State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
3911 Fish Hatchery Road
Fitchburg WI 53711-5397

Tony Evers, Governor Preston D. Cole, Secretary

Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



March 8, 2019

Mr. John Sigafus P.O. Box 187 Browntown, WI 53522

# KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS

SUBJECT:

Final Case Closure with Continuing Obligations

Browntown Oil, 303 N. Mill Street, Browntown, Green County, WI

DNR BRRTS Activity #: 03-23-001503

Dear Mr. Sigafus:

The Department of Natural Resources (DNR) considers Browntown Oil closed, with continuing obligations. No further investigation or remediation is required at this time. However, you, future property owners, and occupants of the property must comply with the continuing obligations as explained in the conditions of closure in this letter. Please read over this letter closely to ensure that you comply with all conditions and other on-going requirements. Provide this letter and any attachments listed at the end of this letter to anyone who purchases, rents or leases this property from you.

This final closure decision is based on the correspondence and data provided, and is issued under chs. NR 726 and 727, Wis. Adm. Code. The South Central Region (SCR) Closure Committee reviewed the request for closure on October 4, 2018. The DNR Closure Committee reviewed this environmental remediation case for compliance with state laws and standards to maintain consistency in the closure of these cases. A request for remaining actions needed was issued by the DNR on October 15, 2018, and documentation that the conditions in that letter were met was received on January 8, 2019.

This former gas station & automotive repair shop had soil and groundwater contaminated with petroleum volatile organic compounds (PVOCs) from a system of underground petroleum storage tanks. The tank system was removed in 1998 and no other remedial actions were taken to actively address contamination. A pavement and gravel cap will address any potential direct contact exposure to residual soil contamination at this site. The conditions of closure and continuing obligations required were based on the property being used for commercial purposes.

# **Continuing Obligations**

The continuing obligations for this site are summarized below. Further details on actions required are found in the section <u>Closure Conditions</u>.

- Residual soil contamination exists that must be properly managed should it be excavated or removed.
- An engineered cover must be maintained over contaminated soil and the DNR must be notified and approve any changes to this barrier.



The DNR fact sheet "Continuing Obligations for Environmental Protection," RR-819, helps to explain a property owner's responsibility for continuing obligations on their property. The fact sheet may be obtained online at dnr.wi.gov and search "RR-819".

#### **DNR** Database

This site will be included on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web (BOTW) online at dnr.wi.gov and search "BOTW", to provide public notice of residual contamination and of any continuing obligations. The site can also be viewed on the Remediation and Redevelopment Sites Map (RRSM), a map view, at dnr.wi.gov and search "RRSM".

The DNR's approval prior to well construction or reconstruction is required in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. This requirement applies to private drinking water wells and high capacity wells. To obtain approval, complete and submit Form 3300-254 to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line at dnr.wi.gov and search "3300-254".

All site information is also on file at the South Central Regional DNR office, at 3911 Fish Hatchery Road, Fitchburg, WI 53711. This letter and information that was submitted with your closure request application, including any maintenance plan and maps, can be found as a Portable Document Format (PDF) in BOTW.

#### Prohibited Activities

Certain activities are prohibited at closed sites because maintenance of a barrier is intended to prevent contact with any remaining contamination. When a barrier is required, the condition of closure requires notification of the DNR before making a change, in order to determine if further action is needed to maintain the protectiveness of the remedy employed. The following activities are prohibited on any portion of the property where a pavement and gravel cover is required, as shown on the **attached map** (Figure D.2. Cap Maintenance Plan, 12/01/2014), unless prior written approval has been obtained from the DNR:

- removal of the existing barrier or cover;
- replacement with another barrier or cover;
- excavating or grading of the land surface;
- filling on covered or paved areas;
- plowing for agricultural cultivation;
- construction or placement of a building or other structure;

#### Closure Conditions

Compliance with the requirements of this letter is a responsibility to which you, and any subsequent property owners must adhere. DNR staff will conduct periodic prearranged inspections to ensure that the conditions included in this letter and the attached maintenance plan are met. If these requirements are not followed, the DNR may take enforcement action under s. 292.11, Wis. Stats. to ensure compliance with the specified requirements, limitations or other conditions related to the property.

Please send written notifications in accordance with the following requirements to:

Department of Natural Resources
Attn: Remediation and Redevelopment Program Environmental Program Associate
3911 Fish Hatchery Road
Fitchburg, WI 53711

Residual Soil Contamination (ch. NR 718, chs. 500 to 536, Wis. Adm. Code or ch. 289, Wis. Stats.) Soil contamination remains to the north of the building to the west of the building, as indicated on the **attached map** (Figure B.2.b. Residual Soil Contamination, 07/15/2011). If soil in the specific locations described above is excavated in the future, the property owner or right-of-way holder at the time of excavation must sample and

analyze the excavated soil to determine if contamination remains. If sampling confirms that contamination is present, the property owner or right-of-way holder at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. Contaminated soil may be managed in accordance with ch. NR 718, Wis. Adm. Code, with prior DNR approval.

In addition, all current and future owners and occupants of the property and right-of-way holders need 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 to prevent a direct contact health threat to humans.

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.

Cover or Barrier (s. 292.12 (2) (a), Wis. Stats., s. NR 726.15, s. NR 727.07 Wis. Adm. Code)
The pavement and gravel cover that exists in the location shown on the **attached map** (Figure D.2. Cap
Maintenance Plan, 12/01/2014) shall be maintained in compliance with **the attached maintenance plan** in order to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health.

The cover approved for this closure was designed to be protective for a commercial or industrial use setting. Before using the property for residential purposes, you must notify the DNR at least 45 days before taking an action, to determine if additional response actions are warranted.

A request may be made to modify or replace a cover or barrier. Before removing or replacing the cover, you must notify the DNR at least 45 days before taking an action. The replacement or modified cover or barrier must be protective of the revised use of the property, and must be approved in writing by the DNR prior to implementation. A cover or barrier for industrial land uses, or certain types of commercial land uses may not be protective if the use of the property were to change such that a residential exposure would apply. This may include, but is not limited to, single or multiple family residences, a school, day care, senior center, hospital or similar settings. In addition, a cover or barrier for multi-family residential housing use may not be appropriate for use at a single-family residence.

The attached maintenance plan and inspection log (DNR form 4400-305) are to be kept up-to-date and on-site. Inspections shall be conducted annually, in accordance with the attached maintenance plan. Submit the inspection log to the DNR only upon request.

#### PECFA Reimbursement

Section 101.143, Wis. Stats., requires that Petroleum Environmental Cleanup Fund Award (PECFA) claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement. If there is equipment purchased with PECFA funds remaining at the site, contact the DNR Project Manager to determine the method for salvaging the equipment.

Per Wisconsin Act 55 (2015 State budget), a claim for PECFA reimbursement must be submitted within 180 days of incurring costs (i.e., completing a task). If your final PECFA claim is not submitted within 180 days of incurring the costs, the costs will not be eligible for PECFA reimbursement.

# In Closing

Please be aware that the case may be reopened pursuant to s. NR 727.13, Wis. Adm. Code, for any of the following situations:

- if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment,
- if the property owner does not comply with the conditions of closure, with any deed restrictions applied to the property, or with a certificate of completion issued under s. 292.15, Wis. Stats., or
- a property owner fails to maintain or comply with a continuing obligation (imposed under this closure approval letter).

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Wendy Weihemuller at 608-275-3212, or at Wendy.Weihemuller@wisconsin.gov.

Sincerely,

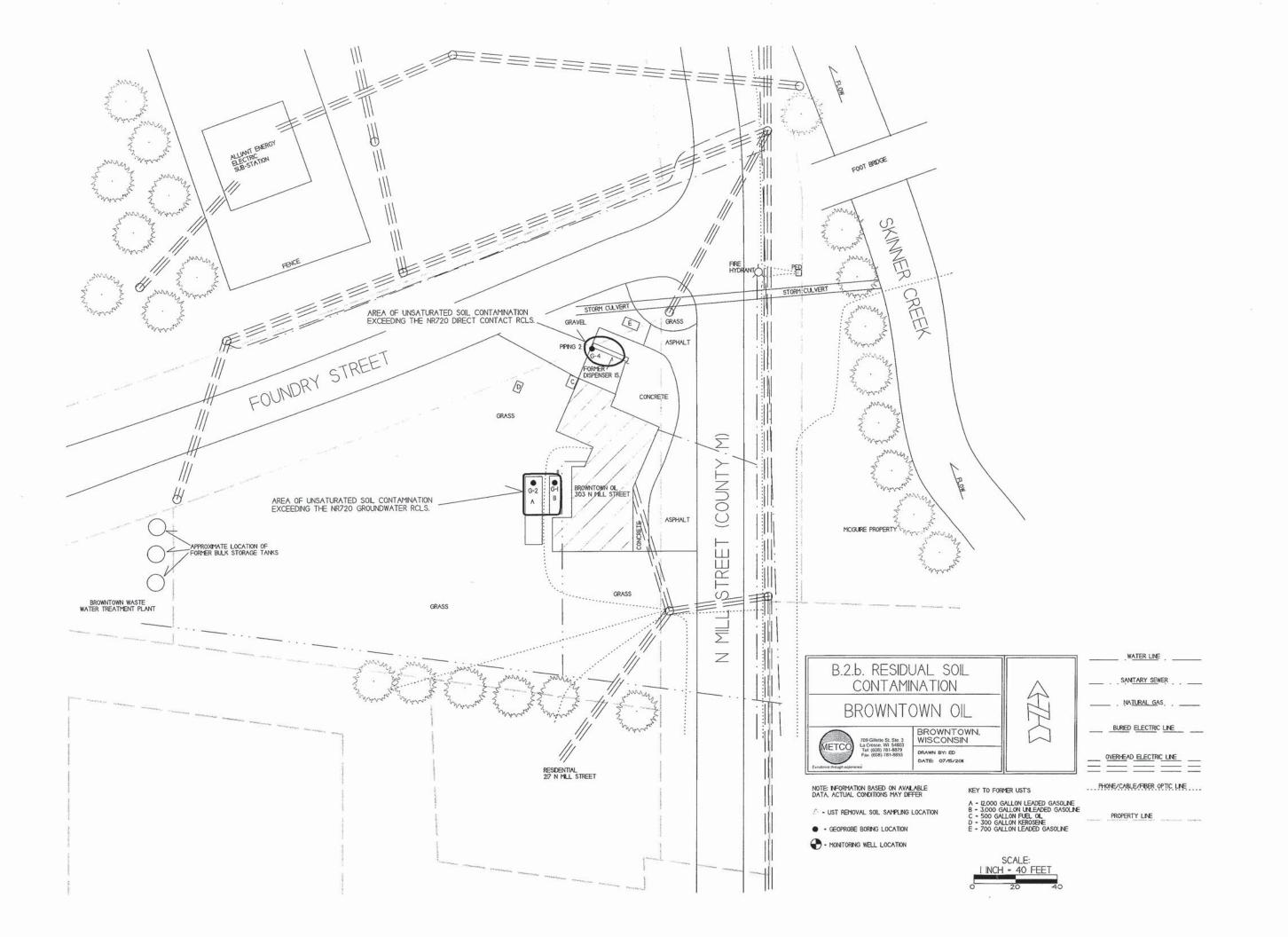
Steve L. Martin

South Central Region Team Supervisor Remediation & Redevelopment Program

#### Attachments:

- Residual Soil Contamination, Attachment B.2.b., 07/15/2011
- Cap Maintenance Plan, Attachment D.2., 12/01/2014
- Description of Maintenance Action(s), Attachment D.1., 10/20/2015
- Inspection Log, DNR Form 4400-305

cc: METCO, Attn: Ron Anderson, 709 Gillette St., Suite 3, La Crosse, WI 54603



# D.1 Description of Maintenance Action(s)

# CAP MAINTENANCE PLAN

October 20, 2015

Property Located at: 303 N Mill Street, Browntown, WI

#### WDNR BRRTS# 03-23-001503

# TAX KEY# 2311001160000

#### Introduction

This document is the Maintenance Plan for a concrete/gravel 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 cap occupying the area over the contaminated soil on-site.

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 Green County.

# Description of Contamination

Soil contaminated by Petroleum Volatile Organic Compounds (PVOCs) is located at a depth of 0-3 feet below ground surface in the area of the former pump island. The extent of the soil contamination is shown on Attachment D.2.

#### Description of the Cap to be maintained

The Cap consists of concrete (approximately 6 inches thick) and gravel in the area of the former pump island on the northern edge of the on-site building, as shown on Attachment D.2.

#### Cover Barrier Purpose

The concrete/gravel cap over the contaminated soil serves as a barrier to minimize exposure to soil exceeding NR720 Direct Contact standards. Based on the current and future use of the property, the barrier should function as intended unless disturbed.

# Annual Inspection

The concrete/gravel cap 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 through the concrete and gravel. 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 the concrete/gravel cap overlying the contaminated soil 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 concrete/gravel 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 concrete/gravel 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; or 6) construction or placement of a building or other structure.

# 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 2015

# **Current Site Owner and Operator:**

John Sigafus P.O. Box 187 Browntown, WI 53522 (608) 966-3312

Signature:		
(DNP may request signature of affected property owners	00.00	by once boois

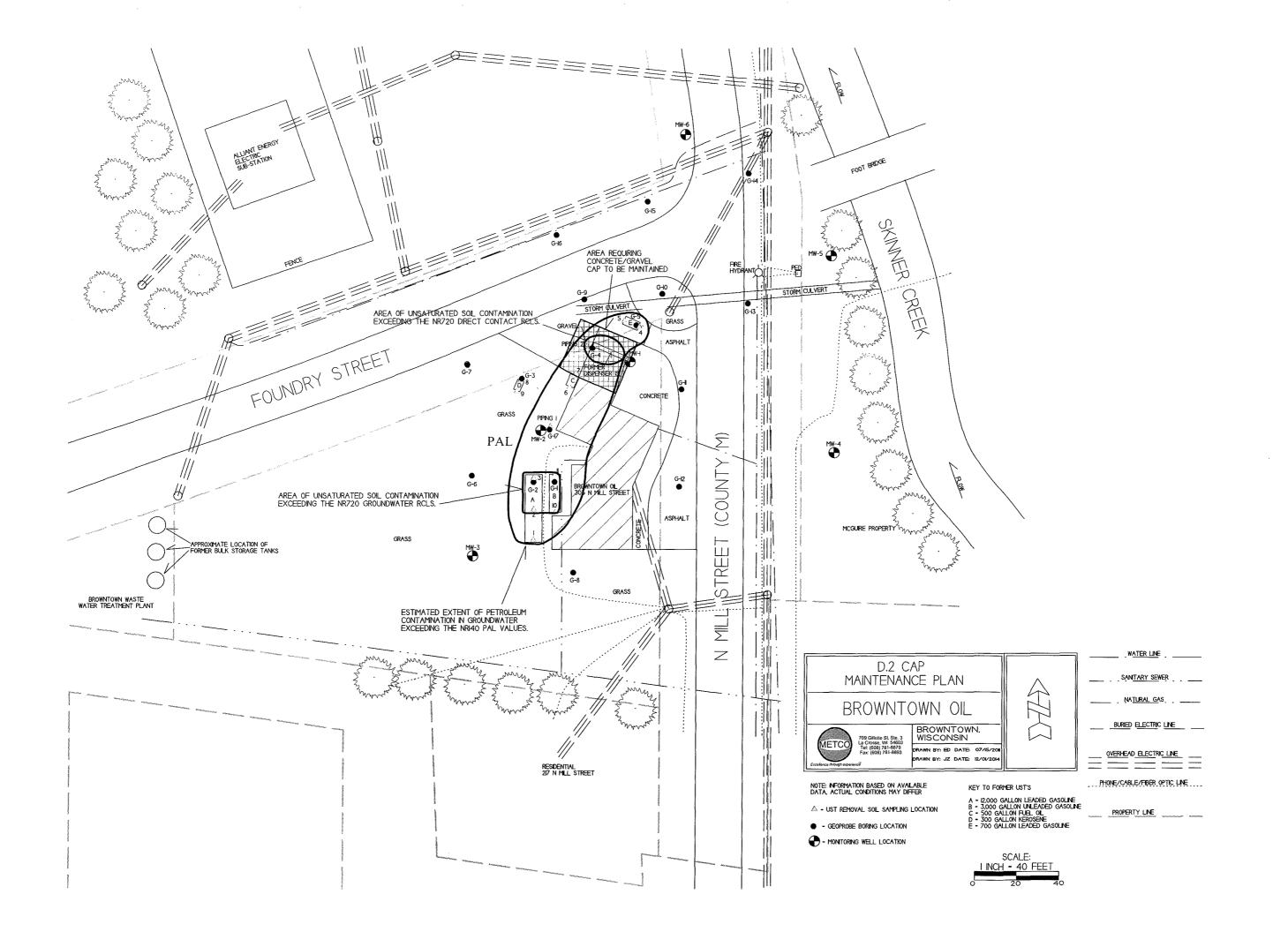
(DNR may request signature of affected property owners, on a case-by-case basis)

# **Consultant:**

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

# WDNR:

Will Meyers 3911 Fish Hatchery Road Fitchburg, WI 53711 (608) 273-5613





1) 3 Obstaczachs



D. J. Photo acarehs



State of Wisconsin Department of Natural Resources dnr.wi.gov

# **Continuing Obligations Inspection and Maintenance Log**

Form 4400-305 (2/14)

Page 1 of 2

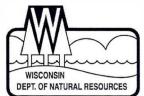
Directions: In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent 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 <a href="http://dnr.wi.gov/botw/SetUpBasicSearchForm.do">http://dnr.wi.gov/botw/SetUpBasicSearchForm.do</a>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

using the Bh	RRISID number, a	and then looking in the "VVho	o" section.				
Activity (Site	e) Name				BRRTS No.		
Browntown	n Oil				(	03-23-001503	
Inspections	<ul><li>annual</li><li>semi-a</li></ul>	nnually	proval letter): -	When submittal of this form is required, submit manager. An electronic version of this filled ou the following email address (see closure appro	t form, or a scar	onically to the Di ned version ma	NR project by be sent to
	Oother -	specify		will.myers@wi.gov			
Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or mainte	re	Previous commendations implemented?	Photographs taken and attached?
		monitoring well cover/barrier vapor mitigation system other:			(	OY ON	$\bigcirc$ Y $\bigcirc$ N
		monitoring well cover/barrier vapor mitigation system other:			(	OY ON	O Y O N
		monitoring well cover/barrier vapor mitigation system other:			(	OY ON	OY ON
		monitoring well cover/barrier vapor mitigation system other:				OY ON	○ Y ○ N
		monitoring well cover/barrier vapor mitigation system other:			,	○ Y	OY ON
		monitoring well cover/barrier vapor mitigation system other:				OY ON	OY ON

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
3911 Fish Hatchery Road
Fitchburg WI 53711-5397

Scott Walker, Governor Daniel L. Meyer, Secretary

Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



October 15, 2018

Mr. John Sigafus P.O. Box 187 Browntown, WI 53522

Subject:

Remaining Actions Needed

Browntown Oil, 303. N. Mill Street, Browntown, Green County, Wisconsin

DNR BRRTS Activity # 03-23-001503

Dear Mr. Sigafus:

On October 8, 2018, the South Central Regional Closure Committee reviewed your request for closure of the case described above. The Regional Closure Committee reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. The following actions are needed to complete our review of your request. Upon completion of these actions, closure approval will be provided.

