NA	NA	NA	0.31	54.3	7.2	1267	7.19	NM
MWT-2D	10/2/2012		4310	224	275	342	172.7	<20.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWT-2D	5/7/2013		4570	211	264	350	175.9	<50.0	<200	NA	NA	NA	NA	0.58	168.3	7.7	1195	6.97	NM
MWT-2D	5/7/2013	D	4540	222	257	343	173.7	<50.0	<200	NA	NA	NA	NA	0.58	168.3	7.7	1195	6.97	NM
MWT-2D	10/3/2013		3120	173	195	277	122.4	30.3J	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWT-2D	5/22/2014		3450	219	247	320	209.4	<25.0	347	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWT-2D	10/30/2014		3400	201	240	366	169.7	28.9J	174	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 5**  
**Groundwater Analytical Results - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters						
			Benzene	Toluene	Ethyl-benzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm	
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	--	--	--	--	--	--	--	--	--	
MWT-2D	5/5/2015		3720	224	277	377	172.2	46.3J	180	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWT-2D	10/7/2015		3740	232	285	393	199.9	43.1J	215	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWT-2D	5/25/2016		3670	246	331	398	203.0	92.5	196	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWT-2D	10/6/2016		3590	228	319	352	193.3	92.8	163	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWT-2D	6/14/2017		3440	214	331	374	191.2	115.0	167	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWT-2D	10/4/2016		3300	194	303	344	181.9	119.0	160	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWT-2D	6/27/2018		2970	171	287	312	163.6	190.0	133	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWT-2D	6/27/2018	D	3290	185	322	354	186.5	212.0	157	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	11/17/2004		1950	57.4	87.6	86.6	34.7	<5.0	27.6	NA	3890	530	NA	NM	NM	NM	NM	NM	NM	
RW-3	4/19/2005		741	5.6	16.5	4.5	3.3	<1.0	<1.0	NA	NA	NA	NA	0.8	28	NM	NM	NM	NM	
RW-3	10/12/2005		8800	210	360	258 J	86 J	<120	63 J	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	5/23/2006		5820	601	309	462	70.7	102	36.3	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	10/23/2006		2320	66.1	123	85.7	34.6	<10.0	<10.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	4/29/2007		2830	57.2	220	118	21.5	<20.0	<20.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	10/1/2007		5120	123	348	185	55.2	35.9	34.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	5/10/2008		2000	38.7	130	54	19.6	<10.0	<40.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	10/28/2008		4680	52	244	108	22.1	<20	82.4	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	10/27/2010		6540	464	698	981	166.2	<50	<200	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	10/13/2011		4560	131	449	625	125.2	13.8	40.5	NA	NA	NA	NA	2.02	-188	9.6	1243	7.95	NM	
RW-3	4/17/2012		4760	89.6	677	625	169.5	<50.0	NA	NA	NA	NA	NA	4.23	-49.4	9.2	1530	7.52	NM	
RW-3	10/3/2012		4670	<50.0	488	327	<50.0	309.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	10/3/2013		5280	66.3	412	220	62.1J	1200.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	10/30/2014		4720	45.8	364	81.3J	51.5J	869	53.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	10/7/2015		4720	78.2	498	529	128.2	588	75.3	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-3	10/6/2016		4560	180	607	601	167.6	455	104.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-7	11/18/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	1.1	NA	<100	290	NA	NM	NM	NM	NM	NM	NM	
RW-7	4/20/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	0.4	-040	NM	NM	NM	NM	
RW-7	10/12/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-7	5/23/2006		<1.0	<1.0	<1.0	<3.0	1.3	<1.0	7.8	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-7	10/23/2006		<1.0	<1.0	1.3	<3.0	1.6	<1.0	3.4	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
RW-7	4/29/2007		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NM	NM	NM	NM	
RW-7	6/26/2007		Abandoned																	
EW-06	7/28/2011		9440	9600	772	5200	1078	<50.0	396	NA	NA	NA	NA	0.32	-184	9.48	995	7.54	NM	
EW-06	10/19/2011		12500	9800	1090	6260	1229	58.4	353	NA	NA	NA	NA	0.23	-196	9.27	988	7.83	NM	
EW-06	4/18/2012		10400	1920	662	3260	991	382	NA	NA	NA	NA	0.69	-4.6	9.4	1501	6.92	NM		
EW-06	5/7/2013		FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP



**Table 5**  
**Groundwater Analytical Results - Terminal**  
**Former Amoco Terminal**  
**Superior, Wisconsin**

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters						
			Benzene	Toluene	Ethyl-benzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron	
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm	
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
EW-07	7/28/2011		258	857	490	2350	591	<10.0	159	NA	NA	NA	NA	0.57	-214	9.95	955	7.66	NM	
EW-07	10/19/2011		226	646	307	1330	343.3	<2.0	87.9	NA	NA	NA	NA	0.67	-268	8.97	926	7.89	NM	
EW-07	4/18/2012		615	796	247	969	183.9	<5.0	NA	NA	NA	NA	NA	1.46	-54.7	8.9	1247	7.01	NM	
EW-07	5/7/2013		385	270	334	2240	1254.0	<25.0	199	NA	NA	NA	NA	0.5	-24.9	9.9	1181	6.85	NM	
EW-08	7/28/2011		82.0	1.9	13.4	25	16.8	<1.0	9.2	NA	NA	NA	NA	0.18	-201	9.11	804	7.58	NM	
EW-08	7/28/2011	D	87.2	2.0	14.2	26.3	17.3	<1.0	9.7	NA	NA	NA	NA	0.25	-190	9.46	913	7.87	NM	
EW-08	10/19/2011		234	7.5	53.3	116	98.7	<1.0	45.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-08	10/19/2011	D	242	8.0	54.3	121	98.2	<1.0	41.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-08	4/18/2012		466	11.4	193	444	372.3	<5.0	NA	NA	NA	NA	NA	0.86	-31.6	9.3	1187	6.6	NM	
EW-08	4/18/2012	D	448	12.1	190	435	365.4	<5.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-08	5/7/2013		574	16.7	292	745	615	<5.0	220	NA	NA	NA	NA	0.54	34.4	10	1104	6.74	NM	
EW-08	5/21/2014		4.1	<1.0	1.1	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-08	10/30/2014		219	3.7	101	122	106	<0.97	91.4	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-08	5/5/2015		578	15.8	281	517	395.1	<2.4	241	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-08	10/6/2015		57.0	0.40J	16.1	11.3	7.7	<0.48	11.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-08	10/5/2016		407	9.5	118	141	165.6	<1.9	103	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-09	7/28/2011		374	18.7	215	436	317.4	<2.0	188	NA	NA	NA	NA	0.16	-198	8.04	920	7.52	NM	
EW-09	10/19/2011		231	11.1	132	304	268.1	<2.0	135	NA	NA	NA	NA	0.13	-181	8.05	954	7.88	NM	
EW-09	4/18/2012		74.2	2.8	25.0	49.2	60.7	<1.0	NA	NA	NA	NA	NA	0.66	-21.1	7.6	1228	7.26	NM	
EW-09	5/7/2013		34.1	2.6	24.2	19.4	31.2	<1.0	5.0	NA	NA	NA	NA	0.56	75.5	8.2	1042	7.05	NM	
EW-09	5/21/2014		53.4	1.8	11.9	19.7	10.1	<1.0	6.3	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-09	5/4/2015		21.0	1.0	3.0	2.2J	<1.31J	0.8J	0.75J	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-09	10/5/2016		28.1	2.2	25.5	40.8	38.2	<0.48	26.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-10	7/28/2011		3430	<20.0	<20.0	<60.0	<20.0	<20.0	<80.0	NA	NA	NA	NA	2.28	-143	8.93	1190	7.73	NM	
EW-10	10/19/2011		3970	<1.0	2.6	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.32	-162	8.45	1130	7.99	NM	
EW-10	4/18/2012		1510	<1.0	1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	1.06	91.4	7.6	1437	7.17	NM	
EW-10	5/7/2013		18.3	<1.0	6.0	44.4	48.9	<1.0	4.9	NA	NA	NA	NA	0.93	167.1	8.2	1225	7	NM	
EW-10	5/7/2013	D	16.0	<1.0	4.4	34.0	38.7	<1.0	<4.0	NA	NA	NA	NA	0.93	167.1	8.2	1225	7	NM	
EW-10	5/21/2014		18.6	<1.0	<1.0	<3.0	<2.0	1.3	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-10	5/4/2015		7.2	<0.39	<0.39	<1.2	<0.84	2.0	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-10	10/5/2016		1.4	<0.39	<0.39	<1.2	<0.84	2.6	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
EW-11	7/28/2011		FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP

**Table 5**  
**Groundwater Analytical Results - Terminal**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Sample Date	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethyl-benzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	milli Volts	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES --&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	--	--	--	--	--	--	--	--	
<b>Notes:</b>																			
µg/L ..... = micrograms per liter (equivalent to parts per billion)																			
D ..... = Duplicate sample																			
1,2-DCA ..... = 1,2-Dichloroethane																			
DRO ..... = Diesel Range Organics																			
GRO ..... = Gasoline Range Organics																			
FP ..... = The well was not sampled due to the presence of free product																			
THC ..... = Total hydrocarbons or total petroleum hydrocarbons as gasoline																			
MTBE ..... = Methyl Tertiary Butyl Ether																			
NA ..... = Not Analyzed for indicated parameter																			
NM ..... = Not Measured																			
NR 140 ES ..... = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard																			
NS ..... = Not Sampled on indicated date																			
TMBs ..... = Trimethylbenzenes																			
<b>"BOLD TYPE" ..... = The indicated concentration exceeds the NR 140 ES</b>																			
J ..... = Laboratory flag. Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.																			
<b>Note:</b> Bio-Parameters for the 4/29/07 - 4/30/07 sampling event were taken on 4/24/07																			

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GFO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
GP-36S	6/20/2011		<2.0	<2.0	<2.0	<6.0	<2.0	<2.0	<8.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	9/21/1988		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NM	NM	NA	<10	NM	NM	NM	NM	NM	NM
MW-17	4/27/1989		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	8/29/1990		<2.0	<2.0	<2.0	<4.0	NA	NA	NA	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	8/29/1990	D	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.5	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	1/31/1991		<1.0	<1.0	<1.0	<2.0	NA	<20	NA	NM	NM	NA	<1000	NM	NM	NM	NM	NM	NM
MW-17	1/31/1991	D	<1.0	<1.0	<1.0	NA	NA	NA	<1.5	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NM	NM	NA	<1000	NM	NM	NM	NM	NM	NM
MW-17	7/10/1991	D	<1.0	<1.0	<1.0	<1.0	NA	NA	<1.5	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NM	NM	NA	<1000	NM	NM	NM	NM	NM	NM
MW-17	1/8/1992	D	<1.0	<1.0	<1.0	<2.0	NA	NA	<1.5	NM	NM	NA	<10.0	NM	NM	NM	NM	NM	NM
MW-17	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NM	NM	NA	<1000	NM	NM	NM	NM	NM	NM
MW-17	10/14/1992	D	<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	6/25/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	10/28/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	4/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	10/28/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	4/6/1995		<1.0	<1.0	<1.0	<2.0	1.1	<4.0	<1.5	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	11/15/1995		<1.0	<1.0	<1.0	3.7	2.7	<4.0	NA	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	10/8/1996		<0.5	<2	<2	<3	2.0	<2	NA	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	4/29/1997		NA	NA	NA	NA	NA	NA	<1	NM	NM	190	NA	NM	NM	NM	NM	NM	NM
MW-17	11/5/1997		1.8	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NM	NM	<100	NA	2.90	037	7.9	626	7.49	NM
MW-17	11/5/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NM	NM	<100	NA	4.10	NM	8	775	7.07	NM
MW-17	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NM	NM	<100	NA	6.35	NM	7	NM	NM	NM
MW-17	8/17/1999		<1.0	<1.0	<1.0	<3.0	NA	<4.0	NA	NM	NM	<100	NA	4.10	NM	9.4	NM	NM	NM
MW-17	4/26/2000		<0.15	0.523	0.653	1.858	1.12	<0.30	NA	NM	NM	<100	NA	4.20	153	NM	NM	NM	NM
MW-17	10/10/2000		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	0.40	0.40	<100	NA	3.90	200	NM	NM	NM	0.40
MW-17	4/24/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NM	NM	<100	NA	5.50	157	NM	NM	NM	NM
MW-17	10/23/2001		<0.13	<0.20	<0.22	0.47	0.32	<0.16	NA	2.00	2.00	<100	NA	10.00	156	NM	NM	NM	2.00
MW-17	10/23/2001	D	<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NM	NM	<100	NA	NM	NM	NM	NM	NM	NM
MW-17	4/23/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	0.30	0.30	<100	NA	6.91	277	NM	NM	NM	0.30
MW-17	4/23/2002	D	<0.13	0.25	<0.22	<0.23	<0.29	<0.16	NA	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	11/7/2002		<0.13	0.25	<0.22	<0.23	<0.29	<0.16	<0.46	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	11/7/2002	D	<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<0.46	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	0.0	0.0	NA	NA	3.60	242	NM	NM	NM	0.0
MW-17	4/15/2003	D	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NM	NM	NA	NA	6.40	113	NM	NM	NM	NM
MW-17	10/21/2003	D	<1.0	<1.0	<1.0	<3.0	1.2	<4.0	NA	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	4/20/2004		<1.0	<1.0	<1.0	<3.0	1.2	<4.0	NA	NM	NM	NA	NA	3.70	215	NM	NM	NM	NM
MW-17	4/20/2004	D	4.0	3.9	1.9	4.8	1.6	<4.0	NA	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	0.00	0.00	180	NA	5.80	128	NM	NM	NM	0.00

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GFO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES--&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>µg/L</b>	<b>--</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
MW-17	4/20/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NM	NM	NA	NA	5.7	181	NM	NM	NM	NM
MW-17	10/11/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.1	0.1	NA	NA	6.27	31.1	NM	547	7.85	0.1
MW-17	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.1	0.1	NA	NA	4.1	039	NM	562	7.62	0.1
MW-17	10/24/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.0	0.0	NA	NA	33.4	107	NM	NM	7.17	0.0
MW-17	4/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	1.0	1.0	NA	NA	7.69	10.7	NM	NM	7.44	1.0
MW-17	9/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.0	0.0	NA	NA	4.25	-13.9	NM	NM	7.43	0.0
MW-17	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	1.0	1.0	NA	NA	4.2	114.8	NM	NM	6.74	1.0
MW-17	10/25/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.0	0.0	NA	NA	5.89	22	NM	NM	7.19	0.0
MW-17	4/20/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	10/17/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NM	NM	NA	NA	2.61	-68	8.58	562	8.28	NM
MW-17	10/2/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	5/7/2013		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NM	NM	NA	NA	6.29	357.2	8.7	635.9	7.08	NM
MW-17	7/30/2014		<0.50	<0.50	<0.50	<1.5	<1.0	<0.17	<2.5	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	10/29/2014		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	10/5/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-17	10/4/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM
MW-31	7/11/1989		3.0	<2.0	<2.0	<4.0	NA	NA	NA	NM	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-31	8/29/1990		<2.0	32	5.0	29	NA	NA	NA	NM	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-31	1/31/1991		<1.0	3.0	<1.0	3.0	NA	<20	NA	NM	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-31	7/10/1991		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NM	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-31	1/8/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NM	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-31	10/14/1992		<1.0	<1.0	<1.0	<1.0	NA	<20	NA	NM	NA	NA	<1000	NM	NM	NM	NM	NM	NM
MW-31	6/25/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NM	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	10/28/1993		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.6	NM	<50	<110	NA	NM	NM	NM	NM	NM	NM
MW-31	4/27/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NM	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	10/28/1994		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NM	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	4/6/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NM	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	11/15/1995		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NM	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	4/22/1996		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NM	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	10/8/1996		<0.5	<2	<2	<3.0	<2.0	<2	NA	NM	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	4/29/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	<1.5	NM	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	11/5/1997		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NM	52	<100	NA	0.60	022	7.8	774	7.39	NM
MW-31	11/3/1998		<1.0	<1.0	<1.0	<2.0	<1.0	<4.0	NA	NM	<100	<100	NA	4.35	NM	6.1	853	7.41	NM
MW-31	3/3/1999		<1.0	<1.0	<1.0	<2.0	NA	<4.0	NA	NM	<100	<100	NA	2.33	NM	6.4	NM	NM	NM
MW-31	8/17/1999		<1.0	<1.0	<1.0	<3.0	NA	<4.0	NA	NM	<100	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	4/26/2000		<0.15	<0.40	<0.50	<0.55	<0.40	<0.30	NA	NM	<50	<100	NA	0.20	124	NM	NM	NM	NM
MW-31	10/10/2000		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	0.40	<50	<100	NA	0.30	214	NM	NM	NM	0.40
MW-31	4/24/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NM	<50	<100	NA	0.60	218	NM	NM	NM	NM
MW-31	10/23/2001		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	NA	NM	<50	<100	NA	0.40	001	NM	NM	NM	NM
MW-31	4/23/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<1.1	0.40	<50	<100	NA	1.27	126	NM	NM	NM	0.40
MW-31	11/6/2002		<0.13	<0.20	<0.22	<0.23	<0.29	<0.16	<0.46	NM	<50	<100	NA	NM	NM	NM	NM	NM	NM
MW-31	4/15/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	0.12	<100	NA	NA	1.30	230	NM	NM	NM	0.12

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GFO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	μg/L	ppm	mV	°C	μmhos/cm	pH units	ppm
MW-31	10/21/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NM	<100	NA	NA	2.50	004	NM	NM	NM	NM
MW-31	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	NM	<100	NA	NA	1.52	219	NM	NM	NM	NM
MW-31	11/17/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	0.00	<100	200	NA	2.00	149	NM	NM	NM	0.00
MW-31	4/20/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NM	NA	NA	NA	1.1	89	NM	NM	NM	NM
MW-31	10/11/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.1	NA	NA	NA	2.10	20.9	NM	747	7.80	0.1
MW-31	5/23/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.1	NA	NA	NA	2.3	033	NM	726	7.65	0.1
MW-31	10/24/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	1.0	NA	NA	NA	2.1	124	NM	NM	7.13	1.0
MW-31	4/30/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA	1.0	NA	NA	NA	1.97	-45.6	NM	NM	7.25	1.0
MW-31	10/1/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	1.0	NA	NA	NA	0.63	43.8	NM	NM	7.34	1.0
MW-31	5/7/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	1.0	NA	NA	NA	2.03	151.2	NM	NM	6.68	1.0
MW-31	10/28/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	0.0	NA	NA	NA	0.81	42.1	NM	NM	7.06	0.0
MW-31	10/14/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NM	NA	NA	NA	1.06	16	NM	NM	7.60	NM
MW-31	10/27/2010		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NM	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-31	10/17/2011		<1.0	<1.0	<1.0	<3.1	<1.0	<1.0	NA	NM	NA	NA	NA	2.57	-101	7.83	746	8.18	NM
MW-31	10/2/2012		<1.0	<1.0	<1.0	<3.1	<1.0	<1.0	NA	NM	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-31	5/7/2013		<1.0	<1.0	<1.0	<3.1	<1.0	<2.0	<4.0	NM	NA	NA	NA	1.29	356.4	8.4	827	6.87	NM
MW-31	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NM	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-31	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-31	10/4/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NM	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-32			08/91 to present - The well was not sampled due to the presence of free product.																
MW-36S	7/26/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.35	-9	9.54	809	7.95	NM
MW-36S	10/18/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.1	-48	10.0	852	8.15	NM
MW-36S	4/18/2012		1.1	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.75	69.4	6.2	1200	7.43	NM
MW-36S	5/6/2013		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	1.09	236.0	7.3	964	6.93	NM
MW-36S	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36S	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36S	5/24/2016		<0.40	<0.39	<0.39	<1.3	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
GP-36D	6/21/2011		2220	30.6	<10	<30	<10	<10	<40	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	7/26/2011		2290	48.2	8.7	63.3	26.6	<1.0	<4.0	NA	NA	NA	NA	0.17	-244	9.42	951	7.72	NM
MW-36D	10/18/2011		855	23.7	2.5	37.2	16.1	<1.0	NA	NA	NA	NA	NA	0.34	-88	7.48	697	8.31	NM
MW-36D (Dup)	10/18/2011		844	23.0	2.3	36.3	15.5	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	4/18/2012		2270	65.7	14.0	102	49.2	<1.0	NA	NA	NA	NA	NA	0.51	81.7	7.8	1303	7.15	NM
MW-36D (Dup)	4/18/2012		2240	65.0	13.9	101	49.4	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	10/1/2012		2070	51.7	11.1	75.8	23.2	<10.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D (Dup)	10/1/2012		2080	51.9	11.2	77.2	34.7	<10.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	5/7/2013		1390	28.7	<10.0	<30.0	<20.1	<10.0	<40.0	NA	NA	NA	NA	0.40	180.8	9	1187	7.13	NM
MW-36D	10/2/2013		2040	49.7	11.3J	54.9J	23.5J	<7.4	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	5/22/2014		1590	34.2	<10.0	33.7	<20.4	<10.0	<40.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	10/30/2014		1840	34.9	9.2J	28.2J	<19.6J	<9.7	<8.5	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	5/5/2015		1660	30.5	8.3J	<24.9	<16.7	<9.7	<8.5	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	10/7/2015		1840	31.1	<9.8	<31.2	<20.8	<12.1	<10.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	5/25/2016		1970	37.8	10.2J	<24.9	<16.7	<9.7	<8.5	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
MW-36D	10/6/2016		1920	35.4	9.1J	<12.5	<8.4	<4.8	<4.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	6/14/2017		1920	39.4	11.4J	<25.0	<16.7	<9.7	<8.5	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	10/4/2017		1740	33.1	10.0	7.3	3.1	4.0	<2.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36D	6/27/2018		1820	34.0	10.4J	<19.4	<13.2	<6.4	<10.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	10/18/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	4/18/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.52	84.1	7.4	992	7.67	NM
MW-36DD	10/1/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	5/6/2013		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	0.32	228.1	7.7	558.7	7.5	NM
MW-36DD	10/1/2013		<0.34	<0.34	<0.34	<1.0	<0.69	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	10/29/2014		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	10/5/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	5/24/2016		<0.40	<0.39	<0.39	<1.3	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	10/4/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-36DD	6/19/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
GP-37S	6/21/2011		4.4	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
GP-37D	6/21/2011		3720	87.3	22.1	79.6	18.4	<10	<40	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37S	7/26/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.88	-87	8.8	517	8.00	NM
MW-37S	10/18/2011		2.2	<1.0	<1.0	<3.1	<1.0	<1.0	NA	NA	NA	NA	NA	0.43	-90	9.46	708	8.16	NM
MW-37S	4/18/2012		1.1	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	2.42	86.2	6.2	625	7.74	NM
MW-37S	5/6/2013		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	2.1	234.0	6.1	558.7	7.27	NM
MW-37S	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37S	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37S	5/24/2016		<0.40	<0.39	<0.39	<1.3	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	7/26/2011		649	17.20	5.90	14.6	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.22	-134	8.65	927	7.89	NM
MW-37D	10/18/2011		290	8.80	2.60	7	<1.0	<1.0	NA	NA	NA	NA	NA	0.4	-79	7.67	968	8.24	NM
MW-37D	4/18/2012		149	4.40	1.50	3.7	<1.0	<1.0	NA	NA	NA	NA	NA	0.55	53.4	7.8	1200	7.39	NM
MW-37D	10/2/2012		871	26.00	8.70	19.3	<5.0	<5.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	5/7/2013		365.0	10.5	<5.0	<15.0	<10.0	<5.0	<20.0	NA	NA	NA	NA	0.48	136.5	8.8	1137	7.30	NM
MW-37D	10/2/2013		1960	63.3	21.3	45.3J	<13.7	<7.4	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	5/22/2014		2230	73.1	23.9	48.3	<10.0	<5.0	<20.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	10/30/2014		2240	70.4	21.6J	42.4J	<20.8	<12.1	10.8J	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	5/5/2015		2800	96.8	31.7	65.8J	20.8	<12.1	<10.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	10/7/2015		3090	105	32.1J	73.7J	<33.3	<19.4	<17.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	5/25/2016		2990	108	36.3	84.4	13.0J	<4.8	<4.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D (Dup)	5/25/2016		2720	96.9	32.0	75.0	11.4J	<4.8	<4.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	10/6/2016		3020	112	35.2	80.3	<20.8	<12.1	<10.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D (Dup)	10/6/2016		3380	126	40.1	90.5	<16.7	<9.7	<8.5	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	6/14/2017		3020	110	35.4J	71.5J	<41.7	<24.2	<21.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D (Dup)	6/14/2017		3050	112	34.7J	71.5J	<41.7	<24.2	<21.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D	10/4/2017		2730	101	31.9	61.5	<20.8	<12.1	<10.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D (Dup)	10/4/2017		2730	100	31.8	60.5	<20.8	<12.1	<10.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	-	-	-	-	-	-	
MW-37D	6/27/2018		2830	98	31.5	58.5	<16.8	<8.0	<12.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37D (Dup)	6/27/2018		2680	91	28.2	53.2J	<16.8	<8.0	<12.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	10/18/2011		6.9	<1.0	<1.0	<3.0	1.1	<1.0	<4.0	NA	NA	NA	NA	0.49	-253	7.56	766	8.39	NM
MW-37DD	4/18/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.87	19.2	7.7	1102	7.59	NM
MW-37DD	10/1/2012		<1.0	<1.0	<1.0	<3.0	1.2	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	5/6/2013		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.42	168.5	7.6	1028	7.65	NM
MW-37DD	10/1/2013		5.3	<0.34	<0.34	<1.0	<1.66	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	5/21/2014		26.5	<1.0	<1.0	<3.0	1.1	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	10/29/2014		109	<0.39	<0.39	<1.2	<1.4J	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	5/5/2015		263	<0.39	<0.39	<1.2	<1.23J	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	10/6/2015		461	<1.6	<1.6	<5.0	<3.4	<1.9	<1.7	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	5/25/2016		667	<1.9	<2.0	<6.2	<4.2	<2.4	<2.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	10/5/2016		932	<1.6	<1.6	<5.0	<3.4	<1.9	<1.7	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	10/12/2017		1060	<7.8	<7.9	<25.0	<16.7	<9.7	<8.5	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DD	6/27/2018		1260	<4.9	<3.3	<9.8	<6.7	<3.2	<5.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-37DDD	6/27/2018		3.9	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
GP-38S	6/21/2011		4.3	<2.0	<2.0	<6.0	<2.0	<2.0	<8.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38S	7/26/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.36	-172	7.63	934	7.82	NM
MW-38S	10/18/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.61	-201	7.69	961	8.13	NM
MW-38S	4/17/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.66	22	7.1	1337	7.22	NM
MW-38S	5/6/2013		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	0.79	218	8.9	1145	6.76	NM
MW-38S	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38S	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38S	5/24/2016		<0.40	<0.39	<0.39	<1.3	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38S	10/3/2017		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
GP-38D	6/21/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	7/26/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	0.84	-354	8.51	884	7.90	NM
MW-38D	10/18/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.37	-256	7.89	939	8.28	NM
MW-38D	4/17/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.76	-2.1	8.0	1233	7.46	NM
MW-38D	10/1/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	5/6/2013		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	0.32	166	8.6	1117	7.03	NM
MW-38D	10/1/2013		<0.34	<0.34	<0.34	<1.0	<0.69	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	10/29/2014		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	10/5/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	5/24/2016		<0.40	<0.39	<0.39	<1.3	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	10/4/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	10/3/2017		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38D	6/19/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-38DD	6/20/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	0.84	-354	8.51	884	7.90	NM





**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	-	ppm	mV	°C	umhos/cm	pH units	ppm
MW-41D	10/6/2015		1.0	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-41D	5/24/2016		12.4	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-41D	10/4/2016		3.0	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-41D	10/4/2017		18.2	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-41D	6/20/2018		12.9	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-41DD	6/27/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
P-42D	9/14/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
P-42DD	9/14/2011		<2.0	<2.0	<2.0	<6.0	<2.0	<2.0	<8.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
P-43D	9/14/2011		75.2	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
P-43DD	9/14/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45S	6/14/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45S	10/2/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45S	5/6/2013		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	0.44	45.2	8.1	1065	6.81	NM
MW-45S	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45S	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45S	5/24/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45S	10/3/2017		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	6/14/2012		2.1	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	10/1/2012		81.8	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	5/6/2013		37.7	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	0.33	104.9	7.7	1234	6.98	NM
MW-45D	10/2/2013		101	<0.34	<0.34	<1.0	<0.69	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	5/21/2014		127	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D (Dup)	5/21/2014		109	<1.0	2.4	<3.0	<2.0	<1.0	12.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	10/30/2014		120	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	5/5/2015		105	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	10/6/2015		128	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	5/25/2016		136	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	10/5/2016		129	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	10/4/2017		144	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-45D	6/27/2018		155	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46S	6/14/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46S	10/2/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46S	5/6/2013		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	5.65	228.6	8.9	6718	7.42	NM
MW-46S	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46S	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46S	5/24/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	6/14/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	10/2/2012		<1.0	<1.0	<1.0	5.3	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	5/6/2013		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	0.30	174.2	7.9	1122	7.1	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GFO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	-	ppm	mV	°C	umhos/cm	pH units	ppm
MW-46D	10/1/2013		<0.34	<0.34	0.70J	3.5	NA	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	5/20/2014		<1.0	<1.0	<1.0	4.3	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	10/29/2014		<0.40	<0.39	0.47J	2.4J	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	5/4/2015		<0.40	<0.39	0.47J	2.7J	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	10/5/2015		<0.40	<0.39	0.39J	2.3J	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	5/24/2016		<0.40	<0.39	<0.39	<1.2	<.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	10/4/2016		<0.40	<0.39	<0.39	1.9J	<.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	10/3/2017		<0.40	<0.39	0.41	2.0	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-46D	6/19/2018		<0.31	<0.49	<0.33	1.5J	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-48S	10/4/2016		<0.4	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-48S	6/13/2017		<0.4	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-48S	10/3/2017		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-48S	6/19/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-48D	10/4/2016		125	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-48D	6/14/2017		12	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-48D	10/3/2017		<0.40	<0.39	<0.39	<1.25	<0.48	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-48D	6/19/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-49S	10/4/2016		21	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-49S	6/13/2017		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-49S	10/3/2017		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-49S	6/19/2018		1660	33.4	<6.6	<19.4	<13.2	<6.4	<10.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-49D	10/4/2016		14.8	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-49D	6/13/2017		1.0	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-49D	10/4/2017		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-49D	6/19/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-50D	6/20/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-51D	6/20/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-52D	6/19/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MW-52DD	6/19/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWAST-3	10/22/2003		1100	420	140	460	172	<4.0	NA			6900	NA	1.1	207	NM	NM	NM	NM
MWAST-3	4/21/2004		790	240	98	280	111	72	NA			5300	NA	4.4	165	NM	NM	NM	NM
MWAST-3	11/18/2004		85.1	23	6.1	28.9	12.6	<4.0	NA			416	360	4.2	19	NM	NM	NM	0.0
MWAST-3	4/20/2005		374	22.1	6.7	32.3	17.4	<1.0	NA			NA	NA	1.4	212	NM	NM	NM	NM
MWAST-3	10/11/2005		180	30	21	47.1	22.9	3.5	NA			NA	NA	NM	NM	NM	NM	NM	NM
MWAST-3	10/26/2006		650	121	<10.0	103	71.1	<10.0	NA			NA	NA	NM	NM	NM	NM	NM	NM
MWAST-3	5/1/2007		657	118	59.0	108	47.0	<20.0	NA			NA	NA	NM	NM	NM	NM	NM	NM
MWAST-3	10/2/2007		578	86	39.0	63.6	31.3	<5.0	NA			NA	NA	NM	NM	NM	NM	NM	NM
MWAST-3	5/9/2008		528	155	8.7	72.4	20.8	<5.0	NA			NA	NA	NM	NM	NM	NM	NM	NM
MWAST-3	10/30/2008		223	12.8	1.6	7.7	2.5	<1.0	NA			NA	NA	NM	NM	NM	NM	NM	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	-	-	-	-	-	-	-
MWAST-3	10/12/2011		521	181	47.0	88.2	28.1	<1.0	13		NA	NA	NA	1.2	-103	7.6	647	8.07	NM
MWAST-3	10/2/2012		207	49.9	17.8	37.9	16.7	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWAST-3	6/20/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWAST-8	10/22/2003		12000	1100	890	1100	430	<4.0	NA		25000	NA	NA	1.9	211	NM	NM	NM	NM
MWAST-8	4/21/2004		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWAST-8	11/18/2004		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWAST-8	4/20/2005		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWAST-8	10/11/2005		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWAST-8	10/26/2006		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWAST-8	5/1/2007		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWAST-8	6/27/2018		2840	514	596	1633	798	<12.8	260	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWAST-8	6/27/2018	D	2210	356	453	1246	660	<12.8	198	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWAST-9	10/22/2003		1400	1300	170	550	141	<4.0	NA		8300	NA	NA	1.5	212	NM	NM	NM	NM
MWAST-9	4/21/2004		160	110	13	33	8.3	7.7	NA		690	NA	NA	6.52	169	NM	NM	NM	NM
MWAST-9	11/18/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	66 J	NA	3.90	-018	NM	NM	NM	0.0
MWAST-9	4/20/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	5.0	216	NM	NM	NM	NM
MWAST-9	10/11/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	4.65	-023	NM	569	7.78	1.0
MWAST-9	10/26/2006		80.0	71.3	6.8	39.3	11.9	<1.0	NA		NA	NA	NA	64.80	141	NM	NM	NM	0.0
MWAST-9	5/1/2007		11.5	9.0	<1.0	<3.0	<1.0	<4.0	NA		NA	NA	NA	7.62	9.8	NM	NM	7.12	1.0
MWAST-9	10/2/2007		53.4	32.9	3.1	13.9	4.6	<1.0	NA		NA	NA	NA	2.70	29.3	NM	NM	7.30	NM
MWAST-9	5/9/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	2.73	224.4	NM	NM	6.52	1.0
MWAST-9	10/30/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	3.08	54.3	NM	NM	7.13	0.0
MWAST-9	10/12/2011		20.4	3.2	<1.0	<3.0	4.5	<1.0	<4.0		NA	NA	NA	0.11	-1	7.8	508	8.26	NM
MWAST-9	10/2/2012		93.2	98.7	7.0	49.9	11.5	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-2	10/22/2003		720	18	25	8.4	4.8	<4.0	NA		1600	NA	NA	5.7	243	NM	NM	NM	NM
MWM-2	4/21/2004		20	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	NA	NA	4.20	234	NM	NM	NM	NM
MWM-2	11/18/2004		Well Bent/Damaged																
MWM-2	4/20/2005		Well Bent/Damaged--Repaired in Aug 2005																
MWM-2	10/11/2005		0.76 J	<1.0	<1.0	0.74 J	<1.0	<1.0	NA		NA	NA	NA	6.76	34.4	NM	840	7.33	2.0
MWM-2	10/25/2006		1980	52.2	54.5	32.8	10.7	<1.0	NA		<100	NA	NA	22.70	135	NM	NM	NM	0.0
MWM-2	5/1/2007		3.6	<1.0	<1.0	<3.0	<1.0	<4.0	NA		NA	NA	NA	4.29	26.4	NM	NM	6.97	1.0
MWM-2	10/2/2007		5.2	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	2.13	17.6	NM	NM	7.00	0.0
MWM-2	5/9/2008		708	23.0	35.3	<15.0	<5.0	<5.0	NA		NA	NA	NA	0.67	136.5	NM	NM	6.48	0.0
MWM-2	10/29/2008		183	7.0	9.5	3.8	<1.0	<1.0	NA		NA	NA	NA	1.34	30.0	NM	NM	6.96	0.0
MWM-2	10/12/2011		1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	0.78	-50.0	7.8	827	8.00	NM
MWM-2	10/2/2012		244	19.9	14.5	7.4	4	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-2	10/1/2013		523	13.1	22.4	5.8J	<3.5	<1.9	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-2	10/30/2014		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	0.53J	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-2	10/5/2015		12.8	0.49J	0.86J	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-2	10/4/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-2D	10/4/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-2D	6/13/2017		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-2D	10/3/2017		<0.40	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-2D	6/19/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GFO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
			5	800	700	2000	480	60	100	5	-	-	-	-	-	-	-	-	-
MWM-4	10/22/2003		<1.0	<1.0	3.3	<3.0	2.8	<4.0	NA		120	NA	NA	3.6	240	NM	NM	NM	NM
MWM-4	4/21/2004		1.2	<1.0	1.4	<3.0	<1.0	<4.0	NA		<100	NA	NA	6.43	217	NM	NM	NM	NM
MWM-4	11/18/2004		Well Bent/Damaged																
MWM-4	4/20/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	3.6	204	NM	NM	NM	NM
MWM-4	10/11/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	3.45	13.3	NM	692	7.69	2.0
MWM-4	10/26/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	25.80	107.4	NM	NM	NM	0.0
MWM-4	5/1/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		NA	NA	NA	2.08	-7.7	NM	NM	7.48	1.0
MWM-4	10/2/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	0.36	33.3	NM	NM	7.26	0.0
MWM-4	5/9/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	3.12	246.1	NM	NM	6.58	1.0
MWM-4	10/30/2008		1.0	<1.0	3.4	3.7	2.5	<1.0	NA		NA	NA	NA	2.11	68.9	NM	NM	7.12	0.0
MWM-4	10/12/2011		1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	0.09	-6.0	8.3	639	8.13	NM
MWM-6	10/31/2014		3.3	<0.39	24.3	25.9	88.3	4.2	5.9	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-6	5/6/2015		3.2	1.3	7.7	16.2	22.3	0.81J	3.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7	10/22/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	NA	NA	1.1	210	NM	NM	NM	NM
MWM-7	4/21/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	NA	NA	2.34	202	NM	NM	NM	NM
MWM-7	11/18/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	140	NA	2.30	63	NM	NM	NM	0.0
MWM-7	4/20/2005		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	2.4	222	NM	NM	NM	NM
MWM-7	10/11/2005		0.25 J	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	6.30	43.0	NM	800	7.39	0.3
MWM-7	10/25/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	9.80	133.4	NM	NM	NM	1.0
MWM-7	5/1/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		NA	NA	NA	2.65	3.4	NM	NM	7.15	1.0
MWM-7	9/29/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	0.33	33.0	NM	NM	7.06	0.0
MWM-7	5/9/2008		3.7	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	0.61	236.3	NM	NM	6.45	1.0
MWM-7	10/28/2008		6.8	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	0.88	76.6	NM	NM	6.82	0.0
MWM-7	10/12/2011		2.6	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	0.89	-4.0	8.5	781	7.93	NM
MWM-7	10/2/2012		3.6	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7	10/1/2013		2.1	<0.34	<0.34	<1.0	<0.69	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7	10/29/2014		0.60J	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7	10/6/2015		8.8	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7	10/5/2016		4	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	10/14/2009		2340	96	67	97.2	30.3	<1.0	<4.0		NA	NA	NA	1.2	122	NM	NM	7.82	NM
MWM-7D	4/29/2010		1860	82.4	55.1	72.4	16.5	<10.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	4/29/2010		1870	81.9	51.6	71.7	<20.0	<20.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	10/27/2010	D	2200	122	84.2	111	35.1	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	4/26/2011		2180	104	75.9	113	22.5	<20.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	10/12/2011		667	3.7	<1.0	38.1	4.4	<1.0	NA		NA	NA	NA	0.56	-210	8.6	1069	8.10	NM
MWM-7D	4/17/2012		731	28.3	18.0	29.1	10.7	<1.0	NA		NA	NA	NA	0.87	4.6	7.8	1397	7.69	NM
MWM-7D	10/2/2012		1600	78.6	59.2	74.7	28.9	<1.0	NA		<100	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	10/2/2012	D	1430	62.3	46.9	59.0	16.8	<5.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	5/6/2013		1400	53.5	38.5	52.6	18.2	<10.0	<40.0	NA	NA	NA	NA	0.30	90.5	8.4	1276	7.35	NM
MWM-7D	10/3/2013		1210	43.2	35	34.9J	<19.5J	<7.4	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	5/21/2014		1170	38.9	33.6	31.1	<21.7	<10.0	<40.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	10/30/2014		1370	39.3	34.4	35.6	<13.9J	<4.8	8.2J	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	5/5/2015		1630	36.7	33.7	30.5J	<16.7	<9.7	<8.5	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWM-7D	10/6/2015		1890	44.3	40.2	39.7J	<20.8	<12.1	<10.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters						
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron	
NR 140 ES-->			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
			5	800	700	2000	480	60	100	5	-	-	-	-	-	-	-	-	-	-
MWM-7D	5/25/2016		1760	39.8	36.3	37.2	8.3	<2.4	<2.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-7D	10/5/2016		1980	45.1	42.3	40.2	<12.0J	<4.8	<4.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-7D	6/14/2017		2010	43.7	45.4	47.2J	<33.3	<19.4	<17.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-7D	10/4/2017		1980	42.3	46.5	47.8	<33.3	<19.4	<17.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-7D	6/27/2018		2100	41.1	46.6	44.9	<13.2	<6.4	<10.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
			Well Abandoned																	
MWM-9	10/22/2003		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	NA	NA	2.2	183	NM	NM	NM	NM	
MWM-9	4/20/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	NA	NA	1.57	235	NM	NM	NM	NM	
MWM-9	11/18/2004		Well Abandoned																	
MWM-9RS	10/14/2009		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<4.0		NA	NA	NA	2.1	183	NM	NM	7.53	NM	
MWM-9RS	10/27/2010		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RS	10/12/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	0.8	-98	8.1	847	8.11	NM	
MWM-9RS	10/2/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RS	10/2/2013		<0.34	<0.34	<0.34	<1.0	<0.69	<0.37	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RS	10/29/2014		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RS	10/5/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RS	10/4/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	10/14/2009		4790	295	207	327	163.9	<1.0	37.2		NA	NA	NA	1.5	139	NM	NM	7.42	NM	
MWM-9RD	4/29/2010		5520	309	248	366	129	<50.0	<200		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	10/27/2010		4980	292	272	376	205.8	<25.0	<100		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	4/26/2011		5540	318	328	469	228.5	<50.0	<200		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	4/26/2011		5230	299	300	373	164	<50.0	<200		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	10/12/2011	D	3440	153	44.4	206	50.1	<1.0	<4.0		NA	NA	NA	0.46	-148	8.5	924	7.89	NM	
MWM-9RD	4/17/2012		4300	226	198	264	85.7	<50.0	NA		NA	NA	NA	0.53	52.7	8.2	1224	7.14	NM	
MWM-9RD	10/2/2012		4650	262	270	356	190.4	<25.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	5/8/2013		3040	113	44.4	185	127.8	<5.0	<20.0		NA	NA	NA	0.5	7	8.1	1127.0	327.10	NM	
MWM-9RD	10/3/2013		3060	177	202	248	140.8J	<14.8	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	5/22/2014		3190	188	225	258	157.1	<20.0	<80.0		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	10/30/2014		3350	204	252	322	195	<24.2	70.4		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	5/5/2015		3020	164	225	269	151.8J	<19.4	42.0		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	10/7/2015		2980	152	215	253	141.8J	<24.2	34.1J		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	5/25/2016		2620	136	194	250	140.8	<4.8	39.4		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	10/6/2016		2750	141	229	399	140.5	<9.7	36.3		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	6/14/2017		2690	117	197	233	125.4	25.2	37.5		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	10/4/2017		2470	103	189	222	123.7	46.4	50.7		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	6/27/2018		2470	102	163	209	112.4	116	27.5J		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-9RD	6/27/2018	D	2380	105	169	230.4	125.3	123	45.8		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10S	10/27/2010		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10S	4/26/2011		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10S	10/18/2011		<2.0	<2.0	<2.0	<6.0	<2.0	<2.0	<2.0		NA	NA	NA	0.6	-230	9	1342	7.73	NM	
MWM-10S	10/2/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10S	10/1/2013		<0.34	<0.34	<0.34	<1.0	<0.69	<0.37	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10S	10/29/2014		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10S	10/5/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	0.43J		NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10S	10/4/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42		NA	NA	NA	NM	NM	NM	NM	NM	NM	

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GFO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	-	-	-	-	-	-	-
MWM-10D	4/29/2010		1230	23.1	<10.0	<30.0	<10.0	<10.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10D	10/27/2010		960	19.6	<5.0	18	<5.0	<5.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10D	4/26/2011		44.8	1.0	<1.0	3.2	1.3	<1.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10D	10/18/2011		289	6.5	1.4	9.9	2	<1.0	NA	NA	NA	NA	0.46	-305	7.51	869	8.11	NM	
MWM-10D	4/17/2012		785	18.7	3.7	17	3.2	<1.0	NA	NA	NA	NA	0.67	-7.6	8.1	1093	7.65	NM	
MWM-10D	10/2/2012		1180	25	<10.0	<30.0	<10.0	<10.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10D	5/6/2013		497	10.2	<5.0	<15.0	<10.0	<5.0	<20.0	NA	NA	NA	NA	0.3	80	8	982	7.25	NM
MWM-10D	5/6/2013	D	507	9.9	1.8	10.2	2.8	<1.0	<4.0	NA	NA	NA	NA	0.3	80	8	982	7.25	NM
MWM-10D	10/3/2013		845	18.8	5.5J	18.4J	<8.4J	<3.7	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
MWM-10D	5/21/2014		925	23.5	<5.0	19.9	<10.0	<5.0	<20.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWM-10D	10/30/2014		914	19.1	4.0J	13.6J	<4.2	<2.4	<2.1	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWM-10D	10/30/2014	D	869	18.5	<3.9	15.7J	<8.4	<4.8	<4.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWM-10D	5/5/2015		1010	22.6	4.3J	16.2J	<8.4	<4.8	<4.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWM-10D	10/6/2015		874	19.0	<3.9	14.5J	<8.4	<4.8	<4.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWM-10D	5/25/2016		883	19.3	4.9J	14.3J	4.3J	2.6J	3.1J	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWM-10D	10/5/2016		908	18.1	5.3J	13.6J	<8.4	<4.8	<4.2	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWM-10D	6/14/2017		1080	25.9	6.7J	20.3	<8.4	<4.8	9.5J	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWM-10D	10/4/2017		977	23.6	6.9	20.5	<8.4	11.2	12.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWM-10D	6/27/2018		1110	28.6	6.6J	18.3J	<6.7	<3.2	5.7J	NA	NA	NA	NA	NM	NM	NM	NM	NM	
RWAST-1	10/5/2016		5420	1530	642	1220	303.8	<24.2	153	NA	NA	NA	NA	NM	NM	NM	NM	NM	
RWAST-1	6/27/2018		2270	1200	557	1305	259.2	<16.0	104	NA	NA	NA	NA	NM	NM	NM	NM	NM	
RWAST-2	4/29/2010		1460	638	433	1399	590	21.1J	149	NA	NA	NA	NA	NM	NM	NM	NM	NM	
LRMW-1	6/27/2018		6850	1740	859	2714	769	<40.0	303	NA	NA	NA	NA	NM	NM	NM	NM	NM	
LRMW-6	4/15/2003		2400	280	1100	2400	499	<20	140	22000	NA	NA	0.3	-071	NM	NM	NM	1.55	
LRMW-6	4/15/2003	D	2100	300	1300	2500	560	<80	NA	16000	NA	NA	NM	NM	NM	NM	NM	NM	
LRMW-6	10/22/2003		2500	300	1300	2400	510	<20	130	15000	NA	NA	1.3	-094	NM	NM	NM	NM	
LRMW-6	10/22/2003	D	2400	300	1400	2400	540	<40	NA	13000	NA	NA	NM	NM	NM	NM	NM	NM	
LRMW-6	4/21/2004		3100	340	1500	2800	650	<1.0	190	14000	NA	NA	1.82	066	NM	NM	NM	NM	
LRMW-6	4/21/2004	D	2500	350	1400	2600	660	<40	NA	14000	NA	NA	NM	NM	NM	NM	NM	NM	
LRMW-6	11/18/2004		1740	148	656	1080	258	<10	55.7	7940	3700	NA	0.80	-078	NM	NM	NM	4.0	
LRMW-6	11/18/2004	D	48.4	<10.0	12.7	28.6 J	175.9	<40.0	NA	1970	NA	NA	NM	NM	NM	NM	NM	NM	
LRMW-6	4/20/2005		2190	277	972	2020	571	<5.0	118	NA	NA	NA	1.5	-13	NM	NM	NM	NM	
LRMW-6	4/20/2005	D	2590	286	1160	2090	579	<5.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
LRMW-6	10/11/2005		1500	210	1000	1500	660	11	120	NA	NA	NA	1.22	-88.2	NM	1146	7.49	2.0	
LRMW-6	10/11/2005	D	1500	210	1000	1500	660	11	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
LRMW-6	10/25/2006		1640	175	1410	2010	866	<10.0	143	NA	NA	NA	8.60	-147.4	NM	NM	NM	10.0	
LRMW-6	10/25/2006	D	1660	183	1450	2070	904	<10.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
LRMW-6	5/1/2007		1820	207	1420	2160	655	<20.0	140	NA	NA	NA	0.47	-183.6	NM	NM	6.88	10.0	
LRMW-6	5/1/2007	D	1490	187	1180	1870	582	<20.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
LRMW-6	10/1/2007		1690	187	1310	1940	804	<20.0	125	NA	NA	NA	0.04	-55.4	NM	NM	6.85	10.0	
LRMW-6	5/9/2008		1860	200	1500	2380	911	<10.0	167	NA	NA	NA	0.49	-73.1	NM	NM	6.63	NM	
LRMW-6	5/9/2008	D	1900	226	1510	2300	954	<5.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	
LRMW-6	10/30/2008		1820	203	1380	2310	924	<1.0	NA	NA	NA	NA	1.29	-71.50	NM	NM	6.84	10.0	

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GFO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES--&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	-	-		-	-	-	-	-	-
LRMW-6	10/14/2009		1500	170	1300	1940	730.1	<10.0	127		NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-6	4/29/2010		2210	266	1650	2850	822.0	<10.0	177		NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-6	10/27/2010		1560	190	1520	2230	970.0	<10.0	140		NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-6	4/26/2011		1570	196	1660	2540	1162	<10.0	152		NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-6	10/12/2011		1620	181	1300	1860	844	<10.0	108		NA	NA	NA	0.56	-191	9.77	1203	7.86	NM
LRMW-6	4/17/2012		1470	197	1190	2210	620	<10.0	NA		NA	NA	NA	3.04	-19.5	8.3	1478	6.91	NM
LRMW-6	10/2/2012		2070	248	1420	2390	757	<10.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-6	10/5/2016		1130	141	1310	1340	886	<9.7	116	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-6	6/20/2018		1060	143	1290	1519	835	8.4J	127	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-8	7/28/2011		1460	388	132	343	310	<10.0	<40.0		NA	NA	NA	0.47	-132	9.1	440	7.69	NM
LRMW-8	10/17/2011		815	333	164	509	300	<1.0	46.8		NA	NA	NA	0.88	-179	8.82	862	8.2	NM
LRMW-9	7/30/2014		1820	701	142	315	76	<3.5	<50.0					NM	NM	NM	NM	NM	NM
LRMW-9	10/31/2014		1490	499	123	240	73.8	5.2J	18.9	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-9	5/5/2015		1850	681	162	314	88.4	<9.7	26.3	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-9	5/25/2016		2000	661	171	325	105.5	<2.4	23.6	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-9	6/27/2018		2270	713	178	367	137.5	<12.8	31.0J	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
LRMW-10	7/30/2014		3060	4920	1450	4710	1871	<17.4	619					NM	NM	NM	NM	NM	NM
LRMW-10	5/6/2015		FP	FP	FP	FP	FP	FP	FP	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	10/22/2003		57	1.2	<1.0	<3.0	<1.0	<4.0	NA		100	NA	NA	2.7	223	NM	NM	NM	NM
MWRR-1	4/21/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	NA	NA	1.78	183	NM	NM	NM	NM
MWRR-1	11/18/2004		306	1.7	<1.0	1.6 J	<1.0	<4.0	NA		490	320	NA	1.80	058	NM	NM	NM	0.0
MWRR-1	4/20/2005		6.7	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	1.5	45	NM	NM	NM	NM
MWRR-1	10/11/2005		0.29 J	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	10/24/2006		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	5/1/2007		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	10/1/2007		316	13.9	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	5/9/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	10/29/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	10/12/2011		<1.0	<1.0	<1.0	<3.1	<1.0	<1.0	NA		NA	NA	NA	1.1	-135	10	608	8	NM
MWRR-1	10/2/2012		154	2.4	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	10/3/2013		216	0.93J	<0.34	<1.0	<0.69	0.44J	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	5/5/2015		29.8	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	10/6/2015		164	0.89J	<0.39	<1.2	<0.84	0.61J	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1	10/5/2016		<0.4	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-1D	6/28/2018		50.6	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	10/22/2003		2.4	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	NA	NA	4.8	-051	NM	NM	NM	NM
MWRR-2	4/21/2004		4.4	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	NA	NA	1.44	135	NM	NM	NM	NM
MWRR-2	11/18/2004		9.0	<1.0	<1.0	<3.0	1.3	<4.0	NA		61.3 J	790	NA	0.80	-43	NM	NM	NM	6.0
MWRR-2	4/20/2005		2.3	<1.0	<1.0	<1.0	<3.0	<1.0	NA		NA	NA	NA	0.7	-11	NM	NM	NM	NM
MWRR-2	10/11/2005		12	0.38 J	0.59 J	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	10/24/2006		8.9	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	5/1/2007		9.9	<1.0	<1.0	<3.0	<1.0	<4.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GFO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	-	ppm	mV	°C	umhos/cm	pH units	ppm
MWRR-2	10/1/2007		6.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	5/9/2008		11.1	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	10/29/2008		6.1	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	10/14/2009		6.6	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	10/27/2010		8.6	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	10/14/2011		19.9	1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	0.9	-207	8.9	-207	7.83	NM
MWRR-2	10/2/2012		17.2	1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	5/5/2015		6.9	0.45J	0.58J	1.5J	<0.84	0.96J	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	10/6/2015		11.1	0.41J	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-2	10/4/2016		17.6	0.87J	1.2	<3.95	<2.62	0.49J	0.72J	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	10/22/2003		740	470	400	1700	610	<40	NA		8100	NA	NA	3.25	-065	NM	NM	NM	NM
MWRR-4	4/21/2004		940	1200	240	2300	800	<20	NA		9500	NA	NA	1.80	103	NM	NM	NM	NM
MWRR-4	11/18/2004		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWRR-4	4/20/2005		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWRR-4	10/11/2005		0.14 J	<1.0	<1.0	<3.0	<1.0	<1.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	10/24/2006		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWRR-4	5/1/2007		304	174	75.9	1290	423	<20.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	10/1/2007		414	225	130.0	1350	483	<5.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	5/9/2008		498	277	143.0	1470	511	<5.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	10/30/2008		616	308	215	1460	527	<5.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	10/14/2009		689	261	345	1300	546	<5.0	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	10/27/2010		674	309	216	1250	489	<5.0	245		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	10/12/2011		669	235	303	1240	429	<5.0	255		NA	NA	NA	0.7	-215	10.2	868.0	7.76	NM
MWRR-4	5/6/2015		805	172	231	1130	479	<4.8	249		NA	NA	NA	0.7	-215	10.2	868.0	7.76	NM
MWRR-4	10/6/2015		383	80.2	112	702	281.6	<1.9	157	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	10/4/2016		676	125.0	179	797	304.7	<4.8	167	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWRR-4	6/20/2018		323	43.4	38.1	501	262.0	2.6J	136	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWOW-1	10/21/2003		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	1/20/2004		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	4/19/2004		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	7/27/2004		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	11/15/2004		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	4/18/2005		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	10/11/2005		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	5/23/2006		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	10/16/2006		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	5/1/2007		500	25.8	146	444	825	28.5	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWOW-1	9/25/2007		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-1	7/30/2014		377	12.5	92.7	62.6	924	<0.87	<12.5					NM	NM	NM	NM	NM	NM
MWOW-1	5/6/2015		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-2	10/22/2003		6.8	<1.0	1.5	<3.0	1.1	<4.0	NA		230	NA	NA	1.27	194	NM	NM	NM	NM
MWOW-2	10/22/2003	D	6.2	<1.0	1.2	<3.0	<1.0	<4.0	NA		210	NA	NA	NM	NM	NM	NM	NM	NM
MWOW-2	4/21/2004		6.3	<1.0	<1.0	<3.0	3.5	<4.0	NA		140	NA	NA	2.34	163	NM	NM	NM	NM
MWOW-2	4/21/2004	D	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	NA	NA	NM	NM	NM	NM	NM	NM
MWOW-2	11/18/2004		<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	NA		<100	370	NA	2.40	118	NM	NM	NM	0.0



