

Wisconsin Department of Natural Resources
Case Closure – GIS Registry
NR 4400-202

For: Dick's Car Care
BRRTS # 03-57-258614

January 9, 2018



Excellence through experience™



Excellence through experience™

709 Gillette St., Ste 3, La Crosse, WI 54603 ♦ 1-800-552-2932 ♦ Fax (608) 781-8893 Email: rona@metcohq.com ♦ www.metcohq.com

January 9, 2018

BRRTS# 03-57-258614

Wendy Weihemuller, Environmental Program Associate
WDNR Remediation and Redevelopment Program
South Central Region Office
3911 Fish Hatchery Road
Fitchburg, WI 53711

RE: Dick's Car Care

Dear Ms. Weihemuller,

Enclosed is the \$1,050 Closure Review Fee and the \$650.00 GIS Registry fees (Soil & Groundwater) for the Dick's Car Care site (BRRTS# 03-57-258614) in Baraboo, Wisconsin. The complete closure submittal is being sent to John Mason of the Wisconsin Department of Natural Resources.

Sincerely,

Jason T. Powell
Staff Scientist

c: Dave Christian– Client

Table of Contents

WDNR Case Summary and Case Closure – GIS Registry Form

Attachment A/Data Tables

Attachment B/Maps, Figures, and Photos

Attachment C/Documentation of Remedial Action

Attachment D/Maintenance Plan(s)

Attachment E/Monitoring Well Information

Attachment F/Source Legal Documents

Attachment G/Notifications to Owners of Affected Properties

SUBMIT AS UNBOUND PACKAGE IN THE ORDER SHOWN

Notice: Pursuant to ch. 292, Wis. Stats., and chs. NR 726 and 746, Wis. Adm. Code, this form is required to be completed for case closure requests. The closure of a case means that the Department of Natural Resources (DNR) has determined that no further response is required at that time based on the information that has been submitted to the DNR. All sections of this form must be completed unless otherwise directed by the Department. DNR will consider your request administratively complete when the form and all sections are completed, all attachments are included, and the applicable fees required under ch. NR 749, Wis. Adm. Code, are included, and sent to the proper destinations. 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.). Incomplete forms will be considered "administratively incomplete" and processing of the request will stop until required information is provided.

Site Information			
BRRTS No.	VPLE No.		
03-57-258614			
Parcel ID No.			
206-1406-00000			
FID No.	WTM Coordinates		
None	X	Y	
	540701	333222	
BRRTS Activity (Site) Name	WTM Coordinates Represent:		
Dick's Car Care	<input checked="" type="checkbox"/> Source Area <input type="checkbox"/> Parcel Center		
Site Address	City	State	ZIP Code
620 Broadway Street	Baraboo	WI	53913
Acres Ready For Use	0.2		

Responsible Party (RP) Name	Dave Christian		
Company Name			

Mailing Address	City	State	ZIP Code
707 Angle Street	Baraboo	WI	53913-4500
Phone Number	Email		
(608) 393-1867	bautocarellc@gmail.com		

Check here if the RP is the owner of the source property.

Environmental Consultant Name	Ron Anderson		
Consulting Firm	METCO		

Mailing Address	City	State	ZIP Code
709 Gillette Street, Suite 3	La Crosse	WI	54603
Phone Number	Email		
(608) 781-8879	rona@metcohq.com		

Fees and Mailing of Closure Request

- Send a copy of page one of this form and the applicable ch. NR 749, Wis. Adm. Code, fee(s) to the DNR Regional EPA (Environmental Program Associate) at <http://dnr.wi.gov/topic/Brownfields/Contact.html#tabx3>. Check all fees that apply:

<input checked="" type="checkbox"/> \$1,050 Closure Fee	<input checked="" type="checkbox"/> \$300 Database Fee for Soil
<input checked="" type="checkbox"/> \$350 Database Fee for Groundwater or Monitoring Wells (Not Abandoned)	Total Amount of Payment \$ <u>\$1,700.00</u>
	<input type="checkbox"/> Resubmittal, Fees Previously Paid
- Send one paper copy and one e-copy on compact disk of the entire closure package to the Regional Project Manager assigned to your site. Submit as *unbound, separate documents* in the order and with the titles prescribed by this form. For electronic document submittal requirements, see <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

Site Summary

If any portion of the Site Summary Section is not relevant to the case closure request, you must fully explain the reasons why in the relevant section of the form. All information submitted shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected.

1. General Site Information and Site History

- A. Site Location: Describe the physical location of the site, both generally and specific to its immediate surroundings.
The Dick's Car Care site, 620 Broadway Street (State Highway 123), is located at the NW 1/4, SE 1/4, Section 35, Township 12 North, Range 06 East, in Baraboo, Sauk County, WI. The site is bound by Broadway Street to the west, 5th Avenue to the north, an alley to the south, and a residence to the east. The site is located in the downtown business district of Baraboo.
- B. Prior and current site usage: Specifically describe the current and historic occupancy and types of use.
The Dick's Car Care property is currently used as an auto repair shop. A gas station operated on this property from the early 1940's until 1985. In 1985, two 1,000-gallon leaded gasoline UST's and a 500-gallon leaded gasoline UST were removed. In November 2008, a 500-gallon fuel oil UST and a 500-gallon waste oil UST were removed. A Tank System Site Assessment was not required regarding the 500-gallon fuel oil UST as there were no suspected or obvious signs of a release.
- C. Current zoning (e.g., industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).
According to the Sauk County Land Records, the Dick's Car Care property is zoned as Commercial. The surrounding properties are also zoned as Commercial properties.
- D. Describe how and when site contamination was discovered.
On June 30, 2000, BT Squared, Inc. conducted a Phase 2 Environmental Site Assessment (P2ESA) for the Wisconsin Department of Transportation. During the P2ESA, four Geoprobe soil borings were conducted along the western property boundary with eight soil samples collected for laboratory analysis (DRO, GRO, and PVOC). One soil sample (GP2-S6 at 12 feet) showed significant levels of petroleum contamination, including 1,510 ppm DRO, 3,240 ppm GRO, and elevated levels of PVOC's. The petroleum contamination was reported to the WDNR, who then required that a LUST Investigation be completed. On November 3, 2008, during the removal of the waste oil UST, METCO collected two soil samples beneath the removed UST for Diesel Range Organics (DRO) analysis. Both soil samples showed no detects.
- E. Describe the type(s) and source(s) or suspected source(s) of contamination.
Petroleum contamination appears to have originated from the former gasoline UST systems.
- F. Other relevant site description information (or enter Not Applicable).
Not applicable.
- G. List BRRTS activity/site name and number for BRRTS activities at this source property, including closed cases.
No other BRRTS activities exist at the subject property.
- H. List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to (abutting) this source property.
There are currently no BRRTS cases for any immediately adjacent properties.

2. General Site Conditions

- A. Soil/Geology
 - i. Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.
Local unconsolidated materials in the area of the investigation generally consist of fine to coarse grained sand to silty sand with gravel, cobbles, and boulders (bouldery till) from surface to at least 75 feet below ground surface (bgs).
 - ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.
No fill material was encountered during the course of the site investigation.
 - iii. Describe the depth to bedrock, bedrock type, competency and whether or not it was encountered during the investigation.
Bedrock was not encountered during the site investigation but is expected that the unconsolidated materials are underlain by Cambrian Sandstone at approximately 100-200 feet bgs.
 - iv. Describe the nature and locations of current surface cover(s) across the site (e.g., natural vegetation, landscaped areas, gravel, hard surfaces, and buildings).
The on-site building is located in the eastern central portion of the site property. A concrete driveway/parking lot exists to the north and west of the building. An area of gravel/grass exists along the southern edge of the property and to the south of the building.
- B. Groundwater

- i. Discuss depth to groundwater and piezometric elevations. Describe and explain depth variations, including high and low water table elevation and whether free product affects measurement of water table elevation. Describe the stratigraphic unit(s) where water table was found or which were measured for piezometric levels.
Groundwater exists at approximately 42.48-50.50 feet bgs in the water table monitoring wells, and at approximately 42.65-49.49 feet bgs deeper in the aquifer in the piezometer wells, depending on well location and time of year. Free product has affected watertable elevation measurements in monitoring well MW-2. The stratigraphic unit where the watertable exists consists of fine to coarse grained sand to silty sand with gravel, cobbles, and boulders (till).
- ii. Discuss groundwater flow direction(s), shallow and deep. Describe and explain flow variations, including fracture flow if present.
Groundwater elevations measured in the monitoring wells indicated a local shallow groundwater flow to be generally toward the southeast. Groundwater flow direction deeper in the aquifer is generally towards the south to slightly southeast. Significant fluctuation in the local groundwater flow from the historic east-southeast direction was noted during the time the Soil Vapor Extraction (SVE) system was in operation (11/13/2015 - 11/9/2016).
- iii. Discuss groundwater flow characteristics: hydraulic conductivity, flow rate and permeability, or state why this information was not obtained.
On April 7, 2014, METCO conducted slug tests on monitoring wells MW-2 and MW-3, and piezometer PZ-1. The slug test data was evaluated using the curve fitting program "Hydro-Test for Windows" Produced by Dakota Environmental, Inc.

Slug test data was evaluated using the Bouwer and Rice method. Hydrogeologic parameters were estimated as follows:

Monitoring Well MW-2
Hydraulic Conductivity = 0.0000360 cm/sec
Transmissivity = 0.0324 cm²/sec
Flow Velocity (V=KI/n) = 0.21928 m/yr

Monitoring Well MW-3
Hydraulic Conductivity = 0.000634 cm/sec
Transmissivity = 0.514 cm²/sec
Flow Velocity (V=KI/n) = 3.86598 m/yr

Piezometer PZ-1
Hydraulic Conductivity = 0.000978 cm/sec
Transmissivity = 0.882 cm²/sec
Flow Velocity (V=KI/n) = 5.96633 m/yr

Since the thickness of the unconfined aquifer is unknown, the bottom of piezometer PZ-1 was assumed as the lower extent of the aquifer for calculation purposes.

- iv. Identify and describe locations/distance of potable and/or municipal wells within 1200 feet of the site. Include general summary of well construction (geology, depth of casing, depth of screened or open interval).
The subject property and surrounding properties are all served by the City of Baraboo municipal water supply. The nearest municipal well, Baraboo Municipal Well #4, exists approximately 4,100 feet to the east of the subject property. There are no known private wells within one mile of the subject property.

3. Site Investigation Summary

A. General

- i. Provide a brief summary of the site investigation history. Reference previous submittals by name and date. Describe site investigation activities undertaken since the last submittal for this project and attach the appropriate documentation in Attachment C, if not previously provided.

On June 30, 2000, BT Squared, Inc. conducted a Phase 2 Environmental Site Assessment (P2ESA). During the P2ESA, four Geoprobe soil borings were conducted along the western property boundary with eight soil samples collected for laboratory (DRO, GRO, and PVOC) analysis. (Site Investigation Report - June 3, 2013)

On November 3, 2008, during the removal of the waste oil UST, METCO collected two soil samples beneath the removed UST for laboratory (DRO) analysis. (Site Investigation Report - June 3, 2013)

On February 18, 2009, Tetra Tech conducted a Drilling Project under supervision of METCO personnel. During the drilling project, one soil boring was completed with three samples collected for field (PID) and laboratory analysis (GRO, PVOC, and Naphthalene). One sample was also submitted for Lead analysis. Auger refusal was encountered at 20 feet and it was determined that air rotary drilling was needed to complete the project. (Site Investigation Report - June 3, 2013)

From January 6-11, 2010, Environmental Drilling Services conducted a drilling project under METCO supervision. During the drilling project, six soil borings were completed, with sixty-two samples collected for field (PID) and

laboratory analysis (GRO, PVOC, Naphthalene, VOC, and Lead). Two of the borings were converted to monitoring wells (MW-2 and MW-3) and developed during the project. (Site Investigation Report - June 3, 2013)

On March 17, 2010, groundwater samples were collected from two monitoring wells (MW-2 and MW-3) and analyzed for VOC, Dissolved Lead, Nitrate/Nitrite, Sulfate, Dissolved Iron and Dissolved Manganese. Water levels were also collected from the monitoring wells. The groundwater sampling was done concurrently with groundwater sampling at the nearby Smith Oil LUST site. (Site Investigation Report - June 3, 2013)

On June 22, 2010, groundwater samples were collected from two monitoring wells (MW-2 and MW-3) and analyzed for PVOC and Naphthalene. Water levels were also collected from the monitoring wells. The groundwater sampling was done concurrently with groundwater sampling at the nearby Smith Oil LUST site. (Site Investigation Report - June 3, 2013)

On June 13, 2011, water levels were collected from two monitoring wells (MW-2 and MW-3). The water level collection was done concurrently with groundwater sampling at the nearby Smith Oil LUST site. (Site Investigation Report - June 3, 2013)

On September 29, 2011, Ground Source Inc. conducted a Drilling Project under METCO supervision. During the drilling project, one piezometer (PZ-1) was blind drilled and installed to 75 feet bgs. The piezometer was developed during the drilling project. (Site Investigation Report - June 3, 2013)

On October 20, 2011, groundwater samples were collected from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1). The samples from monitoring wells MW-2 and -3 were analyzed for PVOC, Naphthalene, Lead, 1,2-DCA, and EDB while the samples from piezometer PZ-1 was analyzed for VOC and Lead. Water levels were also collected from the monitoring/piezometer wells along with five monitoring/piezometer wells (MW-6, -7, -8, PZ-5, and -8) at the Smith Oil LUST site located to the northwest. (Site Investigation Report - June 3, 2013)

On December 12, 2011, water levels were collected from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1). The water level collection was done concurrently with groundwater sampling at the nearby Smith Oil LUST site. (Site Investigation Report - June 3, 2013)

On January 18, 2012, groundwater samples were collected from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1). The samples were analyzed for PVOC, Naphthalene, 1,2-DCA, and EDB. Water levels were also collected from the monitoring/piezometer wells along with five monitoring/piezometer wells (MW-6, -7, -8, PZ-5, and -8) at the Smith Oil LUST site located to the northwest. (Site Investigation Report - June 3, 2013)

On April 18, 2012, groundwater samples were collected from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1). The samples were analyzed for PVOC, Naphthalene, 1,2-DCA, and EDB. Water levels were also collected from the monitoring/piezometer wells along with five monitoring/piezometer wells (MW-6, -7, -8, PZ-5, and -8) at the Smith Oil LUST site located to the northwest. (Site Investigation Report - June 3, 2013)

On July 18, 2012, groundwater samples were collected from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1). The samples were analyzed for PVOC, Naphthalene, 1,2-DCA, and EDB. Water levels were also collected from the monitoring/piezometer wells along with five monitoring/piezometer wells (MW-6, -7, -8, PZ-5, and -8) at the Smith Oil LUST site located to the northwest. (Site Investigation Report - June 3, 2013)

On April 7, 2014, METCO personnel collected groundwater samples from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1) for laboratory analysis (PVOC, Naphthalene, 1,2-DCA, and EDB). Water level, Dissolved Oxygen, pH, ORP, Temperature, and Specific Conductivity measurements were collected from all sampled wells. Water levels were also collected from Smith Oil site wells MW-8, PZ-5, and PZ-8. The Smith Oil site monitoring wells MW-6 and MW-7 could not be accessed for water level measurements as bailers were frozen in the wells. (Letter Report - September 4, 2009)

On October 7, 2015, groundwater samples were collected from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1). The samples were analyzed for PVOC, Naphthalene, 1,2-DCA, and EDB. Water levels were also collected from the monitoring/piezometer wells along with five monitoring/piezometer wells (MW-6, -7, -8, PZ-5, and -8) at the Smith Oil LUST site located to the northwest. (SVE Remedial Project First Quarterly Report - March 15, 2016)

On October 5-8, 2015, Soil & Engineering Services Inc. of Madison, WI conducted a drilling project under METCO supervision. During the drilling project, three soil vapor extraction wells were completed (SVE-1 thru SVE-3). The wells were blind drilled and installed to 48 feet bgs with 36 feet of slotted screen each. On October 29-30, 2015, trenching, piping connections from the 3 SVE wells to the trailer, hookup to the trailer lines including electrical, and installation of a 25 ft discharge stack were conducted by SGS Environmental Contracting LLC, of Merrill, under METCO supervision. On November 13, 2016, the portable SVE remedial system was started up by REI and METCO jointly. (SVE Remedial Project First Quarterly Report - March 15, 2016)

On February 8, 2016, METCO personnel collected groundwater samples from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1) for laboratory analysis (PVOC, Naphthalene, 1,2-DCA, and EDB). Water level, Dissolved Oxygen, pH, ORP, Temperature, and Specific Conductivity measurements were collected from all sampled wells. Water levels were also collected from the five monitoring/piezometer wells (MW-6, -7, -8, PZ-5, and -8) at the Smith Oil LUST site located to the northwest. (SVE Remedial Project First Quarterly Report - March 15, 2016)

On May 9, 2016, METCO personnel collected groundwater samples from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1) for laboratory analysis (PVOC, Naphthalene, 1,2-DCA, and EDB). Water level, Dissolved Oxygen, pH, ORP, Temperature, and Specific Conductivity measurements were collected from all sampled wells. Water levels were also collected from the five monitoring/piezometer wells (MW-6, -7, -8, PZ-5, and -8) at the Smith Oil LUST site located to the northwest. (SVE Remedial Project Second Quarterly Report - June 1, 2016)

On August 15, 2016, METCO personnel collected groundwater samples from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1) for laboratory analysis (PVOC, Naphthalene, 1,2-DCA, and EDB). Water level, Dissolved Oxygen, pH, ORP, Temperature, and Specific Conductivity measurements were collected from all sampled wells. Water levels were also collected from the five monitoring/piezometer wells (MW-6, -7, -8, PZ-5, and -8) at the Smith Oil LUST site located to the northwest. (SVE Remedial Project Third Quarterly Report - September 7; 2016)

On November 10, 2016, METCO personnel collected groundwater samples from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1) for laboratory analysis (PVOC, Naphthalene, 1,2-DCA, and EDB). Water level, Dissolved Oxygen, pH, ORP, Temperature, and Specific Conductivity measurements were collected from all sampled wells. Water levels were also collected from the five monitoring/piezometer wells (MW-6, -7, -8, PZ-5, and -8) at the Smith Oil LUST site located to the northwest. (SVE Remedial Project Final Report - December 19, 2016)

On March 13, 2017, METCO collected groundwater samples from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1) for laboratory analysis (PVOC, Naphthalene, 1,2-DCA, and EDB). Field measurements for water level, Dissolved Oxygen, pH, ORP, specific conductance, and temperature were collected from the sampled monitoring/piezometer wells. Water levels were also collected from five of the neighboring Smith Oil wells during the groundwater monitoring event. (Groundwater Monitoring Report - July 7, 2017)

On June 13, 2017, METCO collected groundwater samples from two monitoring wells (MW-2 and MW-3) and one piezometer (PZ-1) for laboratory analysis (PVOC, Naphthalene, 1,2-DCA, and EDB). Field measurements for water level, Dissolved Oxygen, pH, ORP, specific conductance, and temperature were collected from the sampled monitoring/piezometer wells. Water levels were also collected from five of the neighboring Smith Oil wells during the groundwater monitoring event. (Groundwater Monitoring Report - July 7, 2017)

- ii. Identify whether contamination extends beyond the source property boundary, and if so describe the media affected (e.g., soil, groundwater, vapors and/or sediment, etc.), and the vertical and horizontal extent of impacts.
Soil contamination exceeding the NR720 Groundwater RCL's extends beyond the property boundary in to the right-of way of Broadway Street. This soil contamination plume is approximately 64 feet wide at the property boundary, extends up to 16.5 feet into the right-of-way, and is up to 37 feet thick (12-49 feet bgs).

A dissolved phase contaminant plume exceeding the NR140 ES has formed at the watertable and has migrated west into the right-of-way of Broadway Street. This groundwater contamination plume extends up to 7 feet into the right-of-way and is approximately 33 feet wide at the property boundary.

- iii. Identify any structural impediments to the completion of site investigation and/or remediation and whether these impediments are on the source property or off the source property. Identify the type and location of any structural impediment (e.g., structure) that also serves as the performance standard barrier for protection of the direct contact or the groundwater pathway.

No structural impediments interfered with the completion of the site investigation.

B. Soil

- i. Describe degree and extent of soil contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways.

An area of unsaturated soil contamination, which exceeds the NR720 Groundwater RCL values exists in the area of the removed gasoline USTs and former pump islands. This soil contamination plume measures up to 87 feet long, up to 60 feet wide, and up to 37 feet thick (12-49 feet bgs).

A water line exists in the area of the soil contaminant plume. This line exists at approximately 5-8 feet bgs and is located above the area of petroleum impacted soils and therefore does not pose a risk as a potential migration pathway.

- ii. Describe the concentration(s) and types of soil contaminants found in the upper four feet of the soil column.
Soil samples collected within the upper four feet of the soil column exceeding the NR720 Groundwater RCL's include:

B-1-1 (2-4 feet): Lead (27.7 ppm).

B-5-1 (3.5 feet): Lead (73.1 ppm).

- iii. Identify the ch. NR 720, Wis. Adm. Code, method used to establish the soil cleanup standards for this site. This includes a soil performance standard established in accordance with s. NR 720.08, a Residual Contaminant Level (RCL) established in accordance with s. NR 720.10 that is protective of groundwater quality, or an RCL established in accordance with s. NR 720.12 that is protective of human health from direct contact with contaminated soil. Identify the land use classification that was used to establish cleanup standards. Provide a copy of the supporting calculations/information in Attachment C.

The method used to establish the soil cleanup standards for this site were the NR720 RCL's. The property is zoned as Commercial, therefore non-industrial standards were used for this site.

C. Groundwater

- i. Describe degree and extent of groundwater contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways. Specifically address any potential or existing impacts to water supply wells or interception with building foundation drain systems.

A dissolved phase contaminant plume exceeding the NR140 ES and/or PAL has formed at the water table in the area of the removed UST systems and has migrated toward the southeast. This plume is approximately 105 feet long and 95 feet wide.

There are no municipal or private water supply wells within 1,200 feet of the subject property.

A natural gas service line, water service line, and sanitary sewer service line exist in the area of the groundwater contaminant plume. Gas service lines typically exist within 30-inches of ground surface and the water service lines typically exist at approximately 5-8 feet bgs. Since the utility lines exist well above the watertable, they do not appear to be potential contaminant migration pathways.

The groundwater contamination plume extends beneath the on-site building. However, due to the depth to groundwater in the area (47-50 feet bgs), vapor intrusion to the on-site building does not appear to be likely.

- ii. Describe the presence of free product at the site, including the thickness, depth, and locations. Identify the depth and location of the smear zone.

Free product has been encountered in one monitoring well (MW-2).

Free product in MW-2 was first encountered on March 17, 2010 and was last encountered on October 7, 2015 (24 inches). During this time, the thickness of free product varied between 1.5 and 24.0 inches. Free product was removed by hand bailing with a total of 2.75 gallons removed. Free product has not been encountered since the start of the SVE system in October 2015.

Free Product removal totals have been summarized in the A.7. Summary of Free Product Levels & Recovery table.

D. Vapor

- i. Describe how the vapor migration pathway was assessed, including locations where vapor, soil gas, or indoor air samples were collected. If the vapor pathway was not assessed, explain reasons why.

Soil and groundwater contamination exceeding the NR720 Groundwater RCL's or NR140 ES/PAL appears to extend underneath the on-site building. However, vapor intrusion does not appear to be a risk at this time for the following reasons: 1) Free product has not been encountered since the SVE system operation started. 2) Based on the soil analytical results, it appears that there are no petroleum impacted soils within 5 feet of the building foundation. 3) There is more than 40 feet of unsaturated soil between the groundwater and building foundation.

- ii. Identify the applicable DNR action levels and the land use classification used to establish them. Describe where the DNR action levels were reached or exceeded (e.g., sub slab, indoor air or both).

No indoor air/sub slab vapor samples were collected.

E. Surface Water and Sediment

- i. Identify whether surface water and/or sediment was assessed and describe the impacts found. If this pathway was not assessed, explain why.

The nearest surface water is the Baraboo River, which exists approximately 2,000 feet to the south of the subject property. No surface water or sediment samples were collected since it does not appear that the extent of petroleum contamination has migrated to any surface waters.

- ii. Identify any surface water and/or sediment action levels used to assess the impacts for this pathway and how these were derived. Describe where the DNR action levels were reached or exceeded.

No surface water or sediment samples were collected.

4. Remedial Actions Implemented and Residual Levels at Closure

- A. General: Provide a brief summary of the remedial action history. List previous remedial action report submittals by name and date. Identify remedial actions undertaken since the last submittal for this project and provide the appropriate documentation in Attachment C.

A Soil Vapor Extraction System (SVE) system was installed in October 2015. The SVE system was designed to extract petroleum vapors from three SVE wells (SVE-1 thru SVE-3). The remedial system ran from November 13, 2015 until November 9, 2016 with 8,572 hours ran (98.9% on-line percentage). During the systems operation, 8,484 pounds of GRO was recovered from the subsurface, including 155 pounds of Benzene. (SVE Remedial Project Final Report - December 19, 2016)

- B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code.
Before the start of the SVE system, free product was recovered from MW-2 by hand bailing during the groundwater sampling events. Approximately 2.75 gallons of free product was recovered by hand bailing.
- C. Describe the *active* remedial actions taken at the source property, including: type of remedial system(s) used for each media affected; the size and location of any excavation or in-situ treatment; the effectiveness of the systems to address the contaminated media and substances; operational history of the systems; and summarize the performance of the active remedial actions. Provide any system performance documentation in Attachment A.7.

A Soil Vapor Extraction System (SVE) system was installed in October 2015. The SVE system was designed to extract petroleum vapors from three SVE wells (SVE-1 thru SVE-3). The remedial system ran from November 13, 2015 until November 9, 2016 with 8,572 hours ran (98.9% on-line percentage). During the systems operation, 8,484 pounds of GRO was recovered from the subsurface, including 155 pounds of Benzene. (SVE Remedial Project Final Report - December 19, 2016)

- D. Describe the alternatives considered during the Green and Sustainable Remediation evaluation in accordance with NR 722.09 and any practices implemented as a result of the evaluation.
No evaluation of Green and Sustainable Remediation was conducted.

- E. Describe the nature, degree and extent of residual contamination that will remain at the source property or on other affected properties after case closure.
An area of unsaturated soil contamination, which exceeds the NR720 Groundwater RCL values exists in the area of the removed gasoline USTs and former pump islands. This soil contamination plume measures up to 87 feet long, up to 60 feet wide, and up to 37 feet thick (12-49 feet bgs). Please note this is based on pre-remedial soil sample results.

A dissolved phase contaminant plume exceeding the NR140 ES and/or PAL has formed at the water table in the area of the removed UST systems and has migrated toward the southeast This plume is approximately 105 feet long and 95 feet wide.

Soil contamination exceeding the NR720 Groundwater RCL's extends beyond the property boundary in to the right-of way of Broadway Street. This soil contamination plume is approximately 64 feet wide at the property boundary, extends up to 16.5 feet into the right-of-way, and is up to 37 feet thick (12-49 feet bgs).

A dissolved phase contaminant plume exceeding the NR140 ES has formed at the watertable and has migrated west into the right-of-way of Broadway Street. This groundwater contamination plume extends up to 7 feet into the right-of-way and is approximately 33 feet wide at the property boundary.

- F. Describe the residual soil contamination within four feet of ground surface (direct contact zone) that attains or exceeds RCLs established under s. NR 720.12, Wis. Adm. Code, for protection of human health from direct contact.
There were no exceedances of the NR720 Direct Contact RCL's within four feet of ground surface.

- G. Describe the residual soil contamination that is above the observed low water table that attains or exceeds the soil standard(s) for the groundwater pathway.

The following unsaturated soil samples currently exceed NR720 Groundwater RCLs:

GP2-S6 (12 feet bgs): Benzene, Ethylbenzene, Toluene, Trimethylbenzenes, Xylene

B-1-1 (2-4 feet bgs): Lead

B-1-3 (16-18 feet bgs): Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

B-2-4 (16 feet bgs): Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

B-2-6 (24 feet bgs): Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

B-2-8 (32 feet bgs): Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

B-2-10 (40 feet bgs): Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

B-2-12 (48 feet bgs): Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

B-3-11 (44 feet bgs): Benzene

B-4-9 (36 feet bgs): Benzene

B-5-1 (3.5 feet bgs): Lead

B-5-3 (12 feet bgs): Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

B-5-5 (20 feet bgs): Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

B-5-7 (28 feet bgs): Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

B-6-11 (44 feet bgs): Benzene

Please note this is based on pre-remedial soil sample results.

- H. Describe how the residual contamination will be addressed, including but not limited to details concerning: covers, engineering controls or other barrier features; use of natural attenuation of groundwater; and vapor mitigation systems or measures.
Residual soil and groundwater contamination will be addressed via a cap maintenance plan and natural attenuation.
- I. If using natural attenuation as a groundwater remedy, describe how the data collected supports the conclusion that natural attenuation is effective in reducing contaminant mass and concentration (e.g., stable or receding groundwater plume). Overall contaminant trends in groundwater appear to be at least stable to decreasing. Since the overall contaminant trends appear to be stable to decreasing, it appears that natural attention will be effective in reducing contaminant mass and concentration (and that a large amount of contamination was removed from the unsaturated soil during the remedial project).
- J. Identify how all exposure pathways (soil, groundwater, vapor) were removed and/or adequately addressed by immediate, interim and/or remedial action(s).
Any remaining exposure pathways will be addressed via cap maintenance plan and natural attenuation.
- K. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain.
No system hardware will be left in place after site closure as the portable SVE system was removed.
- L. Identify the need for a ch. NR 140, Wis. Adm. Code, groundwater Preventive Action Limit (PAL) or Enforcement Standard (ES) exemption, and identify the affected monitoring points and applicable substances.
From the June 13, 2017 groundwater sampling event:

Monitoring Well MW-2: Currently shows NR140 Enforcement Standard (ES) exceedances for Benzene (5,200 ppb), 1,2-Dichloroethane (680 ppb), 1,2-Dibromoethane (EDB) (700 ppb), Naphthalene (320 ppb), Toluene (4,000 ppb), Trimethylbenzenes (992 ppb) and Xylene (3,920 ppb) as well as a NR140 (PAL) exceedance for Ethylbenzene (640 ppb).

Piezometer PZ-1: Currently shows NR140 ES exceedances for Benzene (1,250 ppb), 1,2-Dichloroethane (114 ppb), and MTBE (590 ppb) as well as NR140 PAL exceedances for Ethylbenzene (260 ppb) and Naphthalene (25.9 ppb).
- M. If a DNR action level for vapor intrusion was exceeded (for indoor air, sub slab, or both) describe where it was exceeded and how the pathway was addressed.
No indoor/sub slab vapor samples were collected.
- N. Describe the surface water and/or sediment contaminant concentrations and areas after remediation. If a DNR action level was exceeded, describe where it was exceeded and how the pathway was addressed.
No surface water and/or sediment samples were collected.

5. Continuing Obligations: Situations where sites, including all affected properties and rights-of-way (ROWs), are included on the DNR's GIS Registry. In certain situations, maintenance plans are also required, and must be included in Attachment D.

Directions: For each of the 3 property types below, check all situations that apply to this closure request.

(NOTE: Monitoring wells to be transferred to another site are addressed in Attachment E.)

This situation applies to the following property or Right of Way (ROW):			Case Closure Situation - Continuing Obligation Inclusion on the GIS Registry is Required (ii. - xiv.)	Maintenance Plan Required	
Property Type:					
Source Property	Affected Property (Off-Source)	ROW			
i.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	None of the following situations apply to this case closure request.	NA
ii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residual groundwater contamination exceeds ch. NR 140 ESs.	NA
iii.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residual soil contamination exceeds ch. NR 720 RCLs.	NA
iv.				Monitoring Wells Remain:	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Not Abandoned (filled and sealed)	NA
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Continued Monitoring (requested or required)	Yes
v.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) direct contact pathways (includes vapor barriers)	Yes
vi.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) groundwater infiltration pathway	Yes
vii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Structural Impediment: impedes completion of investigation or remedial action (not as a performance standard cover)	NA
viii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination meets NR 720 industrial soil RCLs, land use is classified as industrial	NA
ix.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor Mitigation System (VMS) required due to exceedances of vapor risk screening levels or other health based concern	Yes
x.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Dewatering System needed for VMS to work effectively	Yes
xi.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Compounds of Concern in use: full vapor assessment could not be completed	NA
xii.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Commercial/industrial exposure assumptions used.	NA
xiii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vapor: Residual volatile contamination poses future risk of vapor intrusion	NA
xiv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Site-specific situation: (e. g., fencing, methane monitoring, other) (<i>discuss with project manager before submitting the closure request</i>)	Site specific

6. Underground Storage Tanks

- A. Were any tanks, piping or other associated tank system components removed as part of the investigation or remedial action? Yes No
- B. Do any upgraded tanks meeting the requirements of ch. ATCP 93, Wis. Adm. Code, exist on the property? Yes No
- C. If the answer to question 6.B. is yes, is the leak detection system currently being monitored? Yes No

General Instructions

All information shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected. For each attachment (A-G), provide a Table of Contents page, listing all 'applicable' and 'not applicable' items by Closure Form titles (e.g., A.1. Groundwater Analytical Table, A.2. Soil Analytical Results Table, etc.). If any item is 'not applicable' to the case closure request, you must fully explain the reasons why.