# Remaining Actions Needed

# Monitoring Well Abandonment

The monitoring wells and piezometers at the site must be properly abandoned in accordance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment for all wells must be submitted to Erin Niemisto on Form 3300-005, found at http://dnr.wi.gov/topic/groundwater/forms.html.

#### Documentation

When the well abandonments have been completed, submit the appropriate documentation forms within 90 days of the date of this letter, to verify their completion. At that point, your closure request can be approved, and your case can be closed.

## **GIS** Registry

Your site will be listed on the DNR Remediation and Redevelopment Program's GIS Registry, to provide public notice of remaining contamination and continuing obligations. The continuing obligations will be specified in the final closure approval. Information that was submitted with your closure request application will be included on the Bureau for Remediation and Redevelopment Tracking System (BRRTS on the Web), at <a href="http://dnr.wi.gov/topic/Brownfields/rrsm.html">http://dnr.wi.gov/topic/Brownfields/rrsm.html</a>.



## In Conclusion

We appreciate your efforts to restore the environment at this site. This remedial action project is nearing completion. I look forward to receiving the well abandonment forms so that we may issue a case closure letter.

If you have any questions regarding this letter, please contact the project manager, Erin Niemisto, at 608-275-3224, or by email at <a href="mailto:Erin.Niemisto@wisconsin.gov">Erin.Niemisto@wisconsin.gov</a>.

Sincerely,

Steven L. Martin

South Central Region Team Supervisor Remediation & Redevelopment Program

cc: METCO, Attn: Ron Anderson, 709 Gillette St., Ste. 3, La Crosse, WI 54603

State of Wisconsin Department of Natural Resources PO Box 7921, Madison WI 53707-7921 dnr.wi.gov

# Case Closure - GIS Registry

Form 4400-202 (R 3/15)

Page 1 of 13

# 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.	
03-23-001503		
Parcel ID No.		
2311001160000		
FID No.	WTM Coor	dinates
	X 526802	224172
BRRTS Activity (Site) Name	536892 WTM Coordinates Represent:	234173
	Source Area	Parcel Center
Browntown Oil Site Address	City	State ZIP Code
	'	
303 N. Mill Street Acres Ready For Use	Browntown	WI 53522
Acros (Cady) of Osc	0.5	
Responsible Party (RP) Name		
John Sigafus		
Company Name		
Mailing Address	City	State ZIP Code
P.O. Box 187	Browntown	WI 53522
Phone Number	Email	
(715) 501-8349		
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		
<ol> <li>Send a copy of page one of this form and the applicable (Environmental Program Associate) at http://dnr.wi.gov/</li> </ol>	ch. NR 749, Wis. Adm. Code, fee(s) to the topic/Brownfields/Contact.html. Check a	DNR Regional EPA all fees that apply:
∑ \$1,050 Closure Fee		
\$350 Database Fee for Groundwater or	Total Amount of Payment \$ \$1	1,350.00
Monitoring Wells (Not Abandoned)	Resubmittal, Fees Previous	sly Paid
2. Send one paper copy and one e-copy on compact dis	k of the entire closure package to the Re	egional Project Manager

2. 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 <u>unbound</u>, <u>separate documents</u> in the order and with the titles prescribed by this form. For electronic document submittal requirements, see <a href="http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf">http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf</a>.

Browntown Oil

Case Closure - GIS Registry

BRRTS No.

Activity (Site) Name

Form 4400-202 (R 3/15)

Page 2 of 13

# 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 subject property is located in the NW 1/4 of the NW 1/4 of Section 9, Township 1 N, Range 6 E, Village of Browntown, Green County, Wisconsin. The property consists of one tax parcel (PID #2311001160000), and is bound by Light Industrial properties on the south and west, by Foundry Street to the north and by N. Mill Street to the east.
- B. Prior and current site usage: Specifically describe the current and historic occupancy and types of use. A gas station/auto repair shop has operated on the subject property since the 1940's. John Sigafus has owned the property since the late 1970's, and operated the gas station until 1989. The gas station's petroleum storage tank systems consisted of a 12,000-gallon leaded gasoline, a 3,000-gallon unleaded gasoline, a 700-gallon leaded gasoline, a 500-gallon fuel oil, and a 300-gallon kerosene UST. The UST systems were removed on December 8, 1998.
- C. Current zoning (e.g., industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).
  - The subject property is zoned as M-1 Light Industrial and the surrounding properties are also zoned M-1 Light Industrial.
- D. Describe how and when site contamination was discovered.
  - On December 8, 1998, during the UST removal, thirteen soil samples were collected for field and laboratory analysis (DRO, GRO, and/or PID). Petroleum contamination was confirmed in soil samples #3, which showed 1,900 ppm GRO in the area of the removed 12,000-gallon leaded gasoline UST. Elevated PID detects were recorded in soil samples #4 (700-gallon leaded gasoline), #11 (3,000-gallon unleaded gasoline), and Piping 1, however confimation samples were not subnmitted for laboratory analysis from these locations.
- E. Describe the type(s) and source(s) or suspected source(s) of contamination.

  The contamination source is the removed UST systems consisting of, a 12,000-gallon leaded gasoline, a 3,000-gallon unleaded gasoline, a 700-gallon leaded gasoline, a 500-gallon fuel oil, a 300-gallon kerosene UST and associated piping and dispensers.
- F. Other relevant site description information (or enter Not Applicable).

  The WDNR GIS Registry has incorrectly identified the locations of sites in this area. The GIS Registry shows an ERP site (Green County Ag Service, 212 N. Mill Street, 02-23-001152) in the location of the Browntown Oil site, which is incorrect. The GIS Registry also shows the Browntown Oil site to be approximately 500 feet to the south of its actual location.
- G. List BRRTS activity/site name and number for BRRTS activities at this source property, including closed cases. No other BRRTS activities exist at this source property.
- H. List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to (abutting) this source property. No other BRRTS activities exist at any of the adjacent properties.

# 2. General Site Conditions

- A. Soil/Geology
  - Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.
    - Unconsolidated materials on the subject property consist of black to brown to tan to green to gray to orange, fine to coarse grained sand to silty sand from surface to depths ranging up to 8.5 feet below ground surface (bgs).
  - ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site. There are no known fill or waste deposits on the subject property.
  - iii. Describe the depth to bedrock, bedrock type, competency and whether or not it was encountered during the investigation. At depths ranging from 6 feet to at least 13 feet bgs exists a tan to pink, fine to coarse grained sandstone.
  - 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 subject property consists of grass to the south and west of the on site building and asphalt and concrete to the north and east of the on site building.
- B. Groundwater

BRRTS No.

Activity (Site) Name

Form 4400-202 (R 3/15)

Page 3 of 13

 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.

Based on the data collected during the site investigation, depth to groundwater varies from 0.82 to 7.03 feet bgs, depending on well location and time of year. Free product was not encountered during this investigation.

Groundwater exists in the sandstone bedrock and also in the unconsolidated soil, which consist of mostly sand to silty sand.

ii. Discuss groundwater flow direction(s), shallow and deep. Describe and explain flow variations, including fracture flow if present.

The shallow groundwater flow direction is generally toward the northeast. Groundwater flow deeper in the aquifer is not known, as there were no piezometer wells installed as part of the site investigation.

iii. Discuss groundwater flow characteristics: hydraulic conductivity, flow rate and permeability, or state why this information was not obtained.

On September 26, 2012, METCO conducted slug tests on monitoring wells MW-1, MW-2, and MW-5. 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 the following:

Monitoring Well MW-1 Hydraulic Conductivity = 0.00180 cm/sec Transmissivity = 0.412. cm2/sec Flow Velocity (V=Kl/n) = 33.56 m/yr

Monitoring Well MW-2 Hydraulic Conductivity = 0.00326 cm/sec Transmissivity = 0.836 cm2/sec Flow Velocity (V=KI/n) = 60.66 m/yr

Monitoring Well MW-5 Hydraulic Conductivity = 0.00271 cm/sec Transmissivity = 0.527 cm2/sec Flow Velocity (V=KI/n) = 50.39 m/yr

Since the thickness of the unconfined aquifer was unknown, the bottoms of monitoring wells MW-1, -2, and -5 were 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 Village of Browntown has one municipal water supply well, which supplies potable water within the village limits. The village municipal well exists approximately 4,000 feet to the southeast of the subject property. METCO is not aware of any private potable wells in the area.

#### 3. Site Investigation Summary

#### A. General

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 December 8, 1998, Northern Environmental collected thirteen soil samples during the UST removal for field and laboratory analysis (DRO, GRO, and/or PID). (Site Investigation Report, September 2013)

On October 10-11, 2011, METCO completed seventeen geoprobe borings (G-1 thru G-17). Thirty-four soil samples and sixteen groundwater samples were collected for field and/or laboratory analysis. (Site Investigation Report, September 2013)

On June 4, 2012, METCO completed six soil borings and installed six monitoring wells (MW-1 thru MW-6). Fourteen soil samples were collected for field and/or laboratory analysis. Upon completion, the wells were properly developed. (Site Investigation Report, September 2013)

On September 26, 2012, METCO surveyed and collected groundwater samples for field and laboratory analysis from the six monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6). METCO also conducted slug tests on monitoring wells MW-1, MW-2, and MW-5.(Site Investigation Report, September 2013)

On March 20, 2013, METCO collected groundwater samples for field and laboratory analysis from the six monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6). (Site Investigation Report, September 2013)

Activity (Site) Name

Form 4400-202 (R 3/15)

Page 4 of 13

On January 14, 2014, METCO collected groundwater samples for field and laboratory analysis from the six monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6). (Groundwater Monitoring Report, December 2014)

On April 14, 2014, METCO collected groundwater samples for field and laboratory analysis from the six monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6). (Groundwater Monitoring Report, December 2014)

On July 15, 2014, METCO collected groundwater samples for field and laboratory analysis from the six monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6). (Groundwater Monitoring Report, December 2014)

On October 15, 2014, METCO collected groundwater samples for field and laboratory analysis from the six monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6). (Groundwater Monitoring Report, December 2014)

- 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.
  The petroleum contamination in soil and groundwater does not currently extend beyond the source 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.

The extent of residual soil contamination which exceeds the NR720 Groundwater RCL's, consists of one oval shaped area in the area of the former dispenser island approximately 19 feet long, 8 feet wide and extending up to 3 feet bgs and one rectangular shaped area in the area of the removed USTs west of the on site building approximately 19 feet long, 18 feet wide and extending up to 3 feet bgs.

The area of soil contamination does not appear to intersect any utility corridors and does not appear to have an impact any buildings, basements, sumps, etc.

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 RCL's that remain include:

G-1-1 (3 feet bgs) - Lead (39 ppm)

G-2-1 (3 feet bgs) - Lead (45 ppm)

G-4-1 (3 feet bgs) - Naphthalene (12.5 ppm), Trimethylbenzenes (106.2 ppm) and Xylene (11.09 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.

Residual Contaminant Levels (RCL's) were established in accordance with NR720.10 and NR720.12. Soil RCL's for the protection of the groundwater pathway and for non-industrial direct contact were taken from the RR programs RCL's spreadsheet.

#### C. Groundwater

 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 PAL Groundwater Quality Standards has formed at the watertable in the area of the removed USTs west of the on site building and has migrated to the north. The plume is approximately 121 feet long and 26 feet wide.

The area of groundwater contamination does not appear to intersect any utility corridors and does not appear to have an impact any buildings, basements, sumps, etc.

BRRTS No.

Activity (Site) Name

Form 4400-202 (R 3/15)

Page 5 of 13

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 was never encountered at this site.

#### 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 contamination does not appear to extend underneath any buildings. Groundwater contamination appears to extend underneath the on site building, which has a slab on grade foundation. Although the groundwater under the building is shallow (1.81-5.5 feet bgs), Benzene levels are well below 1,000 ppb. The highest recorded Benzene level in groundwater in a geoprobe or monitoring well during the investigation was from G-2 (14.6 ppb). Based on the limited extent of unsaturated soil contamination, and the low level Benzene contamination in groundwater, vapor intrusion does not appear to be a risk at this time.
- 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 vapor samples were collected as part of the site investigation.

#### 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.
  - No surface water or sediment samples were collected during this investigation. Although the nearest surface water is Skinner Creek, which exists approximately 100 feet east of the subject property, monitoring wells MW-4 and MW-5 are located just west of Skinner Creek. MW-4 has never had any detects for any contaminants of concern and MW-5 has only shown a PAL exceedance during one round (1.28 ppb Benzene) and had no detects during the most recent round of sampling. Based on this it is unlikely that Skinner Creek is at risk of contamination.
- 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 sediments were assessed as part of the site investigation.

#### 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.
  - No remedial activities occurred as part of the site investigation.
- B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code. No immediate or interim activities occurred as part of the site investigation.
- 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.
  - No active remedial activities occurred as part of the site investigation.
- 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 alternatives were considered during the Green and Sustainable Remediation evaluation.
- 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.
  - The extent of residual soil contamination which exceeds the NR720 Groundwater RCL's, consists of one oval shaped area in the area of the former dispenser island approximately 19 feet long, 8 feet wide and extending up to 3 feet bgs and one rectangular shaped area in the area of the removed USTs west of the on site building approximately 19 feet long, 18 feet wide and extending up to 3 feet bgs.

A dissolved phase contaminant plume exceeding the NR140 PAL Groundwater Quality Standards has formed at the watertable in the area of the removed USTs west of the on site building and has migrated to the north. The plume is approximately 121 feet long and 26 feet wide.

The petroleum contamination in soil and groundwater does not currently extend beyond the source property boundary

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.

G-4-1 (3 feet bgs): Naphthalene

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 soil samples currently exceed NR720 Groundwater RCL's:

G-1-1 (3 feet bgs): Lead

G-2-1 (3 feet bgs): Lead

G-4-1 (3 feet bgs): Naphthalene, Trimethylbenzenes and Xylene

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 contamination exceeding the NR720 Groundwater RCL's and groundwater contamination exceeding the NR140 ES and/or PAL can be addressed through natural attenuation.

- 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 decreasing. Since the overall contaminant trends appear to be decreasing, natural attenuation appears to be effective in reducing contaminant mass and concentration.
- 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 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 was installed as part of the site investigation.
- 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. One monitoring well currently show NR140 PAL exceedances:

MW-2: Benzene and Naphthalene

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 vapor samples were collected as part of the site investigation.

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 waters or sediments were assessed during the site investigation.

03-23-001503
--------------

Browntown	Oil
-----------	-----

Case Closure - GIS Registry Form 4400-202 (R 3/15) Page 7 of 13

BRRTS No.