**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters						
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron	
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	-	ppm	mV	°C	umhos/cm	pH units	ppm	
MWOW-2	11/18/2004	D	101	3.0	59.0	7.8	62.6	<4.0	NA				466	NA	NA	NM	NM	NM	NM	NM
MWOW-2	4/20/2005		5.1	<1.0	<1.0	<3.0	<1.0	<1.0	NA				NA	NA	NA	1.1	-23	NM	NM	NM
MWOW-2	4/20/2005	D	5.9	<1.0	0.53 J	<3.0	<1.0	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	10/11/2005		3.8	<1.0	0.42 J	<3.0	<1.0	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	10/11/2005	D	3.8	<1.0	0.50 J	<3.0	<1.0	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	10/24/2006		0.61 J	<1.0	<1.0	<3.0	<1.0	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	10/24/2006	D	0.79 J	<1.0	<1.0	<3.0	<1.0	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	5/1/2007		1.3	<1.0	<1.0	<3.0	<1.0	<4.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	5/1/2007	D	1.7	<1.0	<1.0	<3.0	<1.0	<4.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	10/1/2007		1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	5/9/2008		3.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	5/9/2008	D	3.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	10/29/2008		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-2	10/12/2011		1.1	<1.0	<1.0	<3.0	<1.0	<1.0	NA				NA	NA	NA	0.6	-202	12.5	804	8.01
MWOW-2	10/2/2012		<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWOW-2	10/2/2013		0.38J	<0.34	<0.34	<1.0	<0.69	<0.37	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWOW-2	5/4/2015		0.54J	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWOW-2	10/6/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWOW-2	10/4/2016		0.44J	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	
MWOW-2D	6/20/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/22/2003		190	30	81	160	123	<8.0	NA				2100	NA	NA	3.14	-104	NM	NM	NM
MWOW-3	4/21/2004		61	6.5	27	68	111	<4.0	NA				1700	NA	NA	1.32	060	NM	NM	NM
MWOW-3	11/18/2004		24.7	6.9	52	10.8 J	366	<20	NA				1870	15.4	NA	0.90	-29	NM	NM	2.0
MWOW-3	4/20/2005		45.1	3.7 J	21.3	43.9	50.7	<5.0	NA				NA	NA	NA	0.6	-06	NM	NM	NM
MWOW-3	10/11/2005		75	8.2	85	89.1	91	1.3	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/24/2006		266	25.4	16.7	<15.0	18.7	<5.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	5/1/2007		71.2	3.7	40.6	35.4	30.8	<4.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/1/2007		47.5	<5.0	30.2	27.0	22.0	<5.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	5/9/2008		120.0	5.4	55.1	29.6	29.6	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/29/2008		116	6.0	63.2	33.0	23.5	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/14/2009		119	9.2	3.0	<3.0	<1.0	<1.0	NA				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/27/2010		23	1.6	4.1	<3.0	<1.0	<1.0	<4.0				NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/12/2011		34.3	1.9	2.3	<3.0	<1.0	<1.0	<4.0				NA	NA	NA	0.79	-162	8.8	737	8.01
MWOW-3	10/2/2012		72.4	3.3	1.3	<3.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/3/2013		167.0	16.7	23.0	56.4	14.0	4.1	NA	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	7/30/2014		66.6	2.0	3.6	2.1J	<2.4	<0.17	<2.5	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	5/5/2015		32.5	1.2	1.9	2.8J	<1.09J	1.5	1.3	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/6/2015		24.1	2.2	6.9	7.2	4.24J	0.53J	3.7	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM
MWOW-3	10/4/2016		36.8	1.4	5.2	3.2	1.1	1.0	1.1	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM
MWOW-5	10/21/2003		FP	FP	FP	FP	FP	FP	FP				FP	FP	FP	NM	NM	NM	NM	NM
MWOW-5	1/20/2004		FP	FP	FP	FP	FP	FP	FP				FP	FP	FP	NM	NM	NM	NM	NM
MWOW-5	4/19/2004		NM	NM	NM	NM	NM	NM	NM				NM	NM	NM	NM	NM	NM	NM	NM
MWOW-5	7/27/2004		NM	NM	NM	NM	NM	NM	NM				NM	NM	NM	NM	NM	NM	NM	NM
MWOW-5	11/15/2004		FP	FP	FP	FP	FP	FP	FP				FP	FP	FP	NM	NM	NM	NM	NM
MWOW-5	4/18/2005		FP	FP	FP	FP	FP	FP	FP				FP	FP	FP	NM	NM	NM	NM	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
NR 140 ES-->			5	800	700	2000	480	60	100	5	-	-	-	--	--	--	--	--	--
MWOW-5	10/11/2005		1300	890	570	1400	530	<10	NA		NA	NA	NA	NM	NM	NM	NM	NM	NM
MWOW-5	5/23/2006		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-5	10/16/2006		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-5	4/23/2007		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWOW-5	9/25/2007		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
ABC MW-6	4/20/1998		<	0.4	0.5	1.5	<	<	3.1		NA	NA	<0.005	NM	NM	NM	NM	NM	NM
ABC MW-6	6/24/1998		1.8	<	0.6	<	<	<	<		NA	NA	<	NM	NM	NM	NM	NM	NM
ABC MW-6	10/1998		1.02	2.57	0.696	2.29	1.38	<	<		NA	NA	<	NM	NM	NM	NM	NM	NM
ABC MW-6	2/03/1999		<0.27	<0.27	<0.32	<0.67	<0.49	<0.32	<0.35		NA	NA	<1.6	NM	NM	NM	NM	NM	NM
ABC MW-6	5/21/1999		<0.27	<0.27	<0.32	<0.67	<0.49	<0.32	<0.35		NA	NA	<1.8	NM	NM	NM	NM	NM	NM
ABC MW-6	9/23/1999		<0.27	<0.27	<0.32	<0.67	<0.49	<0.32	<0.35		NA	NA	2.9 <sup>(2)</sup>	NM	NM	NM	NM	NM	NM
ABC MW-6	1/5/2000		<0.44	<0.40	<.50	<1.31	<0.92	<0.44	<0.59		NA	NA	5 <sup>(2)</sup>	NM	NM	NM	NM	NM	NM
ABC MW-6	4/18/2000		<0.27	<0.27	<0.32	<0.67	<0.49	<0.32	<0.35		NA	NA	<0.92	NM	NM	NM	NM	NM	NM
GP100	9/15/2011		1730	622.0	58.6	128	92.5	<10	<40		NA	NA		NM	NM	NM	NM	NM	NM
GP101	9/15/2011		215	37.8	23.3	52.4	151.6	<1	<20.2		NA	NA		NM	NM	NM	NM	NM	NM
GP102	9/15/2011		14200	1340.0	579	924	247.7	<25	<100		NA	NA		NM	NM	NM	NM	NM	NM
GP103	9/15/2011		305	25.1	19.7	24	<1	<2	<8		NA	NA		NM	NM	NM	NM	NM	NM
GP104	9/15/2011		2670	442.0	713	3190	835	<25	747		NA	NA		NM	NM	NM	NM	NM	NM
GP105	9/15/2011		421	165.0	67	116	5.2	<5	<20		NA	NA		NM	NM	NM	NM	NM	NM
GP106	9/15/2011		493	343.0	376	1870	11760	<5	203		NA	NA		NM	NM	NM	NM	NM	NM
GP107	9/16/2011		19	7.2	19.4	56.9	932	<1	17		NA	NA		NM	NM	NM	NM	NM	NM
GP108	9/16/2011		563	23.6	34.7	108	124.8	<5	61		NA	NA		NM	NM	NM	NM	NM	NM
GP109	9/16/2011		1340	109.0	201	805	220	<10	141		NA	NA		NM	NM	NM	NM	NM	NM
GP110	9/19/2011		<1	1.1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP111	9/19/2011		1050	120.0	362	1380	835	<10	369		NA	NA		NM	NM	NM	NM	NM	NM
GP112	9/19/2011		39.4	5.0	6	6.9	5.2	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP113	9/19/2011		4430	1590.0	5280	17600	11760	<50	3940		NA	NA		NM	NM	NM	NM	NM	NM
GP114	9/19/2011		174	51.6	715	1670	932	<10	351		NA	NA		NM	NM	NM	NM	NM	NM
GP115	9/20/2011		649	20.6	21	31.1	124.8	<5	<20		NA	NA		NM	NM	NM	NM	NM	NM
GP116	9/20/2011		278	139.0	45.1	144	220	<2	21		NA	NA		NM	NM	NM	NM	NM	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
Former Amoco Terminal  
Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
			5	800	700	2000	480	60	100	5	-	-		-	-	-	-	-	-
GP117	9/20/2011		93.4	8.4	1.8	5.6	2.3	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP118	9/22/2011		5.3	<2	<2	<6	2.5	<2	<8		NA	NA		NM	NM	NM	NM	NM	NM
GP119	9/22/2011		2230	426.0	567	2940	855	<20	549		NA	NA		NM	NM	NM	NM	NM	NM
GP120	9/22/2011		4710	2440.0	732	2740	1282	<50	352		NA	NA		NM	NM	NM	NM	NM	NM
GP200	9/20/2011		3.2	<1	<1	<3	<2	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP201	9/20/2011		15.6	5.1	3.2	8.1	31.1	<2	<8		NA	NA		NM	NM	NM	NM	NM	NM
GP202(D)	9/20/2011		83.7	<2	<2	<6	<2	<2	<8		NA	NA		NM	NM	NM	NM	NM	NM
GP203	9/20/2011		1.6	1.5	18.7	49.8	77.7	<1	14.9		NA	NA		NM	NM	NM	NM	NM	NM
GP204	9/20/2011		1.2	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP205	9/21/2011		1410	28.6	<1	4.7	<1	2	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP206	9/21/2011		1110	23.7	<1	3.4	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP207	9/21/2011		<1	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP208	9/21/2011		<1	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP209(D)	9/21/2011		<1	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP210(D)	9/21/2011		10.7	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP211	9/22/2011		<1	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP212	9/22/2011		<1	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP213	9/22/2011		<1	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP214	9/22/2011		1230	156.0	217	466	526	<10	86.6		NA	NA		NM	NM	NM	NM	NM	NM
GP215	9/22/2011		<1	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP216	9/22/2011		<1	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
GP-217	9/22/2011		1.9	<1	<1	<3	<1	<1	<4		NA	NA		NM	NM	NM	NM	NM	NM
ABC MW-7	2/4/1999		440	150	360	497	410	<3.2	60		NA	NA	<1.6	NM	NM	NM	NM	NM	NM
ABC MW-7	5/21/1999		440	120	310	446	334	<1.6	56		NA	NA	<1.6	NM	NM	NM	NM	NM	NM
ABC MW-7	9/23/1999		420	110	300	423	332	<0.80	55		NA	NA	3.2 <sup>(2)</sup>	NM	NM	NM	NM	NM	NM

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
NR 140 ES-->			5	800	700	2000	480	60	100	5	--	--	--	--	--	--	--	--	
ABC MW-7	1/5/2000		410	120	340	425	440	<2.2	67		NA	NA	5 <sup>(2)</sup>	NM	NM	NM	NM	NM	NM
ABC MW-7	4/18/2000		350	100	290	396	295	<3.2	42		NA	NA	<0.92	NM	NM	NM	NM	NM	NM
BC-3	11/20/1998		460	130	130	280	182	20	NA		3300	22000	FP	NM	NM	NM	NM	NM	NM
BC-4	11/20/1998		2.1	3.1	2.2	8.1	5.1	<4	NA		120	<300	FP	NM	NM	NM	NM	NM	NM
BC-7	11/20/1998		FP	FP	FP	FP	FP	FP	FP		FP	FP	FP	NM	NM	NM	NM	NM	NM
MWBD-1	10/10/2013		<0.34	<0.34	<0.34	<1.0	NA	<0.37	NA	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1	5/20/2014		<1.0	<1.0	<1.0	<3.0	<2.0	<1.0	<4.0	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1	10/29/2014		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1	5/4/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1	10/6/2015		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1	5/24/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1	10/6/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	10/29/2014		167	<0.39	<0.39	<1.2	<0.84	<0.48	0.46J	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	2/19/2015		185	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	5/5/2015		207	<0.78	<0.79	<2.5	<1.67	<0.97	<0.85	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	5/5/2015	D	205	<0.78	<0.79	<2.5	<1.67	<0.97	<0.85	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	10/6/2015		210	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	10/6/2015	D	212	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	5/25/2016		213	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	10/5/2016		193	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	6/14/2017		156	<0.78	<0.79	<2.5	<1.67	<0.97	<0.85	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	10/4/2017		148	<0.39	<0.39	<1.25	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1D	6/20/118		123	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
MWBD-1DD	6/20/2018		<0.31	<0.49	<0.33	<0.98	<0.67	<0.32	<0.51	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM
Trip Blank	10/5/2016		<0.40	<0.39	<0.39	<1.2	<0.84	<0.48	<0.42	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM

**NOTES:**  
 < ..... = The compound was not detected at or above the indicated method detection limit. Unlisted detection limit concentrations were unavailable.  
 µg/L ..... = micrograms per liter (equivalent to parts per billion)  
 µmhos/cm ..... = micromhos per centimeter  
 ABC MW-6 ..... = Indicates a well owned by ABC Rail Corporation (data obtained from WDNR files)  
 °C ..... = Degrees Celsius  
 D ..... = Duplicate sample  
 DO ..... = Dissolved Oxygen  
 DRO ..... = Diesel Range Organics  
 FP ..... = The well was not sampled due to the presence of free product  
 GRO ..... = Gasoline Range Organics  
 MTBE ..... = Methyl Tertiary-Butyl Ether  
 mV ..... = millivolts  
 NA ..... = Not Analyzed for indicated parameter  
 NM ..... = Not Measured  
 NR 140 ES ..... = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard

**Table 6**  
**Groundwater Analytical Results - Barge Dock**  
 Former Amoco Terminal  
 Superior, Wisconsin

Sample ID	Date Sampled	Duplicate (D) or Split (S)	Analytical Parameters											Bio-Parameters					
			Benzene	Toluene	Ethylbenzene	Xylenes	Total TMBs	MTBE	Naphthalene	1,2-DCA	GRO	DRO	THC	DO	REDOX	Temp	Conductivity	pH	Soluble Iron
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ppm	mV	°C	µmhos/cm	pH units	ppm
<b>NR 140 ES--&gt;</b>			<b>5</b>	<b>800</b>	<b>700</b>	<b>2000</b>	<b>480</b>	<b>60</b>	<b>100</b>	<b>5</b>	-	-	-	-	-	-	-	-	-
NS .....			= Not Sampled																
ppm .....			= parts per million																
REDOX .....			= Reduction/Oxidation																
TMBs .....			= Trimethylbenzenes																
<b>"BOLD TYPE" .....</b>			<b>= The indicated concentration exceeds the NR 140 ES</b>																













**Table 7**  
**Phase II System LNAPL Recovery Summary**  
 Former Amoco Terminal  
 Superior, WI

Superior Barge Dock Product Skimming System - Phase II				Tank Dimensions/Volume Calculation (depth meas. from top of hori. cylindrical tank)																							
5 LNAPL Skimming Wells on C. Reiss property				Diameter of tank = 8.00 feet			Depth of tank from top of bung = 8.08 feet			Length of tank = 18.67 feet			Depth of bung = 0.08 feet			Full Volume of tank = 7,019 gallons			95% full volume of tank = 6,668 gallons								
Date/Time	Operational Time				Panel Hour Meter total hours	Panel Hour Meter period hours	Dial hour hand	Dial minute hand	Dial total (inches)	Depth to Product (ft)	Depth to Water (ft)	Water Tx (ft)	Product Tx (ft)	Total Fluid Volume (gal)	95% Tank full (%)	Period Estimated # of days until tank full (95%)	Cumulative Estimated # of days until tank full (95%)	Current Tank Water Volume (gal)	Current Tank Free Product Volume (gal)	Period Water recovered (gal)	Period Free Product recovered (gal)	Period Water recovery rate (gallons / day)	Period Product recovery rate (gallons / day)	Cumulative Product recovered (gallons)	Cumulative Water recovery rate (gallons / day)	Cumulative Product recovery rate (gallons / day)	Notes
	Calendar Period hours	Total hours	Total days																								
7/26/2017 12:00	166.00	25,305.0	1060.05	25,441.10	165.9	1	8	4	6.14	7.95	0.13	1.81	1314.36	20%	555.6	168.042	24.56	1289.80	0.0	66.6	0.0	9.6	33,774		31.9		
7/27/2017 13:24	25.40	25,330.5	1061.11	25,466.60	25.5	1	9	0	6.11	7.94	0.14	1.83	1343.16	20%	218.3	167.177	27.44	1315.72	2.9	25.9	2.7	24.4	33,800		31.9		
8/4/2017 12:00	190.60	25,520.9	1069.04	25,657.00	190.4	1	9	9	6.07	7.95	0.13	1.88	1381.79	21%	1010.4	167	24.56	1357.23	-2.9	41.5	-0.4	5.2	33,842		31.7		
8/8/2017 12:40	96.67	25,617.6	1073.07	25,753.70	96.7	1	10	4	6.01	7.95	0.13	1.94	1440.21	22%	360.6	165.491	24.56	1415.65	0.0	58.4	0.0	14.5	33,900		31.6		
8/15/2017 13:05	168.42	25,786.1	1080.09	25,922.20	168.5	1	11	1.5	5.94	7.95	0.13	2.01	1509.07	23%	526.0	164.047	24.56	1484.51	0.0	68.9	0.0	9.8	33,969		31.5		
8/23/2017 16:42	195.62	25,981.7	1088.24	26,117.80	195.6	2	0	2	5.87	7.95	0.13	2.08	1578.64	24%	596.2	162.722	24.56	1554.08	0.0	69.6	0.0	8.5	34,039		31.3		
8/30/2017 9:20	160.63	26,142.6	1094.95	26,278.70	160.9	2	1	5	5.75	7.93	0.15	2.18	1699.49	25%	289.7	159.299	30.42	1669.08	5.9	115.0	0.9	17.2	34,154		31.2		
8/30/2017 2:36	0.00	26,142.6	1095.16	26,283.80	0.0	0	1	7	7.84	7.94	0.14	0.10	61.3509	1%	NA	211.856	27.44	33.91	0.0	0.0	0.0	0.0	34,154		31.2	Mid Summer Pump Out	
9/7/2017 17:45	207.15	26,337.7	1103.29	26,478.90	195.1	0	2	6	7.69	7.95	0.13	0.26	126.355	2%	783.4	210.91	24.56	101.79	-2.9	67.9	-0.4	8.4	34,222		31.0		
9/14/2017 22:00	172.25	26,500.2	1110.06	26,641.40	162.5	0	3	4	7.56	7.94	0.14	0.38	193.554	3%	681.6	209.63	27.44	166.12	2.9	64.3	0.4	9.5	34,286		30.9		
9/19/2017 14:50	112.83	26,621.9	1115.13	26,763.10	121.7	0	4	8	7.49	7.95	0.13	0.46	233.281	3%	765.9	209.036	24.56	208.72	-2.9	42.6	-0.6	8.4	34,329		30.8		
9/27/2017 13:15	190.42	26,811.9	1123.05	26,953.10	190.0	0	6	1	7.37	7.95	0.13	0.58	306.496	5%	687.9	207.682	24.56	281.94	0.0	73.2	0.0	9.2	34,402		30.6		
10/4/2017 15:01	169.77	26,981.4	1130.11	27,122.60	169.5	0	7	3	7.29	7.95	0.13	0.66	358.582	5%	855.6	206.964	24.56	334.02	0.0	52.1	0.0	7.4	34,454		30.5		
10/12/2017 16:05	193.07	27,174.7	1138.16	27,315.90	193.3	0	8	5	7.17	7.94	0.14	0.77	441.173	7%	629.2	205.235	27.44	413.73	2.9	79.7	0.4	9.9	34,534		30.3		
10/19/2017 12:40	164.58	27,339.2	1145.02	27,480.40	164.5	0	9	5	7.08	7.95	0.13	0.87	506.355	8%	620.6	203.908	24.56	481.79	-2.9	68.1	-0.4	9.9	34,602		30.2		
10/26/2017 18:35	173.92	27,513.2	1152.27	27,654.40	174.0	0	10	6	6.99	7.94	0.14	0.95	574.104	9%	681.1	202.564	27.44	546.67	2.9	64.9	0.4	8.9	34,667		30.1		
11/8/2017 8:40	302.08	27,534.0	1153.13	27,675.20	20.8	0	11	6	6.94	7.88	0.20	0.94	612.79	9%	270.8	201.317	46.74	566.05	19.3	19.4	22.3	22.4	34,686		30.1	Ice at Base of Tank, WL is top of ice. System off since 10/27 due to power outage.	
11/8/2017 10:15	0.00	27,534.0	1153.14	27,675.40	0.0	0	3	5	7.86	7.87	0.21	0.01	53.8853	1%	NA	219.9	50.27	3.61	0.0	0.0	0.0	0.0	34,686		30.1	Ice at Base of Tank, WL is top of ice, After pump out	
5/14/2018 10:10	4,487.92	27,534.0	1153.14	27,675.40	0.0	0	1	9	7.86	7.87	0.21	0.01	53.8853	1%	NA	219.9	50.27	3.61	0.0	0.0	0.0	0.0	34,686		30.1	T=0 Conditions (Start of Season) - Ice Dam Caused Diff. in Dial	
5/15/2018 16:15	30.08	27,562.5	1154.33	27,703.90	28.5	0	3	7	7.59	7.87	0.21	0.28	177.256	3%	62.5	215.255	50.27	126.98	0.0	123.4	0.0	103.9	34,809		30.2		
5/23/2018 17:15	193.00	27,755.6	1162.38	27,897.00	193.1	0	6	6	7.33	7.87	0.21	0.54	332.228	5%	329.0	210.642	50.27	281.96	0.0	155.0	0.0	19.3	34,964		30.1		
5/24/2018 8:20	15.08	27,770.5	1163.00	27,911.90	14.9	0	6	8	7.32	7.87	0.21	0.55	338.759	0.0508	601.7	210.498	50.27	288.49	0.0	6.5	0.0	10.5	34,971		30.1		
5/30/2018 17:46	153.43	27,924.2	1169.40	28,065.60	153.7	0	8	4	7.19	7.86	0.22	0.67	427.055	0.06404	472.0	208.201	53.89	373.17	3.6	84.7	0.6	13.2	35,056		30.0		
6/8/2018 9:25	207.65	28,131.8	1178.05	28,273.20	207.6	0	10	2	7.02	7.86	0.22	0.84	551.247	0.08267	426.1	204.842	53.89	497.36	0.0	124.2	0.0	14.4	35,180		29.9		
6/12/2018 9:00	95.58	28,227.5	1182.04	28,368.90	95.7	0	11	0	6.97	7.86	0.22	0.89	589.491	0.0884	633.8	204.028	53.89	535.61	0.0	38.2	0.0	9.6	35,218		29.8		
6/15/2018 16:15	79.25	28,306.8	1185.34	28,448.20	79.3	0	11	4	6.91	7.88	0.2	0.97	636.345	0.09543	369.1	202.711	46.74	589.60	-7.1	54.0	-2.2	16.3	35,272		29.8		
6/19/2018 17:12	96.95	28,403.7	1189.38	28,545.10	96.9	1	2	3	6.68	7.58	0.5	0.9	824.925	0.12371	447.8	196.748	182.64	642.29	135.9	52.7	33.7	13.0	35,325		29.7		
6/27/2018 9:05	183.88	28,587.6	1197.04	28,729.00	183.9	1	3	6	6.58	7.56	0.52	0.98	910.979	0.13661	587.1	194.686	193.55	717.42	10.9	75.1	1.4	9.8	35,400		29.6	Sytem OFF at 9:10am for Pumpout	
6/28/2018 10:25	25.33	28,587.6	1197.04	28,729.00	0.0	0	2	0	7.83	7.96	0.12	0.13	65.2001	0.00978	NA	223.285	21.79	43.41	-171.8	-674.0	0.0	0.0	35,400		29.6	T=0 Conditions after pump out, System ON at 10:25am after Pumpout	





**Table 9**  
**MRW-3 Recovery**

<b>1,000 Gallon Product Storage Tank (MRW-3)</b>											
<b>Date / Time</b>	<b>Period Run Time</b>	<b>Run Time Per Day</b>	<b>Depth to Water</b> (feet from TOC)	<b>Water Level</b> (feet from tank top)	<b>Depth to LNAPL</b> (feet from TOC)	<b>LNAPL Level</b> (feet from tank top)	<b>Water Volume</b> (gallons, from chart)	<b>Water Volume</b> (gallons, calculated)	<b>Total Liquid Volume</b> (gallons, from chart)	<b>LNAPL Volume</b> (gallons)	<b>LNAPL Volume</b> (gallons, calc)
8/22/2017 8:18	163.05	163.05	7.68	6.78	7.45	6.55	103.6	103.63	142.1	38.5	38.4376
8/22/2017 15:00	6.70	6.70	7.68	6.78	7.44	6.54	103.6	103.63	143.8	40.2	40.1088
8/23/2017 16:50	25.83	25.83	7.66	6.76	7.4	6.5	106.9	106.97	150.4	43.5	43.4512
8/30/2017 9:36	160.77	160.77	7.49	6.59	7.18	6.28	135.4	135.38	187.2	51.8	51.8072
8/30/2017 11:00	1.40	1.40	8.3	7.4	8.3	7.4	0.00	0.00	0.00	0	0.012
9/7/2017 17:45	198.75	198.75	8.3	7.4	8.21	7.31	0	0.00	15	15	15.0528
9/14/2017 14:10	164.42	164.42	8.21	7.31	8.03	7.13	15	15.05	45.1	30.1	30.0816
9/19/2017 14:21	120.18	120.18	8.17	7.27	7.94	7.04	21.7	21.74	60.2	38.5	38.4376
9/27/2017 13:31	191.17	191.17	8.03	7.13	7.74	6.84	45.1	45.13	93.6	48.5	48.4648
10/4/2017 15:11	169.67	169.67	7.93	7.03	7.6	6.7	61.8	61.85	117	55.2	55.1496
10/12/2017 16:30	193.32	193.32	7.86	6.96	7.42	6.52	70.2	73.54	147.1	76.9	73.5328
10/19/2017 12:45	164.25	164.25	7.79	6.89	7.26	6.36	85.3	85.24	173.8	88.5	88.5736
10/26/2017 12:45	168.00	168.00	7.72	6.82	7.12	6.22	96.9	96.94	197.2	100.3	100.272
11/8/2017 8:45	308.00	308.00	7.57	6.67	6.87	5.97	122.1	122.01	239	116.9	116.984
11/8/2017 10:15	1.50	1.50	8.31	7.41	8.3	7.4	0	0.00	0	0	0.012
5/15/2018 11:15	25.08	25.08	7.85	6.95	7.36	6.46	75.2	75.22	157.1	81.9	81.8888
5/15/2018 16:20	5.08	5.08	7.79	6.89	7.25	6.35	85.3	85.24	175.5	90.2	90.2448
5/24/2018 8:30	208.17	208.17	7.72	6.82	7.02	6.12	96.9	96.94	213.9	117	116.984
5/30/2018 10:30	146.00	146.00	7.61	6.71	6.88	5.98	115.3	115.32	237.3	122	121.9976
6/8/2018 9:30	215.00	215.00	7.48	6.58	6.66	5.76	137.1	137.05	274	136.9	137.0384
6/12/2018 9:00	95.50	95.50	7.45	6.55	6.58	5.68	142.1	142.06	287.5	145.4	145.3944
6/15/2018 16:27	79.45	79.45	7.41	6.51	6.51	5.61	148.7	148.75	299.1	150.4	150.408
6/19/2018 17:21	176.35	176.35	7.41	6.51	6.51	5.61	148.7	148.75	299.1	150.4	150.408
6/27/2018 9:00	280.55	280.55	7.41	6.51	6.4	5.5	148.7	148.75	317.5	168.8	168.7912
6/28/2018 10:30	306.05	306.05	8.31	7.41	8.28	7.38	0	0.00	3.4	3.4	3.3544

**Table 9  
MRW-3 Recovery**

<b>1,000 Gallon Product Storage Tank (MRW-3)</b>						
<b>Date / Time</b>	<b>Total LNAPL Recovered Since Last Monitoring Event (gallons)</b>	<b>Total LNAPL Recovered Since Previous Monitoring Day (gallons)</b>	<b>Cumulative Holding Tank LNAPL Volume (gallons)</b>	<b>Monitoring Period LNAPL Recovery (gallons/day)</b>	<b>Total Pilot Test LNAPL Recovered (gallons)</b>	<b>Comments</b>
8/22/2017 8:18	5.0	5.0	1696.9	0.7	1253.7	Last MWAST-4 Reading Before Switch to MRW-3
8/22/2017 15:00	1.7	1.7	40.13	6.1	1.7	Tank switch to MRW-3 recovery only @ 15:00. 1253.7 final for MWAST-4. MRW-3 Pilot Test Began with 38.43 Gallons of LNAPL in the Holding Tank
8/23/2017 16:50	3.3	3.3	43.43	3.1	5.0	MRW-3 Recovery in blue.
8/30/2017 9:36	8.3	8.3	51.73	1.2	13.3	
8/30/2017 11:00	0.0	0.0	51.73	1.2	13.3	Mid summer pump out. Water table very high. System set to 40 min refill, 30 sec discharge
9/7/2017 17:45	15.0	15.0	66.73	1.8	28.3	Timer set to 22 on, 2 off. Refill at 40 min and discharge at 30 sec.
9/14/2017 14:10	15.1	15.1	81.83	2.2	43.4	Timer set to 22 on, 2 off. Refill at 40 min and discharge at 30 sec.
9/19/2017 14:21	8.4	8.4	90.23	1.7	51.8	Timer set to 22 on, 2 off. Refill at 30 min and discharge at 30 sec.
9/27/2017 13:31	10.0	10.0	100.23	1.3	61.8	Timer set to 22 on, 2 off. Refill at 40 min and discharge at 30 sec.
10/4/2017 15:11	6.7	6.7	106.93	0.9	68.5	Timer set to 22 on, 2 off. Refill at 30 min and discharge at 30 sec.
10/12/2017 16:30	21.7	21.7	128.63	2.7	90.2	Timer set to 22 on, 2 off. Refill at 30 min and discharge at 30 sec.
10/19/2017 12:45	11.6	11.6	140.23	1.7	101.8	Timer set to 22 on, 2 off. Refill at 40 min and discharge at 30 sec.
10/26/2017 12:45	11.8	11.8	152.03	1.7	113.6	Timer set to 22 on, 2 off. Refill at 40 min and discharge at 30 sec.
11/8/2017 8:45	16.6	16.6	168.63	1.3	130.2	Ice at base of tank, WL is top of ice. System off 10/27 due to power outage.
11/8/2017 10:15	0.0	0.0	168.63	0.0	130.2	Ice at base of tank, WL is top of ice. Data after pump out.
5/15/2018 11:15	0.0	0.0	168.63	0.0	130.2	System Start-up T=0 (From MWAST-4 Accumulation)
5/15/2018 16:20	8.3	8.3	176.93	39.2	138.5	Start of collection for MRW-3. Began with 81.9 gallons of product in tank.
5/24/2018 8:30	26.8	26.8	203.73	3.1	165.3	Set to 30 min Refill, 30 sec Discharge, 22 ON, 2 OFF
5/30/2018 10:30	5.0	5.0	208.73	0.8	170.3	Set to 30 min Refill, 30 sec Discharge, 22 ON, 2 OFF
6/8/2018 9:30	14.9	14.9	223.63	1.7	185.2	Set to 40 min Refill, 30 sec Discharge, 22 ON, 2 OFF
6/12/2018 9:00	8.5	8.5	232.13	2.1	193.7	Set to 40 min Refill, 30 sec Discharge, 22 ON, 2 OFF
6/15/2018 16:27	5.0	5.0	237.13	1.5	198.7	Air turned off for system 16:40
6/19/2018 17:21	0.0	0.0	237.13	0.0	198.7	Set to 40 min Refill, 30 sec Discharge, 22 ON, Air turned on for system 17:30
6/27/2018 9:00	18.4	18.4	255.53	1.6	217.1	
6/28/2018 10:30	0.0	0.0	255.53	0.0	217.1	System Pump Out

Table 10

LRMW-7 Monitoring

Calculations for Fluid Recovery and Drainage in a Horizontal Tank

BP Superior Terminal (Bail tank 1000 Gal tank (formally TRFT tank)

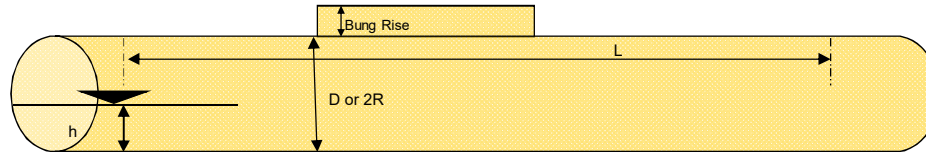
Superior, Wisconsin

AST Inside Diameter (in.)	63
AST Inside Length (in.)	71
Bung Rise (in.)	8.04

Tank Capacity (gal) 958.1



Data Entry  
Calculated Cell



$$Volume = \left[ R^2 \cos^{-1} \left( \frac{R-h}{R} \right) - (R-h) \sqrt{2Rh - h^2} \right] L$$

Date	DTP <sub>1</sub> (ft)	DTW <sub>1</sub> (ft)	Product (gal)	Water (gal)	Product (gal/day)	Cummulative Inc. Product Since Start (gal/day)	Product Recovered Since Last Monitoring	Water (gal/day)	Incremental Q <sub>product</sub> (GPH)	Total Pilot Test LNAPL Recovered (gal)	Tank Volume Remaing	Comments
8/30/17 11:00	5.87		1.51	0.00						1.51	956.6	
9/7/17 17:45	5.81		4.90	0.00	0.41	0.02	3.39		0.00	4.90	953.2	
9/19/17 14:16	5.78		7.03	0.00	0.18	0.01	2.12			7.03	951.1	
9/27/17 13:26	5.69		14.72	0.00	0.97	0.04	7.69			14.72	943.4	
10/4/17 15:14	5.48	5.67	21.80	16.66	1.00	0.04	7.08	0.42		21.80	919.7	Pump Level at 4. Refill set to 40 minute recharge with 30 sec d
10/12/17 16:16	5.35	5.59	31.11	25.14	1.16	0.05	9.31	0.95		31.11	901.9	
10/19/17 12:50	5.22	5.53	43.75	32.19	1.84	0.08	12.64	0.97		43.76	882.2	
10/26/17 10:16	5.15	5.46	46.17	41.06	0.35	0.01	2.42	0.78		46.17	870.9	
10/26/17 18:09	4.78	5.43	108.35	45.06			62.18			108.35	804.7	62.18 gal added to tank from gauge and bail
11/7/17 10:30	4.70	5.30	105.30	63.62	-0.26	-0.01		0.63			789.2	Ice at base of tank, WL is top of ice. System off since 10/27 dt
11/8/17 10:20	5.21	5.30	13.91	63.62	0.00	0.00	0.00	0.00		108.35	880.6	Ice at base of tank, WL is top of ice. Data after pump out.
5/14/18 10:10	5.29	5.34	7.42	57.71			7.42			108.35	893.0	T=0 Conditions (Start of Season)
5/15/18 16:25	5.17	5.34	26.25	57.71	3.44	0.62	4.33	#DIV/0!		112.68	874.2	Bailed (LRMW-7 6 gallons, MRW-3 ~14.5 gallons), Remainder
5/24/18 8:30	5.09	5.34	39.54	57.71	1.53	0.06	13.29	#DIV/0!		125.98	860.9	
5/30/18 17:15	4.96	5.14	31.08	88.88	-1.33	-0.06	-8.46	0.20			838.2	
6/8/18 9:35	4.84	5.05	37.92	104.10	0.79	0.03	6.84	0.57		132.82	816.1	
6/12/18 9:55	4.80	5.02	40.27	109.32	0.58	0.02	2.35	0.77		135.16	808.5	Air line turned off 6/13 18:00
6/15/18 16:32	4.77	5.00	42.49	112.83	0.68	0.03	2.22	0.93		137.38	802.8	Air line turned on 6/15 16:30 22 ON 2 OFF 40 min refill, 30 sec
6/19/18 17:25	4.70	4.94	45.35	123.57	0.70	0.03	2.86	0.51		140.25	789.2	
6/27/18 9:00	4.65	4.94	55.24	123.57	1.09	0.05	9.88	1.09		150.13	779.3	22 ON 2 OFF 40 min refill, 30 sec discharge
6/28/18 10:35	5.80		5.58	0.00			0.00			150.13	952.5	System Pump Out



*2018 Jan.-June Progress Report  
Former Amoco Terminal  
2904 Winter Street, Superior, Wisconsin  
Antea Group Project No. WISUP181*



## ***Appendix A***

Groundwater Analytical Laboratory Reports

July 06, 2018

Jonathan Zimdars  
Antea Group - MN  
5910 Rice Creek Parkway  
Saint Paul, MN 55126

RE: Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171305

Dear Jonathan Zimdars:

Enclosed are the analytical results for sample(s) received by the laboratory on June 22, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Christopher Hyska  
christopher.hyska@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Todd Kremmin, Antea Group



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

---

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40171305001	MW-40D	Water	06/19/18 10:50	06/22/18 08:50
40171305002	MW-38D	Water	06/19/18 11:10	06/22/18 08:50
40171305003	MW-46D	Water	06/19/18 12:10	06/22/18 08:50
40171305004	MW-36DD	Water	06/19/18 12:15	06/22/18 08:50
40171305005	MW-52D	Water	06/19/18 16:50	06/22/18 08:50
40171305006	MW-52DD	Water	06/19/18 17:20	06/22/18 08:50
40171305007	MW-38DD	Water	06/20/18 08:45	06/22/18 08:50
40171305008	MW-41D	Water	06/20/18 08:30	06/22/18 08:50
40171305009	MW-51D	Water	06/20/18 10:00	06/22/18 08:50
40171305010	MW-50D	Water	06/20/18 10:15	06/22/18 08:50
40171305011	TRIP BLANK	Water	06/20/18 00:00	06/22/18 08:50

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171305

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40171305001	MW-40D	WI MOD GRO	ALD	10	PASI-G
40171305002	MW-38D	WI MOD GRO	ALD	10	PASI-G
40171305003	MW-46D	WI MOD GRO	ALD	10	PASI-G
40171305004	MW-36DD	WI MOD GRO	ALD	10	PASI-G
40171305005	MW-52D	WI MOD GRO	ALD	10	PASI-G
40171305006	MW-52DD	WI MOD GRO	ALD	10	PASI-G
40171305007	MW-38DD	WI MOD GRO	ALD	10	PASI-G
40171305008	MW-41D	WI MOD GRO	ALD	10	PASI-G
40171305009	MW-51D	WI MOD GRO	ALD	10	PASI-G
40171305010	MW-50D	WI MOD GRO	ALD	10	PASI-G
40171305011	TRIP BLANK	WI MOD GRO	ALD	10	PASI-G

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40171305003</b>	<b>MW-46D</b>					
WI MOD GRO	m&p-Xylene	1.5J	ug/L	2.2	06/25/18 12:18	
<b>40171305008</b>	<b>MW-41D</b>					
WI MOD GRO	Benzene	12.9	ug/L	1.0	06/25/18 13:36	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## PROJECT NARRATIVE

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171305

---

**Method:** WI MOD GRO  
**Description:** WIGRO GCV  
**Client:** Antea Group  
**Date:** July 06, 2018

**General Information:**

11 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

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

**Initial Calibrations (including MS Tune as applicable):**

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

**Continuing Calibration:**

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

**Surrogates:**

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

**Method Blank:**

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

**Laboratory Control Spike:**

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

**Matrix Spikes:**

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

**Additional Comments:**

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Project No.: 40171305

**Sample: MW-40D**      **Lab ID: 40171305001**      Collected: 06/19/18 10:50      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 11:27	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 11:27	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 11:27	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 11:27	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 11:27	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 11:27	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 11:27	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 11:27	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 11:27	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/25/18 11:27	98-08-8	

**Sample: MW-38D**      **Lab ID: 40171305002**      Collected: 06/19/18 11:10      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 11:53	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 11:53	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 11:53	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 11:53	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 11:53	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 11:53	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 11:53	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 11:53	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 11:53	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/25/18 11:53	98-08-8	

**Sample: MW-46D**      **Lab ID: 40171305003**      Collected: 06/19/18 12:10      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 12:18	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 12:18	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 12:18	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 12:18	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 12:18	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 12:18	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 12:18	108-67-8	
m&p-Xylene	1.5J	ug/L	2.2	0.66	1		06/25/18 12:18	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 12:18	95-47-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

Sample: MW-46D      Lab ID: 40171305003      Collected: 06/19/18 12:10      Received: 06/22/18 08:50      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
<i>Surrogates</i>									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		06/25/18 12:18	98-08-8	

Sample: MW-36DD      Lab ID: 40171305004      Collected: 06/19/18 12:15      Received: 06/22/18 08:50      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 12:44	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 12:44	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 12:44	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 12:44	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 12:44	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 12:44	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 12:44	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 12:44	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 12:44	95-47-6	
<i>Surrogates</i>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/25/18 12:44	98-08-8	

Sample: MW-52D      Lab ID: 40171305005      Collected: 06/19/18 16:50      Received: 06/22/18 08:50      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 17:54	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 17:54	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 17:54	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 17:54	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 17:54	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 17:54	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 17:54	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 17:54	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 17:54	95-47-6	
<i>Surrogates</i>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/25/18 17:54	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

**Sample: MW-52DD**      **Lab ID: 40171305006**      Collected: 06/19/18 17:20      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 18:20	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 18:20	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 18:20	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 18:20	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 18:20	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 18:20	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 18:20	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 18:20	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 18:20	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		06/25/18 18:20	98-08-8	

**Sample: MW-38DD**      **Lab ID: 40171305007**      Collected: 06/20/18 08:45      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 13:10	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 13:10	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 13:10	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 13:10	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 13:10	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 13:10	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 13:10	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 13:10	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 13:10	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/25/18 13:10	98-08-8	

**Sample: MW-41D**      **Lab ID: 40171305008**      Collected: 06/20/18 08:30      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	12.9	ug/L	1.0	0.31	1		06/25/18 13:36	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 13:36	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 13:36	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 13:36	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 13:36	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 13:36	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 13:36	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 13:36	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 13:36	95-47-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

**Sample: MW-41D**      **Lab ID: 40171305008**      Collected: 06/20/18 08:30      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		06/25/18 13:36	98-08-8	

**Sample: MW-51D**      **Lab ID: 40171305009**      Collected: 06/20/18 10:00      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 18:45	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 18:45	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 18:45	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 18:45	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 18:45	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 18:45	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 18:45	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 18:45	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 18:45	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/25/18 18:45	98-08-8	

**Sample: MW-50D**      **Lab ID: 40171305010**      Collected: 06/20/18 10:15      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 19:11	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 19:11	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 19:11	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 19:11	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 19:11	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 19:11	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 19:11	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 19:11	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 19:11	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/25/18 19:11	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

**Sample: TRIP BLANK**      **Lab ID: 40171305011**      Collected: 06/20/18 00:00      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO							
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 20:54	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 20:54	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 20:54	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 20:54	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 20:54	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 20:54	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 20:54	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 20:54	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 20:54	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/25/18 20:54	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171305

QC Batch: 292697 Analysis Method: WI MOD GRO  
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water  
Associated Lab Samples: 40171305001, 40171305002, 40171305003, 40171305004, 40171305005, 40171305006, 40171305007, 40171305008, 40171305009, 40171305010, 40171305011

METHOD BLANK: 1711758 Matrix: Water  
Associated Lab Samples: 40171305001, 40171305002, 40171305003, 40171305004, 40171305005, 40171305006, 40171305007, 40171305008, 40171305009, 40171305010, 40171305011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	06/25/18 09:44	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	06/25/18 09:44	
Benzene	ug/L	<0.31	1.0	06/25/18 09:44	
Ethylbenzene	ug/L	<0.33	1.1	06/25/18 09:44	
m&p-Xylene	ug/L	<0.66	2.2	06/25/18 09:44	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	06/25/18 09:44	
Naphthalene	ug/L	<0.51	1.7	06/25/18 09:44	
o-Xylene	ug/L	<0.32	1.0	06/25/18 09:44	
Toluene	ug/L	<0.49	1.6	06/25/18 09:44	
a,a,a-Trifluorotoluene (S)	%	99	80-120	06/25/18 09:44	

LABORATORY CONTROL SAMPLE & LCSD: 1711759 1711760

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	19.9	19.9	99	99	80-120	0	20	
1,3,5-Trimethylbenzene	ug/L	20	19.2	19.2	96	96	80-120	0	20	
Benzene	ug/L	20	19.0	18.8	95	94	80-120	1	20	
Ethylbenzene	ug/L	20	19.4	19.3	97	96	80-120	1	20	
m&p-Xylene	ug/L	40	38.4	38.2	96	95	80-120	1	20	
Methyl-tert-butyl ether	ug/L	20	20.2	19.5	101	98	80-120	3	20	
Naphthalene	ug/L	20	20.4	20.2	102	101	80-120	1	20	
o-Xylene	ug/L	20	19.2	19.2	96	96	80-120	0	20	
Toluene	ug/L	20	19.2	19.0	96	95	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				98	98	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1711989 1711990

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40171305001 Result	Spike Conc.	Spike Conc.	MS Result						
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	19.2	17.3	96	87	51-160	10	20
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	18.5	16.6	93	83	56-146	11	20
Benzene	ug/L	<0.31	20	20	20.2	18.3	101	92	71-137	10	20
Ethylbenzene	ug/L	<0.33	20	20	20.5	18.7	102	94	71-141	9	20
m&p-Xylene	ug/L	<0.66	40	40	39.4	36.0	99	90	66-141	9	20
Methyl-tert-butyl ether	ug/L	<0.32	20	20	19.5	18.3	98	91	80-120	7	20
Naphthalene	ug/L	<0.51	20	20	20.2	19.3	101	96	67-138	5	20
o-Xylene	ug/L	<0.32	20	20	19.8	18.1	99	91	75-133	9	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1711989		1711990		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		40171305001 Result	MS Spike Conc.	MSD Spike Conc.									
Toluene	ug/L	<0.49	20	20	20.2	18.5	101	93	76-134	8	20		
a,a,a-Trifluorotoluene (S)	%							98	99	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171305

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40171305001	MW-40D	WI MOD GRO	292697		
40171305002	MW-38D	WI MOD GRO	292697		
40171305003	MW-46D	WI MOD GRO	292697		
40171305004	MW-36DD	WI MOD GRO	292697		
40171305005	MW-52D	WI MOD GRO	292697		
40171305006	MW-52DD	WI MOD GRO	292697		
40171305007	MW-38DD	WI MOD GRO	292697		
40171305008	MW-41D	WI MOD GRO	292697		
40171305009	MW-51D	WI MOD GRO	292697		
40171305010	MW-50D	WI MOD GRO	292697		
40171305011	TRIP BLANK	WI MOD GRO	292697		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



(Please Print Clearly)

UPPER MIDWEST REGION

700 WI: 920-469-2436

Page 1 of 1

WO#: 10436440

40171305

Page 16 of 19

1.1 VARIOUS VOLUMES  
 A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH  
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED?  
 (YES/NO)  
 PRESERVATION  
 (CODE)\*

Company Name: Antea Group  
 Branch/Location: 5910 Rice Creek Pkwy  
 Project Contact: Todd Kremmin  
 Phone: 651-587-9658  
 Project Number: WIS0P181  
 Project Name: Superior Terminal  
 Project State: Wisconsin  
 Sampled By (Print): Todd Kremmin  
 Sampled By (Sign): Todd Kremmin  
 PO #: WIS0P181  
 Regulatory Program:

Data Package Options  
 (billable)  
 EPA Level III  
 EPA Level IV

MS/MSD  
 On your sample (billable)  
 NOT needed on your sample

Matrix Codes  
 A = Air B = Biotia C = Charcoal O = Oil S = Soil SI = Sludge  
 W = Water DW = Drinking Water GW = Ground Water SW = Surface Water WW = Waste Water WP = Wipe

PAGE LAB #	CLIENT FIELD ID	DATE	TIME	MATRIX
D01	MW-4DD	6/19/18	10:50	W
D02	MW-38D		11:10	W
D03	MW-46D		12:10	W
D04	MW-36DD		12:15	W
D05	MW-52D		16:50	W
D06	MW-52DD		17:20	W
D07	MW-38DD	6/20/18	08:45	W
D08	MW-41D		08:30	W
D09	MW-51D		10:00	W
D10	MW-50D		10:15	W
D11	Trip Blank	6/20/18		W

Analyses Requested

PVOC + Napl

Quote #: [Blank]  
 Mail To Contact: Jonathan Zindars  
 Mail To Company: Antea Group  
 Mail To Address: 5910 Rice Creek Pkwy, Shoreview, MN 55126  
 Invoice To Contact: Jonathan Zindars  
 Invoice To Company: Antea Group  
 Invoice To Address: 5910 Rice Creek Pkwy, Shoreview, MN 55126  
 Invoice To Phone: 651-597-5219  
 CLIENT COMMENTS: 3 containers  
 LAB COMMENTS (Lab Use Only): D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11

Rush Turnaround Time Requested - Prelims  
 (Rush TAT subject to approval/surcharge)  
 Date Needed:  
 Transmit Prelim Rush Results by (complete what you want):  
 Email #1:  
 Email #2:  
 Telephone:  
 Fax:  
 Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:
Todd Kremmin	6-20-18/1400
Chr	6-20-18/1700
Chr	6-20-18/1945
Chr	6/21/18 1900
Chr	6/21/18 1900

Received By:	Date/Time:
Laura	6/20/18 1400
Chr	6-20-18 1700
Chr	6-20-18 1945
Chr	6/20/18 1900
Chr	6/20/18 1900

PACE Project No. 40171305  
 Receipt Temp = 5.3 °C  
 Sample Receipt pH OK / Adjusted  
 Cooler Custody Seal Present / Not Present (Intact) / Not Intact

T=1.2, T=1.8

# Sample Preservation Receipt Form

Pace Analytical Services, LLC  
1241 Bellevue Street, Suite 9  
Green Bay, WI 54305

Client Name: Antea

Project # Y0171305

All containers needing preservation have been checked and noted below:  Yes  No  N/A

Lab Lot# of pH paper:

Lab Std #ID of preservation (if pH adjusted):

Initial when completed:

Date/Time:

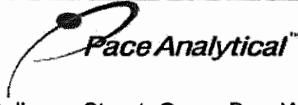
Pace Lab #	Glass	Plastic	Vials	Jars	General	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (ml)													
													AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N
001												2.5 / 5 / 10													
002												2.5 / 5 / 10													
003												2.5 / 5 / 10													
004												2.5 / 5 / 10													
005												2.5 / 5 / 10													
006												2.5 / 5 / 10													
007												2.5 / 5 / 10													
008												2.5 / 5 / 10													
009												2.5 / 5 / 10													
010												2.5 / 5 / 10													
011												2.5 / 5 / 10													
012												2.5 / 5 / 10													
013												2.5 / 5 / 10													
014												2.5 / 5 / 10													
015												2.5 / 5 / 10													
016												2.5 / 5 / 10													
017												2.5 / 5 / 10													
018												2.5 / 5 / 10													
019												2.5 / 5 / 10													
020												2.5 / 5 / 10													

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRQ, Phenolics, Other:

Headspace in VOA Vials (>6mm):  Yes  No  N/A \*if yes look in headspace column

AG1U 1 liter amber glass	BP1U 1 liter plastic unpres	DG9A 40 ml. amber ascorbic	JGFU 4 oz amber jar unpres
AG1H 1 liter amber glass HCL	BP2N 500 ml plastic HNO3	DG9T 40 ml. amber Na Thio	WGFU 4 oz clear jar unpres
AG4S 125 ml amber glass H2SO4	BP2Z 500 ml plastic NaOH, Znact	VG9U 40 ml. clear vial unpres	WPFU 4 oz plastic jar unpres
AG4U 120 ml amber glass unpres	BP3U 250 ml plastic unpres	VG9H 40 ml. clear vial HCL	
AG5U 100 ml amber glass unpres	BP3C 250 ml plastic NaOH	VG9M 40 ml. clear vial MeOH	
AG2S 500 ml amber glass H2SO4	BP3N 250 ml plastic HNO3	VG9D 40 ml. clear vial DI	
BG3U 250 ml clear glass unpres	BP3S 250 ml plastic H2SO4		SP5T 120 ml. plastic Na Thiosulfate
			ZPLC ziploc bag
			GN:



 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

### Sample Condition Upon Receipt Form (SCUR)

Client Name: Anteel Project #: \_\_\_\_\_

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Walco  
 Client  Pace Other: \_\_\_\_\_

Tracking #: 1755519-2 / 1755514-1 **WO#: 40171305**

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

Custody Seal on Samples Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR-30 Type of Ice:  Wet  Blue  Dry  None  Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3 / Corr: 3

Temp Blank Present:  yes  no Biological Tissue is Frozen:  yes  no

Temp should be above freezing to 6°C.  
Biota Samples may be received at ≤ 0°C.