Data Tables (Attachment A)

Directions for Data Tables:

- Use **bold** and italics font for information of importance on tables and figures. Use **bold** font for ch. NR 140, Wis. Adm. Code ES attainments or exceedances, and *italicized font* for ch. NR 140, Wis. Adm. Code, PAL attainments or exceedances.
- Use **bold** font to identify individual ch. NR 720 Wis. Adm. Code RCL exceedances. Tables should also include the corresponding groundwater pathway and direct contact pathway RCLs for comparison purposes. Cumulative hazard index and cumulative cancer risk exceedances should also be tabulated and identified on Tables A.2 and A.3.
- Do not use shading or highlighting on the analytical tables.
- Include on Data Tables the level of detection for results which are below the detection level (i.e., do not just list as no detect (ND)).
- Include the units on data tables.
- Summaries of all data must include information collected by previous consultants.
- Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15 (3)(c), Wis. Adm. Code, in the format required in s. NR 716.15(4)(e), Wis. Adm. Code.
- Include in Attachment A all of the following tables, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: A.1. Groundwater Analytical Table; A.2. Soil Analytical Results Table, etc.).
- For required documents, each table (e.g., A.1., A.2., etc.) should be a separate Portable Document Format (PDF).

A. Data Tables

- Groundwater Analytical Table(s):** Table(s) showing the analytical results and collection dates for all groundwater sampling points (e.g., monitoring wells, temporary wells, sumps, extraction wells, potable wells) for which samples have been collected.
- Soil Analytical Results Table(s):** Table(s) showing **all** soil analytical results and collection dates. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated).
- Residual Soil Contamination Table(s):** Table(s) showing the analytical results of only the residual soil contamination at the time of closure. This table shall be a subset of table A.2 and should include only the soil sample locations that exceed an RCL. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated). Table A.3 is optional only if a total of fewer than 15 soil samples have been collected at the site.
- Vapor Analytical Table(s):** Table(s) showing type(s) of samples, sample collection methods, analytical method, sample results, date of sample collection, time period for sample collection, method and results of leak detection, and date, method and results of communication testing.
- Other Media of Concern (e.g., sediment or surface water):** Table(s) showing type(s) of sample, sample collection method, analytical method, sample results, date of sample collection, and time period for sample collection.
- Water Level Elevations:** Table(s) showing all water level elevation measurements and dates from all monitoring wells. If present, free product should be noted on the table.
- Other:** This attachment should include: 1) any available tabulated natural attenuation data; 2) data tables pertaining to engineered remedial systems that document operational history, demonstrate system performance and effectiveness, and display emissions data; and (3) any other data tables relevant to case closure not otherwise noted above. If this section is not applicable, please explain the reasons why.

Maps, Figures and Photos (Attachment B)

Directions for Maps, Figures and Photos:

- Provide on paper no larger than 11 x 17 inches, unless otherwise directed by the Department. Maps and figures may be submitted in a larger electronic size than 11 x 17 inches, in a PDF readable by the Adobe Acrobat Reader. However, those larger-size documents must be legible when printed.
- Prepare visual aids, including maps, plans, drawings, fence diagrams, tables and photographs according to the applicable portions of ss. NR 716.15(4), 726.09(2) and 726.11(3), (5) and (6), Wis. Adm. Code.
- Include all sample locations.
- Contour lines should be clearly labeled and defined.
- Include in Attachment B all of the following maps and figures, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: B.1. Location Map; B.2. Detailed Site Map, etc).
- For the electronic copies that are required, each map (e.g., B.1.a., B.2.a, etc.,) should be a separate PDF.
- Maps, figures and photos should be dated to reflect the most recent revision.

B.1. Location Maps

- Location Map:** A map outlining all properties within the contaminated site boundaries on a United States Geological Survey (U.S.G.S.) topographic map or plat map in sufficient detail to permit easy location of all affected and/or adjacent parcels. If groundwater standards are exceeded, include the location of all potable wells, including municipal wells, within 1200 feet of the area of contamination.
- Detailed Site Map:** A map that shows all relevant features (buildings, roads, current ground surface cover, individual property boundaries for all affected properties, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination attaining or exceeding a ch. NR 140 ES, and/or in relation to the boundaries of soil contamination attaining or exceeding a RCL. Provide parcel identification numbers for all affected properties.
- RR Sites Map:** From RR Sites Map ([http://dnrmaps.wi.gov/sl/?Viewer=RR Sites](http://dnrmaps.wi.gov/sl/?Viewer=RR%20Sites)) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

B.2. Soil Figures

- B.2.a. **Soil Contamination:** Figure(s) showing the location of all identified unsaturated soil contamination. Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720.Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedances (0-4 foot depth).
- B.2.b. **Residual Soil Contamination:** Figure(s) showing only the locations of soil samples where unsaturated soil contamination remains at the time of closure (locations represented in Table A.3). Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720 Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedance (0-4 foot depth).

B.3. Groundwater Figures

- B.3.a. **Geologic Cross-Section Figure(s):** One or more cross-section diagrams showing soil types and correlations across the site, water table and piezometric elevations, and locations and elevations of geologic rock units, if encountered. Display on one or more figures all of the following:
- Source location(s) and vertical extent of residual soil contamination exceeding an RCL. Distinguish between direct contact and the groundwater pathway RCLs.
 - Source location(s) and lateral and vertical extent if groundwater contamination exceeds ch. NR 140 ES.
 - Surface features, including buildings and basements, and show surface elevation changes.
 - Any areas of active remediation within the cross section path, such as excavations or treatment zones.
 - Include a map displaying the cross-section location(s), if they are not displayed on the Detailed Site Map (Map B.1.b.)
- B.3.b. **Groundwater Isoconcentration:** Figure(s) showing the horizontal extent of the post-remedial groundwater contamination exceeding a ch. NR 140, Wis. Adm. Code, PAL and/or an ES. Indicate the date and direction of groundwater flow based on the most recent sampling data.
- B.3.c. **Groundwater Flow Direction:** Figure(s) representing groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit two groundwater flow maps showing the maximum variation in flow direction.
- B.3.d. **Monitoring Wells:** Figure(s) showing all monitoring wells, with well identification number. Clearly designate any wells that: (1) are proposed to be abandoned; (2) cannot be located; (3) are being transferred; (4) will be retained for further sampling, or (5) have been abandoned.

B.4. Vapor Maps and Other Media

- B.4.a. **Vapor Intrusion Map:** Map(s) showing all locations and results for samples taken to investigate the vapor intrusion pathway in relation to residual soil and groundwater contamination, including sub-slab, indoor air, soil vapor, soil gas, ambient air, and communication testing. Show locations and footprints of affected structures and utility corridors, and/or where residual contamination poses a future risk of vapor intrusion.
- B.4.b. **Other media of concern (e.g., sediment or surface water):** Map(s) showing all sampling locations and results for other media investigation. Include the date of sample collection and identify where any standards are exceeded.
- B.4.c. **Other:** Include any other relevant maps and figures not otherwise noted above. (This section may remain blank).

- B.5. Structural Impediment Photos:** One or more photographs documenting the structural impediment feature(s) which precluded a complete site investigation or remediation at the time of the closure request. The photographs should document the area that could not be investigated or remediated due to a structural impediment. The structural impediment should be indicated on Figures B.2.a and B.2.b.

Documentation of Remedial Action (Attachment C)**Directions for Documentation of Remedial Action:**

- Include in Attachment C all of the following documentation, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: C.1. Site Investigation Documentation; C.2. Investigative Waste, etc.).
- If the documentation requested below has already been submitted to the DNR, please note the title and date of the report for that particular document requested.
 - C.1. **Site investigation documentation**, that has not otherwise been submitted with the Site Investigation Report.
 - C.2. **Investigative waste** disposal documentation.
 - C.3. Provide a **description of the methodology** used along with all supporting documentation if the RCLs are different than those contained in the Department's RCL Spreadsheet available at: <http://dnr.wi.gov/topic/Brownfields/Professionals.html>.
 - C.4. **Construction documentation** or as-built report for any constructed remedial action or portion of, or interim action specified in s. NR 724.02(1), Wis. Adm. Code.
 - C.5. **Decommissioning of Remedial Systems.** Include plans to properly abandon any systems or equipment.
 - C.6. **Other.** Include any other relevant documentation not otherwise noted above (This section may remain blank).

Maintenance Plan(s) and Photographs (Attachment D)**Directions for Maintenance Plans and Photographs:**

Attach a maintenance plan for each affected property (source property, each off-source affected property) with continuing obligations requiring future maintenance (e.g., direct contact, groundwater protection, vapor intrusion). See Site Summary section 5 for all affected property(s) requiring a maintenance plan. Maintenance plan guidance and/or templates for: 1) Cover/barrier systems; 2) Vapor intrusion; and 3) Monitoring wells, can be found at: <http://dnr.wi.gov/topic/Brownfields/Professionals.html#tabx3>

- D.1. Descriptions of maintenance action(s) required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required:**
- Provide brief descriptions of the type, depth and location of residual contamination.

- Provide a description of the system/cover/barrier/monitoring well(s) to be maintained.
 - Provide a description of the maintenance actions required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required.
 - Provide contact information, including the name, address and phone number of the individual or facility who will be conducting the maintenance.
- D.2. **Location map(s) which show(s):** (1) the feature that requires maintenance; (2) the location of the feature(s) that require(s) maintenance - on and off the source property; (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site; (4) the extent and type of residual contamination; and (5) all property boundaries.
- D.3. **Photographs** for site or facilities with a cover or other performance standard, a structural impediment or a vapor mitigation system, include one or more photographs documenting the condition and extent of the feature at the time of the closure request. Pertinent features shall be visible and discernible. Photographs shall be submitted with a title related to the site name and location, and the date on which it was taken.
- D.4. **Inspection log**, to be maintained on site, or at a location specified in the maintenance plan or approval letter. The inspection and maintenance log is found at: <http://dnr.wi.gov/files/PDF/forms/4400/4400-305.pdf>.

Monitoring Well Information (Attachment E)

Directions for Monitoring Well Information:

For all wells that will remain in use, be transferred to another party, or that could not be located; attach monitoring well construction and development forms (DNR Form 4400-113 A and B: http://dnr.wi.gov/topic/groundwater/documents/forms/4400_113_1_2.pdf)

Select One:

- No monitoring wells were installed as part of this response action.
- All monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site
- Select One or More:**
 - Not all monitoring wells can be located, despite good faith efforts. Attachment E must include a description of efforts made to locate the wells.
 - One or more wells will remain in use at the site after this closure. Attachment E must include documentation as to the reason (s) the well(s) will remain in use. When one or more monitoring wells will remain in use this is considered a continuing obligation and a maintenance plan will be required and must be included in Attachment D.
 - One or more monitoring wells will be transferred to another owner upon case closure being granted. Attachment E should include documentation identifying the name, address and email for the new owner(s). Provide documentation from the party accepting future responsibility for monitoring well(s).

Source Legal Documents (Attachment F)

Directions for Source Legal Documents:

Label documents with the specific closure form titles (e.g., F.1. Deed, F.2. Certified Survey Map, etc.). Include all of the following documents, in the order listed:

- F.1. **Deed:** The most recent deed with legal description clearly listed.
Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- F.2. **Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.
- F.3. **Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- F.4. **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description(s) accurately describe(s) the correct contaminated property or properties. This section applies to the source property only. Signed statements for Other Affected Properties should be included in Attachment G.

Notifications to Owners of Affected Properties (Attachment G)

Directions for Notifications to Owners of Affected Properties:

Complete the table on the following page for sites which require notification to owners of affected properties pursuant to ch. 292, Wis. Stats. and ch. NR 725 and 726, Wis. Adm. Code. 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.]. The DNR's "Guidance on Case Closure and the Requirements for Managing Continuing Obligations" (PUB-RR-606) lists specific notification requirements <http://dnr.wi.gov/files/PDF/pubs/rr/RR606.pdf>.

State law requires that the responsible party provide a 30-day, written advance notification to certain persons prior to applying for case closure. This requirement applies if: (1) the person conducting the response action does not own the source property; (2) the contamination has migrated onto another property; and/or (3) one or more monitoring wells will not be abandoned. Use form 4400-286, Notification of Continuing Obligations and Residual Contamination, at <http://dnr.wi.gov/files/PDF/forms/4400/4400-286.pdf>

Include a copy of each notification sent and accompanying proof of delivery, i.e., return receipt or signature confirmation. (These items will not be placed on the GIS Registry.)

Include the following documents for each property, keeping each property's documents grouped together and labeled with the letter G and the corresponding ID number from the table on the following page. (Source Property documents should only be included in Attachment F):

- **Deed:** The most recent deed with legal descriptions clearly listed for all affected properties.
Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- **Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.
- **Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes the attached legal description(s) accurately describe(s) the correct contaminated property or properties.

Signatures and Findings for Closure Determination

Check the correct box for this case closure request, and have either a professional engineer or a hydrogeologist, as defined in ch. NR 712, Wis. Adm. Code, sign this document.

A response action(s) for this site addresses groundwater contamination (including natural attenuation remedies).

The response action(s) for this site addresses media other than groundwater.

Engineering Certification

I, Thomas Pignet 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 case closure request has been prepared by me or prepared under my supervision 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 case closure request is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code. Specifically, with respect to compliance with the rules, in my professional opinion a site investigation has been conducted in accordance with ch. NR 716, Wis. Adm. Code, and all necessary remedial actions have been completed in accordance with chs. NR 140, NR 718, NR 720, NR 722, NR 724 and NR 726, Wis. Adm. Codes."

THOMAS PIGNET

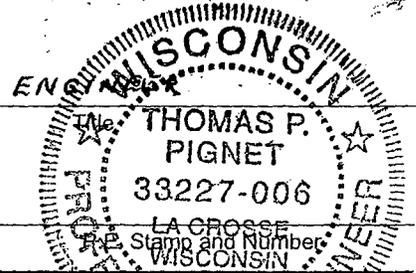
Printed Name

Thomas Pignet

Signature

1-10-18

Date



Hydrogeologist Certification

I, Ronald J. Anderson 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 of the information contained in this case closure request is correct and the document was prepared by me or prepared by me or prepared under my supervision and, in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code. Specifically, with respect to compliance with the rules, in my professional opinion a site investigation has been conducted in accordance with ch. NR 716, Wis. Adm. Code, and all necessary remedial actions have been completed in accordance with chs. NR 140, NR 718, NR 720, NR 722, NR 724 and NR 726, Wis. Adm. Codes."

Ronald J. Anderson

Printed Name

Senior Hydrogeologist/Project Manager

Title

Ronald J. Anderson

Signature

1/9/18

Date

Attachment A/Data Tables

A.1 Groundwater Analytical Tables

A.2 Soil Analytical Tables

A.3 Residual Soil Contamination Table

A.4 Vapor Analytical Table

A.5 Other Media of Concern - No surface waters or sediments were assessed as part of the site investigation.

A.6 Water Level Elevations

A.7 Other – Hydraulic Conductivity Calculations, Free Product Recovery, Natural Attenuation Parameters

A.1 Groundwater Analytical Table
Dick's Car Care BRRTS# 03-57-258614

Well MW-2

PVC Elevation =

880.81

(feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Lead (ppb)	Benzene (ppb)	1,2-Dichloroethane (ppb)	1,2-Dibromoethane (EDB) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)	
03/17/10	833.39	47.42	NS	10900	NS	NS	930	1070	370	12800	600-900	4780	
06/22/10	833.49	47.32	NS	11400	NS	NS	970	1140	330	12700	149-168	4440	
06/13/11	833.86	46.95	NS	NOT SAMPLED									
10/20/11	833.59	47.22	5.6	9700	1440	1270	960	650	287	11100	833	4820	
12/12/11	833.42	47.39	NS	NOT SAMPLED									
01/18/12	FREE PRODUCT			NS	9500	1910	1390	1190	700	312	11500	1038	5380
04/18/12	833.14	47.67	NS	7500	1150	1270	1310	620	490	11800	1540	6450	
07/18/12	832.33	48.48	NS	8900	920	1140	1050	600	370	11400	967	5160	
04/07/14	831.35	49.46	NS	7800	1360	1170	1270	198	530	11700	1136	5950	
10/07/15	830.31	50.50	NS	6900	1000	780	960	275	340	5000	893	3920	
02/08/16	833.47	47.34	NS	4700	890	910	730	360	350	5900	1021	4550	
05/09/16	833.61	47.20	NS	4900	930	910	640	297	430	5500	1286	5010	
08/15/16	833.60	47.21	NS	5600	860	980	650	360	390	4900	1178	4570	
11/10/16	833.83	46.98	NS	4600	560	840	480	176	360	3500	1150	3580	
03/13/17	833.52	47.29	NS	5600	770	720	450	120	247	3300	799	3160	
06/13/17	834.10	46.71	NS	5200	680	700	640	<41	320	4000	992	3920	
ENFORCEMENT STANDARD = ES - Bold			5	5	5	0.55	700	60	100	800	480	2000	
PREVENTIVE ACTION LIMIT = PAL - Italics			0.5	0.5	0.5	0.005	140	12	10	160	96	400	

(ppb) = parts per billion (ppm) = parts per million
ns = not sampled nm = not measured
Note: Elevations are presented in feet mean sea level (msl).

Well MW-3

PVC Elevation =

880.46

(feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Lead (ppb)	Benzene (ppb)	1,2-Dichloroethane (ppb)	1,2-Dibromoethane (EDB) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
03/17/10	833.38	47.08	NS	560	NS	NS	<43.5	<25	<85	<25.5	<130	<106.5
06/22/10	833.55	46.91	NS	620	NS	NS	30.8	<4.9	<12	14.6	68	59.5
06/13/11	833.97	46.49	NS	NOT SAMPLED								
10/20/11	834.05	46.41	<0.7	99	<5	<6.3	10.2	<8	<21	<5.3	<15.4	<19
12/12/11	833.92	46.54	NS	NOT SAMPLED								
01/18/12	833.94	46.52	NS	83	<5	<6.3	7.8	<8	<21	<5.3	<15.4	<19
04/18/12	833.40	47.06	NS	39	<0.5	<0.63	4.5	<0.8	<2.1	1.39	<1.54	1.18-1.98
07/18/12	832.78	47.68	NS	12	<0.5	<0.63	2.02	<0.8	<2.1	1.07	<1.54	<1.9
04/07/14	832.05	48.41	NS	0.5	<0.41	<0.44	<0.55	<0.23	<1.7	<0.69	<3.6	<1.32
10/07/15	831.76	48.70	NS	<0.44	<0.48	<0.63	<0.71	<1.1	<1.6	<0.44	<3.1	<3.1
02/08/16	833.01	47.45	NS	<0.44	<0.48	<0.63	<0.71	<1.1	<1.6	<0.44	<3.1	<3.1
05/09/16	832.87	47.59	NS	<0.44	<0.48	<0.63	<0.71	<1.1	<1.6	<0.44	<3.1	<3.1
08/15/16	832.57	47.89	NS	<0.44	<0.48	<0.63	<0.71	<1.1	<1.6	<0.44	<3.1	<3.1
11/10/16	833.56	46.90	NS	<0.44	<0.48	<0.63	<0.71	<1.1	<1.6	<0.44	<3.1	<3.1
03/13/17	833.48	46.98	NS	<0.17	<0.45	<0.34	<0.2	<0.82	<2.17	<0.67	<2.05	<1.95
06/13/17	834.06	46.40	NS	<0.17	<0.45	<0.34	<0.2	<0.82	<2.17	<0.67	<2.05	<1.95
ENFORCEMENT STANDARD = ES - Bold			5	5	5	0.55	700	60	100	800	480	2000
PREVENTIVE ACTION LIMIT = PAL - Italics			0.5	0.5	0.5	0.005	140	12	10	160	96	400

(ppb) = parts per billion (ppm) = parts per million
ns = not sampled nm = not measured
Note: Elevations are presented in feet mean sea level (msl).

Well MW-6 (Smith Oil)

PVC Elevation =

878.94

(feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Lead (ppb)	Benzene (ppb)	1,2-Dichloroethane (ppb)	1,2-Dibromoethane (EDB) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
03/17/10	833.66	45.28	NOT SAMPLED									
06/22/10	833.87	45.07	NS	<0.38	NS	NS	<0.55	<0.25	<2.4	<0.72	<1.20	<1.62
06/13/11	835.25	43.69	NS	<0.5	NS	NS	<0.78	<0.8	<2.1	<0.53	<1.54	<1.9
10/20/2011	834.45	44.49	NOT SAMPLED									
01/18/12	834.36	44.58	NOT SAMPLED									
04/18/12	833.79	45.15	NOT SAMPLED									
07/18/12	833.16	45.78	NOT SAMPLED									
04/07/14	COULD NOT ACCESS - BAILER FROZEN											
10/07/15	834.38	44.56	NOT SAMPLED									
02/08/16	832.26	46.68	NOT SAMPLED									
05/09/16	832.77	46.17	NOT SAMPLED									
08/15/16	832.40	46.54	NOT SAMPLED									
11/10/16	833.44	45.50	NOT SAMPLED									
03/13/17	833.84	45.10	NOT SAMPLED									
06/13/17	834.42	44.52	NOT SAMPLED									
ENFORCEMENT STANDARD = ES - Bold			5	5	5	0.55	700	60	100	800	480	2000
PREVENTIVE ACTION LIMIT = PAL - Italics			0.5	0.5	0.5	0.005	140	12	10	160	96	400

(ppb) = parts per billion (ppm) = parts per million
ns = not sampled nm = not measured
Note: Elevations are presented in feet mean sea level (msl).

A.1 Groundwater Analytical Table
 Dick's Car Care BRRS# 03-57-258614

Well MW-7 (Smith Oil)
 PVC Elevation =

877.60 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Lead (ppb)	Benzene (ppb)	1,2-Dichloroethane (ppb)	1,2-Dibromoethane (EDB) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
03/17/10	833.52	44.08	NS	<0.4	NS	NS	<0.65	<0.49	<1.2	<0.86	<1.49	<2.15
06/22/10	833.59	44.01	NS	<0.38	NS	NS	<0.55	<0.25	<2.4	<0.72	<1.20	<1.62
06/13/11	835.03	42.57	NS	<0.5	NS	NS	<0.78	<0.8	<2.1	<0.53	<1.54	<1.9
10/20/2011	834.17	43.43	NOT SAMPLED									
01/18/12	834.08	43.52	NOT SAMPLED									
04/18/12	833.50	44.10	NOT SAMPLED									
07/18/12	832.89	44.71	NOT SAMPLED									
04/07/14			COULD NOT ACCESS - BAILER FROZEN									
10/07/15	831.81	45.79	NOT SAMPLED									
02/08/16	832.06	45.54	NOT SAMPLED									
05/09/16	832.50	45.10	NOT SAMPLED									
08/15/16	832.14	45.46	NOT SAMPLED									
11/10/16	833.18	44.42	NOT SAMPLED									
03/13/17	833.55	44.05	NOT SAMPLED									
06/13/17	834.14	43.46	NOT SAMPLED									
ENFORCEMENT STANDARD = ES - Bold			5	5	5	0.55	700	60	100	800	480	2000
PREVENTIVE ACTION LIMIT = PAL - Italics			0.5	0.5	0.5	0.005	140	12	10	160	96	400

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured
 Note: Elevations are presented in feet mean sea level (msl).

Well MW-8 (Smith Oil)
 PVC Elevation =

877.52 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Lead (ppb)	Benzene (ppb)	1,2-Dichloroethane (ppb)	1,2-Dibromoethane (EDB) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
03/17/10	833.60	43.92	NS	<0.41	NS	NS	<0.87	6.6	<1.7	<0.51	<2.6	<2.13
06/22/10	833.74	43.78	NS	<0.38	NS	NS	<0.55	<0.25	<2.4	<0.72	<1.20	<1.62
06/13/11	835.04	42.48	NS	<0.5	NS	NS	<0.78	4.5	<2.1	<0.53	<1.54	<1.9
10/20/2011	834.20	43.32	NOT SAMPLED									
01/18/12	834.16	43.36	NOT SAMPLED									
04/18/12	833.57	43.95	NOT SAMPLED									
07/18/12	832.94	44.58	NOT SAMPLED									
04/07/14	832.19	45.33	NOT SAMPLED									
10/07/15	831.84	45.68	NOT SAMPLED									
02/08/16	832.02	45.50	NOT SAMPLED									
05/09/16	832.50	45.02	NOT SAMPLED									
08/15/16	832.12	45.40	NOT SAMPLED									
11/10/16	833.27	44.25	NOT SAMPLED									
03/13/17	833.59	43.93	NOT SAMPLED									
06/13/17	834.17	43.35	NOT SAMPLED									
ENFORCEMENT STANDARD = ES - Bold			15	5	5	0.55	700	60	100	800	480	2000
PREVENTIVE ACTION LIMIT = PAL - Italics			1.5	0.5	0.5	0.005	140	12	10	160	96	400

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured
 Note: Elevations are presented in feet mean sea level (msl).

Well PZ-1
 PVC Elevation =

880.88 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Lead (ppb)	Benzene (ppb)	1,2-Dichloroethane (ppb)	1,2-Dibromoethane (EDB) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
10/20/2011	833.85	47.03	0.7	730	190	37	34	208	<21	44	10.1-17.5	45-46.8
12/12/11	833.76	47.12	NS	NOT SAMPLED								
01/18/12	833.75	47.13	NS	2860	530	68	173	490	<105	122	55-92	257-297
04/18/12	833.26	47.62	NS	2920	380	48	264	480	<105	86	167	294-334
07/18/12	832.65	48.23	NS	3600	330	61	330	570	44	50	159	229.2
04/07/14	832.06	48.82	NS	1560	630	<22	198	570	<85	<34.5	<180	<66
10/07/15	831.39	49.49	NS	1050	193	<6.3	460	570	26.4	69	57-72	89.7
02/08/16	831.70	49.18	NS	1670	81	<6.3	560	320	30.9	58	79-94	130.1
05/09/16	832.22	48.66	NS	1330	68	<6.3	500	470	21.8	54	62-77	103.6
08/15/16	831.69	49.19	NS	880	41	<6.3	390	540	21.7	26.4	<31	41-50
11/10/16	832.85	48.03	NS	790	46	<6.3	350	470	19.5	24.1	<31	51-60
03/13/17	833.27	47.61	NS	480	11.2	<3.4	286	216	<21.7	15.3	<20.5	23.8-27.70
06/13/17	833.80	47.08	NS	1250	114	<3.4	260	590	25.9	17.9	26.1-35.20	66.7
ENFORCEMENT STANDARD = ES - Bold			5	5	5	0.55	700	60	100	800	480	2000
PREVENTIVE ACTION LIMIT = PAL - Italics			0.5	0.5	0.5	0.005	140	12	10	160	96	400

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured
 Note: Elevations are presented in feet mean sea level (msl).

A.1 Groundwater Analytical Table
 Dick's Car Care BRRTS# 03-57-258614

Well PZ-5 (Smith Oil)
 PVC Elevation =

878.60 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Lead (ppb)	Benzene (ppb)	1,2-Dichloroethane (ppb)	1,2-Dibromoethane (EDB) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethyl-benzenes (ppb)	Xylene (Total) (ppb)
03/17/10	833.49	45.11	NS	5.6	NS	NS	<0.87	170	<1.7	<0.51	1.76-3.26	9.1-9.63
06/22/10	833.57	45.03	NS	3.5	NS	NS	<0.55	165	<2.4	<0.72	0.86-1.41	6.3-6.82
06/13/11	835.05	43.55	NS	<0.5	NS	NS	<0.78	2.53	<2.1	<0.53	<1.54	<1.9
10/20/2011	834.12	44.48	NOT SAMPLED									
01/18/12	834.05	44.55	NOT SAMPLED									
04/18/12	833.48	45.12	NOT SAMPLED									
07/18/12	833.34	45.26	NOT SAMPLED									
04/07/14	832.13	46.47	NOT SAMPLED									
10/07/15	831.73	46.87	NOT SAMPLED									
02/08/16	831.99	46.61	NOT SAMPLED									
05/09/16	832.46	46.14	NOT SAMPLED									
08/15/16	832.03	46.57	NOT SAMPLED									
11/10/16	833.20	45.40	NOT SAMPLED									
03/13/17	833.53	45.07	NOT SAMPLED									
06/13/17	834.09	44.51	NOT SAMPLED									
ENFORCEMENT STANDARD = ES - Bold			5	5	5	0.55	700	60	100	800	480	2000
PREVENTIVE ACTION LIMIT = PAL - <i>Italics</i>			0.5	0.5	0.5	0.005	140	12	10	160	96	400

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured
 Note: Elevations are presented in feet mean sea level (msl).

Well PZ-8 (Smith Oil)
 PVC Elevation =

877.62 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Lead (ppb)	Benzene (ppb)	1,2-Dichloroethane (ppb)	1,2-Dibromoethane (EDB) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethyl-benzenes (ppb)	Xylene (Total) (ppb)
03/17/10	834.69	42.93	NS	5.6	NS	NS	<0.87	170	<1.7	<0.51	1.76-3.26	9.1-9.63
06/22/10	833.58	44.04	NS	3.5	NS	NS	<0.55	165	<2.4	<0.72	0.86-1.41	6.3-6.82
06/13/11	834.97	42.65	NS	<0.5	NS	NS	<0.78	2.53	<2.1	<0.53	<1.54	<1.9
10/20/2011	834.22	43.40	NOT SAMPLED									
01/18/12	834.07	43.55	NOT SAMPLED									
04/18/12	833.65	43.97	NOT SAMPLED									
07/18/12	833.00	44.62	NOT SAMPLED									
04/07/14	831.78	45.84	NOT SAMPLED									
10/07/15	831.83	45.79	NOT SAMPLED									
02/08/16	832.33	45.29	NOT SAMPLED									
05/09/16	832.43	45.19	NOT SAMPLED									
08/15/16	832.27	45.35	NOT SAMPLED									
11/10/16	833.18	44.44	NOT SAMPLED									
03/13/17	834.16	43.46	NOT SAMPLED									
06/13/17	834.22	43.40	NOT SAMPLED									
ENFORCEMENT STANDARD = ES - Bold			5	5	5	0.55	700	60	100	800	480	2000
PREVENTIVE ACTION LIMIT = PAL - <i>Italics</i>			0.5	0.5	0.5	0.005	140	12	10	160	96	400

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured
 Note: Elevations are presented in feet mean sea level (msl).