Activity (Site) Name

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 property of	on applies to t or Right of Wa	he following ay (ROW):		Maintanana
	Property Typ	pe:		Case Closure Situation - Continuing Obligation Inclusion on the GIS Registry is Required (ii xiv.)	Maintenance Plan
	Source Property	Affected Property (Off-Source)	ROW	inolation and old riegistry is residunted (iii. xix.)	Required
i.		$\boxtimes$	$\boxtimes$	None of the following situations apply to this case closure request.	NA
ii.				Residual groundwater contamination exceeds ch. NR 140 ESs.	NA
iii.	$\boxtimes$			Residual soil contamination exceeds ch. NR 720 RCLs.	NA
iv.				Monitoring Wells Remain:	
				Not Abandoned (filled and sealed)	NA
				Continued Monitoring (requested or required)	Yes
٧.	$\boxtimes$			Cover/Barrier/Engineered Cover or Control for (soil) direct contact pathways (includes vapor barriers)	Yes
vi.				Cover/Barrier/Engineered Cover or Control for (soil) groundwater infiltration pathway	Yes
vii.				Structural Impediment: impedes completion of investigation or remedial action (not as a performance standard cover)	NA
viii.				Residual soil contamination meets NR 720 industrial soil RCLs, land use is classified as industrial	NA
ix.			NA	Vapor Mitigation System (VMS) required due to exceedances of vapor risk screening levels or other health based concern	Yes
Х.			NA	Vapor: Dewatering System needed for VMS to work effectively	Yes
xi.			NA	Vapor: Compounds of Concern in use: full vapor assessment could not be completed	NA
xii			NA	Vapor: Commercial/industrial exposure assumptions used.	NA
xiii.				Vapor: Residual volatile contamination poses future risk of vapor intrusion	NA
xiv.				Site-specific situation: (e. g., fencing, methane monitoring, other) (discuss with project manager before submitting the closure request)	Site specific
	Underground A. Were any or remedia	tanks, piping		ociated tank system components removed as part of the investigation	Yes   No
1	3. Do any up	graded tanks	meeting the	requirements of ch. ATCP 93, Wis. Adm. Code, exist on the property?	Yes   No
(	C. If the answ	ver to questio	n 6.B. is yes	, is the leak detection system currently being monitored?	Yes ( No

03-23-001503 BRRTS No. Browntown Oil

Activity (Site) Name

Case Closure - GIS Registry

Form 4400-202 (R 3/15)

Page 8 of 13

#### 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 <u>must</u> 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

- A.1. 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.
- A.2. **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).
- A.3. **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.
- A.4. 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.
- A.5. 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.
- A.6. 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.
- A.7. 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 <u>all</u> 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

- B.1.a. 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.
- B.1.b. **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.
- B.1.c. RR Sites Map: From RR Sites Map (http://dnrmaps.wi.gov/sl/?Viewer=RR Sites) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

BRRTS No.

Activity (Site) Name

Form 4400-202 (R 3/15)

Page 9 of 13

#### **B.2.** Soil Figures

- B.2.a. **Soil Contamination:** Figure(s) showing the location of <u>all</u> 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 exceedence (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.

03-23-001503	Browntown Oil	Case Closure - GIS	Registry
BRRTS No.	Activity (Site) Name	Form 4400-202 (R 3/15)	Page 10 of 13

- 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)

_	_		
$\mathbf{c}_{-}$	14	One	
	H-1:1		٠.

$\bigcirc$	No monitoring wells were installed as part of this response action.
$\odot$	All monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site
$\bigcirc$	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.

03-23-001503

Browntown Oil

Case Closure - GIS Registry

BRRTS No.

Activity (Site) Name

Form 4400-202 (R 3/15)

Page 11 of 13

# 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.

03-23-00150	3
BRRTS No.	

Browntown Oil

Activity (Site) Name

# Case Closure-GIS Registry Form 4400-202 (R 3/15)

Page 12 of 13

Z	otifications to Owners of Affected Properties (	Attachment G	)						F	Reas	ons	Noti	ficat	ion l	_ette	r Se	nt:		
ID	Address of Affected Property	Parcel ID No.	Date of Receipt of Letter	Type of Property Owner	WTMX	WTMY	Residual Groundwater Contamination = or > ES	Residual Soil Contamination Exceeds RCLs	Monitoring Wells: Not Abandoned	Monitoring Wells: Continued Monitoring	Cover/Barrier/Engineered Control	Structural Impediment	Industrial RCLs Met/Applied	Vapor Mitigation System(VMS)	Dewatering System Needed for VMS	Compounds of Concern in Use	Commercial/Industrial Vapor Exposure Assumptions Applied	Residual Volatile Contamination Poses Future Risk of Vapor Intrusion	Site Specification Situation
А																			
В																			
С																			
D																			

Browntown Oil

Case Closure - GIS Registry

BRRTS No.

Activity (Site) Name

Form 4400-202 (R 3/15)

Page 13 of 13

# Signatures and Findings for Closure Determination

Check the correct box for this case closure request, and have ch. NR 712, Wis. Adm. Code, sign this document.	either a professio	onal engineer or a hydrogeologist, as defined in
A response action(s) for this site addresses groundwater	contamination (in	cluding natural attenuation remedies).
The response action(s) for this site addresses media other	er than groundwat	er.
Engineering Certification		
in the State of Wisconsin, registered in accordance with closure request has been prepared by me or prepared to Conduct in ch. A–E 8, Wis. Adm. Code; and that, to the closure request is correct and the document was prepare to 726, Wis. Adm. Code. Specifically, with respect to convestigation has been conducted in accordance with chave been completed in accordance with chs. NR 140, Codes."	the requirement under my supervibest of my know red in compliant ompliance with NR 716, Wis.	vision in accordance with the Rules of Professional wledge, all information contained in this case be with all applicable requirements in chs. NR 700 the rules, in my professional opinion a site Adm. Code, and all necessary remedial actions
Printed Name		Title
Signature	Date	P.E. Stamp and Number
Hydrogoologist Cortification		

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 718, NR 720, NR 722, NR 724 and NR 726, Wis. Adm. Codes."

Printed Name

Ronald J. Anderson

Signature

Senior Hydrogeologist/Project Manager

Title

Date

# **Attachment A/Data Tables**

- A.1 Groundwater Analytical Table(s)
- A.2 Soil Analytical Results Table(s)
- A.3 Residual Soil Contamination Table(s)
- A.4 Vapor Analytical Table No vapor samples were assessed as part of the site investigation.
- A.5 Other Media of Concern (e.g., sediment or surface water) No surface waters or sediments were assessed as part of the site investigation.
- A.6 Water Level Elevations
- A.7 Other Natural Attenuation data, Free Product Recovery

#### A.1 Groundwater Analytical Table Browntown Oil BRRTS# 03-23-001503

Well MW-1

PVC Elevation =

784.49

(feet) (MSL)

Date 09/26/12 03/20/13 01/14/14 04/17/14	Water Elevation (in feet msl) 778.99 781.12 779.84 781.29	Depth to Water (in feet) 5.50 3.37 4.65 3.20	Lead (ppb) <0.7 <0.7 NS NS	Benzene (ppb) <0.74 3.2 <0.27 <0.27	Ethyl Benzene (ppb) 16.7 17.5 <0.82 <0.82	MTBE (ppb) <0.8 <0.37 <0.37 <0.37	Naph- thalene (ppb) 17.6 18.4 <1.2 <1.2	Toluene (ppb) 17 17.3 <0.8 <0.8	Trimethyl- benzenes (ppb) 124.6 116.4 <1.69 1.29-2.15	Xylene (Total) (ppb) 129 <2.41 <2.41
07/15/14 10/15/14	780.71 781.87	3.78 2.62	NS NS	<0.27 <0.27	<0.82 <0.82	<0.37 <0.37	<1.2 <1.2	<0.8 <0.8	<1.69 <1.69	<2.41 <2.41
	NT STANDARD ACTION LIMIT /		15 1.5	5 0.5	700 140	60 12	100 10	800 160	480 96	2000 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-2 PVC Elevation =

784.44

(feet) (MSL)

	Water	Depth			Ethyl		Naph-		Trimethyl-	Xylene
	Elevation	to Water	Lead	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	779.82	4.62	<0.7	1.16	33	<0.8	16.1	3.6	176	63.4
03/20/13	782.63	1.81	20.8	1.52	1.79	<0.37	141	<0.8	60.3	56
01/14/14	781.27	3.17	NS	1.14	<0.82	<0.37	3.3	<0.8	31.6	24.5
04/17/14	782.87	1.57	NS	0.84	0.97	<0.37	2.98	<0.8	29.4	16.8
07/15/14	782.04	2.40	<0.7	1.88	<0.82	< 0.37	<1.2	<0.8	<1.69	<2.41
10/15/14	1/14/14     781.27     3.       1/17/14     782.87     1.       1/15/14     782.04     2.		<0.7	0.72	3.5	<0.37	12.2	<0.8	90.9	65.1
ENFORCE ME	NT STANDARD	ES = Bold	15	5	700	60	100	800	480	2000
PREVENTIVE	ACTION LIMIT F	PAL = Italics	1.5	0.5	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 =

785.62

(feet) (MSL)

	Water	Depth			Ethyl		Naph-		Trimethyl-	Xylene
	Elevation	to Water	Lead	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	780.21	5.41	<0.7	<0.5	<0.78	<0.8	<2.1	<0.53	<1.54	<1.9
03/20/13	783.14	2.48	<0.7	< 0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
01/14/14	781.70	3.92	NS	<0.27	<0.82	< 0.37	<1.2	<0.8	<1.69	<2.41
04/17/14	783.75	1.87	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
07/15/14	782.74	2.88	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
10/15/14	784.80	0.82	NŞ	< 0.27	<0.82	< 0.37	<1.2	<0.8	<1.69	<2.41
	NT STANDARD		15	5	700	60	100	800	480	2000
PREVENTIVE	ACTION LIMIT /	PAL = Italics	1.5	0.5	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 Browntown Oil BRRTS# 03-23-001503

Well MW-4

PVC Elevation =

784.70

(MSL)

(feet)

	Water	Depth		1	Ethyl		Naph-		Trimethyl-	Xylene
	Elevation	to Water	Lead	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	777.67	7.03	<0.7	<0.5	<0.78	<0.8	<2.1	<0.53	<1.54	<1.9
03/20/13	779.28	5.42	<0.7	<0.27	<0.82	< 0.37	<1.2	<0.8	<1.69	<2.41
01/14/14	778.32	6.38	NS	<0.27	<0.82	< 0.37	<1.2	<0.8	<1.69	<2.41
04/17/14	779.72	4.98	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
07/15/14	779.04	5.66	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
10/15/14	780.71	3.99	NS	<0.24	<0.55	<0.23	<1.7	<0.69	<3.6	<1.32
ENFORCE ME	NT STANDARD	ES = Bold	15	5	700	60	100	800	480	2000
PREVENTIVE	ACTION LIMIT A	PAL = Italics	1.5	0.5	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-5

PVC Elevation =

783.61

(MSL)

(feet)

	Water	Depth			Ethyl		Naph-		Trimethyl-	Xylene
1	Elevation	to Water	Lead	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	776.99	6.62	<0.7	<0.5	2.06	<0.8	<2.1	<0.53	18.74	5.66
03/20/13	778.74	4.87	<0.7	<0.27	<0.82	<0.37	<1.2	<0.8	1.63-2.49	<2.41
01/14/14	777.66	5.95	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
04/17/14	778.99	4.62	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
07/15/14	778.34	5.27	NS	1.28	7.7	<0.37	1.78	2.74	39-39.86	12.2
10/15/14	779.63	3.98	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
ENFORCE ME	NT STANDARD	ES = Bold	15	5	700	60	100	800	480	2000
PREVENTIVE	ACTION LIMIT /	PAL = Italics	1.5	0.5	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

PVC Elevation =

783.92 (feet)

(MSL)

	Water	Depth	i		Ethyl		Naph-		Trimethyl-	Xylene
1	Elevation	to Water	Lead	Benzene	Benzene	MTBE	thalene	Toluene	benzenes	(Total)
Date	(in feet msl)	(in feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	777.57	6.35	<0.7	<0.5	<0.78	<0.8	<2.1	<0.53	<1.54	<1.9
03/20/13	779.53	4.39	<0.7	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
01/14/14	778.50	5.42	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
04/17/14	779.68	4.24	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
07/15/14	778.99	4.93	NS	<0.27	<0.82	<0.37	<1.2	<0.8	<1.69	<2.41
10/15/14	780.84	3.08	NS	<0.24	<0.55	<0.23	<1.7	<0.69	<3.6	<1.32
ENFORCE ME	NT STANDARD	ES = Bold	15	5	700	60	100	800	480	2000
PREVENTIVE	ACTION LIMIT /	PAL = Italics	1. <u>5</u>	0.5	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 (PAH)

Browntown Oil BRRTS# 03-23-001503

Well MW-1

PVC Elevation =

784.49 (feet)

(MSL)

	Ace-	Acenaph-		Benzo(a)	Benzo(a)	Benzo(b)	Benzo(g.h,l)	Benzo(k)		Dibenzo(a,h)			Indeno(1,2,3-cd)	1-Methyl-	2-Methyl-	Naph-	Phenan-	_
1	naphthene	thylene	Anthracene	anthracene	pyrene	fluoranthene	Perylene	fluoranthene	Chrysene	anthracene .	thene	Fluorene	pyrene	naphthalene	naphthalene	thalene	threne	Pyrene
Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	< 0.025	<0.019	<0.018	<0.024	<0.018	<0.02	<0.019	< 0.022	<0.019	<0.019	<0.022	<0.02	<0.018	1.63	2.49	8.9	0.019	<0.02
ENFORCE ME	NT STANDARD	= ES Bold	3000	25	0.2	0.2	==	==	0.2	111111111111111111111111111111111111111	400	400			==	40	==	250
PREVENTIVE	ACTION LIMIT	= PAL Italics	600	==	0.02	0.020	==	==	0.02	==	80	. 80	==	==	==	8	==	50

(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-2

PVC Elevation =

784.44 (feet)

(MSL)

	Ace-	Acenaph-		Benzo(a)	Benzo(a)	Benzo(b)	Benzo(g.h,l)	Benzo(k)		Dibenzo(a,h)	Fluoran-		Indeno(1,2,3-cd)	1-Methyl-	2-Methyl-	Naph-	Phenan-	
	naphthene	thylene	Anthracene	anthracene	pyrene	fluoranthene	Perylene	fluoranthene	Chrysene	anthracene	thene	Fluorene	pyrene	naphthalene	naphthalene	thalene	threne	Pyren
Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	<0.025	<0.019	<0.018	<0.024	<0.018	< 0.02	<0.019	<0.022	<0.019	<0.019	< 0.022	<0.02	<0.018	2.64	3.7	4.5	0.02	<0.02
	<u> </u>															,,		<del></del>
NFORCE ME	NT STANDAR	) = ES Bold	3000	==	0.2	0.2	==	==	0.2	22	400	400	22	==	===	40	==	250
REVENTIVE	ACTION LIMIT	= PAI Italics	600	==	0.02	0.020	==	==	0.02	==	80	80	==	==	==	8	==	50

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

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

Well MW-3

PVC Elevation =

785.62 (feet)

(MSL)

	Ace-	Acenaph-		Benzo(a)	Benzo(a)	Benzo(b)	Benzo(g.h.l)	Benzo(k)		Dibenzo(a,h)	Fluoran-		Indeno(1,2,3-cd)	1-Methyl-	2-Methyl-	Naph-	Phenan-	
	naphthene	thylene	Anthracene	anthracene	pyrene	fluoranthene	Perylene	fluoranthene	Chrysene	anthracene	thene	Fluorene	pyrene	naphthalene	парhthalene	thalene	threne	Pyrene
Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	<0.025	<0.019	<0.018	<0.024	<0.018	<0.02	<0.019	<0.022	<0.019	<0.019	<0.022	<0.02	<0.018	<0.022	<0.024	<0.021	<0.019	<0.02
										-		I						
ENFORCE ME	NT STANDAR	) = ES Bold	3000	85	0.2	0.2	==	==	0.2	#=	400	400	==	==	==	40	==	250
PREVENTIVE.	ACTION LIMIT	= PAL Italics	600	111	0.02	0.020	==	==	0.02	==	80	80	==	==	==	8	==	50

3

(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

(PAH)

Browntown Oil BRRTS# 03-23-001503

Well MW-4

PVC Elevation =

784.70 (feet)

(MSL)

09/26/12 <0.025 <0.019 <0.018 <0.024 <0.018 <0.02 <0.019 <0.019 <0.019 <0.019 <0.022 <0.018 <0.022	Date	Ace- naphthene (ppb)	Acenaph- thylene (ppb)	Anthracene (ppb)	Benzo(a) anthracene (ppb)		Benzo(b) fluoranthene (ppb)	Benzo(g.h.l) Perylene (ppb)	Benzo(k) fluoranthene (ppb)	Chrysene (ppb)	Dibenzo(a,h) anthracene (ppb)	Fluoran- thene (ppb)	Fluorene (ppb)	indeno(1,2,3-cd) pyrene (ppb)	1-Methyl- naphthalene (ppb)	2-Methyl- парhthalene (ppb)	Naph- thalene (ppb)	Phenan- threne (ppb)	Pyrene (ppb)
																<0.024	0.051	<0.019	<0.02
ENFORCE MENT STANDARD = ES Bold 3000 == 0.2 0.2 == == 0.2 == 400 400 == ==	ENFORCE ME	NT STANDARI	) = ES Bold	3000	==	0.2	0.2	==	22	0.2	==	400	400	- 52	25	==	40	==	250