Person examining contents:  
Date: 6/22/18  
Initials: DS

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>Page not numbered DS 6/22/18</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>399</u>		

**Client Notification/ Resolution:** \_\_\_\_\_ If checked, see attached form for additional comments

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: CA Date: 6/25/18

July 06, 2018

Jonathan Zimdars  
Antea Group - MN  
5910 Rice Creek Parkway  
Saint Paul, MN 55126

RE: Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171802

Dear Jonathan Zimdars:

Enclosed are the analytical results for sample(s) received by the laboratory on June 29, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Christopher Hyska  
christopher.hyska@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Todd Kremmin, Antea Group



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

---

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171802

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40171802001	MWM-10D	Water	06/27/18 16:00	06/29/18 09:38
40171802002	MW-45D	Water	06/27/18 16:10	06/29/18 09:38
40171802003	MW-37DD	Water	06/27/18 14:50	06/29/18 09:38
40171802004	MW-41DD	Water	06/27/18 15:15	06/29/18 09:38
40171802005	MW-37DDD	Water	06/27/18 14:45	06/29/18 09:38
40171802006	MW-37D	Water	06/27/18 14:30	06/29/18 09:38
40171802007	MW-37D DUP	Water	06/27/18 14:40	06/29/18 09:38
40171802008	MW-36D	Water	06/27/18 14:00	06/29/18 09:38
40171802009	MWM-7D	Water	06/27/18 16:05	06/29/18 09:38
40171802010	MWM-9RD	Water	06/27/18 16:45	06/29/18 09:38
40171802011	MWM-9RD DUP	Water	06/27/18 16:50	06/29/18 09:38
40171802012	MWT-2D	Water	06/27/18 17:00	06/29/18 09:38
40171802013	MWT-2D DUP	Water	06/27/18 17:10	06/29/18 09:38
40171802014	TRIP BLANK	Water	06/27/18 00:00	06/29/18 09:38

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171802

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40171802001	MWM-10D	WI MOD GRO	ALD	10	PASI-G
40171802002	MW-45D	WI MOD GRO	ALD	10	PASI-G
40171802003	MW-37DD	WI MOD GRO	ALD	10	PASI-G
40171802004	MW-41DD	WI MOD GRO	ALD	10	PASI-G
40171802005	MW-37DDD	WI MOD GRO	ALD	10	PASI-G
40171802006	MW-37D	WI MOD GRO	ALD	10	PASI-G
40171802007	MW-37D DUP	WI MOD GRO	ALD	10	PASI-G
40171802008	MW-36D	WI MOD GRO	ALD	10	PASI-G
40171802009	MWM-7D	WI MOD GRO	ALD	10	PASI-G
40171802010	MWM-9RD	WI MOD GRO	ALD	10	PASI-G
40171802011	MWM-9RD DUP	WI MOD GRO	PMS	10	PASI-G
40171802012	MWT-2D	WI MOD GRO	PMS	10	PASI-G
40171802013	MWT-2D DUP	WI MOD GRO	PMS	10	PASI-G
40171802014	TRIP BLANK	WI MOD GRO	PMS	10	PASI-G

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## PROJECT NARRATIVE

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

---

**Date:** July 06, 2018

Revised report to update field ID for 40171802008 from MW-36 to MW-36D, per client request.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## PROJECT NARRATIVE

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171802

---

**Method:** WI MOD GRO  
**Description:** WIGRO GCV  
**Client:** Antea Group  
**Date:** July 06, 2018

**General Information:**

14 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

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

**Initial Calibrations (including MS Tune as applicable):**

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

**Continuing Calibration:**

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

**Surrogates:**

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

**Method Blank:**

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

**Laboratory Control Spike:**

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

**Matrix Spikes:**

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

**Additional Comments:**

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

**Sample: MWM-10D**      **Lab ID: 40171802001**      Collected: 06/27/18 16:00      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	1110	ug/L	10.2	3.1	10		07/03/18 09:42	71-43-2	
Ethylbenzene	6.6J	ug/L	11.0	3.3	10		07/03/18 09:42	100-41-4	
Methyl-tert-butyl ether	<3.2	ug/L	10.7	3.2	10		07/03/18 09:42	1634-04-4	
Naphthalene	5.7J	ug/L	16.8	5.1	10		07/03/18 09:42	91-20-3	
Toluene	28.6	ug/L	16.3	4.9	10		07/03/18 09:42	108-88-3	
1,2,4-Trimethylbenzene	<3.4	ug/L	11.4	3.4	10		07/03/18 09:42	95-63-6	
1,3,5-Trimethylbenzene	<3.3	ug/L	10.9	3.3	10		07/03/18 09:42	108-67-8	
m&p-Xylene	18.3J	ug/L	21.8	6.6	10		07/03/18 09:42	179601-23-1	
o-Xylene	<3.2	ug/L	10.5	3.2	10		07/03/18 09:42	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	95	%	80-120		10		07/03/18 09:42	98-08-8	

**Sample: MW-45D**      **Lab ID: 40171802002**      Collected: 06/27/18 16:10      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	155	ug/L	1.0	0.31	1		07/02/18 12:09	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 12:09	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		07/02/18 12:09	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		07/02/18 12:09	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		07/02/18 12:09	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		07/02/18 12:09	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 12:09	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		07/02/18 12:09	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		07/02/18 12:09	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		07/02/18 12:09	98-08-8	

**Sample: MW-37DD**      **Lab ID: 40171802003**      Collected: 06/27/18 14:50      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	1260	ug/L	10.2	3.1	10		07/02/18 19:24	71-43-2	
Ethylbenzene	<3.3	ug/L	11.0	3.3	10		07/02/18 19:24	100-41-4	
Methyl-tert-butyl ether	<3.2	ug/L	10.7	3.2	10		07/02/18 19:24	1634-04-4	
Naphthalene	<5.1	ug/L	16.8	5.1	10		07/02/18 19:24	91-20-3	
Toluene	<4.9	ug/L	16.3	4.9	10		07/02/18 19:24	108-88-3	
1,2,4-Trimethylbenzene	<3.4	ug/L	11.4	3.4	10		07/02/18 19:24	95-63-6	
1,3,5-Trimethylbenzene	<3.3	ug/L	10.9	3.3	10		07/02/18 19:24	108-67-8	
m&p-Xylene	<6.6	ug/L	21.8	6.6	10		07/02/18 19:24	179601-23-1	
o-Xylene	<3.2	ug/L	10.5	3.2	10		07/02/18 19:24	95-47-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

**Sample: MW-37DD**      **Lab ID: 40171802003**      Collected: 06/27/18 14:50      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----	-----	----	----------	----------	---------	------

**WIGRO GCV**      Analytical Method: WI MOD GRO

**Surrogates**

a,a,a-Trifluorotoluene (S)	97	%	80-120		10		07/02/18 19:24	98-08-8	
----------------------------	----	---	--------	--	----	--	----------------	---------	--

**Sample: MW-41DD**      **Lab ID: 40171802004**      Collected: 06/27/18 15:15      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----	-----	----	----------	----------	---------	------

**WIGRO GCV**      Analytical Method: WI MOD GRO

Benzene	<0.31	ug/L	1.0	0.31	1		07/02/18 13:01	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 13:01	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		07/02/18 13:01	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		07/02/18 13:01	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		07/02/18 13:01	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		07/02/18 13:01	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 13:01	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		07/02/18 13:01	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		07/02/18 13:01	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		07/02/18 13:01	98-08-8	

**Sample: MW-37DDD**      **Lab ID: 40171802005**      Collected: 06/27/18 14:45      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----	-----	----	----------	----------	---------	------

**WIGRO GCV**      Analytical Method: WI MOD GRO

Benzene	3.9	ug/L	1.0	0.31	1		07/02/18 12:35	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 12:35	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		07/02/18 12:35	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		07/02/18 12:35	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		07/02/18 12:35	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		07/02/18 12:35	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 12:35	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		07/02/18 12:35	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		07/02/18 12:35	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		07/02/18 12:35	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: MW-37D</b> <b>Lab ID: 40171802006</b> Collected: 06/27/18 14:30      Received: 06/29/18 09:38      Matrix: Water									
Analytical Method: WI MOD GRO									
Benzene	2830	ug/L	25.5	7.6	25		07/02/18 13:52	71-43-2	
Ethylbenzene	31.5	ug/L	27.5	8.2	25		07/02/18 13:52	100-41-4	
Methyl-tert-butyl ether	<8.0	ug/L	26.8	8.0	25		07/02/18 13:52	1634-04-4	
Naphthalene	<12.6	ug/L	42.0	12.6	25		07/02/18 13:52	91-20-3	
Toluene	98.3	ug/L	40.8	12.2	25		07/02/18 13:52	108-88-3	
1,2,4-Trimethylbenzene	<8.6	ug/L	28.5	8.6	25		07/02/18 13:52	95-63-6	
1,3,5-Trimethylbenzene	<8.2	ug/L	27.2	8.2	25		07/02/18 13:52	108-67-8	
m&p-Xylene	58.5	ug/L	54.5	16.4	25		07/02/18 13:52	179601-23-1	
o-Xylene	<7.9	ug/L	26.2	7.9	25		07/02/18 13:52	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		25		07/02/18 13:52	98-08-8	

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: MW-37D DUP</b> <b>Lab ID: 40171802007</b> Collected: 06/27/18 14:40      Received: 06/29/18 09:38      Matrix: Water									
Analytical Method: WI MOD GRO									
Benzene	2680	ug/L	25.5	7.6	25		07/02/18 16:51	71-43-2	
Ethylbenzene	28.2	ug/L	27.5	8.2	25		07/02/18 16:51	100-41-4	
Methyl-tert-butyl ether	<8.0	ug/L	26.8	8.0	25		07/02/18 16:51	1634-04-4	
Naphthalene	<12.6	ug/L	42.0	12.6	25		07/02/18 16:51	91-20-3	
Toluene	91.0	ug/L	40.8	12.2	25		07/02/18 16:51	108-88-3	
1,2,4-Trimethylbenzene	<8.6	ug/L	28.5	8.6	25		07/02/18 16:51	95-63-6	
1,3,5-Trimethylbenzene	<8.2	ug/L	27.2	8.2	25		07/02/18 16:51	108-67-8	
m&p-Xylene	53.2J	ug/L	54.5	16.4	25		07/02/18 16:51	179601-23-1	
o-Xylene	<7.9	ug/L	26.2	7.9	25		07/02/18 16:51	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	98	%	80-120		25		07/02/18 16:51	98-08-8	

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: MW-36D</b> <b>Lab ID: 40171802008</b> Collected: 06/27/18 14:00      Received: 06/29/18 09:38      Matrix: Water									
Analytical Method: WI MOD GRO									
Benzene	1820	ug/L	20.4	6.1	20		07/03/18 09:16	71-43-2	
Ethylbenzene	10.4J	ug/L	22.0	6.6	20		07/03/18 09:16	100-41-4	
Methyl-tert-butyl ether	<6.4	ug/L	21.4	6.4	20		07/03/18 09:16	1634-04-4	
Naphthalene	<10.1	ug/L	33.6	10.1	20		07/03/18 09:16	91-20-3	
Toluene	34.0	ug/L	32.6	9.8	20		07/03/18 09:16	108-88-3	
1,2,4-Trimethylbenzene	<6.8	ug/L	22.8	6.8	20		07/03/18 09:16	95-63-6	
1,3,5-Trimethylbenzene	<6.6	ug/L	21.8	6.6	20		07/03/18 09:16	108-67-8	
m&p-Xylene	<13.1	ug/L	43.6	13.1	20		07/03/18 09:16	179601-23-1	
o-Xylene	<6.3	ug/L	21.0	6.3	20		07/03/18 09:16	95-47-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

**Sample: MW-36D**      **Lab ID: 4017180208**      Collected: 06/27/18 14:00      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----	-----	----	----------	----------	---------	------

**WIGRO GCV**      Analytical Method: WI MOD GRO

**Surrogates**

a,a,a-Trifluorotoluene (S)	99	%	80-120		20		07/03/18 09:16	98-08-8	
----------------------------	----	---	--------	--	----	--	----------------	---------	--

**Sample: MWM-7D**      **Lab ID: 4017180209**      Collected: 06/27/18 16:05      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----	-----	----	----------	----------	---------	------

**WIGRO GCV**      Analytical Method: WI MOD GRO

Benzene	<b>2100</b>	ug/L	20.4	6.1	20		07/02/18 17:42	71-43-2	
Ethylbenzene	<b>46.6</b>	ug/L	22.0	6.6	20		07/02/18 17:42	100-41-4	
Methyl-tert-butyl ether	<b>&lt;6.4</b>	ug/L	21.4	6.4	20		07/02/18 17:42	1634-04-4	
Naphthalene	<b>&lt;10.1</b>	ug/L	33.6	10.1	20		07/02/18 17:42	91-20-3	
Toluene	<b>41.4</b>	ug/L	32.6	9.8	20		07/02/18 17:42	108-88-3	
1,2,4-Trimethylbenzene	<b>&lt;6.8</b>	ug/L	22.8	6.8	20		07/02/18 17:42	95-63-6	
1,3,5-Trimethylbenzene	<b>&lt;6.6</b>	ug/L	21.8	6.6	20		07/02/18 17:42	108-67-8	
m&p-Xylene	<b>44.9</b>	ug/L	43.6	13.1	20		07/02/18 17:42	179601-23-1	
o-Xylene	<b>&lt;6.3</b>	ug/L	21.0	6.3	20		07/02/18 17:42	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		20		07/02/18 17:42	98-08-8	

**Sample: MWM-9RD**      **Lab ID: 40171802010**      Collected: 06/27/18 16:45      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----	-----	----	----------	----------	---------	------

**WIGRO GCV**      Analytical Method: WI MOD GRO

Benzene	<b>2470</b>	ug/L	25.5	7.6	25		07/02/18 17:16	71-43-2	
Ethylbenzene	<b>163</b>	ug/L	27.5	8.2	25		07/02/18 17:16	100-41-4	
Methyl-tert-butyl ether	<b>116</b>	ug/L	26.8	8.0	25		07/02/18 17:16	1634-04-4	
Naphthalene	<b>27.5J</b>	ug/L	42.0	12.6	25		07/02/18 17:16	91-20-3	
Toluene	<b>102</b>	ug/L	40.8	12.2	25		07/02/18 17:16	108-88-3	
1,2,4-Trimethylbenzene	<b>75.9</b>	ug/L	28.5	8.6	25		07/02/18 17:16	95-63-6	
1,3,5-Trimethylbenzene	<b>36.5</b>	ug/L	27.2	8.2	25		07/02/18 17:16	108-67-8	
m&p-Xylene	<b>209</b>	ug/L	54.5	16.4	25		07/02/18 17:16	179601-23-1	
o-Xylene	<b>&lt;7.9</b>	ug/L	26.2	7.9	25		07/02/18 17:16	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		25		07/02/18 17:16	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: MWM-9RD DUP</b> <b>Lab ID: 40171802011</b> Collected: 06/27/18 16:50      Received: 06/29/18 09:38      Matrix: Water									
Analytical Method: WI MOD GRO									
Benzene	<b>2380</b>	ug/L	25.5	7.6	25		07/03/18 13:45	71-43-2	
Ethylbenzene	<b>169</b>	ug/L	27.5	8.2	25		07/03/18 13:45	100-41-4	
Methyl-tert-butyl ether	<b>123</b>	ug/L	26.8	8.0	25		07/03/18 13:45	1634-04-4	
Naphthalene	<b>45.8</b>	ug/L	42.0	12.6	25		07/03/18 13:45	91-20-3	
Toluene	<b>105</b>	ug/L	40.8	12.2	25		07/03/18 13:45	108-88-3	
1,2,4-Trimethylbenzene	<b>84.3</b>	ug/L	28.5	8.6	25		07/03/18 13:45	95-63-6	
1,3,5-Trimethylbenzene	<b>41.0</b>	ug/L	27.2	8.2	25		07/03/18 13:45	108-67-8	
m&p-Xylene	<b>222</b>	ug/L	54.5	16.4	25		07/03/18 13:45	179601-23-1	
o-Xylene	<b>8.4J</b>	ug/L	26.2	7.9	25		07/03/18 13:45	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	97	%	80-120		25		07/03/18 13:45	98-08-8	

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: MWT-2D</b> <b>Lab ID: 40171802012</b> Collected: 06/27/18 17:00      Received: 06/29/18 09:38      Matrix: Water									
Analytical Method: WI MOD GRO									
Benzene	<b>2970</b>	ug/L	40.8	12.2	40		07/03/18 10:19	71-43-2	
Ethylbenzene	<b>287</b>	ug/L	44.0	13.2	40		07/03/18 10:19	100-41-4	
Methyl-tert-butyl ether	<b>190</b>	ug/L	42.8	12.8	40		07/03/18 10:19	1634-04-4	
Naphthalene	<b>133</b>	ug/L	67.2	20.2	40		07/03/18 10:19	91-20-3	
Toluene	<b>171</b>	ug/L	65.2	19.6	40		07/03/18 10:19	108-88-3	
1,2,4-Trimethylbenzene	<b>114</b>	ug/L	45.6	13.7	40		07/03/18 10:19	95-63-6	
1,3,5-Trimethylbenzene	<b>49.6</b>	ug/L	43.6	13.1	40		07/03/18 10:19	108-67-8	
m&p-Xylene	<b>283</b>	ug/L	87.2	26.2	40		07/03/18 10:19	179601-23-1	
o-Xylene	<b>28.5J</b>	ug/L	42.0	12.6	40		07/03/18 10:19	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		40		07/03/18 10:19	98-08-8	

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: MWT-2D DUP</b> <b>Lab ID: 40171802013</b> Collected: 06/27/18 17:10      Received: 06/29/18 09:38      Matrix: Water									
Analytical Method: WI MOD GRO									
Benzene	<b>3290</b>	ug/L	40.8	12.2	40		07/03/18 10:45	71-43-2	
Ethylbenzene	<b>322</b>	ug/L	44.0	13.2	40		07/03/18 10:45	100-41-4	
Methyl-tert-butyl ether	<b>212</b>	ug/L	42.8	12.8	40		07/03/18 10:45	1634-04-4	
Naphthalene	<b>157</b>	ug/L	67.2	20.2	40		07/03/18 10:45	91-20-3	
Toluene	<b>185</b>	ug/L	65.2	19.6	40		07/03/18 10:45	108-88-3	
1,2,4-Trimethylbenzene	<b>128</b>	ug/L	45.6	13.7	40		07/03/18 10:45	95-63-6	
1,3,5-Trimethylbenzene	<b>58.5</b>	ug/L	43.6	13.1	40		07/03/18 10:45	108-67-8	
m&p-Xylene	<b>322</b>	ug/L	87.2	26.2	40		07/03/18 10:45	179601-23-1	
o-Xylene	<b>31.5J</b>	ug/L	42.0	12.6	40		07/03/18 10:45	95-47-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

**Sample: MWT-2D DUP**      **Lab ID: 40171802013**      Collected: 06/27/18 17:10      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO							
<i>Surrogates</i>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		40		07/03/18 10:45	98-08-8	

**Sample: TRIP BLANK**      **Lab ID: 40171802014**      Collected: 06/27/18 00:00      Received: 06/29/18 09:38      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO							
Benzene	<0.31	ug/L	1.0	0.31	1		07/02/18 15:16	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 15:16	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		07/02/18 15:16	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		07/02/18 15:16	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		07/02/18 15:16	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		07/02/18 15:16	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 15:16	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		07/02/18 15:16	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		07/02/18 15:16	95-47-6	
<i>Surrogates</i>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		07/02/18 15:16	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

QC Batch:	293384	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40171802001, 40171802002, 40171802003, 40171802004, 40171802005, 40171802006, 40171802007, 40171802008, 40171802009, 40171802010		

METHOD BLANK:	1716280	Matrix:	Water
Associated Lab Samples:	40171802001, 40171802002, 40171802003, 40171802004, 40171802005, 40171802006, 40171802007, 40171802008, 40171802009, 40171802010		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	07/02/18 09:10	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	07/02/18 09:10	
Benzene	ug/L	<0.31	1.0	07/02/18 09:10	
Ethylbenzene	ug/L	<0.33	1.1	07/02/18 09:10	
m&p-Xylene	ug/L	<0.66	2.2	07/02/18 09:10	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	07/02/18 09:10	
Naphthalene	ug/L	<0.51	1.7	07/02/18 09:10	
o-Xylene	ug/L	<0.32	1.0	07/02/18 09:10	
Toluene	ug/L	<0.49	1.6	07/02/18 09:10	
a,a,a-Trifluorotoluene (S)	%	102	80-120	07/02/18 09:10	

Parameter	Units	1716281		1716282		% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCS Result	LCS % Rec				
1,2,4-Trimethylbenzene	ug/L	20	20.9	20.8	105	104	80-120	0	20
1,3,5-Trimethylbenzene	ug/L	20	20.5	20.5	103	102	80-120	0	20
Benzene	ug/L	20	20.8	20.6	104	103	80-120	1	20
Ethylbenzene	ug/L	20	21.0	20.9	105	105	80-120	0	20
m&p-Xylene	ug/L	40	41.5	41.3	104	103	80-120	0	20
Methyl-tert-butyl ether	ug/L	20	20.5	20.7	103	103	80-120	1	20
Naphthalene	ug/L	20	19.9	20.4	100	102	80-120	3	20
o-Xylene	ug/L	20	20.9	20.9	105	104	80-120	0	20
Toluene	ug/L	20	21.1	20.9	105	105	80-120	1	20
a,a,a-Trifluorotoluene (S)	%				102	102	80-120		

Parameter	Units	1716516		1716517		% Rec Limits	RPD	Max RPD	Qual		
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	22.5	22.8	113	114	51-160	1	20
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	22.2	22.5	111	112	56-146	1	20
Benzene	ug/L	<0.31	20	20	22.4	22.4	112	112	71-137	0	20
Ethylbenzene	ug/L	<0.33	20	20	22.9	23.1	114	116	71-141	1	20
m&p-Xylene	ug/L	<0.66	40	40	45.2	45.7	113	114	66-141	1	20
Methyl-tert-butyl ether	ug/L	<0.32	20	20	21.6	21.8	108	109	80-120	1	20
Naphthalene	ug/L	<0.51	20	20	21.3	22.3	106	112	67-138	5	20
o-Xylene	ug/L	<0.32	20	20	22.5	22.7	113	114	75-133	1	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

Parameter	Units	40171753002		1716516		1716517		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Toluene	ug/L	<0.49	20	20	22.9	23.0	114	115	76-134	1	20			
a,a,a-Trifluorotoluene (S)	%						102	103	80-120					

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171802

QC Batch: 293385 Analysis Method: WI MOD GRO  
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water  
Associated Lab Samples: 40171802011, 40171802012, 40171802013, 40171802014

METHOD BLANK: 1716283 Matrix: Water  
Associated Lab Samples: 40171802011, 40171802012, 40171802013, 40171802014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	07/02/18 09:30	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	07/02/18 09:30	
Benzene	ug/L	<0.31	1.0	07/02/18 09:30	
Ethylbenzene	ug/L	<0.33	1.1	07/02/18 09:30	
m&p-Xylene	ug/L	<0.66	2.2	07/02/18 09:30	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	07/02/18 09:30	
Naphthalene	ug/L	<0.51	1.7	07/02/18 09:30	
o-Xylene	ug/L	<0.32	1.0	07/02/18 09:30	
Toluene	ug/L	<0.49	1.6	07/02/18 09:30	
a,a,a-Trifluorotoluene (S)	%	103	80-120	07/02/18 09:30	

LABORATORY CONTROL SAMPLE & LCSD: 1716284 1716285

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	22.2	22.1	111	110	80-120	1	20	
1,3,5-Trimethylbenzene	ug/L	20	21.7	21.5	109	108	80-120	1	20	
Benzene	ug/L	20	21.0	21.1	105	106	80-120	0	20	
Ethylbenzene	ug/L	20	21.9	21.7	109	109	80-120	1	20	
m&p-Xylene	ug/L	40	43.6	43.1	109	108	80-120	1	20	
Methyl-tert-butyl ether	ug/L	20	20.5	19.7	102	99	80-120	4	20	
Naphthalene	ug/L	20	22.4	21.6	112	108	80-120	4	20	
o-Xylene	ug/L	20	21.9	21.4	109	107	80-120	2	20	
Toluene	ug/L	20	21.5	21.5	107	108	80-120	0	20	
a,a,a-Trifluorotoluene (S)	%				101	103	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1716495 1716496

Parameter	Units	40171812001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	71.9	200	200	283	277	106	102	51-160	2	20	
1,3,5-Trimethylbenzene	ug/L	38.4	200	200	246	241	104	101	56-146	2	20	
Benzene	ug/L	685	200	200	914	891	114	103	71-137	2	20	
Ethylbenzene	ug/L	184	200	200	397	389	106	103	71-141	2	20	
m&p-Xylene	ug/L	136	400	400	544	537	102	100	66-141	1	20	
Methyl-tert-butyl ether	ug/L	18.7	200	200	210	213	95	97	80-120	2	20	
Naphthalene	ug/L	120	200	200	333	335	106	107	67-138	1	20	
o-Xylene	ug/L	48.7	200	200	251	245	101	98	75-133	2	20	
Toluene	ug/L	126	200	200	332	326	103	100	76-134	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1716495		1716496									
Parameter	Units	40171812001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
a,a,a-Trifluorotoluene (S)	%						102	104	80-120				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171802

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

### WORKORDER QUALIFIERS

WO: 40171802

[1] Revised report to update field ID for 40171802008 from MW-36 to MW-36D, per client request.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171802

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40171802001	MWM-10D	WI MOD GRO	293384		
40171802002	MW-45D	WI MOD GRO	293384		
40171802003	MW-37DD	WI MOD GRO	293384		
40171802004	MW-41DD	WI MOD GRO	293384		
40171802005	MW-37DDD	WI MOD GRO	293384		
40171802006	MW-37D	WI MOD GRO	293384		
40171802007	MW-37D DUP	WI MOD GRO	293384		
40171802008	MW-36D	WI MOD GRO	293384		
40171802009	MWM-7D	WI MOD GRO	293384		
40171802010	MWM-9RD	WI MOD GRO	293384		
40171802011	MWM-9RD DUP	WI MOD GRO	293385		
40171802012	MWT-2D	WI MOD GRO	293385		
40171802013	MWT-2D DUP	WI MOD GRO	293385		
40171802014	TRIP BLANK	WI MOD GRO	293385		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**CHAIN-OF-CUSTODY / Analytical Request Document**  
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

46171802

**Section A**  
Required Client Information:

Company: **Antea Group**  
Address: **5910 Rice Creek Pkwy**  
Shoreview, MN 55126  
Email To: **td.kennin@antegroup.com**  
Phone: **651-587-9658**  
Requested Due Date/AT: **Standard**

**Section B**  
Required Project Information:

Report To: **Jonathan Zinders @ antegroup.com**  
Copy To: **td.kennin@antegroup.com**  
Purchase Order No.: **68810m**  
Project Name: **Superior Terminal**  
Project Number: **WISUP181**

**Section C**  
Invoice Information:

Attention: **Jonathan Zinders**  
Company Name: **Antea Group**  
Address: **5910 Rice Creek Pkwy**  
City/State: **Shoreview, MN**  
Reference: **CHRIS HYSTKA**  
Pace Project Manager: **WISUP181**  
Pace Profile #:

REGULATORY AGENCY: **WI**  
NPDES  GROUND WATER  DRINKING WATER   
UST  RCRA  OTHER   
Site Location: **WI**  
STATE: **WI**

2217223

ITEM #	Section D Required Client Information MATRIX CODE	Matrix Codes MATRIX CODE DW Drinking Water WT Water WW Waste Water P Product SL Soil/Solid OL Oil WP Wipe AR Air TS Tissue OT Other	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.		
					COMPOSITE START	COMPOSITE END/GRAB							H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol					Other	Y
1	MWM-10D		WT G						6/28	16:00		3									X			001
2	MW-4SD																				X			002
3	MW-37DD																				X			003
4	MW-41DD																				X			004
5	MW-37DD																				X			005
6	MW-37D																				X			006
7	MW-37D Dup																				X			007
8	MW-36																				X			008
9	MWM-7D																				X			009
10	MWM-9RD																				X			010
11	MWM-9RD Dup																				X			011
12	MWT-2D																				X			012

**ADDITIONAL COMMENTS:**  
Send to G.B.  
Overnight Shipping

**RELINQUISHED BY / AFFILIATION:**  
Todd Kennin / AG  
Date: 6/28/18  
Time: 13:06

**ACCEPTED BY / AFFILIATION:**  
Aller Rice  
Date: 6/28/18  
Time: 13:06

**SAMPLE CONDITIONS:**  
Temp in °C: 18  
Received on Ice (Y/N): Y  
Custody Sealed Cooler (Y/N): Y  
Samples Intact (Y/N): Y

**SAMPLER NAME AND SIGNATURE:**  
PRINT Name of SAMPLER: **Todd Kennin**  
SIGNATURE of SAMPLER: **Todd Kennin**  
DATE Signed (MM/DD/YY): **6/28/18**

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

**CHAIN-OF-CUSTODY / Analytical Request Document**  
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

48171802

Section A Required Client Information: Company: Antea Group  
Section B Required Project Information: Report To: Jonathan Zinders @ anteagrp.com  
Section C Invoice Information: All Affiliations: Jonathan Zinders

Address: 5910 Rice Creek Pkwy  
Copy To: todd.kreminin@anteagr.com  
Purchase Order No.:  
Project Name: Superior Terminal  
Requested Due Date/AT: Standard  
Project Number: W150P181

Company Name: Antea Group  
Address: 5910 Rice Creek Pkwy  
REGULATORY AGENCY: NPDES GROUND WATER DRINKING WATER  
UST RORA OTHER

Site Location STATE: WI  
Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
					COMPOSITE START	COMPOSITE END/GRAB							
1	MWT-2 D DUP		WT 6		DATE	TIME	DATE	TIME	Unpreserved				
2	Trip Blank								H <sub>2</sub> SO <sub>4</sub>	X			013
3									HNO <sub>3</sub>				014
4									HCl				
5									NaOH				
6									Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>				
7									Methanol				
8									Other				
9													
10													
11													
12													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Send to G.B.	Todd Kreminin / AG	6/28/18	13:06	Agneron	6/28/18	13:06	Temp in °C: 1.8 Received on Ice (Y/N): Y Custody Sealed Cooler (Y/N): N Samples Intact (Y/N): Y
Overnight Shipping	Fedex	6/28/18	09:38	Olivera	6/28/18	09:38	Temp in °C: 3 Received on Ice (Y/N): Y Custody Sealed Cooler (Y/N): Y Samples Intact (Y/N): Y

ORIGINAL

SAMPLER NAME AND SIGNATURE: PRINT Name of SAMPLER: Todd Kreminin  
SIGNATURE of SAMPLER: Todd Kreminin  
DATE Signed (MM/DD/YY): 6/28/18

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.  
F-ALL-Q-020rev.07.15-May-2007



# Sample Preservation Receipt Form

Client Name: Antea Project # 5071802

All containers needing preservation have been checked and noted below:  Yes  No  N/A  
 Lab Lot# of pH paper: \_\_\_\_\_ Lab Sid #ID of preservation (if pH adjusted): \_\_\_\_\_

Initial when completed: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Pace Analytical Services, LLC  
 1241 Bellevue Street, Suite 9  
 Green Bay, WI 54302

Pace Lab #	Glass	Plastic	Vials	Jars	General	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)						
													BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N
001												2.5 / 5 / 10						
002												2.5 / 5 / 10						
003												2.5 / 5 / 10						
004												2.5 / 5 / 10						
005												2.5 / 5 / 10						
006												2.5 / 5 / 10						
007												2.5 / 5 / 10						
008												2.5 / 5 / 10						
009												2.5 / 5 / 10						
010												2.5 / 5 / 10						
011												2.5 / 5 / 10						
012												2.5 / 5 / 10						
013												2.5 / 5 / 10						
014												2.5 / 5 / 10						
015												2.5 / 5 / 10						
016												2.5 / 5 / 10						
017												2.5 / 5 / 10						
018												2.5 / 5 / 10						
019												2.5 / 5 / 10						
020												2.5 / 5 / 10						

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: \_\_\_\_\_  
 Headspace in VOA Vials (<6mm):  Yes  No  N/A \*If yes look in headspace column

AG1U 1 liter amber glass AG1H 1 liter amber glass HCL AG4S 125 ml amber glass H2SO4 AG4U 120 ml amber glass unpres AG5U 100 ml amber glass unpres AG2S 500 ml amber glass H2SO4 BG3U 250 ml clear glass unpres	BP1U 1 liter plastic unpres BP2N 500 ml plastic HNO3 BP2Z 500 ml plastic NaOH, Znact BP3U 250 ml plastic unpres BP3C 250 ml plastic NaOH BP3N 250 ml plastic HNO3 BP3S 250 ml plastic H2SO4	DG9A 40 ml amber ascorbic DG9T 40 ml amber Na Thio VG9U 40 ml clear vial unpres VG9H 40 ml clear vial HCL VG9M 40 ml clear vial MeOH VG9D 40 ml clear vial DI	JGFU 4 oz amber jar unpres WGFU 4 oz clear jar unpres WPFU 4 oz plastic jar unpres SP5T 120 ml plastic Na Thiosulfate ZPLC ziploc bag GN
--	---	--	---

**Sample Condition Upon Receipt Form (SCUR)**

Project #: \_\_\_\_\_

Client Name: Antea

**WO# : 40171802**

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Waitco  
 Client  Pace Other: \_\_\_\_\_



Tracking #: 6779 8846 3694

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

Custody Seal on Samples Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR - 69 Type of Ice:  Wet  Blue  Dry  None  Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3 / Corr: 3

Temp Blank Present:  yes  no Biological Tissue is Frozen:  yes  no

Person examining contents:  
Date: 4/25/18  
Initials: [Signature]

Temp should be above freezing to 6°C.  
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
-Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): _____		

**Client Notification/ Resolution:** \_\_\_\_\_ If checked, see attached form for additional comments   
Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
Comments/ Resolution: \_\_\_\_\_

Project Manager Review: [Signature] Date: 4/2/18

July 06, 2018

Jonathan Zimdars  
Antea Group - MN  
5910 Rice Creek Parkway  
Saint Paul, MN 55126

RE: Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171812

Dear Jonathan Zimdars:

Enclosed are the analytical results for sample(s) received by the laboratory on June 29, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Christopher Hyska  
christopher.hyska@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Todd Kremmin, Antea Group



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

---

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40171812001	MW-30S	Water	06/27/18 11:45	06/29/18 09:15
40171812002	MW-30D	Water	06/27/18 12:15	06/29/18 09:15
40171812003	MW-30DDD	Water	06/27/18 12:55	06/29/18 09:15
40171812004	LRMW-1	Water	06/27/18 10:40	06/29/18 09:15
40171812005	LRMW-9	Water	06/27/18 11:20	06/29/18 09:15
40171812006	MWRR-1D	Water	06/28/18 12:15	06/29/18 09:15
40171812007	RWAST-1	Water	06/27/18 10:45	06/29/18 09:15
40171812008	RWAST-2	Water	06/28/18 09:10	06/29/18 09:15
40171812009	MWAST-8	Water	06/27/18 11:05	06/29/18 09:15
40171812010	MWAST-8 DUP	Water	06/27/18 11:20	06/29/18 09:15
40171812011	TRIP BLANK	Water	06/27/18 00:00	06/29/18 09:15

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171812

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40171812001	MW-30S	WI MOD GRO	PMS	10	PASI-G
40171812002	MW-30D	WI MOD GRO	PMS	10	PASI-G
40171812003	MW-30DDD	WI MOD GRO	PMS	10	PASI-G
40171812004	LRMW-1	WI MOD GRO	PMS	10	PASI-G
40171812005	LRMW-9	WI MOD GRO	PMS	10	PASI-G
40171812006	MWRR-1D	WI MOD GRO	PMS	10	PASI-G
40171812007	RWAST-1	WI MOD GRO	PMS	10	PASI-G
40171812008	RWAST-2	WI MOD GRO	PMS	10	PASI-G
40171812009	MWAST-8	WI MOD GRO	PMS	10	PASI-G
40171812010	MWAST-8 DUP	WI MOD GRO	PMS	10	PASI-G
40171812011	TRIP BLANK	WI MOD GRO	PMS	10	PASI-G

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## PROJECT NARRATIVE

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171812

---

**Method:** WI MOD GRO  
**Description:** WIGRO GCV  
**Client:** Antea Group  
**Date:** July 06, 2018

### General Information:

11 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

- pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.
- MWRR-1D (Lab ID: 40171812006)

### Hold Time:

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

### Initial Calibrations (including MS Tune as applicable):

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

### Continuing Calibration:

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

### Surrogates:

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

### Method Blank:

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

### Laboratory Control Spike:

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

### Matrix Spikes:

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

### Additional Comments:

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

Sample: **MW-30S** Lab ID: **40171812001** Collected: 06/27/18 11:45 Received: 06/29/18 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<b>685</b>	ug/L	10.2	3.1	10		07/03/18 14:11	71-43-2	
Ethylbenzene	<b>184</b>	ug/L	11.0	3.3	10		07/03/18 14:11	100-41-4	
Methyl-tert-butyl ether	<b>18.7</b>	ug/L	10.7	3.2	10		07/03/18 14:11	1634-04-4	
Naphthalene	<b>120</b>	ug/L	16.8	5.1	10		07/03/18 14:11	91-20-3	
Toluene	<b>126</b>	ug/L	16.3	4.9	10		07/03/18 14:11	108-88-3	
1,2,4-Trimethylbenzene	<b>71.9</b>	ug/L	11.4	3.4	10		07/03/18 14:11	95-63-6	
1,3,5-Trimethylbenzene	<b>38.4</b>	ug/L	10.9	3.3	10		07/03/18 14:11	108-67-8	
m&p-Xylene	<b>136</b>	ug/L	21.8	6.6	10		07/03/18 14:11	179601-23-1	
o-Xylene	<b>48.7</b>	ug/L	10.5	3.2	10		07/03/18 14:11	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103	%	80-120		10		07/03/18 14:11	98-08-8	

Sample: **MW-30D** Lab ID: **40171812002** Collected: 06/27/18 12:15 Received: 06/29/18 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<b>1930</b>	ug/L	25.5	7.6	25		07/03/18 15:53	71-43-2	
Ethylbenzene	<b>59.2</b>	ug/L	27.5	8.2	25		07/03/18 15:53	100-41-4	
Methyl-tert-butyl ether	<b>&lt;8.0</b>	ug/L	26.8	8.0	25		07/03/18 15:53	1634-04-4	
Naphthalene	<b>200</b>	ug/L	42.0	12.6	25		07/03/18 15:53	91-20-3	
Toluene	<b>72.7</b>	ug/L	40.8	12.2	25		07/03/18 15:53	108-88-3	
1,2,4-Trimethylbenzene	<b>9.4J</b>	ug/L	28.5	8.6	25		07/03/18 15:53	95-63-6	
1,3,5-Trimethylbenzene	<b>&lt;8.2</b>	ug/L	27.2	8.2	25		07/03/18 15:53	108-67-8	
m&p-Xylene	<b>62.4</b>	ug/L	54.5	16.4	25		07/03/18 15:53	179601-23-1	
o-Xylene	<b>&lt;7.9</b>	ug/L	26.2	7.9	25		07/03/18 15:53	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		25		07/03/18 15:53	98-08-8	

Sample: **MW-30DDD** Lab ID: **40171812003** Collected: 06/27/18 12:55 Received: 06/29/18 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<b>&lt;0.31</b>	ug/L	1.0	0.31	1		07/02/18 11:24	71-43-2	
Ethylbenzene	<b>&lt;0.33</b>	ug/L	1.1	0.33	1		07/02/18 11:24	100-41-4	
Methyl-tert-butyl ether	<b>&lt;0.32</b>	ug/L	1.1	0.32	1		07/02/18 11:24	1634-04-4	
Naphthalene	<b>&lt;0.51</b>	ug/L	1.7	0.51	1		07/02/18 11:24	91-20-3	
Toluene	<b>&lt;0.49</b>	ug/L	1.6	0.49	1		07/02/18 11:24	108-88-3	
1,2,4-Trimethylbenzene	<b>&lt;0.34</b>	ug/L	1.1	0.34	1		07/02/18 11:24	95-63-6	
1,3,5-Trimethylbenzene	<b>&lt;0.33</b>	ug/L	1.1	0.33	1		07/02/18 11:24	108-67-8	
m&p-Xylene	<b>&lt;0.66</b>	ug/L	2.2	0.66	1		07/02/18 11:24	179601-23-1	
o-Xylene	<b>&lt;0.32</b>	ug/L	1.0	0.32	1		07/02/18 11:24	95-47-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

**Sample: MW-30DDD**      **Lab ID: 40171812003**      Collected: 06/27/18 12:55      Received: 06/29/18 09:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----	-----	----	----------	----------	---------	------

**WIGRO GCV**      Analytical Method: WI MOD GRO

**Surrogates**

a,a,a-Trifluorotoluene (S)	102	%	80-120		1		07/02/18 11:24	98-08-8	
----------------------------	-----	---	--------	--	---	--	----------------	---------	--

**Sample: LRMW-1**      **Lab ID: 40171812004**      Collected: 06/27/18 10:40      Received: 06/29/18 09:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----	-----	----	----------	----------	---------	------

**WIGRO GCV**      Analytical Method: WI MOD GRO

Benzene	<b>6850</b>	ug/L	128	38.2	125		07/02/18 13:59	71-43-2	
Ethylbenzene	<b>859</b>	ug/L	138	41.1	125		07/02/18 13:59	100-41-4	
Methyl-tert-butyl ether	<b>&lt;40.0</b>	ug/L	134	40.0	125		07/02/18 13:59	1634-04-4	
Naphthalene	<b>303</b>	ug/L	210	63.2	125		07/02/18 13:59	91-20-3	
Toluene	<b>1740</b>	ug/L	204	61.1	125		07/02/18 13:59	108-88-3	
1,2,4-Trimethylbenzene	<b>593</b>	ug/L	142	42.8	125		07/02/18 13:59	95-63-6	
1,3,5-Trimethylbenzene	<b>176</b>	ug/L	136	41.0	125		07/02/18 13:59	108-67-8	
m&p-Xylene	<b>2070</b>	ug/L	272	81.9	125		07/02/18 13:59	179601-23-1	
o-Xylene	<b>644</b>	ug/L	131	39.4	125		07/02/18 13:59	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		125		07/02/18 13:59	98-08-8	

**Sample: LRMW-9**      **Lab ID: 40171812005**      Collected: 06/27/18 11:20      Received: 06/29/18 09:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	-----	-----	----	----------	----------	---------	------

**WIGRO GCV**      Analytical Method: WI MOD GRO

Benzene	<b>2270</b>	ug/L	40.8	12.2	40		07/03/18 12:53	71-43-2	
Ethylbenzene	<b>178</b>	ug/L	44.0	13.2	40		07/03/18 12:53	100-41-4	
Methyl-tert-butyl ether	<b>&lt;12.8</b>	ug/L	42.8	12.8	40		07/03/18 12:53	1634-04-4	
Naphthalene	<b>31.0J</b>	ug/L	67.2	20.2	40		07/03/18 12:53	91-20-3	
Toluene	<b>713</b>	ug/L	65.2	19.6	40		07/03/18 12:53	108-88-3	
1,2,4-Trimethylbenzene	<b>98.0</b>	ug/L	45.6	13.7	40		07/03/18 12:53	95-63-6	
1,3,5-Trimethylbenzene	<b>39.5J</b>	ug/L	43.6	13.1	40		07/03/18 12:53	108-67-8	
m&p-Xylene	<b>275</b>	ug/L	87.2	26.2	40		07/03/18 12:53	179601-23-1	
o-Xylene	<b>92.3</b>	ug/L	42.0	12.6	40		07/03/18 12:53	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		40		07/03/18 12:53	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

Sample: MWRR-1D      Lab ID: 40171812006      Collected: 06/28/18 12:15      Received: 06/29/18 09:15      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	50.6	ug/L	1.0	0.31	1		07/02/18 11:50	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 11:50	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		07/02/18 11:50	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		07/02/18 11:50	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		07/02/18 11:50	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		07/02/18 11:50	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 11:50	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		07/02/18 11:50	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		07/02/18 11:50	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	97	%	80-120		1		07/02/18 11:50	98-08-8	HS,pH

Sample: RWAST-1      Lab ID: 40171812007      Collected: 06/27/18 10:45      Received: 06/29/18 09:15      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	2770	ug/L	51.0	15.3	50		07/03/18 11:36	71-43-2	
Ethylbenzene	557	ug/L	55.0	16.4	50		07/03/18 11:36	100-41-4	
Methyl-tert-butyl ether	<16.0	ug/L	53.5	16.0	50		07/03/18 11:36	1634-04-4	
Naphthalene	104	ug/L	84.0	25.3	50		07/03/18 11:36	91-20-3	
Toluene	1200	ug/L	81.5	24.4	50		07/03/18 11:36	108-88-3	
1,2,4-Trimethylbenzene	192	ug/L	57.0	17.1	50		07/03/18 11:36	95-63-6	
1,3,5-Trimethylbenzene	67.2	ug/L	54.5	16.4	50		07/03/18 11:36	108-67-8	
m&p-Xylene	960	ug/L	109	32.8	50		07/03/18 11:36	179601-23-1	
o-Xylene	345	ug/L	52.5	15.8	50		07/03/18 11:36	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	109	%	80-120		50		07/03/18 11:36	98-08-8	

Sample: RWAST-2      Lab ID: 40171812008      Collected: 06/28/18 09:10      Received: 06/29/18 09:15      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	1460	ug/L	25.5	7.6	25		07/03/18 13:19	71-43-2	
Ethylbenzene	433	ug/L	27.5	8.2	25		07/03/18 13:19	100-41-4	
Methyl-tert-butyl ether	21.1J	ug/L	26.8	8.0	25		07/03/18 13:19	1634-04-4	
Naphthalene	149	ug/L	42.0	12.6	25		07/03/18 13:19	91-20-3	
Toluene	638	ug/L	40.8	12.2	25		07/03/18 13:19	108-88-3	
1,2,4-Trimethylbenzene	436	ug/L	28.5	8.6	25		07/03/18 13:19	95-63-6	
1,3,5-Trimethylbenzene	154	ug/L	27.2	8.2	25		07/03/18 13:19	108-67-8	
m&p-Xylene	1030	ug/L	54.5	16.4	25		07/03/18 13:19	179601-23-1	
o-Xylene	369	ug/L	26.2	7.9	25		07/03/18 13:19	95-47-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

Sample: RWAST-2      Lab ID: 40171812008      Collected: 06/28/18 09:10      Received: 06/29/18 09:15      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
<i>Surrogates</i>									
a,a,a-Trifluorotoluene (S)	105	%	80-120		25		07/03/18 13:19	98-08-8	

Sample: MWAST-8      Lab ID: 40171812009      Collected: 06/27/18 11:05      Received: 06/29/18 09:15      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	2840	ug/L	40.8	12.2	40		07/03/18 11:11	71-43-2	
Ethylbenzene	596	ug/L	44.0	13.2	40		07/03/18 11:11	100-41-4	
Methyl-tert-butyl ether	<12.8	ug/L	42.8	12.8	40		07/03/18 11:11	1634-04-4	
Naphthalene	260	ug/L	67.2	20.2	40		07/03/18 11:11	91-20-3	
Toluene	514	ug/L	65.2	19.6	40		07/03/18 11:11	108-88-3	
1,2,4-Trimethylbenzene	583	ug/L	45.6	13.7	40		07/03/18 11:11	95-63-6	
1,3,5-Trimethylbenzene	215	ug/L	43.6	13.1	40		07/03/18 11:11	108-67-8	
m&p-Xylene	1310	ug/L	87.2	26.2	40		07/03/18 11:11	179601-23-1	
o-Xylene	323	ug/L	42.0	12.6	40		07/03/18 11:11	95-47-6	
<i>Surrogates</i>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		40		07/03/18 11:11	98-08-8	

Sample: MWAST-8 DUP      Lab ID: 40171812010      Collected: 06/27/18 11:20      Received: 06/29/18 09:15      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	2210	ug/L	40.8	12.2	40		07/03/18 12:28	71-43-2	
Ethylbenzene	453	ug/L	44.0	13.2	40		07/03/18 12:28	100-41-4	
Methyl-tert-butyl ether	<12.8	ug/L	42.8	12.8	40		07/03/18 12:28	1634-04-4	
Naphthalene	198	ug/L	67.2	20.2	40		07/03/18 12:28	91-20-3	
Toluene	356	ug/L	65.2	19.6	40		07/03/18 12:28	108-88-3	
1,2,4-Trimethylbenzene	481	ug/L	45.6	13.7	40		07/03/18 12:28	95-63-6	
1,3,5-Trimethylbenzene	179	ug/L	43.6	13.1	40		07/03/18 12:28	108-67-8	
m&p-Xylene	1010	ug/L	87.2	26.2	40		07/03/18 12:28	179601-23-1	
o-Xylene	236	ug/L	42.0	12.6	40		07/03/18 12:28	95-47-6	
<i>Surrogates</i>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		40		07/03/18 12:28	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

**Sample: TRIP BLANK**      **Lab ID: 40171812011**      Collected: 06/27/18 00:00      Received: 06/29/18 09:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO							
Benzene	<0.31	ug/L	1.0	0.31	1		07/02/18 15:41	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 15:41	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		07/02/18 15:41	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		07/02/18 15:41	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		07/02/18 15:41	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		07/02/18 15:41	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		07/02/18 15:41	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		07/02/18 15:41	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		07/02/18 15:41	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103	%	80-120		1		07/02/18 15:41	98-08-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

QC Batch:	293385	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40171812001, 40171812002, 40171812003, 40171812004, 40171812005, 40171812006, 40171812007, 40171812008, 40171812009, 40171812010, 40171812011		

METHOD BLANK:	1716283	Matrix:	Water
Associated Lab Samples:	40171812001, 40171812002, 40171812003, 40171812004, 40171812005, 40171812006, 40171812007, 40171812008, 40171812009, 40171812010, 40171812011		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	07/02/18 09:30	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	07/02/18 09:30	
Benzene	ug/L	<0.31	1.0	07/02/18 09:30	
Ethylbenzene	ug/L	<0.33	1.1	07/02/18 09:30	
m&p-Xylene	ug/L	<0.66	2.2	07/02/18 09:30	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	07/02/18 09:30	
Naphthalene	ug/L	<0.51	1.7	07/02/18 09:30	
o-Xylene	ug/L	<0.32	1.0	07/02/18 09:30	
Toluene	ug/L	<0.49	1.6	07/02/18 09:30	
a,a,a-Trifluorotoluene (S)	%	103	80-120	07/02/18 09:30	

Parameter	Units	1716285		1716285		% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	% Rec				
1,2,4-Trimethylbenzene	ug/L	20	22.2	22.1	111	110	80-120	1	20
1,3,5-Trimethylbenzene	ug/L	20	21.7	21.5	109	108	80-120	1	20
Benzene	ug/L	20	21.0	21.1	105	106	80-120	0	20
Ethylbenzene	ug/L	20	21.9	21.7	109	109	80-120	1	20
m&p-Xylene	ug/L	40	43.6	43.1	109	108	80-120	1	20
Methyl-tert-butyl ether	ug/L	20	20.5	19.7	102	99	80-120	4	20
Naphthalene	ug/L	20	22.4	21.6	112	108	80-120	4	20
o-Xylene	ug/L	20	21.9	21.4	109	107	80-120	2	20
Toluene	ug/L	20	21.5	21.5	107	108	80-120	0	20
a,a,a-Trifluorotoluene (S)	%				101	103	80-120		

Parameter	Units	1716495		1716496		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.					
1,2,4-Trimethylbenzene	ug/L	71.9	200	283	277	106	102	51-160	2	20
1,3,5-Trimethylbenzene	ug/L	38.4	200	246	241	104	101	56-146	2	20
Benzene	ug/L	685	200	914	891	114	103	71-137	2	20
Ethylbenzene	ug/L	184	200	397	389	106	103	71-141	2	20
m&p-Xylene	ug/L	136	400	544	537	102	100	66-141	1	20
Methyl-tert-butyl ether	ug/L	18.7	200	210	213	95	97	80-120	2	20
Naphthalene	ug/L	120	200	333	335	106	107	67-138	1	20
o-Xylene	ug/L	48.7	200	251	245	101	98	75-133	2	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

Parameter	Units	40171812001		1716495		1716496		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS Result	MSD Result							
Toluene	ug/L	126	200	332	326	103	100	76-134	2	20				
a,a,a-Trifluorotoluene (S)	%					102	104	80-120						

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40171812

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

### ANALYTE QUALIFIERS

HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40171812

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40171812001	MW-30S	WI MOD GRO	293385		
40171812002	MW-30D	WI MOD GRO	293385		
40171812003	MW-30DDD	WI MOD GRO	293385		
40171812004	LRMW-1	WI MOD GRO	293385		
40171812005	LRMW-9	WI MOD GRO	293385		
40171812006	MWRR-1D	WI MOD GRO	293385		
40171812007	RWAST-1	WI MOD GRO	293385		
40171812008	RWAST-2	WI MOD GRO	293385		
40171812009	MWAST-8	WI MOD GRO	293385		
40171812010	MWAST-8 DUP	WI MOD GRO	293385		
40171812011	TRIP BLANK	WI MOD GRO	293385		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



**CHAIN-OF-CUSTODY / Analytical Request Document**  
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

**Section A** Required Client Information: **Section B** Required Project Information: **Section C** Invoice Information:

Company: **Antea Group** Report To: **Jonathan Zindars @antegrapp.com** Attention: **Jonathan Zindars**  
 Address: **5910 Rice Creek Plaza** Copy To: **todd.kremmin @antegrapp.com** Company Name: **Antea Group**  
 Email To: **todd.kremmin @antegrapp.com** Purchase Order No.: **5910 Rice Creek Pruy**  
 Phone: **651-587-0688** Project Name: **Superior Terminal** Address: **5910 Rice Creek Pruy**  
 Requested Due Date/TAT: **Standard** Project Number: **WISDP181** Page Quote Reference: **WISDP181**  
 Page Project Manager: **Chris Huston** Page Profile #: **WISDP181**

REGULATORY AGENCY: **NPDES**  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER  
 Site Location STATE: **WI**

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	Matrix Code (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED			SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
					COMPOSITE START	COMPOSITE END/GRAB	DATE			TIME	DATE	TIME	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl				
1	MW-305		WTG	G			6/28/18	11:45		3	X	X	X	X	X	X	X	X	001	
2	MW-30D							12:15		X	X	X	X	X	X	X	X	X	002	
3	MW-30DDD							12:55		X	X	X	X	X	X	X	X	X	003	
4	LRMW-1							10:40		X	X	X	X	X	X	X	X	X	004	
5	LRMW-9							11:20		X	X	X	X	X	X	X	X	X	005	
6	MWR-1D							12:15		X	X	X	X	X	X	X	X	X	006	
7	RWAST-1							6/28/18 10:45		X	X	X	X	X	X	X	X	X	007	
8	RWAST-2							6/28/18 09:10		X	X	X	X	X	X	X	X	X	008	
9	MWAST-8							6/28/18 11:05		X	X	X	X	X	X	X	X	X	009	
10	MWAST-8 Dup							6/28/18 11:20		X	X	X	X	X	X	X	X	X	010	
11	Trip Blank									2									011	
12																				

**ADDITIONAL COMMENTS**: Send to G.B. Overnight Shipping

**RELINQUISHED BY / AFFILIATION**: Todd Kremmin / AG  
**DATE**: 6/28/18  
**TIME**: 13:07

**ACCEPTED BY / AFFILIATION**: [Signature]  
**DATE**: 6/28/18  
**TIME**: 13:07

**SAMPLE CONDITIONS**: 19 4 4 4 4 4 4 4 4 4 4 4

**ORIGINAL**

**SAMPLER NAME AND SIGNATURE**: [Signature]  
**PRINT Name of SAMPLER**: Todd Kremmin  
**SIGNATURE of SAMPLER**: [Signature]  
**DATE Signed (MM/DD/YY)**: 6/28/18

**Sample Preservation Receipt Form**

Client Name: Antea

Project # 40171812

All containers needing preservation have been checked and noted below:  Yes  No  N/A  
 Lab Lot# of pH paper: \_\_\_\_\_ Lab Std #ID of preservation (if pH adjusted): \_\_\_\_\_  
 Initial when completed: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Page Lab #	Glass	Plastic	Vials	Jars	General		VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
					SP5T	ZPLC GN							
001													2.5/5/10
002													2.5/5/10
003													2.5/5/10
004													2.5/5/10
005													2.5/5/10
006													2.5/5/10
007													2.5/5/10
008													2.5/5/10
009													2.5/5/10
010													2.5/5/10
011													2.5/5/10
012													2.5/5/10
013													2.5/5/10
014													2.5/5/10
015													2.5/5/10
016													2.5/5/10
017													2.5/5/10
018													2.5/5/10
019													2.5/5/10
020													2.5/5/10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: \_\_\_\_\_  
 Headspace in VOA Vials (<6mm):  Yes  No  N/A \*If yes look in headspace column

AG1U	BP1U	DG9A	JGFU
1 liter amber glass	1 liter plastic unpres	40 ml amber ascorbic	4 oz amber jar unpres
AG1H	BP2N	DG9T	WGFU
1 liter amber glass HCL	500 ml plastic HNO3	40 ml clear Na Thio	4 oz clear jar unpres
AG4S	BP2Z	VG9U	WPFU
125 ml amber glass H2SO4	500 ml plastic NaOH, Znact	40 ml clear unpres	4 oz plastic jar unpres
AG4U	BP3U	VG9H	
120 ml amber glass unpres	250 ml plastic unpres	40 ml clear HCL	
AG5U	BP3C	VG9M	
100 ml amber glass unpres	250 ml plastic NaOH	40 ml clear vial MeOH	
AG2S	BP3N	VG9D	
500 ml amber glass H2SO4	250 ml plastic HNO3	40 ml clear vial DI	
BG3U	BP3S		SP5T
250 ml clear glass unpres	250 ml plastic H2SO4		ZPLC
			GN:
			120 ml plastic Na Thiosulfate ziploc bag

**Sample Condition Upon Receipt Form (SCUR)**

Project #: \_\_\_\_\_

Client Name: Antea

**WO#: 40171812**

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Walco  
 Client  Pace Other: \_\_\_\_\_



Tracking #: \_\_\_\_\_

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

Custody Seal on Samples Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR - 69 Type of Ice:  Wet  Blue  Dry  None  Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3 / Corr: 3

Temp Blank Present:  yes  no

Biological Tissue is Frozen:  yes  no

Person examining contents:  
Date: 7/2/18  
Initials: CS

Temp should be above freezing to 6°C.  
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No - VOA Samples frozen upon receipt <input type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time: _____
Short Hold Time Analysis (<72hr): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used: <input type="checkbox"/> Yes <input type="checkbox"/> No - Pace Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A - Pace IR Containers Used: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9.
Containers Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A - Includes date/time/ID/Analysis Matrix: <u>W</u>	12. <u>IM 012418 0005 hold time 11:15, COC sent: DO</u>
Trip Blank Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): _____	

Client Notification/ Resolution: \_\_\_\_\_ If checked, see attached form for additional comments

Person Contacted: Jonathan Zindars Date/Time: 7/2/18

Comments/ Resolution: Bob all vials have heavy sediment

Proceed with analysis for Surber 006 per [signature] 7/2/18

Project Manager Review: [Signature]

Date: 7/2/18

July 06, 2018

Jonathan Zimdars  
Antea Group - MN  
5910 Rice Creek Parkway  
Saint Paul, MN 55126

RE: Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40172026

Dear Jonathan Zimdars:

Enclosed are the analytical results for sample(s) received by the laboratory on June 22, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Christopher Hyska  
christopher.hyska@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Todd Kremmin, Antea Group



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

---

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40171305012	MW-48S	Water	06/19/18 08:15	06/22/18 08:50
40171305013	MW-48D	Water	06/19/18 08:30	06/22/18 08:50
40171305014	MW-49S	Water	06/19/18 08:45	06/22/18 08:50
40171305015	MW-49D	Water	06/19/18 09:15	06/22/18 08:50
40171305016	MWM-2D	Water	06/19/18 15:20	06/22/18 08:50
40171305017	MW-30DD	Water	06/19/18 15:40	06/22/18 08:50
40171305018	MWOW-2D	Water	06/20/18 11:35	06/22/18 08:50
40171305019	MWBD-1D	Water	06/20/18 11:30	06/22/18 08:50
40171305020	MWBD-1DD	Water	06/20/18 11:50	06/22/18 08:50
40171305021	MWRR-4	Water	06/20/18 12:30	06/22/18 08:50
40171305022	LRMW-6	Water	06/20/18 12:25	06/22/18 08:50
40171305023	MWAST-3	Water	06/20/18 12:35	06/22/18 08:50
40171305024	TRIP BLANK	Water	06/20/18 12:35	06/22/18 08:50