A.1 Groundwater Analytical Table
 Dick's Car Care BRRTS# 03-57-258614

Samples collected: 3/17/2010 3/17/2010 10/20/2011

VOC's Well Name	MW-2	MW-3	PZ-1	ENFORCE MENT STANDARD = ES - Bold		PREVENTIVE ACTION LIMIT = PAL - Italics	
Lead/ppm	< 0.7	3.5	0.7 "J"	15		<i>1.5</i>	
Benzene/ppb	10900	560	730	5		<i>0.5</i>	
Bromobenzene/ppb	< 86	< 21.5	< 7.4	==		==	
Bromodichloromethane/ppb	< 82	< 20.5	< 6.8	==		==	
Bromoform/ppb	< 92	< 23	< 4.3	==		==	
tert-Butylbenzene/ppb	< 92	< 23	< 7.1	==		==	
sec-Butylbenzene/ppb	< 86	< 21.5	< 10	==		==	
n-Butylbenzene/ppb	< 300	< 75	< 9	==		==	
Carbon Tetrachloride/ppb	< 86	< 21.5	< 4.7	==		==	
Chlorobenzene/ppb	< 78	< 19.5	< 5.1	==		==	
Chloroethane/ppb	< 300	< 75	< 14	==		==	
Chloroform/ppb	< 96	< 24	< 4.9	==		==	
Chloromethane/ppb	< 100	< 25	< 19	==		==	
2-Chlorotoluene/ppb	< 74	< 18.5	< 7	==		==	
4-Chlorotoluene/ppb	< 126	< 31.5	< 4.4	==		==	
1,2-Dibromo-3-chloropropane/ppb	< 400	< 100	< 28	==		==	
Dibromochloromethane/ppb	< 152	< 38	< 5.5	==		==	
1,4-Dichlorobenzene/ppb	< 154	< 38.5	< 9.8	==		==	
1,3-Dichlorobenzene/ppb	< 68	< 17	< 8.7	==		==	
1,2-Dichlorobenzene/ppb	< 132	< 33	< 7.6	==		==	
Dichlorodifluoromethane/ppb	< 90	< 22.5	< 18	==		==	
1,2-Dichloroethane/ppb	1830	< 21.5	190	5		<i>0.5</i>	
1,1-Dichloroethane/ppb	< 88	< 22	< 9.8	==		==	
1,1-Dichloroethene/ppb	< 94	< 23.5	< 6	==		==	
cis-1,2-Dichloroethene/ppb	< 136	< 34	< 7.4	==		==	
trans-1,2-Dichloroethene/ppb	< 122	< 30.5	< 7.9	==		==	
1,2-Dichloropropane/ppb	< 52	< 13	< 4	==		==	
2,2-Dichloropropane/ppb	< 178	< 44.5	< 19	==		==	
1,3-Dichloropropane/ppb	< 98	< 24.5	< 7.1	==		==	
Di-isopropyl ether/ppb	< 64	< 16	< 6.9	==		==	
EDB (1,2-Dibromoethane)/ppb	1250	< 26	37	0.05		<i>0.005</i>	
Ethylbenzene/ppb	930	< 43.5	34	700		<i>140</i>	
Hexachlorobutadiene/ppb	< 300	< 75	< 22	==		==	
Isopropylbenzene/ppb	< 78	< 19.5	< 9.2	==		==	
p-Isopropyltoluene/ppb	< 114	< 28.5	< 9.2	==		==	
Methylene chloride/ppb	< 300	< 75	< 11	==		==	
Methyl tert-butyl ether (MTBE)/ppb	1070	< 25	208	60		<i>12</i>	
Naphthalene/ppb	370 "J"	< 85	< 21	100		<i>10</i>	
n-Propylbenzene/ppb	< 66	< 16.5	< 5.9	==		==	
1,1,2,2-Tetrachloroethane/ppb	< 110	< 27.5	< 5.3	==		==	
1,1,1,2-Tetrachloroethane/ppb	< 108	< 27	< 10	==		==	
Tetrachloroethene (PCE)/ppb	< 84	< 21	< 4.4	5		<i>0.5</i>	
Toluene/ppb	12800	< 25.5	44	800		<i>160</i>	
1,2,4-Trichlorobenzene/ppb	< 420	< 105	< 15	==		==	
1,2,3-Trichlorobenzene/ppb	< 320	< 80	< 13	==		==	
1,1,1-Trichloroethane/ppb	< 92	< 23	< 8.5	==		==	
1,1,2-Trichloroethane/ppb	< 82	< 20.5	< 4.7	==		==	
Trichloroethene (TCE)/ppb	< 78	< 19.5	< 4.7	5		<i>0.5</i>	
Trichlorofluoromethane/ppb	< 144	< 36	< 17	==		==	
1,2,4-Trimethylbenzene/ppb	600 "J"	< 55	10.1 "J"				
1,3,5-Trimethylbenzene/ppb	< 300	< 75	< 7.4	480		<i>96</i>	
Vinyl Chloride/ppb	< 40	< 10	< 1.8	==		==	
m&p-Xylene/ppb	3200	< 80	45				
o-Xylene/ppb	1580	< 26.5	14.5 "J"	2000		<i>400</i>	

NS = not sampled, NM = Not Measured
 Q = Analyte detected above laboratory method detection limit but below practical quantitation limit.
 = = No Exceedences
 (ppb) = parts per billion
 (ppm) = parts per million
 "J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

A.2. Soil Analytical Results Table
 Dick's Car Care BRRS# 03-57-258614

Sample ID	Depth (feet)	Saturation U/S	Date	PID	Lead (ppm)	DRO (ppm)	GRO (ppm)	Benzene (ppm)	Ethyl Benzene (ppm)	MTBE (ppm)	Naphthalene (ppm)	Toluene (ppm)	1,2,4-Trime-thylbenzene (ppm)	1,3,5-Trime-thylbenzene (ppm)	Xylene (Total) (ppm)	Other VOC's (ppm)	DIRECT CONTACT PVOC		
																	Exceedance Count	Hazard Index	Cumulative Cancer Risk
GP1-S5	9.0	U	06/30/00	NM	NS	<5.3	<5.8	<0.030	<0.030	<0.030	NS	<0.030	<0.030	<0.030	<0.087	NS			
GP1-S9	18.0	U	06/30/00	NM	NS	<5.3	<5.3	<0.026	<0.026	<0.026	NS	<0.026	<0.026	<0.026	<0.079	NS			
GP2-S5	9.0	U	06/30/00	NM	NS	7.7	<5.8	<0.030	0.039	<0.030	NS	0.117	0.191	0.090	0.286	NS			
GP2-S6	12.0	U	06/30/00	360	NS	1510	3240	23.8	73.5	<1.3	NS	178	176	56.2	397*	NS			
GP3-S7	9.0	U	06/30/00	NM	NS	<5.3	<5.9	<0.030	<0.030	<0.030	NS	0.128	<0.030	<0.030	<0.087	NS			
GP3-S10	20.0	U	06/30/00	NM	NS	<5.3	<6.4	<0.032	<0.032	<0.032	NS	<0.032	<0.032	<0.032	<0.096	NS			
GP4-S4	7.0	U	06/30/00	NM	NS	<5.1	<5.1	<0.026	<0.026	<0.026	NS	0.044	<0.026	<0.026	<0.077	NS			
GP4-S6	11.0	U	06/30/00	NM	NS	<5.3	<5.3	<0.027	<0.027	<0.027	NS	<0.027	<0.027	<0.027	<0.080	NS			
SA-1	1-2	U	11/03/08	NM	NS	<10										NS			
SA-2	1-2	U	11/03/08	NM	NS	<10										NS			
B-1-1	2-4	U	02/18/09	10	27.7	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	0.00	
B-1-2	9-11	U	02/18/09	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-1-3	16-18	U	02/18/09	350	NS	NS	1220	6.3	28.1	<1.25	5.5	60	46	17.8	119	NS			
B-2-1	3.5	U	1/6-11/10	0	NS	NS	NS									NS			
B-2-2	8.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-2-3	12.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-2-4	16.0	U	1/6-11/10	200	NS	NS	850	2.01	18.2	<0.250	4.3	38	25.9	11.3	89.2	NS			
B-2-5	20.0	U	1/6-11/10	300	NS	NS	NS									NS			
B-2-6	24.0	U	1/6-11/10	300	NS	NS	530	4.5	9.3	<0.250	4.1	27.7	11.3	5.2	39.9	NS			
B-2-7	28.0	U	1/6-11/10	350	NS	NS	NS									NS			
B-2-8	32.0	U	1/6-11/10	300	<1.5	NS	307	2.85	5.8	<0.230	1.97	17.7	9.2	3.16	27.2	SEE VOC SHEET			
B-2-9	36.0	U	1/6-11/10	100	NS	NS	NS									NS			
B-2-10	40.0	U	1/6-11/10	400	NS	NS	304	0.930	4.2	<0.250	4.1	6.9	10.2	4.4	18.7	NS			
B-2-11	44.0	U	1/6-11/10	300	NS	NS	NS									NS			
B-2-12	48.0	U	1/6-11/10	300	NS	NS	1660	8.6	19.4	<0.250	9.1	48	24.2	10.9	78.8	NS			
B-2-13	52.0	S	1/6-11/10	50	NS	NS	NS									NS			
B-2-14	54-56	S	1/6-11/10	10	NS	NS	<10	1.09	0.360	<0.025	0.251	1.99	0.480	0.178	1.75	NS			
B-3-1	3.5	U	1/6-11/10	0	<1.5	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-3-2	8.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-3-3	12.0	U	1/6-11/10	0	NS	NS	<10	<0.025	0.028	<0.025	<0.025	0.110	<0.025	<0.025	0.123	NS			
B-3-4	16.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-3-5	20.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-3-6	24.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-3-7	28.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-3-8	32.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-3-9	36.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-3-10	40.0	U	1/6-11/10	20	NS	NS	NS									NS			
B-3-11	44.0	U	1/6-11/10	20	NS	NS	<10	0.028	<0.025	<0.025	<0.025	0.00294	<0.025	<0.025	<0.075	NS			
B-3-12	48.0	S	1/6-11/10	10	NS	NS	NS									NS			
B-3-13	52.0	S	1/6-11/10	0	NS	NS	<10	0.091	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-4-1	3.5	U	1/6-11/10	0	<1.5	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-4-2	8.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-4-3	12.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-4-4	16.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-4-5	20.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-4-6	24.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-4-7	28.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	0.074	0.053	<0.075	NS			
B-4-8	32.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-4-9	36.0	U	1/6-11/10	0	NS	NS	<10	0.129	<0.025	<0.025	<0.025	0.0255	0.072	0.044	0.059-0.084	NS			
B-4-10	40.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-4-11	44.0	U	1/6-11/10	20	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	0.088	0.039	<0.025	0.071-0.096	NS			
B-4-12	48.0	S	1/6-11/10	5	NS	NS	<10	0.228	0.051	<0.025	<0.025	0.067	0.096	0.042	0.167	NS			
B-5-1	3.5	U	1/6-11/10	0	73.1	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-5-2	8.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-5-3	12.0	U	1/6-11/10	140	NS	NS	2630	17.7	55	<0.250	30.1	165	137	51	351*	NS			
B-5-4	16.0	U	1/6-11/10	200	NS	NS	NS									NS			
B-5-5	20.0	U	1/6-11/10	250	NS	NS	1860	24.1	46	<0.250	21.5	132	86	33	217	NS			
B-5-6	24.0	U	1/6-11/10	200	NS	NS	NS									NS			
B-5-7	28.0	U	1/6-11/10	200	NS	NS	1710	17.4	38	<0.250	14.2	105	70	27.8	181	NS			
B-6-1	3.5	U	1/6-11/10	0	<1.5	NS	<10	<0.025	<0.025	<0.025	<0.025	0.0288	<0.025	<0.025	0.046-0.096	NS			
B-6-2	8.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-6-3	12.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	0.046	0.037	<0.025	0.089	NS			
B-6-4	16.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-6-5	20.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-6-6	24.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-6-7	28.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-6-8	32.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-6-9	36.0	U	1/6-11/10	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-6-10	40.0	U	1/6-11/10	10	NS	NS	NS									NS			
B-6-11	44.0	U	1/6-11/10	10	NS	NS	<10	0.043	0.037	<0.025	<0.025	<0.025	0.060	0.038	0.050-0.075	NS			
B-6-12	48.0	S	1/6-11/10	0	NS	NS	<10	0.103	0.053	<0.025	<0.025	0.026	0.077	0.037	0.057-0.082	NS			
B-7-1	3.5	U	1/6-11/10	0	<1.5	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-7-2	8.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-7-3	12.0	U	1/6-11/10	0	NS	NS	NS									NS			
B-7-4	15.5	U	1/6-11/10	30	NS	NS	<10	<0.025	0.045	<0.025	0.046	0.035	0.127	0.067	0.248	NS			
Groundwater RCL						27	-	-	0.00512	1.57	0.027	0.6582	1.11	1.38	3.96	-			
Non-Industrial Direct Contact RCL						400 </													

A.2. Soil Analytical Results Table
 Dick's Car Care BRRTS# 03-57-258614

Sampling Conducted on January 6 -11, 2010

VOC's		Bold = Groundwater RCL	<u>Underline &</u> Bold = Direct <u>Contact RCL</u>	Asteric * & Bold =Soil Saturation (C-sat) RCL
Sample ID#	B-2-8			
Sample Depth/ft.	32			
Solids Percent				
Lead/ppm	<1.5	27	400	==
Gasoline Range Organics/ppm	307	==	==	==
Benzene/ppm	2.85	0.00512	1.49	1820
Bromobenzene/ppm	< 0.340	==	354	==
Bromodichloromethane/ppm	< 0.160	0.000326	0.39	==
Bromoform/ppm	< 0.230	0.00233	61.6	==
tert-Butylbenzene/ppm	< 0.230	==	183	183
sec-Butylbenzene/ppm	0.276 "J"	==	145	145
n-Butylbenzene/ppm	0.900 "J"	==	108	108
Carbon Tetrachloride/ppm	< 0.210	0.00388	0.85	==
Chlorobenzene/ppm	< 0.160	==	392	==
Chloroethane/ppm	< 0.230	0.227	==	==
Chloroform/ppm	< 0.500	0.0033	0.42	==
Chloromethane/ppm	< 0.430	0.0155	171	==
2-Chlorotoluene/ppm	< 0.310	==	==	==
4-Chlorotoluene/ppm	< 0.240	==	==	==
1,2-Dibromo-3-chloropropane/ppm	< 0.370	0.000173	0.01	==
Dibromochloromethane/ppm	< 0.210	0.032	0.93	==
1,4-Dichlorobenzene/ppm	< 0.420	0.144	3.48	==
1,3-Dichlorobenzene/ppm	< 0.410	1.15	297	297
1,2-Dichlorobenzene/ppm	< 0.320	1.17	376	376
Dichlorodifluoromethane/ppm	< 0.330	3.08	135	==
1,2-Dichloroethane/ppm	< 0.240	0.00284	0.61	540
1,1-Dichloroethane/ppm	< 0.220	0.484	4.72	==
1,1-Dichloroethene/ppm	< 0.270	0.00502	342	==
cis-1,2-Dichloroethene/ppm	< 0.240	0.0412	156	==
trans-1,2-Dichloroethene/ppm	< 0.290	0.0588	211	==
1,2-Dichloropropane/ppm	< 0.190	0.00332	1.33	==
2,2-Dichloropropane/ppm	< 1.150	==	527	527
1,3-Dichloropropane/ppm	< 0.210	==	1490	1490
Di-isopropyl ether/ppm	< 0.150	==	2260	2260
EDB (1,2-Dibromoethane)/ppm	< 0.210	0.0000282	0.05	==
Ethylbenzene/ppm	5.8	1.57	7.47	480
Hexachlorobutadiene/ppm	< 0.500	==	6.23	==
Isopropylbenzene/ppm	0.810 "J"	==	==	==
p-Isopropyltoluene/ppm	0.500 "J"	==	162	162
Methylene chloride/ppm	< 0.440	0.00256	60.7	==
Methyl tert-butyl ether (MTBE)/ppm	< 0.230	0.027	59.4	8870
Naphthalene/ppm	1.970 "J"	0.659	5.15	==
n-Propylbenzene/ppm	1.51	==	==	==
1,1,2,2-Tetrachloroethane/ppm	< 0.250	0.000156	0.75	==
1,1,1,2-Tetrachloroethane/ppm	< 0.270	0.0533	2.59	==
Tetrachloroethene (PCE)/ppm	< 0.180	0.00454	30.7	==
Toluene/ppm	17.7	1.11	818	818
1,2,4-Trichlorobenzene/ppm	< 0.530	0.408	22.1	==
1,2,3-Trichlorobenzene/ppm	< 0.870	==	48.9	==
1,1,1-Trichloroethane/ppm	< 0.270	0.14	==	==
1,1,2-Trichloroethane/ppm	< 0.300	0.00324	1.48	==
Trichloroethene (TCE)/ppm	< 0.200	0.00358	0.64	==
Trichlorofluoromethane/ppm	< 0.160	==	1120	==
1,2,4-Trimethylbenzene/ppm	9.2	1.38	89.8	219
1,3,5-Trimethylbenzene/ppm	3.16	==	182	182
Vinyl Chloride/ppm	< 0.170	0.000138	0.07	==
m&p-Xylene/ppm	19.6	3.94	258	258
o-Xylene/ppm	7.6	==	==	==

NS = not sampled, NM = Not Measured
 (ppm) = parts per million
 DRO = Diesel Range Organics
 GRO = Gasoline Range Organics
 == No Exceedences

A.3. Residual Soil Table
Dick's Car Care BRRTS# 03-57-258614

Sample ID	Depth (feet)	Saturation U/S	Date	PID	Lead (ppm)	DRO (ppm)	GRO (ppm)	Benzene (ppm)	Ethyl Benzene (ppm)	MTBE (ppm)	Naphthalene (ppm)	Toluene (ppm)	1,2,4-Trime-thylbenzene (ppm)	1,3,5-Trime-thylbenzene (ppm)	Xylene (Total) (ppm)	Other VOC's (ppm)	DIRECT CONTACT PVOC		
																	Exceedance Count	Hazard Index	Cumulative Cancer Risk
GP2-S6	12.0	U	06/30/00	360	NS	1510	3240	23.8	73.5	<1.3	NS	178	176	56.2	397*	NS			
B-1-1	2-4	U	02/18/09	10	27.7	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	0.00	
B-1-3	16-18	U	02/18/09	350	NS	NS	1220	6.3	28.1	<1.25	5.5	60	46	17.8	119	NS			
B-2-4	16.0	U	1/6-11/10	200	NS	NS	850	2.01	18.2	<0.250	4.3	38	25.9	11.3	89.2	NS			
B-2-6	24.0	U	1/6-11/10	300	NS	NS	530	4.5	9.3	<0.250	4.1	27.7	11.3	5.2	39.9	NS			
B-2-8	32.0	U	1/6-11/10	300	<1.5	NS	307	2.85	5.8	<0.230	1.97	17.7	9.2	3.16	27.2	SEE VOC SHEET			
B-2-10	40.0	U	1/6-11/10	400	NS	NS	304	0.930	4.2	<0.250	4.1	6.9	10.2	4.4	18.7	NS			
B-2-12	48.0	U	1/6-11/10	300	NS	NS	1660	8.6	19.4	<0.250	9.1	48	24.2	10.9	78.8	NS			
B-2-14	54-56	S	1/6-11/10	10	NS	NS	<10	1.09	0.360	<0.025	0.251	1.99	0.480	0.178	1.75	NS			
B-3-11	44.0	U	1/6-11/10	20	NS	NS	<10	0.028	<0.025	<0.025	<0.025	0.00294	<0.025	<0.025	<0.075	NS			
B-3-13	52.0	S	1/6-11/10	0	NS	NS	<10	0.091	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
B-4-9	36.0	U	1/6-11/10	0	NS	NS	<10	0.129	<0.025	<0.025	<0.025	0.0255	0.072	0.044	0.059-0.084	NS			
B-4-12	48.0	S	1/6-11/10	5	NS	NS	<10	0.228	0.051	<0.025	<0.025	0.067	0.096	0.042	0.167	NS			
B-5-1	3.5	U	1/6-11/10	0	73.1	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	0.00	
B-5-3	12.0	U	1/6-11/10	140	NS	NS	2630	17.7	55	<0.250	30.1	165	137	51	351*	NS			
B-5-5	20.0	U	1/6-11/10	250	NS	NS	1860	24.1	46	<0.250	21.5	132	86	33	217	NS			
B-5-7	28.0	U	1/6-11/10	200	NS	NS	1710	17.4	38	<0.250	14.2	105	70	27.8	181	NS			
B-6-11	44.0	U	1/6-11/10	10	NS	NS	<10	0.043	0.037	<0.025	<0.025	<0.025	0.060	0.038	0.050-0.075	NS			
B-6-12	48.0	S	1/6-11/10	0	NS	NS	<10	0.103	0.053	<0.025	<0.025	0.026	0.077	0.037	0.057-0.082	NS			
Groundwater RCL					27	-	-	0.00512	1.57	0.027	0.6582	1.11	1.38	3.96	-				
Non-Industrial Direct Contact RCL					400	-	-	1.6	8.02	63.8	5.52	818	219	182	258	-		1.00E+00	1.00E-05
Industrial Direct Contact RCL					(800)	-	-	(7.07)	(35.4)	(282)	(24.1)	(818)	(219)	(182)	(258)	-		1.00E+00	1.00E-05
Soil Saturation Concentration (C-sat)*					-	-	-	1820*	480*	8870*	-	818*	219*	182*	258*	-			

Bold = Groundwater RCL Exceedance

Bold & Underline = Non Industrial Direct Contact RCL Exceedance

(Bold & Parentheses) = Industrial Direct Contact RCL Exceedance

Bold & Asteric * = C-sat Exceedance

Italics = Industrial Direct Contact RCL

NS = Not Sampled NM = Not Measured

(ppm) = parts per million ND = No Detects

DRO = Diesel Range Organics

GRO = Gasoline Range Organics

PID = Photoionization Detector

PVOC's = Petroleum Volatile Organic Compounds

VOC's = Volatile Organic Compounds

Note: Non-Industrial RCLs apply to this site.

U=UNSATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)

S=SATURATED (BASED ON ALL TIME LOW WATER TABLE PER WDNR)

A.6 Water Level Elevations
Dick's Car Care BRRTS# 03-57-258614
Baraboo, Wisconsin

	MW-2	MW-3	MW-6 (Smith Oil)	MW-7 (Smith Oil)	MW-8 (Smith Oil)	PZ-1	PZ-5 (Smith Oil)	PZ-8 (Smith Oil)
Ground Surface (feet msl)	NM	NM	NM	NM	NM	NM	NM	NM
PVC top (feet msl)	880.81	880.46	878.94	877.60	877.52	880.88	878.60	877.62
Well Depth (feet)	53.00	54.00	55.00	53.00	52.00	75.00	68.00	71.00
Top of screen (feet msl)	842.81	841.46	NM	NM	NM	815.88	NM	NM
Bottom of screen (feet msl)	827.81	826.46	NM	NM	NM	805.88	NM	NM
Depth to Water From Top of PVC (feet)								
03/17/10	47.42	47.08	45.28	44.08	43.92	NI	45.11	42.93
06/22/10	47.32	46.91	45.07	44.01	43.78	NI	45.03	44.04
06/13/11	46.95	46.49	43.69	42.57	42.48	NI	43.55	42.65
10/20/11	47.22	46.41	44.49	43.43	43.32	47.03	44.48	43.40
12/12/11	47.39	46.54	44.63	43.55	43.43	47.12	44.60	43.54
01/18/12	FP	46.52	44.58	43.52	43.36	47.13	44.55	43.55
04/18/12	47.67	47.06	45.15	44.10	43.95	47.62	45.12	43.97
07/18/12	48.48	47.68	45.78	44.71	44.58	48.23	45.26	44.62
04/07/14	49.46	48.41	CNA	CNA	45.33	48.82	46.47	45.84
10/07/15	50.50	48.70	44.56	45.79	45.68	49.49	46.87	45.79
02/08/16	47.34	47.45	46.68	45.54	45.50	49.18	46.61	45.29
05/09/16	47.20	47.59	46.17	45.10	45.02	48.66	46.14	45.19
08/15/16	47.21	47.89	46.54	45.46	45.40	49.19	46.57	45.35
11/10/16	46.98	46.90	45.50	44.42	44.25	48.03	45.40	44.44
03/13/17	47.29	46.98	45.10	44.05	43.93	47.61	45.07	43.46
06/13/17	46.71	46.40	44.52	43.46	43.35	47.08	44.51	43.40
Groundwater Elevation (feet msl)								
03/17/10	833.39	833.38	833.66	833.52	833.60	NI	834.69	833.49
06/22/10	833.49	833.55	833.87	833.59	833.74	NI	833.58	833.57
06/13/11	833.86	833.97	835.25	835.03	835.04	NI	834.97	835.05
10/20/11	833.59	834.05	834.45	834.17	834.20	833.85	834.12	834.22
12/12/11	833.42	833.92	834.31	834.05	834.09	833.76	834.00	834.08
01/18/12	FP	833.94	834.36	834.08	834.16	833.75	834.05	834.07
04/18/12	833.14	833.40	833.79	833.50	833.57	833.26	833.48	833.65
07/18/12	832.33	832.78	833.16	832.89	832.94	832.65	833.34	833.00
04/07/14	831.35	832.05	CNA	CNA	832.19	832.06	832.13	831.78
10/07/15	830.31	831.76	834.38	831.81	831.84	831.39	831.73	831.83
02/08/16	833.47	833.01	832.26	832.06	832.02	831.70	831.99	832.33
05/09/16	833.61	832.87	832.77	832.50	832.50	832.22	832.46	832.43
08/15/16	833.60	832.57	832.40	832.14	832.12	831.69	832.03	832.27
11/10/16	833.83	833.56	833.44	833.18	833.27	832.85	833.20	833.18
03/13/17	833.52	833.48	833.84	833.55	833.59	833.27	833.53	834.16
06/13/17	834.10	834.06	834.42	834.14	834.17	833.80	834.09	834.22

Note: Elevations are presented in feet mean sea level (msl).

NI = Not Installed

FP = Free Product

CNA = Could Not Access

A.7. Other - Hydraulic Conductivity Calculations

Dick's Car Care BRRTS# 03-57-258614

MW-2

	ft/s	cm/s	m/yr
K	1.18E-06	3.60E-05	11.34
	sq ft/s	sq cm/s	
T	3.49E-05	3.24E-02	

MW-3

	ft/s	cm/s	m/yr
K	2.08E-05	6.34E-04	199.93
	sq ft/s	sq cm/s	
T	5.53E-04	5.14E-01	

PZ-1

	ft/s	cm/s	m/yr
K	3.21E-05	9.78E-04	308.55
	sq ft/s	sq cm/s	
T	9.50E-04	8.82E-01	

Date	Elv. (High)	Elv. (Low)	Distance (ft)	Hyd Grad (I)
6/22/2010	834.25	833.50	170	0.0044118
6/13/2011	835.75	834.00	193	0.0090674
12/12/2011	834.50	833.50	149	0.0067114
1/18/2012	834.25	834.00	78	0.0032051
4/18/2012	833.75	833.25	100	0.0050000
7/18/2012	833.00	832.50	78	0.0064103

Average	0.0058010
----------------	-----------

	K (m/yr)	I	n	Flow Velocity (m/yr)
MW-2	11.34	0.0058010	0.3	0.21928
MW-3	199.93	0.0058010	0.3	3.86598
PZ-1	308.55	0.0058010	0.3	5.96633

A.7. Other - Summary of Free Product Levels & Recovery
Dick's Car Care BRRTS# 03-57-258614

DATE		MW-2	GALS REC./PERIOD	TOT GALS RECOVERED
03/17/10	Inches of FP	0.00	0.00	0.00
	Gals Rec. w/ Absorbent Sock	0.00		
	Gals Rec. w/ Bailer	0		
06/22/10	Inches of FP	0.00	0.00	0.00
	Gals Rec. w/ Absorbent Sock	0.00		
	Gals Rec. w/ Bailer	0		
10/20/11	Inches of FP	2.5	0.11	0.11
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.11		
01/18/12	Inches of FP	5.5	0.26	0.37
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.26		
04/18/12	Inches of FP	1.5	0.10	0.47
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.10		
07/18/12	Inches of FP	3.5	0.11	0.58
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.11		
04/07/14	Inches of FP	24.0	0.67	1.25
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.67		
10/07/15	Inches of FP	24.0	1.50	2.75
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	1.50		
11/30/15	Inches of FP	0.00	0.00	2.75
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.00		
01/07/16	Inches of FP	0.00	0.00	2.75
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.00		
02/08/16	Inches of FP	0.00	0.00	2.75
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.00		
03/13/17	Inches of FP	0.00	0.00	2.75
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.00		
06/13/17	Inches of FP	0.00	0.00	2.75
	Gals Rec. w/ Absorbent Sock	No Sock		
	Gals Rec. w/ Bailer	0.00		

A.7 Other
Groundwater NA Indicator Results
Dick's Car Care BRRTS# 03-57-258614

Well MW-2

Date	Dissolved Oxygen (ppm)	pH	ORP	Temp (C)	Specific Conductance	Nitrate + Nitrite (ppm)	Total Sulfate (ppm)	Dissolved Iron (ppm)	Manganese (ppb)
3/17/10	NOT SAMPLED					< 0.1	87	210	1312
04/07/14	0.48	6.76	-42	12.5	15	NS	NS	NS	NS
10/07/15	NOT SAMPLED					NS	NS	NS	NS
02/08/16	1.87	6.69	11	8.8	912	NS	NS	NS	NS
05/09/16	1.19	6.74	19	13.9	841	NS	NS	NS	NS
08/15/16	2.87	6.89	-123	15.0	2468	NS	NS	NS	NS
11/10/16	1.48	6.94	44	11.7	818	NS	NS	NS	NS
03/13/17	1.96	6.95	-79	10.2	1627	NS	NS	NS	NS
06/13/17	0.35	6.92	-53	13.4	1694	NS	NS	NS	NS
ENFORCE MENT STANDARD = ES - Bold						10	-	-	300
PREVENTIVE ACTION LIMIT = <i>PAL - Italics</i>						2	-	-	60

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured
 Note: Elevations are presented in feet mean sea level (msl).

Well MW-3

Date	Dissolved Oxygen (ppm)	pH	ORP	Temp (C)	Specific Conductance	Nitrate + Nitrite (ppm)	Total Sulfate (ppm)	Dissolved Iron (ppm)	Manganese (ppb)
3/17/10	NOT SAMPLED					< 0.1	49	90	1200
04/07/14	1.59	6.58	202	12.3	2087	NS	NS	NS	NS
10/07/15	NOT SAMPLED					NS	NS	NS	NS
02/08/16	4.36	6.87	184	8.5	810	NS	NS	NS	NS
05/09/16	1.97	6.78	103	14.4	1227	NS	NS	NS	NS
08/15/16	5.87	6.88	215	16.1	1951	NS	NS	NS	NS
11/10/16	4.70	7.28	272	11.8	851	NS	NS	NS	NS
03/13/17	5.17	7.43	245	8.4	1458	NS	NS	NS	NS
06/13/17	3.67	7.67	211	13.6	1109	NS	NS	NS	NS
ENFORCE MENT STANDARD = ES - Bold						10	-	-	300
PREVENTIVE ACTION LIMIT = <i>PAL - Italics</i>						2	-	-	60

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured
 Note: Elevations are presented in feet mean sea level (msl).

Well MW-6 (Smith Oil)

Date	Dissolved Oxygen (ppm)	pH	ORP	Temp (C)	Specific Conductance	Nitrate + Nitrite (ppm)	Total Sulfate (ppm)	Dissolved Iron (ppm)	Manganese (ppb)
04/07/14	COULD NOT ACCESS - BAILER FROZEN					NS	NS	NS	NS
10/07/15	NOT SAMPLED					NS	NS	NS	NS
02/08/16	NOT SAMPLED					NS	NS	NS	NS
05/09/16	NOT SAMPLED					NS	NS	NS	NS
08/15/16	NOT SAMPLED					NS	NS	NS	NS
11/10/16	NOT SAMPLED					NS	NS	NS	NS
03/13/17	NOT SAMPLED					NS	NS	NS	NS
06/13/17	NOT SAMPLED					NS	NS	NS	NS
ENFORCE MENT STANDARD = ES - Bold						10	-	-	300
PREVENTIVE ACTION LIMIT = <i>PAL - Italics</i>						2	-	-	60

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured
 Note: Elevations are presented in feet mean sea level (msl).

A.7 Other

Groundwater NA Indicator Results

Dick's Car Care BRRTS# 03-57-258614

Well MW-7 (Smith Oil)

Date	Dissolved Oxygen (ppm)	pH	ORP	Temp (C)	Specific Conductance	Nitrate + Nitrite (ppm)	Total Sulfate (ppm)	Dissolved Iron (ppm)	Manganese (ppb)
04/07/14	COULD NOT ACCESS – BAILER FROZEN					NS	NS	NS	NS
10/07/15	NOT SAMPLED					NS	NS	NS	NS
02/08/16	NOT SAMPLED					NS	NS	NS	NS
05/09/16	NOT SAMPLED					NS	NS	NS	NS
08/15/16	NOT SAMPLED					NS	NS	NS	NS
11/10/16	NOT SAMPLED					NS	NS	NS	NS
03/13/17	NOT SAMPLED					NS	NS	NS	NS
06/13/17	NOT SAMPLED					NS	NS	NS	NS
ENFORCE MENT STANDARD = ES – Bold						10	-	-	300
PREVENTIVE ACTION LIMIT = <i>PAL - Italics</i>						2	-	-	60

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Well MW-8 (Smith Oil)

Date	Dissolved Oxygen (ppm)	pH	ORP	Temp (C)	Specific Conductance	Nitrate + Nitrite (ppm)	Total Sulfate (ppm)	Dissolved Iron (ppm)	Manganese (ppb)
04/07/14	NOT SAMPLED					NS	NS	NS	NS
10/07/15	NOT SAMPLED					NS	NS	NS	NS
02/08/16	NOT SAMPLED					NS	NS	NS	NS
05/09/16	NOT SAMPLED					NS	NS	NS	NS
08/15/16	NOT SAMPLED					NS	NS	NS	NS
11/10/16	NOT SAMPLED					NS	NS	NS	NS
03/13/17	NOT SAMPLED					NS	NS	NS	NS
06/13/17	NOT SAMPLED					NS	NS	NS	NS
ENFORCE MENT STANDARD = ES – Bold						10	-	-	300
PREVENTIVE ACTION LIMIT = <i>PAL - Italics</i>						2	-	-	60

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Well PZ-1

Date	Dissolved Oxygen (ppm)	pH	ORP	Temp (C)	Specific Conductance	Nitrate + Nitrite (ppm)	Total Sulfate (ppm)	Dissolved Iron (ppm)	Manganese (ppb)
04/07/14	1.14	7.16	-97	12.8	1601	NS	NS	NS	NS
10/07/15	NOT SAMPLED					NS	NS	NS	NS
02/08/16	2.91	7.06	93	8.6	687	NS	NS	NS	NS
05/09/16	1.57	6.80	46	13.4	857	NS	NS	NS	NS
08/15/16	4.76	6.99	-45	15.2	1845	NS	NS	NS	NS
11/10/16	1.69	6.89	-66	11.6	857	NS	NS	NS	NS
03/13/17	3.19	6.98	13	9.3	1691	NS	NS	NS	NS
06/13/17	1.16	7.03	226	13.9	1749	NS	NS	NS	NS
ENFORCE MENT STANDARD = ES – Bold						10	-	-	300
PREVENTIVE ACTION LIMIT = <i>PAL - Italics</i>						2	-	-	60

(ppb) = parts per billion (ppm) = parts per million
 ns = not sampled nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

A.7 Other

Groundwater NA Indicator Results

Dick's Car Care BRRTS# 03-57-258614

Well PZ-5 (Smith Oil)

Date	Dissolved Oxygen (ppm)	pH	ORP	Temp (C)	Specific Conductance	Nitrate + Nitrite (ppm)	Total Sulfate (ppm)	Dissolved Iron (ppm)	Manganese (ppb)
04/07/14	COULD NOT ACCESS – BAILER FROZEN					NS	NS	NS	NS
10/07/15	NOT SAMPLED					NS	NS	NS	NS
02/08/16	NOT SAMPLED					NS	NS	NS	NS
05/09/16	NOT SAMPLED					NS	NS	NS	NS
08/15/16	NOT SAMPLED					NS	NS	NS	NS
11/10/16	NOT SAMPLED					NS	NS	NS	NS
03/13/17	NOT SAMPLED					NS	NS	NS	NS
06/13/17	NOT SAMPLED					NS	NS	NS	NS
ENFORCE MENT STANDARD = ES - Bold						10	-	-	300
PREVENTIVE ACTION LIMIT = <i>PAL - Italics</i>						2	-	-	60

(ppb) = parts per billion (ppm) = parts per million

ns = not sampled nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Well PZ-8 (Smith Oil)

Date	Dissolved Oxygen (ppm)	pH	ORP	Temp (C)	Specific Conductance	Nitrate + Nitrite (ppm)	Total Sulfate (ppm)	Dissolved Iron (ppm)	Manganese (ppb)
04/07/14	NOT SAMPLED					NS	NS	NS	NS
10/07/15	NOT SAMPLED					NS	NS	NS	NS
02/08/16	NOT SAMPLED					NS	NS	NS	NS
05/09/16	NOT SAMPLED					NS	NS	NS	NS
08/15/16	NOT SAMPLED					NS	NS	NS	NS
11/10/16	NOT SAMPLED					NS	NS	NS	NS
11/10/16	NOT SAMPLED					NS	NS	NS	NS
03/13/17	NOT SAMPLED					NS	NS	NS	NS
06/13/17	NOT SAMPLED					NS	NS	NS	NS
ENFORCE MENT STANDARD = ES - Bold						10	-	-	300
PREVENTIVE ACTION LIMIT = <i>PAL - Italics</i>						2	-	-	60

(ppb) = parts per billion (ppm) = parts per million

ns = not sampled nm = not measured

Note: Elevations are presented in feet mean sea level (msl).