(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-5

PVC Elevation =

783.61

(feet)

(MSL)

	Ace-	Acenaph-		Benzo(a)	Benzo(a)	Benzo(b)	Benzo(g.h.l)	Benzo(k)	1	Dibenzo(a.h)	Fluoran-		Indeno(1,2,3-cd)	1-Methyl-	2-Methyl-	Naph-	Phenan-	
	naphthene	thylene	Anthracene	anthracene	pyrene	fluoranthene	Perylene	fluoranthene	Chrysene	anthracene	thene	Fluorene	pyrene	naphthalene	naphthalene	thalene	threne	Pyrene
Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	0.066	<0.019	<0.018	<0.024	<0.018	<0.02	<0.019	<0.022	<0.019	<0.019	<0.022	0.041	<0.018	0.43	0.093	0.35	<0.019	<0.02
NFORCE ME	NT STANDAR	D = ES Bold	3000	==	0.2	0.2	25	===	0.2	==	400	400	==	==	==	40	==	250
REVENTIVE	ACTION LIMIT	= PAL Italics	600	==	0.02	0.020	==	==	0.02	==	80	80	==	==	==	8	==	50

(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

PVC Elevation =

783.92 (feet)

(MSL)

	Ace-	Acenaph-		Benzo(a)	Benzo(a)	Benzo(b)	Benzo(g.h.l)	Benzo(k)		Dibenzo(a.h)	Fluoran-		Indeno(1,2,3-cd)	1-Methyl-	2-Methyl-	Naph-	Phenan-	
	naphthene	thylene	Anthracene	anthracene	pyrene	fluoranthene	Perylene	fluoranthene	Chrysene	anthracene	thene	Fluorene	pyrene	naphthalene	naphthalene	thalene	threne	Pyrene
Date	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(dqq)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
09/26/12	<0.025	<0.019	<0.018	<0.024	<0.018	<0.02	<0.019	<0.022	<0.019	<0.019	<0.022	<0.02	<0.018	<0.022	<0.024	0.049	<0.019	<0.02
ENFORCE ME	NT STANDARI	) = ES Bold	3000	==	0.2	0.2	==	==	0.2	==	400	400	==	==	==	40	22	250
PREVENTIVE	ACTION LIMIT	= PAL Italics	600	==	0.02	0.020	m E	55	0.02	==	80	80	==	==	==	8	==	50

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

# A.1 Groundwater Analytical Table Browntown Oil BRRTS# 03-23-001503

Well Sampling Conducted on September 26, 2012

							ENFORCE MENT STANDARD =	PREVENTIVE ACTION LIMIT =
VOC's							ES – Bold	PAL - Italics
Well Name	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6		
Danna a danh	3.3	1.16 "J"	0.5	0.5	. 0.5	- 0.5	5	0.5
Benzene/ppb			0.5	0.5	< 0.5	< (),5	==	0.3 ==
Bromobenzene/ppb	< 0.74	< 0.74	0.74	< 0.74	< 0.74	< 0.74		
Bromodichloromethane/ppb	< 0.68	< 0.68	0.68	< 0.68	< 0.68	< 0.68	0.6	0.06
Bromoform/ppb	< 0.43	< 0.43	0.43	< 0.43	< 0.43	< 0.43	4.4	0.44
tert-Butylbenzene/ppb	< 0.71	< 0.71	0.71	< 0.71	< 0.71	< 0.71	==	==
sec-Butylbenzene/ppb	3.4	1.75 "J"	< 1	e 1	1.06 "J"	< 1	==	==
n-Butylbenzene/ppb	6.8	7.5	-: 0.9	< (),9	1.07 "J"	< 0.9	==	==
Carbon Tetrachloride/ppb	< 0.47	< 0.47	. 0.47	< 0.47	< 0.47	< 0.47	5	0.5
Chlorobenzene/ppb	< 0.51	< 0.51	0.51	< 0.51	< 0.51	< 0.51	==	==
Chloroethane/ppb	< 1.4	< 1.4	- 1,4	4 1.4	< 1.4	< 1.4	400	80
Chioroform/ppb	< 0.49	< 0.49	0.49	·· ().49	< 0.49	< 0.49	66	0.6
Chloromethane/ppb	< 1.9	< 1.9	- 1.9	< 1,9	< 1.9	< 1.9	30	3
2-Chlorotoluene/ppb	< 0.7	< 0.7	. 0.7	0.7	< 0.7	< 0.7	==	==
4-Chiorotoluene/ppb	< 0.44	< (),44	0.44	. 0,44	~ 0,44	< (),44		
1,2-Dibromo-3-chloropropane/ppb	< 2.8	< 2.x	2.8	· 2,x	< 2.8	< 2,8	0.2	0.02
Dibromochloromethane/ppb	< 0.55	< 0.55	0.55	0.55	< 0.55	< 0.55	60	6
1,4-Dichlorobenzene/ppb	. 0.98	< 0.98	0.98	. 0.98	. 0.98	+ 0,98	75	15
1,3-Dichlorobenzene/ppb	< 0.87	< 0.87	0.87	0.87	< 0.87	0.87	600	120
1,2-Dichlorobenzene/ppb	< 0.76	< 0.76	0.76	- 0.76	~ 0.76	~ 0.76	600	60
Dichlorodifluoromethane/ppb	. 1.8	< 1.8	1.8	· 1,8	× 1.8	· 1,8	1000	200
1,2-Dichloroethane/ppb	< 0.5	< 0.5	- 0.5	~ 0.5	< 0.5	< 0.5	5	0.5
1,1-Dichloroethane/ppb	< 0.98	< 0.98	0.98	0.98	- 0.98	0.98	850	85
1,1-Dichloroethene/ppb	~ 0.6	< 0.6	0.6	8.0	- 0.6	< 0.6	7	0.7
cis-1,2-Dichloroethene/ppb	< 0.74	< 0.74	0.74	< 0.74	· 0.74	0.74	70	7
trans-1,2-Dichloroethene/ppb	~ 0.79	< 0.79	0.79	0.79	< 0.79	< 0.79	100	20
1,2-Dichloropropane/ppb	< 0.4	< 0.4	0.4	< 0.4	< 0.4	< 0.4	5	0.5
2,2-Dichloropropane/ppb	< 1.9	< 1.9	- 1.9	-: 1.9	< 1.9	< 1,9	==	==
1,3-Dichloropropane/ppb	< 0.71	< 0.71	0.71	~ 0.71	< 0.71	< 0.71	==	==
Di-isopropyl ether/ppb	< 0.69	< (),69	- 0,69	< 0.69	< (),69	< 0.69	==	==
EDB (1,2-Dibromoethane)/ppb	< 0.63	< 0.63	0.63	< 0.63	< 0.63	< 0.63	0.05	0.005
Ethylbenzene/ppb	16.7	33	0.78	< 0.78	2.06 "J"	< 0.78	700	140
Hexachlorobutadiene/ppb	< 2.2	< 2.2	2.2	< 2,2	< 2.2	< 2.2	==	==
Isopropylbenzene/ppb	9.4	5	0.92	< 0.92	1.42 "J"	< 0.92	==	==
p-Isopropyltoluene/ppb	5.4	< 0.92	0.92	< 0.92	1.28 "J"	< 0.92	==	==
Methylene chloride/ppb	< 1.1	< 1.1	1.1	· 1.1	e: 1.1	< 1.1	5	0.5
Methyl tert-butyl ether (MTBE)/ppb	< 0.8	< 0.8	0.8	- 0.8	+ 0.8	< 0.8	60	12
Naphthalene/ppb	17.6	16.1	- 2.1	× 2.1	· 2.1	< 2.1	100	10
n-Propylbenzene/ppb	14.7	20	0.59	0.59	2.25	< 0.59	==	==
1,1,2,2-Tetrachloroethane/ppb	< 0.53	< 0.53	0.53	< 0.53	< 0.53	< 0.53	0.2	0.02
1,1,1,2-Tetrachloroethane/ppb	~ }	< 1	< 1	< 1	+ T	<	70	7
Tetrachloroethene (PCE)/ppb	- 0.44	< 0.44	- 0,44	€ 0,44	≈ 0,44	< 0.44	5	0.5
Toluene/ppb	17	3.6	0.53	< 0.53	< 0.53	< 0.53	800	160
1,2,4-Trichlorobenzene/ppb	< 1.5	< 1.5	1.5	< 1.5	- 1.5	< 1.5	70	14
1,2,3-Trichlorobenzene/ppb	< 1.3	< 1.3	- 1.3	< 1.3	< 1.3	< 1.3	==	i i
1,1,1-Trichloroethane/ppb	< 0.85	< 0.85	0,85	< 0.85	< 0.85	< 0.85	200	40
1,1,2-Trichloroethane/ppb	< 0.47	< 0.47	0.47	< 0.47	< 0.47	<: 0.47	5	0.5
Trichloroethene (TCE)/ppb	< 0.47	< ().47	0.47	< 0.47	< 0.47	< 0.47	5	0.5
Trichlorofluoromethane/ppb	< 1.7	< 1,7	1.7	< 1.7	< 1.7	< 1.7	==	==
1,2,4-Trimethylbenzene/ppb	97	135	8.0	-: ().8	15.6	< 0.8		
1,3,5-Trimethylbenzene/ppb	27.6	41	0.74	< 0.74	3.14	< 0.74	Total TMB's 480	Total TMB's 96
Vinyl Chloride/ppb	< 0.18	< 0.18	- 0.18	< 0.18	< 0.18	< 0.18	0.2	0.02
m&p-Xylene/ppb	88	51	< 1.1	< 1.1	3.11 "J"	< 1.1		
o-Xylene/ppb	41	12.4	.: 0.8	< 0.8	2.55 "J"	< 0.8	Total Xylenes 2000	Total Xylenes 400
So o o serito force	• • • • • • • • • • • • • • • • • • • •	144.4	. (7.11	* 0,0		~ 0,0	Total Aylelles 2000	i otal Aylelles 400

NS = not sampled, NM = Not Measured
Q = Analyte detected above laboratory method detection limit but below practical quantitation limit.
= = No Exceedences

A.2. Soil Analytical Results Table Browntown Oil BRRTS# 03-23-001503

																	DIRECT CO	NTACT PVOC & PAI	H COMBINED
Sample	Depth	Saturation	Date	PID	Lead	DRO	GRO	_	Ethyl		Naph-		1,2,4-Trime-		Xylene	Other VOC's			Cumula
ID	(feet)	U/S			(ppm)	(ppm)	(ppm)	Benzene		ľ	thalene	Toluene		thylbenzene	1	(ppm)	Exeedance	Hazard	Cance
1	11	S	12/08/98	3				(ppm)	(ppm)		(ppm) SAMPLED	(ppm)	(ppm)	(ppm)	(ppm)	NS	Count	Index	Risk
2	11	Š	12/08/98	15	<del>                                     </del>						SAMPLED					NS NS		<del> </del>	<del> </del>
3	11	S	12/08/98	916	NS	NS	1900	NS	NS	NS	NS NS	NS	NS	NS	NS	NS		1	<del> </del>
4	8.5	S	12/08/98	556							AMPLED		·	<u> </u>	·	NS		1	
5	8.5	S	12/08/98	5	]					NOT S	AMPLED					NS			
6	8.5	S	12/08/98	9							SAMPLED					NS			
7	8.5	S	12/08/98	27	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS_	NS			
8	8.5	S	12/08/98	59							SAMPLED					NS		<u> </u>	ļ
9	8.5 9	S	12/08/98 12/08/98	33 59	ļ						SAMPLED SAMPLED					NS NS	·		<u> </u>
11	9	S	12/08/98	172	ļ <u> </u>						SAMPLED			<del></del>		NS NS		<del> </del>	<del> </del>
Piping 1	2	Ü	12/08/98	636	<del> </del>						SAMPLED					NS NS			
Piping 2	2	Ü	12/08/98	24	<del>                                     </del>						SAMPLED	*****				NS		<del>                                     </del>	<del> </del>
G-1-1	3	U	10/10/11	0	39	NS	<10	<0.025	<0.025	<0.025	<0.025	0.045	<0.025	<0.025	0.058-0.083	NS			İ
G-1-2	6	S	10/10/11	50	NS	NS	22	0.032	0.320	<0.025	0.470	0.125	2.67	1.11	2.23	NS			
G-2-1	3	U	10/10/11	0	45.0	NS	<10	<0.025	<0.025	<0.025	<0.025	0.079	<0.025	<0.025	<0.075	NS			
G-2-2	6	S	10/10/11	100	NS	NS	<10	<0.025	0.091	<0.025	0.082	0.043	0.450	0.165	0.494	NS			
G-3-1	3	U	10/10/11	0	NS	12.8	NS	<0.025	<0.025	<0.025	<0.0108	<0.025	<0.025	<0.025	0.068-0.118	NS			<u> </u>
G-3-2	6	S	10/10/11	50	NS	27.3	NS	<0.025	1.43	<0.025	2.87	0.120	2.09	2.95	2.15	NS			
ı							ı		1	1			l			SEE VOC		1	
G-4-1	3	U	10/10/11	200	21.8	NS	2860	<0.089	1.41	<0.120	12.5	<0.500	76	30.2	11.09	SPREAD- SHEET	1	1.02E+00	2.6E-0
G-4-1	6	S	10/10/11	250	NS NS	NS NS	1140	0.810	8.4	<0.120	6.2	5.1	48	19	37.3	NS		1.025*00	Z.0E-
G-5-1	3	Ü	10/10/11	0	25.4	NS	<10	<0.025	<0.025	<0.025	<0.025	0.036	<0.025	<0.025	<0.075	NS NS		<del> </del>	<del> </del>
G-5-2	6	S	10/10/11	150	NS	NS	370	0.460	4.6	<0.250	3.7	1.76	12.3	5.9	9.48	NS			l
G-6-1	3	U	10/10/11	0		-		·	-		AMPLED			····	<del></del>	NS			1
G-6-2	6	S	10/10/11	0							AMPLED					NS			
G-7-1	3	U	10/10/11	0							AMPLED					NS			
G-7-2	6	S	10/10/11	0							AMPLED					NS			
G-8-1	3	U	10/11/11	0							AMPLED					NS			
G-8-2	6	S	10/11/11	0	440	1 10	1 -40	-0.005	-0.005		AMPLED	1 0 000	-0.005	-0.005	10.075	NS.		<u> </u>	
G-9-1 G-9-2	<u>3</u>	S	10/11/11	10 20	14.2 NS	NS NS	<10 <10	<0.025	<0.025	<0.025 <0.025	<0.025 <0.025	0.036 0.036	<0.025	<0.025	<0.075	NS NS			
G-10-1	3	<del>u</del>	10/11/11	0	143	142	<u> </u>	<0.025	<0.025		AMPLED	0.036	<0.025	<0.025	<0.075	NS NS			
G-10-2	6	s	10/11/11	200	NS	NS	1150	0.580	12.4	<0.0250	1.09	4.8	10.1	5.1	12.62	NS NS			
G-11-1	3	<del>- ŭ</del>	10/11/11	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	0.036	<0.025	< 0.025	<0.075	NS NS			ļ
G-11-2	6		10/11/11	0	NS	NS	<10	< 0.025	<0.025	<0.025	<0.025	0.036	<0.025	<0.025	<0.075	NS			
G-12-1	3	U	10/11/11	0						NOT S	AMPLED	<u> </u>				NS			
G-12-2	6	S	10/11/11	0					NS										
G-13-1	3	U	10/11/11	0					NS										
G-13-2	6	U	10/11/11	60	NS	NS	<10	<0.025	<0.025	<0.025	<0.025	0.036	<0.025	<0.025	. <0.075	NS			
G-14-1	3		10/11/11	0	NIC	LNC	L <10	-0.00F	-0.005		AMPLED 50.005	T 0 000 I	-0.00F	40.00E	10.075	NS			
G-14-2 G-15-1	6 3		10/11/11	0	NS	NS	<10	<0.025	<0.025	<0.025	<0.025 AMPLED	0.036	<0.025	<0.025	<0.075	NS NS			
G-15-2	6		10/11/11	0							AMPLED					NS NS			
G-16-1	3		10/11/11	0							AMPLED					NS			
G-16-2	5-7		10/11/11	0							AMPLED					NS			
G-17-1	3	U	10/11/11	0	15.5	NS	<10	<0.025	<0.025	< 0.025	<0.025	0.036	<0.025	<0.025	<0.075	NS			
G-17-2	6		10/11/11	250	NS	NS	<10	<0.025	0.570	<0.025	0.320	0.110	1.02	0.340	3.25	NS			
иW-1-1	3.5		06/04/12	0	5	NS	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
/W-1-2	8		06/04/12	40	NS	NS	<10	<0.025	0.03	<0.025	0.0274	0.049	0.198	0.124	0.287	NS			
/W-1-3	13		06/04/12	10							AMPLED					NS			
MW-3-1	3.5		06/04/12	0							AMPLED					NS			
1W-3-2 1W-3-3	6-8 13		06/04/12	0							AMPLED					NS NS			
1W-4-1	3.5		06/04/12	0							AMPLED AMPLED					NS NS			
W-4-2	6-8		06/04/12						N	O RECOVE						NS NS			
IW-4-3	13		06/04/12	0				·			AMPLED					NS			
IW-5-1	3.5		06/04/12	0						NOT S	AMPLED					NS			
1W-5-2	6.5		06/04/12	0							AMPLED					NS			
1W-5-3	13		06/04/12	0							AMPLED					NS			
IW-6-1	3		06/04/12	0							AMPLED					NS			
IW-6-2	6		06/04/12	0							AMPLED					NS			
W-6-3	13	S	06/04/12	0						NOTS	AMPLED					NS			
undwater	RCI				27	_		0.00512	1.57	0.027	0.659	1.11	1.3	8	3.94	NS .			-
		ontact RCL			400	-	-	1.49	7.47	59.4	5.15	818	89.8	182	258			1.00E+00	1.00E
		tration (C-sa	t)*					1820*	480*	8870*	-	818*	219*	182*	258*				1.002
Id & Under Id & Asterio = Not Sam m) = parts p O = Diesel O = Gasolir	rline = Non ic * = C-sat ipled per million Range Org	Organics	irect Cont	act RCL Exc															