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40171305012	MW-48S	WI MOD GRO	ALD	10	PASI-G
40171305013	MW-48D	WI MOD GRO	ALD	10	PASI-G
40171305014	MW-49S	WI MOD GRO	ALD	10	PASI-G
40171305015	MW-49D	WI MOD GRO	ALD	10	PASI-G
40171305016	MWM-2D	WI MOD GRO	ALD	10	PASI-G
40171305017	MW-30DD	WI MOD GRO	ALD	10	PASI-G
40171305018	MWOW-2D	WI MOD GRO	ALD	10	PASI-G
40171305019	MWBD-1D	WI MOD GRO	ALD	10	PASI-G
40171305020	MWBD-1DD	WI MOD GRO	ALD	10	PASI-G
40171305021	MWRR-4	WI MOD GRO	ALD	10	PASI-G
40171305022	LRMW-6	WI MOD GRO	ALD	10	PASI-G
40171305023	MWAST-3	WI MOD GRO	ALD	10	PASI-G
40171305024	TRIP BLANK	WI MOD GRO	ALD	10	PASI-G

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## PROJECT NARRATIVE

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

---

**Method:** WI MOD GRO

**Description:** WIGRO GCV

**Client:** Antea Group

**Date:** July 06, 2018

**General Information:**

13 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

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

**Initial Calibrations (including MS Tune as applicable):**

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

**Continuing Calibration:**

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

**Surrogates:**

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

**Method Blank:**

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

**Laboratory Control Spike:**

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

**Matrix Spikes:**

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

**Additional Comments:**

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL  
Project No.: 40172026

Sample: MW-48S Lab ID: 40171305012 Collected: 06/19/18 08:15 Received: 06/22/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 14:02	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 14:02	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 14:02	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 14:02	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 14:02	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 14:02	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 14:02	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 14:02	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 14:02	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		06/25/18 14:02	98-08-8	

Sample: MW-48D Lab ID: 40171305013 Collected: 06/19/18 08:30 Received: 06/22/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/25/18 19:37	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 19:37	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/25/18 19:37	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/25/18 19:37	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/25/18 19:37	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/25/18 19:37	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/25/18 19:37	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/25/18 19:37	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/25/18 19:37	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/25/18 19:37	98-08-8	

Sample: MW-49S Lab ID: 40171305014 Collected: 06/19/18 08:45 Received: 06/22/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	1660	ug/L	20.4	6.1	20		06/26/18 09:11	71-43-2	
Ethylbenzene	<6.6	ug/L	22.0	6.6	20		06/26/18 09:11	100-41-4	
Methyl-tert-butyl ether	<6.4	ug/L	21.4	6.4	20		06/26/18 09:11	1634-04-4	
Naphthalene	<10.1	ug/L	33.6	10.1	20		06/26/18 09:11	91-20-3	
Toluene	33.4	ug/L	32.6	9.8	20		06/26/18 09:11	108-88-3	
1,2,4-Trimethylbenzene	<6.8	ug/L	22.8	6.8	20		06/26/18 09:11	95-63-6	
1,3,5-Trimethylbenzene	<6.6	ug/L	21.8	6.6	20		06/26/18 09:11	108-67-8	
m&p-Xylene	<13.1	ug/L	43.6	13.1	20		06/26/18 09:11	179601-23-1	
o-Xylene	<6.3	ug/L	21.0	6.3	20		06/26/18 09:11	95-47-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

**Sample: MW-49S**      **Lab ID: 40171305014**      Collected: 06/19/18 08:45      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	98	%	80-120		20		06/26/18 09:11	98-08-8	

**Sample: MW-49D**      **Lab ID: 40171305015**      Collected: 06/19/18 09:15      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 14:58	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 14:58	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 14:58	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 14:58	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 14:58	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 14:58	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 14:58	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/27/18 14:58	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/27/18 14:58	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		06/27/18 14:58	98-08-8	

**Sample: MWM-2D**      **Lab ID: 40171305016**      Collected: 06/19/18 15:20      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 10:45	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 10:45	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 10:45	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 10:45	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 10:45	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 10:45	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 10:45	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/27/18 10:45	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/27/18 10:45	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		06/27/18 10:45	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

**Sample: MW-30DD**      **Lab ID: 40171305017**      Collected: 06/19/18 15:40      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 11:11	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 11:11	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 11:11	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 11:11	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 11:11	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 11:11	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 11:11	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/27/18 11:11	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/27/18 11:11	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		06/27/18 11:11	98-08-8	

**Sample: MWOW-2D**      **Lab ID: 40171305018**      Collected: 06/20/18 11:35      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 19:39	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 19:39	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 19:39	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 19:39	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 19:39	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 19:39	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 19:39	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/27/18 19:39	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/27/18 19:39	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		06/27/18 19:39	98-08-8	

**Sample: MWBD-1D**      **Lab ID: 40171305019**      Collected: 06/20/18 11:30      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	123	ug/L	1.0	0.31	1		06/27/18 18:23	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 18:23	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 18:23	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 18:23	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 18:23	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 18:23	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 18:23	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/27/18 18:23	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/27/18 18:23	95-47-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

Sample: MWBD-1D      Lab ID: 40171305019      Collected: 06/20/18 11:30      Received: 06/22/18 08:50      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	97	%	80-120		1		06/27/18 18:23	98-08-8	

Sample: MWBD-1DD      Lab ID: 40171305020      Collected: 06/20/18 11:50      Received: 06/22/18 08:50      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 20:05	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 20:05	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 20:05	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 20:05	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 20:05	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 20:05	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 20:05	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/27/18 20:05	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/27/18 20:05	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		06/27/18 20:05	98-08-8	

Sample: MWRR-4      Lab ID: 40171305021      Collected: 06/20/18 12:30      Received: 06/22/18 08:50      Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	323	ug/L	4.1	1.2	4		06/27/18 17:32	71-43-2	
Ethylbenzene	38.1	ug/L	4.4	1.3	4		06/27/18 17:32	100-41-4	
Methyl-tert-butyl ether	2.6J	ug/L	4.3	1.3	4		06/27/18 17:32	1634-04-4	
Naphthalene	136	ug/L	6.7	2.0	4		06/27/18 17:32	91-20-3	
Toluene	43.4	ug/L	6.5	2.0	4		06/27/18 17:32	108-88-3	
1,2,4-Trimethylbenzene	130	ug/L	4.6	1.4	4		06/27/18 17:32	95-63-6	
1,3,5-Trimethylbenzene	132	ug/L	4.4	1.3	4		06/27/18 17:32	108-67-8	
m&p-Xylene	286	ug/L	8.7	2.6	4		06/27/18 17:32	179601-23-1	
o-Xylene	215	ug/L	4.2	1.3	4		06/27/18 17:32	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	110	%	80-120		4		06/27/18 17:32	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

**Sample: LRMW-6**      **Lab ID: 40171305022**      Collected: 06/20/18 12:25      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	1060	ug/L	20.4	6.1	20		06/27/18 16:41	71-43-2	
Ethylbenzene	1290	ug/L	22.0	6.6	20		06/27/18 16:41	100-41-4	
Methyl-tert-butyl ether	8.4J	ug/L	21.4	6.4	20		06/27/18 16:41	1634-04-4	
Naphthalene	127	ug/L	33.6	10.1	20		06/27/18 16:41	91-20-3	
Toluene	143	ug/L	32.6	9.8	20		06/27/18 16:41	108-88-3	
1,2,4-Trimethylbenzene	674	ug/L	22.8	6.8	20		06/27/18 16:41	95-63-6	
1,3,5-Trimethylbenzene	161	ug/L	21.8	6.6	20		06/27/18 16:41	108-67-8	
m&p-Xylene	1460	ug/L	43.6	13.1	20		06/27/18 16:41	179601-23-1	
o-Xylene	58.9	ug/L	21.0	6.3	20		06/27/18 16:41	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		20		06/27/18 16:41	98-08-8	

**Sample: MWAST-3**      **Lab ID: 40171305023**      Collected: 06/20/18 12:35      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 20:30	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 20:30	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 20:30	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 20:30	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 20:30	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 20:30	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 20:30	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/27/18 20:30	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/27/18 20:30	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		06/27/18 20:30	98-08-8	

**Sample: TRIP BLANK**      **Lab ID: 40171305024**      Collected: 06/20/18 12:35      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 15:24	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 15:24	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 15:24	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 15:24	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 15:24	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 15:24	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 15:24	108-67-8	
m&p-Xylene	<0.66	ug/L	2.2	0.66	1		06/27/18 15:24	179601-23-1	
o-Xylene	<0.32	ug/L	1.0	0.32	1		06/27/18 15:24	95-47-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

---

**Sample: TRIP BLANK**      **Lab ID: 40171305024**      Collected: 06/20/18 12:35      Received: 06/22/18 08:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO							
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		06/27/18 15:24	98-08-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40172026

QC Batch: 292697 Analysis Method: WI MOD GRO  
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water  
Associated Lab Samples: 40171305012, 40171305013, 40171305014

METHOD BLANK: 1711758 Matrix: Water  
Associated Lab Samples: 40171305012, 40171305013, 40171305014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	06/25/18 09:44	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	06/25/18 09:44	
Benzene	ug/L	<0.31	1.0	06/25/18 09:44	
Ethylbenzene	ug/L	<0.33	1.1	06/25/18 09:44	
m&p-Xylene	ug/L	<0.66	2.2	06/25/18 09:44	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	06/25/18 09:44	
Naphthalene	ug/L	<0.51	1.7	06/25/18 09:44	
o-Xylene	ug/L	<0.32	1.0	06/25/18 09:44	
Toluene	ug/L	<0.49	1.6	06/25/18 09:44	
a,a,a-Trifluorotoluene (S)	%	99	80-120	06/25/18 09:44	

LABORATORY CONTROL SAMPLE & LCSD: 1711759 1711760

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	19.9	19.9	99	99	80-120	0	20	
1,3,5-Trimethylbenzene	ug/L	20	19.2	19.2	96	96	80-120	0	20	
Benzene	ug/L	20	19.0	18.8	95	94	80-120	1	20	
Ethylbenzene	ug/L	20	19.4	19.3	97	96	80-120	1	20	
m&p-Xylene	ug/L	40	38.4	38.2	96	95	80-120	1	20	
Methyl-tert-butyl ether	ug/L	20	20.2	19.5	101	98	80-120	3	20	
Naphthalene	ug/L	20	20.4	20.2	102	101	80-120	1	20	
o-Xylene	ug/L	20	19.2	19.2	96	96	80-120	0	20	
Toluene	ug/L	20	19.2	19.0	96	95	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				98	98	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1711989 1711990

Parameter	Units	40171305001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	19.2	17.3	96	87	51-160	10	20	
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	18.5	16.6	93	83	56-146	11	20	
Benzene	ug/L	<0.31	20	20	20.2	18.3	101	92	71-137	10	20	
Ethylbenzene	ug/L	<0.33	20	20	20.5	18.7	102	94	71-141	9	20	
m&p-Xylene	ug/L	<0.66	40	40	39.4	36.0	99	90	66-141	9	20	
Methyl-tert-butyl ether	ug/L	<0.32	20	20	19.5	18.3	98	91	80-120	7	20	
Naphthalene	ug/L	<0.51	20	20	20.2	19.3	101	96	67-138	5	20	
o-Xylene	ug/L	<0.32	20	20	19.8	18.1	99	91	75-133	9	20	
Toluene	ug/L	<0.49	20	20	20.2	18.5	101	93	76-134	8	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1711989		1711990									
Parameter	Units	40171305001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
a,a,a-Trifluorotoluene (S)	%						98	99	80-120				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL  
Pace Project No.: 40172026

QC Batch: 292964 Analysis Method: WI MOD GRO  
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water  
Associated Lab Samples: 40171305015, 40171305016, 40171305017, 40171305018, 40171305019, 40171305020, 40171305021, 40171305022, 40171305023, 40171305024

METHOD BLANK: 1713026 Matrix: Water  
Associated Lab Samples: 40171305015, 40171305016, 40171305017, 40171305018, 40171305019, 40171305020, 40171305021, 40171305022, 40171305023, 40171305024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	06/27/18 08:58	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	06/27/18 08:58	
Benzene	ug/L	<0.31	1.0	06/27/18 08:58	
Ethylbenzene	ug/L	<0.33	1.1	06/27/18 08:58	
m&p-Xylene	ug/L	<0.66	2.2	06/27/18 08:58	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	06/27/18 08:58	
Naphthalene	ug/L	<0.51	1.7	06/27/18 08:58	
o-Xylene	ug/L	<0.32	1.0	06/27/18 08:58	
Toluene	ug/L	<0.49	1.6	06/27/18 08:58	
a,a,a-Trifluorotoluene (S)	%	101	80-120	06/27/18 08:58	

LABORATORY CONTROL SAMPLE & LCSD: 1713027 1713028

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.7	20.9	104	105	80-120	1	20	
1,3,5-Trimethylbenzene	ug/L	20	20.5	20.5	102	103	80-120	0	20	
Benzene	ug/L	20	20.3	20.4	101	102	80-120	1	20	
Ethylbenzene	ug/L	20	20.8	20.8	104	104	80-120	0	20	
m&p-Xylene	ug/L	40	41.3	41.4	103	104	80-120	0	20	
Methyl-tert-butyl ether	ug/L	20	20.2	20.1	101	100	80-120	1	20	
Naphthalene	ug/L	20	19.8	19.8	99	99	80-120	0	20	
o-Xylene	ug/L	20	20.5	20.6	103	103	80-120	0	20	
Toluene	ug/L	20	20.6	20.7	103	103	80-120	0	20	
a,a,a-Trifluorotoluene (S)	%				102	102	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1713270 1713271

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40171305017 Result	Spike Conc.	Spike Conc.	MS Result						
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	21.9	20.8	109	104	51-160	5	20
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	21.4	20.5	107	103	56-146	4	20
Benzene	ug/L	<0.31	20	20	22.5	21.6	112	108	71-137	4	20
Ethylbenzene	ug/L	<0.33	20	20	22.6	21.8	113	109	71-141	4	20
m&p-Xylene	ug/L	<0.66	40	40	44.4	42.8	111	107	66-141	4	20
Methyl-tert-butyl ether	ug/L	<0.32	20	20	20.6	20.2	103	101	80-120	2	20
Naphthalene	ug/L	<0.51	20	20	19.0	19.2	95	96	67-138	1	20
o-Xylene	ug/L	<0.32	20	20	22.2	21.2	111	106	75-133	4	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

Parameter	Units	40171305017		1713270		1713271		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Toluene	ug/L	<0.49	20	20	22.7	21.9	114	109	76-134	4	20			
a,a,a-Trifluorotoluene (S)	%						102	103	80-120					

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WISUP181 SUPERIOR TERMINAL

Pace Project No.: 40172026

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40171305012	MW-48S	WI MOD GRO	292697		
40171305013	MW-48D	WI MOD GRO	292697		
40171305014	MW-49S	WI MOD GRO	292697		
40171305015	MW-49D	WI MOD GRO	292964		
40171305016	MWM-2D	WI MOD GRO	292964		
40171305017	MW-30DD	WI MOD GRO	292964		
40171305018	MWOW-2D	WI MOD GRO	292964		
40171305019	MWBD-1D	WI MOD GRO	292964		
40171305020	MWBD-1DD	WI MOD GRO	292964		
40171305021	MWRR-4	WI MOD GRO	292964		
40171305022	LRMW-6	WI MOD GRO	292964		
40171305023	MWAST-3	WI MOD GRO	292964		
40171305024	TRIP BLANK	WI MOD GRO	292964		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

(Please Print Clearly)

W0#: 10436442

IT REGION  
00 WI: 920-469-2436

Page 1 of 1

W017305

Page 18 of 21

# CHAIN OF CUSTODY

A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH  
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED?  
 (YES/NO)  
 PRESERVATION  
 (CODE)

Company Name: Antea Group  
 Branch/Location: 5910 Rice Creek Pkwy  
 Project Contact: Todd Kremmin  
 Phone: 651-587-9658  
 Project Number: WISUP181  
 Project Name: Superior Terminal  
 Project State: Wisconsin  
 Sampled By (Print): Todd Kremmin  
 Sampled By (Sign): Todd Kremmin  
 PO #: WISUP181  
 Regulatory Program:

**Data Package Options**  
 EPA Level III  
 EPA Level IV  
 On your sample (billable)  
 NOT needed on your sample

**Matrix Codes**  
 A = Air  
 B = Biota  
 C = Charcoal  
 O = Oil  
 S = Soil  
 SI = Sludge  
 W = Water  
 DW = Drinking Water  
 GW = Ground Water  
 SW = Surface Water  
 WW = Waste Water  
 WP = Wipe

PACE LAB #	CLIENT FIELD ID	DATE	COLLECTION TIME	MATRIX
001	NW-485	6/19/18	08:15	W
002	NW-48D		08:30	W
003	NW-49S		09:45	W
004	NW-49D		09:15	W
005	NW-2D		15:20	W
006	NW-30DD		19:40	W
007	MWOW-2D	6/20/18	11:35	W
008	MWBD-1D		11:30	W
009	MWBD-1DD		11:50	W
010	MWR-4		12:30	W
011	LRMW-6		12:25	W
012	MWAST-3		12:35	W
013	Trip Blank	6/20/18	-	W

### Analyses Requested

PVOC + Naph

V/I/N	Pick Letter
2	B

**Quote #:**  
 Mail To Contact: Jonathan Zinders  
 Mail To Company: Antea Group  
 Mail To Address: 5910 Rice Creek Pkwy #100  
 Shoreview, MN 55126  
 Invoice To Contact: Jonathan Zinders  
 Invoice To Company: Antea Group  
 Invoice To Address: 5910 Rice Creek Pkwy #100  
 Shoreview, MN 55126  
 Invoice To Phone: 651-587-9658  
**CLIENT COMMENTS**  
 3 containers  
**LAB COMMENTS (Lab Use Only)**  
 Profile #

**Transmit Prelim Rush Results by (complete what you want):**  
 (Rush TAT subject to approval/surcharge)  
 Date Needed:

**Relinquished By:** Todd Kremmin  
 Date/Time: 6/20/18 1400  
**Relinquished By:** [Signature]  
 Date/Time: 6/20/18 1945  
**Relinquished By:** [Signature]  
 Date/Time: 6/20/18 0800

**Received By:** [Signature]  
 Date/Time: 6/20/18 1400  
**Received By:** [Signature]  
 Date/Time: 6/20/18 1700  
**Received By:** [Signature]  
 Date/Time: 6/20/18 1948  
**Received By:** [Signature]  
 Date/Time: 6/20/18 0800

Receipt Temp = 8.7 °C  
 Sample Receipt pH  
 OK / Adjusted  
 Cooler/Custody Seal Present / Not Present  
 Intact / Not Intact

# Sample Preservation Receipt Form

Pace Analytical Services, LLC  
1241 Bellevue Street, Suite # 208  
Green Bay, WI 54306

Client Name: Antea

Project # Y0171305

All containers needing preservation have been checked and noted below:  Yes  No  N/A

Lab Lot# of pH paper:

Lab Std #ID of preservation (if pH adjusted):

Initial when completed:

Date/Time:

Pace Lab #	Glass	Plastic	Vials	Jars	General	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (ml)													
													AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N
001												2.5 / 5 / 10													
002												2.5 / 5 / 10													
003												2.5 / 5 / 10													
004												2.5 / 5 / 10													
005												2.5 / 5 / 10													
006												2.5 / 5 / 10													
007												2.5 / 5 / 10													
008												2.5 / 5 / 10													
009												2.5 / 5 / 10													
010												2.5 / 5 / 10													
011												2.5 / 5 / 10													
012												2.5 / 5 / 10													
013												2.5 / 5 / 10													
014												2.5 / 5 / 10													
015												2.5 / 5 / 10													
016												2.5 / 5 / 10													
017												2.5 / 5 / 10													
018												2.5 / 5 / 10													
019												2.5 / 5 / 10													
020												2.5 / 5 / 10													

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRQ, Phenolics, Other: Headspace in VOA Vials (>6mm):  Yes  No  N/A \*if yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 ml. amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 ml plastic HNO3	DG9T	40 ml. amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 ml amber glass H2SO4	BP2Z	500 ml plastic NaOH, Znact	VG9U	40 ml. clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 ml amber glass unpres	BP3U	250 ml plastic unpres	VG9H	40 ml. clear vial HCL		
AG5U	100 ml amber glass unpres	BP3C	250 ml plastic NaOH	VG9M	40 ml. clear vial MeOH	SP5T	120 ml. plastic Na Thiosulfate
AG2S	500 ml amber glass H2SO4	BP3N	250 ml plastic HNO3	VG9D	40 ml. clear vial DI	ZPLC	ziploc bag
BG3U	250 ml clear glass unpres	BP3S	250 ml plastic H2SO4			GN:	

Client Name: Anter

**Sample Preservation Receipt Form**

Project #: W0171305

Pace Lab #	Glass					Plastic					Vials					Jars			General			Special Tests				Volume (mL)							
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC		GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted
021																																	2.5 / 5 / 10
022																		3															2.5 / 5 / 10
023																		3															2.5 / 5 / 10
024																		2															2.5 / 5 / 10
025																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10



Document Name:  
**Sample Condition Upon Receipt (SCUR)**  
 Document No.:  
**F-GB-C-031-Rev.07**

Document Revised: 25Apr2018  
 Issuing Authority:  
 Pace Green Bay Quality Office

**Sample Condition Upon Receipt Form (SCUR)**

Project #

Client Name: Antea

WO#: **40171305**

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Walco  
 Client  Pace Other: \_\_\_\_\_



Tracking #: 1755519-2 / 1755514-1

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

Custody Seal on Samples Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR-30 Type of Ice:  Wet  Blue  Dry  None  Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3 / Corr: 3

Temp Blank Present:  yes  no

Biological Tissue is Frozen:  yes  no

Person examining contents:  
 Date: 6/22/18  
 Initials: RS

Temp should be above freezing to 6°C.  
 Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>Page not numbered</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>399</u>		

If checked, see attached form for additional comments

**Client Notification/ Resolution:**

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: CH

Date: 6/25/18



*2018 Jan.-June Progress Report  
Former Amoco Terminal  
2904 Winter Street, Superior, Wisconsin  
Antea Group Project No. WISUP181*



## ***Appendix B***

Boring Logs


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

Page 1 of 1

Facility/Project Name <b>Former Amoco Terminal</b>			License/Permit/Monitoring Number		Boring Number <b>MW-RR-10</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <b>TOD</b> Last Name: <b>Schmoller</b>			Date Drilling Started <b>06/16/2018</b>		Date Drilling Completed <b>06/16/2018</b>	
Firm: <b>Cascade Drilling</b>			Drilling Method <b>SONIC</b>			
WI Unique Well No. <b>VR359</b>	DNR Well ID No. ---	Well Name <b>MW RR-10</b>	Final Static Water Level ____ Feet MSL		Surface Elevation ____ Feet MSL	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane _____ N, _____ E			Local Grid Location Lat <b>46° 04' 028"</b> Long <b>92° 57' 44"</b>		<input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
NE 1/4 of NE 1/4 of Section 16, T 49 N, R 14 W			County <b>Douglas</b>		County Code <b>16</b>	
Facility ID			Civil Town/City/Village <b>Superior</b>			

Sample Number and Type	Length An. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1'	Top Soil											
			20'	clay Red STIFF											
			53'	SAND / Fine / Red-Brown E.O.B 53'											

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

Signature:  Firm: **Cascade Drilling**

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

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

Facility/Project Name <b>Former AMCO</b>		Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. ft. <input type="checkbox"/> S. <input type="checkbox"/> W.		Well Name <b>MW-RR-10</b>	
Facility License, Permit or Monitoring No.		Local Grid Origin (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. <b>48° 44' 0.03"</b> Long. <b>92° 7' 16.40"</b>		Wis. Unique Well No. <b>VR359</b> DNR Well ID No.	
Facility ID		St. Plane <b>MURRIN</b> ft. N. _____ ft. E. S/C/N		Date Well Installed <b>06/16/2018</b> m m d d y y y y	
Type of Well Well Code <b>1</b>		Section Location of Waste/Source <b>NE 1/4 of NE 1/4 of Sec. 16, T. 49 N, R. 14</b> <input type="checkbox"/> E <input type="checkbox"/> W		Well Installed By: Name (first, last) and Firm <b>Tom Schmalzhofer</b> <b>Cascade Drilling</b>	
Distance from Waste/Source _____ ft.		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known		Gov. Lot Number	

A. Protective pipe, top elevation	2.5 ft. MSL	1. Cap and lock?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	2.4 ft. MSL	2. Protective cover pipe:	
C. Land surface elevation	_____ ft. MSL	a. Inside diameter:	<b>4</b> in.
D. Surface seal, bottom	_____ ft. MSL or _____ ft.	b. Length:	<b>3</b> ft.
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		c. Material:	Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
13. Sieve analysis performed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	d. Additional protection?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
14. Drilling method used:	Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Other <input type="checkbox"/>	3. Surface seal:	Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99		4. Material between well casing and protective pipe:	Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
16. Drilling additives used? <input type="checkbox"/> Yes <input type="checkbox"/> No		5. Annular space seal:	a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. <b>13</b> Lbs/gal mud weight ... Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. <b>4.2</b> Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input checked="" type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
17. Source of water (attach analysis, if required): Describe <b>City of Superior</b>		6. Bentonite seal:	a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
E. Bentonite seal, top	<b>413</b> ft. MSL or _____ ft.	7. Fine sand material: Manufacturer, product name & mesh size	a. <b>WA</b> b. Volume added _____ ft <sup>3</sup>
F. Fine sand, top	<b>0 MM</b> ft. MSL or _____ ft.	8. Filter pack material: Manufacturer, product name & mesh size	a. <b>Rector Sil #2</b> b. Volume added <b>1.5</b> ft <sup>3</sup>
G. Filter pack, top	<b>48</b> ft. MSL or _____ ft.	9. Well casing:	Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
H. Screen joint, top	<b>50</b> ft. MSL or _____ ft.	10. Screen material: <b>PVC</b>	a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
I. Well bottom	<b>53</b> ft. MSL or _____ ft.	b. Manufacturer <b>Whe Products</b>	c. Slot size: <b>0.012</b> in.
J. Filter pack, bottom	<b>53</b> ft. MSL or _____ ft.	d. Slotted length: <b>1.0</b> ft.	
K. Borehole, bottom	<b>53</b> ft. MSL or _____ ft.	11. Backfill material (below filter pack):	None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
L. Borehole, diameter	<b>6"</b> in.		
M. O.D. well casing	<b>2.375</b> in.		
N. I.D. well casing	<b>2.060</b> in.		

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

Signature **John Z...** Firm **Cascade Drilling**

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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

Page 1 of 2

Facility/Project Name <u>Fromer Ames Terminal</u>			License/Permit/Monitoring Number	Boring Number <u>MW-1-BA-100</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>TODD</u> Last Name: <u>Schmalheldt</u> Firm: <u>Cascade Drilling</u>			Date Drilling Started <u>06/16/2018</u> m m d d y y y y	Date Drilling Completed m m d d y y y y
WI Unique Well No. <u>VR360</u>	DNR Well ID No.	Well Name <u>00130100</u>	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <u>N</u> <u>E</u>			Local Grid Location Lat <u>46 04 13.15</u> <input type="checkbox"/> N <input type="checkbox"/> E Long <u>92 07 19.5</u> <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID		County <u>Douglas</u>	County Code <u>16</u>	Civil Town/City or Village <u>Superior</u>

Number and Type	Length An. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1'	Top soil											
			2'20"	Red clay											
			20'63"	sand fine Red sand											
			53'	sand fine Red/Brown											
			65.5'												

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
Signature Todd R Firm Cascade Drilling

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

Facility/Project Name <u>Former Amoco Terminal</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <u>MW-1-BA-100</u>
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> <u>Lat. 46° 44' 31.2" Long. 92° 07' 19.15"</u> or	Wis. Unique Well No. <u>VR360</u> DNR Well ID No.
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed _____/_____/_____
Type of Well Well Code <u>1</u>	Section Location of Waste/Source <u>NE 1/4 of NE 1/4 of Sec. 16, T. 49 N. R. 14</u> <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm <u>1000 Schmalfeld</u> <u>Cascade</u>
Distance from Waste/Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation _____ ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in.
C. Land surface elevation _____ ft. MSL	b. Length: _____ ft.
D. Surface seal, bottom _____ ft. MSL or _____ ft.	c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/>
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 <u>Sonic</u> Other <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. <u>14</u> Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. <u>36</u> Ft <sup>3</sup> volume added for any of the above
16. Drilling additives used? <input type="checkbox"/> Yes <input type="checkbox"/> No Describe <u>City of Superior</u>	f. How installed: Tremie <input checked="" type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
17. Source of water (attach analysis, if required): _____	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
E. Bentonite seal, top <u>58</u> ft. MSL or _____ ft.	7. Fine sand material: Manufacturer, product name & mesh size a. <u>NA</u>
F. Fine sand, top <u>NA</u> ft. MSL or _____ ft.	b. Volume added _____ ft <sup>3</sup>
G. Filter pack, top <u>63</u> ft. MSL or _____ ft.	8. Filter pack material: Manufacturer, product name & mesh size a. <u>#2 Filter Sil Fil #10</u>
H. Screen joint, top <u>65</u> ft. MSL or _____ ft.	b. Volume added <u>2</u> ft <sup>3</sup>
I. Well bottom <u>68</u> ft. MSL or _____ ft.	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
J. Filter pack, bottom <u>68.5</u> ft. MSL or _____ ft.	10. Screen material: <u>PVC</u>
K. Borehole, bottom <u>68.5</u> ft. MSL or _____ ft.	a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
L. Borehole, diameter <u>6"</u> in.	b. Manufacturer <u>Wade products</u>
M. O.D. well casing <u>2.375</u> in.	c. Slot size: _____ 0. <u>1/8</u> in.
N. I.D. well casing <u>2.067</u> in.	d. Slotted length: _____ <u>3</u> ft.
	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>

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

Signature [Handwritten Signature]

Firm Cascade Drilling

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

Page 1 of 1

Facility/Project Name <u>Foxes Amoco Terminal</u>		License/Permit/Monitoring Number	Boring Number <u>MU-02-20</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Randy</u> Last Name: <u>Radtke</u> Firm: <u>Cascade Drilling</u>		Date Drilling Started <u>06.15.2018</u> m m d d y y y y	Date Drilling Completed <u>06.15.2018</u> m m d d y y y y
WI Unique Well No. <u>WR358</u>	DNR Well ID No.	Well Name <u>MU02-20</u>	Borehole Diameter <u>6</u> inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <u>N</u> , <u>ES</u>		Final Static Water Level <u>1</u> Feet MSL	Surface Elevation Feet MSL
Local Grid Location <u>NE 1/4 of NE 1/4 of Section 21, T 49 N, R 14 W</u>		Lat <u>46° 44' 2"</u>	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W
Facility ID	County <u>Douglas</u>	County Code <u>16</u>	Civil Town/City/Village <u>Superior</u>

Number and Type	Length Av. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments				
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200					
				0-3' Topsoil BLK.														
				3-10' clay Red.														
				10'-39' v-F sand - Silt.														
				E.O.B. 39'														
				Well 38'														

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

Signature Randy Radtke Firm Cascade

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

Facility/Project Name <u>Ferret Aquic Terminal</u>		Local Grid Location of Well ft. <input checked="" type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W.		Well Name <u>MW-0W-2D</u>	
Facility License, Permit or Monitoring No.		Local Grid Origin (estimated: <input type="checkbox"/> ) or Well Location <input checked="" type="checkbox"/> Lat. <u>46° 44' 20" N</u> Long. <u>92° 7' 40" W</u>		Wis. Unique Well No. <u>VR358</u> DNR Well ID No.	
Facility ID		St. Plane _____ ft. N. _____ ft. E. S/C/N		Date Well Installed <u>06/15/2018</u> m m d d y y y y	
Type of Well Well Code <u>1</u>		Section Location of Waste/Source <u>NE 1/4 of NE 1/4 of Sec. 21, T. 49 N, R. 14</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W		Well Installed By: Name (first, last) and Firm <u>Randy Radtke</u> <u>Cascade Drilling</u>	
Distance from Waste/Source _____ ft.		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known		Gov. Lot Number	

<p>A. Protective pipe, top elevation <u>2.5</u> ft. MSL</p> <p>B. Well casing, top elevation <u>2.4</u> ft. MSL</p> <p>C. Land surface elevation <u>0.0</u> ft. MSL</p> <p>D. Surface seal, bottom <u>0.0</u> ft. MSL or _____ ft.</p>		<p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: a. Inside diameter: <u>4</u> in. b. Length: <u>7</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/></p> <p>d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input checked="" type="checkbox"/></p> <p>4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/></p> <p>5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. <u>10.4</u> Lbs/gal mud weight . . . . . Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite . . . . . Bentonite-cement grout <input type="checkbox"/> 50 e. <u>28</u> Ft<sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input type="checkbox"/> 08</p> <p>6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/></p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size a. <u>NA</u> b. Volume added <u>NA</u> ft<sup>3</sup></p> <p>8. Filter pack material: Manufacturer, product name &amp; mesh size a. <u>Filaco</u> b. Volume added _____ ft<sup>3</sup></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/></p> <p>10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/></p> <p>b. Manufacturer <u>Johnson</u> c. Slot size: <u>0.010</u> in. d. Slotted length: <u>3</u> ft.</p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/></p>
--	--	--

12. USCS classification of soil near screen:  
GP  GM  GC  OW  SW  SP   
SM  SC  ML  MH  CL  CH   
Bedrock

13. Sieve analysis performed?  Yes  No

14. Drilling method used: Rotary  50  
Hollow Stem Auger  41  
Sonic Other

15. Drilling fluid used: Water  02 Air  01  
Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
Describe: \_\_\_\_\_

17. Source of water (attach analysis, if required):  
City of Superior

E. Bentonite seal, top <u>28</u> ft. MSL or _____ ft.	
F. Fine sand, top <u>NA</u> ft. MSL or _____ ft.	
G. Filter pack, top <u>33</u> ft. MSL or _____ ft.	
H. Screen joint, top <u>35</u> ft. MSL or _____ ft.	
I. Well bottom <u>38</u> ft. MSL or _____ ft.	
J. Filter pack, bottom <u>39</u> ft. MSL or _____ ft.	
K. Borehole, bottom <u>39</u> ft. MSL or _____ ft.	
L. Borehole, diameter <u>6</u> in.	
M. O.D. well casing <u>2.375</u> in.	
N. I.D. well casing <u>2.067</u> in.	

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

Signature Randy Radtke Firm Cascade Drilling

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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

Page 1 of 1

Facility/Project Name <u>Former Amso Terminal</u>		License/Permit/Monitoring Number	Boring Number <u>MW-30-000</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Randy</u> Last Name: <u>Racke</u> Firm: <u>Cascade Drilling</u>		Date Drilling Started <u>06/17/2016</u>	Date Drilling Completed <u>06/18/2016</u>
WI Unique Well No. <u>WR36L</u>	DNR Well ID No.	Well Name <u>MW-30-000</u>	Final Static Water Level Feet MSL <u>14.5</u>
Local Grid Origin <input type="checkbox"/> (estimated; <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <u>NE 1/4 of SE 1/4 of Section 16, T 49 N, R 14 W</u>		Surface Elevation Feet MSL <u>14.5</u>	Borehole Diameter <u>6</u> inches
Local Grid Location Lat <u>46° 43' 45"</u> Long <u>92° 7' 18"</u>		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID	County <u>Douglas</u>	County Code <u>16</u>	Civil Town/City/Village <u>Superior</u>

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
				0-1' Topsoil BLK. Sandy, Silt.											
				1'-14.5' Red Clay											
				14.5'-26' M.C Sands											
				26'-100' VF sand-Silt.											
				E.O.B. 100' well @ 99'											

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

Signature Randy Racke Firm Cascade Drilling

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



Facility/Project Name <u>Former Amoco Terminal</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W.	Well Name <u>MW30000</u>
Facility License, Permit or Monitoring No.	Local Grid Origin (estimated <input type="checkbox"/> ) or Well Location <input checked="" type="checkbox"/> Lat. <u>46° 43' 45"</u> Long. <u>92° 7' 18"</u>	Wis. Unique Well No. <u>VR36L</u> DNR well ID No. _____
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed <u>6/17/2018</u> m m d d y y y y
Type of Well Well Code <u>1</u>	Section Location of Waste/Source <u>NE 1/4 of SE 1/4 of Sec. 16, T. 49 N, R. 14</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W	Well Installed By: Name (first, last) and Firm <u>Randy Radtke</u> <u>Cascade Drilling</u>
Distance from Waste/Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	
Enf. Stds. Apply <input type="checkbox"/>	Gov. Lot Number _____	

A. Protective pipe, top elevation <u>2.5</u> ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation <u>2.4</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: <u>4</u> in. b. Length: <u>7</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation <u>2.0</u> ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom <u>0.0</u> ft. MSL or _____ ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input checked="" type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. <u>NA</u> Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. <u>10.4</u> Lbs/gal mud weight ... Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. <u>89</u> Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 <u>Sonic</u> Other <input checked="" type="checkbox"/>	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99	7. Fine sand material: Manufacturer, product name & mesh size a. <u>NA</u> b. Volume added <u>NA</u> ft <sup>3</sup>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	8. Filter pack material: Manufacturer, product name & mesh size a. <u>Filpro</u> b. Volume added <u>6</u> ft <sup>3</sup>
17. Source of water (attach analysis, if required): <u>City of Superior</u>	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
E. Bentonite seal, top <u>89</u> ft. MSL or _____ ft.	10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top <u>NA</u> ft. MSL or _____ ft.	b. Manufacturer <u>Johnson</u> c. Slot size: <u>0.010</u> in. d. Slotted length: <u>3</u> ft.
G. Filter pack, top <u>94</u> ft. MSL or _____ ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
H. Screen joint, top <u>96</u> ft. MSL or _____ ft.	
I. Well bottom <u>99</u> ft. MSL or _____ ft.	
J. Filter pack, bottom <u>102</u> ft. MSL or _____ ft.	
K. Borehole, bottom <u>100</u> ft. MSL or _____ ft.	
L. Borehole, diameter <u>6</u> in.	
M. O.D. well casing <u>2.275</u> in.	
N. I.D. well casing <u>2.067</u> in.	

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

Signature Randy Radtke Firm Cascade Drilling

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

Page 1 of 1

Facility/Project Name <u>Former Amoco Terminal</u>		License/Permit/Monitoring Number	Boring Number <u>MW-52 DD</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Randy</u> Last Name: <u>Radtke</u> Firm: <u>Cascade Drilling</u>		Date Drilling Started <u>06/11/2018</u>	Date Drilling Completed <u>06/12/2018</u> Drilling Method <u>Sonic</u>
WI Unique Well No. <u>VR262</u>	DNR Well ID No.	Well Name <u>MW-52DD</u>	Final Static Water Level <u>28</u> Feet MSL
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <u>N</u> <u>EW</u>		Surface Elevation ____ Feet MSL	Borehole Diameter <u>6</u> inches
NE 1/4 of <u>SE</u> 1/4 of Section <u>15</u> . T <u>49</u> N. R <u>14</u> W		Lat <u>46° 43' 39"</u> Long <u>92° 7' 13"</u>	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W
Facility ID	County <u>Douglas</u>	County Code <u>L6</u>	Civil Town/City/Village <u>Superior</u>

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments					
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200						
				0-2' Topsoil BLK. Sandy Silt.															
				2' - 30' Red Clay							28'								
				30'-89' Red. Br.															
				89' E.O.B.															
				Well @ 88'															

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

Signature Randy Radtke Firm Cascade Drilling

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

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

Facility/Project Name <u>Former Amoco Terminal</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W.	Well Name <u>MW-5200</u>
Facility License, Permit or Monitoring No.	Local Grid Origin (estimated: <input type="checkbox"/> ) or Well Location <input checked="" type="checkbox"/> Lat. <u>46° 43' 29 N</u> Long. <u>92° 7' 13 W</u>	Wis. Unique Well No. <u>VR363</u> DNR Well ID No. _____
Facility ID	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed <u>06/12/2018</u> m m d d y y y y
Type of Well Well Code <u>1</u>	Section Location of Waste/Source <u>NE 1/4 of SE 1/4 of Sec. 15, T. 49 N. R. 14</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W	Well Installed By: Name (first, last) and Firm <u>Randy Radtke</u> <u>Cascade Drilling</u>
Distance from Waste/Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	

A. Protective pipe, top elevation <u>2.5</u> ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation <u>2.3</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: <u>4</u> in. b. Length: <u>7</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation <u>0.0</u> ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or <u>0.0</u> ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input checked="" type="checkbox"/> <u>Native Soil</u>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight... Bentonite-sand slurry <input type="checkbox"/> 35 c. <u>10.4</u> Lbs/gal mud weight... Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite... Bentonite-cement grout <input type="checkbox"/> 50 e. <u>78</u> Ft <sup>3</sup> volume added for any of the above
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 <u>Sonic</u> Other <input checked="" type="checkbox"/>	f. How installed: Tremie <input checked="" type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7. Fine sand material: Manufacturer, product name & mesh size a. <u>NA</u> b. Volume added _____ ft <sup>3</sup>
Describe _____	8. Filter pack material: Manufacturer, product name & mesh size a. <u>F. + Pro</u> # <u>2</u> b. Volume added <u>6</u> ft <sup>3</sup>
17. Source of water (attach analysis, if required): <u>City of Superior</u>	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
E. Bentonite seal, top <u>78</u> ft. MSL or _____ ft.	10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top <u>NA</u> ft. MSL or _____ ft.	b. Manufacturer <u>Johnson</u> c. Slot size: <u>0.010</u> in. d. Stotted length: <u>3.0</u> ft.
G. Filter pack, top <u>83</u> ft. MSL or _____ ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
H. Screen joint, top <u>85</u> ft. MSL or _____ ft.	
I. Well bottom <u>88</u> ft. MSL or _____ ft.	
J. Filter pack, bottom <u>89</u> ft. MSL or _____ ft.	
K. Borehole, bottom <u>89</u> ft. MSL or _____ ft.	
L. Borehole, diameter <u>6</u> in.	
M. O.D. well casing <u>2.375</u> in.	
N. I.D. well casing <u>2.067</u> in.	

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

Signature Randy Radtke Firm Cascade Drilling

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

Page 1 of 1

Facility/Project Name <u>Former Amoso Terminal</u>			License/Permit/Monitoring Number		Boring Number <u>MW-37000</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Randy</u> Last Name: <u>Reulke</u>			Date Drilling Started <u>06.18.2018</u>	Date Drilling Completed <u>06.18.2018</u>	Drilling Method <u>Sonic</u>
Firm: <u>Cascade Drilling</u>			Final Static Water Level <u>7</u> Feet MSL	Surface Elevation Feet MSL	Borehole Diameter <u>6</u> inches
WI Unique Well No. <u>VR368</u>	DNR Well ID No. ---	Well Name <u>MW-37000</u>	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <u>N.</u>		Local Grid Location <u>La: 46° 43' 53"</u> <input type="checkbox"/> N <input type="checkbox"/> E <u>Long 92° 7' 34"</u> <input type="checkbox"/> S <input type="checkbox"/> W
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <u>N.</u>		Facility ID		County <u>Douglas</u>	County Code <u>16</u>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <u>N.</u>		Civil Town/City/Village <u>Superior</u>			

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
				<u>0-2.5' Top soil</u> <u>2.5'-6' Red clay</u> <u>6'-88' VF-Sand-Silt</u>  <u>E.O.B. 88'</u> <u>Well 87'</u>										

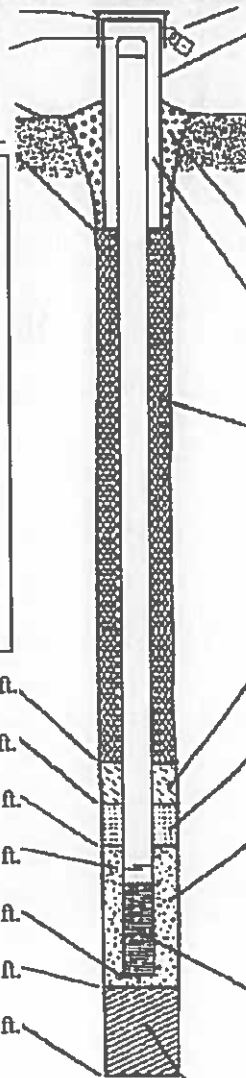
I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Randy Reulke Firm Cascade Drilling

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

Facility/Project Name <u>Former Amoco Terminal</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <u>MW-30-000</u>
Facility License, Permit or Monitoring No.	Local Grid Origin (estimated: <input type="checkbox"/> ) or Well Location <input checked="" type="checkbox"/> Lat. <u>46° 43' 53" N</u> Long. <u>92° 7' 27" W</u>	Wis. Unique Well No. <u>VR368</u> DNR Well ID No.
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed <u>06/19/2018</u> m m d d y y y y
Type of Well Well Code <u>1</u>	Section Location of Waste/Source <u>SW 1/4 of NE 1/4 of Sec. 16 T. 49 N. R. 14</u> <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: Name (first, last) and Firm <u>Randy Radke</u> <u>Cascade Drilling</u>
Distance from Waste/Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	

A. Protective pipe, top elevation	--- <u>2.5</u> ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	--- <u>2.4</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: <u>4</u> in.
C. Land surface elevation	--- <u>0.0</u> ft. MSL	b. Length: <u>7</u> ft.
D. Surface seal, bottom	--- <u>0.0</u> ft. MSL or _____ ft.	c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
13. Sieve analysis performed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3. Surface seal: <u>Native Soils</u> Other <input checked="" type="checkbox"/>
14. Drilling method used: <u>Sonic</u>	Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Other <input checked="" type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99		5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. <u>10.4</u> Lbs/gal mud weight ... Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. <u>77</u> Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____		6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
17. Source of water (attach analysis, if required): <u>City of Superior</u>		7. Fine sand material: Manufacturer, product name & mesh size a. <u>NA</u> b. Volume added <u>NA</u> ft <sup>3</sup>
E. Bentonite seal, top	--- <u>7.7</u> ft. MSL or _____ ft.	8. Filter pack material: Manufacturer, product name & mesh size a. <u>FillPro</u> b. Volume added <u>6</u> ft <sup>3</sup>
F. Fine sand, top	--- <u>NA</u> ft. MSL or _____ ft.	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
G. Filter pack, top	--- <u>8.2</u> ft. MSL or _____ ft.	10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
H. Screen joint, top	--- <u>8.4</u> ft. MSL or _____ ft.	b. Manufacturer <u>Johnson</u> c. Slot size: <u>0.010</u> in. d. Slotted length: <u>3</u> ft.
I. Well bottom	--- <u>8.7</u> ft. MSL or _____ ft.	11. Backfill material (below filter pack): None <input type="checkbox"/> 14 Other <input checked="" type="checkbox"/>
J. Filter pack, bottom	--- <u>8.8</u> ft. MSL or _____ ft.	
K. Borehole, bottom	--- <u>8.8</u> ft. MSL or _____ ft.	
L. Borehole, diameter	--- <u>6</u> in.	
M. O.D. well casing	<u>2.375</u> in.	
N. I.D. well casing	<u>2.067</u> in.	



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

Signature Randy Radke Firm Cascade Drilling

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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

Page 1 of 1

Facility/Project Name <u>Former Amoco Terminal</u>			License/Permit/Monitoring Number		Boring Number <u>MW-518</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: _____ Last Name: _____			Date Drilling Started <u>06.12.2018</u>	Date Drilling Completed <u>06.13.2018</u>	Drilling Method <u>Sonic</u>
Firm: <u>VR365</u>			Final Static Water Level <u>17' Feet MSL</u>		Surface Elevation Feet MSL
WI Unique Well No. <u>VR365</u>	DNR Well ID No. _____	Well Name <u>MW-518</u>	Local Grid Location Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane _____ N, _____ E <u>NE 1/4 of SE 1/4 of Section 16, T 49 N, R 14 W</u>		Borehole Diameter <u>6</u> inches
Facility ID _____			County <u>Douglas</u>	County Code <u>16</u>	Civil Town (City) or Village <u>Superior</u>

Number and Type	Length An. & Recovered (m)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments			
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200				
				0-6" Topsoil													
				6"-17' clay-Red.													
				17'-67' VF. Sandy silt. Br.-Red.													
				E.O.B. 67'													
				well 66'													

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

Signature Randy Rasche Firm Cascade Drilling

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

Facility/Project Name <u>Former Amoco Terminal</u>		Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W.		Well Name <u>MW-51A</u>	
Facility License, Permit or Monitoring No.		Local Grid Origin (estimated: <input type="checkbox"/> ) or Well Location Lat. <u>43°43'50"N</u> Long. <u>92°7'31"W</u>		Wis. Unique Well No. <u>42345</u> DNR Well ID No.	
Facility ID		St. Plane _____ ft. N. _____ ft. E. S/C/N		Date Well Installed <u>06/13/2018</u> m m d d y y y y	
Type of Well		Section Location of Waste/Source <u>NE 1/4 of SE 1/4 of Sec. 16, T. 49 N. R. 14</u> <input type="checkbox"/> E <input type="checkbox"/> W		Well Installed By: Name (first, last) and Firm <u>Randy Radtke</u> <u>Cascade Drilling</u>	
Well Code _____		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known		Gov. Lot Number _____	
Distance from Waste/Source _____ ft.		Enf. Stds. Apply <input type="checkbox"/>			

A. Protective pipe, top elevation --- 2.5 ft. MSL

B. Well casing, top elevation --- 2.3 ft. MSL

C. Land surface elevation --- 0.0 ft. MSL

D. Surface seal, bottom --- 0.0 ft. MSL or \_\_\_\_\_ ft.

12. USCS classification of soil near screen:  
GP  GM  GC  GW  SW  SP   
SM  SC  ML  MH  CL  CH   
Bedrock

13. Sieve analysis performed?  Yes  No

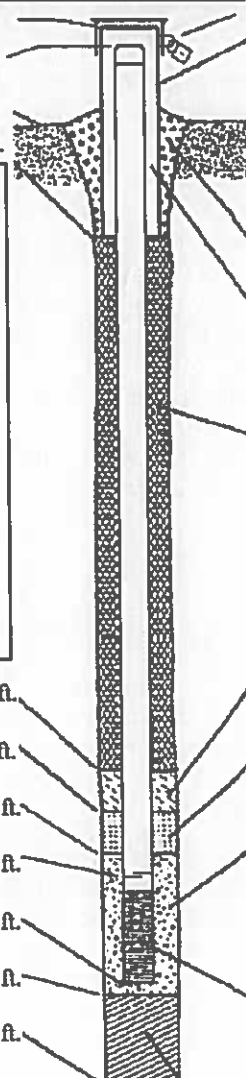
14. Drilling method used: Rotary  50  
Hollow Stem Auger  41  
Sonic Other

15. Drilling fluid used: Water  02 Air  01  
Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No

Describe \_\_\_\_\_

17. Source of water (attach analysis, if required):  
City of Superior WI.



1. Cap and lock?  Yes  No

2. Protective cover pipe:  
a. Inside diameter: 4 in.  
b. Length: 7 ft.  
c. Material: Steel  04  
Other

d. Additional protection?  Yes  No  
If yes, describe: \_\_\_\_\_

3. Surface seal: Bentonite  30  
Concrete  01  
Other   
Nature Soils

4. Material between well casing and protective pipe:  
Bentonite  30  
Other

5. Annular space seal: a. Granular/Chipped Bentonite  33  
b. \_\_\_\_\_ Lbs/gal mud weight... Bentonite-sand slurry  35  
c. 10.4 Lbs/gal mud weight... Bentonite slurry  31  
d. \_\_\_\_\_ % Bentonite... Bentonite-cement grout  50  
e. 61 Ft<sup>3</sup> volume added for any of the above  
f. How installer: Tremie  01  
Tremie pumped  02  
Gravity  08

6. Bentonite seal: a. Bentonite granules  33  
b.  1/4 in.  3/8 in.  1/2 in. Bentonite chips  32  
c. \_\_\_\_\_ Other

7. Fine sand material: Manufacturer, product name & mesh size  
a. NA  
b. Volume added NA ft<sup>3</sup>

8. Filter pack material: Manufacturer, product name & mesh size  
a. FilPro # 02  
b. Volume added 6 ft<sup>3</sup>

9. Well casing: Flush threaded PVC schedule 40  23  
Flush threaded PVC schedule 80  24  
Other

10. Screen material: PVC  
a. Screen type: Factory cut  11  
Continuous slot  01  
Other   
b. Manufacturer Johnson  
c. Slot size: 0.010 in.  
d. Slotted length: 3 ft.