Attachment B/Maps and Figures

B.1 Location Maps

B.1.a Location Map

B.1.b Detailed Site Map

B.1.c RR Site Map

B.2 Soil Figures

B.2.a Soil Contamination

B.2.b Residual Soil Contamination

B.3 Groundwater Figures

B.3.a Geologic Cross-Section Figure(s)

B.3.b Groundwater Isoconcentration

B.3.c Groundwater Flow Direction

B.3.d Monitoring Wells

B.4 Vapor Maps and Other Media

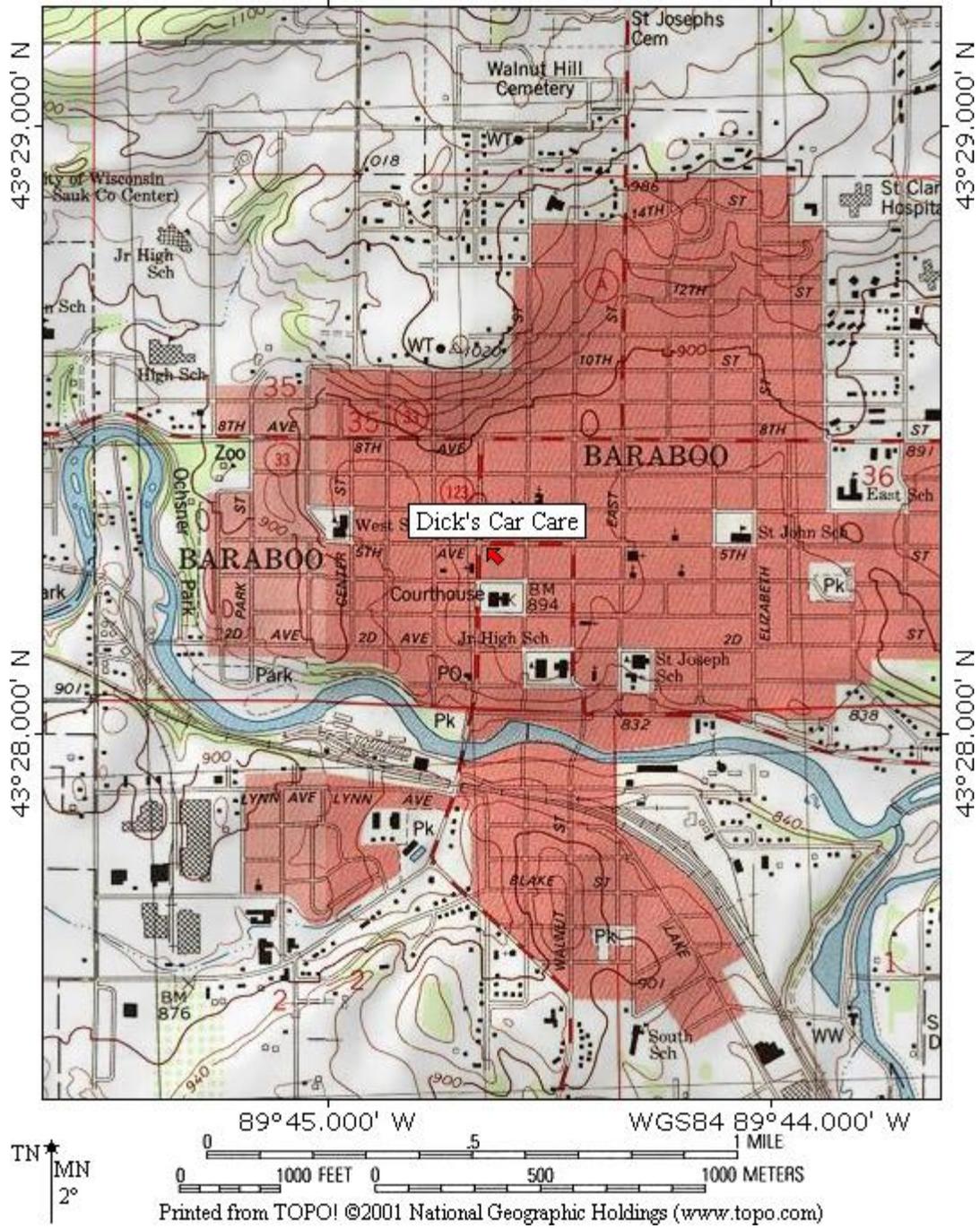
B.4.a Vapor Intrusion Map

B.4.b Other media of concern - No surface waters or sediments were assessed as part of the site investigation.

B.4.c Other – Not applicable.

B.5 Structural Impediment Photos – There were no structural impediments to the completion of the investigation.

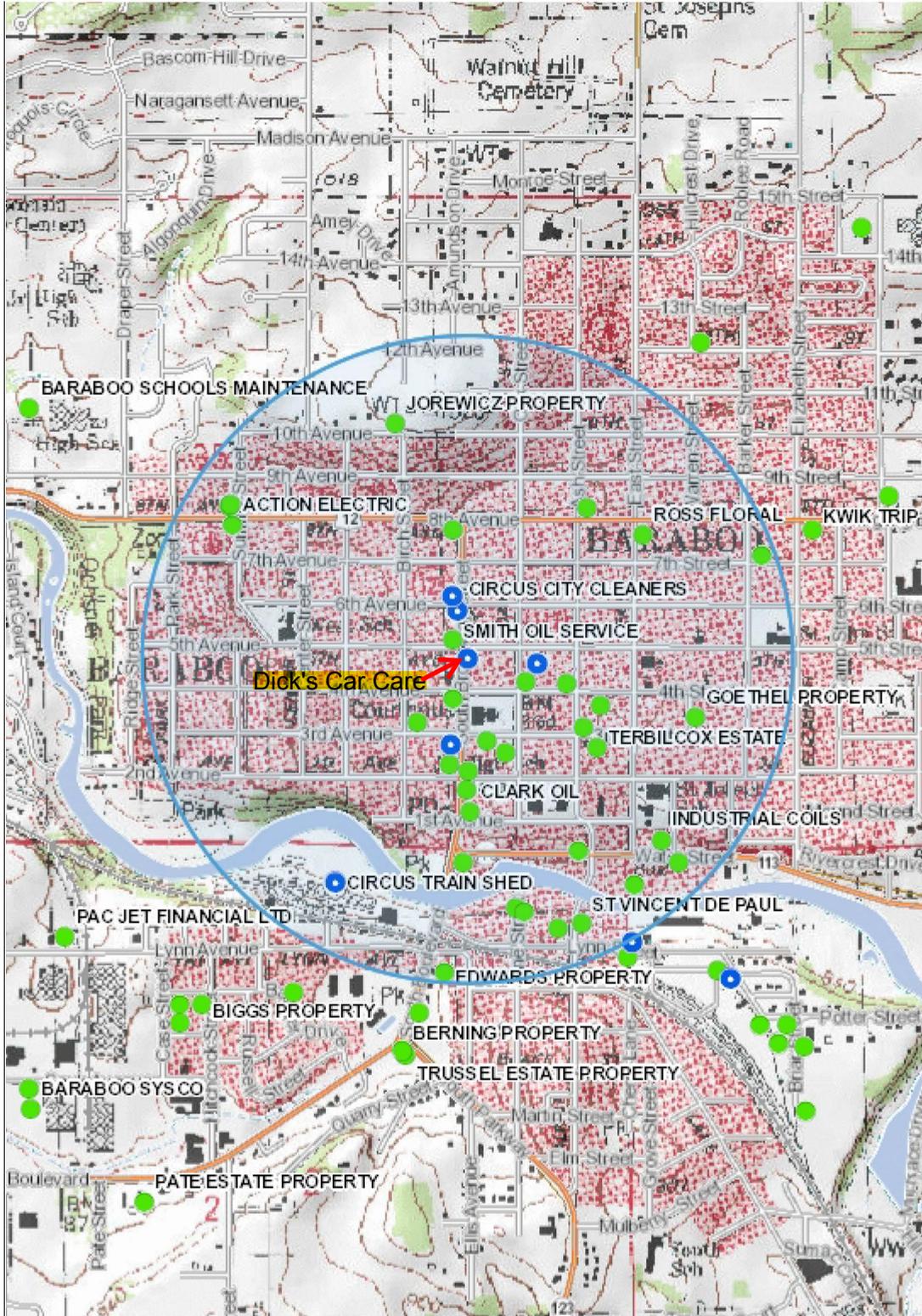
TOPO! map printed on 12/18/08 from "wisconsin.tpo" and "Untitled.tpg"
 89°45.000' W WGS84 89°44.000' W



B.1.a. SITE LOCATION MAP – CONTOUR INTERVAL 20 FEET
DICK'S CAR CARE – BARABOO, WI
SEAMLESS USGS TOPOGRAPHIC MAPS ON CD-ROM



B.1.c. RR Site Map



Legend

- Open Site (ongoing cleanup)
- Closed Site (completed cleanup)
- Municipality
- State Boundaries
- County Boundaries
- Major Roads**
 - Interstate Highway
 - State Highway
 - US Highway
- County and Local Roads**
 - County HWY
 - Local Road
- + Railroads
- Tribal Lands

0.5 0 Distance / 2 0.5 Miles

1: 15,840



NAD_1983_HARN_Wisconsin_TM

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/org/legal/>

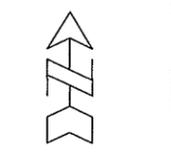
Note: Not all sites are mapped.

Notes

B.2.a. SOIL CONTAMINATION DICK'S CAR CARE

METCO
709 Gillette St., Ste 3
La Crosse, WI 54603
Tel: (608) 781-8879
Fax: (608) 781-8893

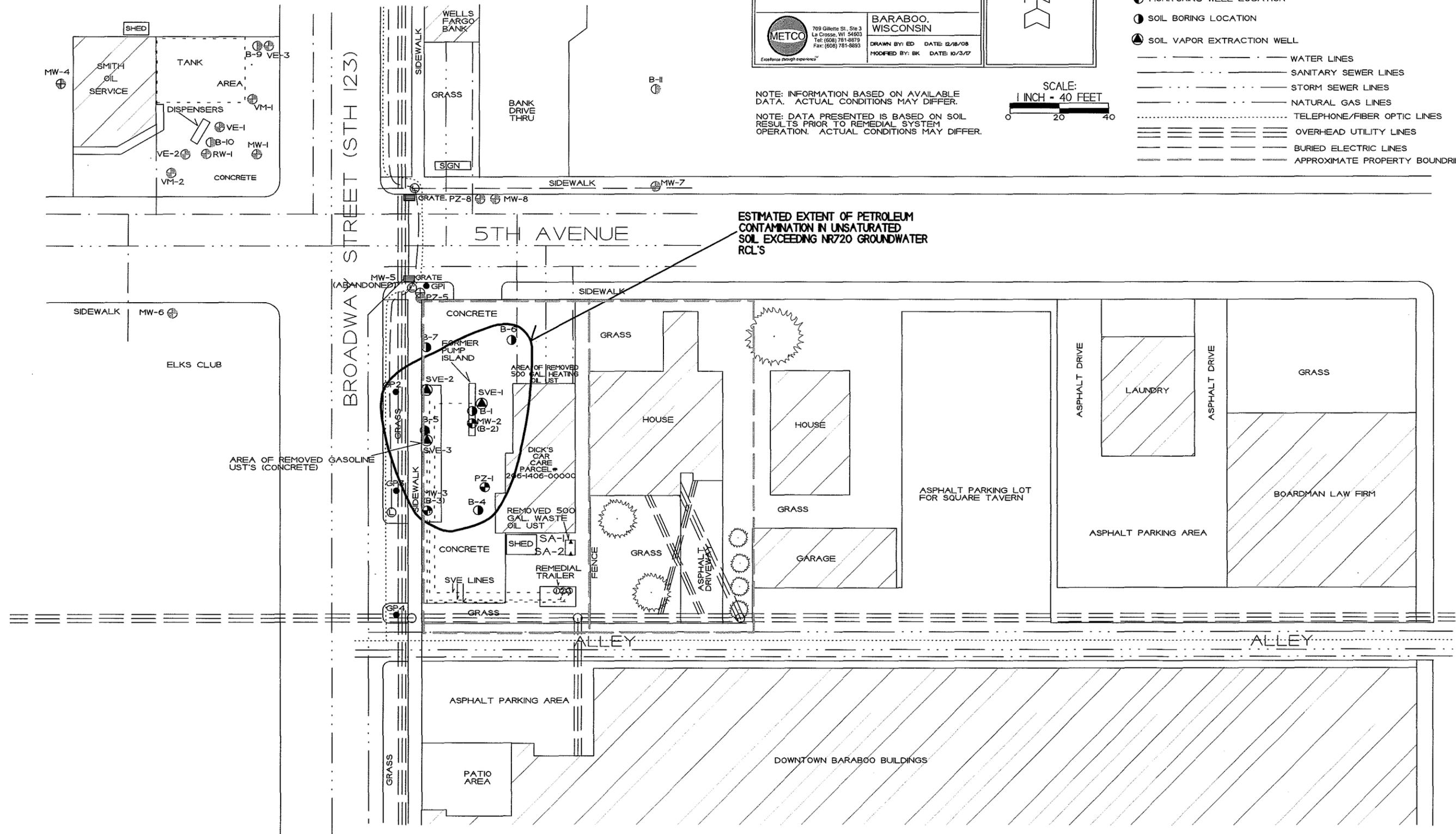
BARABOO, WISCONSIN
DRAWN BY: ED DATE: 12/18/08
MODIFIED BY: BK DATE: 10/3/17



NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.
NOTE: DATA PRESENTED IS BASED ON SOIL RESULTS PRIOR TO REMEDIAL SYSTEM OPERATION. ACTUAL CONDITIONS MAY DIFFER.



- ⊕ MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE)
- ⊙ SOIL BORING LOCATION (SMITH OIL SERVICE)
- GEOPROBE BORING LOCATION (P2ESA)
- ▲ SOIL SAMPLE LOCATION (UST REMOVAL)
- ⊕ MONITORING WELL LOCATION
- ⊙ SOIL BORING LOCATION
- ⊕ SOIL VAPOR EXTRACTION WELL
- WATER LINES
- - - - - SANITARY SEWER LINES
- - - - - STORM SEWER LINES
- - - - - NATURAL GAS LINES
- ⋯ TELEPHONE/FIBER OPTIC LINES
- ==== OVERHEAD UTILITY LINES
- BURIED ELECTRIC LINES
- ⋯ APPROXIMATE PROPERTY BOUNDARIES



B.2.b. RESIDUAL SOIL CONTAMINATION
DICK'S CAR CARE

METCO 709 Gillette St., Ste. 3
 La Crosse, WI 54603
 Tel: (608) 781-8879
 Fax: (608) 781-8883

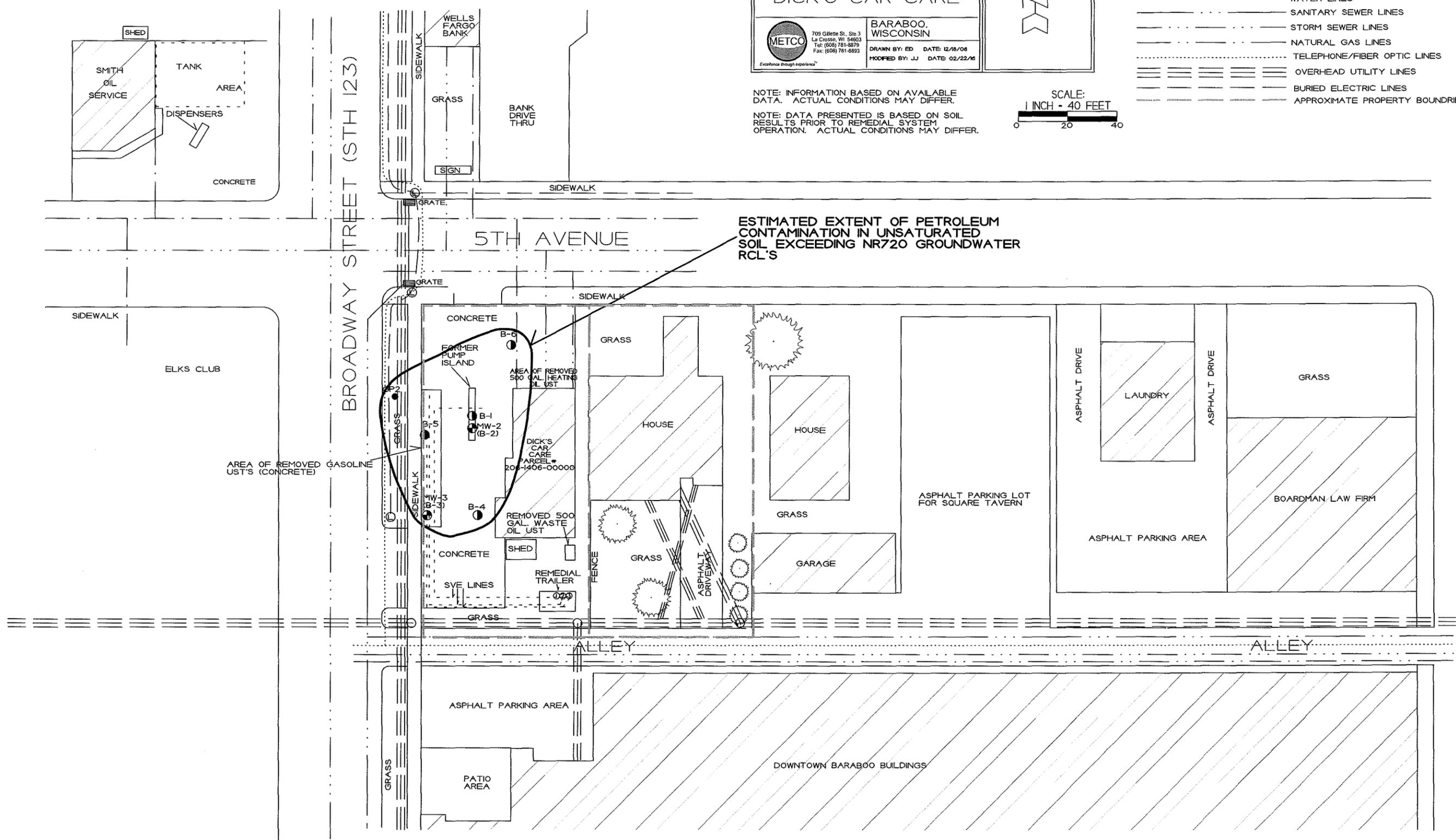
BARABOO, WISCONSIN
 DRAWN BY: ED DATE: 12/18/08
 MODIFIED BY: JJ DATE: 02/22/15



- GEOPROBE BORING LOCATION (P2ESA)
- ⊕ MONITORING WELL LOCATION
- ⊙ SOIL BORING LOCATION
- · — · — · — · — WATER LINES
- · — · — · — · — SANITARY SEWER LINES
- · — · — · — · — STORM SEWER LINES
- · — · — · — · — NATURAL GAS LINES
- · — · — · — · — TELEPHONE/FIBER OPTIC LINES
- ==== OVERHEAD UTILITY LINES
- · — · — · — · — BURIED ELECTRIC LINES
- · — · — · — · — APPROXIMATE PROPERTY BOUNDRIES

NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.

NOTE: DATA PRESENTED IS BASED ON SOIL RESULTS PRIOR TO REMEDIAL SYSTEM OPERATION. ACTUAL CONDITIONS MAY DIFFER.

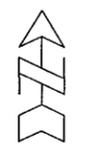


B.3.d. GEOLOGIC CROSS SECTION MAP

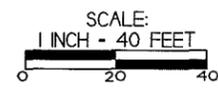
DICK'S CAR CARE



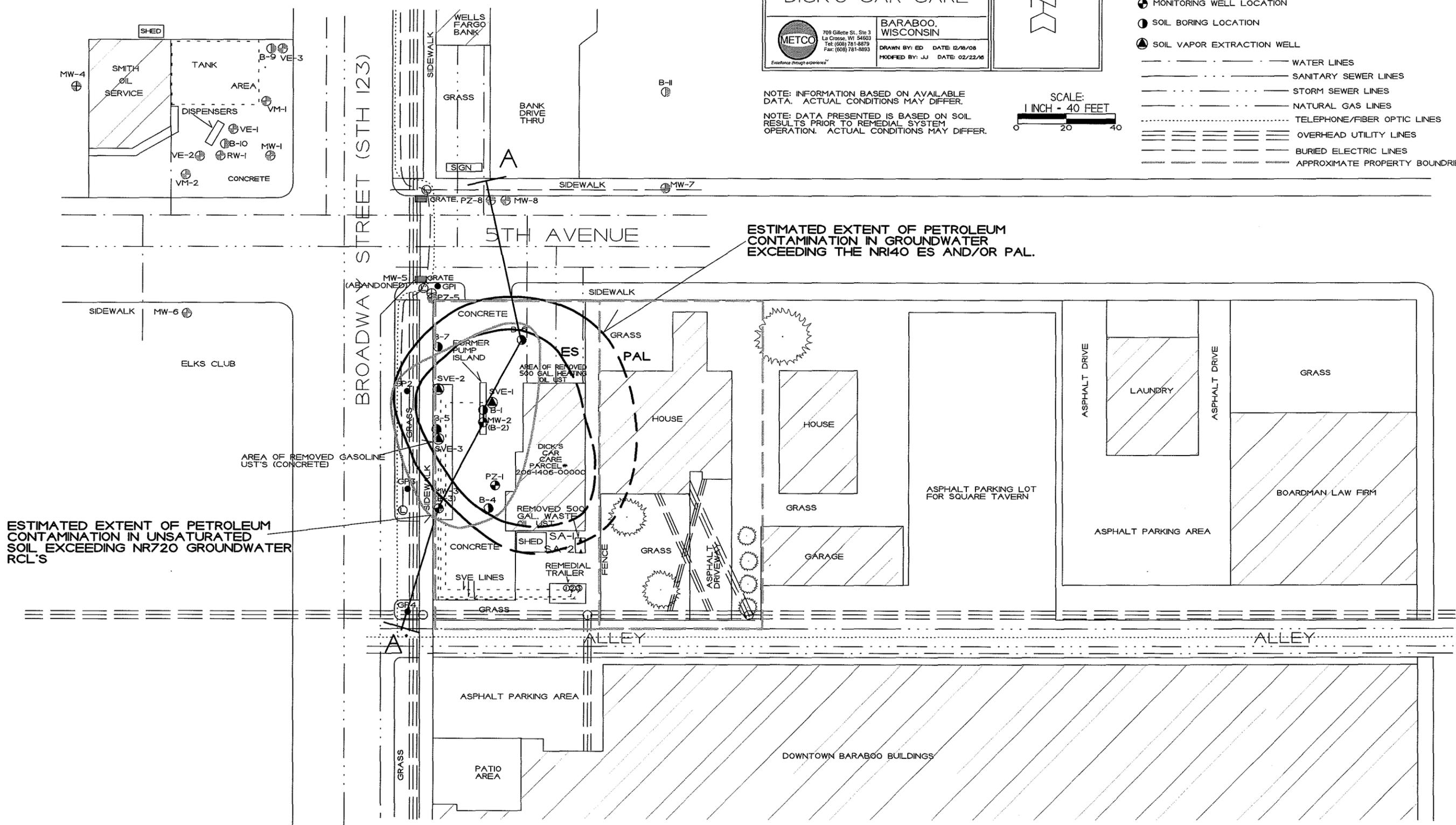
BARABOO, WISCONSIN
 DRAWN BY: ED DATE: 12/18/08
 MODIFIED BY: JJ DATE: 02/22/16



NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.
 NOTE: DATA PRESENTED IS BASED ON SOIL RESULTS PRIOR TO REMEDIAL SYSTEM OPERATION. ACTUAL CONDITIONS MAY DIFFER.



- ⊕ MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE)
- ⊙ SOIL BORING LOCATION (SMITH OIL SERVICE)
- GEOPROBE BORING LOCATION (P2ESA)
- ▲ SOIL SAMPLE LOCATION (UST REMOVAL)
- ⊕ MONITORING WELL LOCATION
- ⊙ SOIL BORING LOCATION
- ⊕ SOIL VAPOR EXTRACTION WELL
- WATER LINES
- SANITARY SEWER LINES
- STORM SEWER LINES
- NATURAL GAS LINES
- TELEPHONE/FIBER OPTIC LINES
- OVERHEAD UTILITY LINES
- BURIED ELECTRIC LINES
- APPROXIMATE PROPERTY BOUNDARIES



ESTIMATED EXTENT OF PETROLEUM CONTAMINATION IN UNSATURATED SOIL EXCEEDING NR720 GROUNDWATER RCL'S

ESTIMATED EXTENT OF PETROLEUM CONTAMINATION IN GROUNDWATER EXCEEDING THE NR140 ES AND/OR PAL.

AREA OF REMOVED GASOLINE UST'S (CONCRETE)

REMOVED 500 GAL WASTE OIL UST

AREA OF REMOVED 500 GAL HEATING OIL UST

DICK'S CAR CARE PARCEL # 206-1406-00000

DOWNTOWN BARABOO BUILDINGS

B.3.d. GEOLOGIC CROSS SECTION MAP (CLOSE-UP)

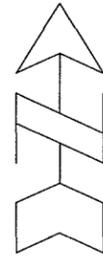
DICK'S CAR CARE



709 Gillette St., Ste 3
La Crosse, WI 54603
Tel: (608) 781-8879
Fax: (608) 781-8893

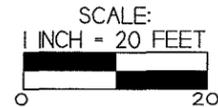
BARABOO,
WISCONSIN

DRAWN BY: ED DATE: 12/18/08
MODIFIED BY: BK DATE: 10/3/2017



NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.

NOTE: DATA PRESENTED IS BASED ON SOIL RESULTS PRIOR TO REMEDIAL SYSTEM OPERATION. ACTUAL CONDITIONS MAY DIFFER.



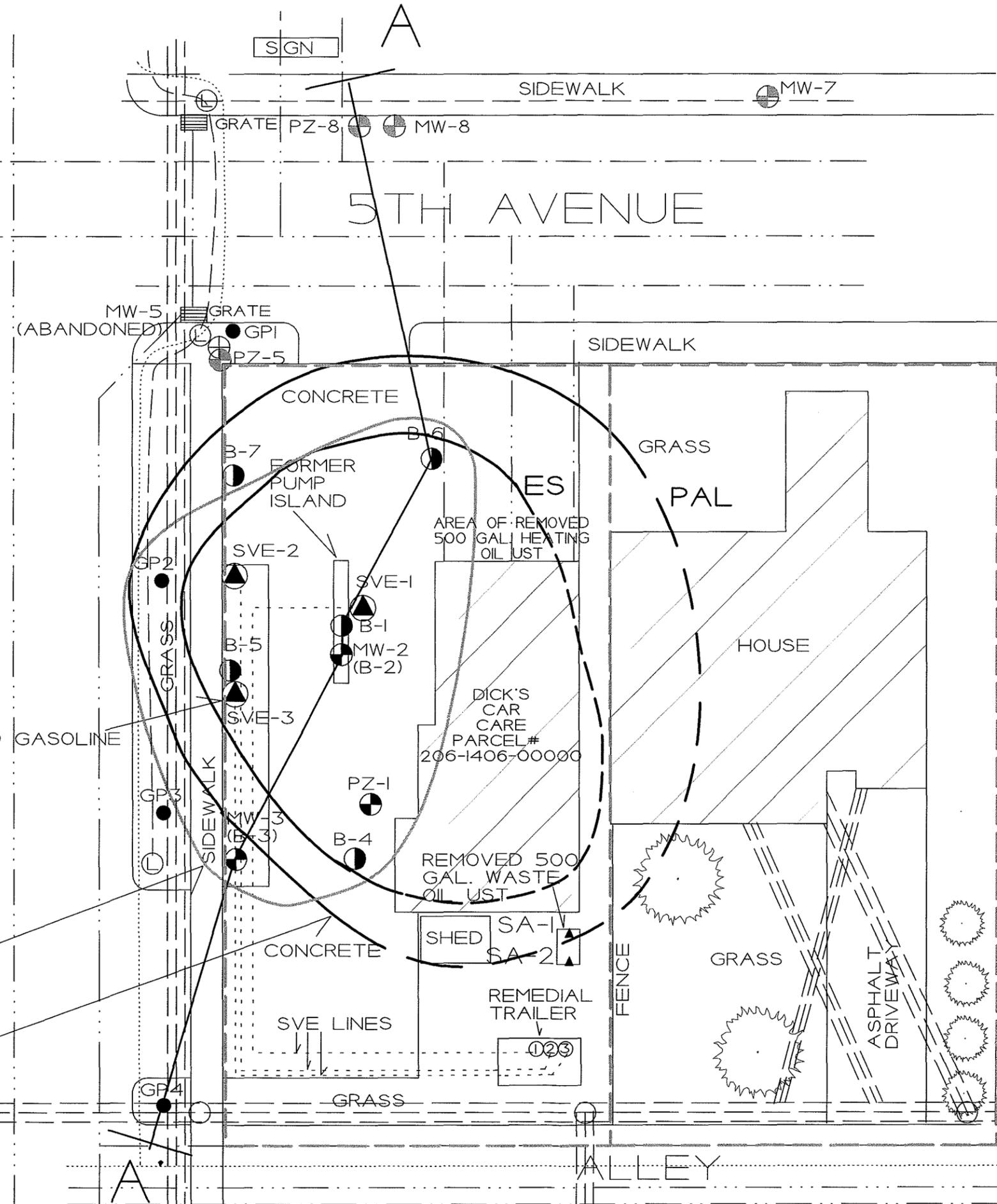
- MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE)
- SOIL BORING LOCATION (SMITH OIL SERVICE)
- GEOPROBE BORING LOCATION (P2ESA)
- SOIL SAMPLE LOCATION (UST REMOVAL)
- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- SOIL VAPOR EXTRACTION WELL

- WATER LINES
- SANITARY SEWER LINES
- STORM SEWER LINES
- NATURAL GAS LINES
- TELEPHONE/FIBER OPTIC LINES
- OVERHEAD UTILITY LINES
- BURIED ELECTRIC LINES
- APPROXIMATE PROPERTY BOUNDARIES

ESTIMATED EXTENT OF PETROLEUM CONTAMINATION IN UNSATURATED SOIL EXCEEDING NR720 GROUNDWATER RCL'S

ESTIMATED EXTENT OF PETROLEUM CONTAMINATION IN GROUNDWATER EXCEEDING THE NR140 ES AND/OR PAL.

BROADWAY STREET (5TH)



B.3.d. GEOLOGIC CROSS SECTION

DICK'S CAR CARE



709 Gillette St. Ste 3
La Crosse, WI 54603
Tel: (608) 781-8879
Fax: (608) 781-8893

BARABOO, WISCONSIN

DRAWN BY: MM
DATE: 03/18/13

NOTE: SOIL RESULTS SHOW DETECTS AND EXCEEDANCES THAT HAVE BEEN DOCUMENTED ON THE MAP. SEE DATA TABLES AND/OR LABORATORY REPORTS FOR ALL RESULTS

NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.

NOTE: DATA PRESENTED IS BASED ON SOIL RESULTS PRIOR TO REMEDIAL SYSTEM OPERATION. ACTUAL CONDITIONS MAY DIFFER.

SOIL SAMPLE RESULTS ARE PRESENTED IN PARTS PER MILLION (PPM).

GROUNDWATER SAMPLE RESULTS ARE PRESENTED IN PARTS PER BILLION (PPB).

GROUNDWATER FLOW IS TOWARD THE SOUTH TO SOUTHEAST.