# A.2. Soil Analytical Results Table (Geoprobe PAH) Browntown Oil BRRTS# 03-23-001503

																	DIRECT CONTACT PVOC & PAH COMBINED							
		Saturation		Acenaph-	Acenaph-		Benzo(a)	Benzo(a)	Benzo(b)	Benzo(g,h,i)	Benzo(k)		Dibenzo(a,h)			Indeno(1,2,3-cd)	1-Methyl-	2-Methyl-	Naph-	Phenan-				Cumulative
Sample	Depth	U/S	Date	thene	thylene	Anthracene	anthracene	pyrene	fluoranthene	perylene	fluoranthene	Chrysene	anthracene	Fluoranthene	Fluorene	pyrene	naphthalene	naphthalene	thalene	threne	Pyrene	Exeedance	Hazard	Cancer
	(feet)			(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	Count	Index	Risk
G-3-1	3		10/10/11	<0.0097	<0.0084	<0.0102	<0.0146	<0.0166	< 0.0167	<0.0082	<0.0161	0.0115	< 0.0105	0.0155	< 0.0107	<0.0095	<0.0179	<0.0096	<0.0108	<0.0098	0.0143			
Groundwate	Groundwater RCL					197		0.47	0.48			0.145		88.8	14.8		ļ		0.659		54.5			
Non-Industr	rial Direct Co	ontact RCL	<u>3440</u>		<u>17200</u>	0.148	0.0148	0.148		<u>1.48</u>	14.8	0.0148	2290	2290	0.148	<u>15.6</u>	229	5.15		1720	0	1.00E+00	1.00E-05	
Soil Saturat	Soil Saturation Concentration (C-sat)*																							

Bold = Groundwater RCL Exceedance

Bold & Underline =Industrial Direct Contact RCL Exceedance
Bold &Asteric \* = C-sat Exceedance

NS = Not Sampled

(ppm) = parts per million
PAH = Polynuclear Aromatic Hydrocarbons
PID = Photoionization Detector
VOC's = Volatile Organic Compounds

#### A.2. Soil Analytical Results Table Browntown Oil BRRTS# 03-23-001503

Well Sampling Conducted on October 10, 2011

VOC's		Bold = Groundwater RCL	Underline & Bold = Direct Contact RCL	Asteric * & Bold =Soil Saturation (C-sat) RCL
Sample ID# Sample Depth/ft.	G-4-1 3			
Solids Percent	87.1	= =	= =	= =
Lead/ppm	21.8	27	400	= =
GRO/ppm	2860	= =	= =	= =
Benzene/ppm	< ().()89	0.00512	1.49	1820
Bromobenzene/ppm	< ().14()	= =	354	= =
Bromodichloromethane/ppm	<().120	0.000326	0.39	= =
Bromoform/ppm	< (),2()()	0.00233	61.6	<b>=</b> =
tert-Butylbenzene/ppm	< ().540	= =	183	183
sec-Butylbenzene/ppm	3.4	= =	145	145
n-Butylbenzene/ppm	15.9	==	108	108
Carbon Tetrachloride/ppm	< 0.120	0.00388	0.85	II II
Chlorobenzene/ppm	< (),()94	= =	392	= =
Chloroethane/ppm	< 1.420	0.227	<b>=</b> =	= =
Chloroform/ppm	< ().46()	0.0033	0.42	= =
Chloromethane/ppm	< .070	0.0155	171	tion many
2-Chlorotoluene/ppm	< 0.840	= =	= =	= =
4-Chlorotoluene/ppm	< ().760	==	==	THE STREET
1,2-Dibromo-3-chloropropane/ppm	< ().770	0.000173	0.01	= =
Dibromochloromethane/ppm	< 0.095	0.032	0.93	= =
1,4-Dichlorobenzene/ppm	< 0.520	0.144	3.48	==
1,3-Dichlorobenzene/ppm	< 0.530	1.15	297	297
1,2-Dichlorobenzene/ppm	< 0.510	1.17	376	376
Dichlorodifluoromethane/ppm	< 0.120	3.08	135	<u> </u>
1,2-Dichloroethane/ppm	< 0.130	0.00284	0.61	540
1,1-Dichloroethane/ppm	< 0.110 < 0.220	0.484	4.72	<u></u>
1,1-Dichloroethene/ppm	< ().140	0.00502	342	= =
cis-1,2-Dichloroethene/ppm	< ().22()	0.0412 0.0588	156	= =
trans-1,2-Dichloroethene/ppm	< 0.220	0.00332	211	==
1,2-Dichloropropane/ppm	< 0.330	0.00332	1.33 527	527
2,2-Dichloropropane/ppm 1,3-Dichloropropane/ppm	< 0.110	==	1490	1490
Di-isopropyl ether/ppm	< 0.470	= =	2260	2260
EDB (1,2-Dibromoethane)/ppm	< 0.170	0.0000282	0.05	2200
Ethylbenzene/ppm	1.410 "J"	1.57	7.47	480
Hexachlorobutadiene/ppm	< 0.950	==	6.23	= =
isopropylbenzene/ppm	2.65	= =	==	= =
p-Isopropyltoluene/ppm	11.1	= =	162	162
Methylene chloride/ppm	< 1.190	0.00256	60.7	=======================================
Methyl tert-butyl ether (MTBE)/ppm	< ().120	0.027 0.659	59.4 5.15	8870 = =
Naphthalene/ppm n-Propylbenzene/ppm	<u>12.5</u> 5.5	0.659	5.15	==
1,1,2,2-Tetrachloroethane/ppm	< ().200	0.000156	0.75	= =
1,1,1,2-Tetrachloroethane/ppm	< ().410	0.0533	2.59	= =
Tetrachloroethene (PCE)/ppm	< (),240	0.00454	30.7	= =
Toluene/ppm	< 0.500	1,11	818	818
1,2,4-Trichlorobenzene/ppm	<: ().740	0.408	22.1	= =
1,2,3-Trichlorobenzene/ppm	< 1.290	= =	48.9	= =
1,1,1-Trichloroethane/ppm	< ().110	0.14	= =	= =
1,1,2-Trichloroethane/ppm	< 0.160	0.00324	1.48	= =
Trichloroethene (TCE)/ppm	< ().170	0.00358	0.64	= =
Trichlorofluoromethane/ppm	< ().43()	= =	1120	= =
1,2,4-Trimethylbenzene/ppm	76	1.38	89.8	219
1,3,5-Trimethylbenzene/ppm	30.2		182	182
Vinyl Chloride/ppm m&p-Xylene/ppm	< ().160 9.6	0.000138	0.07	= =
o-Xylene/ppm	1.490 "J"	3.94	258	258

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

#### A.3. Residual Soil Contamination Table Browntown Oil BRRTS# 03-23-001503

																	DIRECT CO	NTACT PVOC & PAF	COMBINED
Sample	Depth	Saturation	Date	PID	Lead	DRO	GRO		Ethyl		Naph-		1,2,4-Trime-	1,3,5-Trime-	Xylene	Other VOC's			Cumulative
ID	(feet)	U/S	]		(ppm)	(ppm)	(ppm)	Benzene	Benzene	MTBE	thalene	Toluene	thylbenzene	thylbenzene	(Total)	(ppm)	Exeedance	Hazard	Cancer
		ļ						(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)		Count	Index	Risk
G-1-1	3	U	10/10/11	0	39	NS	<10	<0.025	<0.025	<0.025	<0.025	0.045	<0.025	<0.025	0.058-0.083	NS			
G-1-2	6	S	10/10/11	50	NS	NS	22	0.032	0.320	<0.025	0.470	0.125	2.67	1.11	2.23	NS			
G-2-1	3	U	10/10/11	0	45.0	NS	<10	<0.025	<0.025	<0.025	<0.025	0.079	<0.025	<0.025	<0.075	NS			
G-3-2	6	S	10/10/11	50	NS	27.3	NS	<0.025	1.43	<0.025	2.87	0.120	2.09	2.95	2.15	NS			
																SEE VOC SPREAD-			
G-4-1	3	U	10/10/11	200	21.8	NS	2860	<0.089	1.41	< 0.120	<u>12.5</u>	<0.500	76	30.2	11.09	SHEET	11	1.02E+00	2.6E-06
G-4-2	6	S	10/10/11	250	NS	NS	1140	0.810	8.4	<0.250	6.2	5.1	48	19	37.3	NS			
G-5-2	6	S	10/10/11	150	NS	NS	370	0.460	4.6	<0.250	3.7	1.76	12.3	5.9	9.48	NS			
G-10-2	6	S	10/11/11	200	NS	NS	1150	0.580	12.4	<0.0250	1.09	4.8	10.1	5.1	12.62	NS			
·																NS			
Groundwate	er RCL				27	-	-	0.00512	1.57	0.027	0.659	1.11	1.	38	3.94	-			
Non-Industr	ial Direct (	Contact RCL			400	-	-	<u>1.49</u>	7.47	<u>59.4</u>	<u>5.15</u>	<u>818</u>	<u>89.8</u>	<u>182</u>	<u>258</u>	-	<u>0</u>	1.00E+00	1.00E-05
Soil Saturat	ion Conce	ntration (C-s	at)*		-	_	-	1820*	480*	8870*	-	818*	219*	182*	258*	-			

Bold = Groundwater RCL Exceedance

Bold & Underline = Non Industrial Direct Contact RCL Exceedance

Bold & Asteric \* = C-sat Exceedance

NS = Not Sampled

NM = Not Measured

(ppm) = parts per million DRO = Diesel Range Organics

GRO = Gasoline Range Organics

PID = Photoionization Detector

PVOC's = Petroleum Volatile Organic Compounds

### A.6 Water Level Elevations Browntown Oil BRRTS# 03-23-001503 Browntown, Wisconsin

	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Ground Surface (feet msl)	785.13	784.80	786.00	785.12	784.13	784.40
PVC top (feet msl)	784.49	784.44	785.62	784.70	783.61	783.92
Well Depth (feet)	13.00	13.00	13.00	13.00	13.00	13.00
Top of screen (feet msl)	762.13	761.80	763.00	762.12	761.13	761.40
Bottom of screen (feet msl)	772.13	771.80	773.00	772.12	771.13	771.40
Depth to Water From Top of PVC	C (feet)					
09/26/12	5.50	4.62	5.41	7.03	6.62	6.35
03/20/13	3.37	1.81	2.48	5.42	4.87	4.39
01/14/14	4.65	3.17	3.92	6.38	5.95	5.42
04/17/14	3.20	1.57	1.87	4.98	4.62	4.24
07/15/14	3.78	2.40	2.88	5.66	5.27	4.93
10/15/14	2.62	0.83	0.82	3.99	3.98	3.08
Depth to Water From Ground Su	, ,	4.00	E 70	7.45	7 4 4	0.00
09/26/12	6.14	4.98	5.79	7.45	7.14	6.83
03/20/13	4.01	2.17	2.86	5.84	5.39	4.87
01/14/14	5.29	3.53	4.30	6.80	6.47	5.90
04/17/14	3.84	1.93	2.25	5.40	5.14	4.72
07/15/14	4.42	2.76	3.26	6.08	5.79	5.41
10/15/14	3.26	1.19	1.20	4.41	4.50	3.56
Cupumdurater Elevation (feet me	n					
Groundwater Elevation (feet ms	<i>יי</i> 778.99	779.82	780.21	777.67	776.99	777.57
09/26/12 03/20/13	776.99 781.12	782.63	783.14	779.28	778.74	779.53
	779.84	782.03 781.27	783.14 781.70	778.32		
01/14/14	779.64 781.29	781.27 782.87	783.75	770.32 779.72	777.66	778.50
04/17/14	781.29 780.71	782.04	763.75 782.74	779.72	778.99 778.34	779.68 778.99
07/15/14	780.71 781.87	782.04 783.61	784.80	779.04 780.71	778.34 779.63	778.99 780.84
10/15/14	101.01	103.01	104.00	100.11	119.03	700.04

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

CNL = Could Not Locate

NI = Not Installed

NM = Not Measured

#### A.7 Other **Groundwater NA Indicator Results** Browntown Oil BRRTS# 03-23-001503

#### Monitoring Well MW-1

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	pН	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			(C)	Conductance	(ppm)	(ppm)	(ppm)	(ppm)
09/26/12	2.35	7.11	146.00	18.90	1684.00	3.12	24.8	<60	310
03/20/13	2.49	6.53	117.00	2.80	1298.00	NS	NS	NS	NS
01/14/14	3.13	6.61	109.00	6.90	819.00	NS	NS	NS	NS
04/17/14	3.11	6.68	300.00	3.80	1731.00	NS	NS	NS	NS
07/15/14	2.17	6.87	247.00	17.60	1551.00	NS	NS	NS	NS
10/15/14	2.16	6.17	262.00	14.40	917.00	NS	NS	NS	NS
NFORCE ME	NT STANDARD	= ES – Bold		L		10	-	-	300
REVENTIVE	ACTION LIMIT =	PAL - Italics				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).

#### Monitoring Well MW-2

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	ρΗ	ORP	Temp	Specific	Nitrite	Sulfate	iron	ganese
	(ppm)			( C)	Conductance	(ppm)	(ppm)	(ppm)	(ppm)
09/26/12	0.98	7.17	9.00	19.30	1107.00	0.18	30.2	3020	840
03/20/13	1.71	6.50	156.00	2.80	448.50	NS	NS	NS	NS
01/14/14	3.69	6.95	79.00	5.50	713.00	NS	NS	NS	NS
04/17/14	1.68	7.05	227.00	5.80	550.00	NS	NS	NS	NS
07/15/14	0.89	7.04	3.00	18.30	621.00	NS	NS	NS	NS
10/15/14	2.10	5.86	246.00	13.30	347.00	NS	NS	NS	NS
NFORCE ME	NT STANDARD	= ES – Bold		L	<del></del>	10	-	-	300
REVENTIVE	ACTION LIMIT =	PAL - Italics				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).

#### Monitoring Well MW-3

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	рΗ	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			(C)	Conductance	(ppm)	(ppm)	(ppm)	(ppm)
09/26/12	2.44	6.55	279.00	16.60	1528.00	1.74	36.8	360	176
03/20/13	5.61	6.55	147.00	2.08	708.00	NS	NS	NS	NS
01/14/14	4.13	7.10	241.00	5.50	981.00	NS	NS	NS	NS
04/17/14	4.48	7,41	216.00	7.00	403.00	NS	NS	NS	NS
07/15/14	1.30	6.98	277.00	19.10	508.00	NS	NS	NS	NS
10/15/14	3.95	6.46	279.00	13.00	514.00	NS	NS	NS	NS
ENFORCE ME	NT STANDARD	= ES – Bold		I	1	10	-	-	300
PREVENTIVE A	ACTION LIMIT =	PAL - Italics				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 Browntown Oil BRRTS# 03-23-001503

#### Monitoring Well MW-4

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	pΗ	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			( C)	Conductance	(ppm)	(ppm)	(ppm)	(ppm)
09/26/12	0.22	7.17	170.00	16.60	3156.00	2.42	50.1	<60	248
03/20/13	0.71	6.81	108.00	5.90	2497.00	NS	NS	NS	NS
01/14/14	1.61	6.72	209.00	7.40	2610.00	NS	NS	NS	NS
04/17/14	1.64	6.79	106.00	6.90	2027.00	NS	NS	NS	NS
07/15/14	1.40	6.73	259.00	17.60	2295.00	NS	NS	NS	NS
10/15/14	3.95	6.12	312.00	13.80	1227.00	NS	NS	NS	NS
ENFORCE MEN	NT STANDARD	= ES Bold				10	-	-	300
PREVENTIVE A	ACTION LIMIT =	PAL - Italics		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-5

	Dissolved			Ì		Nitrate +	Total	Dissolved	Man-
Date	Oxygen	pН	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
	(ppm)			( C)	Conductance	(ppm)	(ppm)	(ppm)	(ppm)
09/26/12	1.90	6.41	161.00	17.00	2326.00	<0.1	17.6	650	<0.7
03/20/13	1.53	6.58	139.00	4.20	3006.00	NS	NS	NS	NS
01/14/14	3.85	6.87	180.00	4.70	2811.00	NS	NS	NS	NS
04/17/14	2.02	7.19	69.00	5.70	2836.00	NS	NS	NS	NS
07/15/14	1.09	6.42	-1.00	16.50	4084.00	NS	NS	NS	NS
10/15/14	1.62	6.32	39.00	13.60	2161.00	NS	NS	NS	NS
	ll								
ENFORCE ME	NT STANDARD	= ES – Bold				10	-	-	300
REVENTIVE ACTION LIMIT = PAL - Italics						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).