11. Backfill material (below filter pack): None  14  
Other

E. Bentonite seal, top --- 56 ft. MSL or \_\_\_\_\_ ft.

F. Fine sand, top --- NA ft. MSL or \_\_\_\_\_ ft.

G. Filter pack, top --- 61 ft. MSL or \_\_\_\_\_ ft.

H. Screen joint, top --- 63 ft. MSL or \_\_\_\_\_ ft.

I. Well bottom --- 66 ft. MSL or \_\_\_\_\_ ft.

J. Filter pack, bottom --- 67 ft. MSL or \_\_\_\_\_ ft.

K. Borehole, bottom --- 67 ft. MSL or \_\_\_\_\_ ft.

L. Borehole, diameter --- 6 in.

M. O.D. well casing --- 2.375 in.

N. I.D. well casing --- 2.067 in.

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

Signature Randy Radtke Firm Cascade Drilling

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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

Facility/Project Name <u>Former Ampco Terminal</u>			License/Permit/Monitoring Number		Boring Number <u>MW-520</u>	
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Randy</u> Last Name: <u>Radke</u> Firm: <u>Cascade Drilling</u>			Date Drilling Started <u>06/12/2018</u> <small>m m d d y y y y</small>		Date Drilling Completed <u>06/12/2018</u> <small>m m d d y y y y</small>	
WI Unique Well No. <u>UB364</u>			DNR Well ID No. <u>MW-520</u>		Well Name <u>MW-520</u>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <u>N</u>			Final Static Water Level <u>29' Feet MSL</u>		Surface Elevation <u>    </u> Feet MSL	
<u>SU</u> 1/4 of <u>S4</u> 1/4 of Section <u>15</u> . T <u>49</u> N, R <u>14</u> W			Lat <u>46° 49' 39"</u> Long <u>92° 7' 13"</u>		Borehole Diameter <u>6</u> inches	
Facility ID			County <u>Douglas</u>		County Code <u>16</u>	
			Civil Town/City or Village <u>Superior</u>			

Sample Number and Type	Length Air. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments		
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200			
				0-2' Topsoil BLK, Sandy Silt.							M					
				2-30' clay - Red-Br.							W					
				30'-61' vfr-Sandy Silt.							29'					
				E.O.B. 61'												
				Well 60'												

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

Signature Randy Radke Firm Cascade Drilling

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



Facility/Project Name <u>Former Anso Terminal</u>		Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W.		Well Name <u>MW-520</u>	
Facility License, Permit or Monitoring No.		Local Grid Origin (estimated: <input type="checkbox"/> ) or Well Location <input checked="" type="checkbox"/> Lat. <u>46° 43' 39" N</u> Long. <u>92° 7' 13W"</u> or		Wis. Unique Well No. <u>VR364</u> DNR Well ID No.	
Facility ID		St. Plane _____ ft. N. _____ ft. E. S/C/N		Date Well Installed <u>06/12/2018</u> m m d d y y y y	
Type of Well Well Code <u>1</u>		Section Location of Waste/Source <u>SW 1/4 of SW 1/4 of Sec. 15, T. 49 N, R. 14 E W</u>		Well Installed By: Name (first, last) and Firm <u>Randy Radtke</u> <u>Cascade Drilling</u>	
Distance from Waste/Source _____ ft.		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known		Gov. Lot Number _____	

<p>A. Protective pipe, top elevation <u>2.5</u> ft. MSL</p> <p>B. Well casing, top elevation <u>2.3</u> ft. MSL</p> <p>C. Land surface elevation <u>0.0</u> ft. MSL</p> <p>D. Surface seal, bottom <u>0.0</u> ft. MSL or _____ ft.</p>	<p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: a. Inside diameter: <u>4</u> in. b. Length: <u>7</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/> _____ d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input checked="" type="checkbox"/> <u>Native Soil</u></p> <p>4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/> _____</p> <p>5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. <u>10.4</u> Lbs/gal mud weight ... Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. <u>50</u> Ft<sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input type="checkbox"/> 08</p> <p>6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. Other <input type="checkbox"/> _____</p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size a. <u>NA</u> b. Volume added <u>NA</u> ft<sup>3</sup></p> <p>8. Filter pack material: Manufacturer, product name &amp; mesh size a. <u>FilPro</u> # <u>20</u> b. Volume added <u>0</u> ft<sup>3</sup></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> _____</p> <p>10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> _____ b. Manufacturer <u>Johanson</u> c. Slot size: <u>0.010</u> in. d. Slotted length: <u>3</u> ft.</p> <p>11. Backfill material (below filter pack): None <input type="checkbox"/> 14 Other <input checked="" type="checkbox"/> _____</p>
--	---

12. USCS classification of soil near screen:  
 OP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

13. Sieve analysis performed?  Yes  No

14. Drilling method used: Rotary  50  
 Hollow Stem Auger  41  
Sonic Other

15. Drilling fluid used: Water  02 Air  01  
 Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
 Describe: \_\_\_\_\_

17. Source of water (attach analysis, if required):  
City of Superior W.

<p>E. Bentonite seal, top <u>50</u> ft. MSL or _____ ft.</p> <p>F. Fine sand, top <u>NA</u> ft. MSL or _____ ft.</p> <p>G. Filter pack, top <u>55</u> ft. MSL or _____ ft.</p> <p>H. Screen joint, top <u>57</u> ft. MSL or _____ ft.</p> <p>I. Well bottom <u>60</u> ft. MSL or _____ ft.</p> <p>J. Filter pack, bottom <u>61</u> ft. MSL or _____ ft.</p> <p>K. Borehole, bottom <u>61</u> ft. MSL or _____ ft.</p> <p>L. Borehole, diameter <u>6</u> in.</p> <p>M. O.D. well casing <u>2.375</u> in.</p> <p>N. I.D. well casing <u>2.067</u> in.</p>	
---	--

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

Signature Randy Radtke Firm Cascade Drilling

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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

Page 1 of 1

Facility/Project Name <u>Former Amso Terminal</u>			License/Permit/Monitoring Number		Boring Number <u>MW-500</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Randy</u> Last Name: <u>Radtke</u> Firm: <u>Cascade Drilling</u>			Date Drilling Started <u>06/13/2018</u> m m d d y y y y	Date Drilling Completed <u>06/13/2018</u> m m d d y y y y	Drilling Method <u>Sonic</u>
WI Unique Well No. <u>VR366</u>	DNR Well ID No. ---	Well Name <u>MW-500</u>	Final Static Water Level <u>27'</u> Feet MSL	Surface Elevation _____ Feet MSL	Borehole Diameter <u>6</u> inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <u>9</u> State Plane _____ N. _____ W.			Local Grid Location <u>Lat 46° 45' 46"</u> <u>Long 92° 7' 31"</u>	<input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID _____		County <u>Douglas</u>	County Code <u>16</u>	Civil Town (City) or Village <u>Superior</u>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
				Topsoil 0-8" BLK. clay 8" 27' Red. VF. Sandy Silt 27' 6-67 Red-B r.  E.O.B. 67' Well 66'											

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

Signature Randy Radtke Firm Cascade Drilling

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

Facility/Project Name <u>Former Amoco Terminal</u>		Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. ft. <input type="checkbox"/> S. <input type="checkbox"/> W.		Well Name <u>MW-500</u>	
Facility License, Permit or Monitoring No.		Local Grid Origin (estimated: <input type="checkbox"/> ) or Well Location <input checked="" type="checkbox"/> Lat. <u>46° 43' 46" N</u> Long. <u>92° 7' 31" W</u>		Wis. Unique Well No. <u>VR366</u> DNR Well ID No.	
Facility ID		St. Plane _____ ft. N. _____ ft. E. S/C/N		Date Well Installed <u>06/13/2016</u> m m d d y y y y	
Type of Well Well Code <u>1</u>		Section Location of Waste/Source <u>NE 1/4 of SE 1/4 of Sec. 16, T. 49 N, R. 14 E</u>		Well Installed By: Name (first, last) and Firm <u>Randy Raalhe</u> <u>Cascade Drilling</u>	
Distance from Waste/Source _____ ft.		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known		Gov. Lot Number	

A. Protective pipe, top elevation	<u>2.5</u> ft. MSL		1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	<u>2.4</u> ft. MSL		2. Protective cover pipe: a. Inside diameter: <u>4</u> in. b. Length: <u>7</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation	<u>0.0</u> ft. MSL		d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom	<u>0.0</u> ft. MSL or _____ ft.		3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input checked="" type="checkbox"/>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>			4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
13. Sieve analysis performed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. <u>10.4</u> Lbs/gal mud weight ... Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. <u>61</u> Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
14. Drilling method used: <u>Sonic</u>	Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 Other <input checked="" type="checkbox"/>		6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99			7. Fine sand material: Manufacturer, product name & mesh size a. <u>NA</u> b. Volume added <u>NA</u> ft <sup>3</sup>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			8. Filter pack material: Manufacturer, product name & mesh size a. <u>Filora</u> # <u>20</u> b. Volume added <u>6</u> ft <sup>3</sup>
17. Source of water (attach analysis, if required): <u>City of Superior</u>			9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
E. Bentonite seal, top	<u>56</u> ft. MSL or _____ ft.		10. Screen material: <u>Pvc</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top	<u>NA</u> ft. MSL or _____ ft.		b. Manufacturer <u>Johnson</u> c. Slot size: <u>0.010</u> in. d. Slotted length: <u>3</u> ft.
G. Filter pack, top	<u>61</u> ft. MSL or _____ ft.		11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>
H. Screen joint, top	<u>63</u> ft. MSL or _____ ft.		
I. Well bottom	<u>66</u> ft. MSL or _____ ft.		
J. Filter pack, bottom	<u>67</u> ft. MSL or _____ ft.		
K. Borehole, bottom	<u>67</u> ft. MSL or _____ ft.		
L. Borehole, diameter	<u>6</u> in.		
M. O.D. well casing	<u>2.375</u> in.		
N. I.D. well casing	<u>2.067</u> in.		

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

Signature Randy Raalhe Firm Cascade Drilling

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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

Page 1 of 1

Facility/Project Name <u>Former Amoco Terminal</u>			License/Permit/Monitoring Number		Boring Number <u>MW-41AD</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Randy</u> Last Name: <u>Raabe</u> Firm: <u>Cascade Drilling</u>			Date Drilling Started <u>06/14/2018</u> m m d d y y y y	Date Drilling Completed <u>06/14/2018</u> m m d d y y y y	Drilling Method <u>Sonic</u>
WI Unique Well No. <u>WR363</u>	DNR Well ID No. ---	Well Name <u>MW-41AD</u>	Final Static Water Level <u>16</u> Feet MSL	Surface Elevation _____ Feet MSL	Borehole Diameter <u>6</u> inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) Boring Location <u>ED</u> State Plane _____ N. _____ E			Lat <u>46° 43' 51"</u>	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S _____ Feet <input type="checkbox"/> W	
Facility ID _____			County <u>Douglas</u>	County Code <u>16</u>	Civil Town/City/Village <u>Spartan</u>

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
				Topsoil 0-1' blk. clay 1' 16' Red. VF sand-silt 16'-75' Red-br.  E.O.B. 75' Well @ 74'										

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

Signature Randy Raabe Firm Cascade Drilling

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

Facility/Project Name <u>Former Amoco Terminal</u>		Local Grid Location of Well N. <u>1N.</u> E. <u>1W.</u>		Well Name <u>MW-41AD</u>	
Facility License, Permit or Monitoring No.		Local Grid Origin <input type="checkbox"/> (unmarked: <input type="checkbox"/> ) or Well Location <input checked="" type="checkbox"/> Lat. <u>46° 43' 56 N</u> Long. <u>92° 7' 29 W</u>		Wis. Unique Well No. <u>VR363</u> DNR Well ID No.	
Facility ID		St. Plane _____ ft. N, _____ ft. E. S/C/N		Date Well Installed <u>06/14/2018</u> m m d d y y y y	
Type of Well Well Code <u>1</u>		Section Location of Waste/Source <u>NE 1/4 of SE 1/4 of Sec. 16, T. 49 N. R. 14</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W		Well Installed By: Name (first, last) and Firm <u>Randy Rasche</u> <u>Cascade Drilling</u>	
Distance from Waste/Source _____ ft.		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known		Gov. Lot Number	

A. Protective pipe, top elevation	<u>2.5</u> ft. MSL	1. Cap and lock?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	<u>2.4</u> ft. MSL	2. Protective cover pipe:	
C. Land surface elevation	<u>0.0</u> ft. MSL	a. Inside diameter:	<u>4</u> in.
D. Surface seal, bottom	<u>0.0</u> ft. MSL or _____ ft.	b. Length:	<u>7</u> ft.
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		c. Material:	Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
13. Sieve analysis performed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	d. Additional protection?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
14. Drilling method used:	Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 <u>Sonic</u> Other <input checked="" type="checkbox"/>	3. Surface seal:	Bentonite <input type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input checked="" type="checkbox"/> <u>Native Soils</u>
15. Drilling fluid used: Water <input checked="" type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input type="checkbox"/> 99		4. Material between well casing and protective pipe:	Bentonite <input checked="" type="checkbox"/> 30 Other <input type="checkbox"/>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		5. Annular space seal:	a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. <u>10.4</u> Lbs/gal mud weight ... Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. <u>64</u> Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
17. Source of water (attach analysis, if required): <u>City of Superior</u>		6. Bentonite seal:	a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
E. Bentonite seal, top	<u>64</u> ft. MSL or _____ ft.	7. Fine sand material: Manufacturer, product name & mesh size	a. <u>NA</u>
F. Fine sand, top	<u>NA</u> ft. MSL or _____ ft.	b. Volume added	<u>NA</u> ft <sup>3</sup>
G. Filter pack, top	<u>69</u> ft. MSL or _____ ft.	8. Filter pack material: Manufacturer, product name & mesh size	a. <u>FilPro</u>
H. Screen joint, top	<u>71</u> ft. MSL or _____ ft.	b. Volume added	<u>6</u> ft <sup>3</sup>
I. Well bottom	<u>74</u> ft. MSL or _____ ft.	9. Well casing:	Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
J. Filter pack, bottom	<u>75</u> ft. MSL or _____ ft.	10. Screen material:	<u>PVC</u>
K. Borehole, bottom	<u>75</u> ft. MSL or _____ ft.	a. Screen type:	Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
L. Borehole, diameter	<u>6</u> in.	b. Manufacturer	<u>Johanson</u>
M. O.D. well casing	<u>2.375</u> in.	c. Slot size:	<u>0.010</u> in.
N. I.D. well casing	<u>2.267</u> in.	d. Slotted length:	<u>3</u> ft.
		11. Backfill material (below filter pack):	None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/>

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

Signature Randy Rasche Firm Cascade Drilling

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

Page 1 of 1

Facility/Project Name <u>Former Ansox Terminal</u>		License/Permit/Monitoring Number	Boring Number <u>MW-380D</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Randy</u> Last Name: <u>Radka</u> Firm: <u>Cascade Drilling</u>		Date Drilling Started <u>06/14/2018</u> <small>m m d d y y y y</small>	Date Drilling Completed <u>06/15/2018</u> <small>m m d d y y y y</small>
Drilling Method <u>Sonic</u>	WI Unique Well No. <u>VR367</u>	DNR Well ID No. <u>---</u>	Well Name <u>MW-380D</u>
Final Static Water Level <u>8</u> Feet MSL	Surface Elevation <u>---</u> Feet MSL	Borehole Diameter <u>6</u> inches	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input checked="" type="checkbox"/> State Plane <u>N</u>	Local Grid Location <u>Lat 46° 43' 56"</u> <u>Long 92° 7' 35"</u>	<input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID	County <u>Douglas</u>	County Code <u>16</u>	Civil Town/City/Village <u>Superior</u>

Sample	Number and Type	Length An. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/Comments		
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200			
					0-2' Topsoil BLU.												
					2-8' clay Red												
					8-77' VF-Sand-S.H												
					E.O.B. 77'												
					Well @ 76'												

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

Signature Randy Radka Firm Cascade Drilling

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

Facility/Project Name <u>Former Access Terminal</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <u>MW-380D</u>
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input checked="" type="checkbox"/> Lat. <u>46° 43' 56.2"</u> Long. <u>92° 7' 25.4"</u> or	Wis. Unique Well No. <u>VR367</u> DNR Well ID No.
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed <u>06/15/2018</u> m m d d y y y y
Type of Well Well Code <u>1</u>	Section Location of Waste/Source <u>MW14 of HE 14 of Sec. 16, T. 49 N. R. 14</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W	Well Installed By: Name (first, last) and Firm <u>Randy Badke Cascade Drilling</u>
Distance from Waste/Source _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	
Enf. Stds. Apply <input type="checkbox"/>	Gov. Lot Number	

- A. Protective pipe, top elevation --- 2.5 ft. MSL  
 B. Well casing, top elevation --- 2.4 ft. MSL  
 C. Land surface elevation --- 0.0 ft. MSL  
 D. Surface seal, bottom --- 0.0 ft. MSL or --- ft.

12. USCS classification of soil near screen:  
 GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

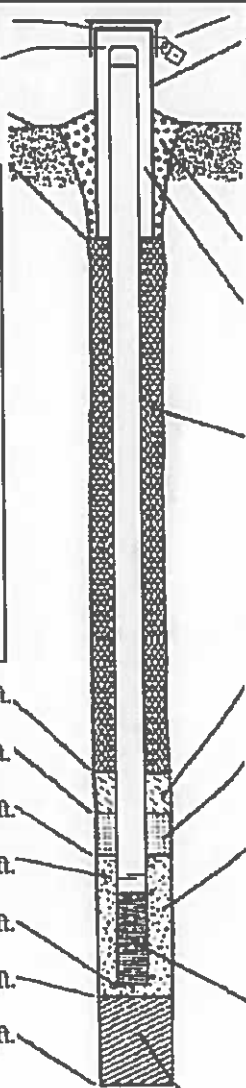
13. Sieve analysis performed?  Yes  No

14. Drilling method used: Rotary  50  
 Hollow Stem Auger  41  
Sonic Other

15. Drilling fluid used: Water  02 Air  01  
 Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
 Describe \_\_\_\_\_

17. Source of water (attach analysis, if required):  
City of Superior.



1. Cap and lock?  Yes  No
2. Protective cover pipe:  
 a. Inside diameter: 4 in.  
 b. Length: 7 ft.  
 c. Material: Steel  04  
 Other
- d. Additional protection?  Yes  No  
 If yes, describe: \_\_\_\_\_
3. Surface seal:  
 Bentonite  30  
 Concrete  01  
 Other  Native Soils
4. Material between well casing and protective pipe:  
 Bentonite  30  
 Other
5. Annular space seal:  
 a. Granular/Chipped Bentonite  33  
 b. Lbs/gal mud weight ... Bentonite-sand slurry  35  
 c. 10.4 Lbs/gal mud weight ... Bentonite slurry  31  
 d. % Bentonite ... Bentonite-cement grout  50  
 e. 66 Ft<sup>3</sup> volume added for any of the above  
 f. How installed: Tremie  01  
 Tremie pumped  02  
 Gravity  08
6. Bentonite seal:  
 a. Bentonite granules  33  
 b.  1/4 in.  3/8 in.  1/2 in. Bentonite chips  32  
 c. Other
7. Fine sand material: Manufacturer, product name & mesh size  
 a. NA  
 b. Volume added NA ft<sup>3</sup>
8. Filter pack material: Manufacturer, product name & mesh size  
 a. FILPRO  
 b. Volume added 6 ft<sup>3</sup>
9. Well casing: Flush threaded PVC schedule 40  23  
 Flush threaded PVC schedule 80  24  
 Other
10. Screen material: PVC  
 a. Screen type: Factory cut  11  
 Continuous slot  01  
 Other   
 b. Manufacturer Johnson  
 c. Slot size: 0.010 in.  
 d. Slotted length: 3 ft.
11. Backfill material (below filter pack): None  14  
 Other

- E. Bentonite seal, top 66 ft. MSL or --- ft.  
 F. Fine sand, top NA ft. MSL or --- ft.  
 G. Filter pack, top 71 ft. MSL or --- ft.  
 H. Screen joint, top 73 ft. MSL or --- ft.  
 I. Well bottom 76 ft. MSL or --- ft.  
 J. Filter pack, bottom 77 ft. MSL or --- ft.  
 K. Borehole, bottom 77 ft. MSL or --- ft.  
 L. Borehole, diameter 6 in.  
 M. O.D. well casing 2.375 in.  
 N. I.D. well casing 2.067 in.

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

Signature Randy Badke Firm Cascade Drilling



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-30DDD**  
TOTAL DEPTH: **100'**  
UNIQUE WELL NUMBER: **VR361**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Cloudy, thunderstorms**  
Date Completed: **6/18/2018**  
Date Developed: **6/19/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **16.38' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **630.10**  
Top of Casing Elevation (feet): **632.74**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,1.0) Topsoil: Grass and Organics, Black Gravel with Clay					Above grade completion, 2.64' stickup
5.7		(1.0,10.0) CL: Red Brown Clay, Very Stiff, Trace Gravel, Trace Plasticity	CL				3/8" Bentonite Chip surface seal 0' to 5'
6.3							
4.3							
10		(10.0,14.5) CL: Red Brown Clay, Stiff, Trace Gravel, Medium Plasticity	CL				2-inch diameter sch 40 PVC casing
6.4							
8.5		(14.5,15.0) SP: Medium Brown Fine to Medium Grain Sand, Trace Black and Red Grains	SP				
15		(15.0,26.0) SP: Dark Brown Coarse Sand, Trace Black, Red, and Clear Grains, Moderate Petroleum Odor	SP SP				
7.2							
176							
20							
910							

**Comments:**

Water level could not be observed due to city water drilling fluid and standing water in drilling area.





5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-30DDD**

PROJECT: **Superior Terminal**

UNIQUE WELL NUMBER: **VR361**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
25					957		
		(26.0,34.0) SM: Medium Brown Fine Grain Sand with Silt, Orange and Black Mottling, No Odor	SM		1528		
					626		
30					814		
		(34.0,35.0) SP: Dark Brown Medium Grain Sand, Trace Black and Orange Grains	SP		3.1		
35					127.5		
		(35.0,37.0) SM: Medium Brown Fine Grain Sand with Silt, No Odor	SM				
		(37.0,40.0) ML: Medium Brown Silt with Fine Grain Sand, Orange Mottling, Medium Plasticity, Medium Density, Petroleum Odor at 37ft	ML		6.7		
40					3.2		Aquaguard bentonite slurry annular seal 5' to 89'
		(40.0,53.0) SP: Medium Brown Medium Grain Sand, Trace Orange and Black Grains	SP		51.5		
45					308.6		
					16.7		
50					91.0		
					114.5		

Comments:

Water level could not be observed due to city water drilling fluid and standing water in drilling area.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-30DDD**

PROJECT: **Superior Terminal**

UNIQUE WELL NUMBER: **VR361**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
55		(53.0,60.0) SP: Medium Brown Medium Grain Sand, Black and Orange Mottling, Faint Petroleum Odor			262		
60		(60.0,64.0) SP: Olive Brown Medium Grain Sand, Trace Black Grains, Faint Petroleum Odor	SP		98.5		
65		(64.0,65.0) SW: Olive Brown Fine to Medium Sand, No Odor	SW		16.8		
70		(65.0,75.0) SP: Medium Brown Medium Grain Sand, Trace Black and Red Grains, No Odor	SP		8.7		
75		(75.0,80.0) SW: Medium to Olive Brown Fine to Medium Grain Sand	SW		0.8		
80		(80.0,82.5) SP: Olive Brown Fine Grain Sand, Trace Black Grains	SP		1.4		
		(82.5,85.0) SW: Olive Brown Medium to Fine Grain Sand, Trace Black Grains	SW		1.3		
					1.1		
					0.9		
					1.2		
					1.1		

Comments:


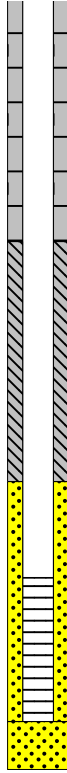




Water level could not be observed due to city water drilling fluid and standing water in drilling area.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-30DDD**  
PROJECT: **Superior Terminal**  
UNIQUE WELL NUMBER: **VR361**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
85		(85.0,99.0) SP: Medium to Olive Brown Medium Grain Sand, Trace Orange Grains, Black Mottling	SP		1.1		3/8" Bentonite Chips 89' to 94'
90					0.7		Quartz filtration media filter pack 94' to 100'
95					0.6		2-inch diameter 10-slot sch 40 PVC screen 96' to 99'
99					0.9		
100					0.7		
					0.8		Total depth of well 99'

Comments:

Water level could not be observed due to city water drilling fluid and standing water in drilling area.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-37DDD**  
TOTAL DEPTH: **88'**  
UNIQUE WELL NUMBER: **VR368**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Sunny**  
Date Completed: **6/19/2018**  
Date Developed: **6/20/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **6.35' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **614.40**  
Top of Casing Elevation (feet): **616.96**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,2.5) Topsoil: Medium Brown Sand with Black Clay, Grass and Organics from 0 - 0.5 ft, Medium Density, Medium Plasticity	Topsoil				Above grade completion, 2.56' stickup
2.56		(2.5,5.0) CL: Red Brown Clay with Trace Pockets of Black Gravel and Yellow Sand, Stiff, Medium Plasticity	CL		0.6		
5.16		(5.0,6.0) CL: Red Brown Clay with Black Mottling, Medium Plasticity, Medium Density	CL		0.6		3/8" Bentonite Chip surface seal 0' to 5'
5.76		(6.0,25.0) SP: Medium to Dark Brown Medium Grain Sand with Black, Red, and Clear Grains, No Odor	SP		0.3		
6.06					0.6		
6.66					0.5		
7.16					0.5		
7.66					LR		
8.16					LR		
8.66					0.2		

Comments:

LR = limited recovery. Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-37DDD**

PROJECT: **Superior Terminal**

UNIQUE WELL NUMBER: **VR368**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
25		(25.0,28.0) SP: Medium Brown Coarse Grain Sand with Orange and Clear Grains, some Black Gravel (1-2mm)	SP		LR		
		(28.0,30.0) SP: Orange to Medium Brown Fine Grain Sand	SP		0.5		
30		(30.0,34.0) ML: Medium and Dark Brown Silt with Fine Grain Sand, Significant Orange and Red Mottling, Orange Staining	ML		0.7		
		(34.0,37.0) SP: Medium Brown Medium Grain Sand, Orange and Black Mottling	SP		0.4		
35		(37.0,38.0) ML: Silt with Fine Grain Sand, Significant Orange Mottling	ML		0.3		
		(38.0,45.0) SP: Dark Brown Fine Grain Sand with Black Grains	SP		0.6		
40					0.6		
					0.6		
45		(45.0,56.0) SP: Brown Medium Grain Sand with Black and Orange Grains, Black Mottling from 55-56 ft	SP		0.6		
					0.5		
50					3.0		
					43.1		
55					44.3		

Aquaguard bentonite slurry annular seal 5' to 77'

Comments:

LR = limited recovery. Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-37DDD**

PROJECT: **Superior Terminal**

UNIQUE WELL NUMBER: **VR368**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
60		(56.0,65.0) SM: Dark Brown Fine to Medium Grain Sand with Black and Orange Grains, some Silt	SM		7.7		
65		(65.0,67.0) SP: Dark Brown Medium Grain Sand with Black and Orange Grains	SP		1.6		
70		(67.0,83.0) SM: Dark Brown Fine Grain Sand with Black Grains, Black Mottling, some Silt	SM		0.7		
75					0.3		
					0.4		3/8" Bentonite Chips 77' to 82'
					0.3		Quartz filtration media filter pack 82' to 88'
					0.3		
80					0.3		
85		(83.0,86.0) SM: Dark Brown Medium Grain Sand with Black and Orange Grains	SM		2.7		2-inch diameter 10-slot sch 40 PVC screen 84' to 87'
		(86.0,88.0) SM: Dark Brown Fine Grain Sand, Black Mottling, some Silt	SM		1.2		Total depth of well 87'

Comments:

LR = limited recovery. Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-38DD**  
TOTAL DEPTH: **77'**  
UNIQUE WELL NUMBER: **VR367**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Sunny**  
Date Completed: **6/15/2018**  
Date Developed: **6/18/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **3.28' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **610.9**  
Top of Casing Elevation (feet): **613.48**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,4.0) Topsoil: Black Topsoil, Clay with Gravel, Low Density, with Grass and Organics			1.4		Above grade completion, 2.58' stickup
5		(4.0,7.0) CL: Black Topsoil, Clay with Medium Grain Sand and Gravel, Wet	CL		1.4		3/8" Bentonite Chip surface seal 0' to 5'
		(7.0,9.5) CL: Red Brown Clay, Very Stiff	CL		0.0		
10		(9.5,11.0) SW: Medium Brown Course Sand, some Black Grains	SW		0.1		2-inch diameter sch 40 PVC casing
		(11.0,14.0) CL: Medium Brown Clay, Medium Density, Medium Plasticity	CL		1.5		
15		(14.0,15.0) SM: Medium Brown Fine Grain Sand with Silt	SM		1.5		
		(15.0,18.0) SP: Medium Grain Sand with Silt, Significant Orange and Black Mottling	SP		1.5		
20		(18.0,21.0) SM: Fine Grain Sand with Silt, Significant Orange and Black Mottling	SM		1.3		
		(21.0,25.0) SM: Medium Brown Fine to Medium Grain Sand with Red and Black	SM		0.6		

**Comments:**

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-38DD**  
PROJECT: **Superior Terminal**  
UNIQUE WELL NUMBER: **VR367**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
		Mottling, with Silt			0.7		
25		(25.0,30.0) ML: Medium Brown Silt, some Fine Grain Sand, with Orange Mottling	ML		0.9		
					0.7		
30		(30.0,36.0) SP: Olive Brown Fine Grain Sand with Silt, with Black Mottling	SP		0.9		Aquaguard bentonite slurry annular seal 5' to 66'
					2.2		
35		(36.0,40.0) ML: Olive Brown Silt with Fine Grain Sand, Trace Plasticity, Medium Density	ML		1.8		
					1.6		
40		(40.0,49.0) SP: Red Brown Fine Grain Sand with Silt, with Orange Mottling	SP		1.5		
					2.9		
45					2.7		
					2.2		
50		(49.0,65.0) SW: Medium Brown Fine to Medium Grain Sand, Well Sorted, with Red Mottling	SW		2.1		
					4.1		

Comments:  
Water level could not be observed due to city water drilling fluid.





5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-38DD**  
PROJECT: **Superior Terminal**  
UNIQUE WELL NUMBER: **VR367**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
55					6.8		
60					3.2		
65		(65.0,76.0) SP: Medium Brown Fine Grain Sand, with Red and Black Mottling	SP		9.5		3/8" Bentonite Chips 66' to 71'
70					6.2		Quartz filtration media filter pack 71' to 77'
75					5.1		2-inch diameter 10-slot sch 40 PVC screen 73' to 76'
					4.2		
					4.4		
					3.1		
					5.1		Total depth of well 76'

Comments:

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-41DD**  
TOTAL DEPTH: **75'**  
UNIQUE WELL NUMBER: **VR363**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Sunny**  
Date Completed: **6/14/2018**  
Date Developed: **6/18/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **3.58' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **608.7**  
Top of Casing Elevation (feet): **611.32**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,0.5) Topsoil: Black Clay with Grass and Organics, with Gravel, Medium Density, Trace Plasticity	CL				Above grade completion, 2.62' stickup
		(0.5,4.0) CL: Red Brown Clay, Stiff, Medium Plasticity			2.1		
5		(4.0,5.0) SM: Red Brown Fine Grain Sand with Silt, with Black Mottling	SM				3/8" Bentonite Chip surface seal 0' to 5'
		(5.0,10.0) CH: Red Brown Clay, Stiff, High Plasticity	CH		2.7		
					0.0		
10		(10.0,12.0) SP: Dark Brown Medium Grain Sand, Black Mottling, Streak of Orange Mottling at 12ft	SP		2.7		2-inch diameter sch 40 PVC casing
		(12.0,15.0) ML: Red Brown Silt with Fine Grain Sand, Orange and Black Mottling	ML		2.2		
15		(15.0,16.5) SP: Red Brown and Black Course Grain Sand, with Orange Mottling	SP		0.8		
		(16.5,28.0) ML: Red Brown to Olive Brown Silt with Fine Grain Sand	ML		2.5		
20					3.3		

Comments:

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-41DD**  
PROJECT: **Superior Terminal**  
UNIQUE WELL NUMBER: **VR363**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
23.6							
24.0							Aquaguard bentonite slurry annular seal 5' to 64'
52.8		(28.0,30.0) ML: Red Brown Silt with Fine Grain Sand, Significant Orange and Black Mottling	ML				
19.3		(30.0,40.0) SM: Medium Brown Fine Grain Sand with Silt, Orange and Black Mottling	SM				
11.0							
5.4							
11.9							
13.0		(40.0,43.0) SM: Medium Brown and Black Medium Grain Sand, with Silt, Black Mottling	SM				
13.9		(43.0,50.0) SM: Medium Brown Fine Grain Sand, with Silt, Black and Orange Mottling	SM				
11.4							
4.8							
4.3		(50.0,54.0) SP: Medium Brown Medium Grain Sand, Black and Orange Mottling	SP				
10.5							

Comments:  
Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-41DD**  
PROJECT: **Superior Terminal**  
UNIQUE WELL NUMBER: **VR363**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
55		(54.0,75.0) SP: Olive Brown Fine Grain Sand, Significant Orange and Black Mottling	SP				3/8" Bentonite Chips 64' to 69'  Quartz filtration media filter pack 69' to 75'  2-inch diameter 10-slot sch 40 PVC screen 71' to 74'  Total depth of well 74'
60							
65							
70							
75							

Comments:  
Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-50D**  
TOTAL DEPTH: **67'**  
UNIQUE WELL NUMBER: **VR366**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Sunny**  
Date Completed: **6/13/2018**  
Date Developed: **6/18/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **16.65' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **626.07**  
Top of Casing Elevation (feet): **628.62**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,0.5) Topsoil: Dark Brown Topsoil, Clay with Grass and Organics, Medium Density	CL				Above grade completion, 2.55' stickup
5		(0.5,10.0) CL: Red Brown Clay, Very Stiff, Trace Gravel			9.5		3/8" Bentonite Chip surface seal 0' to 5'
10		(10.0,20.0) CL: Red Brown Clay, Stiff, High Plasticity	CL		4.9		2-inch diameter sch 40 PVC casing
15					10.9		
20		(20.0,27.0) CL: Red Brown Clay, Medium Density, High Plasticity	CL		6.8		
25					7.7		
		(27.0,30.0) SM: Yellow Brown Silty	SM		7.9		Aquaguard bentonite slurry annular seal 5' to 56'
					8.5		
					2.9		
					8.6		

Comments:

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-50D**  
PROJECT: **Superior Terminal**  
UNIQUE WELL NUMBER: **VR366**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
30		Sand, Medium Density, Significant Black, Red, and Yellow Mottling					
		(30.0,35.0) ML: Dark Brown Silt, Trace Fine Grain Sand, with Red Mottling	ML		2.9		
					7.2		
35		(35.0,40.0) SM: Medium Brown Fine Grain Sand with Silt	SM		6.8		
					13.5		
40		(40.0,45.0) SM: Medium Brown Medium Grain Sand, some Silt, with Trace Red Grain and Black Mottling	SM		10.2		
					42.9		
45		(45.0,56.0) SM: Medium Brown Fine Grain Sand, with Silt, with Orange Mottling	SM		4.5		
					11.2		
50					7.1		3/8" Bentonite Chips 56' to 61'
					9.0		
55		(56.0,63.0) SM: Medium Brown Fine to Medium Grain Sand, with Silt, with Black Mottling and Orange	SM		5.9		Quartz filtration media filter pack 61' to 67'
					2.7		
60					10.9		2-inch diameter 10-slot sch 40 PVC screen 63' to 66'
					7.4		
65		(63.0,66.0) SM: Medium Brown Fine Grain Sand, with Silt, with Black Mottling	SM		9.0		Total depth of well 66'
					3.4		

Comments:

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-51D**  
TOTAL DEPTH: **67'**  
UNIQUE WELL NUMBER: **VR365**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Sunny**  
Date Completed: **6/13/2018**  
Date Developed: **6/18/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **14.98' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **625.43**  
Top of Casing Elevation (feet): **627.43**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,0.5) Topsoil: Topsoil, Dark Brown to Black Clay, Grass and Organics	OH				Above grade completion, 2.00' stickup
		(0.5,2.0) OH: Dark Brown to Red Brown Clay, Organics, Trace Black Mottling	CL		4.8		
5		(2.0,12.0) CL: Red Brown Clay, Very Stiff			4.4		3/8" Bentonite Chip surface seal 0' to 5'
		(12.0,13.0) CL: Clay with Fine Grain Sand, Medium Density	CL		4.3		
10		(13.0,17.0) SM: Red Brown Fine Grain Sand with Silt and Trace Clay, Black and Orange Mottling	SM		5.7		2-inch diameter sch 40 PVC casing
15		(17.0,19.0) SM: Medium to Dark Brown Medium Grain Sand, Some Silt, Trace Red and Black Grains	SM		7.3		
		(19.0,20.0) CL: Red Brown Clay, Very Stiff	CL		11.9		
20		(20.0,22.0) SM: Medium Brown Fine Grain Sand with Silt, Black Mottling	SM		8.5		
		(22.0,25.0) CL: Medium to Red Brown Clay with Fine Grain Sand, Trace Plasticity	CL		4.9		Aquaguard bentonite slurry annular seal 5' to 56'
25		(25.0,35.0) SM: Medium Brown Fine Grain Sand with Silt, Stiff, Trace Black and Orange Mottling	SM		7.9		
					7.7		
					5.5		

**Comments:**

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-51D**  
PROJECT: **Superior Terminal**  
UNIQUE WELL NUMBER: **VR365**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
30					3.9		
35		(35.0,38.0) ML: Medium to Dark Brown Silt, some Fine Grain Sand (1mm), Trace Plasticity, Medium Density,	ML		7.1		
		(38.0,39.0) ML: Medium to Dark Brown Silt, some Sand, Trace Clay, Medium Plasticity, Medium Density	ML		3.8		
40		(39.0,47.0) ML: Medium to Dark Brown Silt, some Fine Grain Sand, Trace Plasticity, Medium Density	ML		7.2		
45					1.6		
					4.6		
50		(47.0,60.0) SM: Medium Brown Fine Grain Sand with Silt, Trace Red and Black Grains, 50-55 ft had 10% recovery	SM		4.0		
55					7.7		3/8" Bentonite Chips 56' to 61'
					5.0		Quartz filtration media filter pack 61' to 67'
60		(60.0,66.0) SM: Medium Brown Fine to Medium Grain (1-2mm) Sand with Silt	SM		2.6		2-inch diameter 10-slot sch 40 PVC screen 63' to 66'
65					4.6		
					4.7		Total depth of well 66'

Comments:

Water level could not be observed due to city water drilling fluid.





5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-52D**  
TOTAL DEPTH: **61'**  
UNIQUE WELL NUMBER: **VR364**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Cloudy**  
Date Completed: **6/12/2018**  
Date Developed: **6/18/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **18.35' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **632.28**  
Top of Casing Elevation (feet): **634.83**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,0.2) Topsoil, Grass and Roots	GC				
0.2		(0.2,7.0) GC: Red, Brown, and Black Fill with Gravel, Organics, and Trace Angular Cobbles (5 in)			34.7		Above grade completion, 2.55' stickup
5					29.5		3/8" Bentonite Chip surface seal 0' to 5'
7		(7.0,14.0) CL: Red Brown Clay, Very Stiff, Black and Brown Smearing from Fill	CL		81.1		
10					55.0		2-inch diameter sch 40 PVC casing
14		(14.0,18.0) CL: Red Brown Clay, Very Stiff	CL		12.0		
18		(18.0,20.0) CL: Red Brown Clay with Trace Dark Grey Mottling, Very Stiff	CL		2.3		
20		(20.0,25.0) CL: Red Brown Clay with Trace Pockets of Tan Sand, Stiff to Medium Density, Very Thin (1cm) Sand Lens at 22 ft	CL		5.0		
22					3.1		Aquaguard bentonite slurry annular seal 5' to 50'
25		(25.0,27.5) CL: Red Brown Clay with Dark Brown Streaking, Moist, Stiff to Medium Density	CL		2.9		

**Comments:**

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-52D**  
PROJECT: **Superior Terminal**  
UNIQUE WELL NUMBER: **VR364**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
30	(27.5,28.0)	SM: Silty Sand Lens, Medium Grain, Medium brown	CL				
30	(28.0,30.0)	CL: Red Brown and Dark Brown Clay, Medium Density, Moist to Wet	SM		2.6		
35	(30.0,35.0)	SM: Red Brown Silty Medium Grain Sand with Trace Black grains, Poorly Sorted			3.6		
35	(35.0,60.0)	SM: Red Brown Silty Fine Grain Sand with Orange and Black Mottling, Poorly Sorted	SM		3.1		
40					2.5		
45					3.3		
45					1.3		
50					1.0		3/8" Bentonite Chips 50' to 55'
50					2.0		
55					1.9		Quartz filtration media filter pack 55' to 61'
55					2.5		
55					4.4		2-inch diameter 10-slot sch 40 PVC screen 85' to 88'
60					4.7		
60					5.5		Total depth of well 60'

Comments:

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-52DD**  
TOTAL DEPTH: **89'**  
UNIQUE WELL NUMBER: **VR362**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Cloudy**  
Date Completed: **6/11/2018**  
Date Developed: **6/13/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **19.52' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **632.85**  
Top of Casing Elevation (feet): **635.65**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,0.2) Topsoil Grass	CL				
		(0.2,1.0) CL: Topsoil, Clay with Organics, Trace Gravel, Red and Black Mottling	CL				Above grade completion, 2.8' stickup
		(1.0,2.5) CL: Topsoil, Fill, Brown Clay with Organics and Gravel	CL		36.5		
5		(2.5,5.0) CL: Red Brown Clay, Medium Density	OH		86.9		3/8" Bentonite Chip surface seal 0' to 5'
		(5.0,8.0) OH: Medium Brown to Black Clay, with Organics, with Silt, Black Topsoil Horizon from 8 - 8.5 ft	CL		0.0		
10		(8.0,21.0) CL: Red Brown Clay, Very Stiff			0.0		2-inch diameter sch 40 PVC casing
					0.0		
					0.0		
					0.0		
					0.0		
					0.0		
					10.5		
		(21.0,30.0) CL: Red Brown Clay, Stiff to Medium Density, Trace Grey Mottling	CL		0.0		
					0.0		
25					0.0		

Comments:

Water level could not be observed due to city water drilling fluid.




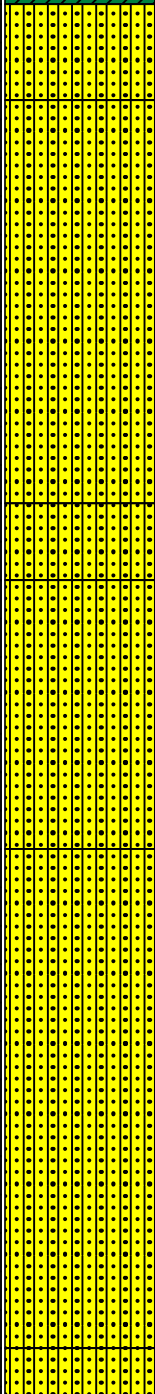
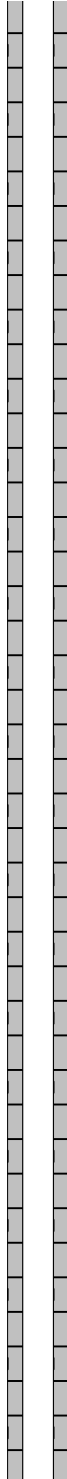
5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-52DD**

PROJECT: **Superior Terminal**

UNIQUE WELL NUMBER: **VR362**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
30							
		(30.0,32.5) SM: Red Brown Medium Grain Sand with Silt, Poorly Sorted	SM		30.9		Aquaguard bentonite slurry annular seal 5' to 78'
		(32.5,43.0) SM: Red Brown Fine Grain Sand with Silt, Poorly Sorted	SM		38.4		
35					35.8		
					31.6		
40					30.0		
		(43.0,45.0) SM: Red and Medium Brown Medium Grain Sand with Silt, Trace Black Mottling, Poorly Sorted	SM		40.7		
45		(45.0,52.0) SM: Red and Medium Brown Fine Grain Sand with Silt, Poorly Sorted	SM		27.4		
					5.4		
50					20.2		
		(52.0,65.0) SM: Red and Medium Brown Medium Grain Sand with Silt, Fine Silt Lens 55 - 57.5 ft	SM		29.7		
55					33.5		
					32.9		
60					29.1		
					40.9		
65		(65.0,70.0) SM: Red and Medium Brown	SM		38.7		

Comments:

Water level could not be observed due to city water drilling fluid.



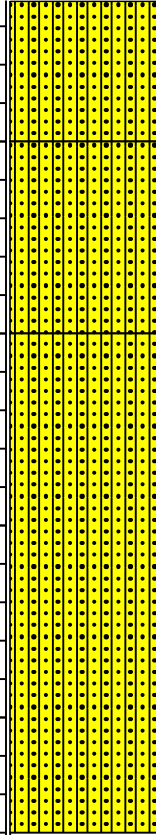
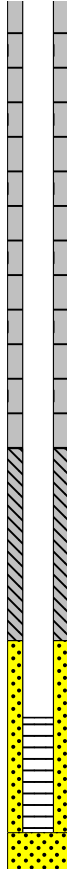
5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MW-52DD**

PROJECT: **Superior Terminal**

UNIQUE WELL NUMBER: **VR362**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
		Fine Grain Sand with Silt, Medium Density			31.3		
70		(70.0,75.0) SM: Dark Brown Medium Grain Sand with Silt, Trace Black Mottling	SM		33.1		3/8" Bentonite Chips 78' to 83'
75		(75.0,88.0) SM: Dark Brown Fine Grain Sand with Silt, Trace Black Grains	SM		20.2		
80					17.6		Quartz filtration media filter pack 83' to 89'
					33.7		
					30.5		2-inch diameter 10-slot sch 40 PVC screen 85' to 88'
					30.7		
85					25.4		Total depth of well 88'
					43.7 33.8		

Comments:

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MWBD-1DD**  
TOTAL DEPTH: **69'**  
UNIQUE WELL NUMBER: **VR360**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Cloudy, scattered rain**  
Date Completed: **6/17/2018**  
Date Developed: **6/19/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **1.35' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **603.06**  
Top of Casing Elevation (feet): **605.25**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,1.0) Fill: Orange Medium Grain Sand with Cobbles (5-10cm), Organics, and Roots	CL				Above grade completion, 2.19' stickup
		(1.0,4.0) CL: Red Brown Clay with Black Mottling, Very Stiff, Medium Plasticity, Trace Gravel			1.4		
5		(4.5,5.0) CL: Red Brown Clay with Medium Grain Sand, Red and Black Mottling, Very Stiff	CL SM		1.9		3/8" Bentonite Chip surface seal 0' to 5'
		(5.0,10.0) SM: Olive Brown Medium Grain Sand, some Black and Red Grains, with Silt			0.8		
10		(10.0,11.0) SP: Medium Brown Fine Grain Sand with Red and Orange Mottling, Medium Plasticity, Stiff	SP		1.7		2-inch diameter sch 40 PVC casing
		(11.0,12.5) ML: Medium Brown Silt with Fine Grain Sand, Red and Orange Mottling, Medium Plasticity, Stiff	ML				
		(12.5,15.0) SP: Medium Brown Fine to Medium Grain Sand with Black and Orange Mottling	SP		1.4		
15		(15.0,20.0) SM: Medium Brown Medium Grain Sand, some Red and Black Grains, with Silt	SM		1.3		
					1.1		
20		(20.0,21.5) SP: Red Orange Fine Grain Sand with Orange Mottling	SP		2.4		
		(21.5,35.0) SP: Medium Brown Fine to	SP				

**Comments:**

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MWBD-1DD**

PROJECT: **Superior Terminal**

UNIQUE WELL NUMBER: **VR360**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS	
25		Medium Grain Sand, some Red and Black Grains			4.2		Aquaguard bentonite slurry annular seal 5' to 58'	
30				3.3				
35				1.7				
40				1.1				
45				1.8				
50				2.4				
			(35.0,40.0) SP: Olive Brown Fine Grain Sand with Orange and Black Mottling	SP				2.1
			(40.0,54.0) SP: Olive Brown Fine Grain Sand, some Red and Black Grains	SP				2.1
								2.2
								2.8
					3.6			
					3.5			
					10.6			

Comments:  
Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MWBD-1DD**

PROJECT: **Superior Terminal**

UNIQUE WELL NUMBER: **VR360**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
55		(54.0,55.0) SP: Olive Brown Medium Grain Sand with Black Grains	SP				
		(55.0,68.0) SM: Dark Brown Fine Grain Sand, some Black Grains, with Silt	SM		13.6		3/8" Bentonite Chips 58' to 63'
60					10.7		Quartz filtration media filter pack 63' to 69'
65					12.1		
					11.5		2-inch diameter 10-slot sch 40 PVC screen 65' to 68'
					8.9		
					5.4		Total depth of well 68'

Comments:

Water level could not be observed due to city water drilling fluid.





5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MWOW-2D**  
TOTAL DEPTH: **39'**  
UNIQUE WELL NUMBER: **VR358**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Thunderstorms**  
Date Completed: **6/15/2018**  
Date Developed: **6/19/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **2.62' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **607.81**  
Top of Casing Elevation (feet): **610.74**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,2.5) Fill: Black Gravel with Organics, Grass, Slight Petroleum Odor at Base					Above grade completion, 2.93' stickup
2.5		(2.5,6.0) CL: Red Brown Clay, Very Stiff, Slight Petroleum Odor	CL		38.9		
6.0		(6.0,6.5) CL: Red Brown Clay with Layers of Fine Sand, Significant Orange Mottling, Trace Plasticity, Firm	CL		342		3/8" Bentonite Chip surface seal 0' to 5'
6.5		(6.5,9.0) CL: Red Brown Clay with Olive Brown and Orange Mottling, Very Stiff	CL		1715		
9.0		(9.0,10.0) CL: Red Brown Clay with Layers of Fine Sand, with Dark Orange and Yellow Mottling	CL				
10.0		(10.0,16.0) SM: Red Brown Medium to Fine Grain Sand, some Silt, with Yellow and Orange Mottling	SM		95.3		2-inch diameter sch 40 PVC casing
16.0		(16.0,20.0) SM: Red Brown Fine Grain Sand with Silt, with Orange Mottling	SM		52		
20.0		(20.0,22.0) SP: Medium to Red Brown Medium Grain Sand, Orange Layer on Top of Clay, Significant Orange / Rust Mottling	SP		51.6		Aquaguard bentonite slurry annular seal 5' to 28'
22.0					41		
22.0					40.4		

Comments:

Water level could not be observed due to city water drilling fluid and standing water in drilling area.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MWOW-2D**

PROJECT: **Superior Terminal**

UNIQUE WELL NUMBER: **VR358**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
25		(22.0,22.5) CL: Medium Brown Clay, with Regular Red and Orange Layers, Medium Density, Medium Plasticity			21.7		
		(22.5,35.0) SP: Medium Brown Medium to Fine Grain Sand, with Black and Red Mottling	SP		37.7		3/8" Bentonite Chips 28' to 33'
30					31.5		Quartz filtration media filter pack 33' to 38'
					51.5		
35		(35.0,36.0) ML: Medium Brown Silt with Sand, Medium Plasticity	ML		21.6		2-inch diameter 10-slot sch 40 PVC screen 35' to 38'
		(36.0,39.0) SP: Medium Brown Fine Grain Sand, with Trace Orange Mottling	SP		34.0		
					46.5		Total depth of well 38'

Comments:

Water level could not be observed due to city water drilling fluid and standing water in drilling area.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MWRR-1D**  
TOTAL DEPTH: **53.5'**  
UNIQUE WELL NUMBER: **VR359**

**PROJECT INFORMATION**

Project: **Superior Terminal**  
Site Location: **2904 Winter Street Superior, WI**  
Job No.: **WISUP181**  
Logged By: **Layne Kortbein**  
Weather: **Cloudy, scattered rain**  
Date Completed: **6/16/2018**  
Date Developed: **6/19/2018**  
Water Level During Drilling: **N/A**  
Water Level After Development: **7.40' from TOC**

**DRILLING INFORMATION**

Drilling Co.: **Cascade Environmental**  
Drill Crew Chief: **Randy Radke**  
Rig Type: **Board Longyear 200c Mini Sonic**  
Method of Drilling: **Rotosonic**  
Soil Sampling Method: **5' Sample Bags**  
Surface Elevation (feet): **618.12**  
Top of Casing Elevation (feet): **620.82**  
Field Screening Instrument: **MiniRae 3000**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
0		(0.0,0.2) Fill: Black Gravel, with Grass and Organics	CL				Above grade completion, 2.70' stickup
		(0.2,0.5) Fill: Black Gravel with Clay					
		(0.5,5.0) CL: Red Brown Clay, Very Stiff, Trace Pockets of Fine Grain Yellow Sand			1.4		
5		(5.0,12.5) CL: Red Brown Clay, Very Stiff, Medium Plasticity	CL		1.8		3/8" Bentonite Chip surface seal 0' to 5'
					1.4		
10					1.7		2-inch diameter sch 40 PVC casing
		(12.5,17.0) CL: Red Brown Clay, with Layers of Medium Brown Fine to Medium Grain Sand, Black Mottling, Very Stiff, Medium to High Plasticity, Red and Black Mottling Significant from 15-17ft	CL		1.9		
15					1.4		Aquaguard bentonite slurry annular seal 5' to 43'
		(17.0,29.0) SM: Red Brown Fine to Medium Grain Sand, with Silt, with Orange Mottling	SM		1.7		
20					2.6		

**Comments:**

Water level could not be observed due to city water drilling fluid.



5910 Rice Creek Parkway, Suite 100  
St. Paul, Minnesota 55126

**ENVIRONMENTAL BORING / WELL LOG**

BORING / WELL ID: **MWRR-1D**  
PROJECT: **Superior Terminal**  
UNIQUE WELL NUMBER: **VR359**

DEPTH	LITHOLOGY	DESCRIPTION	USCS	LAB SAMP.	ppm	WELL DIAGRAM	WELL MATERIALS
25					3.7		
30		(29.0,31.0) ML: Red Brown Silt with Fine Grain Sand, Red Mottling, Medium Plasticity	ML		11.7		
		(31.0,31.5) SM: Dark Brown Medium Grain Sand with Silt, Orange Mottling, Red and Brown Mottling Above and Below Layer	SM SM		6.3		
		(31.5,35.0) SM: Medium Brown Fine Grain Sand with Silt, Red and Orange Mottling			5.4		
35		(35.0,40.0) SP: Olive Brown Medium Grain Sand, Orange and Black mottling	SP		13.5		
					6.8		
40		(40.0,45.0) SP: Olive Brown Fine Grain Sand, Black Mottling	SP		14.8		3/8" Bentonite Chips 43' to 48'
					14.7		
45		(45.0,48.0) SM: Red Brown Silt with Fine Grain Sand, Orange Mottling, Stiff, Trace Plasticity	SM		9.1		Quartz filtration media filter pack 48' to 54'
		(48.0,53.0) SM: Olive Brown to Dark Brown Silt with Fine Grain Sand, Black Mottling	SM		4.0		2-inch diameter 10-slot sch 40 PVC screen 50' to 53'
50					1.6		
					7.4		Total depth of well 53'

Comments:

Water level could not be observed due to city water drilling fluid.