NOTE: SOIL AND GROUNDWATER SAMPLE DATA IS BASED ON LABORATORY RESULTS FROM SAMPLES COLLECTED DURING THE FOLLOWING EVENTS:

- GEOPROBE/DRILLING PROJECT (2/6-17/11)
- GROUNDWATER SAMPLING EVENT (6/13/17)

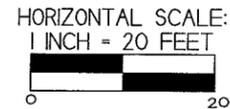
▲ - SOIL BORING LOCATION

⊕ - MONITORING WELL LOCATION

● - GEOPROBE BORING LOCATION

▽ - WATERTABLE

⊙ - SOIL SAMPLE LOCATION



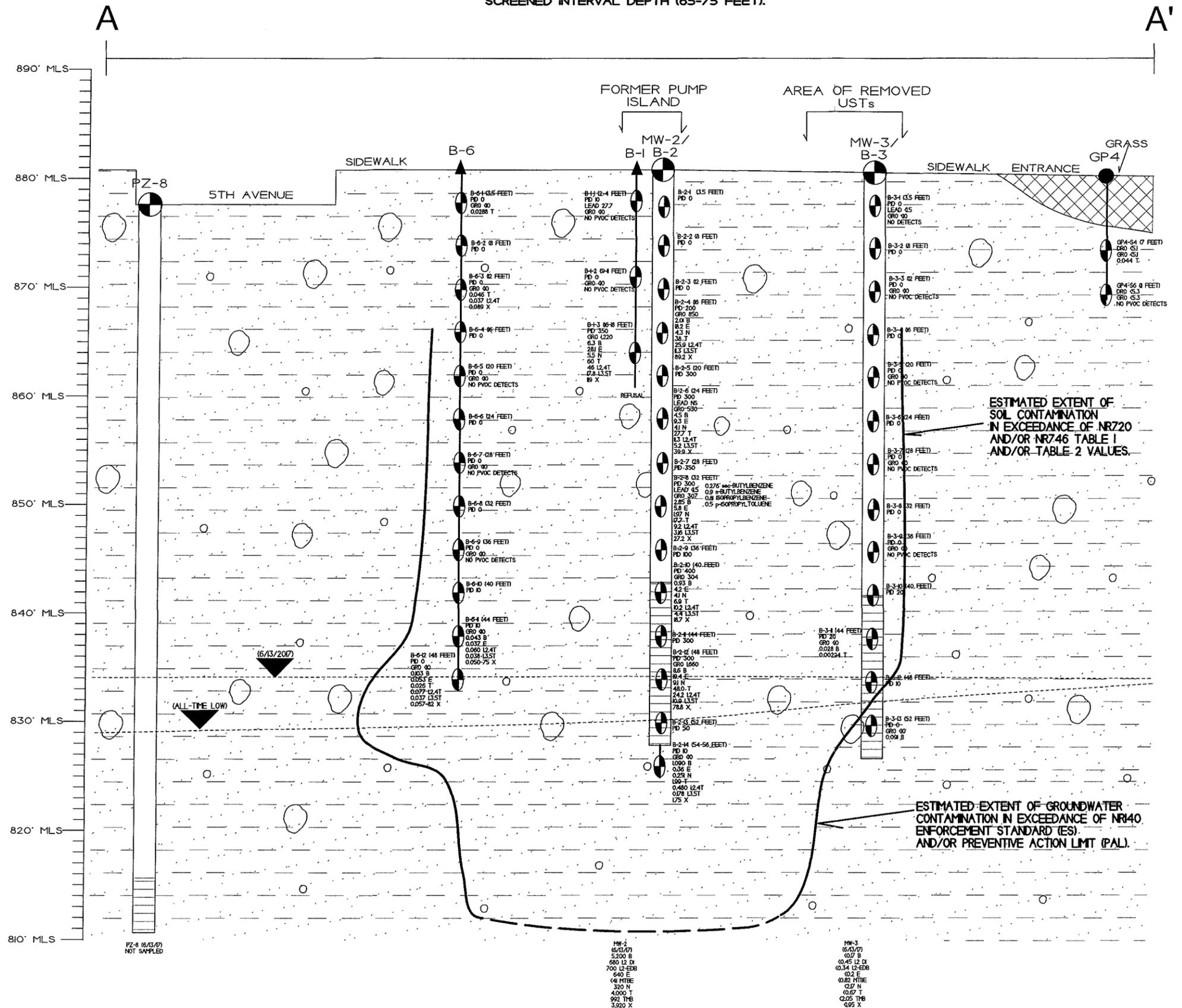
FILL



BOLDERLY TILL

NS - NOT SAMPLED
GRO - GASOLINE RANGE ORGANICS (PPM)
B - BENZENE (PPB)
E - ETHYL BENZENE (PPB)
MTBE - METHYL TERT-BUTYL ETHER (PPB)
N - NAPHTHALENE
T - TOLUENE (PPB)
1,2,4T - 1,2,4 TRIMETHYLBENZENE (PPB)
1,3,5T - 1,3,5 TRIMETHYLBENZENE (PPB)
TMB - TRIMETHYLEBENZENE (PPB)
X - XYLENE

PLEASE NOTE: PZ-1, LOCATED 25 FEET NORTH EAST OF MW-3, SHOWED ES EXCEEDANCES AT SCREENED INTERVAL DEPTH (65-75 FEET).



B.3.b. GROUNDWATER ISOCONCENTRATION (6/13/17)

DICK'S CAR CARE

709 Gillette St., Ste 3
La Crosse, WI 54603
Tel: (608) 781-8879
Fax: (608) 781-8893

BARABOO, WISCONSIN

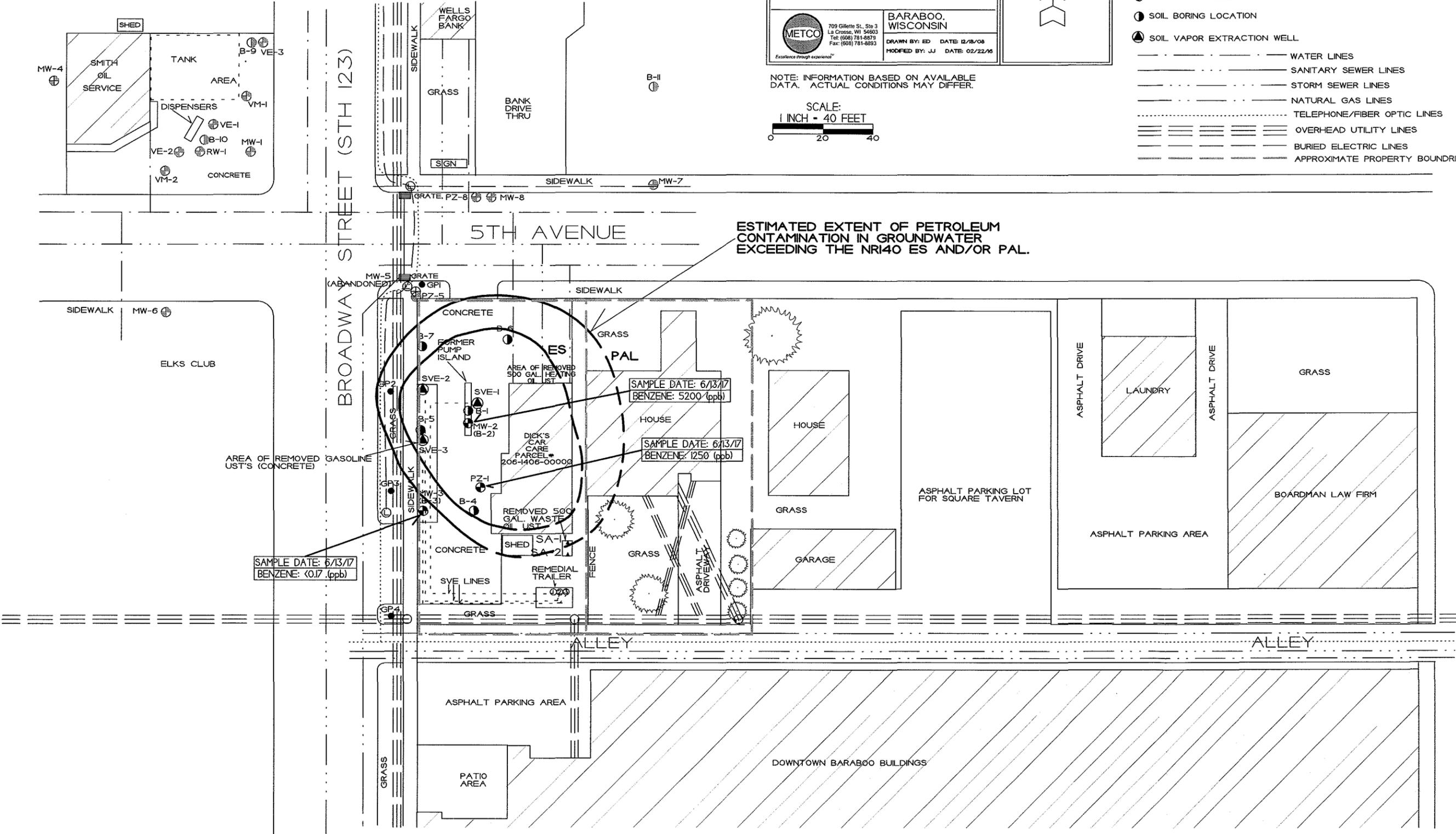
DRAWN BY: ED DATE: 12/08/08
MODIFIED BY: JJ DATE: 02/22/16



NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.



-  MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE)
 -  SOIL BORING LOCATION (SMITH OIL SERVICE)
 -  GEOPROBE BORING LOCATION (P2ESA)
 -  SOIL SAMPLE LOCATION (UST REMOVAL)
 -  MONITORING WELL LOCATION
 -  SOIL BORING LOCATION
 -  SOIL VAPOR EXTRACTION WELL
-  WATER LINES
 -  SANITARY SEWER LINES
 -  STORM SEWER LINES
 -  NATURAL GAS LINES
 -  TELEPHONE/FIBER OPTIC LINES
 -  OVERHEAD UTILITY LINES
 -  BURIED ELECTRIC LINES
 -  APPROXIMATE PROPERTY BOUNDARIES



SAMPLE DATE: 6/13/17
BENZENE: 0.17 (ppb)

SAMPLE DATE: 6/13/17
BENZENE: 5200 (ppb)

SAMPLE DATE: 6/13/17
BENZENE: 1250 (ppb)

ESTIMATED EXTENT OF PETROLEUM CONTAMINATION IN GROUNDWATER EXCEEDING THE NRI40 ES AND/OR PAL.

B.3.c. GROUNDWATER FLOW
DIRECTION (6/13/17)

DICK'S CAR CARE

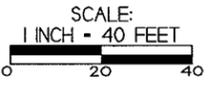


709 Gillette St., Ste. 3
La Crosse, WI 54603
Tel: (608) 781-8879
Fax: (608) 781-8893

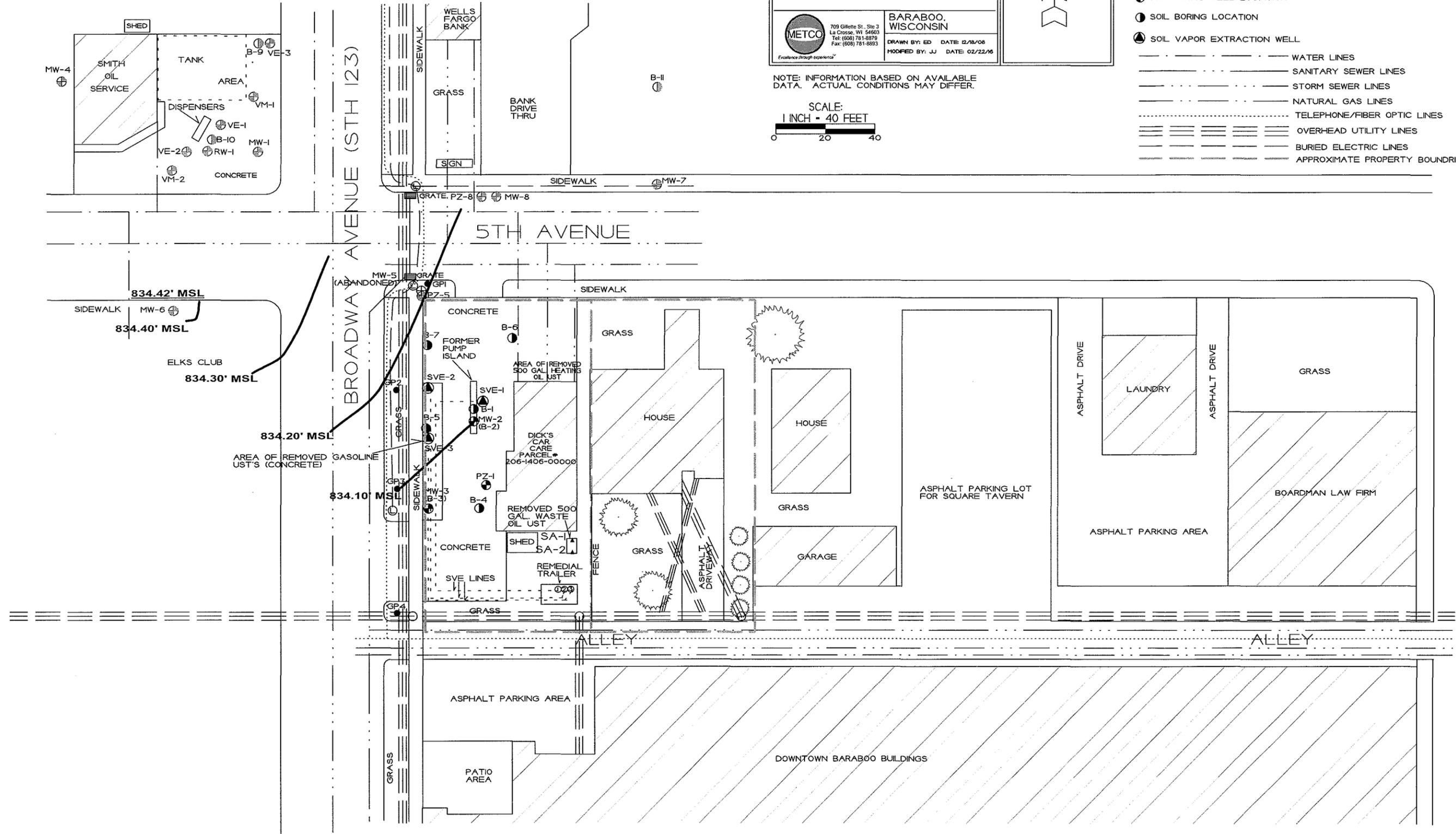
BARABOO,
WISCONSIN
DRAWN BY: ED DATE: 02/18/08
MODIFIED BY: JJ DATE: 02/22/16



NOTE: INFORMATION BASED ON AVAILABLE
DATA. ACTUAL CONDITIONS MAY DIFFER.



- ⊕ MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE)
 - ⊙ SOIL BORING LOCATION (SMITH OIL SERVICE)
 - GEOPROBE BORING LOCATION (P2ESA)
 - ▲ SOIL SAMPLE LOCATION (UST REMOVAL)
 - ⊕ MONITORING WELL LOCATION
 - ⊙ SOIL BORING LOCATION
 - ⊕ SOIL VAPOR EXTRACTION WELL
-
- WATER LINES
 - SANITARY SEWER LINES
 - STORM SEWER LINES
 - NATURAL GAS LINES
 - TELEPHONE/FIBER OPTIC LINES
 - OVERHEAD UTILITY LINES
 - BURIED ELECTRIC LINES
 - APPROXIMATE PROPERTY BOUNDRIES

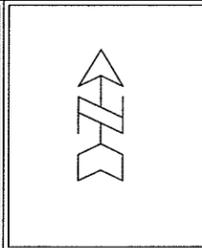


B.3.c. GROUNDWATER FLOW
DIRECTION (PIEZOMETERS)
(6/13/17)

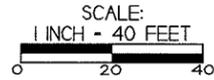
DICK'S CAR CARE



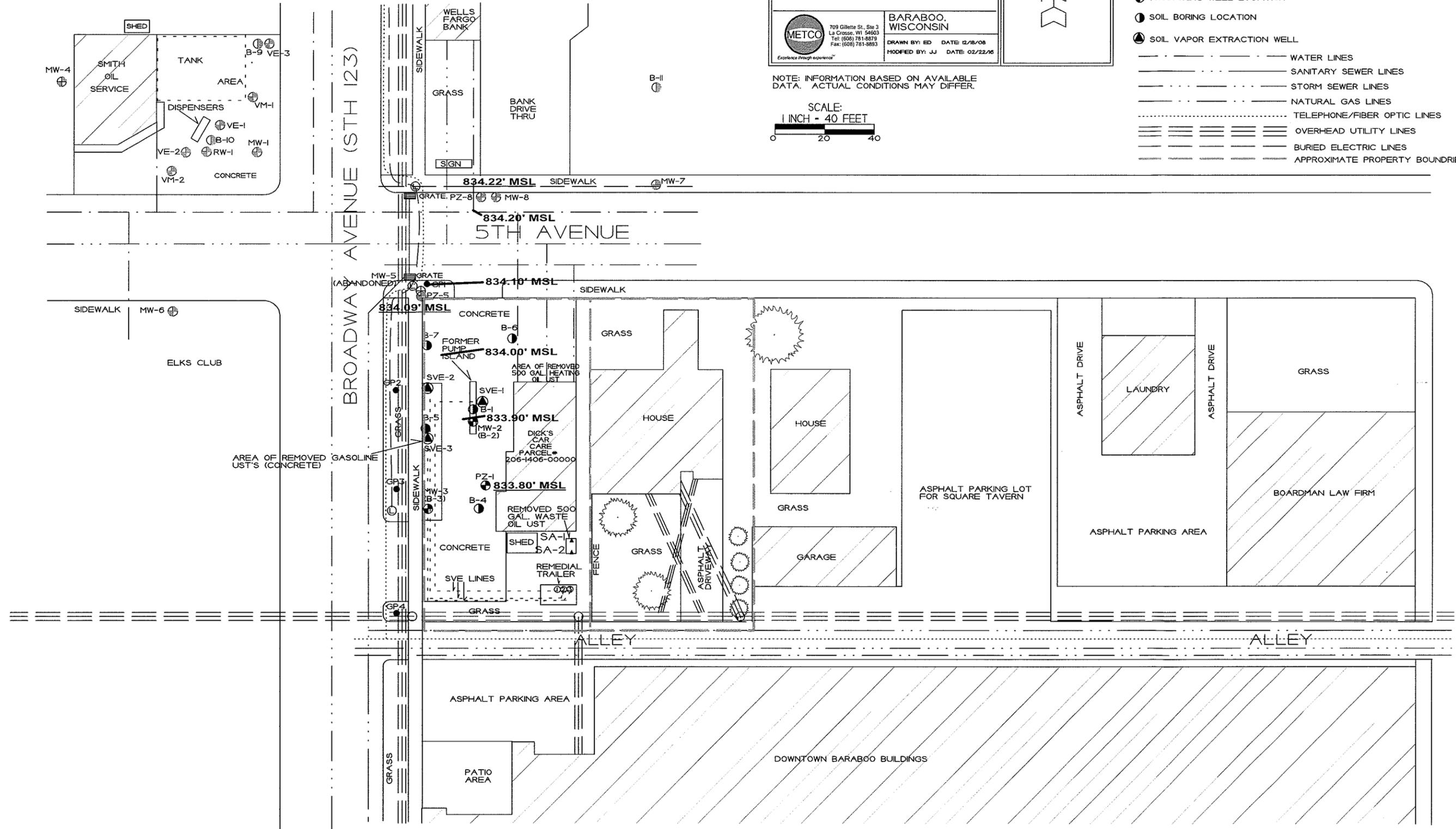
BARABOO,
WISCONSIN
DRAWN BY: ED DATE: 02/28/08
MODIFIED BY: JJ DATE: 02/22/16



NOTE: INFORMATION BASED ON AVAILABLE
DATA. ACTUAL CONDITIONS MAY DIFFER.



- MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE)
- SOIL BORING LOCATION (SMITH OIL SERVICE)
- GEOPROBE BORING LOCATION (PZESA)
- SOIL SAMPLE LOCATION (UST REMOVAL)
- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- SOIL VAPOR EXTRACTION WELL
- WATER LINES
- SANITARY SEWER LINES
- STORM SEWER LINES
- NATURAL GAS LINES
- TELEPHONE/FIBER OPTIC LINES
- OVERHEAD UTILITY LINES
- BURIED ELECTRIC LINES
- APPROXIMATE PROPERTY BOUNDRIES

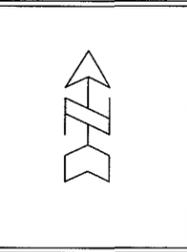


B.3.c. GROUNDWATER FLOW DIRECTION (PIEZOMETERS) (11/10/16)

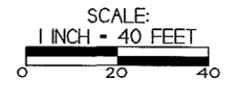
DICK'S CAR CARE



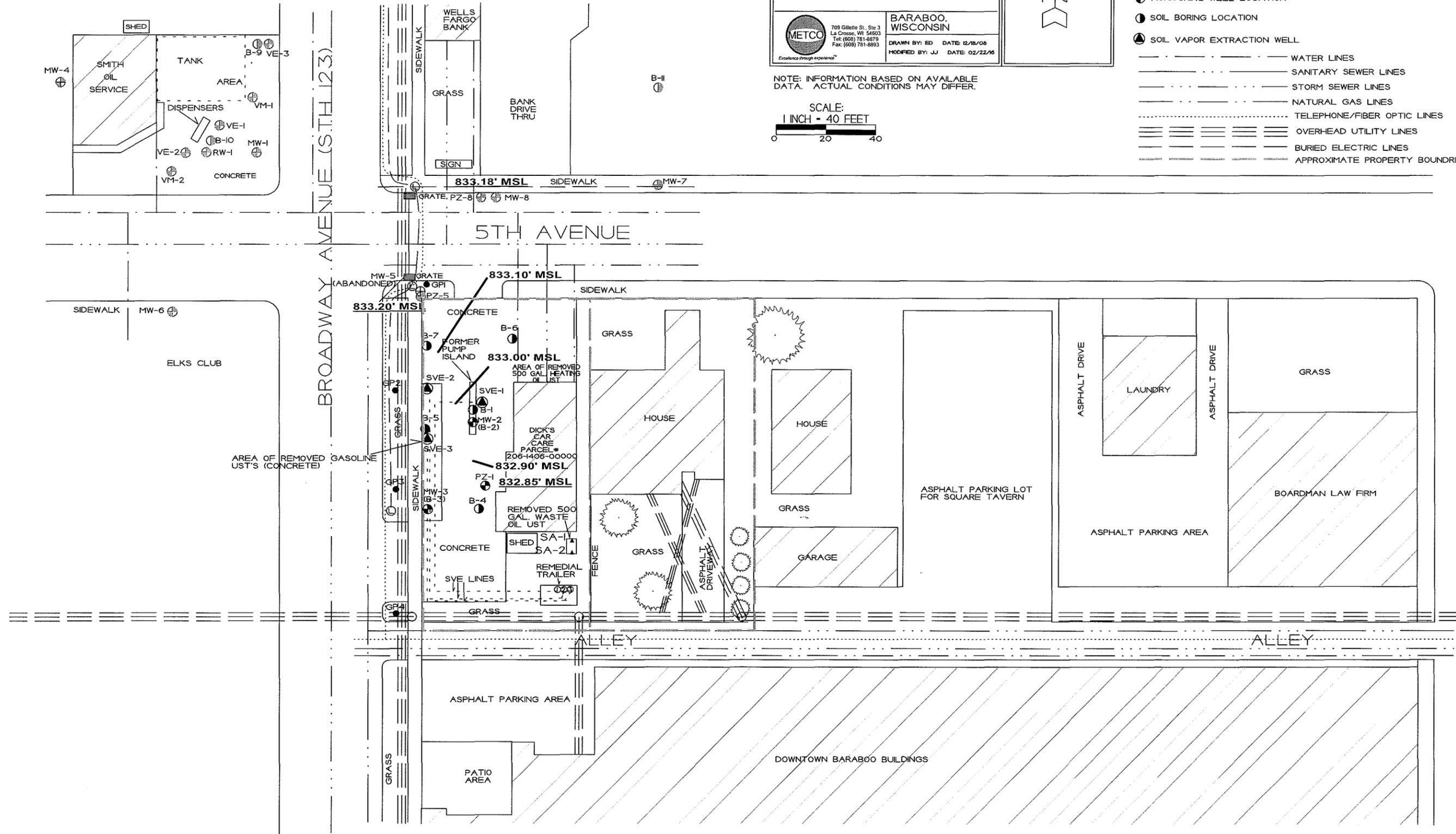
BARABOO, WISCONSIN
 DRAWN BY: ED DATE: 02/18/08
 MODIFIED BY: JJ DATE: 02/22/16



NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.



- ⊕ MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE)
 - ⊙ SOIL BORING LOCATION (SMITH OIL SERVICE)
 - GEOPROBE BORING LOCATION (P2ESA)
 - ▲ SOIL SAMPLE LOCATION (UST REMOVAL)
 - ⊗ MONITORING WELL LOCATION
 - ⊖ SOIL BORING LOCATION
 - ⊕ SOIL VAPOR EXTRACTION WELL
- WATER LINES
 - SANITARY SEWER LINES
 - STORM SEWER LINES
 - NATURAL GAS LINES
 - TELEPHONE/FIBER OPTIC LINES
 - OVERHEAD UTILITY LINES
 - BURIED ELECTRIC LINES
 - APPROXIMATE PROPERTY BOUNDRIES



B.3.d. MONITORING WELLS
DICK'S CAR CARE



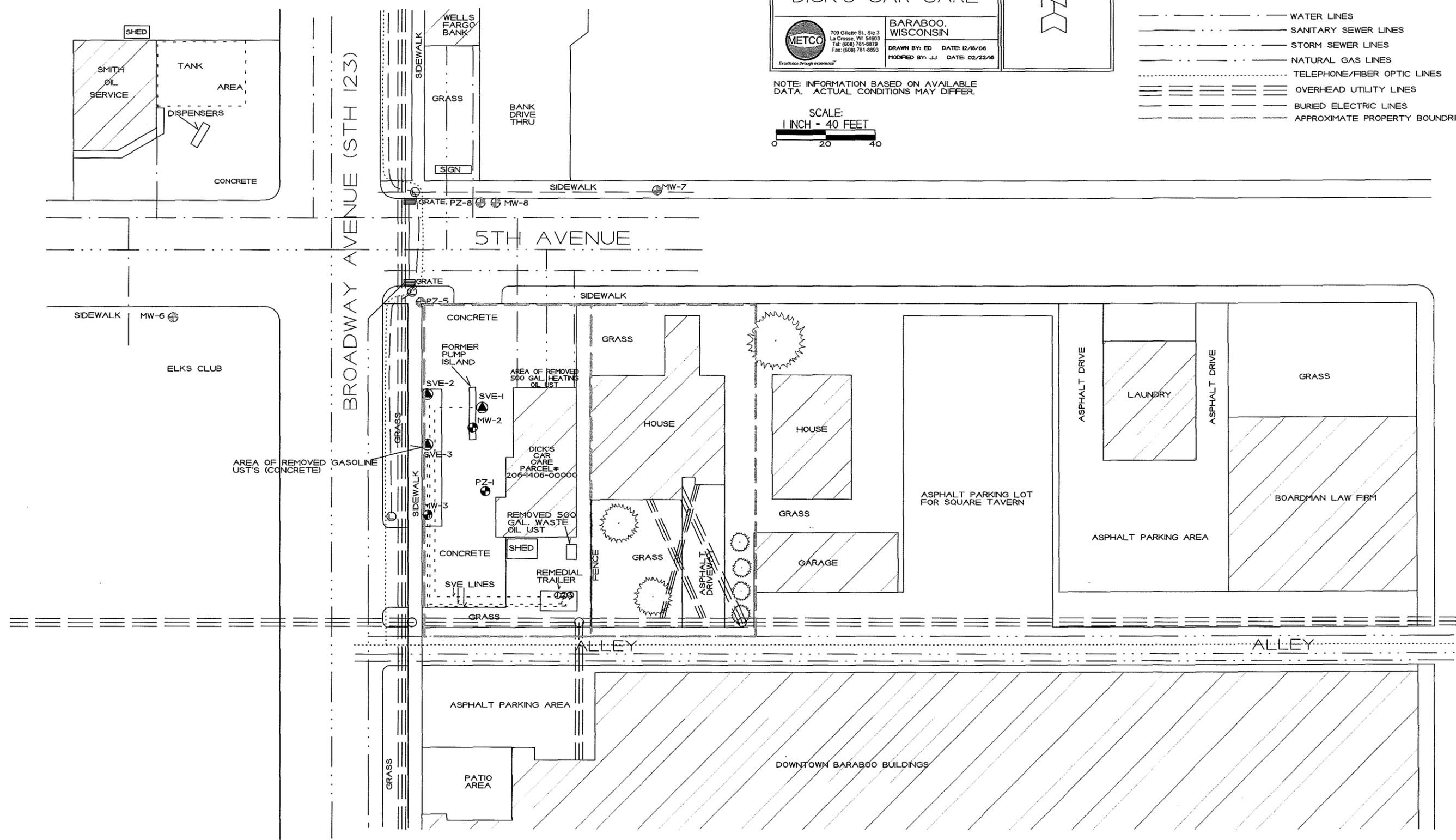
709 Gillette St., Ste 3
La Crosse, WI 54603
Tel: (608) 791-9979
Fax: (608) 791-9953

BARABOO, WISCONSIN
DRAWN BY: ED DATE: 12/18/08
MODIFIED BY: JJ DATE: 02/22/16

NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.



- ⊕ MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE) (PROPOSED TO BE ABANDONED)
 - ⊙ MONITORING WELL LOCATION (PROPOSED TO BE ABANDONED)
 - ⊖ SOIL VAPOR EXTRACTION WELL (PROPOSED TO BE ABANDONED)
- WATER LINES
 - - - - - SANITARY SEWER LINES
 - STORM SEWER LINES
 - NATURAL GAS LINES
 - TELEPHONE/FIBER OPTIC LINES
 - ==== OVERHEAD UTILITY LINES
 - BURIED ELECTRIC LINES
 - - - - - APPROXIMATE PROPERTY BOUNDARIES



Attachment C/Documentation of Remedial Action

C.1 Site Investigation documentation – All other site investigation activities are documented in the following reports:

- Site Investigation Report – June 3, 2013
- Letter Report – September 4, 2014
- 1st Quarterly SVE Report – March 15, 2016
- 2nd Quarterly SVE Report – June 1, 2016
- 3rd Quarterly SVE Report – September 7, 2016
- 4th Quarterly SVE Report – December 19, 2016
- Groundwater Monitoring Report – July 7, 2017

C.2 Investigative waste

C.3 Provide a description of the methodology used along with all supporting documentation if the Residual Contaminant Levels are different than those contained in the Department's RCL Spreadsheet available at: <http://dnr.wi.gov/topic/brownfields.Professionals.html> - Residual Contaminant Levels (RCLs) were established in accordance with NR 720.10 and NR 720.12. Soil RCL for the protection of the groundwater pathway and for non-industrial direct contact were taken from the RR programs RCL spreadsheet.

C.4 Construction documentation

C.5 Decommissioning of Remedial Systems – The remedial system was shut down on November 9, 2016 and on the same day Alliant Energy disconnected the power. On November 14th, REI retrieved the remedial trailer that they were leasing for the project and the vacuum transfer lines were subsequently cut down below grade and abandoned with concrete.

C.6 Other – The remedial system summary data is attached.