#### Monitoring Well MW-6

	Dissolved					Nitrate +	Total	Dissolved	Man-
Date	Oxygen	ρН	ORP	Temp	Specific	Nitrite	Sulfate	Iron	ganese
l	(ppm)			( C)	Conductance	(ppm)	(ppm)	(ppm)	(ppm)
09/26/12	0.12	7.15	226.00	18.20	1032.00	0.99	44.5	<60	526
03/20/13	5.84	6.78	325.00	3.90	1182.00	NS	NS	NS	NS
01/14/14	2.49	6.26	238.00	5.80	1130.00	NS	NS	NS	NS
04/17/14	7.60	6.58	223.00	7.00	609.00	NS	NS	NS	NS
07/15/14	1.51	6.58	276.00	19.50	473.00	NS	NS	NS	NS
10/15/14	3.36	7.88	292.00	14.10	396.00	NS	NS	NS	NS
ENFORCE MEI	NT STANDARD	= E\$ – Bold				10	-	-	300
PREVENTIVE /	ACTION LIMIT =	PAL - Italics			2	-		60	
7 11	L 2011	/							

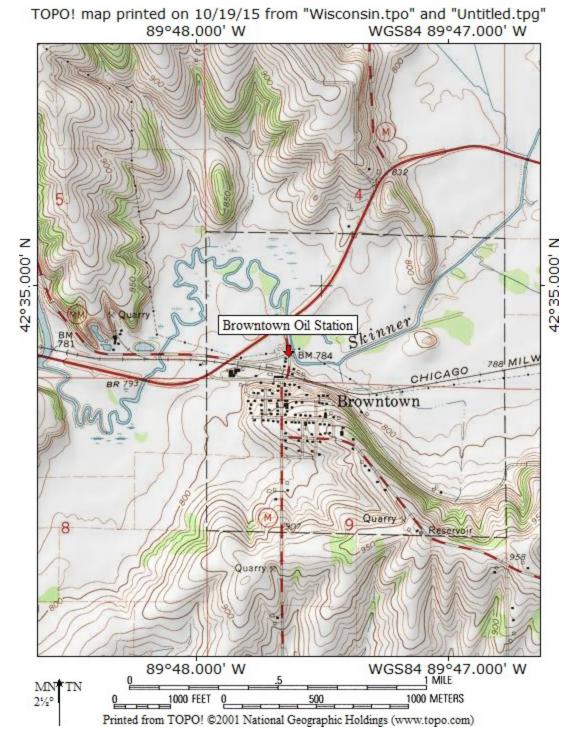
(ppb) = parts per billion

(ppm) = parts per million

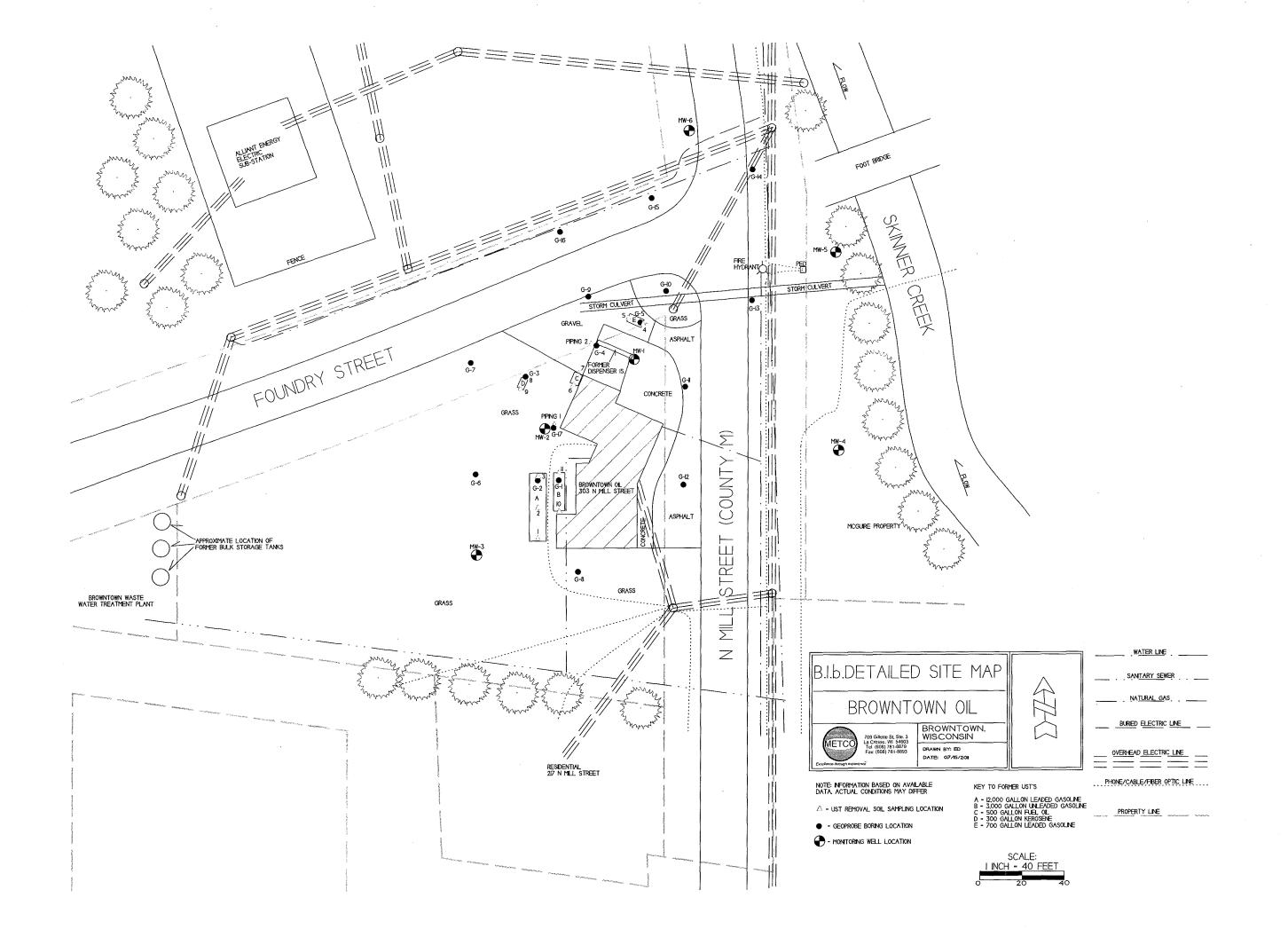
ns = not sampled nm = not measured
Note: Elevations are presented in feet mean sea level (msl).

#### 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 No vapor samples were assessed as part of this site investigation.
  - B.4.b Other media of concern (e.g., sediment or surface water) No surface waters or sediments were sampled as part of this site investigation.
  - B.4.c Other No other relevant maps and/or figures are being included.



B.1.a LOCATION MAP
CONTOUR INTERVAL 10 FEET
BROWNTOWN OIL STATION – BROWNTOWN, WI
SEAMLESS USGS TOPOGRAPHIC MAPS ON CD-ROM





## **B.1.c. RR Sites Map**





#### Legend

- Open Site (ongoing cleanup)
- Open Site Boundary
- Closed Site (completed cleanup)
- Closed Site Boundary
- **Groundwater Contamination**
- Soil Contamination
- Groundwater and Soil Contamination
- Contamination From Another Property
- Dryclean Environmental Response Fund (DERF)
- Green Space Grant (2004-2009)
- Ready for Reuse
- Site Assessment Grant (2001-2009)
- State Funded Response
- Sustainable Urban Development Zone (§
- General Liability Clarification Letters
- Superfund NPL
- Voluntary Party Liability Exemption
- Rivers and Streams
- Open Water

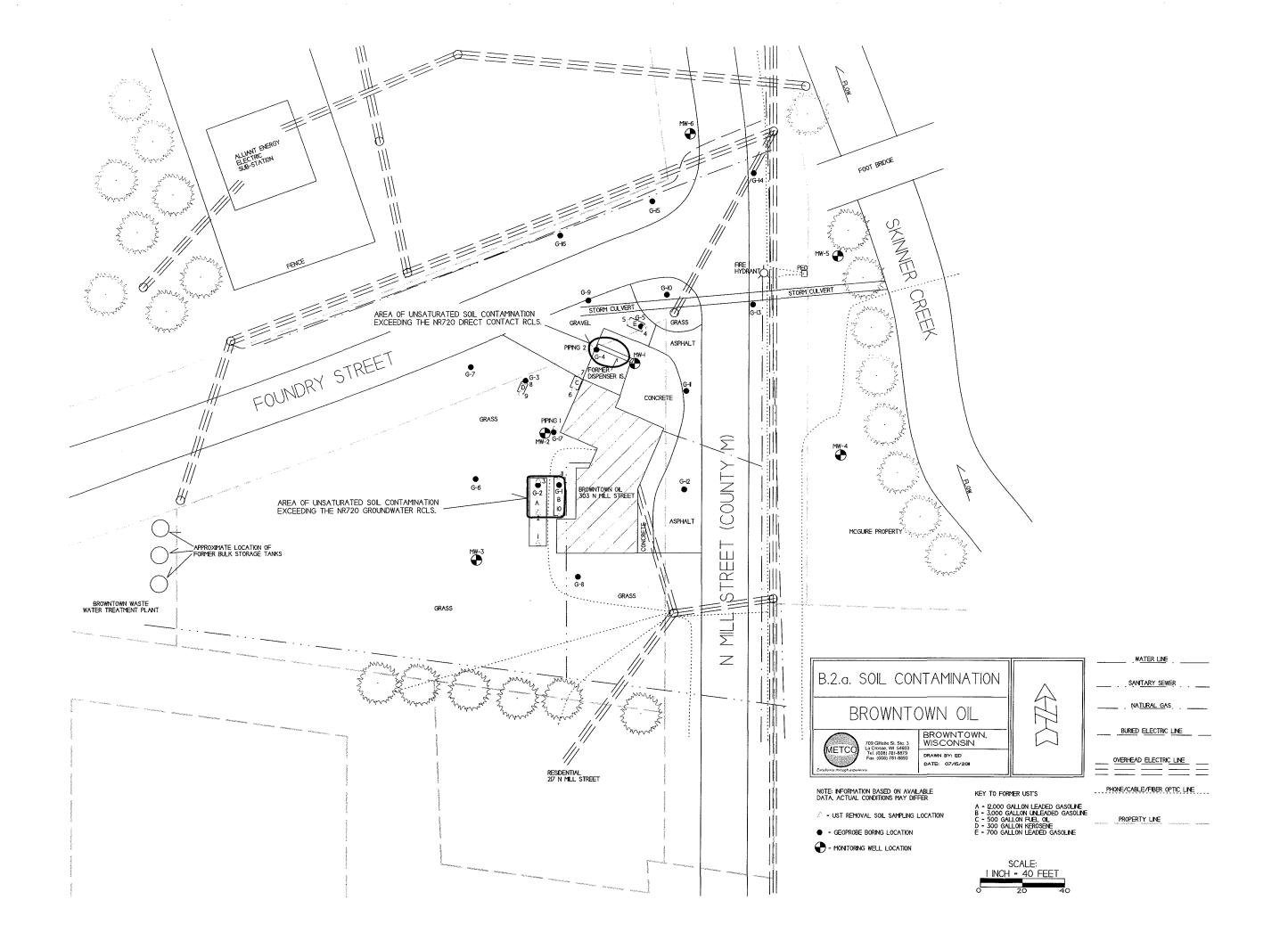
**Notes** 

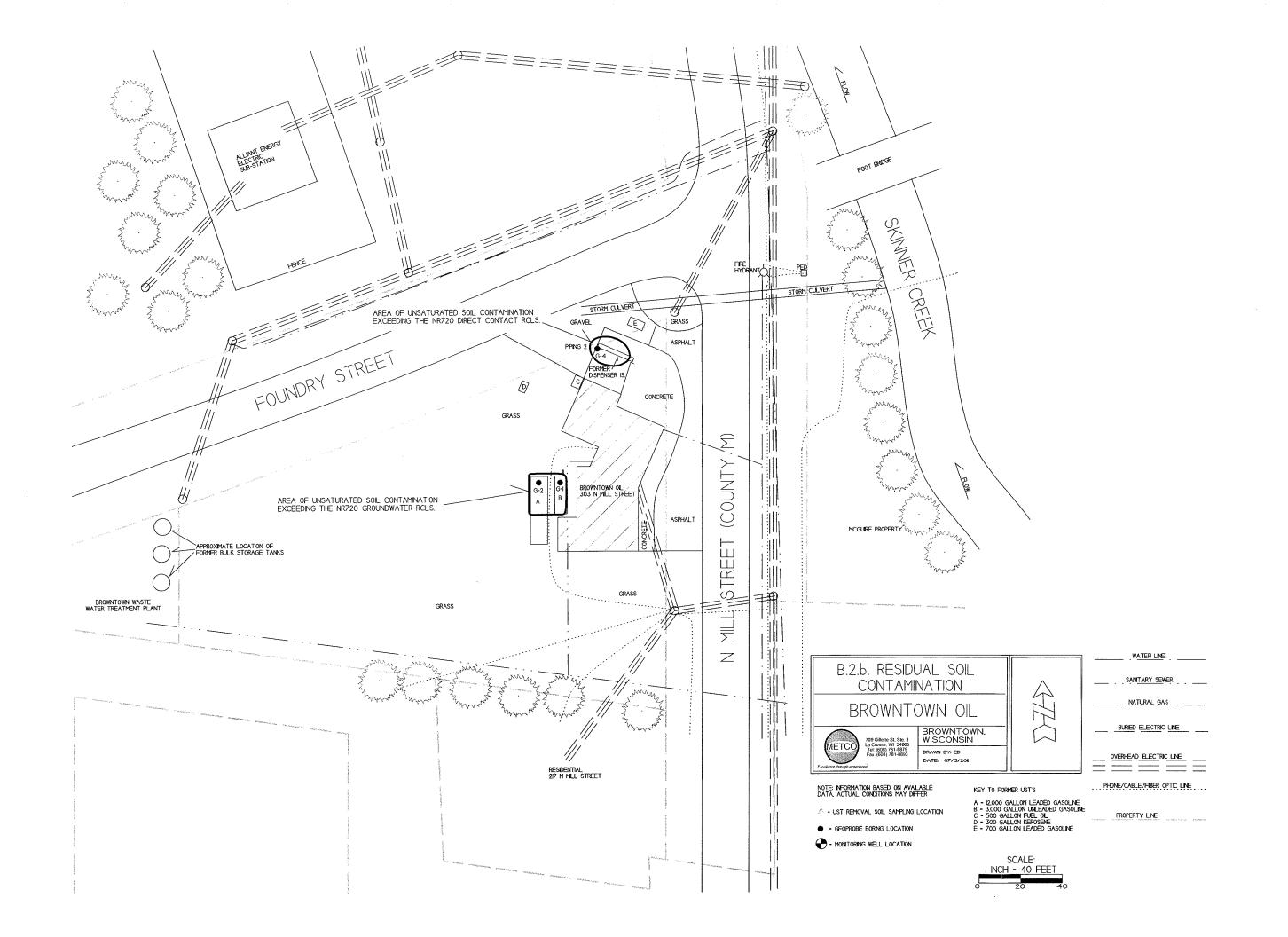
The GIS Registry shows an ERP site (Green County Ag Service) in the location of the Browntown Oil site, which is incorrect. The GIS Registry also shows the Browntown Oil site to be approximately 500 feet to the south of its actual location.