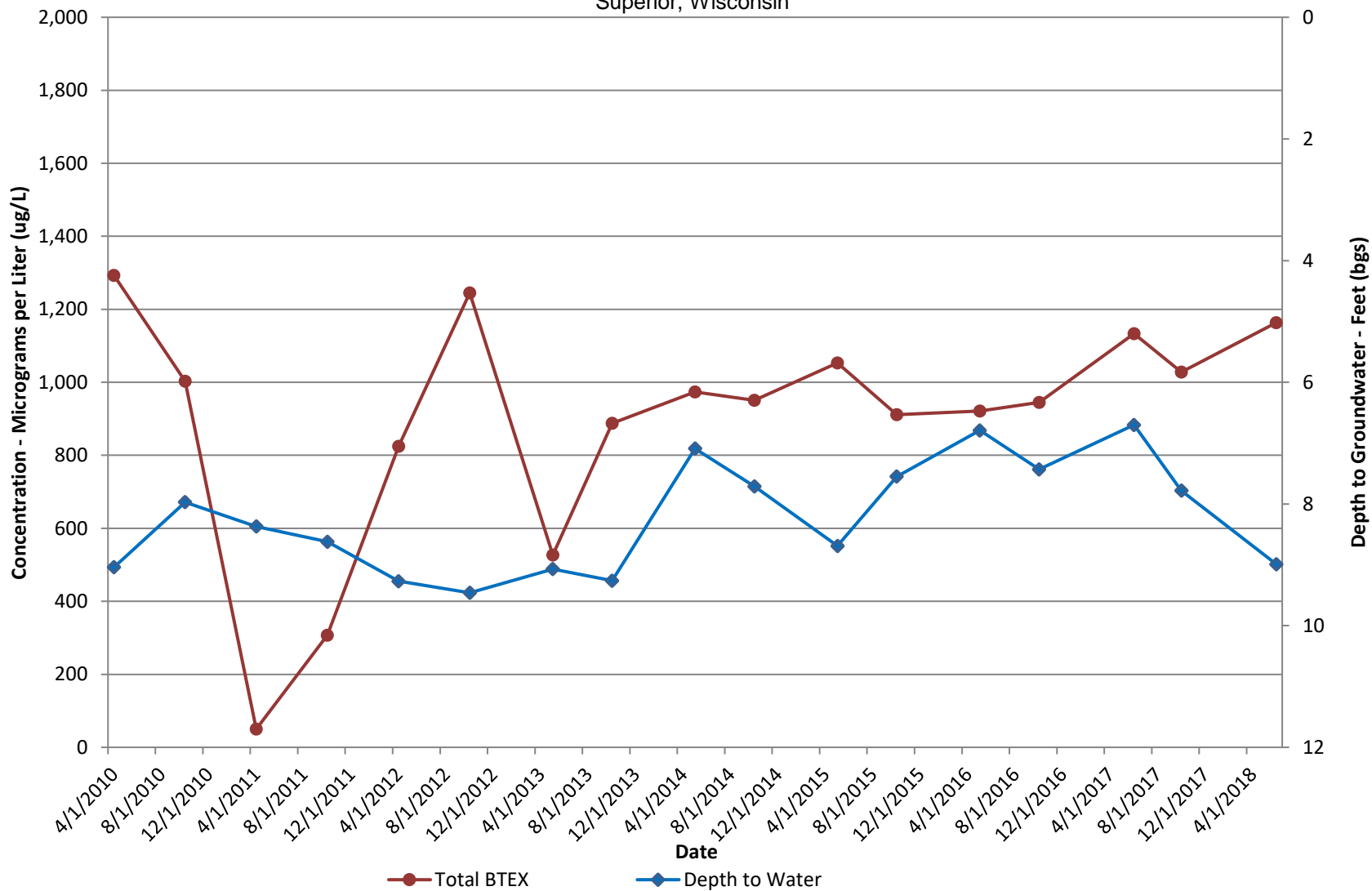
*2018 Jan.-June Progress Report  
Former Amoco Terminal  
2904 Winter Street, Superior, Wisconsin  
Antea Group Project No. WISUP181*



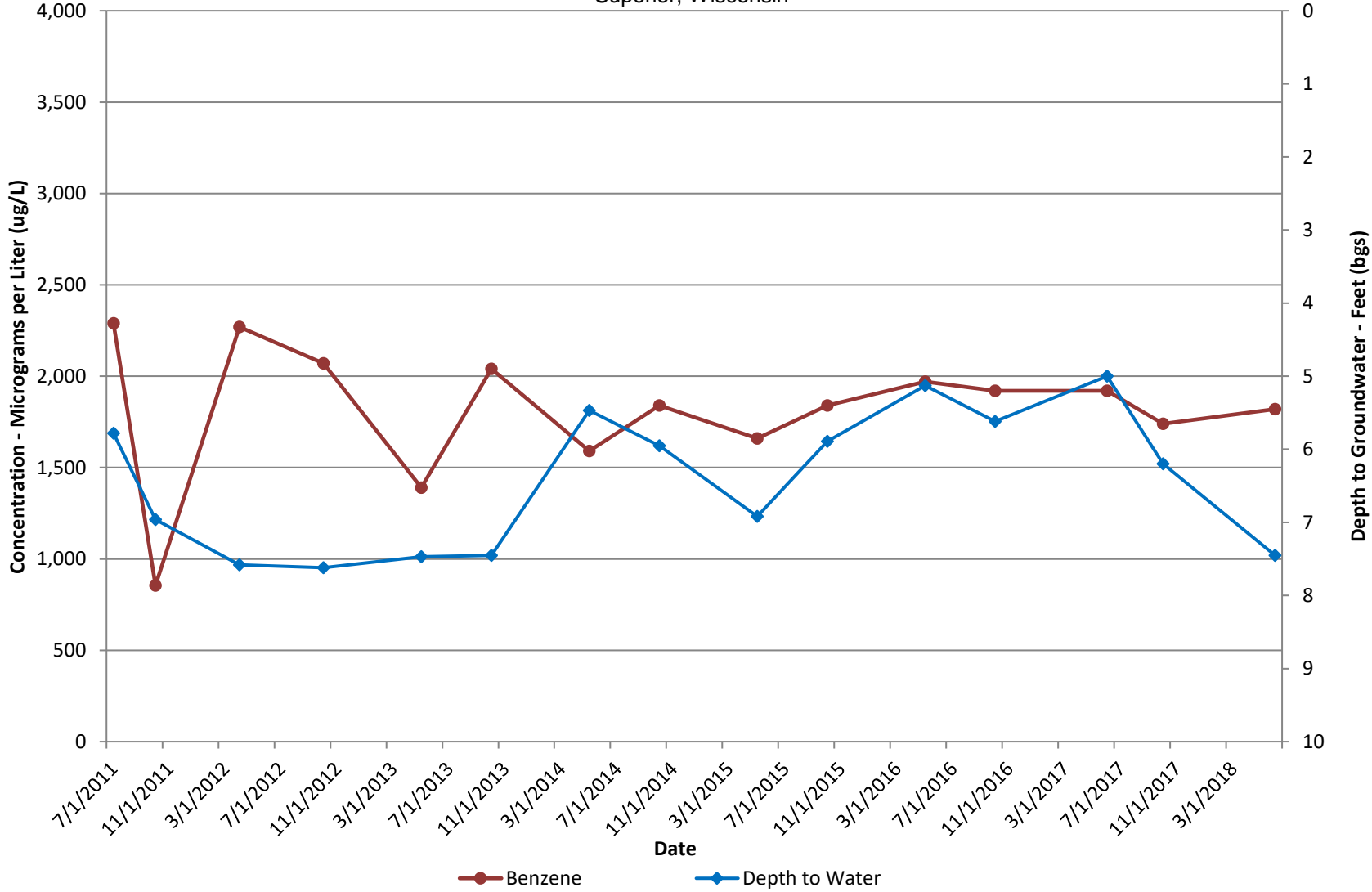
## ***Appendix C***

### **Groundwater BTEX Hydrographs**

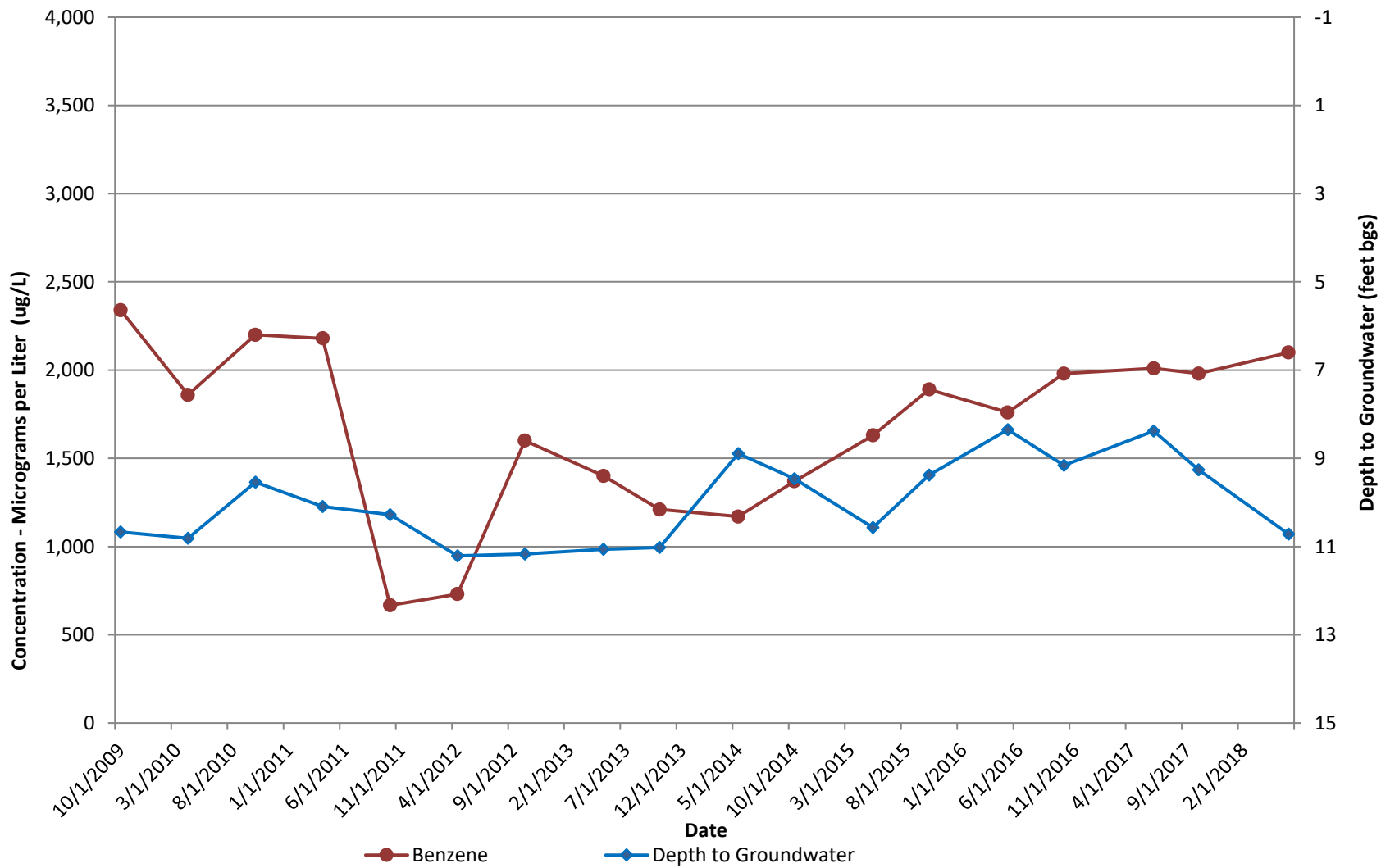
**MWM-10D**  
**Total BTEX/Groundwater Hydrograph**  
 Former Amoco Terminal  
 Superior, Wisconsin



**MW-36D**  
**Benzene/Groundwater Hydrograph**  
Former Amoco Terminal  
Superior, Wisconsin



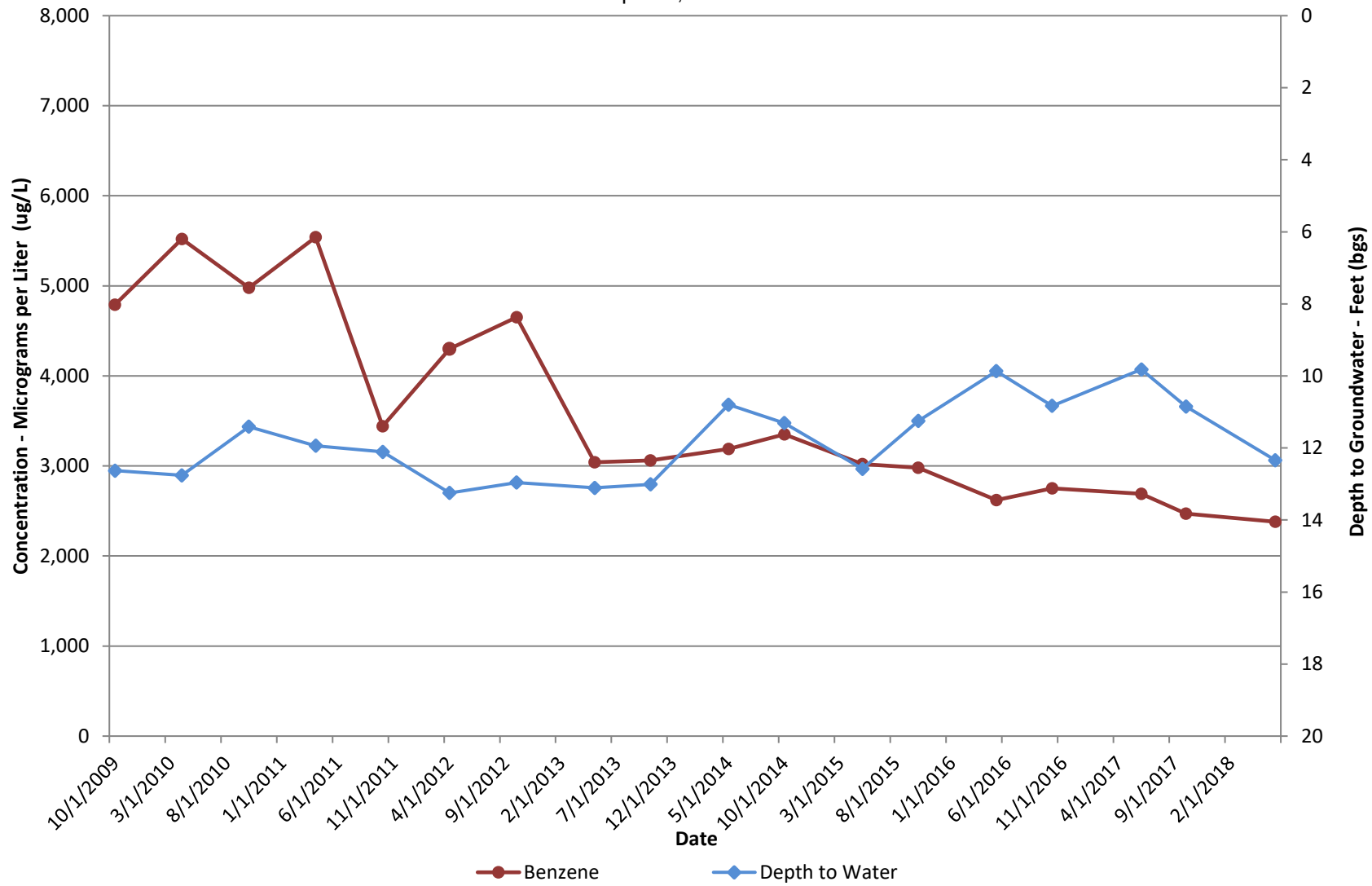
**MWM-7D**  
**Benzene/Groundwater Hydrograph**  
 Former Amoco Terminal  
 Superior, Wisconsin



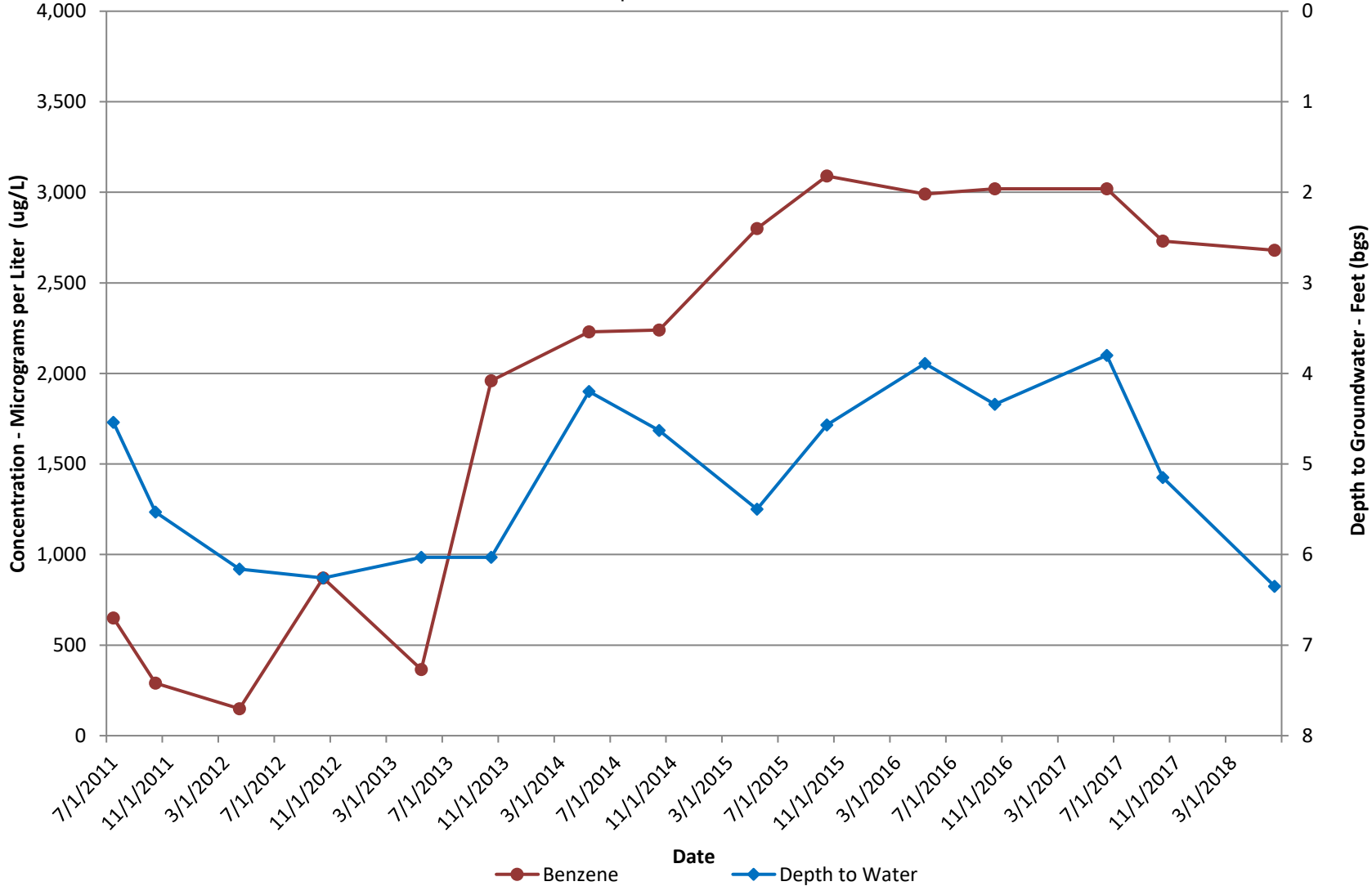


# MWM-9RD Benzene/Groundwater Hydrograph

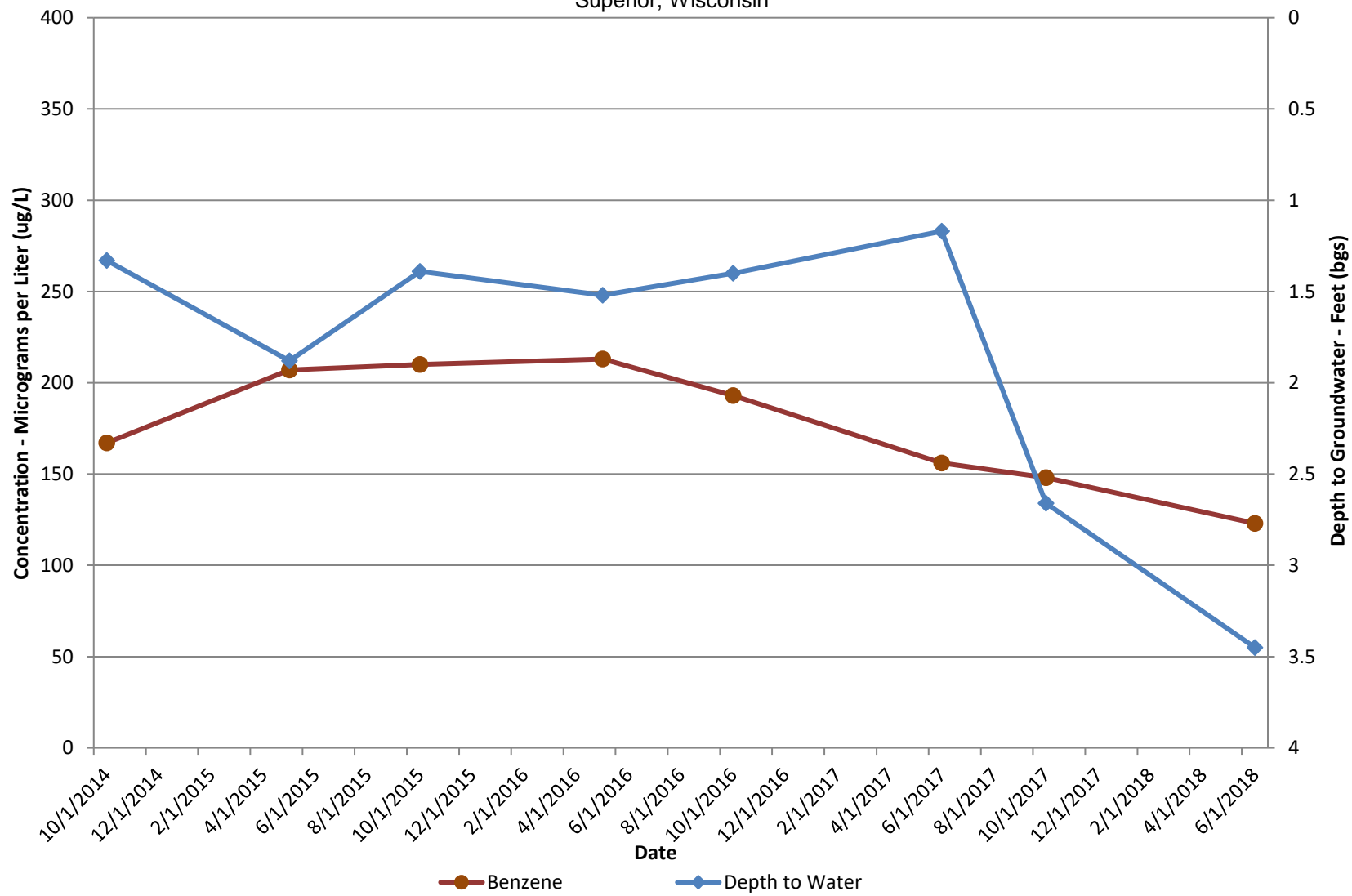
Former Amoco Terminal  
Superior, Wisconsin



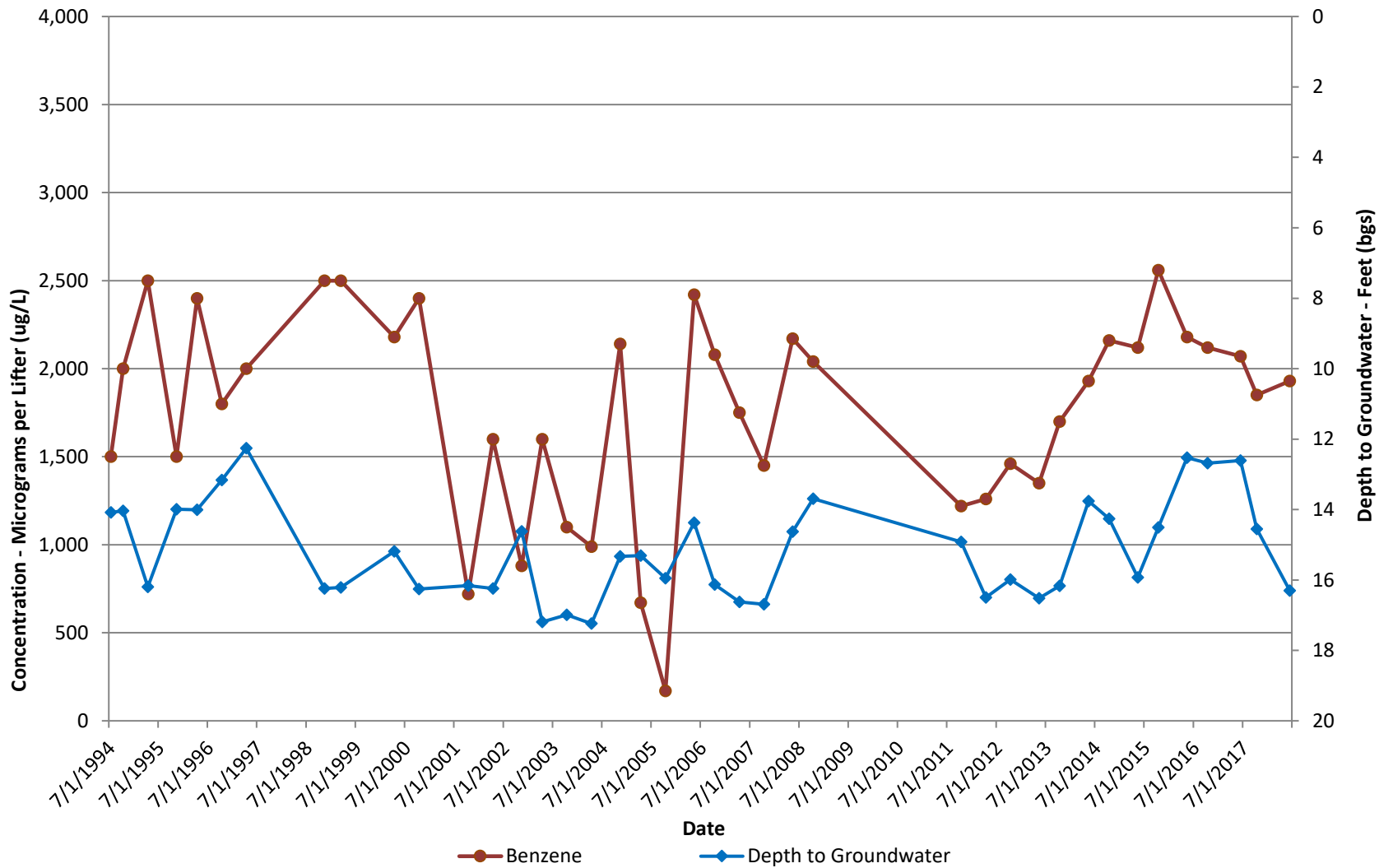
**MW-37D**  
**Benzene/Groundwater Hydrograph**  
Former Amoco Terminal  
Superior, Wisconsin



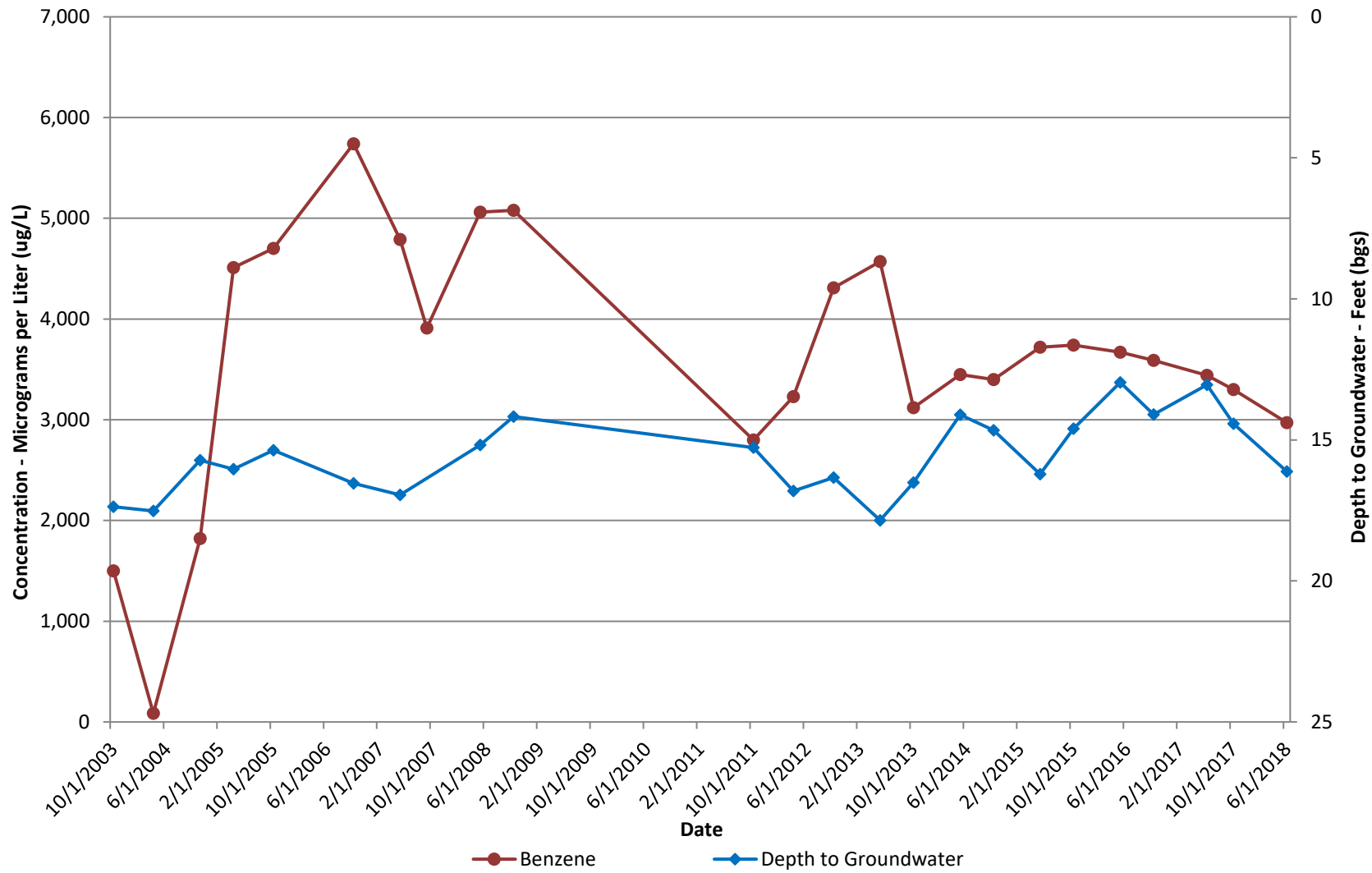
**MWBD-1D**  
**Benzene/Groundwater Hydrograph**  
Former Amoco Terminal  
Superior, Wisconsin



**MW-30D**  
**Benzene/Groundwater Hydrograph**  
Former Amoco Terminal  
Superior, Wisconsin



**MWT-2D**  
**Benzene/Groundwater Hydrograph**  
Former Amoco Terminal  
Superior, Wisconsin

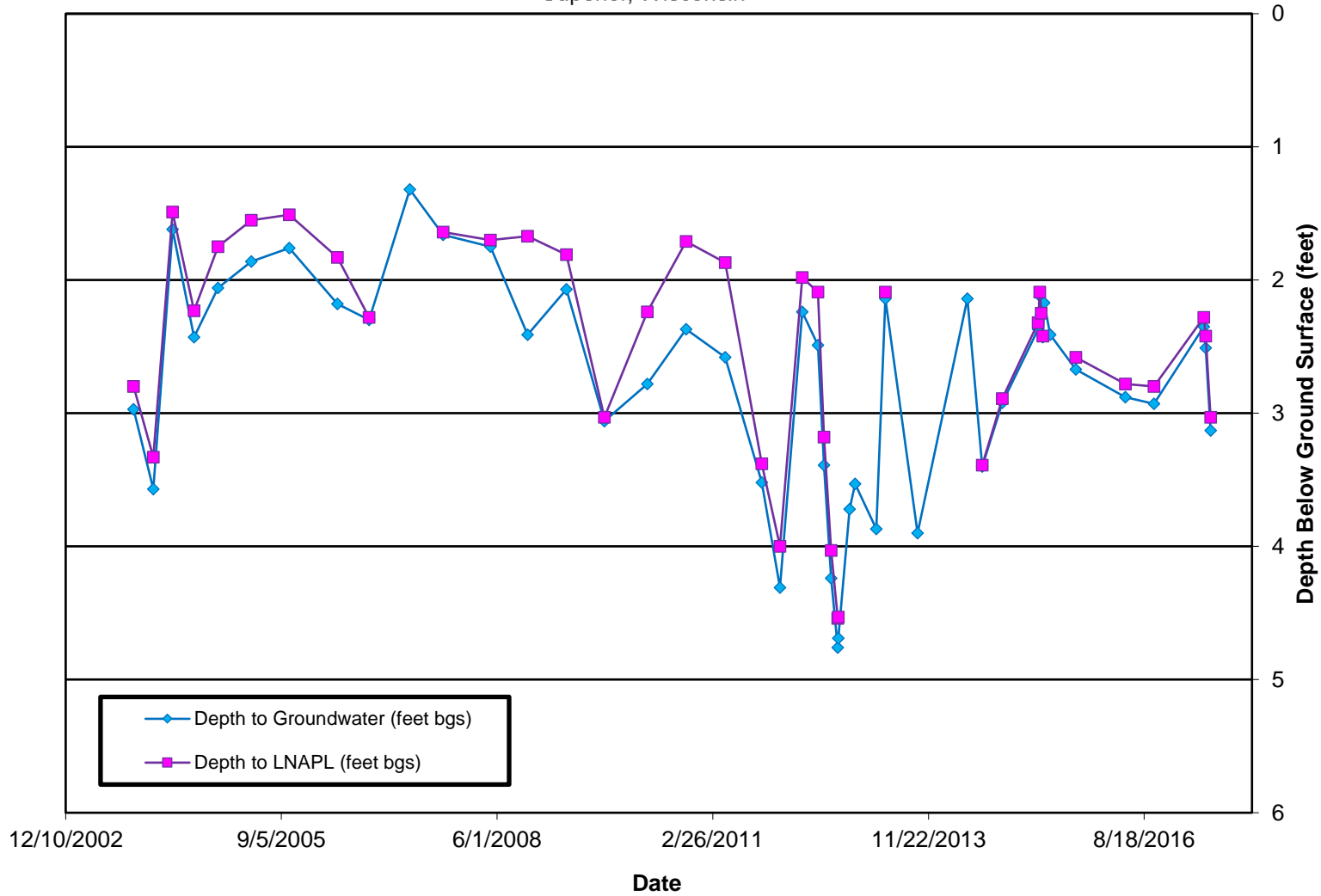


## ***Appendix D***

LNAPL and Groundwater Hydrographs

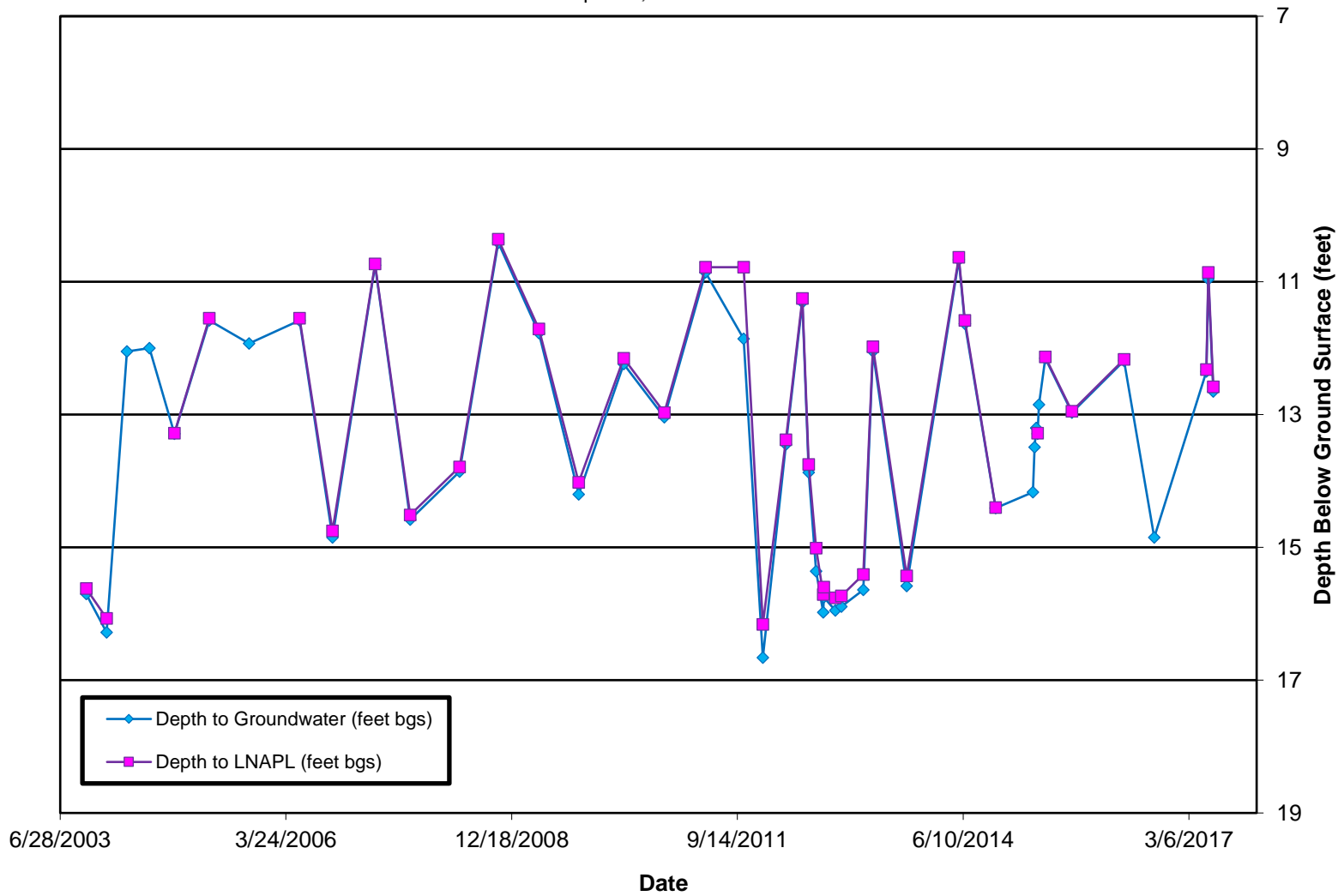
# MWOW-1 (AOC 13) Depth to LNAPL/Groundwater

Former Amoco Terminal  
Superior, Wisconsin



# MWOW-5 (AOC 12) Depth to LNAPL/Groundwater

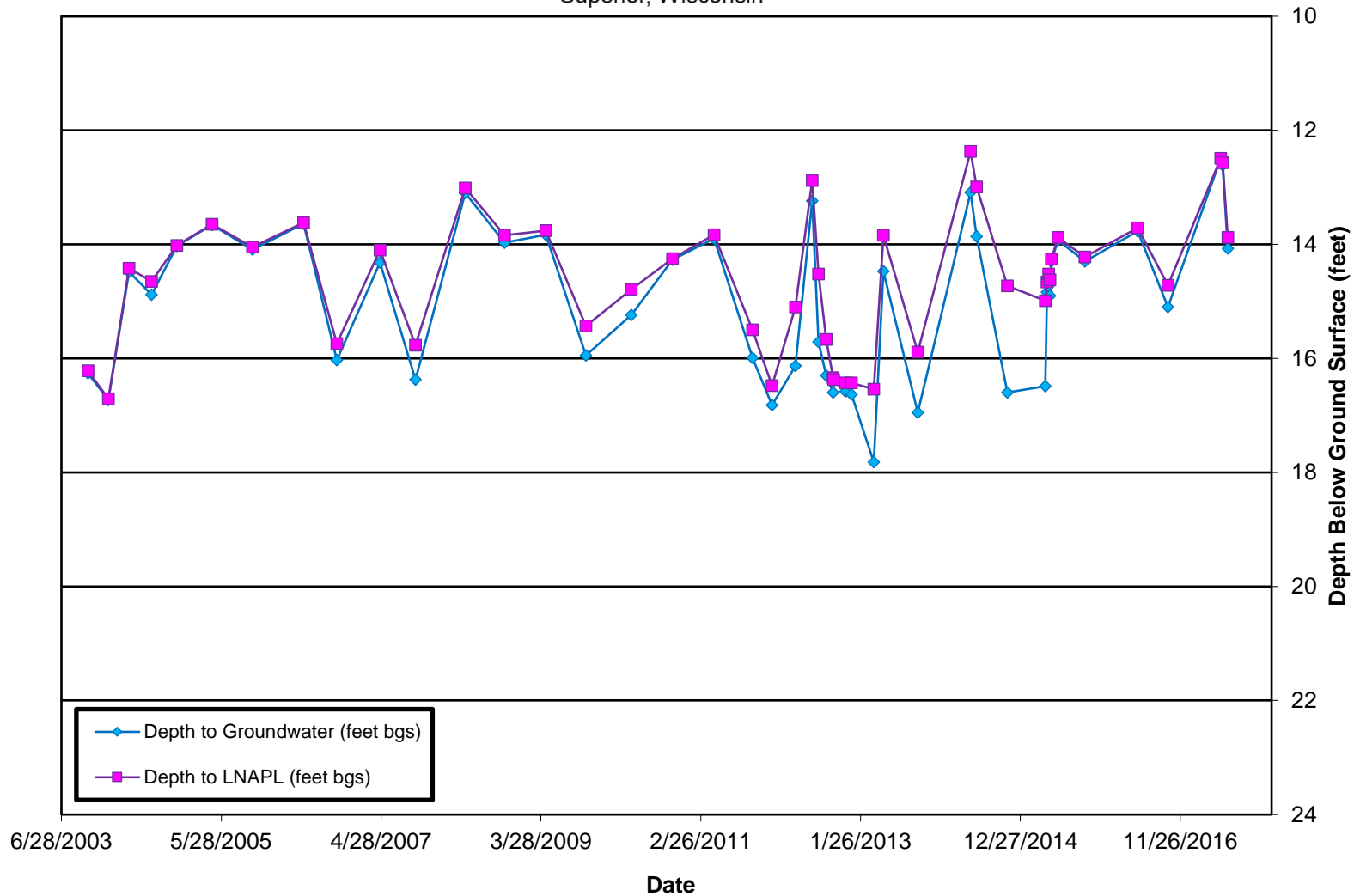
Former Amoco Terminal  
Superior, Wisconsin



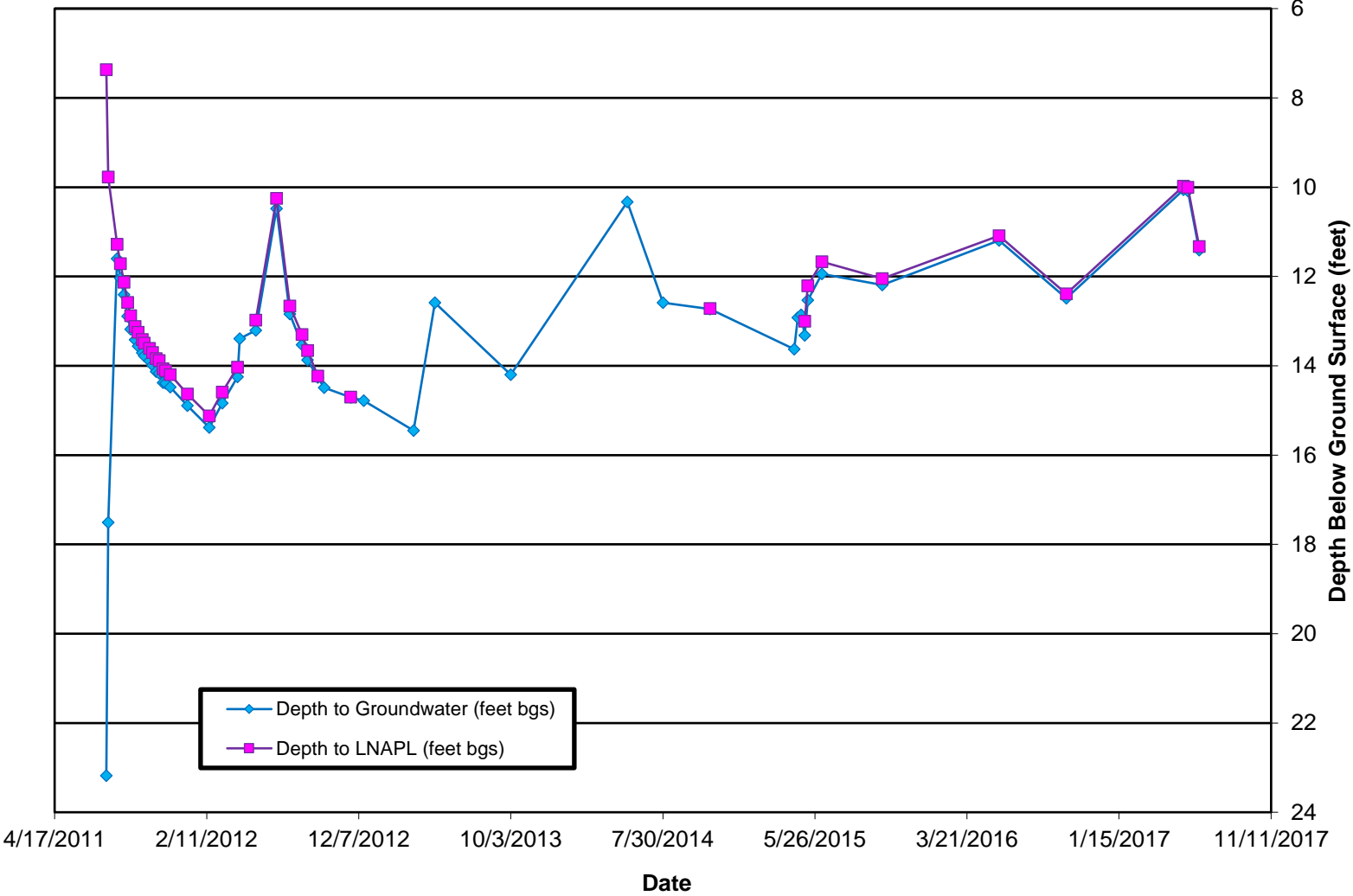


# MWRR-8 (AOC 11) Depth to LNAPL/Groundwater

Former Amoco Terminal  
Superior, Wisconsin

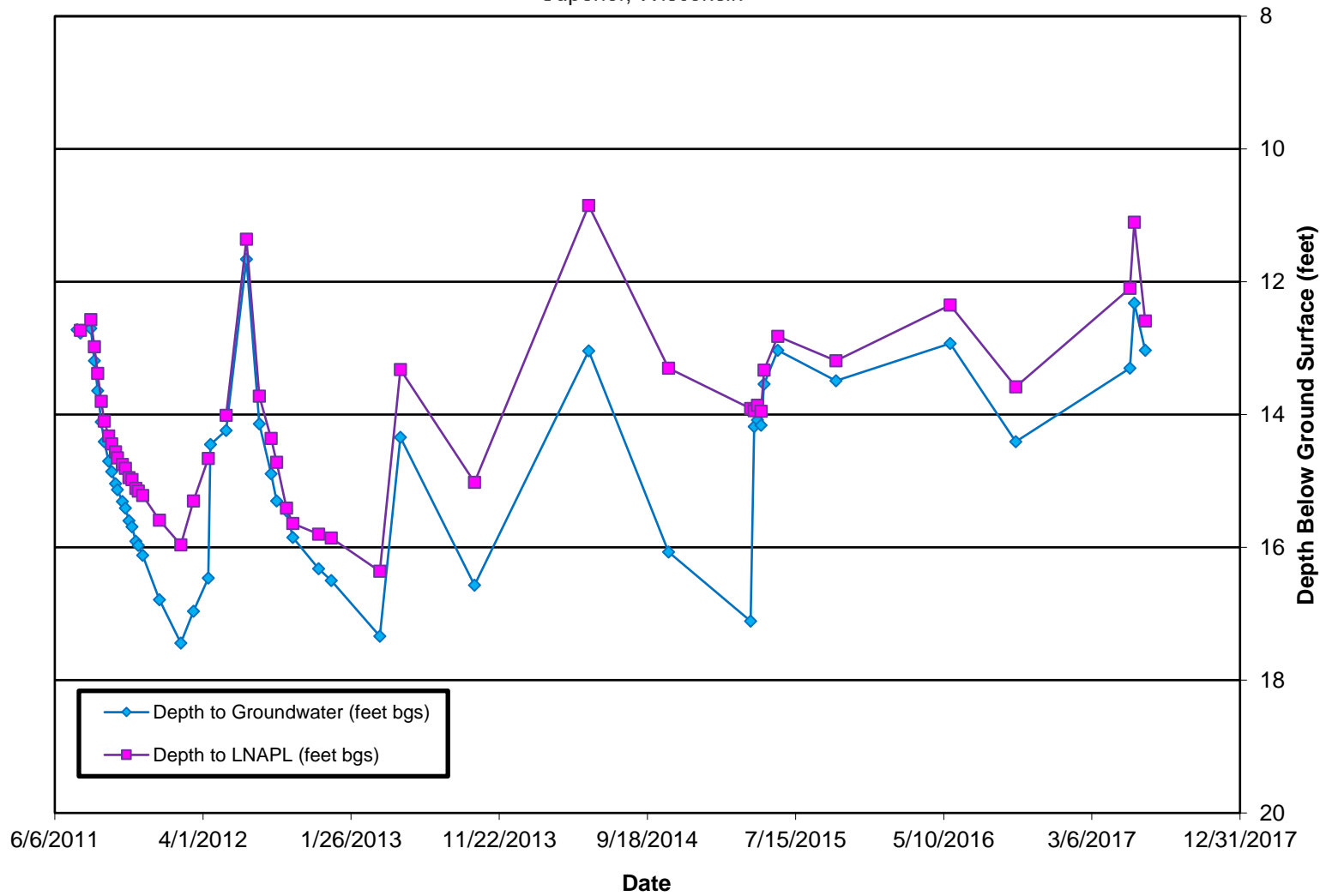


**LRMW-10 (AOC 9)**  
**Depth to LNAPL/Groundwater**  
Former Amoco Terminal  
Superior, Wisconsin



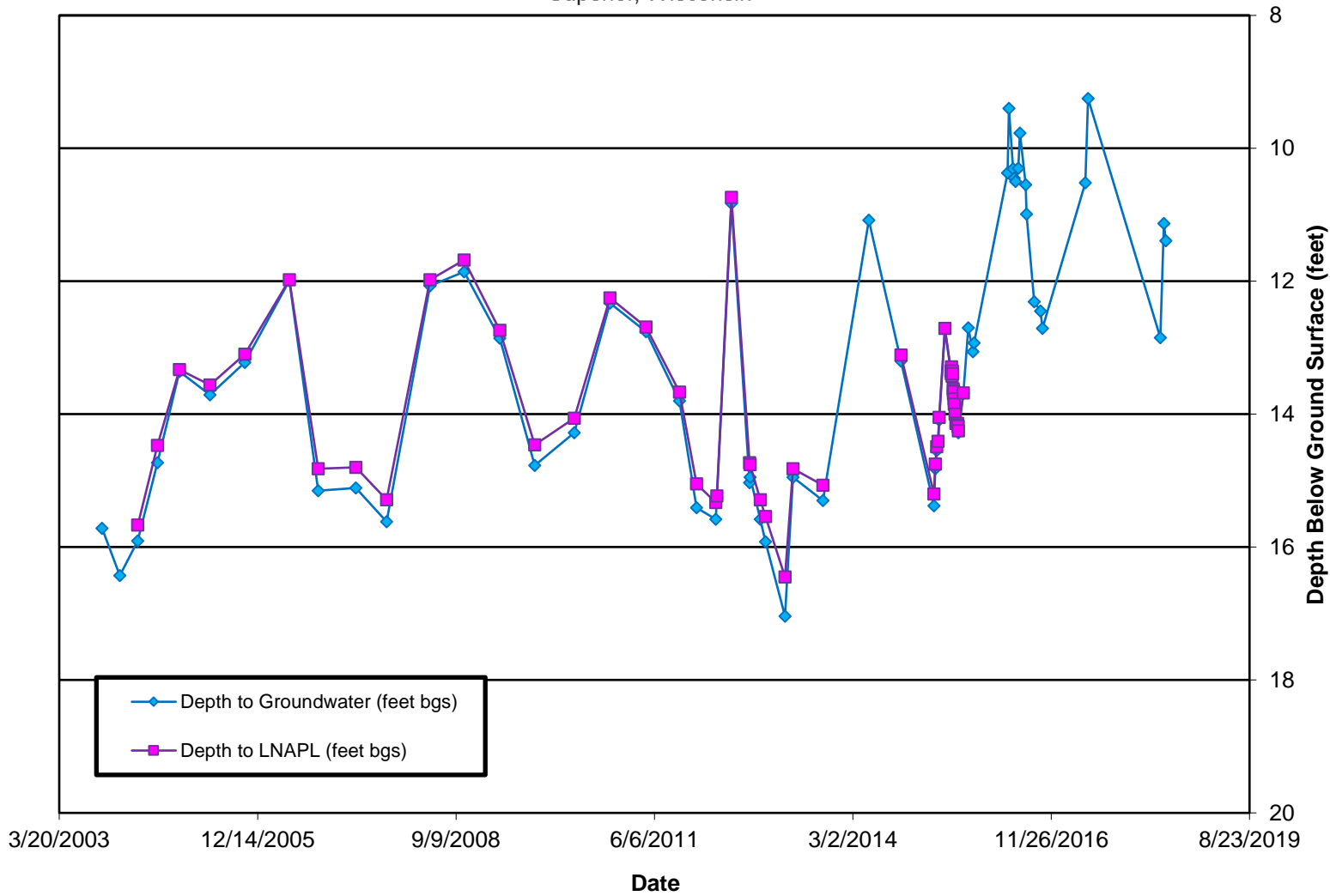
# LRMW-11 (AOC 10) Depth to LNAPL/Groundwater

Former Amoco Terminal  
Superior, Wisconsin



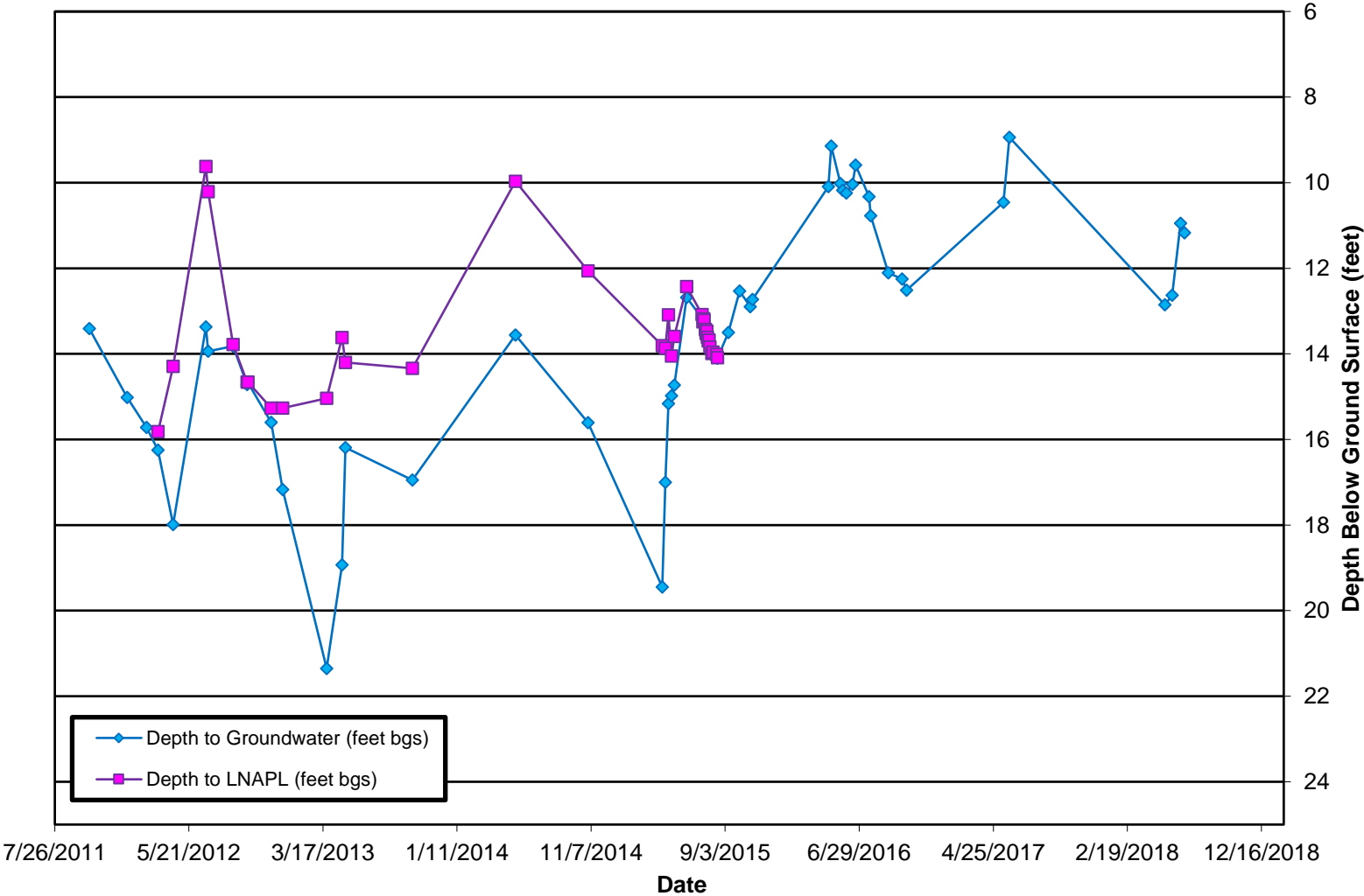
# MWAST-8 (AOC 6) Depth to LNAPL/Groundwater

Former Amoco Terminal  
Superior, Wisconsin



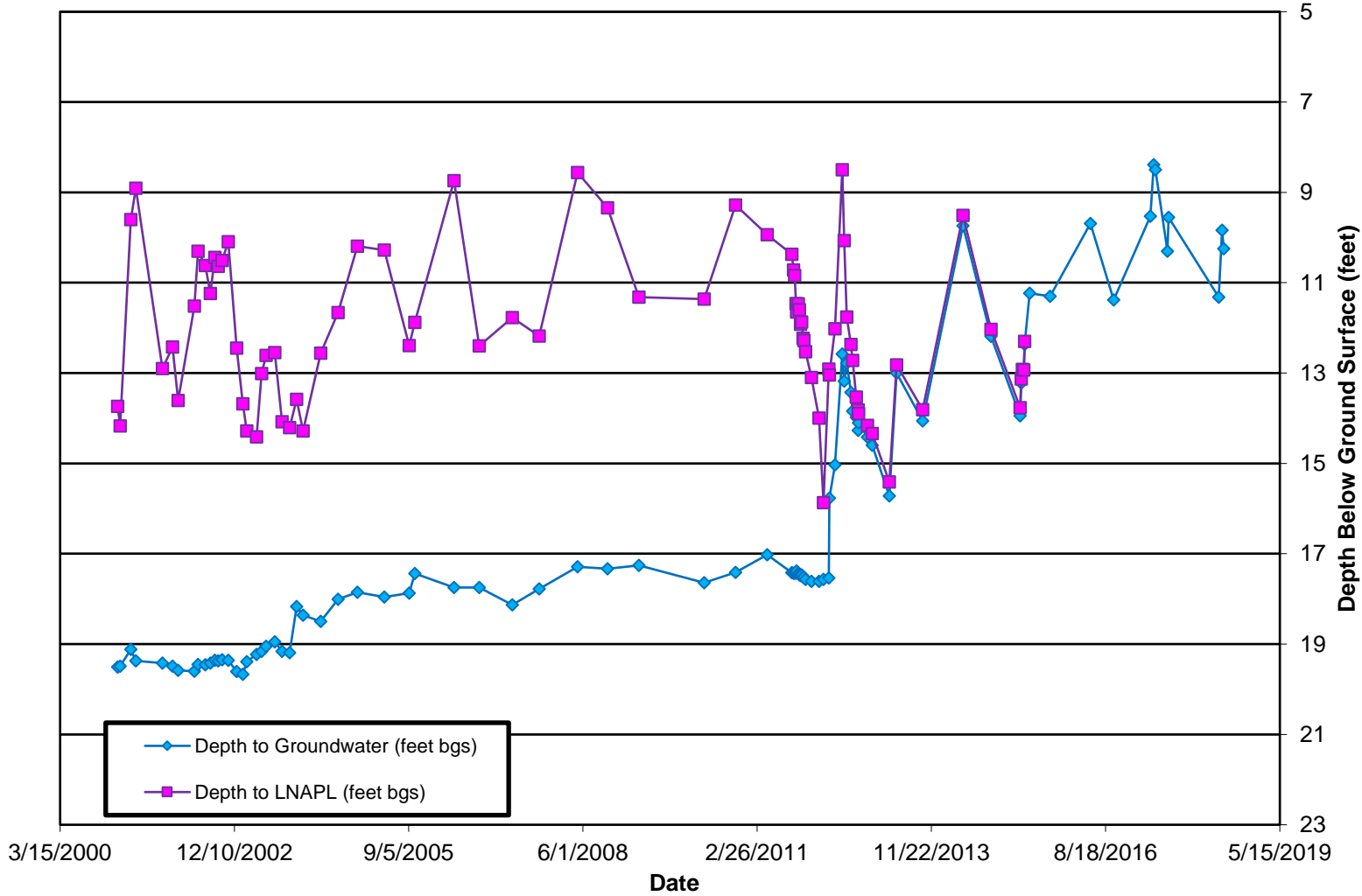
# RWAST-2 (AOC 6) Depth to LNAPL/Groundwater