SVE Vacuum Recovery – Lab Analyses

TABLE 1a

	Sample Date	GRO (µg/liter)	Benzene (µg/liter)	Ethyl Benzene (µg/liter)	MtBE (µg/liter)	Naphthalene (µg/liter)	Toluene (µg/liter)	Trimethylbenzenes (1-2-4+1-3-5) (µg/liter)	Xylenes (o-m-p) (µg/liter)	Σpvoc+n per GRO (ratio)		
# Composite	start - 11/13/15	***** startup 4:30 p.m. *****										
5:40 p.m.	1	11/13/15	18900	810	182	0	0	1380	95	706	0.168	
	2	11/14/15	12000	390	121	0	0	870	65.2	495	0.162	
	5	11/15/15	10400	430	144	0	0	930	89.7	588	0.210	
	7	11/24/15	6400	146	115	0	18.4	530	101	452	0.213	
	8	11/30/15	4400	98	91	0	0	410	73.2	380	0.239	
	9	12/07/15	3300	41	51	0	0	205	43.7	229	0.173	
	13	01/07/16	1460	18.9	30.2	0	0	104	34.3	137	0.222	
	14	02/08/16	1310	14.6	28.6	0	0	88	37.6	130	0.228	
	15	03/08/16	870	8.1	22.2	0	1.16	63	34.9	106.3	0.271	
	16	04/11/16	670	5.4	20.1	0	0	53	33.0	99.2	0.314	
	17	05/09/16	500	1.98	11.5	0	0	33	18.1	60.6	0.250	
	21	06/13/16	550	3.02	14.5	0	0	38	29.8	81.7	0.304	
	22	07/14/16	550	2.5	13.2	0	0	34	27.1	75.1	0.276	
cut vac ½	23	07/14/16	109	0.58	3.3	0	0	8.4	8.14	19.8	0.369	
	24	07/14/16	154	0.85	4.4	0	0	11.6	9.9	25.4	0.339	
	25	07/14/16	102	0.66	3.5	0	0	9.3	8.12	20.2	0.410	
	26	07/21/16	150	0.74	4.1	0	1.79	9.6	9.33	21.2	0.312	
	27	07/28/16	174	0.79	4.4	0	0.62	10.1	9.9	22.9	0.280	
	28	08/15/16	153	0.79	4.1	0	0	9.4	9.06	21.2	0.291	
return vac	29	08/15/16	780	3.4	16.8	0	0	37	32.6	82.6	0.221	
	30	09/12/16	600	2.32	13.8	0	0	31.2	31.6	70.5	0.249	
	31	10/12/16	450	1.93	13.5	0	0	31	33.6	69.6	0.333	
10:35 a.m.	32	11/09/16	470	0.49	11.1	0	0	26.4	29.5	64.3	0.280	
halt	-	11/09/16	***** shutdown 10:40 a.m. *****									

***** Individual Well Sampling *****

SVE-1		GRO	Benzene	Ethyl Benzene	MtBE	Naphthalene	Toluene	Trimethylbenzenes	Xylenes	Σpvoc+n per GRO
3	11/14/15	3800	103	37	0	0	211	28.2	149	0.139
10	12/07/15	1035	10.6	18.2	0	0	52	29.6	73.1	0.177
18	05/09/16	132	0.278	1.54	0	0	5.2	2.76	9.32	0.145
SVE-2		GRO	Benzene	Ethyl Benzene	MtBE	Naphthalene	Toluene	Trimethylbenzenes	Xylenes	Σpvoc+n per GRO
4	11/14/15	5500	257	71	0	0	530	46.5	286	0.216
11	12/07/15	2050	42	54	0	0	193	46.7	219	0.271
19	05/09/16	257	1.23	6.3	0	0	16.6	8.74	33.5	0.258
SVE-3		GRO	Benzene	Ethyl Benzene	MtBE	Naphthalene	Toluene	Trimethylbenzenes	Xylenes	Σpvoc+n per GRO
6	11/15/15	4000	181	63	0	0	360	46.8	264	0.229
12	12/07/15	1560	37	33	0	0	159	33.5	148	0.263
20	05/09/16	181	0.71	3.5	0	0	11.6	5.75	18.6	0.222

SVE Vacuum Recovery – Lbs per Day **TABLE 1b**

#	Sample Date	Vacuum Recovery Flow (scfm)	GRO (lbs/day)	Benzene (lbs/day)	Ethyl Benzene (lbs/day)	MtBE (lbs/day)	Naphthalene (lbs/day)	Toluene (lbs/day)	Trimethylbenzenes (1-2-4+1-3-5) (lbs/day)	Xylenes (o-m-p) (lbs/day)	Σpvoc+n lbs per GRO lbs (ratio)
Note: these lbs/day estimates are made with averaging the last 2 sets of both flow and concentration											
-	11/13/15	***** startup 4:30 p.m.*****									
1	11/13/15	175.8	298.6	12.8	2.9	0.0	0.000	21.8	1.5	11.2	0.168
2	11/14/15	182.2	248.6	9.7	2.4	0.0	0.000	18.1	1.3	9.7	0.166
5	11/15/15	183.2	183.9	6.7	2.2	0.0	0.000	14.8	1.3	8.9	0.184
7	11/24/15	181.3	137.6	4.7	2.1	0.0	0.151	12.0	1.6	8.5	0.211
8	11/30/15	166.5	84.4	1.9	1.6	0.0	0.144	7.3	1.4	6.5	0.224
9	12/07/15	180.4	60.0	1.1	1.1	0.0	0.000	4.8	0.91	4.7	0.211
13	01/07/16	208.1	41.6	0.52	0.71	0.0	0.000	2.7	0.68	3.2	0.188
14	02/08/16	183.2	24.4	0.29	0.52	0.0	0.000	1.7	0.63	2.3	0.225
15	03/08/16	183.2	17.9	0.19	0.42	0.0	0.010	1.2	0.60	1.9	0.245
16	04/11/16	181.3	12.6	0.11	0.35	0.0	0.010	1.0	0.56	1.7	0.290
17	05/09/16	200.7	10.0	0.063	0.27	0.0	0.000	0.74	0.44	1.4	0.287
21	06/13/16	189.6	9.2	0.044	0.23	0.0	0.000	0.62	0.42	1.2	0.278
22	07/14/16	184.1	9.2	0.046	0.23	0.0	0.000	0.60	0.48	1.3	0.290
23	07/14/16	294.4	7.1	0.033	0.18	0.0	0.000	0.46	0.38	1.0	0.292
24	07/14/16	294.4	3.5	0.019	0.10	0.0	0.000	0.26	0.24	0.60	0.351
25	07/14/16	312.5	3.5	0.021	0.11	0.0	0.000	0.29	0.25	0.62	0.367
26	07/21/16	311.2	3.5	0.020	0.11	0.0	0.025	0.26	0.24	0.58	0.351
27	07/28/16	310.0	4.5	0.021	0.12	0.0	0.034	0.28	0.27	0.62	0.295
28	08/15/16	312.5	4.6	0.022	0.12	0.0	0.009	0.27	0.27	0.62	0.285
29	08/15/16	193.4	10.6	0.048	0.24	0.0	0.000	0.53	0.47	1.2	0.233
30	09/12/16	183.2	11.7	0.048	0.26	0.0	0.000	0.58	0.54	1.3	0.233
31	10/12/16	183.2	8.6	0.035	0.22	0.0	0.000	0.51	0.54	1.2	0.285
32	11/09/16	162.0	7.1	0.019	0.19	0.0	0.000	0.45	0.49	1.0	0.306
-	11/09/16	***** shutdown 10:40 a.m.*****									

***** Individual Well Sampling *****

SVE-1											
3	11/14/15	180.4	61.6	1.7	0.6	0.0	0.0	3.4	0.5	2.4	0.139
10	12/07/15	180.4	16.8	0.2	0.3	0.0	0.0	0.8	0.5	1.2	0.177
18	05/09/16	200.7	2.4	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.145
SVE-2											
4	11/14/15	183.2	90.5	4.2	1.2	0.0	0.0	8.7	0.8	4.7	0.216
11	12/07/15	180.4	33.2	0.7	0.9	0.0	0.0	3.1	0.8	3.6	0.271
19	05/09/16	199.8	4.6	0.0	0.1	0.0	0.0	0.3	0.2	0.6	0.258
SVE-3											
6	11/15/15	180.4	64.9	2.9	1.0	0.0	0.0	5.8	0.8	4.3	0.229
12	12/07/15	180.4	25.3	0.6	0.5	0.0	0.0	2.6	0.5	2.4	0.263
20	05/09/16	199.8	3.3	0.0	0.1	0.0	0.0	0.2	0.1	0.3	0.222

SVE Vacuum Recovery – Cumulative Lbs

TABLE 1c

Sample Date	Vacuum Running Time (total hours)	GRO (total lbs)	Benzene (total lbs)	Ethyl Benzene (total lbs)	MtBE (total lbs)	Naphthalene (total lbs)	Toluene (total lbs)	Trimethyl-benzenes (1-2-4+1-3-5) (total lbs)	Xylenes (o-m-p) (total lbs)	Σpvoc+n lbs per GRO lbs (cumulative)
Composite	Note: these cumulative lbs estimates are made with averaging the last 2 sets of lbs/day numbers									
11/13/15	***** startup 4:30 p.m.*****									
11/13/15	1.25	15.6	0.666	0.150	0.0	0.0	1.14	0.078	0.581	0.168
11/14/15	22.0	252.1	10.4	2.45	0.0	0.0	18.4	1.28	9.58	0.167
11/15/15	45.0	459.3	18.2	4.66	0.0	0.0	34.1	2.51	18.5	0.170
11/24/15	256.0	1872.6	68.6	23.5	0.0	0.66	151.7	15.0	95.0	0.189
11/30/15	401.0	2543.3	88.6	34.8	0.0	1.55	210.0	23.8	140.4	0.196
12/07/15	567.0	3042.8	98.9	44.2	0.0	2.05	252.0	31.7	179.3	0.200
01/07/16	1199.9	4382.1	120.1	68.2	0.0	2.05	350.8	52.7	284.0	0.200
02/08/16	1968.8	5437.9	133.2	87.8	0.0	2.05	421.0	73.7	372.8	0.201
03/08/16	2664.0	6050.6	140.2	101.3	0.0	2.19	463.5	91.5	435.0	0.204
04/11/16	3480.0	6570.2	145.2	114.3	0.0	2.51	500.7	111.1	496.7	0.209
05/09/16	4152.0	6887.4	147.7	123.0	0.0	2.64	524.4	125.0	539.4	0.212
06/13/16	4992.7	7224.6	149.5	131.7	0.0	2.64	548.2	140.1	585.3	0.216
07/14/16	5735.2	7509.9	150.9	138.9	0.0	2.64	567.2	153.9	625.0	0.218
07/14/16	5735.3	7510.0	150.9	138.9	0.0	2.64	567.2	154.0	625.0	0.218
07/14/16	5735.8	7510.1	150.9	138.9	0.0	2.64	567.2	154.0	625.0	0.218
07/14/16	5737.8	7510.4	150.9	138.9	0.0	2.64	567.2	154.0	625.1	0.218
07/21/16	5904.6	7534.8	151.1	139.6	0.0	2.73	569.2	155.7	629.2	0.219
07/28/16	6073.6	7563.1	151.2	140.4	0.0	2.94	571.1	157.5	633.5	0.219
08/15/16	6505.0	7644.9	151.6	142.5	0.0	3.32	576.0	162.3	644.5	0.220
08/15/16	6505.5	7645.1	151.6	142.5	0.0	3.32	576.0	162.3	644.5	0.220
09/12/16	7177.4	7957.0	152.9	149.5	0.0	3.32	591.4	176.5	679.2	0.220
10/12/16	7897.6	8262.0	154.2	156.8	0.0	3.32	607.8	192.7	716.0	0.222
11/09/16	8571.6	8483.6	155.0	162.6	0.0	3.32	621.2	207.1	746.7	0.223
11/09/16	***** shutdown 10:40 a.m.*****									

SVE Blower Operations

In-line process flowmeter nominally calibrated as SCFM - corrected by factor = 0.925
 Process vacuum gauge readings, in "H₂O and discharge header pressure, positive, "H₂O
 Blower outlet temperature, (°F)
 SVE Runtime (Hrs)

Cp-air	0.0004321	hp/scfm°F	(nominal)
blower pwr	10	hp	(nominal)
inlet air T	60	deg F	(nominal)
B1	2692.2	Blower Input	
B2	1405.7	Power - Flow	
B3	-3360.3	Correlation Coeff's	

Mfg'r correlation - Blower Inlet Vacuum vs Flowrate
 SCFM = 397.8 - 2.186 ("H₂O vacuum) - 0.005078 ("H₂Ovacuum)² [by regression]
 Mfg'r correlation - Blower Delta Temperature vs Flowrate
 SCFM = 868.78 + 3.7594 (Delta °F) - 105.61 sqrt (Delta °F) [by regression]

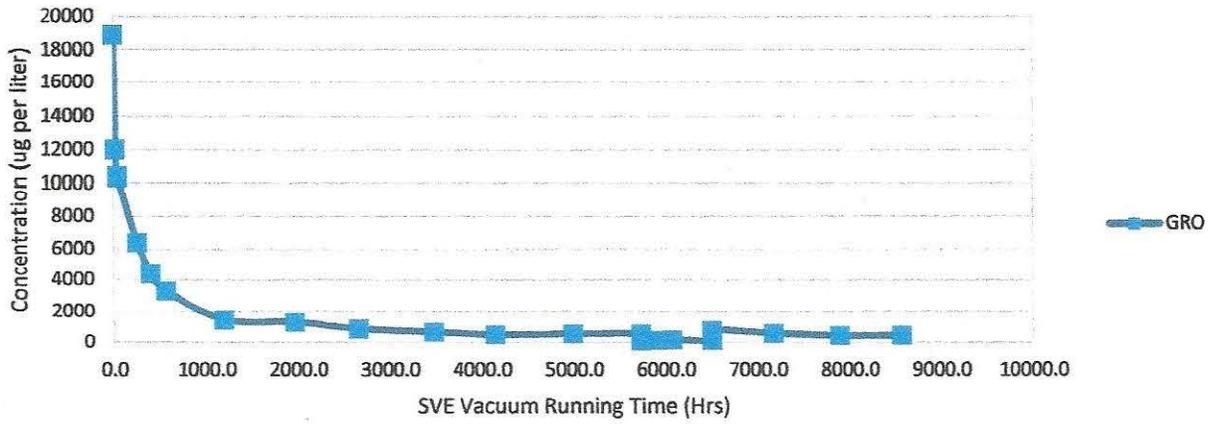
Composite Sampling	SVE-1 well Inlet Vacuum (-) ("H ₂ O) (gauge)	SVE-2 well Inlet Vacuum (-) ("H ₂ O) (gauge)	SVE-3 well Inlet Vacuum (-) ("H ₂ O) (gauge)	Blower Inlet Vacuum (-) ("H ₂ O) (gauge)	Blower Outlet Temperature (°F)	Discharge Header Pressure ("H ₂ O) (gauge) (+)	Process Outlet Flowrate (scfm) (by meter)	Measured Flowrate (corrected) (scfm) 0.925	Process Flowrate Flow vs Vacuum (scfm) (mfg'r curve)	Process Flowrate Flow vs Temp (scfm) (mfg'r curve)	Blower Input Power Power vs Flow (kilowatts) (mfg'r curve)	Process Runtime (Hrs)	Discharge Air Sample #	
startup	11/13/15 88.0	88.0	87.0	90.0	170.0	1.5	190.0	175.8	164.6	174.7	10.48	1.3	1	
	11/14/15 85.0	82.0	85.0	85.0	166.0	1.5	197.0	182.2	179.9	180.0	10.39	22.0	2	
	11/15/15 85.5	85.0	86.2	88.5	180.5	1.0	198.0	183.2	167.6	162.5	10.38	45.0	5	
	11/24/15 88.0	88.0	90.0	91.0	167.0	1.0	196.0	181.3	159.9	178.6	10.41	256.0	7	
	11/30/15 69 entrained	69 water	70 fouling	94.0	181.0	1.0	180.0	166.5	150.6	162.0	10.56	401.0	8	
	12/07/15 64 entrained	64 water	65 fouling	88.0	169.0	1.0	195.0	180.4	169.2	176.0	10.42	567.0	9	
system leak	01/07/16 73.0	72.0	73.0	76.0	T gauge out	0.5	225.0	208.1	203.8	T gauge out	9.89	1199.9	13	
	01/07/16 81.0	80.0	81.0	85.0	T gauge out	0.5	180.0	166.5	176.8	T gauge out	10.56	1200.5	not taken	
	02/08/16 79.0	79.0	80.0	82.5	T gauge out	1.0	198.0	183.2	185.9	T gauge out	10.38	1968.8	14	
	03/08/16 77.0	76.0	78.0	81.0	171.0	1.0	198.0	183.2	190.4	173.4	10.38	2664.0	15	
	04/11/16 79.0	79.0	80.0	83.0	174.0	1.0	196.0	181.3	184.4	167.7	10.41	3480.0	16	
	05/09/15 70.0	70.0	72.0	74.0	166.0	1.0	217.0	200.7	211.2	180.0	10.06	4152.0	17	
	06/13/16 76.0	76.0	77.0	80.0	170.0	1.0	205.0	189.6	193.4	174.7	10.27	4992.7	21	
	07/14/16 76.0	76.0	77.0	80.0	179.0	1.0	199.0	184.1	193.4	164.1	10.37	5735.2	22	
out vac ½	07/14/16 40.0	40.0	44.0	46.0	142.0	3.0	253.0	234.0	294.4	220.7	9.22	5735.3	23	
	07/14/16 40.0	40.0	44.0	46.0	140.0	3.0	253.0	234.0	294.4	224.9	9.22	5735.8	24	
	07/14/16 34.0	34.0	37.0	40.0	139.0	4.0	270.0	249.8	312.5	227.1	8.77	5737.8	25	
	07/21/16 35.0	35.0	37.0	40.0	140.0	3.5	270.0	249.8	311.2	224.9	8.77	5904.6	26	
	07/28/16 34.0	34.0	38.0	41.0	132.0	4.0	270.0	249.8	310.0	243.3	8.77	6073.6	27	
	08/15/16 31.0	32.0	34.0	40.0	131.0	4.0	270.0	249.8	312.5	245.8	8.77	6505.0	28	
return vac	08/15/16 75.0	74.0	75.0	80.0	180.0	1.0	205.0	189.6	193.4	163.0	10.27	6505.5	29	
	09/12/16 77.5	78.0	79.0	82.0	176.0	0.0	198.0	183.2	184.4	167.4	10.38	7177.4	30	
	10/12/16 79.0	79.0	81.0	82.0	170.0	0.0	198.0	183.2	184.4	174.7	10.38	7897.6	31	
10:35 a.m.	11/09/16 85.5	85.0	87.0	88.0	173.0	0.0	162.0	149.9	166.1	170.9	10.58	8571.6	32	
10:40 a.m.	11/09/16	shutdown											-	end of operations

..... Individual Well Flows

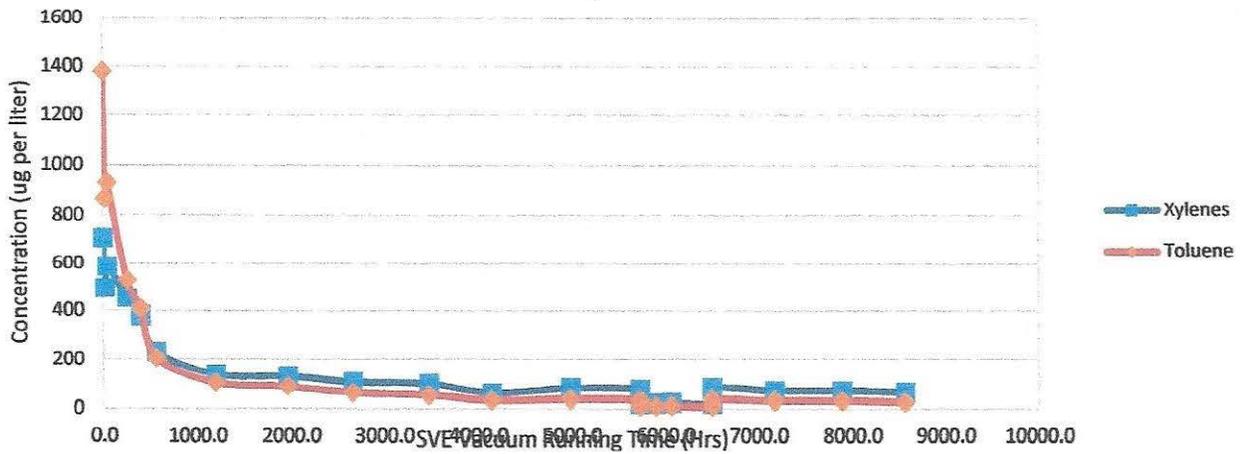
SVE-1 Well Sampling	SVE-1 well Inlet Vacuum (-) ("H ₂ O) (gauge)	SVE-2 well Inlet Vacuum (-) ("H ₂ O) (gauge)	SVE-3 well Inlet Vacuum (-) ("H ₂ O) (gauge)	Blower Inlet Vacuum (-) ("H ₂ O) (gauge)	Blower Outlet Temperature (°F)	Discharge Header Pressure ("H ₂ O) (gauge) (+)	Corrected Flowrate (scfm)	Runtime (Hrs)	Discharge Air Sample #
11/14/15	85.00	off-line	off-line	86.5	171.0	1.5	180.4	22.0	3
12/07/15	77.00	off-line	off-line	88.0	169.0	1.0	180.4	567.8	10
05/09/16	71.00	off-line	off-line	74.0	162.0	1.0	200.7	4152.5	18
see note above, 12/7/15									
11/14/15	off-line	83.0	off-line	86.2	172.0	1.5	183.2	22.3	4
12/07/15	off-line	82.0	off-line	88.0	170.0	1.0	180.4	567.8	11
05/09/16	off-line	70.0	off-line	74.0	164.0	1.0	199.8	4153.0	19
11/15/15	off-line	off-line	86.0	88.5	182.5	1.5	183.2	45.5	6
12/07/15	off-line	off-line	88.0	88.0	170.0	1.0	180.4	568.0	12
05/09/16	off-line	off-line	73.0	74.0	166.0	1.0	199.8	4153.2	20

Figure 1a

Air Discharge Concentration



Air Discharge Concentration



Air Discharge Concentration

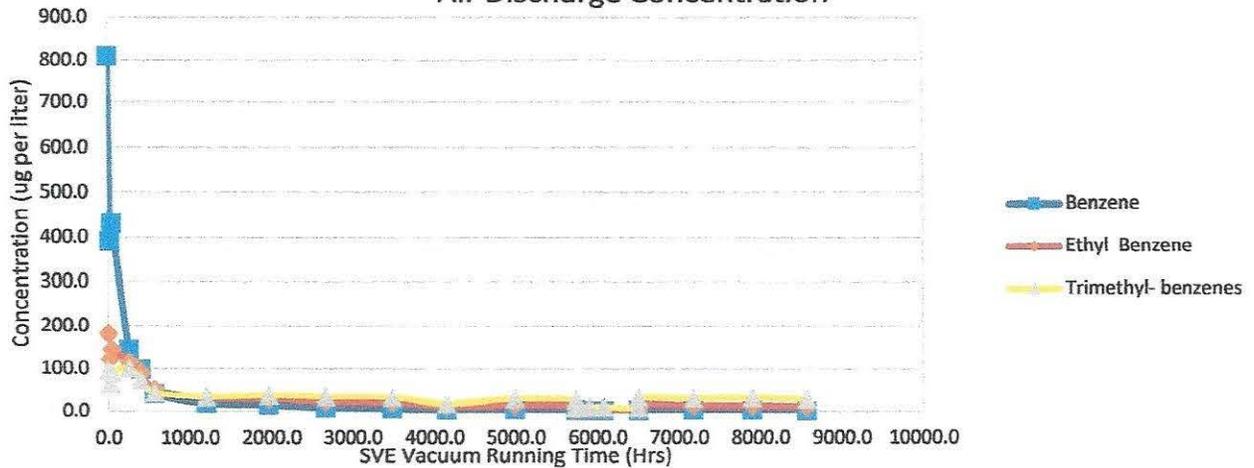
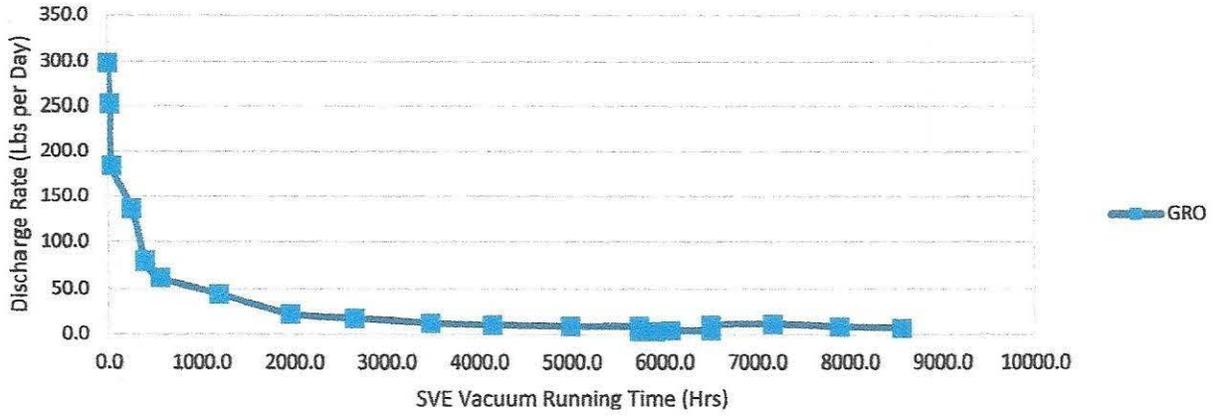
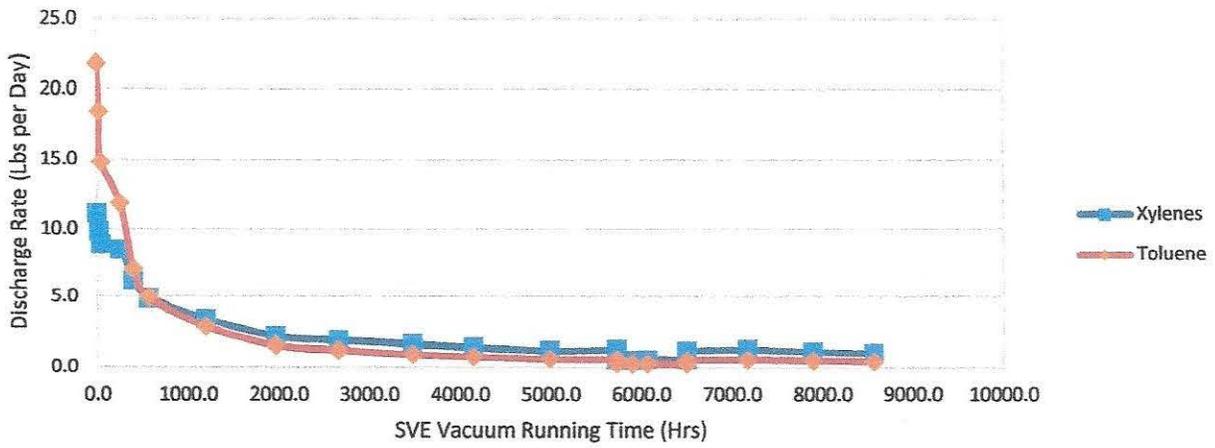


Figure 1b

Air Discharge Mass Rate



Air Discharge Mass Rate



Air Discharge Mass Rate

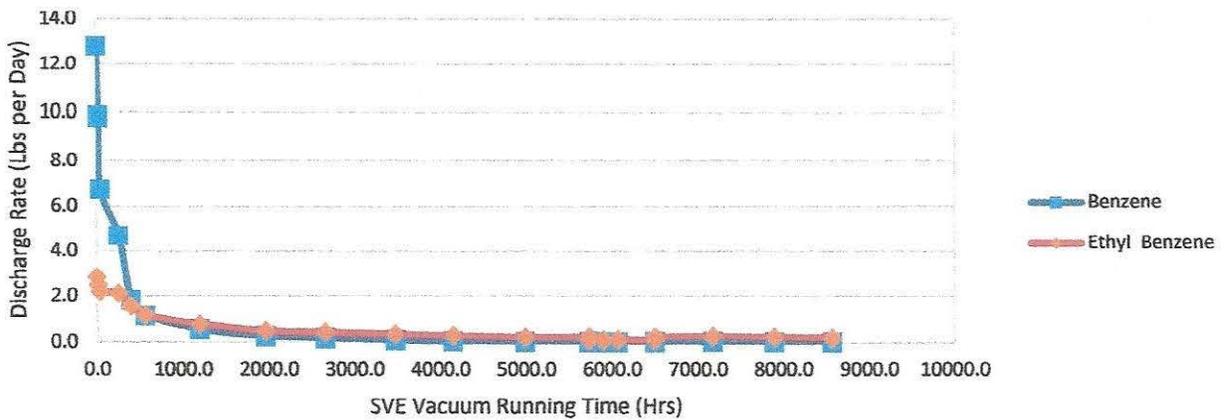
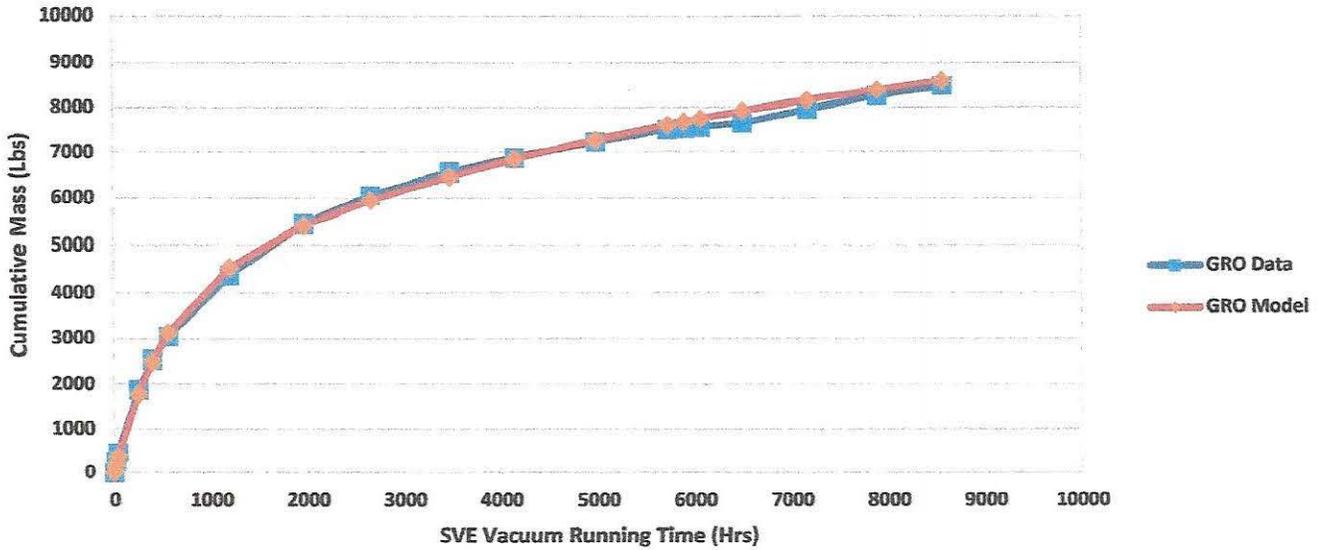
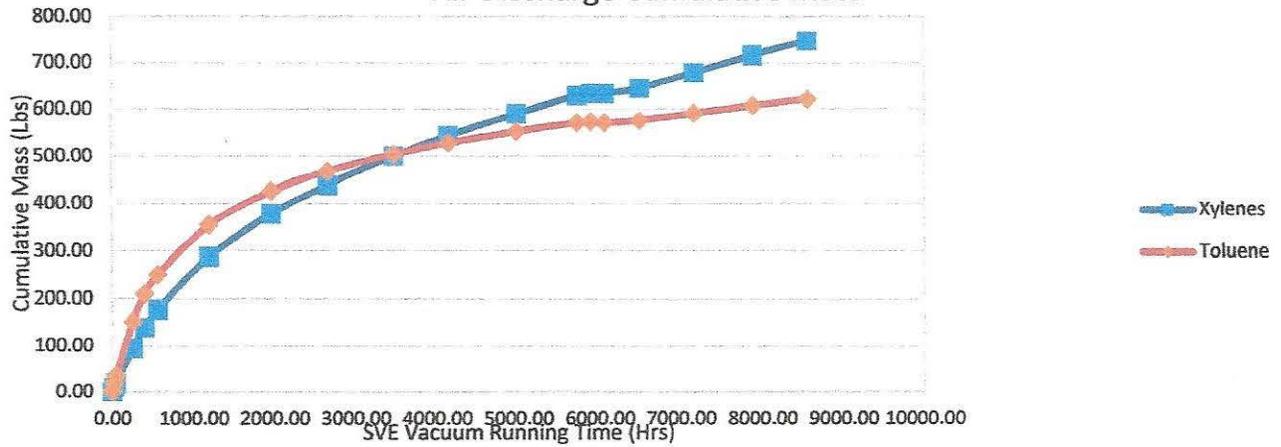


Figure 1c

Air Discharge Contamination - Cumulative Mass



Air Discharge Cumulative Mass



Air Discharge Cumulative Mass

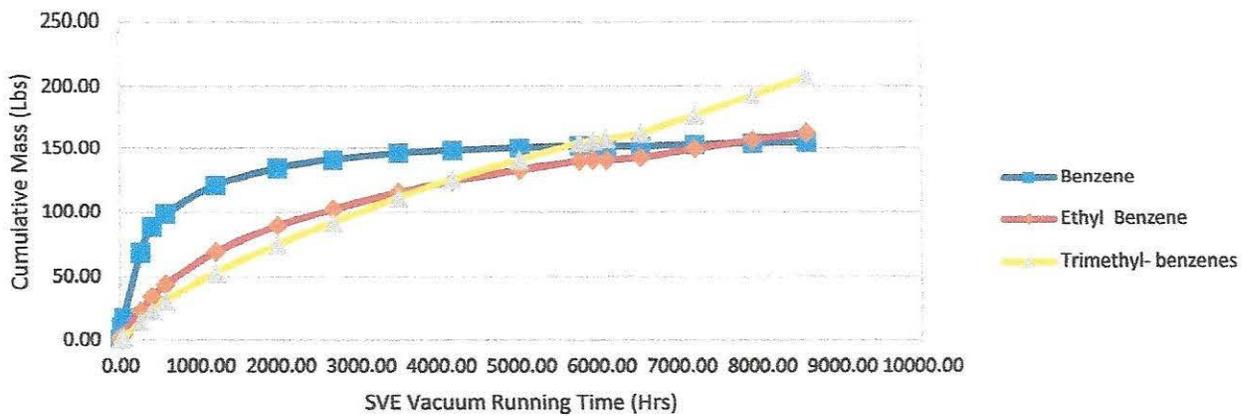


Figure 2

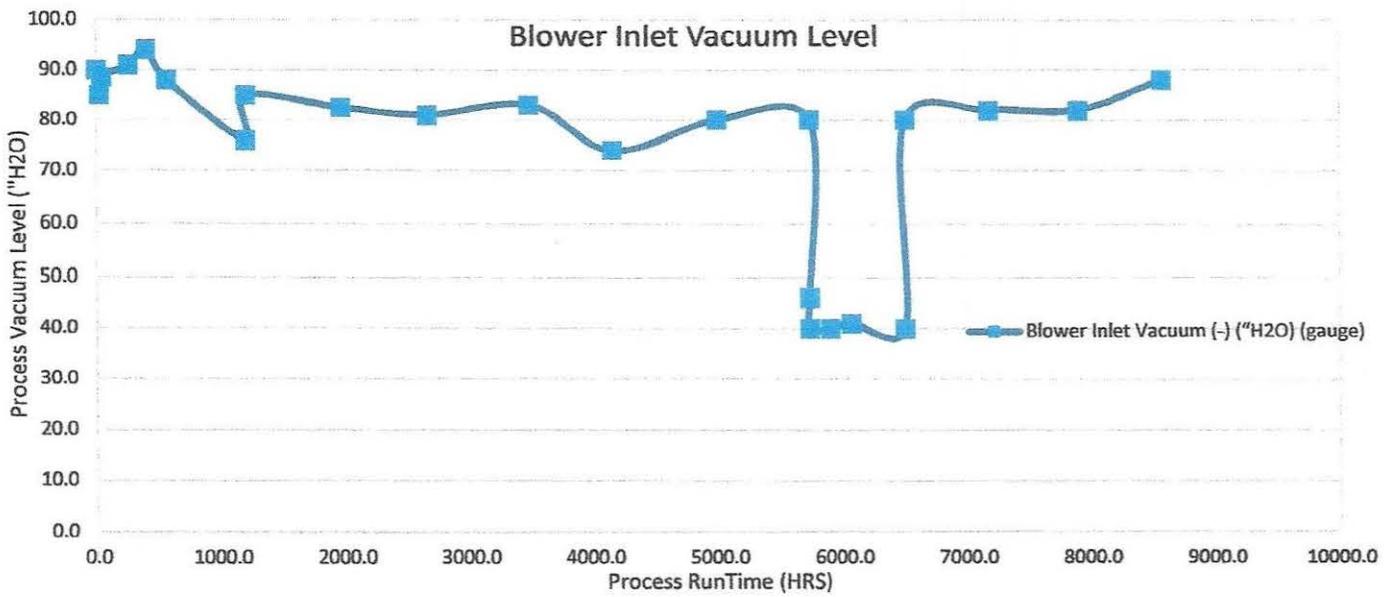
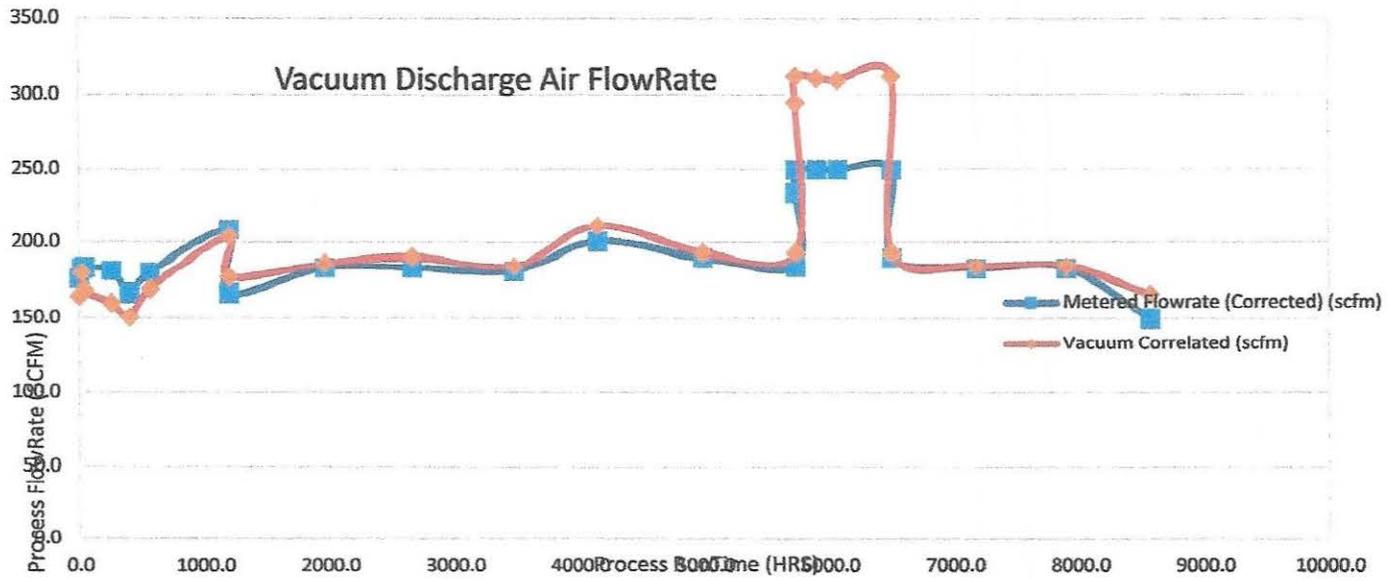


TABLE 3

DICK'S CAR CARE SVE PROJECT – REGRESSION MODEL – CUMULATIVE GRO RECOVERY FROM VADOSE ZONE
 [by METCO – December 2016]

The project had three 4" x 48 ft SVE wells triangulating the source area, with 36 ft of screen each. It ran for 11 of 12 months at 80-85 "H2O vacuum at blower inlet, generating a total discharge flowrate of 160-200 scfm (which includes the added dilution flow for vacuum control). Month 9 was given over to a vacuum test at 1/2 that primary target vacuum, namely 40 "H2O (and higher dilution flow). The discharge flowrate for that test month was ~310 scfm, with recovery rate ~1/2 the level at 80 "H2O.