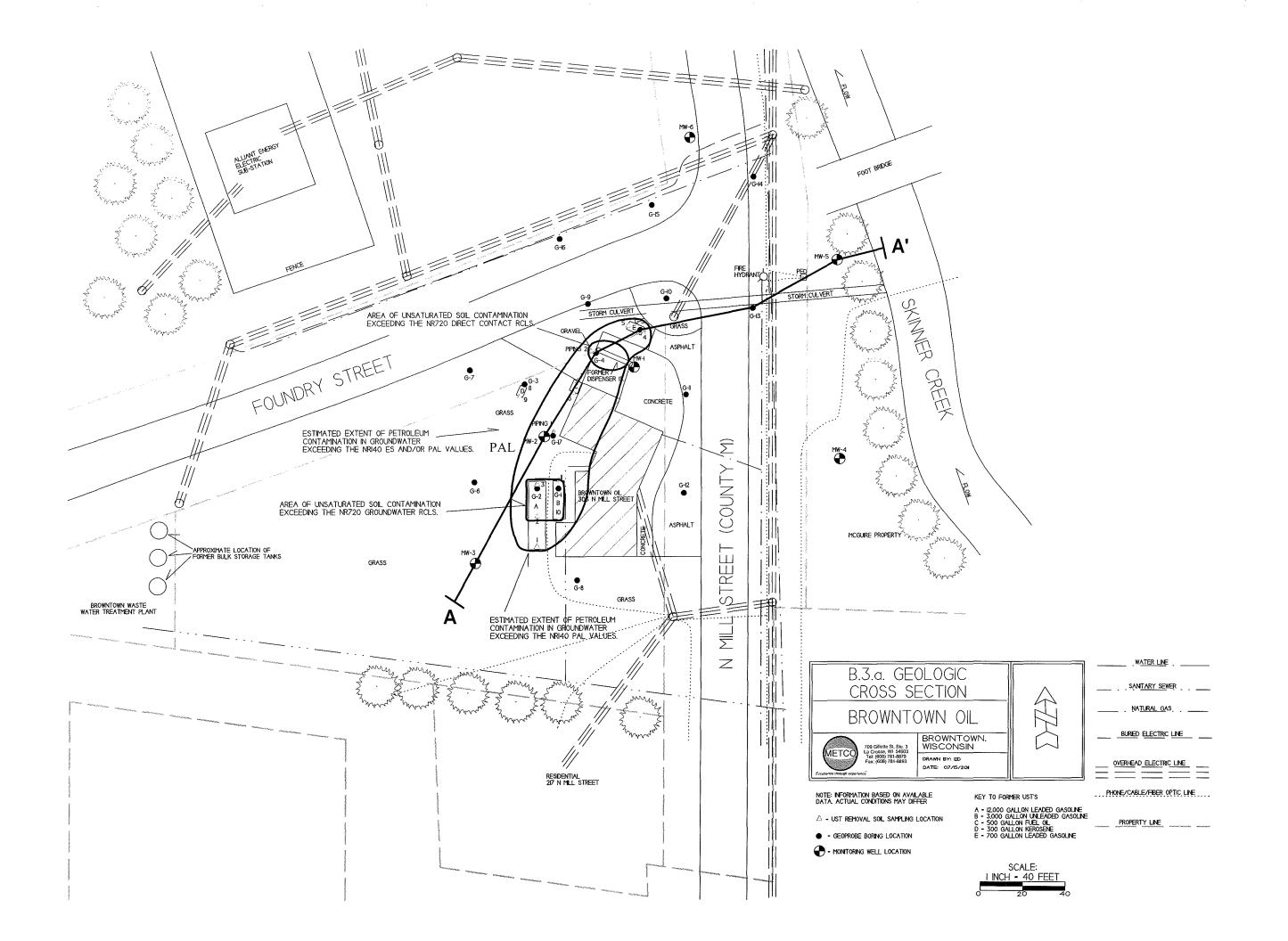
0.17 0.3 Miles 0.3 NAD\_1983\_HARN\_Wisconsin\_TM 1:10,602 © Latitude Geographics Group Ltd.

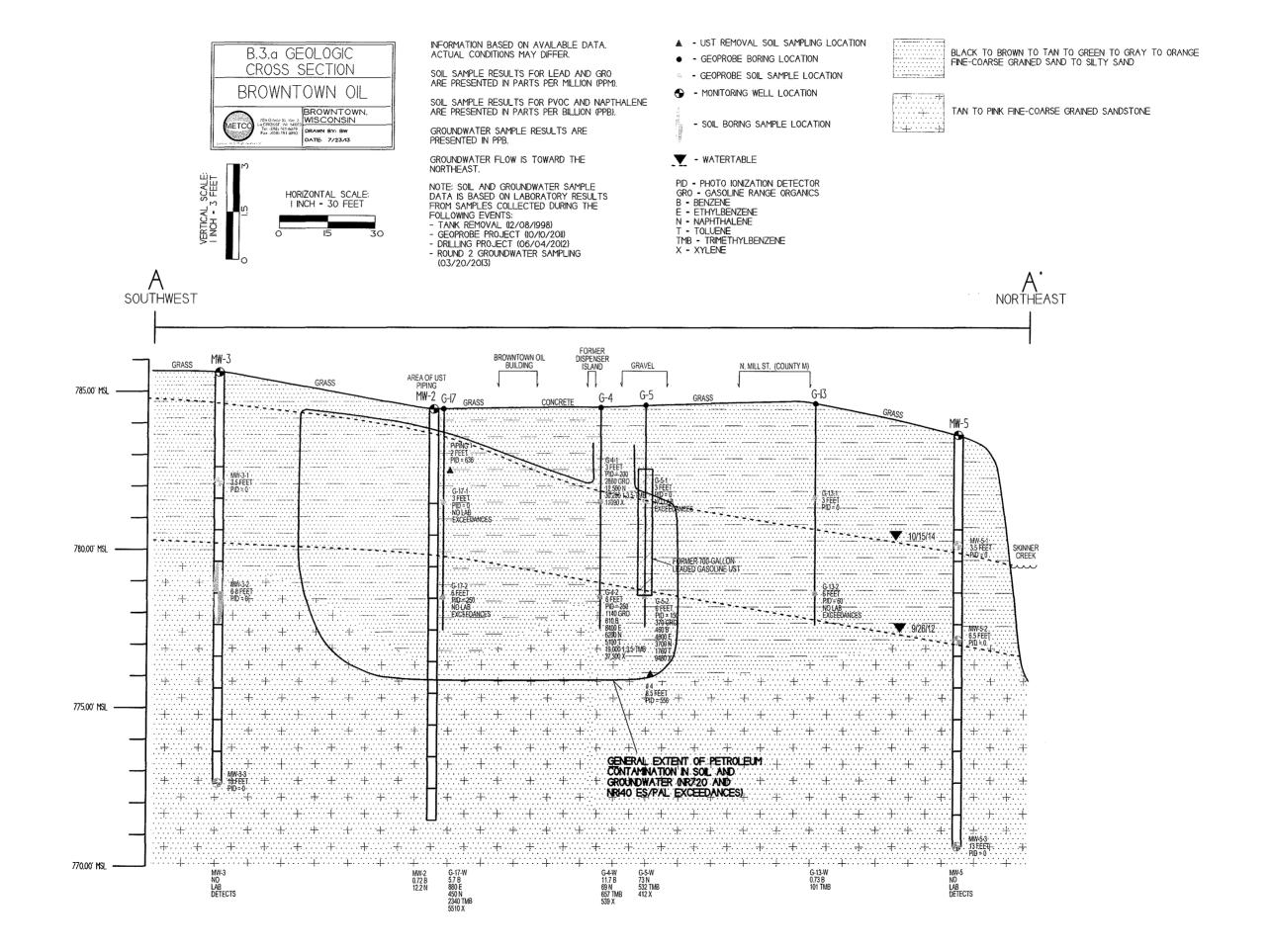
DISCLAIMER: The information shown on these maps has been obtained from various sources and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made aregarding accuracy, applicability for a particular use, completemenss, 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/

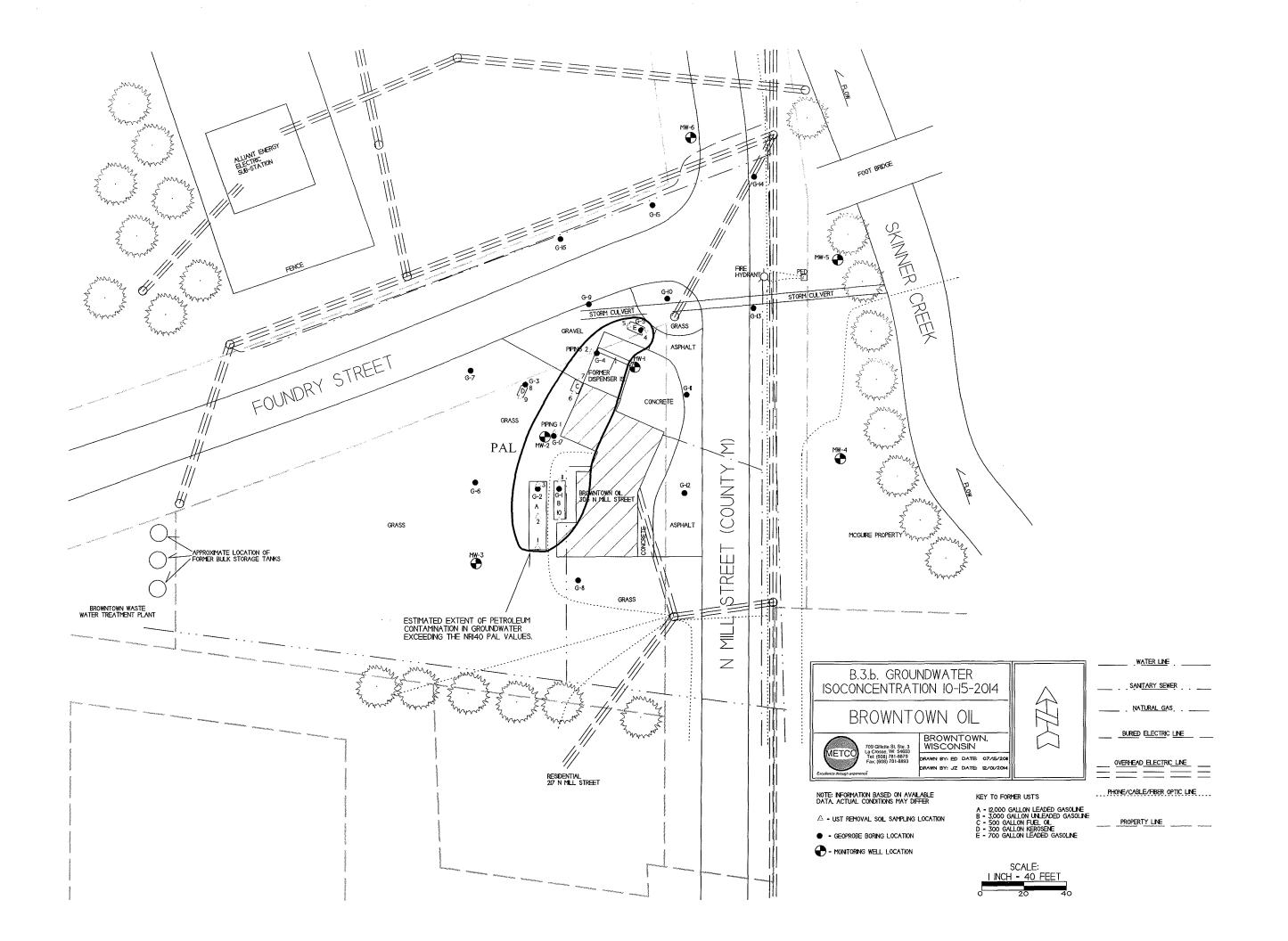
Note: Not all sites are mapped.

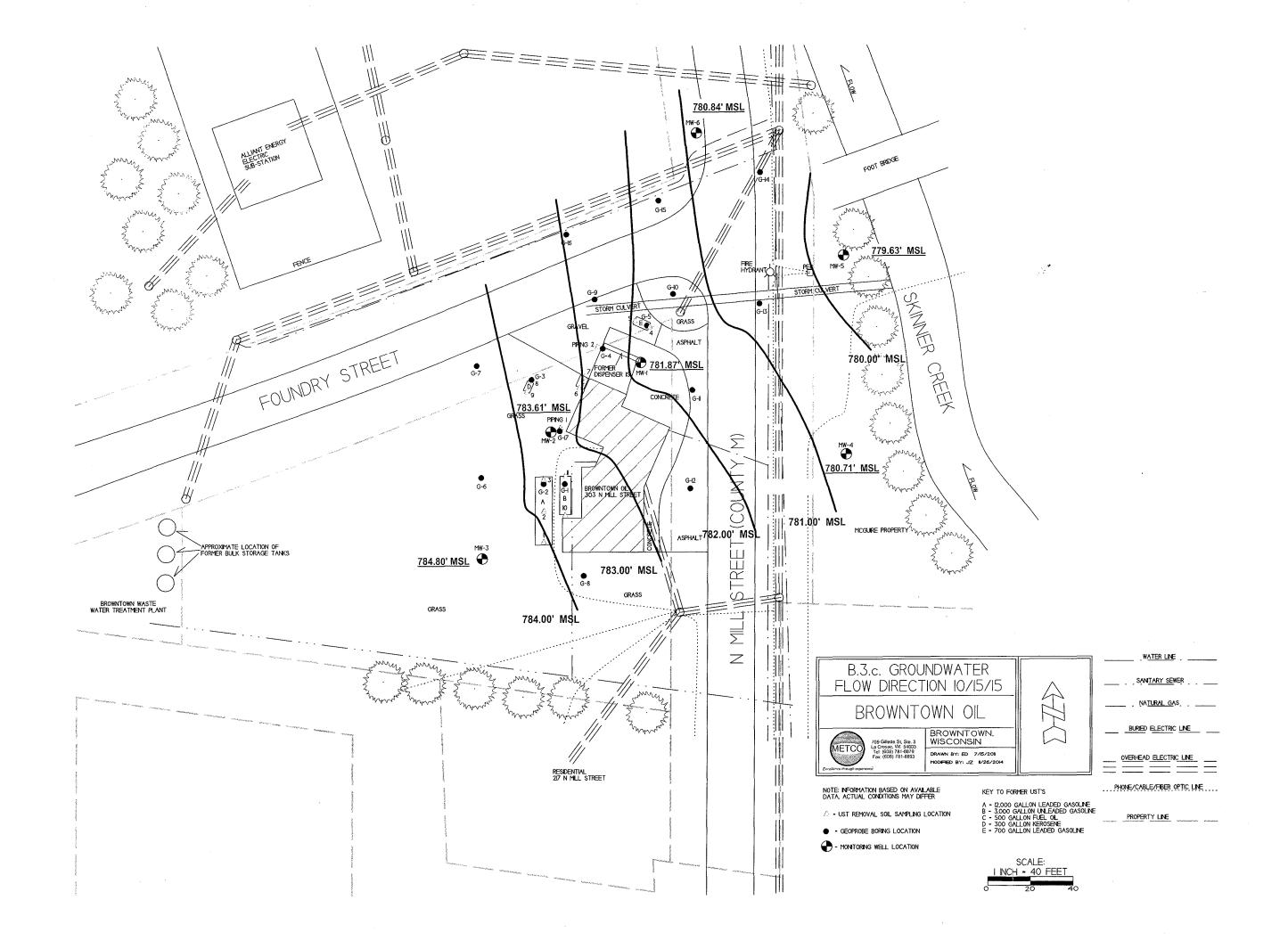


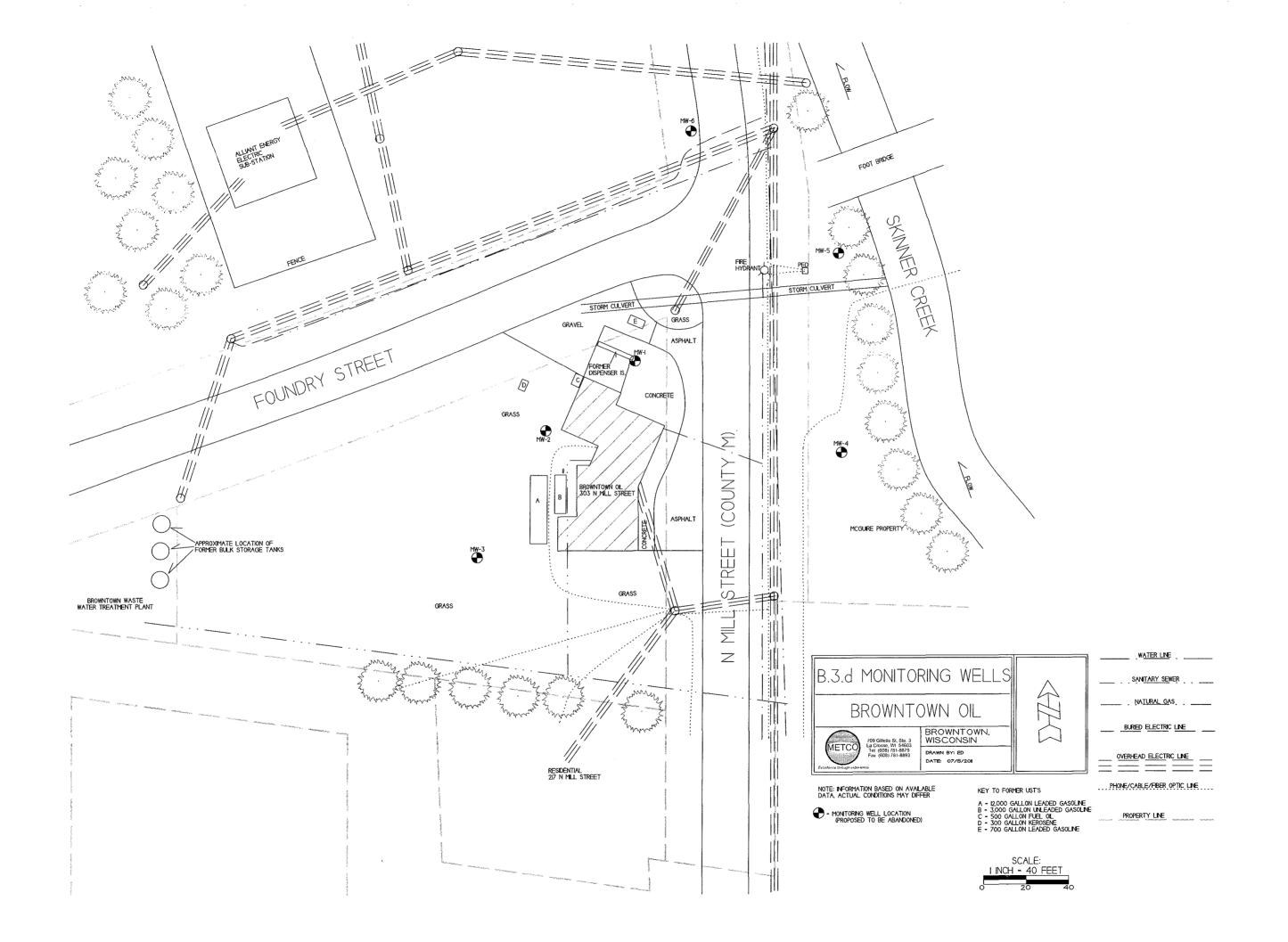












#### Attachment C/Documentation of Remedial Action

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

WDNR Site Name: Browntown Oil

- Site Investigation Report, September 2013
- Groundwater Monitoring Report, December 2014