Former Amoco Terminal  
Superior, Wisconsin



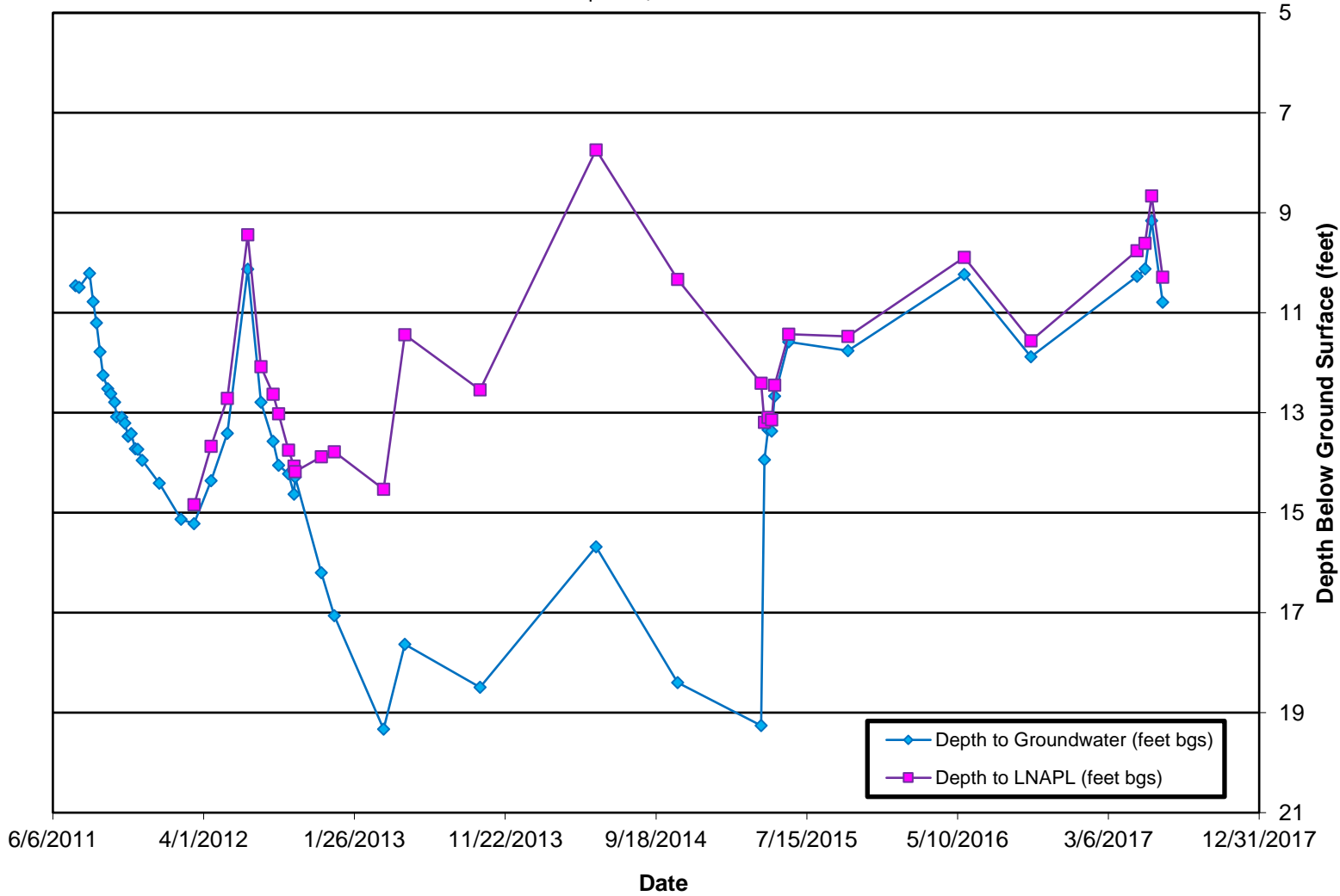
# LRMW-1 (AOC 8) Depth to LNAPL/Groundwater

Former Amoco Terminal  
Superior, Wisconsin



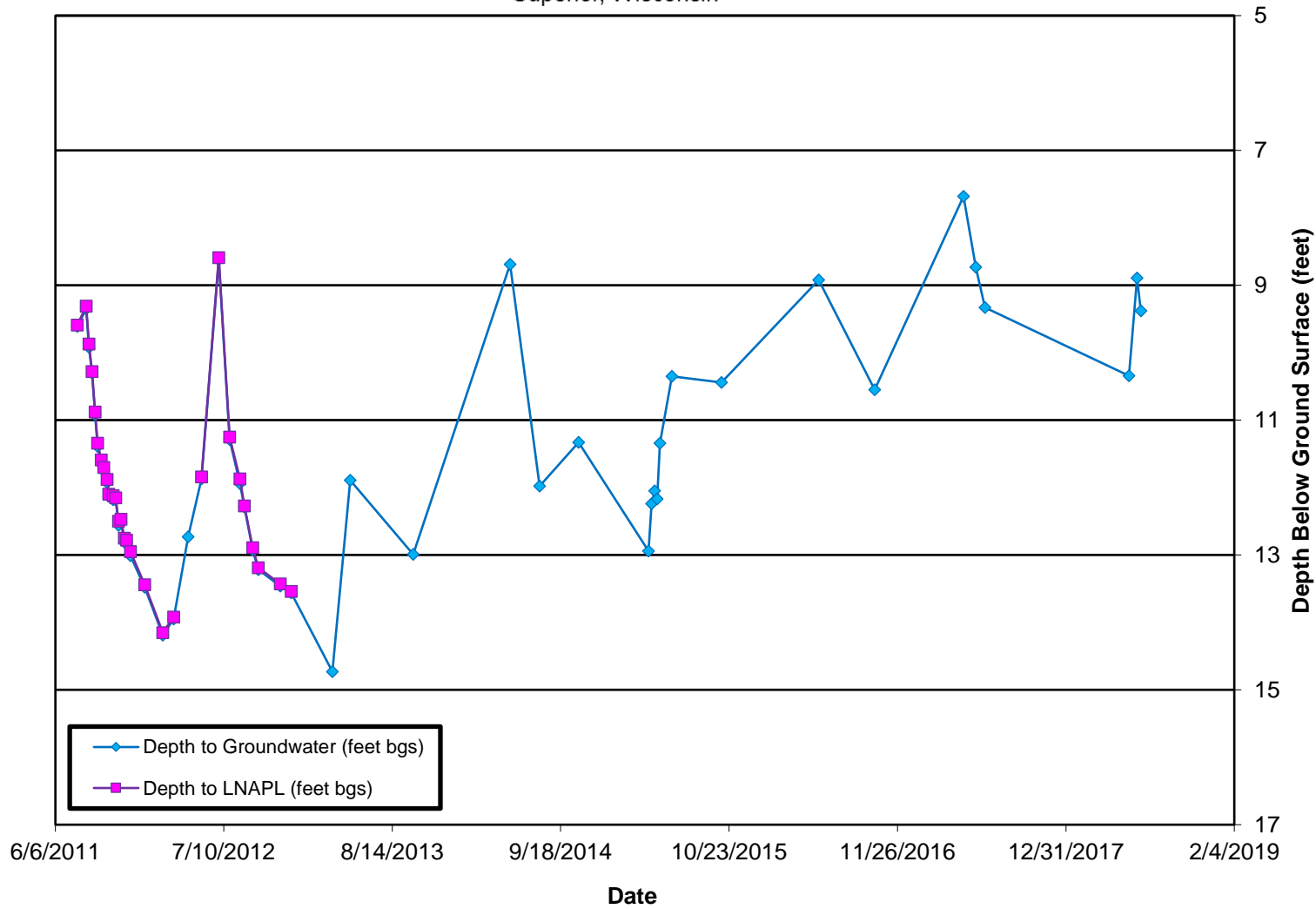
# LRMW-8 (AOC 8) Depth to LNAPL/Groundwater

Former Amoco Terminal  
Superior, Wisconsin



# LRMW-9 (North of AOC 8) Depth to LNAPL/Groundwater

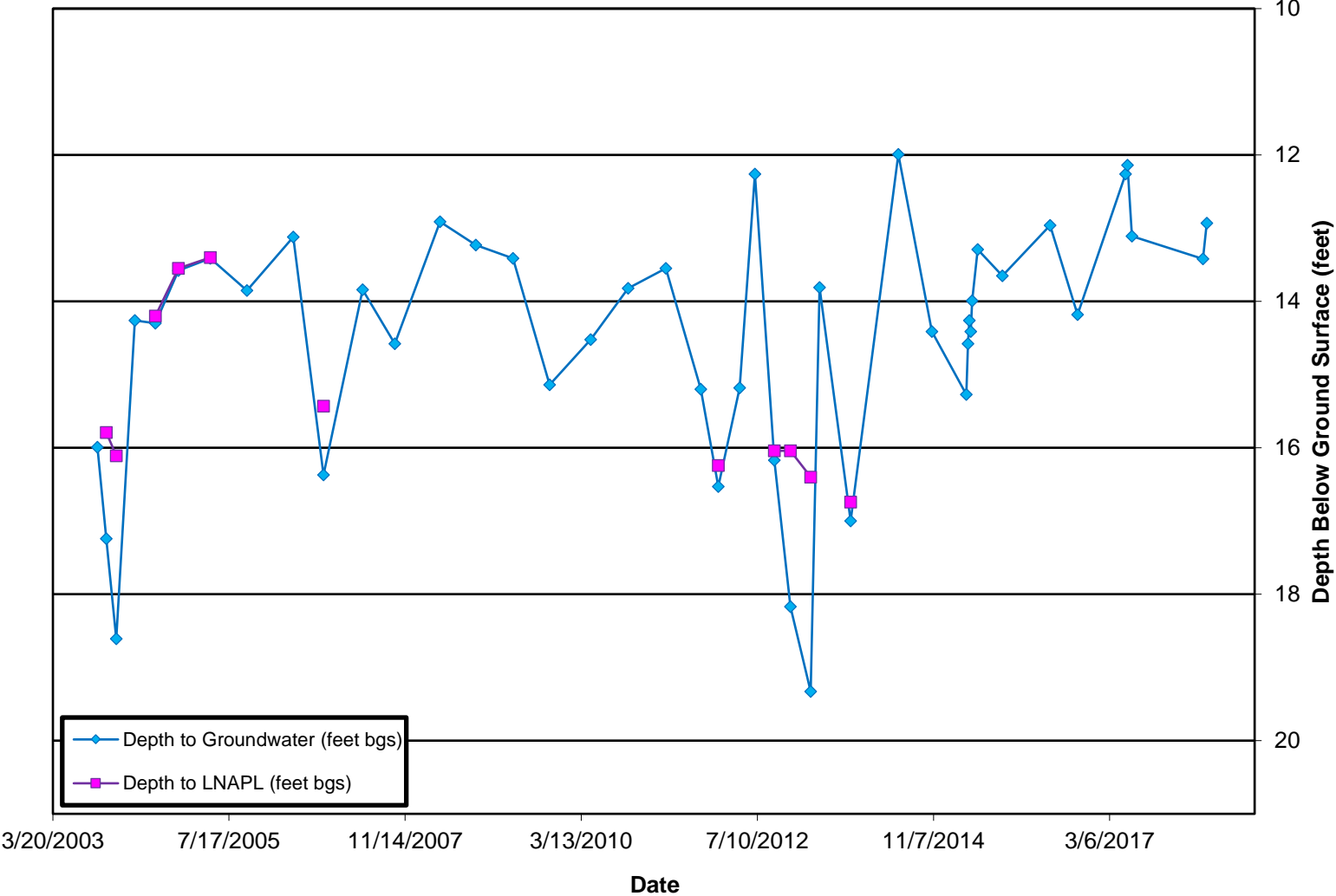
Former Amoco Terminal  
Superior, Wisconsin



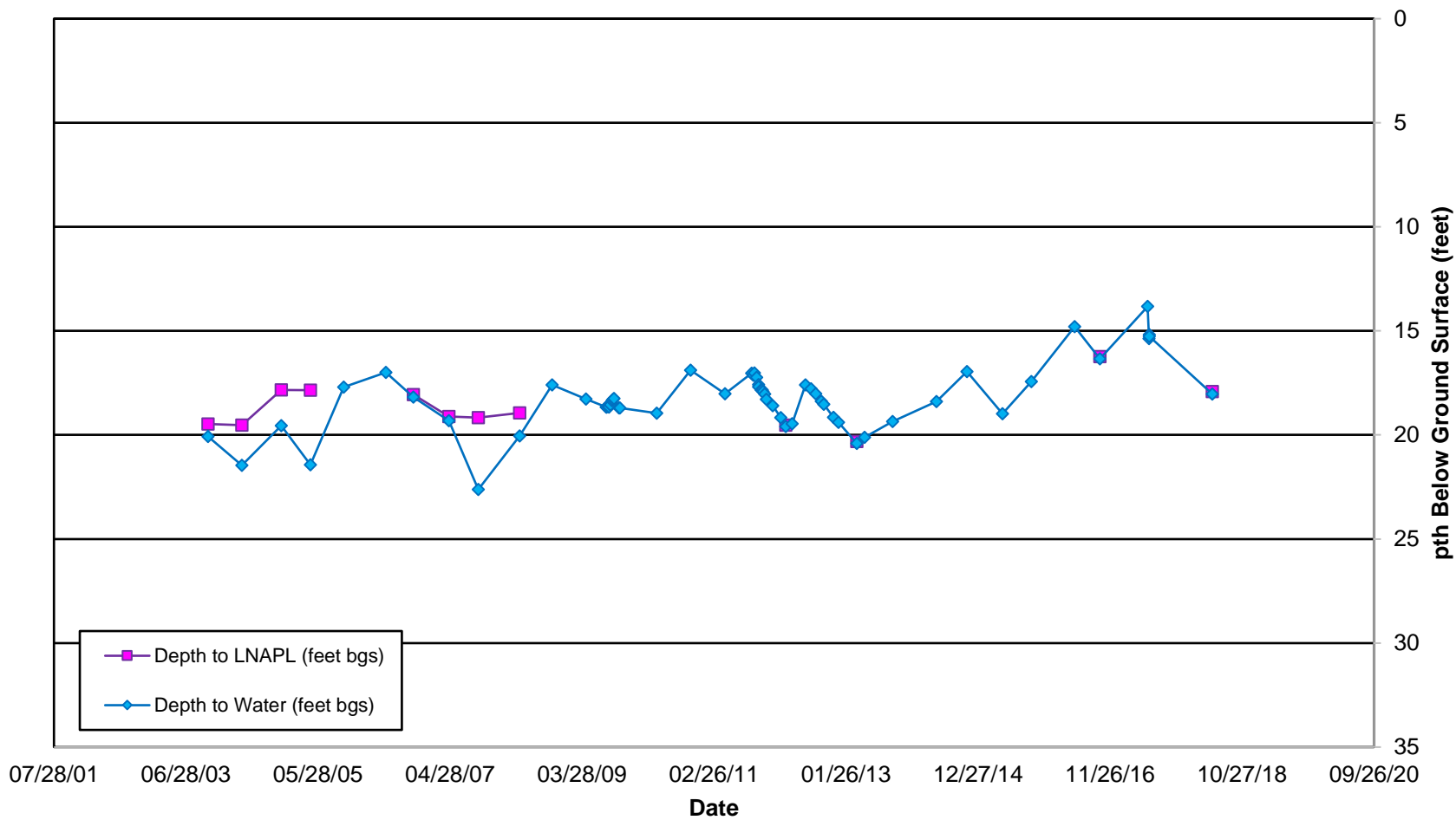


# MWRR-4 (AOC 11) Depth to LNAPL/Groundwater

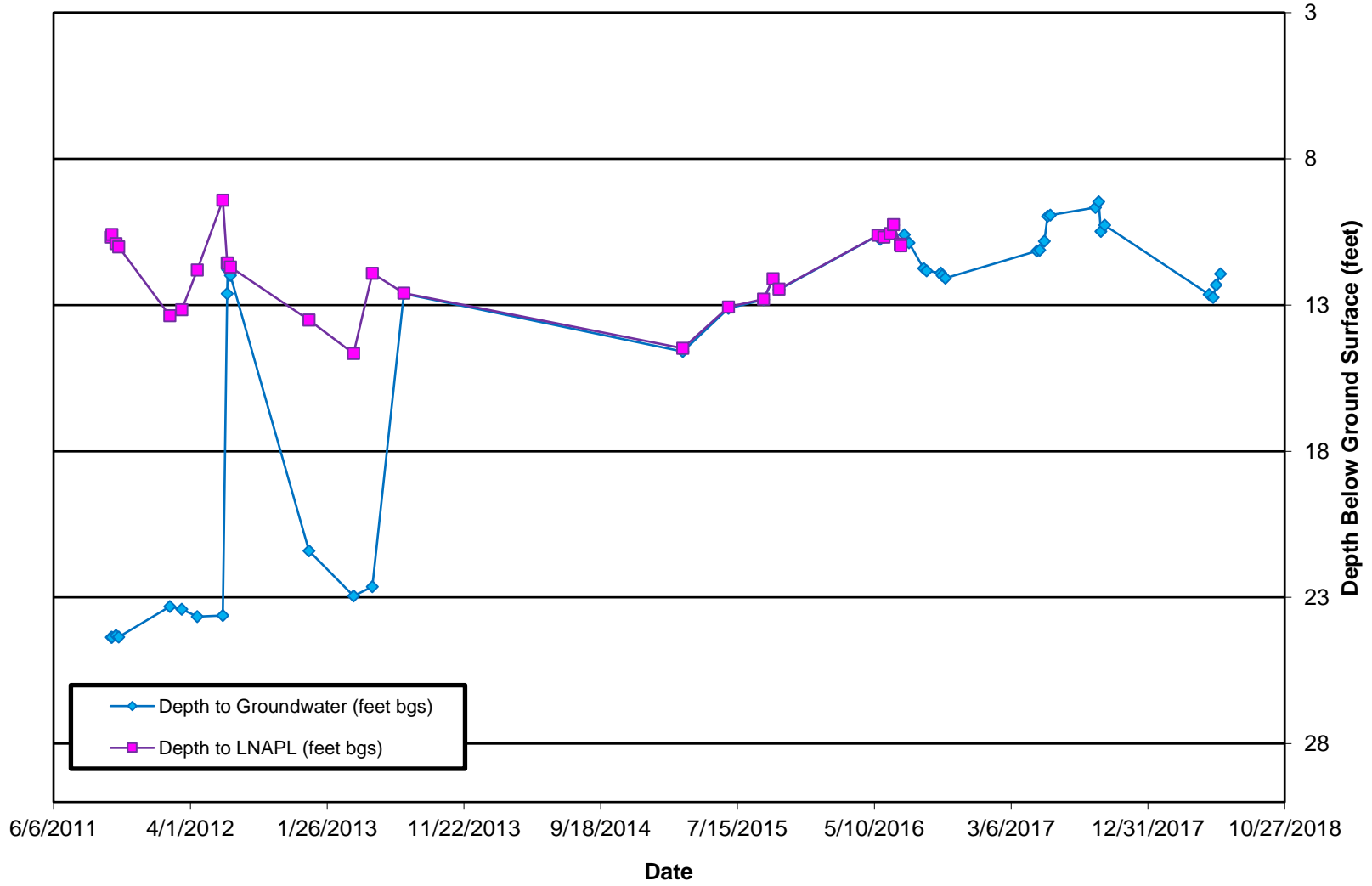
Former Amoco Terminal  
Superior, Wisconsin



**MWT-6**  
**Depth to LNAPL/Groundwater**  
Former Amoco Terminal  
Superior, Wisconsin



**MRW-9**  
**Depth to LNAPL/Groundwater**  
Former Amoco Terminal  
Superior, Wisconsin



## ***Appendix E***

WDNR Operation, Maintenance, Monitoring, and Optimization Form  
(Form 440-194)

**GENERAL INSTRUCTIONS, PURPOSE AND APPLICABILITY OF THIS FORM:** Completion of this form is required under s. NR 724.13(3), Wis. Adm. Code. A narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Failure to submit this form as required is a violation of s. NR 724.13(3), Wis. Adm. Code, and is subject to the penalties in s. 292.99, Wis. Stats. This form must be submitted every six months for soil or groundwater remediation projects that report operation and maintenance progress in accordance with s. NR 724.13(3), Wis. Adm. Code.

Note: Long-term monitoring results submitted in accordance with s. NR 724.17(3), Wis. Adm. Code are required to be submitted within 10 business days of receiving sampling results and are not required to be submitted using this form. However, portions of this form require monitoring data summary information that may be based on information previously submitted in accordance with s. NR 724.17(3), Wis. Adm. Code.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if this form is required to be submitted at sites responded to under the Federal Comprehensive Environmental Response and Compensation Act (commonly known as Superfund) or an equivalent State lead Superfund response.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if any of the information required in this form may be omitted or changed and obtain prior written approval for any omissions or changes.

Submittal of this form is not a substitute for reporting required by Department programs such as Waste Water 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.

Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.). Unless otherwise noted, all citations refer to Wisconsin Administrative Code.

Note: There is a separate semi-annual report required under s. NR 700.11(1), Wis. Adm. Code. Reporting under that provision is through an internet-based form:

<http://dnr.wi.gov/topic/Brownfields/documents/regs/NR700progreport.pdf>

**Section GI - General Site Information**

**A. General Information**

1. Site name

Former Amoco Terminal

2. Reporting period from: 01/01/2018 To: 6/30/2018 Days in period: 181

3. Regulatory agency (enter DNR, DATCP and/or other) 4. BRRTS ID No. (2 digit program-2 digit county-6 digit site specific)  
 WDNR 02-16-117873

5. Site location

Region	County	Address				
Northern Region	Douglas	2904 Winter Street, Superior, WI				
Municipality name	<input type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village	Township	Range	<input type="radio"/> E <input checked="" type="radio"/> W	Section	¼ NE ¼ SE
Superior		49 N	14		16	

6. Responsible party	7. Consultant	
Name	<input type="checkbox"/> Select if the following information has changed since the last submittal	
Antea Group, Project Manager Jonathan Zimdars	Company name	
Mailing address	Antea Group	
5910 Rice Creek Pkwy, Suite 100, Shoreview, MN 55126	Mailing address	Phone number
Phone number	same	(651) 639-9449
(651) 639-9449		

8. Contaminants  
 Gasoline Compounds

9. Soil types (USCS or USDA)  
 CL/ML/SC

10. Hydraulic conductivity(cm/sec): 2x10<sup>-4</sup> (cm/s) 11. Average linear velocity of groundwater (ft/yr) 0.44 to 4.67 ft/yr

12. If soil is treated ex situ, is the treatment location off site?  Yes  No

If yes, give location: Region Wisconsin County Kenosha

Municipality name	City	Town	Village	Township	Range	E	Section	¼	¼ ¼
Emco-Waste Service Division				N		W			

Site name: Former Amoco Terminal

Reporting period from: 01/01/2018 To: 6/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 2 of 28

### B. Remediation Method

Only submit sections that apply to an individual site. Check all that apply:

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

### 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?  Yes  No

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  Yes  No

If yes, explain:

3. Is natural attenuation an effective low cost option at this time?  Yes  No

4. Is closure sampling warranted at this time?  Yes  No

5. Are there any modifications that can be made to the remediation to improve cost effectiveness?  Yes  No

If yes, explain:

### D. Economic and Cost Data to Date

1. Total investigation cost: \_\_\_\_\_

2. Implementation costs (design, capital and installation costs, excluding investigation costs): \_\_\_\_\_

3. Total costs during the previous reporting period: \_\_\_\_\_

4. Total costs during this reporting period: \_\_\_\_\_

5. Total anticipated costs for the next reporting period: \_\_\_\_\_

6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above?  Yes  No

If yes, explain:

7. If closure is anticipated within 12 months, estimated costs for project closeout: \_\_\_\_\_

Site name: Former Amoco Terminal

# Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Reporting period from: 01/01/2018 To: 6/30/2018

Form 4400-194 (R 11/14)

Page 3 of 28

Days in period: 181

## 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 for sites with any ongoing active remediation, monitoring or an investigation. Other persons may sign this form for sites with no response activities during the six month reporting period.


### Registered Professional Engineers:

I 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-E 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.

Print name	Title
Signature	Date

### Hydrogeologists:

I 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.

Print name	Title
Wayne Hutchinson	Senior Hydrogeologist
Signature 	Date
	2018-07-30

### Scientists:

I 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.

Print name	Title
Signature	Date

### Other Persons:

Print name	Title
Signature	Date

### Professional Seal(s), if applicable:





Site name: Former Amoco Terminal

# Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Reporting period from: 01/01/2018 To: 6/30/2018

Form 4400-194 (R 11/14)

Page 4 of 28

Days in period: 181

## Section GW-1, Groundwater Pump and Treat Systems and Free Product Recovery Systems

### A. Groundwater Extraction System Operation:

1. Total number of groundwater extraction wells or trenches available: \_\_\_\_\_ and the number in use during period: \_\_\_\_\_
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): \_\_\_\_\_

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

4. Quantity of groundwater extracted during this time period: \_\_\_\_\_ gallons

5. Average groundwater extraction rate: \_\_\_\_\_ gpm

6. Quantity of dissolved phase contaminants removed during this time period in pounds: \_\_\_\_\_

### B. Free Product Recovery System Operation

1. Is free product (nonaqueous phase liquid) being recovered at this site?  Yes  No

If yes, explain:

Five passive skimmer pumps in the Barge Dock Phase II Skimming system recovering LNAPL from May 14 through June 30, one passive skimmer pump operated in MRW-3 from May 15 through June 30, and one passive skimmer pump operated in LRMW-7 from May 15 through June 30.

2. Quantity of free product extracted during this time period (enter none if none): 865.98 gallons

3. Average free product extraction rate: 0.01 gpm

### C. System Effectiveness Evaluation

1. Is a contaminated groundwater plume fully contained in the capture zone?  Yes  No

If no, explain:

No, current remediation strategy is to recover free product.

2. If free product is present, is the free product fully contained in capture zone?  Yes  No

If no, explain:

Free product is immobile and Phase II system recovery trends show decreasing recovery rates.

3. If free product is present in any wells at the site, but free product was not recovered during reporting period, explain:  
Insufficient LNAPL thickness for select wells on site. Focus was to recover product at wells with an optimal LNAPL thickness for sufficient product recovery.

4. 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 C.4.a.

a. Contaminant: FREE PRODUCT

b. Percent reduction necessary to reach ch. NR 140 ES and PAL: \_\_\_\_\_ %

c. Maximum contaminant concentration level in any monitoring well of that contaminant: \_\_\_\_\_ µg/L

d. Maximum contaminant concentration level in any extraction well of that contaminant: \_\_\_\_\_ µg/L

Site name: Former Amoco Terminal

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Reporting period from: 01/01/2018

To: 6/30/2018

Form 4400-194 (R 11/14)

Page 5 of 28

Days in period: 181

- e. If the maximum concentration in a monitoring well is more that one order of magnitude above the concentration measured in an extraction well, explain why the extracted groundwater contamination levels are significantly less than the levels at other locations within the aquifer.

### D. Additional Attachments

Attach the following to this form:

- Most recent report to the DNR Wastewater Program, if applicable.
- Groundwater contour map with capture zone indicated.
- Groundwater contaminant distribution map (may be combined with contour map).
- Graph of cumulative contaminant removal, if both free product recovery and ground water extraction are used, provide separate graphs.
- Time versus groundwater contaminant concentration graphs for the contaminant listed in C.4.a. (above), as follows:
  - Graph of contaminant concentrations versus time for each extraction well in use during the period.
  - Graph of contaminant concentrations versus time for the monitoring well with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- System operational data table.

Site name: Former Amoco Terminal

Reporting period from: 01/01/2018 To: 6/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 6 of 28

### Section GW-2, In Situ Air Sparging Systems

#### 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: \_\_\_\_\_
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): \_\_\_\_\_
3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain: \_\_\_\_\_

#### 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: \_\_\_\_\_
  - b. Percent reduction necessary to reach ch. NR 140 ES and PAL: \_\_\_\_\_ %
  - c. Maximum contaminant concentration level in any monitoring well: \_\_\_\_\_ µg/L
2. Is there any evidence that air is short circuiting through natural or man-made pathways?  Yes  No  
If yes, explain: \_\_\_\_\_
3. Is the size of the plume:  Increasing  Stabalized  Decreasing ?  
If increasing, explain: \_\_\_\_\_

#### 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.

Site name: Former Amoco Terminal

Reporting period from: 01/01/2017 To: 06/30/2017

Days in period: 181

# Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 7 of 28

## Section GW-3, Natural Attenuation (Passive Bioremediation) in Groundwater

### A. 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 A.1.a

a. Contaminant: \_\_\_\_\_

b. Percent reduction necessary to reach ch. NR 140 ES and PAL: \_\_\_\_\_ %

c. Maximum contaminant concentration level in any monitoring well of that contaminant: \_\_\_\_\_  $\mu\text{g/L}$

2. Aquifer parameters:

a. Hydraulic conductivity: \_\_\_\_\_  $\text{cm/sec}$

b. Groundwater average linear velocity: \_\_\_\_\_  $\text{ft/yr}$

3. Is there a downgradient monitoring well that meets ch. NR 140 standards?  Yes  No

4. Based on water chemistry results, is the plume:  Expanding  Stabalized  Contracting ?

5. If the answer in 4. (above) is "expanding," is natural attenuation still the best option?  Yes  No

If yes, explain:

6. Biodegradation parameters:

a. Upgradient (or other site specific background) DO level: \_\_\_\_\_  $\mu\text{g/L}$

b. DO levels in the part of the plume that is most heavily contaminated \_\_\_\_\_  $\mu\text{g/L}$

7. Is site closure a viable option within 12 months from the date of this form?  Yes  No

8. Are there any modifications that can improve cost effectiveness?  Yes  No

If yes, explain:

9. Have groundwater table fluctuations changed the contaminant level trends over time?  Yes  No

If yes, explain:

10. Has the direction of groundwater flow changed during the reporting period?  Yes  No

If yes, approximate change in degrees: \_\_\_\_\_

### B. Additional Attachments

Attach the following:

- 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).
- Graph of contaminant concentrations versus time for the contaminant listed in A.1.a. (above) for the monitoring point with the greatest level of contamination.  
Note: This is the minimum required graph; however, it is recommended that multiple time versus contamination concentration graphs as described in the instructions on page 24 for Natural Attenuation of Groundwater be submitted.
- Graph of contaminant concentrations versus distance.
- Groundwater contaminant chemistry table.
- Groundwater biological parameters.
- Groundwater elevations table.

Site name: Former Amoco Terminal

Reporting period from: 01/01/2018 To: 06/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 8 of 28

### Section GW-4, Other Groundwater Remediation Methods

#### A. 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 A.1.a.

a. Contaminant: \_\_\_\_\_

b. Percent reduction necessary: \_\_\_\_\_ %

c. Maximum contaminant concentration level in any monitoring well: \_\_\_\_\_ µg/L

2. Is the size of the plume:  Increasing  Stabalized  Decreasing ?

3. Describe the method used to remediate groundwater at the site:

4. List any additional information required by the DNR for this method for this site:

#### B. Additional Attachments

Attach the following:

- 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).
- Graph of contaminant concentrations versus time for the contaminant listed in A.1.a. (above) for the monitoring point with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- Any other attachments required by the DNR for this remediation method.

Site name: Former Amoco Terminal

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Reporting period from: 01/01/2018 To: 06/30/2018

Form 4400-194 (R 11/14)

Page 9 of 28

Days in period: 181

### Section IS-1, Soil Venting (Including Soil Vapor Extraction, Building Venting and Bioventing)

#### A. Soil Venting Operation

**Note:** This form is not required for building vapor mitigation systems that are installed proactively to protect building occupants/users and are not considered part of ongoing active soil remediation.

1. Number of air extraction wells available and number of wells actually in use during the period: \_\_\_\_\_
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): \_\_\_\_\_
3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain: \_\_\_\_\_
4. Average depth to groundwater: \_\_\_\_\_ gpm

#### B. Building Basement/Subslab Venting System Operation

1. Number of venting points available and number of points actually in use during the period: \_\_\_\_\_
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): \_\_\_\_\_
3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain: \_\_\_\_\_

#### C. Effectiveness Evaluation

1. Average contaminant removal rate for the entire system: \_\_\_\_\_ pounds per day
2. Average contaminant removal rate per well or venting point: \_\_\_\_\_ pounds per day
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
    - ii. Methane levels in extracted air (ppmv) If over 10 ppmv, explain: \_\_\_\_\_
  - iii. If methane is not present above 10 ppmv 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.

#### D. 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.

Site name: Former Amoco Terminal

Reporting period from: 01/01/2018 To: 06/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 10 of 28

### Section IS-2, Natural Attenuation (Passive Bioremediation) in Soil

#### A. Effectiveness Evaluation

1. Soil gas information in the soil that is most contaminated from a permanently installed gas probe(s) or water table monitoring well(s).
  - a. Hydrocarbon levels: \_\_\_\_\_ ppm, with an FID
  - b. Oxygen levels: \_\_\_\_\_ percent
  - c. Carbon dioxide levels(specify ppm or percent): \_\_\_\_\_
  - d. Methane levels: \_\_\_\_\_ ppm
2. Soil gas information in background (uncontaminated soil) from permanently installed gas probe(s) or water table monitoring well(s):
  - a. Hydrocarbon levels: \_\_\_\_\_ ppm, with an FID
  - b. Oxygen levels: \_\_\_\_\_ percent
  - c. Carbon dioxide levels(specify ppm or percent): \_\_\_\_\_
  - d. Methane levels: \_\_\_\_\_ ppm
3. List the results of the single boring that had the highest levels of soil contamination during the last round of soil sampling, and the date those samples were collected. Since soil borings are only drilled periodically, list the most recent data even if the data is prior to this reporting period. Since this data is used to assess progress based on the most recent soil sampling event, do not list data from prior sampling events.
  - a. Total hydrocarbons (Specify if GRO and/or DRO): \_\_\_\_\_  $\mu\text{g}/\text{kg}$
  - b. Specific compounds ( $\mu\text{g}/\text{kg}$ ):
    - i. Benzene: \_\_\_\_\_  $\mu\text{g}/\text{kg}$
    - ii. 1,2 Dichloroethane: \_\_\_\_\_  $\mu\text{g}/\text{kg}$
    - iii. Ethylbenzene: \_\_\_\_\_  $\mu\text{g}/\text{kg}$
    - iv. Toluene: \_\_\_\_\_  $\mu\text{g}/\text{kg}$
    - v. Total xylenes: \_\_\_\_\_  $\mu\text{g}/\text{kg}$
4. Is there any evidence that contaminants are leaching into groundwater?  Yes  No  
If the answer is yes and if groundwater quality is not being monitored, explain:
5. Is site closure a viable option within 12 months from the date of this form?  Yes  No
6. Are there any modifications that can be made to the remediation to improve cost effectiveness?  Yes  No  
If yes, explain:

#### B. Additional Attachments

Attach the following to this form:

- Well and soil sample location map.
- Cross sections showing the water table, soil sampling locations, screened intervals for gas probes or water table wells, geologic contacts, and any former excavation boundaries.
- Graphs of contaminant concentrations, oxygen, carbon dioxide and methane levels over time.
- Groundwater elevations table, if water table wells are present at the site.
- Table of soil contaminant chemistry.
- Table of soil gas readings.

Site name: Former Amoco Terminal

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Reporting period from: 01/01/2018 To: 06/30/2018

Form 4400-194 (R 11/14)

Page 11 of 28

Days in period: 181

### Section IS-3, Other In Situ Soil Remediation Methods

#### A. Effectiveness Evaluation

1. Describe the method used to remediate soil at the site:

2. List all information required by the DNR for this remediation method for this site:

#### B. Additional Attachments

Attach the following to this form:

- Any other attachments required by the DNR for this remediation method.



Site name: Former Amoco Terminal

Reporting period from: 01/01/2018 To: 06/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 12 of 28

### Section ES-1, Ex Situ Soil Treatment Using Biopiles

#### A. Effectiveness Evaluation

1. Volume of soil in the biopile (if multiple biopiles, list number of piles and total volume):

---

2. Monitoring used to assess progress and verify optimal conditions for biodegradation.

a. Vapor phase measurements of gases (average of all readings from most recent sampling event):

i. VOCs by FID: \_\_\_\_\_ ppm

ii. Oxygen: \_\_\_\_\_ percent

iii. Carbon dioxide: \_\_\_\_\_ percent

iv. Methane: \_\_\_\_\_ ppm

b. Soil temperature: \_\_\_\_\_ °F

c. Soil moisture sensors, if used: \_\_\_\_\_ percent

3. Treatment amendments added to the soil during construction:

a. Artificial nutrients, excluding manure.

i. Types and total pounds added:

---

ii. Nitrogen and phosphorous content of the added amendment: \_\_\_\_\_ percent

b. Manure: \_\_\_\_\_ total pounds

c. Natural organic materials (straw, wood chips, etc.)(type and total pounds):

---

4. Forced air biopiles only answer the following:

a. Total air flow rate of the ventilation system: \_\_\_\_\_ scfm

b. Average contaminant removal rate: \_\_\_\_\_ pounds per day

c. Average biodegradation rate based on oxygen utilization: \_\_\_\_\_ pounds per day

---

5. If soil samples have been taken to monitor progress, list results. Only list the most recent results. If none collected enter NA.

a. Total hydrocarbons. Specify if GRO and/or DRO: \_\_\_\_\_ µg/kg

b. Specific compounds (µg/kg):

i. Benzene: \_\_\_\_\_ µg/kg

ii. 1,2 Dichloroethane: \_\_\_\_\_ µg/kg

iii. Ethylbenzene: \_\_\_\_\_ µg/kg

iv. Toluene: \_\_\_\_\_ µg/kg

v. Total xylenes: \_\_\_\_\_ µg/kg

#### B. Additional Attachments

Attach the following to this form:

- Figure showing the construction details of the biopile and any sampling locations within the biopile.
- Table of soil contaminant chemistry data.
- Table of operational data.

Site name: Former Amoco Terminal

# Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Reporting period from: 01/01/2018 To: 06/30/2018

Form 4400-194 (R 11/14)

Page 13 of 28

Days in period: 181

## Section ES-2, Ex Situ Soil Treatment Using Landspreading/Thinspreading

### A. Effectiveness Evaluation

1. Method used:  landspreading  thinspreading

**Note:** For purposes of this form, "landspreading" is the placement of contaminated soil on native topsoil, incorporation of that soil into the native soil and planting crops or other plants on it. The term "thinspreading" refers to placing contaminated soil on an impervious base for aeration.

2. Was any progress monitoring using field screening on soil conducted during this reporting period?  Yes  No

3. If the answer to A.2. (above) is yes:

i. List monitoring method:

ii. List monitoring results:

4. Is there any evidence of soil erosion at the landspreading/thinspreading location?  Yes  No

5. Spreading thickness: \_\_\_\_\_ inches

6. Type of crop planted (if thinspreading with no crop planted, so state):

7. Confirmation sampling date: \_\_\_\_\_ Anticipated confirmation sampling date: \_\_\_\_\_

8. Most recent soil sample results, if soil samples for laboratory analysis have been collected to monitor progress. Only list the highest result of the most recent sampling round. If no samples have been collected, enter NA.

a. Total hydrocarbons. Specify if GRO and/or DRO: \_\_\_\_\_  $\mu\text{g}/\text{kg}$

b. Specific compounds ( $\mu\text{g}/\text{kg}$ ):

i. Benzene: \_\_\_\_\_  $\mu\text{g}/\text{kg}$

ii. 1,2 Dichloroethane: \_\_\_\_\_  $\mu\text{g}/\text{kg}$

iii. Ethylbenzene: \_\_\_\_\_  $\mu\text{g}/\text{kg}$

iv. Toluene: \_\_\_\_\_  $\mu\text{g}/\text{kg}$

v. Total xylenes: \_\_\_\_\_  $\mu\text{g}/\text{kg}$

### B. Additional Attachments

Attach the following to this form:

- Map of the landspreading/thinspreading area. If soil samples have been collected, specify locations of samples and dates of sampling.
- Table of soil contaminant chemistry data.
- Table of any field screening results with dates of sample collection.

Site name: Former Amoco Terminal

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Reporting period from: 01/01/2018 To: 06/30/2018

Form 4400-194 (R 11/14)

Page 14 of 28

### Section ES-3, Landfills

**Note:** Reporting forms or reporting requirements in a Department approved Operation and Maintenance Plan for a landfill may take the place of this form.

Specific Inspection Items	Potential Problem Areas	Status	Notes
Perimeter Security Fencing	Broken or missing wood slats, torn chain link fabric, barbed wire, other - list		
Entrance Gate and Locking Mechanism	Lockbroken/missing, mechanism inoperative.		
Monitoring Wells and Wellhead Covers	Signs of tampering, casing damaged, lock missing.		
Final Cover Vegetation	Bare spots, stressed vegetation, deep rooted vegetation.		
Final Cover Slope (explain below)	Gullies, lack of vegetation, subsidence, ponding.		
Evidence of Burrowing Animals	Damage to final cover, evidence of waste.		
Stormwater Drainage Channels	Gullies, erosion, debris, culvert blocked.		
Passive Landfill Gas Venting System	Damaged or blocked vent risers, stressed vegetation.		
Active Landfill Gas Extraction System	Damaged or blocked piping, cleanouts, other blower flare, knockouts, etc.		
Leachate Collection System	Pumps, connection piping, collection system piping, extraction wells, collection tanks, tanker truck loading system or sanitary sewer discharge piping.		
Access Road Cover Mowing; Tall Vegetation Removal	Ponding, rutting, erosion, cracked or damaged pavement. Mowing and tall vegetation removal done to specified vegetation.		

Summary of Deficiencies and/or Corrective Actions:

Site name: Former Amoco Terminal

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Reporting period from: 01/01/2018 To: 06/30/2018

Form 4400-194 (R 11/14)

Page 15 of 28

Days in period: 181

### **B. Additional Attachments**

Attach the following to this form:

- Any photographs documenting problems and maintenance activities.
- Maps, drawings showing site features requiring maintenance.
- Records for leachate pumping/discharge/hauling.
- Records for active gas extraction volumes.

**Section INS- 1, Section by Section Instructions and Information**

**Specific Section by Section Instructions for This Form.** The site name and reporting period is listed on every page. Then if the pages are inadvertently separated, that information can be used to determine which pages form the report.

**General Site Information**

- A.1. List the name as it appears on the DNR tracking system. If the person filling out the form does not know what the name on the tracking system is, use the name that the DNR used in the most recent correspondence.
- A.2. The reporting period should be either from January 1 to June 30 or July 1 to December 31 for active systems. For passive systems, use a calendar year basis. If however the report covers a newly installed system, list the actual startup date instead of January 1 or July 1. For new passive systems, use the first date that monitoring data is available as the date of startup.
- A.3. Enter all regulatory agencies that regulate the site.
- A.4. This form is a DNR form. For that reason, list the DNR site number. If there are other agencies regulating the site, listing identification numbers for other agencies is also recommended, but not mandatory, unless specified by those other agencies.
- A.5. If the information listed for the site location is not sufficient information for a person to use to drive to a site (example: no street address in a rural area), also include a map that is sufficient for a person to use to drive to the site. A U.S. G.S. topographic map that shows the site location may be used.
- A.8. List the contaminants that have at one time exceeded the PALs or Table Values in ch. NR 720. If GRO and/or DRO exceed the ch. NR 720 standards, also list GRO and/or DRO. Do not list other contaminants that have never exceeded state standards at the site. If more room is necessary, write "SEE ATTACHED SHEETS" and list all contaminants on a separate sheet.
- A.9. List the predominant soil types that are contaminated. If there is both contaminated soil and groundwater at the site, list soil types both above and below the water table. If only some soil is contaminated, do not list the soil types that are uncontaminated. If the site soils meet soil cleanup criteria, but groundwater is contaminated, so state that. Specify if the USCS or USDA system is used for soil descriptions. This line specifies soil because the vast majority of contaminated sites do not have contaminated bedrock. If bedrock is contaminated, also list that bedrock type.
- A.10. If the groundwater meets ch. NR 140 standards, enter "NA - NO NR 140 EXCEEDANCES". Otherwise, list the estimated hydraulic conductivity and the method used to estimate it (bail-down tests, calculations based on grain size, pumping test, etc.) If the hydraulic conductivity has not been determined, state when the tests are to be conducted. When a number of test results are available, list the range of results and the geometric mean. If however some results have a low level of accuracy and some results have a high level of accuracy, you should only list the most accurate results. See the Section on aquifer testing in the *Guidance on Design, Installation and Operation of Ground Water Extraction and Product Recovery Systems* for more information.
- A.11. If the groundwater meets ch. NR 140 standards, enter "NA - NO NR 140 EXCEEDANCES". Otherwise, enter groundwater average linear velocity as a function of hydraulic conductivity, effective porosity and the groundwater gradient. You should use the geometric mean from A.11. (above) and the most representative value for the gradient at the site. Estimate the effective porosity based on soil types and geologic origin of the soil. If there are reasons to believe that the average liner velocity estimate is less than the actual rate at the site, so state that reason. Secondary porosity effects, flow through submerged utility trenches, widespread contaminant distribution in low permeability soils, etc., are reasons to assume that the actual migration rate is much greater than the predicted average linear velocity. In such cases, you should explain the reasoning for doubting the predicted average linear velocity.
- A.12. If the information listed for the soil treatment location is not sufficient information for a person to use to drive to a site, also include a map that is sufficient for a person to use to drive to the site. A U.S.G.S. topographic map or a plat map that shows the site location may be used.

- B. Check all methods used at a site. For example, if groundwater extraction, free product recovery and soil venting are used, check all three methods and submit the additional pages for those methods. If dual-phase or bioslurping are used, these methods extract both air and groundwater, check boxes for and attach additional pages for both soil venting and pump and treat.
- C. Remediation systems that use any form of enhancement are considered "active" and sites where there are no enhancements of any kind are considered "passive" forms of remediation. For purposes of these forms, natural attenuation (also called naturally occurring bioremediation) is "passive" and all other remediation methods are "active" methods.
- C.1. Design flow rates refers to flow rates such as gallons per minute extracted by a ground water extraction system, standard cubic feet per minute extracted by a soil venting system, standard cubic feet per minute injected by an in situ air sparging system, etc. If the actual flow rate is within 80 percent of the rate predicted in the design, consider that as meeting the design specification.
- D. The cost data in this section is used by DNR staff to evaluate whether or not the selected remedy is the most cost effective remedy and whether or not system modifications may be warranted to improve efficiency and/or cost effectiveness. Responsible parties and consultants are encouraged to submit cost information so that DNR staff may assist responsible parties and consultants accomplish environmental cleanups in the most cost effective manner.

Total costs for past costs are all costs to date. This information is for all costs that were incurred to investigate and/or remediate the site. These costs include but are not limited to: consulting labor and supplies, laboratory testing, transportation, equipment, etc. If the consultant does not pass all costs through the consulting firm, the consultant will need to contact their client for other non-consulting costs to determine total costs. Exceptions include costs for attorney fees, accounting, claim assistance in preparing claims to state reimbursement funds, or other indirect expenses that are not essential to remediating the site.

- D.2. The initial implementation costs are all costs that are incurred to start implementing a remedy at a site. Costs for the investigation however are excluded because those costs are incurred prior to remedy selection. Since costs for treatability and/or pilot testing are used to procure data for remedial design and are specific to different remediation methods, these costs should be included in implementation costs and not investigation costs. Startup or shakedown costs are also considered implementation costs and should not be considered operation and maintenance costs.
- D.3. Costs for implementation or investigation should not be repeated here or they will be double counted.
- D.4. Costs for implementation or investigation should not be repeated here or they will be double counted.
- D.5. Costs for implementation or investigation should not be repeated here or they will be double counted.
- D.6. Examples of one-time or unusual costs include the following:
  - o Replacing a burned out motor on a pump.
  - o Replacement of a well that was destroyed by a snowplow.
  - o Confirmation sampling to determine if the site meets closeout criteria. This type of cost is considered an unusual cost because this type of sampling is not conducted during most reporting periods.
- D.7. This estimate of costs is for all costs to close out a site minus the salvage value of any remediation equipment. Pertinent costs include items such as well abandonment, equipment removal from the site, consulting costs associated with these items, etc. Do not include any costs that will not be paid by a state reimbursement fund, such as repaving.

**Section GW-1, Groundwater Extraction and Product Recovery**

- A.1. List two numbers, the total number of extraction wells at the site and the number that were in actual use during the period. If all wells were in use, state that on the form.
- A.2. The number of days of operation are the number of days that the system was actually operated. If the system was shut down for reasons such as: repairs were necessary, piping froze, shut down to provide time for subsurface conditions to equilibrate before sampling, etc., do not list those days as being in operation.
- A.3. System utilization is a measure of the amount of time that the system operated relative to the amount of time that it could have operated.
- A.5. The average is for the entire site, not per well or trench. For purposes of determining the average ground water extraction rate, calculate the average based on the total volume of groundwater extracted divided by the time of the reporting period. For example, if the system operated at 10 gallons per minute for one month, the amount of water extracted would be approximately 432,000 gallons. If the reporting period was six months long, then the time period is approximately 260,000 minutes. Therefore, the average flow rate over six months is 432,000 divided by 260,000 minutes for an average flow rate of 1.67 gallons per minute (gpm).
- A.6. Calculate the total dissolved contaminants removed in pounds. If the estimate is a sum of BTEX and not based on a total hydrocarbon test (GRO and/or DRO), so state that on the form.
- B.3. The average should be based on the entire site over the entire reporting period. See instructions above for A.5. List the free product recovery rate as gallons per day (gpd), not gallons per minute (gpm).
- C.1. To answer this question, a thorough evaluation of water levels and chemical analyses in all monitoring points at the site is necessary.
- C.2. If the capture zone has not been determined mathematically, it will need to be determined to answer this question. See the *Guidance on Design, Installation and Operation of Ground Water Extraction and Product Recovery Systems* for and any recent update or errata sheets for more information on plume capture.
- C.4. When free product is present, line C.4.a. should state "FREE PRODUCT" and lines C.4.b. through C.4.d. are left blank. Otherwise, complete the following calculations.  
There typically are several compounds at most contaminated sites that exceed the standards in ch. NR 140. The purpose of this question is to focus on the single contaminant that requires the most treatment to achieve groundwater quality standards on a percent reduction basis. For example, the most recent round of sampling at an example site demonstrated the highest levels of contaminants were 1,000 µg/L benzene and 1,000 µg/L toluene in the most heavily contaminated monitoring well. The ES and PAL for benzene is 5 µg/L and 0.5 µg/L (respectively) and for toluene the ES and PAL is 343 µg/L and 68.6 µg/L (ES and PAL data as of August 1995). Therefore the percent reduction to meet the ES and PAL for benzene is 99.5 and 99.95 percent and for toluene it is 65.7 and 93.14 percent. For that reason, the single contaminant that is most critical to reaching state groundwater standards is benzene. Therefore benzene is entered on line a. In this example, 99.5 and 99.95 percent is entered on line b. In this example, 1,000 µg/L is entered on line c. In this example, benzene is the driving factor, therefore enter the maximum benzene level in the single most heavily contaminated extraction well during the most recent sampling period on line d.
- D. See the generic discussion at the end of the instructions (below) for figures, graphs and tables, starting on page INS-2.

**Section GW-2, In Situ Air Sparging**

- B.1. See instructions for Section GW-1, Item C.4.
- C. See the generic discussion at the end of the instructions (below) for figures, graphs and tables, starting on page INS-2.

**Section GW-3, Natural Attenuation in Groundwater**

- A.1. See instructions for Section GW-1, Item C.4.
- A.2.a. List the estimated hydraulic conductivity that was listed on line A.11 in Section GI-1.
- A.2.b. List the groundwater average linear velocity that was listed on line A.12 in Section GI-1.
- A.3. Assess the monitoring well network to determine if there is a down gradient well that has not been impacted by the contaminants. Consider the possibility of a submerged (or diving) plume in that assessment. If all evidence indicates that the plume does not extend to the farthest "clean" downgradient well, indicate "YES" on the form. Otherwise indicate "NO" on the form. If there are not plans to install such a well, explain.
- A.4. Based on the contaminant distribution, evaluate whether or not the plume is expanding, stabilized, or contracting. When making this determination, consider the contaminant that requires the greatest percent reduction to achieve ch. NR 140 standards.
- A.5. If the plume is expanding and a justification is necessary, add additional sheets justifying why natural attenuation is still the appropriate remedy. If it is not, further describe in the explanation the plans to use a different remedy.
- A.6.a. Enter the upgradient dissolved oxygen (DO) level(s). If however there are contaminants measured in the upgradient well, it is not a true background measurement. In that case enter "UNKNOWN" on the form.
- A.6.b. Enter the range of DO values measured in wells within the plume.
- B. See the generic discussion at the end of the instructions (below) for figures, graphs and tables, starting on page INS-2.

**Section GW-4, Other Groundwater Remediation Methods**

- A.1. See instructions for Section GW-1, Item C.4.
- A.2. Self explanatory.
- A.3-4. Enter the information specified by the DNR for this method at this site.

**Section IS-1, Soil Venting (Including both Soil Vapor Extraction and Bioventing)**

- B.3. This subsection is used as a trigger for determining if the system requires an evaluation for future activities, such as improvements, converting the site to monitoring for natural attenuation, closure, etc. If an in situ respiration test must be performed, see Hinchee, R.E. and Ong, S.K. 1992. A Rapid In Situ Respiration Test for Measuring Aerobic Biodegradation Rates of Hydrocarbons in Soil. *Journal of the Air and Waste Management Association*. Volume 42, Number 10. Pages 1305 to 1312 for general procedures. For a discussion of methane monitoring, see the instructions for Section IS-2, item A.1.d., below. If the contaminant extraction rate in B.3. is greater than the trigger levels, leave lines B.3.a.i. and B.3.a.ii. blank.
- C. See the generic discussion at the end of the instructions (below) for figures, graphs and tables, starting on page INS-2.



**Section IS-2, Natural Attenuation in Soil**

- A.1. This data is used to assess subsurface conditions based on soil gas data. Whenever possible, a permanently installed gas probe should be used. If at all possible, the gas probe should be located in the part of the site that is most heavily contaminated, since that is the part of the site that is likely to take the longest amount of time to meet ch. NR 720 standards. Water table wells that have screen exposed above the water table are also good measuring points. When installing permanent gas probes, you should install the screen deep enough that a true measure of the most heavily contaminated soil is possible, but install the screen shallow enough to assure that it is not submerged by groundwater table fluctuations. In some situations where the depth of contamination is variable, consideration should be given to using nested gas probes instead of only using probes at a single depth. Measuring points that should not be used include temporary gas probes because these points are less repeatable from one monitoring event to the next. Also, if there has been an active soil venting system in use at the site, the air extraction wells should not be used because these wells are in locations that have had much more aggressive treatment than the rest of the site.
- A.1.a. A flame ionization detector (FID) is specified instead of a photo ionization detector (PID) because PIDs often read inaccurately in moist oxygen deficient/carbon dioxide rich atmospheres. Also, PIDs do not detect some petroleum compounds.
- A.1.d. Methane readings are used to measure for anaerobic conditions. When the original product that is lost is a refined petroleum product (not crude oil), there should not be any methane within the product. Methane however may be produced under very anaerobic conditions. Any method may be used for measuring methane provided that the detection limit is less than a few ppmv. One convenient method is to use an FID that is equipped with a granular activated carbon filter to filter out non-methane components. Some instrument manufacturers make these filters available as options. In some cases an FID will flame out due to an oxygen deficiency. Some instrument manufacturers offer a dilution device as an accessory that is designed to prevent flameouts and also raises the upper limit of measurement to 10,000 ppmv or higher. If the meter "pegs" at 10,000 ppmv (or one percent), enter ">10,000 ppmv."
- A.2. The background monitoring point is predominantly used to measure natural oxygen and carbon dioxide levels in soil over time. For this reason, the background monitoring point should be reasonably close to the site, but not so close that the conditions are no longer representative. Considerable variations over time can occur, this background point should be measured during every sample event. Considerations for determining if a background point is representative include:
  - o If an on-site background point has minor levels of VOCs in it due to gas phase diffusion, that is acceptable, but if the levels are high, it may not be representative of true background conditions.
  - o Background oxygen and carbon dioxide levels vary with soil type and natural organic carbon content. For this reason, if at all possible, the soil types should be identical within the screened interval of all gas probes.
  - o The same depths should be used for all gas probes to allow comparison from one location to the next. If the depth to water varies greatly across the site, a certain amount of confusion in the data is likely. In this case, use professional judgement to provide the best data possible at a reasonable cost.
- A.3. Enter this data for petroleum fuel sites. For other sites, provide the data that is most appropriate for the situation.
- B. Cross sections are self explanatory, see the generic discussion at the end of the instructions (below) for other attachments.

**Section IS-3, Other In Situ Soil Treatment Methods**

- A.2. Enter the information specified by the DNR for this method at this site.