The model assumes that uniform imposed conditions generated the data. Therefore, for the regression analysis, the last 4 months of cumulative-lbs data had 180 lbs (each) added to them to correct for the estimated lost recovery during the 1 month of lower vacuum testing (mid-July to mid-August, 2016). Also, the extra samples taken during the month of the test were not included in the regression.

Model Parameters

M1	3797	[Lbs]	Reservoir 1 Initial Contaminant Mass
k1	0.002020	[1/Hrs]	Reservoir 1 recovery rate constant = ln(2)/(half life → [half life = 343 hrs = 14.3 days]
M2	6719	[Lbs]	Reservoir 2 Initial Contaminant Mass
k2	0.0001460	[1/Hrs]	Reservoir 2 recovery rate constant = ln(2)/(half life → [half life = 4748 hrs = 198 days]

First Order Recovery Model: $GRO\ Cumulative\ Lbs = 3797(1 - \exp(-0.002020\ Hrs)) + 6719(1 - \exp(-0.0001460\ Hrs))$

(t-ratio) → (13.0) (10.5) (13.9) (4.43)
 standard error of the fit = 90.5 lbs Multi R-Squared = 0.9993 17 residuals / 13 degrees of freedom
 [Note: 5 more actual data than that listed below, all in the first month, were brought into the regression]

M1 + M2 = 10516 lbs = total mass accessible to vacuum recovery, according to the fitted model above

(Note: the accuracy of all parameter estimates is no better than 2 significant figures, at best)

Month	Model Hours	Model Cumulative Recovered Lbs Reservoir 1	Model Cumulative Recovered Lbs Reservoir 2	Model Cumulative Recovered Lbs Combined	Model Recovery Rate Lbs/Day Combined	Actual Data (uncorrected) Cumulative Recovered Lbs	Actual (At-Sample) Hours
0	0	0	0	0	207.6	-	0
1	567	2589	534	3123	80.2	3043	567
2	1200	3461	1080	4540	36.1	4382	1200
3	1969	3726	1679	5404	21.1	5438	1969
4	2664	3780	2165	5945	16.8	6051	2664
5	3480	3794	2677	6470	14.3	6570	3480
6	4152	3796	3054	6850	12.9	6887	4152
7	4993	3797	3478	7274	11.4	7225	4993
8	5735	3797	3811	7608	10.2	7510	5735
9	6506	3797	4120	7917	9.1	7645	6506
10	7177	3797	4363	8160	8.3	7957	7177
11	7898	3797	4598	8395	7.4	8262	7898
12	8572	3797	4797	8594	6.7	8484	8572
12+	8572	3797	4797	8594	6.7		
13	9302	3797	4991	8788	6.1		
14	10032	3797	5166	8963	5.4		
15	10763	3797	5323	9120	4.9		
16	11493	3797	5464	9261	4.4		
17	12224	3797	5591	9388	4.0		
18	12954	3797	5705	9502	3.6		
19	13684	3797	5808	9605	3.2		
20	14415	3797	5900	9697	2.9		
21	15145	3797	5983	9780	2.6		
22	15876	3797	6057	9854	2.3		
23	16606	3797	6124	9921	2.1		
24	17336	3797	6184	9981	1.9		

Accessible but unrecovered GRO: $10516 - 8484 = 2032\ lbs$
 $8484 / 10516 = 0.807 \rightarrow 80.7\%$ overall recovery (per the model)
 With $4797 / 6719 = 71.4\%$ of the larger, slower Reservoir 2 and 100% recovery of the smaller, faster Reservoir 1

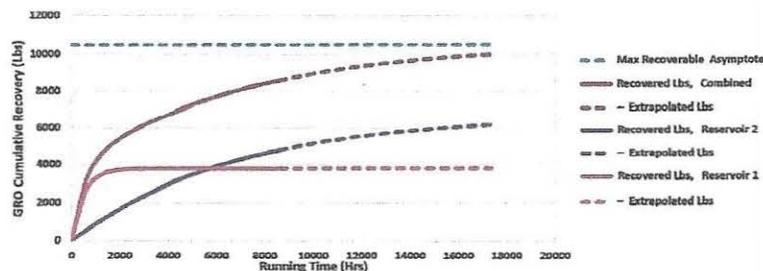
If the SVE operation could have run for a second full year, the regression model projects that ~1500 lbs of additional GRO contamination would have been removed, yielding a final total recovery near 95%. See the Figure below.

Final GRO recovery (actual) was quantified to have 22.3% PVOC content (benzene, toluene, ethylbenzene, xylenes, trimethylbenzenes). Naphthalene was detected occasionally but was negligible. MtBE was uniformly below detection limits. 4 VOC analyses over the course of the year showed no regulated analytes other than the 5 PVOCs indicated. The lighter components (benzene, toluene) came out earlier and faster, and the heavier components (xylenes, trimethylbenzenes) more slowly. The PVOC component of the recovered GRO increased systematically over the course of the year from ~16% initially to >30% at shutdown, with the cumulative average for the year, as indicated, 22.3%. Three sets of measurements of recovery from the individual SVE remedial wells were made over the first 6 months. The three SVE wells consistently showed recovery rates within a factor of 2 of each other.

See Figure 1c which compares the regression model profile to the actual cumulative lbs of GRO recovery data.

Then note the Figure below indicating the 2 sub-parts of the regression model, extrapolated to twice as far as the empirical data.

Dick's Car Care - SVE Cumulative Recovery (GRO)



**DKS Transport
Services, LLC**
N7349 548th Street
Menomonie, WI 54751
715-556-2604

C. Z. Investigative Waste
INVOICE 10-30 2015

CUSTOMER Dave Christian % Marco JOB NAME Dick's Cal Care
709 Gillette St Barraboo WI
La Cross WI 54603

CASH CHECK # _____ IN-HOUSE ACCOUNT

QUANTITY		DESCRIPTION	QTY.	UNIT PRICE		AMOUNT	
DATE	SHIPPED						
	1	mobilization	1	274	-	274	-
	17	Haul soil drums to Advanced Asphalt - Eau Claire WIS	17	103	-	1751	-
		Thank You					
		<i>Mark Schlegel</i>					
						TOTAL	2025-

Due upon receipt of invoice.
1.5% per month Service Charge (18% Annual Percentage Rate) will be added to past due accounts.

SIGNATURE _____

145

C. Z. Investigative
Waste



Construction Services, Inc.
P.O. BOX 222
2520 WILSON ST.
MENOMONIE, WI 54751

Invoice

DATE	INVOICE #
11/28/2011	28682

BILL TO
DAVE CHRISTIAN %METCO 1421 US HIGHWAY 16 LA CROSSE, WI 54601

TERMS	Due on receipt
P.O. NO. OR PROJECT	
DICK'S CAR CARE	

QTY.	DESCRIPTION	RATE	AMOUNT
1	MOBILIZATION	274.00	274.00
11	PICK UP, HAUL, AND DISPOSE OF SOIL DRUMS	103.00	1,133.00
	DISPOSAL AT VEOLIA SEVEN MILE CREEK LANDFILL IN EAU CLAIRE WI		

*Env. Waste Disposal
Reviewed 11/29/11
OK*

A service charge of 1 1/2% per month (18% annual percentage rate) will be charged on accounts over 30 days past due. If you find any problems or have questions regarding this invoice, please call our office within five (5) days. If not, we assume it is entirely correct and you will be responsible for all charges. If payment is not made as stated, all costs and attorneys fees incurred in enforcing this invoice will be the responsibility of the customer and/or owner.

Subtotal \$1,407.00

SUBCONTRACTOR IDENTIFICATION NOTICE
AS REQUIRED BY THE WISCONSIN CONSTRUCTION LIEN LAW, CONTRACTOR HEREBY NOTIFIES THAT PERSONS OR COMPANIES FURNISHING LABOR OR MATERIALS FOR THE CONSTRUCTION ON OWNER'S LAND MAY HAVE LIEN RIGHTS ON THAT LAND OR ON THE BUILDINGS ON THAT LAND IF THEY ARE NOT PAID FOR SUCH LABOR OR MATERIALS. THOSE ENTITLED TO LIEN RIGHTS, IN ADDITION TO THE UNDERSIGNED CONTRACTOR ARE THOSE WHO CONTRACT DIRECTLY WITH THE OWNER OR THOSE WHO GIVE THE OWNER NOTICE WITHIN 60 DAYS AFTER THEY FIRST FURNISH LABOR OR MATERIALS FOR THE CONSTRUCTION. ACCORDINGLY, OWNER PROBABLY WILL RECEIVE NOTICES FROM THOSE WHO FURNISH LABOR OR MATERIALS FOR THE CONSTRUCTION, AND SHOULD GIVE A COPY OF EACH NOTICE RECEIVED TO HIS MORTGAGE LENDER, IF ANY. CONTRACTOR AGREES TO COOPERATE WITH THE OWNER AND HIS LENDER, IF ANY, TO SEE THAT ALL POTENTIAL LIEN CLAIMANTS ARE DULY PAID.

Sales Tax (0.00)	\$0.00
Total Due	\$1,407.00
Payments/Credits	\$0.00
Balance Due	\$1,407.00

TOPSOIL, FILL, GRAVEL, LANDSCAPE ROCK, BOULDER CREEK STONE
PLUS MUCH MORE.
A BUCKET ... A BARRELL ... OR WE CAN DELIVER BY THE TRUCK LOAD.
HOME & COMMERCIAL EXCAVATING, BASEMENTS, DRIVEWAYS, DOZER WORK AND LOADER WORK

C.Z. Investigative
Waste

DKS Construction Services, Inc.

2520 WILSON ST.
MENOMONIE, WI 54751

Invoice

DATE	INVOICE #
3/31/2010	27955

BILL TO
DAVE CHRISTIAN 3220 7TH STREET BARABOO WI 53913

TERMS	Due on receipt
P.O. NO. OR PROJECT.	
DRUMS	

QTY.	DESCRIPTION	RATE	AMOUNT
1	MOBILIZATION/DEMOBILIZATION	266.47	266.47
18	PICK UP, HAUL, AND DISPOSE OF DRUMS DISPOSAL AT LINCOLN COUNTY LANDFILL	100.15	1,802.70

Waste Disposal
Reviewed 3/31/10
OK


A service charge of 1 1/2% per month (18% annual percentage rate) will be charged on accounts over 30 days past due. If you find any problems or have questions regarding this invoice, please call our office within five (5) days. If not, we assume it is entirely correct and you will be responsible for all charges. If payment is not made as stated, all costs and attorneys fees incurred in enforcing this invoice will be the responsibility of the customer and/or owner.

Subtotal \$2,069.17

Sales Tax (0.00) \$0.00

Total Due \$2,069.17

SUBCONTRACTOR IDENTIFICATION NOTICE

AS REQUIRED BY THE WISCONSIN CONSTRUCTION LIEN LAW, CONTRACTOR HEREBY NOTIFIES THAT PERSONS OR COMPANIES FURNISHING LABOR OR MATERIALS FOR THE CONSTRUCTION ON OWNER'S LAND MAY HAVE LIEN RIGHTS ON THAT LAND OR ON THE BUILDINGS ON THAT LAND IF THEY ARE NOT PAID FOR SUCH LABOR OR MATERIALS. THOSE ENTITLED TO LIEN RIGHTS, IN ADDITION TO THE UNDERSIGNED CONTRACTOR ARE THOSE WHO CONTRACT DIRECTLY WITH THE OWNER OR THOSE WHO GIVE THE OWNER NOTICE WITHIN 60 DAYS AFTER THEY FIRST FURNISH LABOR OR MATERIALS FOR THE CONSTRUCTION. ACCORDINGLY, OWNER PROBABLY WILL RECEIVE NOTICES FROM THOSE WHO FURNISH LABOR OR MATERIALS FOR THE CONSTRUCTION, AND SHOULD GIVE A COPY OF EACH NOTICE RECEIVED TO HIS MORTGAGE LENDER, IF ANY. CONTRACTOR AGREES TO COOPERATE WITH THE OWNER AND HIS LENDER, IF ANY, TO SEE THAT ALL POTENTIAL LIEN CLAIMANTS ARE DULY PAID.

TOPSOIL, FILL, GRAVEL, LANDSCAPE ROCK, BOULDER CREEK STONE
PLUS MUCH MORE.
A BUCKET ... A BARRELL ... OR WE CAN DELIVER BY THE TRUCK LOAD.
HOME & COMMERCIAL EXCAVATING, BASEMENTS, DRIVEWAYS, DOZER WORK AND LOADER WORK

C.4. CONSTRUCTION DOCUMENTATION
 DICK'S CAR CARE

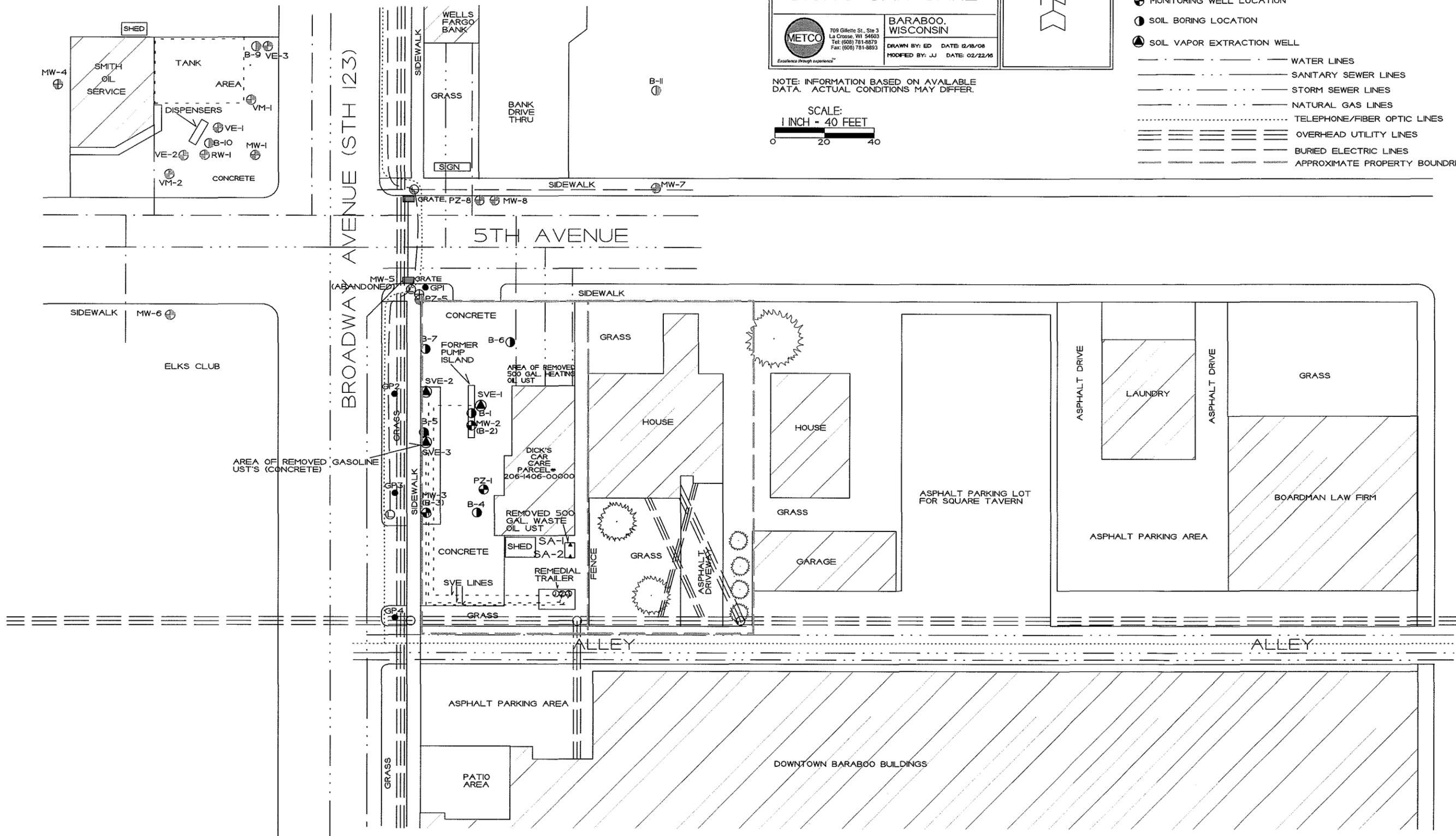
METCO
 709 Gillette St., Ste 3
 La Crosse, WI 54603
 Tel: (608) 781-8879
 Fax: (608) 781-8893

BARABOO, WISCONSIN
 DRAWN BY: ED DATE: 02/18/08
 MODIFIED BY: JJ DATE: 02/22/06

NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.



- MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE)
 - SOIL BORING LOCATION (SMITH OIL SERVICE)
 - GEOPROBE BORING LOCATION (P2ESA)
 - SOIL SAMPLE LOCATION (UST REMOVAL)
 - MONITORING WELL LOCATION
 - SOIL BORING LOCATION
 - SOIL VAPOR EXTRACTION WELL
-
- WATER LINES
 - SANITARY SEWER LINES
 - STORM SEWER LINES
 - NATURAL GAS LINES
 - TELEPHONE/FIBER OPTIC LINES
 - OVERHEAD UTILITY LINES
 - BURIED ELECTRIC LINES
 - APPROXIMATE PROPERTY BOUNDARIES



C.S. Decommissioning
of Remedial System



REI Engineering, Inc.
4080 N. 20th Avenue
Wausau, WI 54401
TEL: 715-675-9784

INVOICE

November 23, 2016
Invoice No: 31350

Dave Christian
METCO
709 Gillette Street, Suite #3
La Crosse, WI 54603

Project Mgr: David Larsen

Project 7003X Dick's Car Care
Professional Services from October 3, 2016 to November 20, 2016

Billing Group 1 PECFA
PECFA

Fee		2,787.18
	Total this Billing Group	\$2,787.18
	Total this Invoice	\$2,787.18

VARIANCE

Outstanding Invoice(s)

Invoice Number	Date	Amount Due
31091	10/12/2016	1,750.00
Total		1,750.00

All invoices are due upon receipt. A late charge of 1.5% will be added to any unpaid balance after 30 days

EFT, Visa/MasterCard Accepted (Credit Card Max of \$2,500/yr.)

Proj. Mgmt = \$438.68
 Job Prep = \$522.00
 Field Time = \$1044.00
 Travel = \$520.00
 Mileage = \$262.50
 \$2787.18

SUE System Removal
 Reviewed 11/28/16
 OK


Attachment D/Maintenance Plan(s)

D.1 Descriptions of maintenance action(s) required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required via cap maintenance plan.

D.2 Location map(s)

D.3 Photographs

D.4 Inspection log

D.1 Description of Maintenance Action(s)

CAP MAINTENANCE PLAN

October 3, 2017

Property Located at:
620 Broadway Street
Baraboo, WI 53913

WDNR BRRTS# 03-57-258614

TAX KEY# 206-1406-00000

Introduction

This document is the Maintenance Plan for a concrete and building cap at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the existing concrete and building cap which addresses or occupies the area over the contaminated groundwater plume or soil.

More site-specific information about this property may be found in:

- The case file in the DNR South Central regional office
- BRRTS on the Web (DNR's internet based data base of contaminated sites):
<http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>
- GIS Registry PDF file for further information on the nature and extent of contamination and
- The DNR project manager for Sauk County.

Description of Contamination

Soil contaminated by petroleum is located at a depth of 12-49 feet below ground surface. Groundwater contaminated by petroleum is located at a depth of 46-50 feet below ground surface. The extent of the soil and groundwater contamination is shown on Attachment D.2.

Description of the Cap to be maintained

The cover consists of 4-6 inches of concrete and an existing building foundation (concrete slab on-grade, 4-6 inches thick). The Cap area is shown on Attachment D.2.

Cover Barrier Purpose

The concrete and building cover over the contaminated soil and groundwater serves as a partial infiltration barrier to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch. NR140, Wisconsin Administrative Code. Based on the current and future use of the property, the barrier should function as intended unless disturbed.

Annual Inspection

The concrete and building cover overlying the contaminated soil and as depicted in Attachment D.2 will be inspected once a year, normally in the spring after all snow and ice is gone, for deterioration, cracks and other potential problems that can cause exposure to underlying soils or additional infiltration through concrete. The inspections will be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to become exposed and where infiltration from the surface will not be effectively minimized will be documented.

A log of the inspections and any repairs will be maintained by the property owner and is included as Form 4400-305 Continuing Obligations and Maintenance Log. The log will include recommendations for necessary repair of any areas where underlying soils are exposed and where infiltration from the surface will not be effectively minimized. Once repairs are completed, they will be documented in the inspection log. A copy of the inspection log will be kept at the address of the property owner and available for submittal or inspection by Wisconsin Department of Natural Resources ("WDNR") representatives upon their request.

Note: The WDNR may, in some instances, require in the case closure letter that the inspection log be submitted at least annually after every inspection. If the case closure letter requires that, then a copy of the inspection log must be submitted to the WDNR at least annually after every inspection.

Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling or larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment ("PPE"). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored and disposed of by the owner in accordance with applicable local, state and federal law.

In the event concrete or building cover overlying the contaminated soil and groundwater plume is removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the WDNR or its successor.

The property owner, in order to maintain the integrity of the cap, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cover or Cap

The following activities are prohibited on any portion of the property where the cap is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; 6) construction or placement of a building or other structure; or 7) changing the use or occupancy of the property to a residential exposure setting, which may include certain uses, such as single or multiple family residences, a school, day care, senior center, hospital, or similar residential exposure settings.

If removal, replacement or other changes to a cover, or a building which is acting as a cover, are considered, the property owner will contact DNR at least 45 days before taking such an action, to determine whether further action may be necessary to protect human health, safety, or welfare or the environment, in accordance with s. NR 727.07, Wis. Adm. Code.

Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

Contact Information

October 2017

Current Site Contact:

Dave Christian
707 Angle Street
Baraboo, WI, 53913-4500

Signature: _____



(DNR may request signature of affected property owners, on a case-by-case basis)

Consultant:

METCO
Ron Anderson
709 Gillette Street, Suite 3
La Crosse, WI 54603
(608) 781-8879

WDNR:

John Mason
3911 Fish Hatchery Road
Fitchburg, WI, 53711
(608) 275-3222

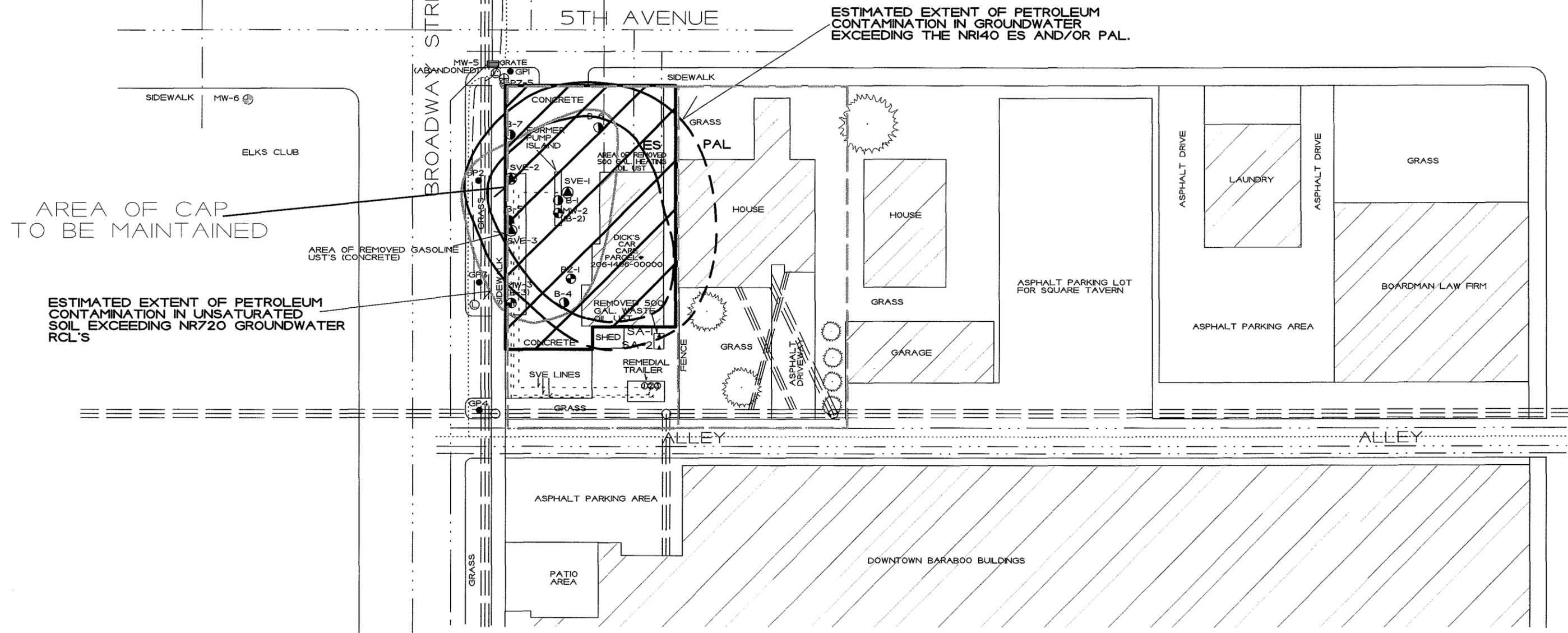
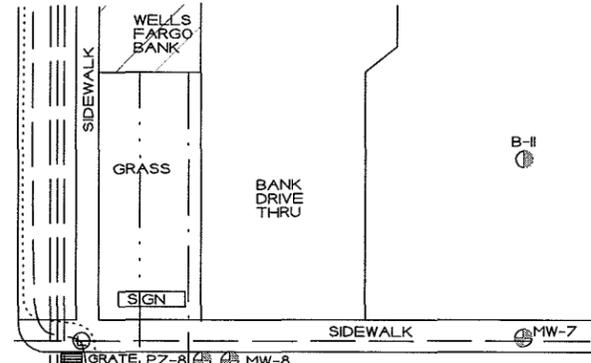
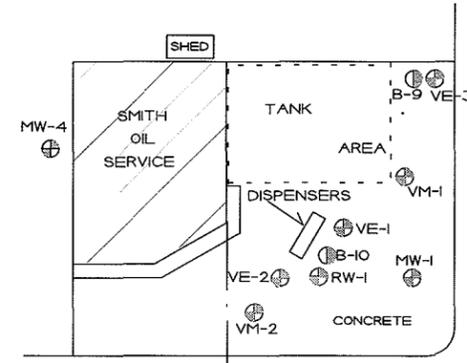
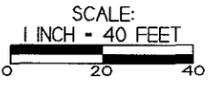
D.2. LOCATION MAP
 DICK'S CAR CARE

METCO
 709 Gillette St., Ste. 3
 La Crosse, WI 54603
 Tel: (608) 781-8878
 Fax: (608) 781-8893
 Experience through experience™

BARABOO, WISCONSIN
 DRAWN BY: ED DATE: 12/18/08
 MODIFIED BY: JJ DATE: 02/22/16

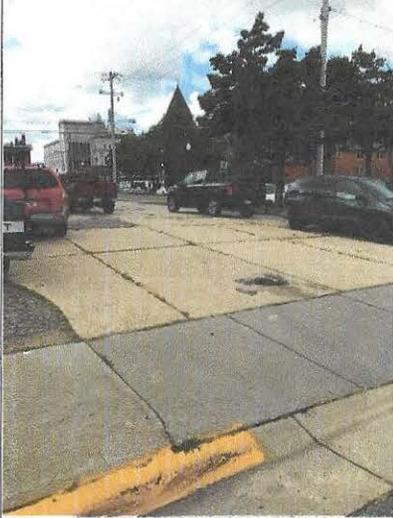
- ⊕ MONITORING/REMEDIAL WELL LOCATION (SMITH OIL SERVICE)
 - ⊙ SOIL BORING LOCATION (SMITH OIL SERVICE)
 - GEOPROBE BORING LOCATION (P2ESA)
 - ▲ SOIL SAMPLE LOCATION (UST REMOVAL)
 - ⊕ MONITORING WELL LOCATION
 - ⊙ SOIL BORING LOCATION
 - ⊕ SOIL VAPOR EXTRACTION WELL
- WATER LINES
 - SANITARY SEWER LINES
 - STORM SEWER LINES
 - NATURAL GAS LINES
 - TELEPHONE/FIBER OPTIC LINES
 - OVERHEAD UTILITY LINES
 - BURIED ELECTRIC LINES
 - APPROXIMATE PROPERTY BOUNDRIES

NOTE: INFORMATION BASED ON AVAILABLE DATA. ACTUAL CONDITIONS MAY DIFFER.