Site name: Former Amoco Terminal

Reporting period from: 01/01/2018

To: 06/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 21 of 28

### **Section ES-1, Ex Situ Soil Treatment Using Biopiles**

- A.3.a. The term "artificial nutrients" essentially means agricultural fertilizers or any other fertilizer products.
- A.3.a.i. The types of fertilizers that are added should be listed here by chemical names, not by vendor trade names.
- A.3.a.ii. List nitrogen content as N, list phosphorous content as phosphoric acid (P<sub>2</sub>O<sub>5</sub>). Note: Fertilizer ratings are based not on actual content of N, P and K, but on nitrogen (as N), phosphorous (as P<sub>2</sub>O<sub>5</sub>) and potassium (as K<sub>2</sub>O).
- A.4.c. See example calculations at the end of this set of instructions.
- A.5. Enter this data for petroleum fuel sites. For other sites, provide the data that is most appropriate for the situation.
- B. The figure is self explanatory. See the generic discussion at the end of the instructions (below) for instructions for the tables.

### **Section ES-2, Ex Situ Soil Treatment Using Landspreading/Thinspreading**

- B. A map to scale of the landspreading location including and landmarks or benchmarks. When samples have been collected, the distances to any landmarks or benchmarks should be indicated.

### **Section ES-3, Other Ex Situ Soil Treatment Methods**

- A.2. Enter the information specified by the DNR for this method at this site.

**Section INS- 2, Figures, Graphs and Tables**

When figures and graphs are specified, they should at a minimum contain the following information, or an explanation as to why the information is not necessary.

**Maps.** All maps should include the applicable information specified in s. NR 724.11(6), Wis. Adm. Code. In most cases, all information can be combined into a single map. There are times that a single map will have so much data that it is essentially unreadable. The consultant should use professional judgement when determining if a single map or multiple maps best portray the information necessary.

- Groundwater Contour Map Guidelines.

- List groundwater elevations for each measuring point on the map.
- Use the most recent data available.
- For water table maps, do not use data from deeper piezometers. If piezometer data is shown, use a different symbol for the piezometers than used for water table wells.
- If any wells are dry, indicate that on the map.
- If free product is present at site, shade the area where free product is estimated to be present.
- If groundwater is extracted with a pump and treat system, also denote plume capture zone.
- If in situ air sparging or soil venting is in use, specify on the map if the system was operating or shut down during the water level measurements. See the Subsection on water table maps in the *Guidance on Design, Installation and Operation of Ground Water Extraction and Product Recovery Systems* for more information on this topic.

- Groundwater Contaminant Distribution Map Guidelines.

- Only contaminants that exceed the ch. NR 140 ES or PAL should be shown on the map. When contaminants are above the PAL or ES at some data points and below the PAL or ES at other data points, list the data for all locations to portray which areas of the site meet ch. NR 140 groundwater quality standards.
- If a well is not sampled due to the presence of free product indicate "FREE PRODUCT" at those data points.
- If more than five contaminants exceed ch. NR 140 ES, only the five contaminants that require the greatest percent reduction to achieve ch. NR 140 ES or PAL should be shown on the map.
- Drawing isoconcentration lines is optional, unless specified for the site on a site specific basis.
- If the contamination has crossed the property line, that property line should be clearly denoted on the map.
- If in situ air sparging is used, water samples from ch. NR 141 type monitoring wells may not represent aquifer water quality as a whole. For that reason, groundwater data should be obtained from driven probes with no filter pack. If there are no driven probes and conventional ch. NR 141 monitoring wells are used, shut down the air injection system at least two weeks prior to collecting groundwater samples. See the *Guidance on Design, Installation and Operation of In Situ Air Sparging Systems* and the August 1995 update sheets for more information on this topic.

- Dissolved Oxygen Map Guidelines.

- Dissolved oxygen data may be shown on the contaminant concentration graphs or on a separate graph.
- Dissolved oxygen maps are optional for ground water extraction and product recovery systems.
- When in situ air sparging is used, monitoring points may not represent aquifer water quality as a whole. For that reason, groundwater data should be obtained from driven probes with no filter pack. If there are no driven probes and conventional ch. NR 141 monitoring wells are used, shut down the air injection system at least two weeks prior to collecting groundwater samples for DO. See the *Guidance on Design, Installation and Operation of In Situ Air Sparging Systems* and the August 1995 update sheets for more information on this topic.

- Well and Soil Sample Location Map Guidelines. Well and sample location maps for all methods should clearly indicate the location(s) of the release or the area where soil contamination historically has been highest. Also, if part of the contamination has been excavated, the pit boundaries.

The recommended documentation for each remedial method is as follows:

- Groundwater Extraction and Product Recovery - separate well location maps should not be provided, instead the wells should be indicated on the groundwater contour and contaminant distribution maps.
- In Situ Air Sparging - the map should indicate all air injection wells, soil venting extraction wells, and all groundwater monitoring points.

**Maps (Continued).**

- Natural Attenuation in Groundwater - separate well location maps should not be provided, instead the wells should be indicated on the groundwater contour maps.
- Soil Venting - indicate all air extraction wells. If any gas probes are used to assess subsurface conditions in either contaminated zones or background locations, also indicate those data points with a different symbol. If soil samples have been collected recently to track progress, indicate those locations with the date of sampling noted on the map.
- Natural Attenuation in Soil - show all monitoring points. Indicate which data points are background measuring points. If soil samples have been collected recently to track progress, indicate those locations with the date of sampling noted on the map. If the site was previously treated by soil venting, the locations of former air extraction wells should also be shown since these are areas where aggressive treatment has been applied. Also show area(s) of paved and unpaved ground surface. If pavement is significantly broken to allow significant water infiltration and air diffusion, map that area as broken pavement.

**Graphs.** All graphs that show time versus contaminant concentration or cumulative contaminant removal should be based on total time, not only operation time. All graphs that denote cumulative removal should use pounds of contaminant removed. Graphs should accurately show the time period(s) when the system was not operating. Plot time on the X axis, concentration or cumulative removal data on the Y axis.

- Time Versus Cumulative Removal. The recommended documentation for each remedial method is as follows:
  - Groundwater Extraction and Product Recovery - separate graphs should be used for free product recovery and dissolved phase recovery. A single graph for each phase is adequate, per well graphs are only necessary when specified by the Department on a site specific basis.
  - In Situ Air Sparging - no graph is necessary (removal data is shown on the graphs for the soil venting system).
  - Natural Attenuation in Groundwater - no graph is necessary.
  - Soil Venting - provide a graph of cumulative removal for total VOCs for the total system.
  - Natural Attenuation in Soil - no graph is necessary.
  - Ex Situ Soil Treatment Using Biopiles - Provide two graphs, one showing cumulative removal of total VOCs and a second graph showing total contaminant biodegradation over time.
  - Ex Situ Soil Treatment Using Landspreading/Thinspreading - no graphs are needed.
- Time Versus Contamination Concentration Graphs. Create graphs with contamination level on the y axis (semilog scale) and time on the x axis (linear scale). If free product is present, time versus contamination concentration graphs are not necessary.

The recommended documentation for each remedial method is as follows:

- Groundwater Extraction and Product Recovery - graph the contaminant level over time for the groundwater that is extracted by the extraction system. List all compounds that exceed ch. NR 140 ES or PAL. If over five contaminants exceed ch. NR 140 standards by the greatest percent.
- In Situ Air Sparging - provide a graph for the single monitoring well that is most heavily contaminated. If over five contaminants exceed ch. NR 140 ES or PAL, only list the five contaminants that exceed ch. NR 140 standards by the greatest percent.
- Natural Attenuation in Groundwater - provide a graph for all monitoring wells that contain any compounds that exceed ch. NR 140 standards. If over five contaminants exceed ch. NR 140 ES or PAL, only list the five contaminants that exceed ch. NR 140 standards by the greatest percent.
- Soil Venting - provide a graph of contaminant concentration over time for the entire system for total VOCs. If any gas probes are used to assess subsurface conditions in either contaminated zones, also provide a graph with the data from the most heavily contaminated gas probe.
- Natural Attenuation in Soil - provide a graph of contaminant concentration over time for total vapor phase VOCs as measured with an FID, oxygen, carbon dioxide and methane in a gas probe.
- Ex Situ Soil Treatment Using Biopiles - no graph is necessary.
- Ex Situ Soil Treatment Using Landspreading/Thinspreading - no graphs are needed.

**Graphs (Continued).**

- Graph of Contaminant Concentrations Versus Distance. If free product is present, a graph of contaminant concentrations versus distance is not necessary.

The recommended documentation for each remedial method is as follows:

- Groundwater Extraction and Product Recovery - no graph is necessary.
- In Situ Air Sparging and Natural Attenuation in Groundwater - plot a graph with distance (on the x axis, linear scale) and contaminant concentrations (y axis, log scale) from the upgradient measurement point to the farthest downgradient data point along the centerline of the plume. List the same contaminants as shown on the Time Versus Contaminant Concentration Graphs. Clearly show the source area on the graph. If free product has been present, label the data points that previously contained free product. For in situ air sparging, see comments above about samples collected from conventional monitoring wells with filter packs versus driven probes.

**Tables.** Whenever possible, data over the life of the project should be listed.

The recommended documentation for each type of table is as follows:

- Groundwater Contaminant Chemistry Data.

List:

- Contamination levels for all contaminants that exceed ch. NR 140 standards.
- Dissolved oxygen levels if applicable.
- Other biological parameters, if applicable (nitrogen, phosphorous, manganese, sulphate, iron, dissolved methane, redox potential, pH, microbial population size, etc.). See instructions for page GW-3 for more information on these parameters. Also, list the dates the samples were collected and the standard methods used to analyze the samples.

- Groundwater Biological Parameters.

For natural attenuation in groundwater only, these measurements should be listed (if known) to provide information on biodegradation. This table is not necessary for free product extraction, groundwater extraction or in situ air sparging.

Provide a table that includes any results of tests conducted for dissolved oxygen, nitrate, manganese, iron, sulphate, methane, redox potential, heterotrophic and/or hydrocarbon degrading microorganism populations. Identify on the table if the monitoring locations are upgradient, side gradient, downgradient, or within the plume, dates of sampling, and the analytical methods used for those parameters. Include all data for the life of the project. Since some of these tests are only conducted once, or periodically - enter "NS" in the table for not sampled for any parameters that were not sampled during a particular round of sampling.

When asked to list the standard methods, list the method if a standard method exists. There are however some tests (for example dissolved methane) where there are no official standard laboratory or field methods. In this case the laboratory will have to create their own standard procedures. In these cases list the name of the laboratory and that laboratory's name for that test.

Specific considerations for each parameter are as follows:

- Dissolved oxygen (mg/L). The most efficient mechanism for natural or enhanced biodegradation of petroleum compounds is aerobic biodegradation.
- Nitrate (mg/L as N). Nitrate ( $\text{NO}_3^{-1}$ ) is a potential electron acceptor for denitrification and also serves as a nutrient for heterotrophic microbial populations to enhance aerobic biodegradation. Decreasing nitrate levels from background wells to wells within the plume are an indication of either aerobic or anaerobic biodegradation.
- Manganese as  $\text{Mn}^{+2}$  (mg/L). Manganese as  $\text{Mn}^{+4}$  is converted to soluble manganese as  $\text{Mn}^{+2}$  under anaerobic biodegradation. For this reason, total manganese analysis is not appropriate, only soluble manganese as  $\text{Mn}^{+2}$ . When the levels of soluble manganese are higher in wells within the plume than in background wells, that is an indication of anaerobic biodegradation.
- Iron as  $\text{Fe}^{+2}$  (mg/L). Iron as  $\text{Fe}^{+3}$  is converted to soluble iron as  $\text{Fe}^{+2}$  under anaerobic biodegradation. For this reason, total iron analysis is not appropriate, only soluble iron as  $\text{Fe}^{+2}$ . When the levels of soluble iron are higher in wells within the plume than in background wells, that is an indication of anaerobic biodegradation.

**Tables (Continued).**

- Dissolved sulphate ( $\text{SO}_4^{-2}$ , mg/L). Sulphate ( $\text{SO}_4^{-2}$ ) is a potential electron acceptor. Decreasing sulphate levels from background wells to wells within the plume are an indication of anaerobic biodegradation.
- Dissolved methane (mg/L). Methane is produced under anaerobic conditions. Since background methane levels can usually be assumed to be zero, in most cases only measurements within the plume are used. Exceptions are when the natural soils have very high levels of TOC (for example peat), background methane levels are also warranted. When the contaminant is crude oil instead of a refined petroleum product, methane measurements may however cause erratic results. Significant amounts of methane may be created when other electron acceptors ( $\text{NO}_3^{-1}$ ,  $\text{Mn}^{+4}$ ,  $\text{Fe}^{+3}$  and  $\text{SO}_4^{-2}$ ) are exhausted. For this reason, significant levels of methane are indicative of very very anaerobic conditions.
- Redox potential (millivolts, include + or - sign). Redox potential is another measure of the level of aerobic/anaerobic conditions, however it is a much more sensitive measurement than DO at very low levels of DO.
- Heterotrophic and hydrocarbon degrading microorganism populations (CFU/mL). Heterotrophic and specific hydrocarbon degrader population sizes should be listed for both background locations and locations within the plume, if there is information available. There is disagreement by many of the experts within the field as to the merits of sampling for this parameter. Refer to other DNR guidance documents on natural attenuation (or passive bioremediation) for more information on this topic.

- Soil Gas Data.

The recommended documentation for each remedial method is as follows:

- When natural attenuation in soil is used, provide a graph of all soil gas readings over time for every data point.
- When soil venting is used, if a gas probe is used to assess subsurface conditions over time in a location where air is not extracted, provide that data in a table.

- System Operational Data.

The recommended documentation for each remedial method is as follows:

- Groundwater Extraction and Product Recovery:
  - Well by well flow rates in gpm for each extraction well. If a well is off line, list flow rate as "ZERO." Clearly denote on the table periods of system shutdown.
- In Situ Air Sparging:
  - Air pressure and injection flow rates in scfm for each well. If a well is off line, list flow rate as "ZERO." Clearly denote on the table periods of system shutdown.
- Natural Attenuation in Groundwater - no table needed.
- Soil Venting:
  - Vacuum readings and extraction rates in scfm for each well. If a well is off line, list flow rate as "ZERO." Clearly denote on the table periods of system shutdown.
  - Air concentrations in ppmv or in mg/L for total VOCs.
  - Total system contaminants removed in pounds and the pounds per day removal rate.
- Natural Attenuation in Soil - no table needed.

Site name: Former Amoco Terminal

Reporting period from: 01/01/2018

To: 06/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 26 of 28

### Tables (Continued).

#### -- Ex Situ Soil Treatment Using Biopiles:

- If forced air ventilation is used:
  - System extraction rates in scfm.
  - Air concentrations in ppmv for total VOCs.
  - Total system contaminants removed in pounds and the pounds per day removal rate.
  - Temperature.
- If passive ventilation is used, a table of temperatures.

#### -- Ex Situ Soil Treatment Using Landspreading/Thinspreading - no table is needed.

### Acronyms and Abbreviations:

CFU/mL	colony forming units per milliliter
cm/sec	centimeters per second
DATCP	Department of Agriculture, Trade and Consumer Protection
DCOM	Department of Commerce
DNR	Department of Natural Resources
DO	Dissolved Oxygen
DRO	Diesel Range Organics
ES	Enforcement Standards in NR 140
FID	Flame Ionization Detector
ft/yr	feet per year
gpd	gallons per day
gpm	gallons per minute
GRO	Gasoline Range Organics
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NR	prefix for rules established by the DNR
P.E.	Registered Professional Engineer
P.G.	Registered Professional Geologist
PAL	Preventative Action Limit in NR 140
PECFA	the state sponsored cleanup fund for certain petroleum contaminated sites
ppmv	parts per million by volume (vapor phase only)
scfm	standard cubic feet per minute
TOC	Total Organic Carbon
USCS	Unified Soil Classification System
USDA	United States Department of Agriculture
µg/kg	micrograms per kilogram
µg/mL	micrograms per milliliter
VOC	Volatile Organic Compounds
Y/N	Yes or No

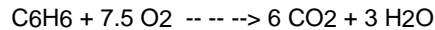
**Section INS-3, Example Calculations for Determining the Biodegradation Rate on Forced Air Biopiles**

Important Note: This page uses a nonproportional font and characters that are unique to WordPerfect. If the user received this document electronically, this page may need to be converted to a different font for the formulas to print correctly. The original font used for this page was prestige elite with 16.67 characters per inch.

Assumptions:

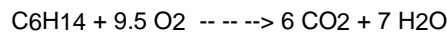
- The measurements at the stack are as follows:
  - Average flow rate is 20 scfm.
  - Average oxygen level extracted from biopile is 14.0 percent by volume.
  - Average carbon dioxide level extracted from biopile is 3.5 percent by volume or 35,000 ppmv.
- Atmospheric air contains 21 percent oxygen by volume and 400 ppmv (or 0.04 percent) carbon dioxide. (Note: On each site visit, the consultant should check atmospheric air to assure that the instrument is spanned correctly.)
- Atmospheric air weight 0.0763 pounds per cubic foot at standard temperature and pressure (Gibbs, 1971).
- Average molecular weight of air is 28.97 (Gibbs, 1971) which is rounded off to 29, molecular weight of O2 is 32, molecular weight of CO2 is 44.
- For every pound of contaminants biodegraded, 3.3 pounds of oxygen is utilized and up to 3.2 pounds of carbon dioxide is generated.

-- The stoichiometry of aerobic benzene biodegradation can be described as follows:



Based on this, benzene biodegradation requires that 3.07 pounds of oxygen are utilized to fully oxidize one pound of benzene, assuming no electron acceptors other than oxygen are used. Assuming no biomass is produced and no geochemical reactions consume carbon dioxide, 3.38 pounds of carbon dioxide is generated from one pound of benzene.

-- The stoichiometry of aerobic hexane biodegradation can be described as follows:



Based on the above assumptions, hexane biodegradation requires 3.52 pounds of oxygen and generates up to 3.06 pounds of carbon dioxide.

Other hydrocarbons also require a similar ratio of oxygen for aerobic biodegradation. For purposes of this guidance it is assumed that a pound of petroleum contamination requires 3.3 pounds of oxygen and generates up to 3.2 pounds of carbon dioxide and 1.1 pounds of water in the biodegradation reaction.

Calculations:

Oxygen utilization rate:

$$(0.21 - 0.14) * \frac{32 \text{ pounds}}{29} * \frac{\text{ft}^3}{\text{min}} * 0.0763 * \frac{\text{min}}{\text{hour}} * 20 * \frac{\text{pounds}}{\text{hour}} * 60 = 7.07$$

Carbon dioxide production rate:

$$(0.035 - 0.0004) * \frac{44 \text{ pounds}}{29} * \frac{\text{ft}^3}{\text{min}} * 0.0763 * \frac{\text{min}}{\text{hour}} * 20 * \frac{\text{pounds}}{\text{hour}} * 60 = 4.81$$



Site name: Former Amoco Terminal

Reporting period from: 01/01/2018

To: 06/30/2018

Days in period: 181

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

Page 28 of 28

Calculations (Continued):

Biodegradation rate based on oxygen:

$$7.07 / 3.3 = 2.1 \text{ pounds per hour}$$

Biodegradation rate based on carbon dioxide:

$$4.81 / 3.2 = 1.5 \text{ pounds per hour}$$

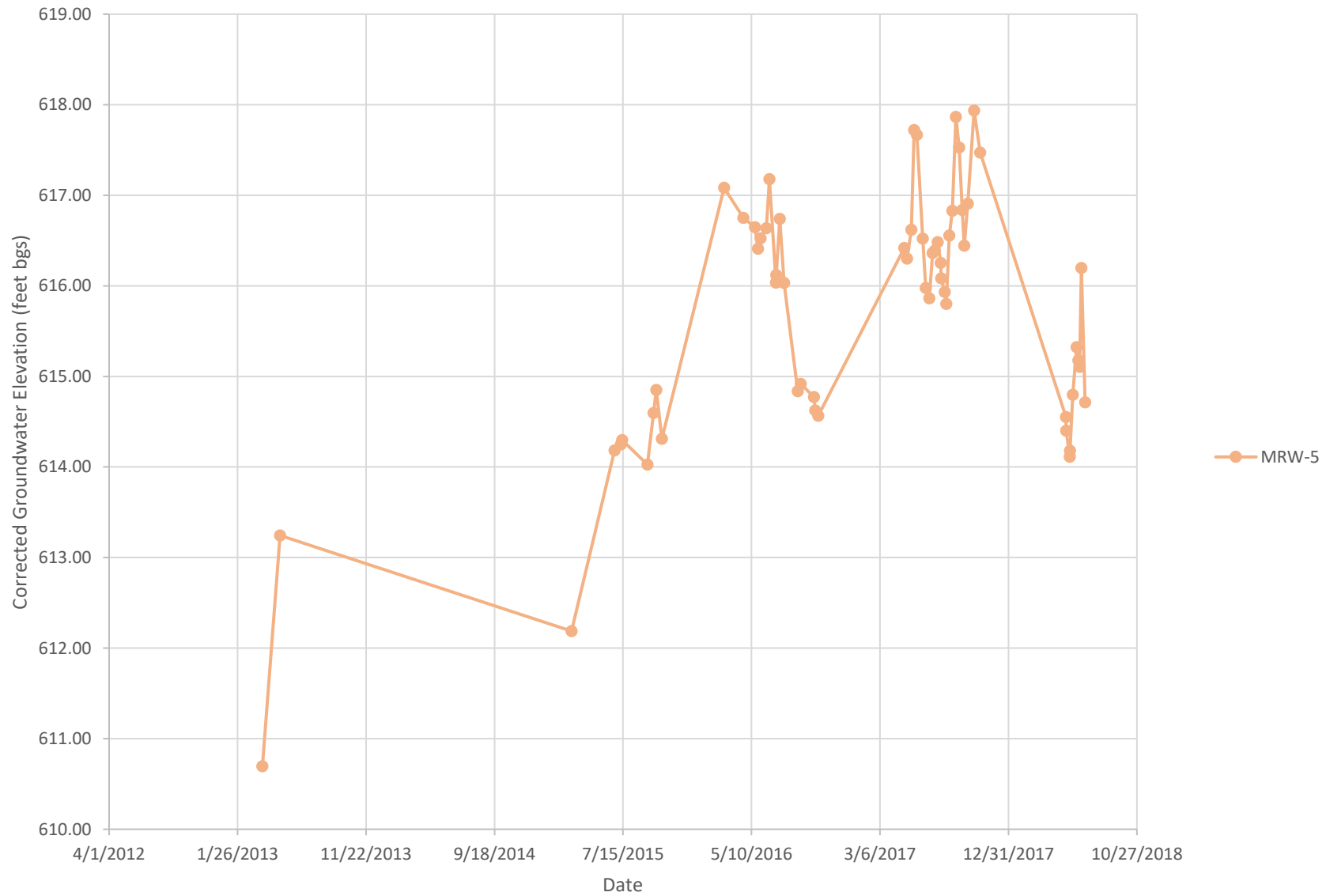
Since the biodegradation rate is based on oxygen utilization and/or carbon dioxide generation, it is a measure of the overall biodegradation rate of all carbon sources, including natural organic carbon and any organic materials that were added. For this reason, the biodegradation rate is not specific to hydrocarbons and it is likely that the measured biodegradation rate will overestimate the rate of contaminant reduction.

Commonly the measured biodegradation rate based on carbon dioxide generation is less than the rate estimated with oxygen. Because of geochemical interferences and biomass formation, estimates based on carbon dioxide measurements are often low. If however the biodegradation rate estimate based on carbon dioxide is significantly greater than the estimate based on oxygen, it is likely that there is a measurement or calculation error. In this way, the carbon dioxide measurements can be used to double check the oxygen measurements and calculations.

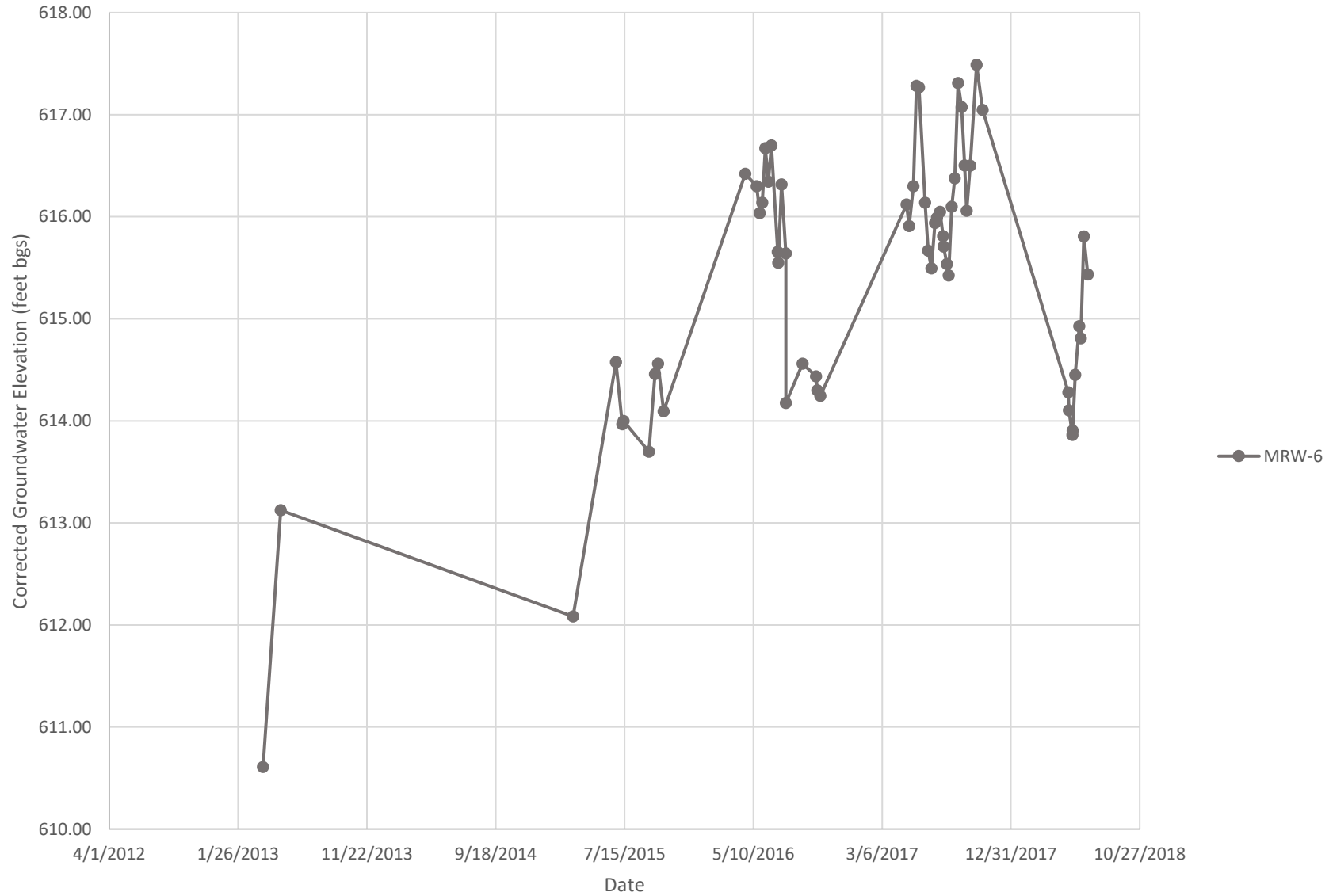
## ***Appendix F***

### Groundwater Elevation Graphs

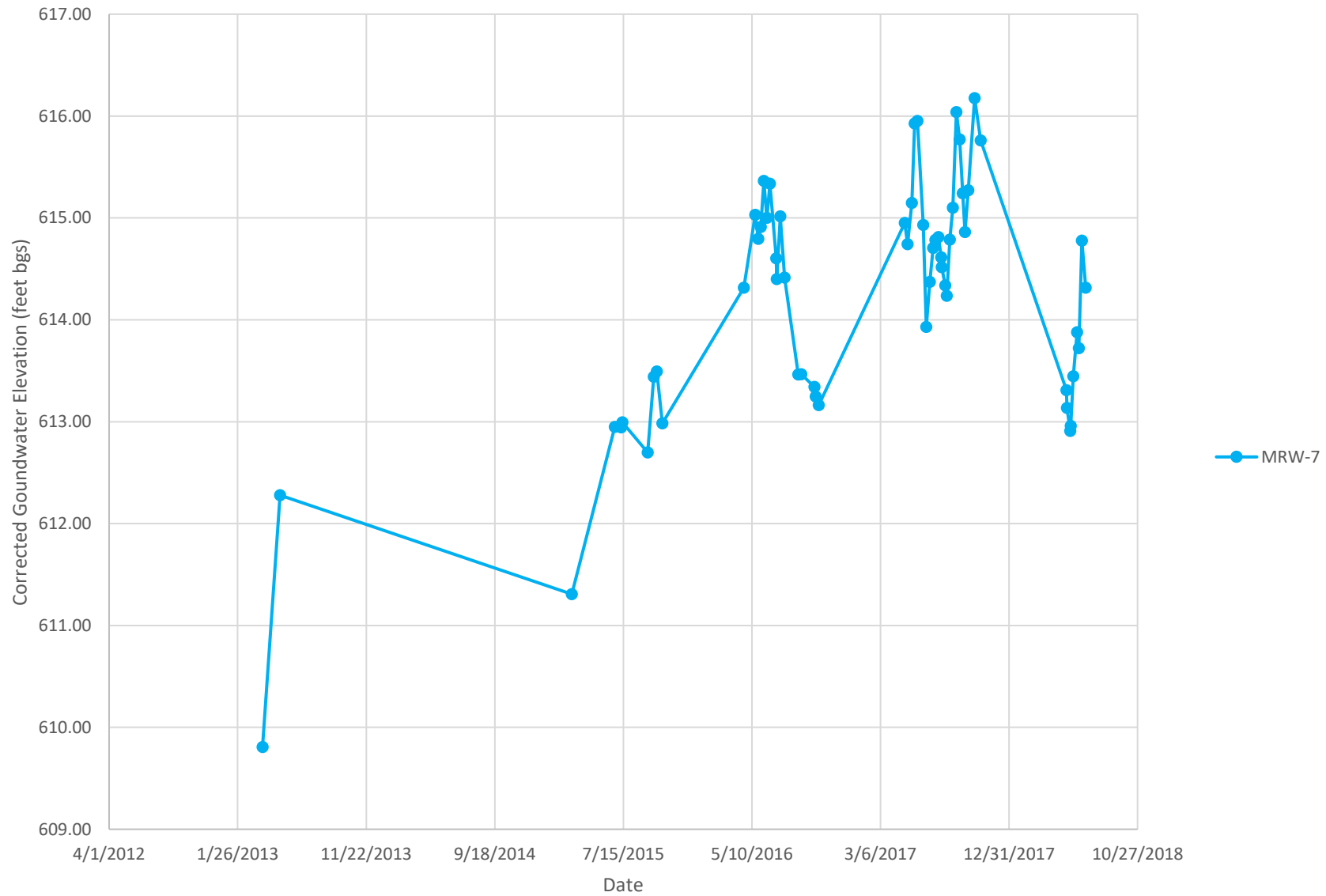
Groundwater Elevation MRW-5



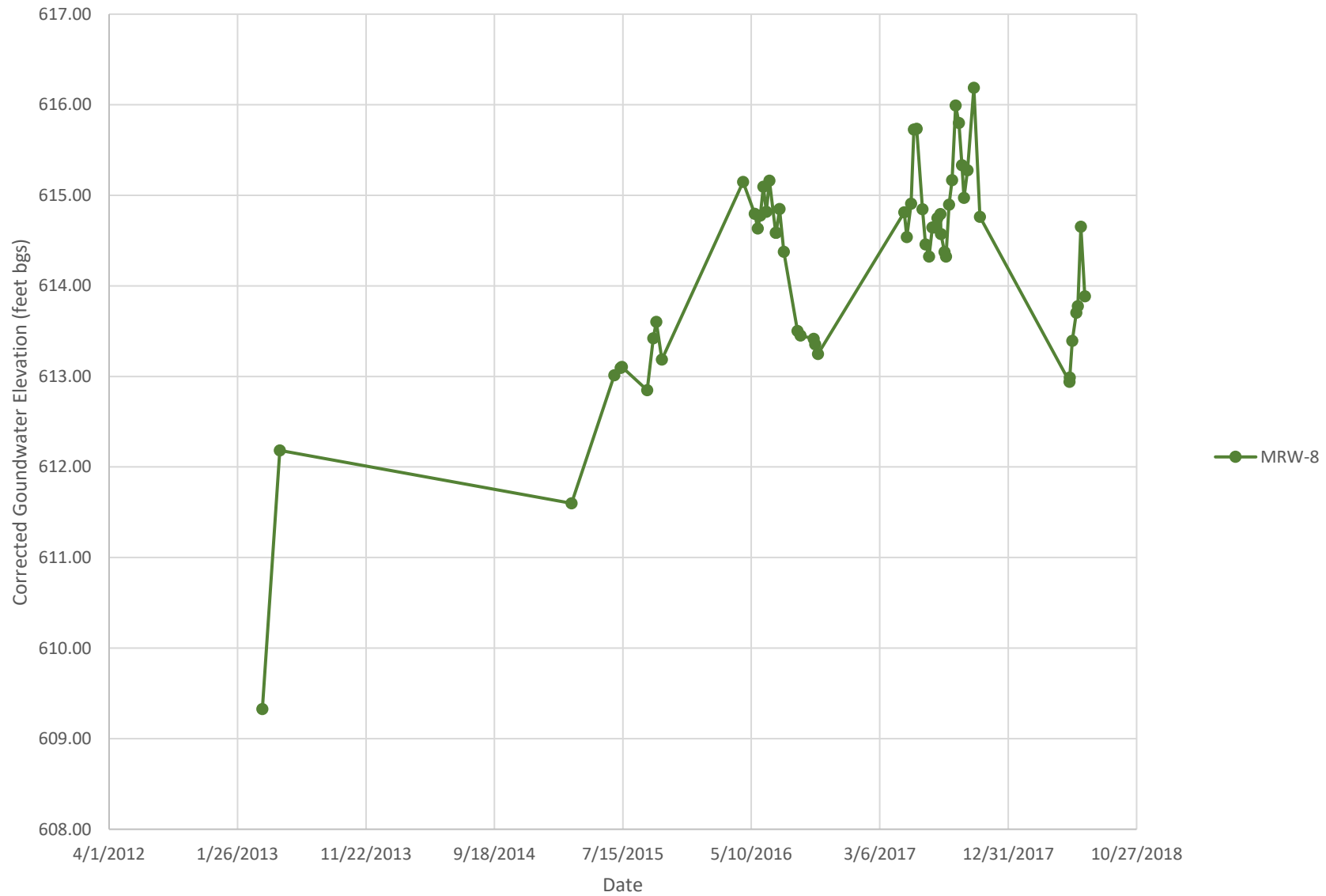
Groundwater Elevation MRW-6



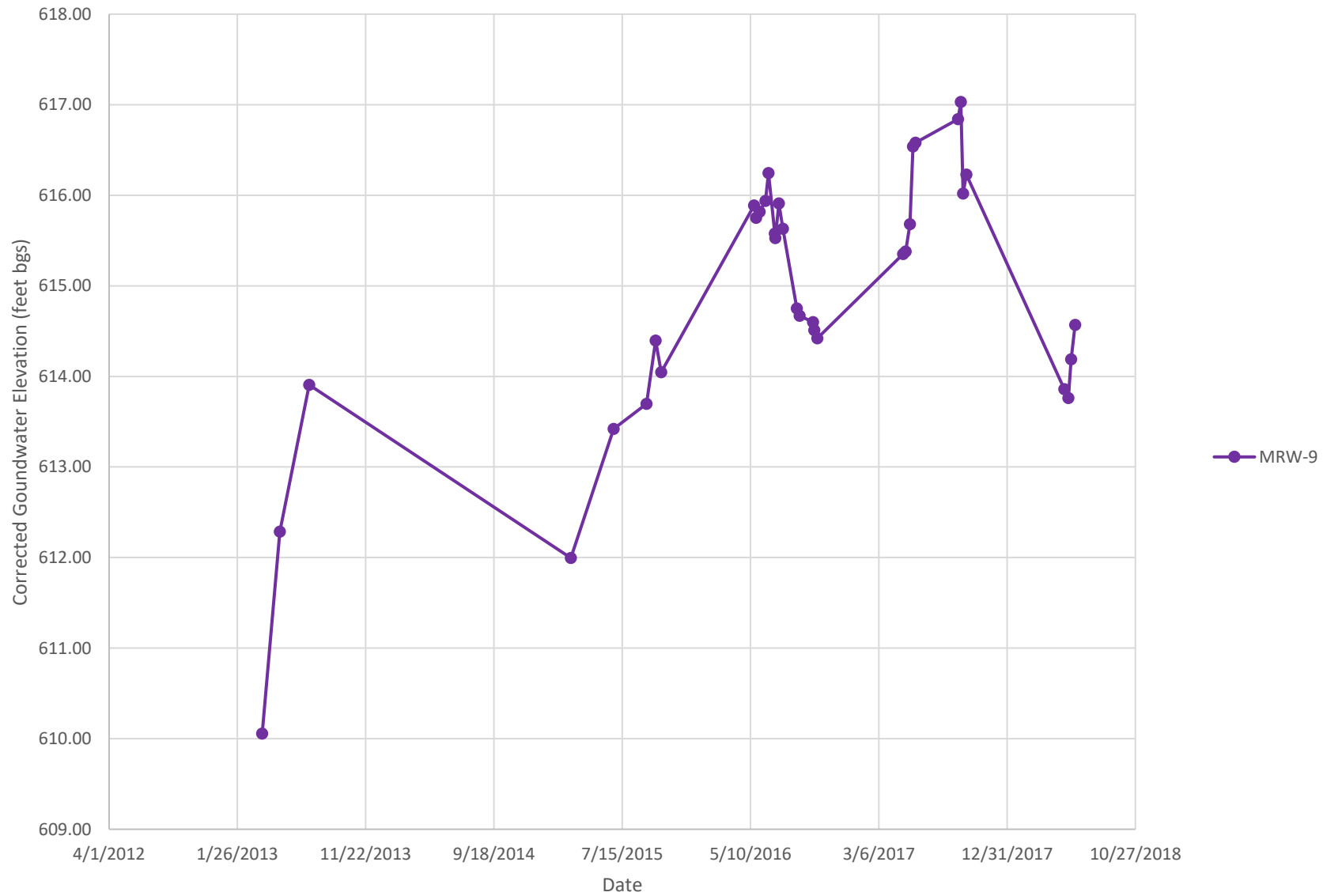
Groundwater Elevation MRW-7



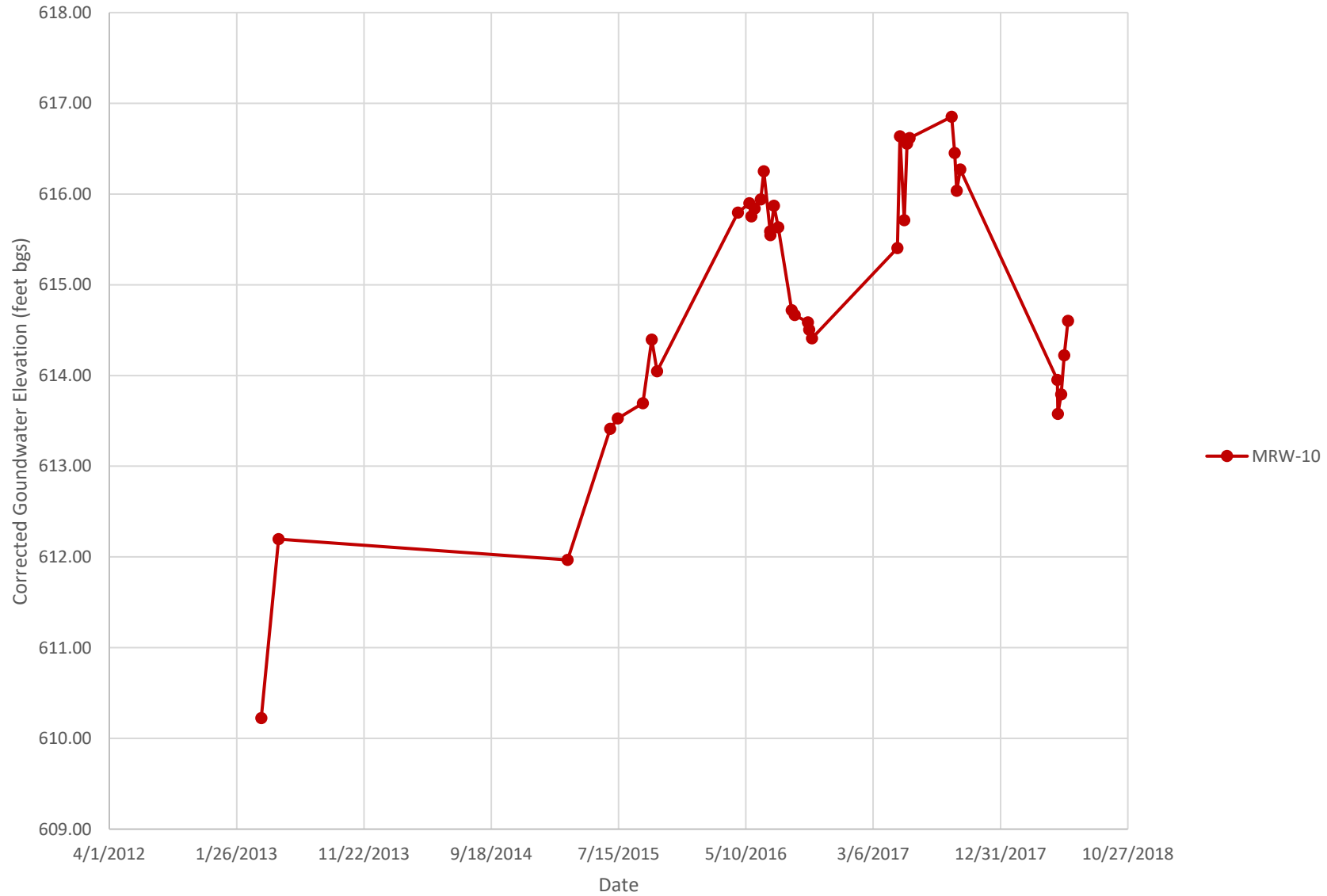
Groundwater Elevation MRW-8



Groundwater Elevation MRW-9

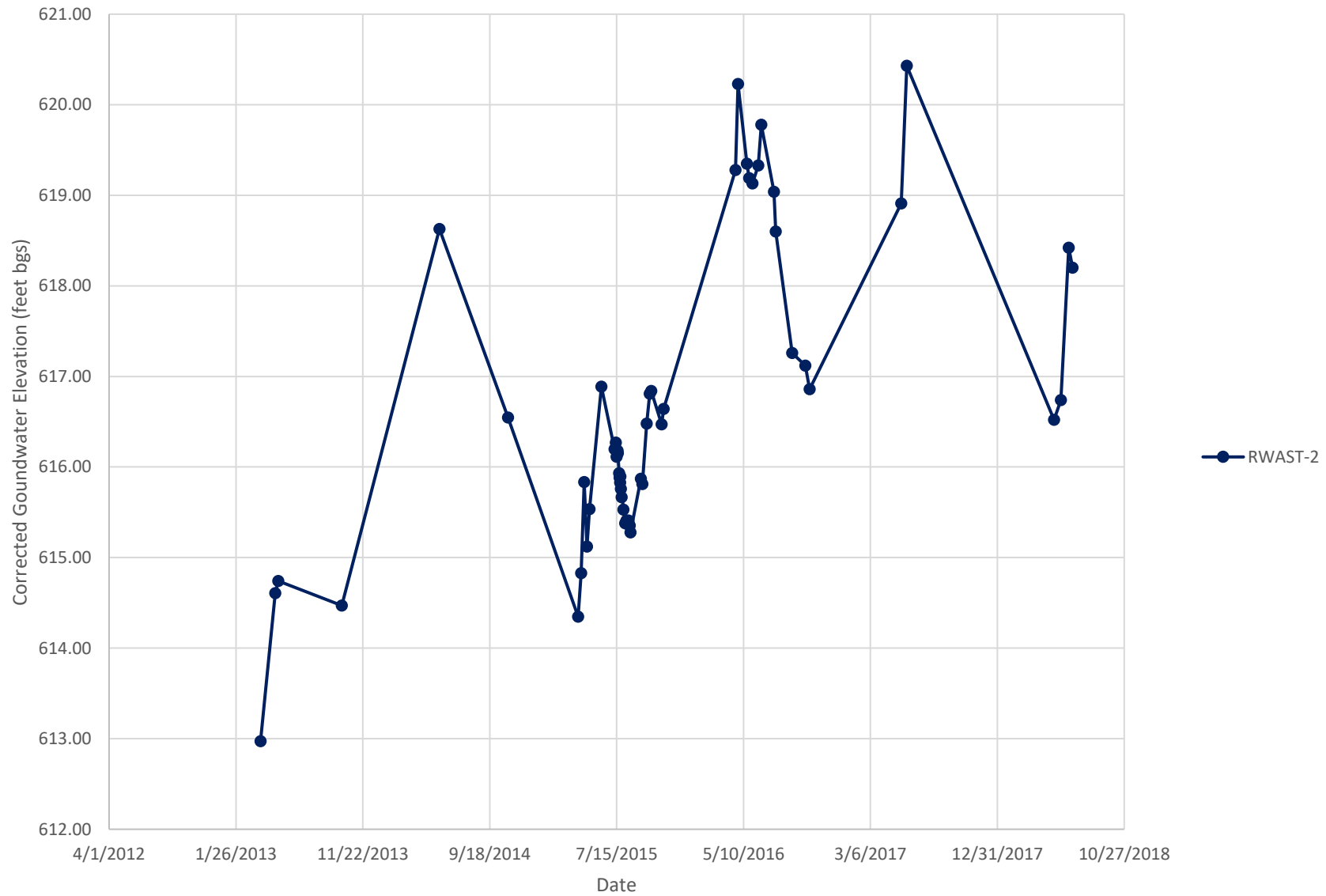


### Grondwater Elevation MRW-10

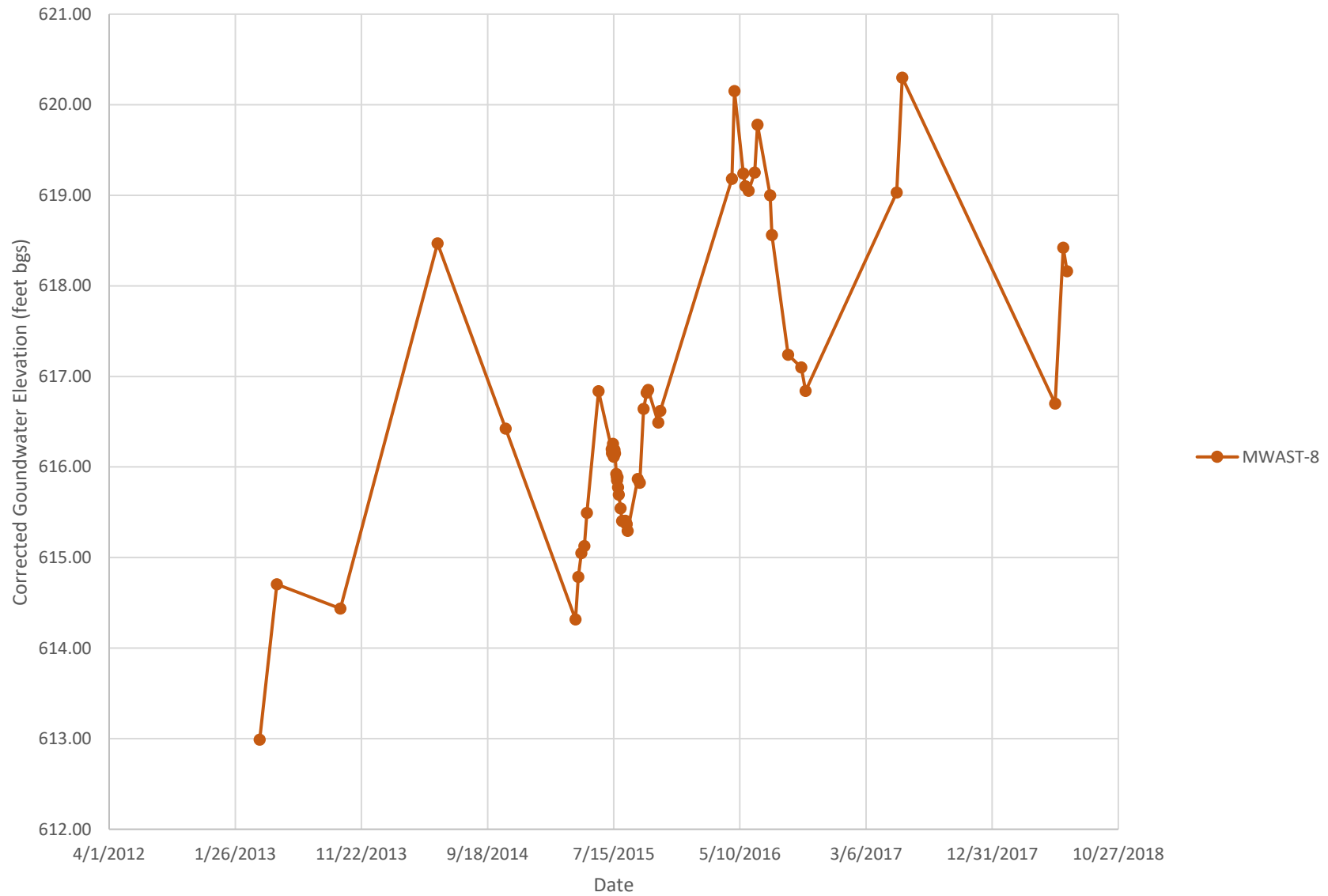




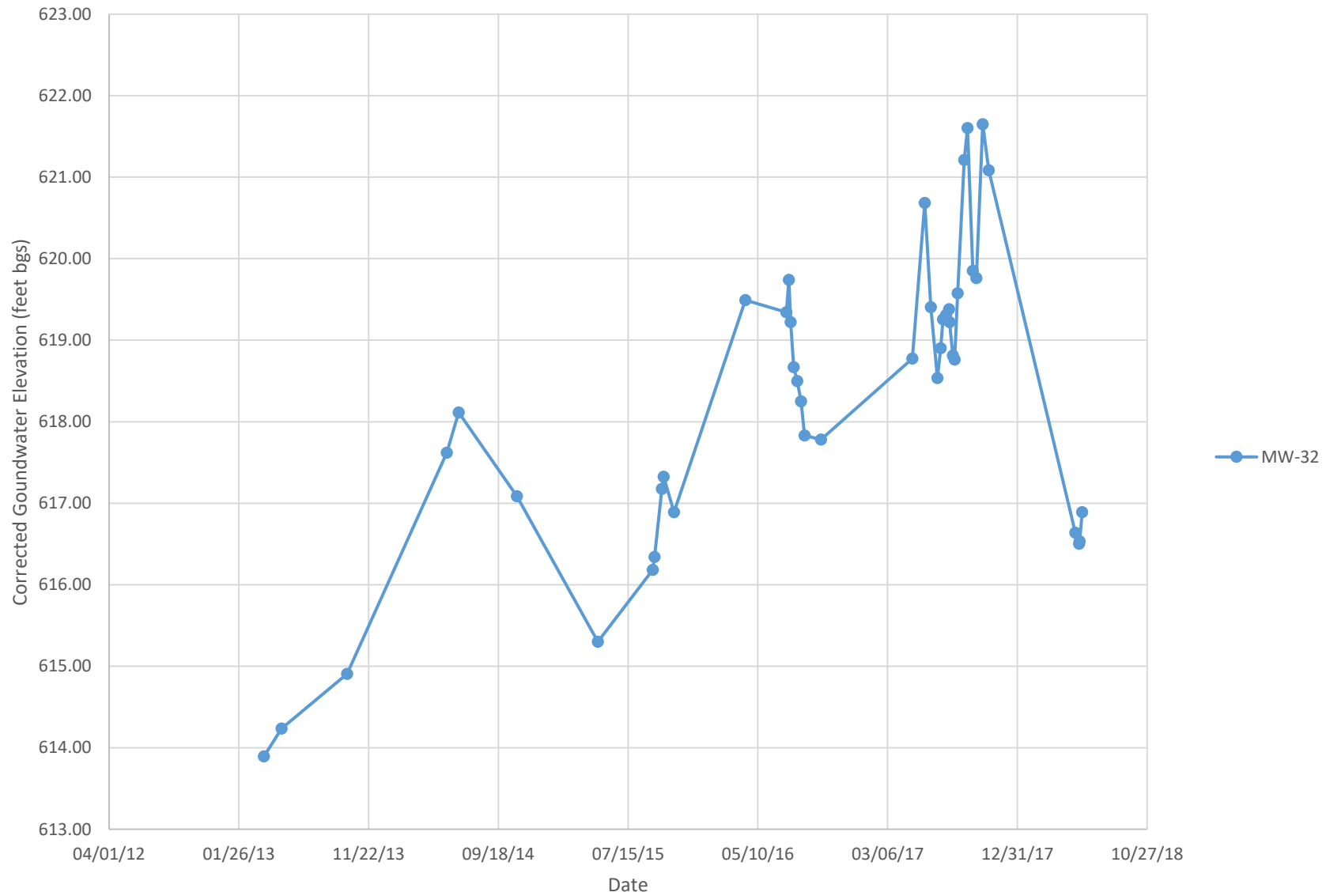
Groundwater Elevation RWAST-2



### Groundwater Elevation MFAST-8



### Groundwater Elevation MW-32



*2018 Jan.-June Progress Report  
Former Amoco Terminal  
2904 Winter Street, Superior, Wisconsin  
Antea Group Project No. WISUP181*



## **Appendix G**

Waste Disposal Manifests - Future Environmental



**THIS MEMORANDUM** is an acknowledgement that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

SHIPPER NO. 0027559

CARRIER NO. \_\_\_\_\_

DATE 6-27-18

CARRIER		SCAC	
<b>TO</b> CONSIGNEE		<b>FROM</b> SHIPPER	
STREET		STREET	
DESTINATION		ORIGIN	
STATE		STATE	
ZIP		ZIP	
ROUTE		VEHICLE NUMBER	U.S. DOT Hazmat Reg. No.

Number and Type of Packages	HTM	Description of Articles	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
1 TT		UN1203, GASOLINE, 3, PGH water impacted from monitoring well	2400	991	
<p><i>Todd Kremmin</i></p>					

Remit COD to: Address: City:	State:	Zip:	Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.	<b>COD AMT:</b> \$	<b>COD FEE:</b> Prepaid <input type="checkbox"/> Collect <input type="checkbox"/> \$
NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ _____ Per _____			(Signature of Consignor)	<b>TOTAL CHARGES:</b> \$	<b>FREIGHT CHARGES:</b> <input type="checkbox"/> Prepaid <input type="checkbox"/> Collect

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request; and all applicable state and federal regulations; the Property described above, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to delivery at said destination, if on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation PER:

SHIPPER: FUTURE ENVIRONMENTAL	CARRIER:
PER: <i>Alberta</i>	PER:
	DATE:

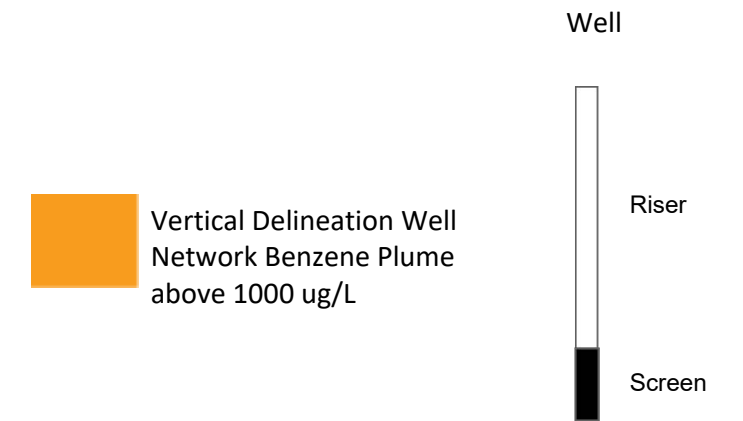
EMERGENCY RESPONSE TELEPHONE NUMBER: 800-424-9300	NAME OR CONTRACT NUMBER OR OTHER UNIQUE IDENTIFIER:
---	---

# Appendix H

3D Benzene Plume Model - Vertical Delineation Well Network

**ATTENTION!** This image is an interactive 3D model.  
To rotate: hold left mouse button and move mouse.  
To pan: hold "Ctrl"+ left mouse button and move mouse.  
To zoom: hold right mouse button and move mouse or use mouse scroll wheel.

For a menu of advanced controls, right-click mouse on the 3D image.



**Former Amoco Terminal 00406**  
Superior, Wisconsin  
2018 Groundwater Benzene  
Concentration above 1,000 ug/L