{Click to Add/Edit Image}

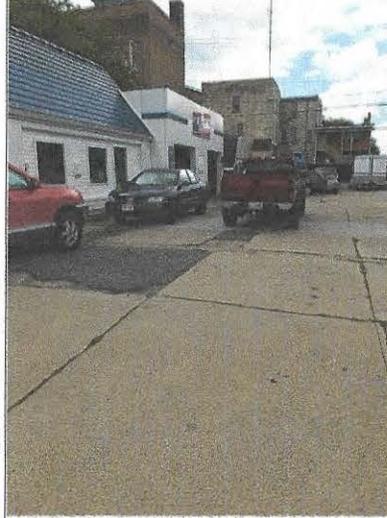
Date added: 10/03/2017



Title: Looking southwest at the area of concrete cap.

{Click to Add/Edit Image}

Date added: 10/03/2017



Title: Looking south at the area of concrete cap.

{Click to Add/Edit Image}

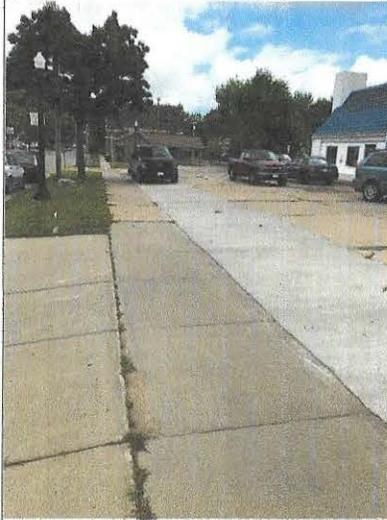
Date added: 10/03/2017



Title: Looking southeast at the area of concrete cap.

{Click to Add/Edit Image}

Date added: 12/13/2017



Title: Looking northeast at the area of concrete cap.

D. 4. Inspection Log

Directions: In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. 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.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name Dick's Car Care	BRRTS No. 03-57-258614
--	----------------------------------

Inspections are required to be conducted (see closure approval letter): <input checked="" type="radio"/> annually <input type="radio"/> semi-annually <input type="radio"/> other – specify _____	When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter): <p style="text-align: center;">john.mason@wisconsin.gov</p>
--	--

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N

Attachment E/Monitoring Well Information

Monitoring wells MW-7, MW-8, and PZ-8 (originally installed as part of the neighboring Smith Oil site and transferred to Dick's Car Care) will be transferred to the City of Baraboo for the Circus City Cleaners site (BRRTS #: 02-57-551681). Email correspondence, map noting wells to be transferred, and well construction forms are included.

All other wells have been located and will be properly abandoned upon WDNR granting closure to the site.

Mason, John M - DNR

From: Mason, John M - DNR
Sent: Friday, March 23, 2018 3:47 PM
To: 'Pinion, Tom'
Cc: Bannister, Trevor A - DNR
Subject: RE: DNR request for the City of Baraboo to maintain three monitoring wells in the City ROW near 710 Broadway Street

Thanks Tom.
-John

From: Pinion, Tom [mailto:tpinion@cityofbaraboo.com]
Sent: Thursday, March 22, 2018 8:00 AM
To: Mason, John M - DNR <John.Mason@wisconsin.gov>
Cc: Bannister, Trevor A - DNR <TrevorA.Bannister@wisconsin.gov>
Subject: RE: DNR request for the City of Baraboo to maintain three monitoring wells in the City ROW near 710 Broadway Street

John,

I have no objection to your "proposal" below. That block of 5th Avenue was reconstructed in 2017 so we have no road construction planned on that block for the foreseeable future.

Thanks

tom

Thomas S. Pinion, PE
Director of Public Works/City Engineer
135 Fourth Street
Baraboo, WI 53913
Office: 608-355-2730
Cell: 608-393-9945
tpinion@cityofbaraboo.com

From: Mason, John M - DNR [mailto:John.Mason@wisconsin.gov]
Sent: Monday, March 19, 2018 5:07 PM
To: Pinion, Tom <tpinion@cityofbaraboo.com>
Cc: Bannister, Trevor A - DNR <TrevorA.Bannister@wisconsin.gov>
Subject: DNR request for the City of Baraboo to maintain three monitoring wells in the City ROW near 710 Broadway Street

Hello Tom,

I have been the DNR project manager for the "Smith Oil Service" site at 701 Broadway Street and "Dick's Car Care" at 620 Broadway Street. Remediation has been completed and the Smith Oil site was closed out in 2016 and the Dick's Car Care site just got approval for case closure also.

As a requirement for case closure, monitoring wells need to be properly abandoned (filled with bentonite sealing material) as per NR 141. Three of the remaining wells (MW-7, MW-8, and PZ-8) will be useful for another site in

Baraboo, "Circus City Cleaners," located at 721 Broadway Street. The wells are located on the North side of the 5th Avenue right-of-way next to the Wells Fargo property at 710 Broadway Street. A map of the well locations is attached. I also attached the well construction forms.

At this time, the DNR does not have someone associated with the Circus City Cleaners (responsible party) to be responsible for the wells, so we are requesting that the City of Baraboo maintain these wells in the meantime. We would appreciate it if the City notified us of possible activities such as roadwork that could potentially damage the wells. Eventually the wells will need to be properly abandoned, and we anticipate a responsible party will be identified by that time to do the work.

Notifications regarding potential damage to the wells would go to DNR project manager Trevor Bannister. His phone number is 608-275-3490. His email is trevora.bannister@wisconsin.gov.

I hope this is not an inconvenience. Please let me know if you have any questions. We are in the case closure process for Dick's Car Care, so your response is greatly appreciated. My email address is john.mason@wisconsin.gov and my phone number is 608-275-3222. Thanks.

-John

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

John Mason

Hydrogeologist, Remediation and Redevelopment Program, Environmental Management Division

Wisconsin Department of Natural Resources

3911 Fish Hatchery Road, Fitchburg, WI 53711

Phone: (608) 275-3222

john.mason@wisconsin.gov



City/Project Name Smith Oil/701 Broadway/Baraboo	Local Grid Location of Well <input type="checkbox"/> N. <input type="checkbox"/> E. ft. <input type="checkbox"/> S. ft. <input type="checkbox"/> W.	Well Name MW-7
City License, Permit or Monitoring Number	Grid Origin Location Lat. 43° 28' 20" Long. 89° 44' 40"	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	St. Plane _____ ft. N. _____ ft. E.	Date Well Installed 03/10/95
Distance Well Is From Waste/Source Boundary 50-100 ft.	Section Location of Waste/Source NW 1/4 of SE 1/4 of Sec. 35, T. 12 N, R. 6 <input type="checkbox"/> W.	Well Installed By: (Person's Name & Firm) Charles Peterson Environmental & Foundation Drilling, Inc.
Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Location of Well Relative to Waste/Source <input type="checkbox"/> Upgradient <input checked="" type="checkbox"/> Sidegradient <input checked="" type="checkbox"/> Downgradient <input type="checkbox"/> Not Known	

1. Protective Pipe, top elevation **0.0** ft. MSL

2. Well casing, top elevation **0.5** ft. MSL

3. Land surface elevation **878.22** ft. MSL

4. Surface seal, bottom _____ ft. MSL or **1.0** ft.

2. USCS classification of soil near screen:
GP GM GC GW SW SP
SM SC ML MH CL CH
Bedrock

13. Sieve analysis attached? Yes No

14. Drilling method used: Rotary 50
Hollow Stem Auger 41
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): _____

5. Bentonite seal, top _____ ft. MSL or **29.0** ft.

F. Fine sand, top _____ ft. MSL or **34.0** ft.

G. Filter pack, top _____ ft. MSL or **36.0** ft.

H. Screen joint, top _____ ft. MSL or **38.0** ft.

I. Well bottom _____ ft. MSL or **53.0** ft.

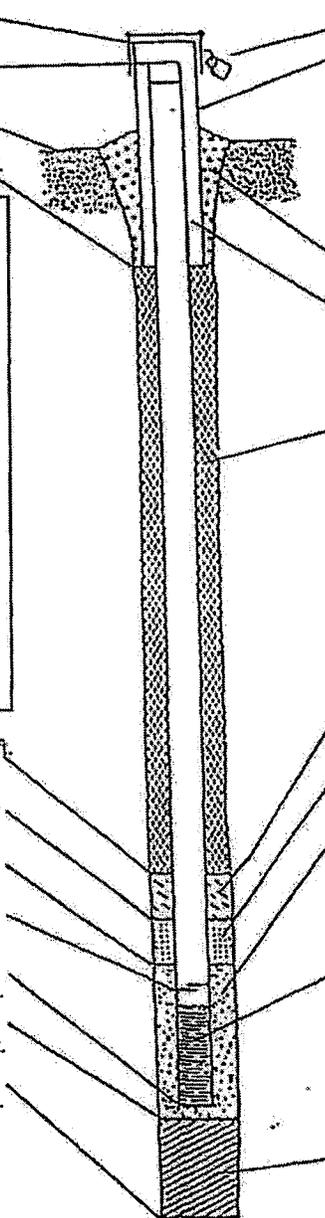
J. Filter pack, bottom _____ ft. MSL or **54.0** ft.

K. Borehole, bottom _____ ft. MSL or **54.0** ft.

L. Borehole, diameter **8.3** in.

M. O.D. well casing **2.10** in.

N. I.D. well casing **2.03** in.



1. Cap & lock? Yes No

2. Protective cover pipe:
a. Inside diameter: **6.0** in
b. Length: **1.0** ft
c. Material: Steel 04
Other

d. Additional protection? Yes No
If yes, describe: _____

3. Surface seal: Concrete 01
Other

4. Material between well casing & protective pipe: Bentonite 30
Annular space seal 31
Other

5. Annular space seal:
a. Granular Bentonite 32
b. _____ Lbs/gal mud weight..... Bentonite-sand slurry 33
c. _____ Lbs/gal mud weight..... Bentonite slurry 34
d. _____ % Bentonite..... Bentonite-cement grout 35
e. **700#** Ft³ volume added for any of the above
f. How installed: Tremie 01
Tremie pumped 02
Gravity 03

6. Bentonite seal:
a. Bentonite granules 36
b. 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 37
c. **3/8" Bentonite Chips** Other

7. Fine sand material: Manufacturer, product name and mesh size
a. **Silica sand**
b. Volume added **50#** ft³

8. Filter pack material: Manufacturer, product name and mesh size
a. **Badger Mining flint #30**
b. Volume added **500#** ft³

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 **Boart-Northern Air**
c. Slot size: **0.010** in
d. Slotted Length: **14.6** ft

11. Backfill material (below filter pack): None 12
Other

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Matthew J. Hood Firm: Environmental & Foundation Drilling, Inc. / METCO

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

Facility/Project Name <u>Smith Oil</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-8</u>	
Facility License, Permit or Monitoring No.		Local Grid Origin (estimated: <input type="checkbox"/>) or Well Location Lat. " Long. " or " or "		Wis. Unique Well No. <u>VX697</u> DNR Well ID No.	
Facility ID		St. Plane ft. N. ft. E. S/C/N		Date Well Installed <u>01/11/2010</u>	
Type of Well Well Code <u>MW1</u>		Section Location of Waste/Source 1/4 of 1/4 of Sec. T. N, R. <input type="checkbox"/> E <input type="checkbox"/> W		Well Installed By: Name (first, last) and Firm <u>Craig Plant</u> <u>Ground Source</u>	
Distance from Waste/Source ft.		Enf. Stds. Apply <input type="checkbox"/>		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 ----- ft. MSL

B. Well casing, top elevation ----- ft. MSL

C. Land surface elevation ----- ft. MSL

D. Surface seal, bottom ----- 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
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): _____

E. Bentonite seal, top ----- ft. MSL or ----- ft.

F. Fine sand, top ----- ft. MSL or 3.8 ft.

G. Filter pack, top ----- ft. MSL or 4.0 ft.

H. Screen joint, top ----- ft. MSL or 4.2 ft.

I. Well bottom ----- ft. MSL or 5.2 ft.

J. Filter pack, bottom ----- ft. MSL or 52.5 ft.

K. Borehole, bottom ----- ft. MSL or 52.5 ft.

L. Borehole, diameter ----- 8 in.

M. O.D. well casing 2.39 in.

N. I.D. well casing 2.03 in.

1. Cap and lock? Yes No

2. Protective cover pipe:
a. Inside diameter: ----- 8 in.
b. Length: ----- 1 ft.
c. Material: Steel 04
Other

d. Additional protection? Yes No
If yes, describe: _____

3. Surface seal: Bentonite 30
Concrete 01
Other

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. Lbs/gal mud weight... Bentonite slurry 31
d. % Bentonite... Bentonite-cement grout 50
e. Ft³ 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. Badger 40/60
b. Volume added .5 ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. Badger 20/40
b. Volume added _____ ft³

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 Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 12 ft.

11. Backfill material (below filter pack): None 14
Other

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Craig Plant Firm Ground Source

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.

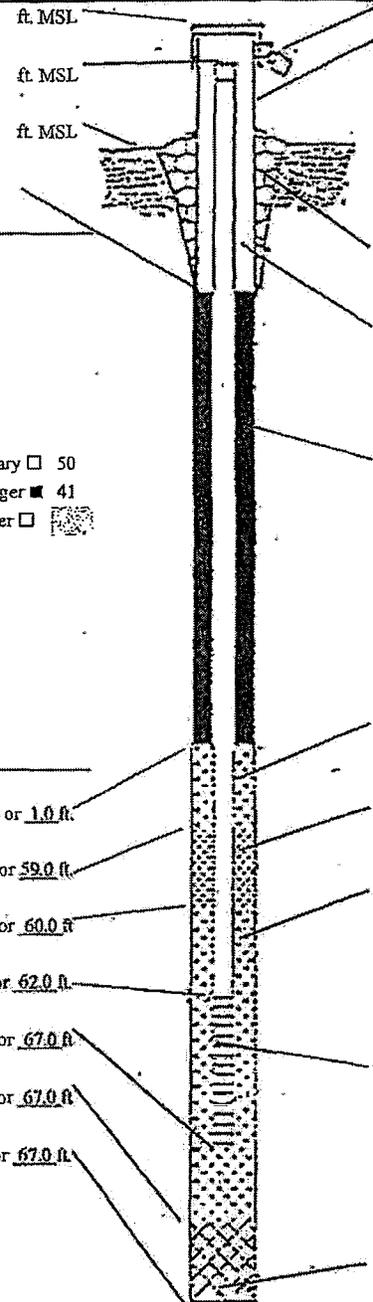
Facility/Project Name Smith Oil Service, Bamboo, WI		Local Grid Location of Well <input type="checkbox"/> N <input type="checkbox"/> E ___ ft. <input type="checkbox"/> S ___ ft. <input type="checkbox"/> W.		Well Name PZ-8	
Facility License, Permit or Monitoring Number		Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/>		Wis. Unique Well No. VZ 686	
Facility ID 03-57-002344		Lat. ___ ° ___ ' ___ " or St. Plane ___ ft. N. ___ ft. E. S/CN		Date Well Installed 02/16/09	
Type of Well Well Code 12/pz		Section Location of Waste/Source 1/4 of ___ 1/4 of Sec. ___ T. ___ N, R. ___		<input type="checkbox"/> E. <input checked="" type="checkbox"/> W. Well Installed By: Name (first, last) and Firm Nick Dispensa: Tetra Tech	
Distance Well is From Waste/Source ___ ft.	Enf. Stds. Apply <input type="checkbox"/>	Location of Well Relative to Waste/Source <input type="checkbox"/> Upgradient <input type="checkbox"/> Sidegradient <input type="checkbox"/> Downgradient <input checked="" type="checkbox"/> Not Known	Gov. Lot Number		

A. Protective pipe, top elevation flushmount ft. MSL

B. Well casing, top elevation ft. MSL

C. Land surface elevation ft. MSL

D. Surface seal, bottom ___ ft. MSL or 0.0 ft.



- 1. Cap and lock? Yes No
- 2. Protective cover pipe:
 - a. Inside diameter: ___ in.
 - b. Length: ___ ft.
 - c. Material: Steel 04
Other
 - d. Additional protection? Yes No
If yes, describe: 2 bumper posts
- 3. Surface seal: Bentonite 30
Concrete 01
Other
- 4. Material between well casing and protective pipe: Bentonite 30
Other
- 5. Annular space seal:
 - a. Granular Bentonite 33
 - b. ___ lbs/gal mud weight. Bentonite-sand slurry 35
 - c. ___ lbs/gal mud weight. Bentonite slurry 31
 - d. ___ % Bentonite. Bentonite-cement grout 50
 - e. 900 lbs 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: Mfr, product name & mesh size
 - a. Red Flint 45-55
 - b. Volume added 50 lbs
- 8. Filter pack material: Mfr, product name & mesh size
 - a. Red Flint 80-120
 - b. Volume added 150 lbs
- 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 Diefdrich
 - c. Slot size: 0.010 in.
 - d. Slotted length: 20.0 ft.
- 11. Backfill material (below filter pack): None 14
Other

12. USCS classification of soil near screen:
 GP GM GC GW SW SP
 SM SC ML MH CL CH
 Bedrock Other

13. Sieve analysis performed? Yes No

14. Drilling method used: Rotary 50
Hollow Stem Auger 41
Other
4 1/2" HSA

15. Drilling fluid used: Water 02
Drilling Mud 03
Air 01
None 99

16. Drilling additives used? Yes No
Describe

17. Source of water (attach analysis, if required):

E. Bentonite seal, top ___ ft. MSL or 1.0 ft.

F. Fine sand, top ___ ft. MSL or 59.0 ft.

G. Filter pack, top ___ ft. MSL or 60.0 ft.

H. Screen joint, top ___ ft. MSL or 62.0 ft.

I. Well bottom ___ ft. MSL or 67.0 ft.

J. Filter pack, bottom ___ ft. MSL or 67.0 ft.

K. Borehole, bottom ___ ft. MSL or 67.0 ft.

L. Borehole, diameter 8.25 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 *[Signature]* Firm Tetra Tech

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.

Attachment F/Source Legal Documents

F.1 Deed

F.2 Certified Survey Map

F.3 Verification of Zoning

F.4 Signed Statement

F.I. Deed -
Source Property

000324

State Bar of Wisconsin Form 3-2003
QUIT CLAIM DEED

DOC# 964338

Document Number

Document Name

Recorded
July 07, 2008 AT 03:35PM

THIS DEED, made between Richard Christian

Shirley

("Grantor," whether one or more), and David Christian and Jennifer Christian

REGISTRAR'S OFFICE
SAUK COUNTY WI
RECEIVED FOR RECORD
Fee Amount: \$111.00
Fee Exempt 77.25-(8)

("Grantee," whether one or more).
Grantor quit claims to Grantee the following described real-estate, together with the rents, profits, fixtures and other appurtenant interests, in Sauk County, State of Wisconsin ("Property") (if more space is needed, please attach addendum):

Recording Area

Lot number Six(6), Block Twenty-two(22) City of Baraboo, County of Sauk, formerly Adams, Wisconsin.

Name and Return Address

Richard A Christian
620 Broadway
Baraboo, WI 53913

206-1406-00000
Parcel Identification Number (PIN)

This is not homestead property.
(is) (is not)

1 Dated 7-7-08

2 Richard Christian (SEAL) _____ (SEAL)

X * Richard Christian * _____ *

_____(SEAL) _____ (SEAL)

AUTHENTICATION

Signature(s) _____

authenticated on _____

TITLE: MEMBER STATE BAR OF WISCONSIN
(If not, _____
authorized by Wis. Stat. § 706.06)

THIS INSTRUMENT DRAFTED BY:

Richard A Christian

ACKNOWLEDGMENT

STATE OF WI)

Sauk) ss.
COUNTY)

Personally came before me on 7-7-2008
the above-named Richard Christian

to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.

Lisa Smith
* _____ *

Notary Public, State of WI

My commission (is permanent) (expires: 10-23-2011)

(Signatures may be authenticated or acknowledged. Both are not necessary.)

NOTE: THIS IS A STANDARD FORM. ANY MODIFICATION TO THIS FORM SHOULD BE CLEARLY IDENTIFIED.

QUIT CLAIM DEED

©2003 STATE BAR OF WISCONSIN

FORM NO. 3-2003

* Type name below signatures.

Sauk County Land Information/GIS Web Map



F.3. Verification of Zoning

206 Broadway Street

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community, Sauk County Land Information/GIS

Tax Parcels	PLSS Section Line	Road ROW	Easements		Lease	CSM	Plat of Survey
Tax Parcels - Ortho View	PLSS 1/4 Section	Railroad ROW	Prescriptive Right Of Way	Easement	Other	Subdivision	Assessor Plat
Lots	PLSS 1/4 1/4 Section	Municipal Boundaries	Private Ingress-Egress	Utility	Unknown	Condominium	Cemetery Plat
Meander Line	PLSS Fractional Lots	Building Footprints	Conservation	Flood	Transportation Plat		

FOR INFORMATIONAL PURPOSES ONLY Sauk County does not attest to the accuracy of the data contained herein and makes no warranty with respect to its correctness or validity. Data contained in this map is limited by the method and accuracy of its collection.



F.3. Verification of Zoning Legend

ZONING DISTRICTS - City Of Baraboo

Zoning Districts - City of Baraboo

-  Agricultural Transitional District
-  Agricultural Holding District
-  Central Business District
-  Central Neighborhood District
-  Highway Oriented Business District
-  Conservancy District
-  Industrial District, Enclosed Storage
-  Industrial District, Open Storage
-  Industrial / Business District
-  Planned Industrial / Business District
-  Manufactured Home (Type 1) Park District
-  Manufactured Home (Type 1) Single Family Residential District
-  Neighborhood Residential / Office District
-  Single Family Residential District
-  One and Two Family Residential District
-  One through Four Family Residential District
-  Four through Twelve Family Residential District
-  Thirteen Family and Up Residential District
-  Single Family Residential District

F.4. Signed Statement

WDNR BRRTS Case #: 03-57-258614

WDNR Site Name: Dick's Car Care

Geographic Information System (GIS) Registry of Closed Remediation Sites

In compliance with the revisions to the NR 700 rule series requiring certain closed sites to be listed on the Geographic Information System (GIS) Registry of Closed Remediation Sites (Registry) effective Nov., 2001, I have provided the following information.

To the best of my knowledge the legal descriptions provided and attached to this statement are complete and accurate.

Responsible Party:

David Christian owner
(print name/title)

 9-19-17
(signature) (date)

Attachment G/Notifications to Owners of Affected Properties

G.1 Deed – No off-site deeded properties have been impacted.

G.2 Certified Survey Map – No off-site deeded properties have been impacted.

G.3 Verification of Zoning – No off-site deeded properties have been impacted.

G.4 Signed Statement – No off-site deeded properties have been impacted.

Notification of Continuing Obligations and Residual Contamination

Form 4400-286 (9/15)

C. I. Page

The affected property is:

- the source property (the source of the hazardous substance discharge), but the property is not owned by the person who conducted the cleanup (a deeded property)
- a deeded property affected by contamination from the source property
- a right-of-way (ROW)
- a Department of Transportation (DOT) ROW

Include this completed page as an attachment with all notifications provided under sections A and B.

Contact Information

Responsible Party: The person responsible for sending this form, and for conducting the environmental investigation and cleanup is:

Responsible Party Name _____

Contact Person Last Name Christian	First Dave	MI	Phone Number (include area code) (608) 393-1867
Address 707 Angle Street	City Baraboo	State WI	ZIP Code 53913-4500
E-mail bautocarellc@gmail.com			

Name of Party Receiving Notification:

Business Name, if applicable: City of Baraboo Engineer

Title Mr.	Last Name Pinion	First Tom	MI	Phone Number (include area code) (608) 355-2730
Address 135 4th Street	City Baraboo	State WI	ZIP Code 53913	

Site Name and Source Property Information:

Site (Activity) Name Dicks's Car Care

Address 620 Broadway Street	City Baraboo	State WI	ZIP Code 53913
DNR ID # (BRRTS#) 03-57-258614	(DATCP) ID #		

Contacts for Questions:

If you have any questions regarding the cleanup or about this notification, please contact the Responsible Party identified above, or contact:

Environmental Consultant: METCO

Contact Person Last Name Powell	First Jason	MI	Phone Number (include area code) (608) 781-8879
Address 709 Gillette Street, Suite 3	City La Crosse	State WI	ZIP Code 54603
E-mail jasonp@metcohq.com			

Department Contact:

To review the Department's case file, or for questions on cleanups or closure requirements, contact:

Department of: Natural Resources (DNR)

Address 3911 Fish Hatchery Road	City Fitchburg	State WI	ZIP Code 53711
Contact Person Last Name Mason	First John	MI	Phone Number (include area code)
E-mail (Firstname.Lastname@wisconsin.gov) john.mason@wisconsin.gov			

**Notification of Continuing Obligations
and Residual Contamination**
Form 4400-286 (9/15)

Section B: ROW Notification: Residual Contamination and/or Continuing Obligations - Non-DOT ROWs

KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS

135 4th Street
Baraboo, WI, 53913

Dear Mr. Pinion:

I am providing this notification to inform you of the location and extent of contamination remaining in a right-of-way for which you are responsible, and of certain long-term responsibilities (continuing obligations) for which city of Baraboo may become responsible. I investigated a release of:

Gasoline

on 620 Broadway Street, Baraboo, WI, 53913 that has shown that contamination

has migrated into the right-of-way for which city of Baraboo is responsible.

I have responded to the release, and will be requesting that the Department of Natural Resources (DNR) grant case closure. Closure means that the DNR will not be requiring any further investigation or cleanup action to be taken. However, continuing obligations may be imposed as a condition of closure approval.

You have 30 days to comment on the proposed closure request:

The DNR will not review my closure request for at least 30 days after the date of this letter. As an affected right-of-way holder, you have a right to contact the DNR to provide any technical information that you may have that indicates that closure should not be granted for this site. If you would like to submit any information to the DNR that is relevant to this closure request, you should mail that information to the DNR contact: 3911 Fish Hatchery Road, Fitchburg, WI, 53711, or at john.mason@wisconsin.gov.

Residual Contamination:

Groundwater Contamination:

Groundwater contamination originated at the property located at: 620 Broadway Street, Baraboo, WI, 53913 .

The levels of

Benzene, Ethylbenzene, MTBE, Naphthalene, Toluene, Trimethylbenzenes, Xylene

contamination in the groundwater on your property are above the state groundwater enforcement standards found in ch. NR 140, Wis. Adm. Code.

Soil Contamination:

Soil contamination remains at:

620 Broadway Street in the area of the removed gasoline USTs and former pump islands.

The remaining contaminants include :

Benzene, Ethylbenzene, Naphthalene, Toluene, Trimethylbenzenes, Xylene

at levels which exceed the soil standards found in ch. NR 720, Wis. Adm. Code. The following steps have been taken to address any exposure to the remaining soil contamination.

A Soil Vapor Extraction System (SVE) system was installed in October 2015. The SVE system was designed to extract soil vapor from three SVE wells (SVE-1 thru SVE-3). The remedial system ran from November 13, 2015 until November 9, 2016 with 8,572 hours ran (98.9% on-line percentage) and 8,484 pounds of GRO recovered from the subsurface, including 155 pounds of Benzene and 1,896.3 pounds of total PVOC's removed by the system.

If residual soil or groundwater contamination is likely to affect water collected in a pit/trench that requires dewatering, a general permit for Discharge of Contaminated Groundwater from Remedial Action Operations may be needed. If you or any other person plan to conduct utility or building construction for which dewatering will be necessary, you or that person must contact the DNR's Water Quality Program, and if necessary, apply for the necessary discharge permit. Additional information regarding discharge permits is available at <http://dnr.wi.gov/topic/wastewater/GeneralPermits.html>.

Continuing Obligations on the Right-of-Way (ROW) : As part of the response actions, I am proposing that the following continuing obligations be used at the affected ROW. If my closure request is approved, you will be responsible for the following continuing obligations:

**Notification of Continuing Obligations
and Residual Contamination**

Form 4400-286 (9/15)

Page 2 of -4

Residual Soil Contamination:

If soil is excavated from the areas with residual contamination, the right-of-way holder at the time of excavation will be responsible for the following:

- determine if contamination is present,
 - determine whether the material would be considered solid or hazardous waste,
 - ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules.
- Contaminated soil may be managed in-place, in accordance with s. NR 718, Wis. Adm. Code, with prior Department approval.

The right-of-way holder needs to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken during excavation activities to prevent a health threat to humans from ingestion, inhalation or dermal contact.

Depending on site-specific conditions, construction over contaminated soils or groundwater may result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

GIS Registry and Well Construction Requirements:

If this site is closed, all properties within the site boundaries where contamination remains, or where a continuing obligation is applied, will be listed on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web, at <http://dnr.wi.gov/topic/Brownfields/clean.html>. Inclusion on this database provides public notice of remaining contamination and of any continuing obligations. Documents can be viewed on this database, and include final closure letters, site maps and any applicable maintenance plans. The location of the site may also be viewed on the Remediation and Redevelopment Sites Map (RR Sites Map), on the "GIS Registry" layer, at the same internet address listed above.

DNR approval prior to well construction or reconstruction is required for all sites included in the GIS Registry, in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. This requirement applies to private drinking water wells and high capacity wells. Special well construction standards may be necessary to protect the well from the remaining contamination. Well drillers need to first obtain approval from a regional water supply specialist in DNR's Drinking Water and Groundwater Program. The well construction application, form 3300-254, is on the internet at <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>.

If you have any questions regarding this notification, I can be reached at: (608) 781-8879
jasonp@metcohq.com

Signature of responsible party/environmental consultant for the responsible party

10-23-17

Date Signed

Attachments

Contact Information

Legal Description for each Parcel:

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Address

Tom Pinion
135 4th Street
Baraboo, WI 53913



9590 9403 0958 5223 6554 14

2. Barcode Number (Transfer from label)

7015 1660 0000 4

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 B. Zema Agent
 Addressee

B. Received by (Printed Name) C. Date of Delivery
 Brenda Zema 11/6/17

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®
<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™
<input checked="" type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restricted Delivery
<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Return Receipt for Merchandise
<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation™
<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery
<input type="checkbox"/> Insured Mail	
<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)	

**Notification of Continuing Obligations
and Residual Contamination**
Form 4400-286 (9/15)

Section C: Notification to the Department of Transportation of Contamination Within the Right-of-Way

Instructions: Fill out the requested information. Submit via e-mail to DOTHazmatUnit@dot.wi.gov. Include "Notification of Contamination" in the subject line of the e-mail. The DOT sends a receipt electronically (e-mail). *No factsheets needed.*

You may also submit the information by certified mail, return receipt requested, or by standard mail to:

WisDOT- Bureau of Technical Services - ESS
ATTN: Hazardous Materials Specialist
4802 Sheboygan Ave Rm 451
PO Box 7965
Madison, WI 53707-7965

Notification of Contamination within a DOT Right-of-Way

Site Name: Dick's Car Care

County: Sauk		Highway: 123	
Address 620 Broadway Street		City Baraboo	State WI
		ZIP Code 53913	
BRRTS Number: 03-57-258614	PECFA Number: 53-91-3210120	FID Number:	

Owner Information

Last Name Christian	First Dave	MI MI
Address 707 Angle Street	City Baraboo	State WI
		ZIP Code 53913-4500

Consultant Information

Consulting Firm: METCO

Consultant Contact: Last Name Powell	First Jason	MI J
Address 709 Gillette Street, Suite 3	City La Crosse	State WI
		ZIP Code 54601
Phone Number (608) 781-8879	Fax Number (608) 781-8893	
E-mail jasonp@metcohq.com		

Contamination Information

Soil contamination? Yes No

Groundwater contamination? Yes No

Describe the type(s) of contamination present.

Benzene, Ethylbenzene, MTBE, Naphthalene, Toluene, Trimethylbenzenes, Xylene

Brief summary of cleanup activity:

A Soil Vapor Extraction System (SVE) system was installed in October 2015. The SVE system was designed to extract soil vapor from three SVE wells (SVE-1 thru SVE-3). The remedial system ran from November 13, 2015 until November 9, 2016 with 8,572 hours ran (98.9% on-line percentage) and 8,484 pounds of GRO recovered from the subsurface, including 155 pounds of Benzene and 1,896.3 pounds of total PVOC's removed by the system.

Checklist of Documents to Submit

- Current isoconcentration map of the groundwater contaminant plume
- Current isoconcentration map of soil contamination

Bryce Kujawa

From: DOT Hazmat Unit <DOTHazmatUnit@dot.wi.gov>
Sent: Thursday, November 02, 2017 10:48 AM
To: Bryce Kujawa; DOT Hazmat Unit
Subject: RE: Notification of Contamination

Thanks Bryce,
I've received the notification for the Dick's Car Care site. BRRTS # 03-57-258614.

Please keep a copy of this email for your records.
Thank you!
Shar

Sharlene Te Beest
Hazardous Materials Specialist
WisDOT- BTS-ESS
Phone 608-266-1476
Cell 608-692-4546
e-mail sharlene.tebeest@dot.wi.gov

Mailing address:
PO Box 7965, Room 451
Madison, WI 53707-7965

Street address:
4802 Sheboygan Ave
Madison, WI 53705

From: Bryce Kujawa [mailto:brycek@metcohq.com]
Sent: Wednesday, November 01, 2017 12:59 PM
To: DOT Hazmat Unit <DOTHazmatUnit@dot.wi.gov>
Subject: [WARNING: ATTACHMENT(S) MAY CONTAIN MALWARE]Notification of Contamination

Notification of Contamination

The attached file is the filled-out form. Please open it to review the data.

Bryce Kujawa
METCO - Staff Scientist
brycek@metcohq.com / 608.781.8879
709 Gillette Street - Suite 3, La Crosse WI 54603
www.metcohq.com