#### 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: <a href="http://dnr.wi.goc/topic/brownfields.Professionals.html">http://dnr.wi.goc/topic/brownfields.Professionals.html</a>\
  Residual Contaminant Levels (RCLs) were established in accordance with NR720.10 and NR720.12. Soil RCLs for the protection of the groundwater pathway and for non-industrial direct contact were taken from the RR programs RCL speadsheet.
- C.4 Construction documentation No Remedial actions and/or interim actions specified in s.NR724.01(1) occurred at this site.
- C.5 Decommissioning of Remedial Systems No remedial systems were installed as part of this site investigation.
- C.6 Other

Attachment D/Maintenance Plan(s)

DKS Transport

Services, LLC

N7349 548th Street
Menomonie, WI 54751

715-556-2604

QUANTITY
DATE SHIPPED

DKS Transport

INVOICE

CUSTOMER

JOB NAME

JOB N

	ACCOUN	L				
QUANTIT DATE SH	Y DESCRIPTION	QTY.	UNIT PF	RICE	AMOUN	ΙΤ
		1	274		274	
	2 Hay ( soil dams to Vedor Lauchll W Bay Clave WI	2	/03		206	_
•	1 Mobilizather 2 Hay (soil days to Vedor Landhill W Eay Clave WI 2 Hay (world days to Vedor Landhill W East deport WI	2	40	0	90	ti
						ļ
			······			
Due upon receipt	of invoice. ervice Charge (18% Annual Percentage Rate) will be added to past due accounts.		TC	TAL	560	a()

SIGNATURE

Inc. Washe Disposal Paviewed 4/18/12

- an

<b>①</b>	VEOLIA
	ENVIRONMENTAL
	SERVICES

## Petroleum Contaminated Soil Profile Sheet

Bio-Plie	đ	Landiil	<u> </u>	
			PROFILE #	
			Criginal submillat Recertification	o o

January Indiana Canadilla Charles C	Seven Mile Creek Landfill LLC Sales	Parracantativa: lim Davie	Che time project	
signated Facility. Vacia c	SALAH MING CLEEK FRUGIN FEG. OBS.	Mehiesengerae. Onli Deals	<u> </u>	
A. Generator	^ .	B. Billing		
Vanie DK	S-Browtown Oil	Name MAR	K SCHMITZ	
Site Address 36	D3 N' Mill St	Address W73	49 548 55	
	MUL 5350		OMONIE WE 5475	
	NOV SCHULTZ	Contact	MARK SCHOUTZ	
Phone	25 556 2604	Phone 715	556 2604	
ax	715 235 6661	1 110110	- AU - AU -	
C. Description of Wishington Contaminated With: Source of Contamination:	Unleaded Gasoline Syleaded Ga	soline Dièsel a Fuei Oil a V	Waste Oi: 3 Other	
	2 For Frequency		Mona	
Luanity of Soil	requericy	Old i tilla Liga Fiddida	<u>i40.1£</u>	
	D. Other Waste Data or Comments  DRIII CUTIVES Man MONTOVAE Wells			
E. Sample Informat	bl			
	(1/34)			
· ·	don .	,		
Check all that apply:		in authorithad on Matairl Ca	Natur Date Diseast Organistical	
Check all that apply:		is submitted a Material Sa	afety Data Sheet Submitted	
Check all that apply:	th profile Laboratory Analysi	is submitted	ifety Data Sheet Submitted	
Check all that apply:  Sample submitted with aboratory Name	th profile Sample Date	is submitted a Material Sa 1010-11 Sample I.D	•	
Check all that apply:  Sample submitted with aboratory Name Sylveriff.  Generator Certification	Laboratory Analysi Sample Date  Ications			
Check all that apply:  Sample submitted wit aboratory Name   F. Generator Certification in the control of the c	Laboratory Analysi Sample Date  Cations  azardous waste as defined in Wisconi	sin Administrative Code NR 661 o		
Check all that apply:  Sample submitted with aboratory Name  F. Generator Certification and a hear that a hear to same to same the contract of	Laboratory Analysi Sample Date  Cations  Exardous waste as defined in Wiscons Contain regulated quantities of PCB's.	sin Administrative Code NR 661 o		
Check all that apply:  Sample submitted with aboratory Name	Laboratory Analysi Sample Date  Cations  azardous waste as defined in Wiscons contain regulated quantities of PCB's. contain regulated quantities of nerbic	sin Administrative Code NR 661 d	or 40 CFR 261.	
Check all that apply:  Sample submitted with aboratory Name	Laboratory Analysi Sample Date  Cations  Azardous waste as defined in Wiscontontain regulated quantities of PCB's.  Contain regulated quantities of herbic contain infectious wastes as defined in	sin Administrative Code NR 661 d des or pesticides. n Wisconsin Administrative Code	or 40 CFR 261.	
Check all that apply:  Sample submitted with aboratory Name  Generator Certifies  This waste is not a hat the waste does not derive the waste does not derive the best of my known descriptions of this waste waste waste does not descriptions of this waste does not descriptions desc	Laboratory Analysi Sample Date  Cations  Contain regulated quantities of PCB's.  Contain regulated quantities of nerbic.  Contain infectious wastes as defined in twisted in the contain.  Contain infectious wastes as defined in twisted, all information submitted in the casts. Any sample submitted is represented.	sin Administrative Code NR 661 d des or pesticides. In Wisconsin Administrative Code his and all attached documents of tentative as defined in 40 CFR 26	or 40 CFR 261.  NR 526.  contains true and accurate 11 - Appendix 1 and was	
Check all that apply:  Sample submitted with aboratory Name  Generator Certified This waste is not a hear this waste does not on this waste does not on the best of my know descriptions of this was obtained by using this	ications  Sample Date  Contain regulated quantities of PC8's.  Contain regulated quantities of inerbic.  Contain infectious wastes as defined in twistom aste. Any sample submitted is repress or an equivalent sympling method.	sin Administrative Code NR 661 d des or pesticides. In Wisconsin Administrative Code his and all attached documents of tentative as defined in 40 CFR 26	or 40 CFR 261.  NR 526.  contains true and accurate 11 - Appendix 1 and was	
Check all that apply:  Sample submitted with aboratory Name  F. Generator Certified This waste is not a hear this waste does not on this waste does not on the best of my know descriptions of this was obtained by using this	Laboratory Analysi Sample Date  Cations  Contain regulated quantities of PCB's.  Contain regulated quantities of nerbic.  Contain infectious wastes as defined in twisted in the contain.  Contain infectious wastes as defined in twisted, all information submitted in the casts. Any sample submitted is represented.	sin Administrative Code NR 661 d des or pesticides. In Wisconsin Administrative Code his and all attached documents of tentative as defined in 40 CFR 26	or 40 CFR 261.  NR 526.  contains true and accurate 11 - Appendix 1 and was	
Check all that apply:  Sample submitted with aboratory Name  Generator Certifies  This waste is not a hat the waste does not derive the waste does not derive the best of my known descriptions of this waste does not descriptions of this waste does not description of the possession of the	ications  Sample Date  Contain regulated quantities of PC8's.  Contain regulated quantities of inerbic.  Contain infectious wastes as defined in twistom aste. Any sample submitted is repress or an equivalent sympling method.	sin Administrative Code NR 661 of des or pesticides. In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding	or 40 CFR 261.  NR 526.  contains true and accurate 11 - Appendix 1 and was	
Check all that apply:  Sample submitted with aboratory Name  F. Generator Certification of the waste does not descriptions of this waste does not description of the possession of the	ications  Sample Date  Contain regulated quantities of PC8's.  Contain regulated quantities of inerbic.  Contain infectious wastes as defined in twiston asis. Any sample submitted is repress or an equivalent sampling method.  In the profile of Laboratory Analysis in the profile of the profi	sin Administrative Code NR 661 of des or pesticides. In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding Title	or 40 CFR 261.  NR 526.  contains true and accurate 11 - Appendix 1 and was	
Check all that apply:  Sample submitted with aboratory Name  F. Generator Certified This waste is not a hear the waste does not derive waste does not derive waste does not descriptions of this waste does not descriptions of the possession of the Generator's Signature	ications  Sample Date  Contain regulated quantities of PC8's.  Contain regulated quantities of inerbic.  Contain infectious wastes as defined in twiston asis. Any sample submitted is repress or an equivalent sampling method.  In the profile of Laboratory Analysis in the profile of the profi	sin Administrative Code NR 661 of des or pesticides. In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding Title	or 40 CFR 261.  NR 526.  contains true and accurate and accurate and was known or suspected hazards	
Check all that apply:  Sample submitted with aboratory Name  F. Generator Certified This waste is not a hear the waste does not derive waste does not derive waste does not descriptions of this waste does not descriptions of this waste does not descriptions of this waste does not descriptions of the possession of the Generator's Signature  Print Name	ications  ication regulated quantities of PC8's.  ication infectious wastes as defined in the contain	sin Administrative Code NR 661 of des or pesticides. In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding Title	or 40 CFR 261.  NR 528.  contains true and accurate and accurate and was known or suspected hazards	
Check all that apply:  Sample submitted with aboratory Name  Generator Certification of the waste does not descriptions of this waste does not descriptions of this waste has considered by using this the possession of the Print Name  Andfill Approversal of the provential of the procession of the Print Name	Laboratory Analysis Sample Date  Cations  Exardous waste as defined in Wisconstain regulated quantities of PCB's. Contain regulated quantities of nerbic contain infectious wastes as defined in the contain infectious wastes as defined in Wisconstant infectious wastes as defined in the contain infectious wastes as defined in the c	sin Administrative Code NR 681 of des or pesticides. In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding.  Title MANO Series Ser	or 40 CFR 261.  NR 526.  Intains true and accurate of the second of the	
Check all that apply:  Sample submitted with aboratory Name  Generator Certification of this waste does not descriptions of this waste does not descriptions of this waste happened by using this the possession of the Cenerator's Signature  Print Name  Landfill Approving approval is based upo	ications  ication regulated quantities of PC8's.  ication infectious wastes as defined in the contain	sin Administrative Code NR 681 of des or pesticides. In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding.  Title MANO Series Ser	or 40 CFR 261.  NR 526.  Intains true and accurate 11 - Appendix 1 and was known or suspected hazards	
Check all that apply:  Sample submitted with aboratory Name  Generator Certification of this waste does not descriptions of this waste does not descriptions of this waste has a contract of the best of my known descriptions of this waste does not description of the possession of the Generator's Signature  Print Name  Landfill Approving approval is based upone generator.  andfill Signature	Laboratory Analysis Sample Date  Contain regulated quantities of PCB's. Contain regulated quantities of herbic contain infectious wastes as defined in the sate. Any sample submitted is repress or an equivalent sampling method generate has been disclosed.  Contain infectious wastes as defined in the sate. Any sample submitted is repression of the sate. Any sample submitted is repression of the sate.	sin Administrative Code NR 681 of des or pesticides. In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding.  Title Market Section 1. Title Sectio	or 40 CFR 261.  NR 528.  Contains true and accurate and was known or suspected hazards	
Check all that apply:  Sample submitted with aboratory Name  Generator Certiff  This waste is not a hat This waste does not descriptions of this was obtained by using this the possession of the Cenerator's Signature  Print Name  Landfill Approving approval is based upone generator.  andfill Signature	ications  izardous waste as defined in Wisconstan regulated quantities of PCB's.  contain regulated quantities of nerbic contain infectious wastes as defined in twisde, all information submitted in trasts. Any sample submitted is represented in the second of the secon	sin Administrative Code NR 661 of des or pesticides. In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding.  Title MAMO Service Sample and/or material sample and/or material sample Date Date	or 40 CFR 261.  NR 528.  Contains true and accurate and was known or suspected hazards	
Check all that apply:  Sample submitted with aboratory Name  F. Generator Certiff  This waste is not a harm of the waste does not on the best of my known descriptions of this waste happened by using this the possession of the Central Name  G. Landfill Approving approval is based upon the generator.  Approvals Signature  Naste Category	Laboratory Analysis Sample Date  Cations  Contain regulated quantities of PCB's.  Contain regulated quantities of nerbic contain infectious wastes as defined in twisdage, all information submitted in the laboratory analysis of a representation the laboratory analysis of a representation.  Analytical Protocol	sin Administrative Code NR 661 of des or pesticides.  In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding.  Title Set Set Set Set Set Set Set Set Set Se	or 40 CFR 261.  NR 528. Pontains true and accurate at and was known or suspected hazards  Second data sheets submitted by Recert Date	
Check all that apply:  Sample submitted wit Laboratory Name Laboratory Name F. Generator Certiff This waste is not a hat This waste does not of the best of my know descriptions of this was obtained by using this the possession of the Generator's Signature  Print Name  G. Landfill Approve My approval is based upoof the generator.  Landfill Signature	Laboratory Analysis Sample Date  Cations  Contain regulated quantities of PCB's.  Contain regulated quantities of nerbic contain infectious wastes as defined in twisdage, all information submitted in the laboratory analysis of a representation the laboratory analysis of a representation.  Analytical Protocol	sin Administrative Code NR 661 of des or pesticides. In Wisconsin Administrative Code his and all attached documents of sentative as defined in 40 CFR 26 All relevant information regarding.  Title Sample and/or material sample and/or material sample Date Date Disposal Operation Other Conc.	or 40 CFR 261.  NR 526. contains true and accurate 11 - Appendix 1 and was known or suspected hazards  S	

#### WDNR Site Name: Browntown Oil

## **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
- D.2 Location map(s) which show(s) cap area
- D.3 Photographs
- D.4 Inspection log

#### D.1 Description of Maintenance Action(s)

#### CAP MAINTENANCE PLAN

October 20, 2015

Property Located at: 303 N Mill Street, Browntown, WI

#### WDNR BRRTS# 03-23-001503

#### TAX KEY# 2311001160000

#### Introduction

This document is the Maintenance Plan for a concrete/gravel 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 cap occupying the area over the contaminated soil on-site.

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 Green County.

#### Description of Contamination

Soil contaminated by Petroleum Volatile Organic Compounds (PVOCs) is located at a depth of 0-3 feet below ground surface in the area of the former pump island. The extent of the soil contamination is shown on Attachment D.2.

#### Description of the Cap to be maintained

The Cap consists of concrete (approximately 6 inches thick) and gravel in the area of the former pump island on the northern edge of the on-site building, as shown on Attachment D.2.

#### Cover Barrier Purpose

The concrete/gravel cap over the contaminated soil serves as a barrier to minimize exposure to soil exceeding NR720 Direct Contact standards. Based on the current and future use of the property, the barrier should function as intended unless disturbed.

#### Annual Inspection

The concrete/gravel cap 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 through the concrete and gravel. 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 the concrete/gravel cap overlying the contaminated soil 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 concrete/gravel 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 concrete/gravel 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; or 6) construction or placement of a building or other structure.

#### 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 2015

## **Current Site Owner and Operator:**

John Sigafus P.O. Box 187 Browntown, WI 53522 (608) 966-3312

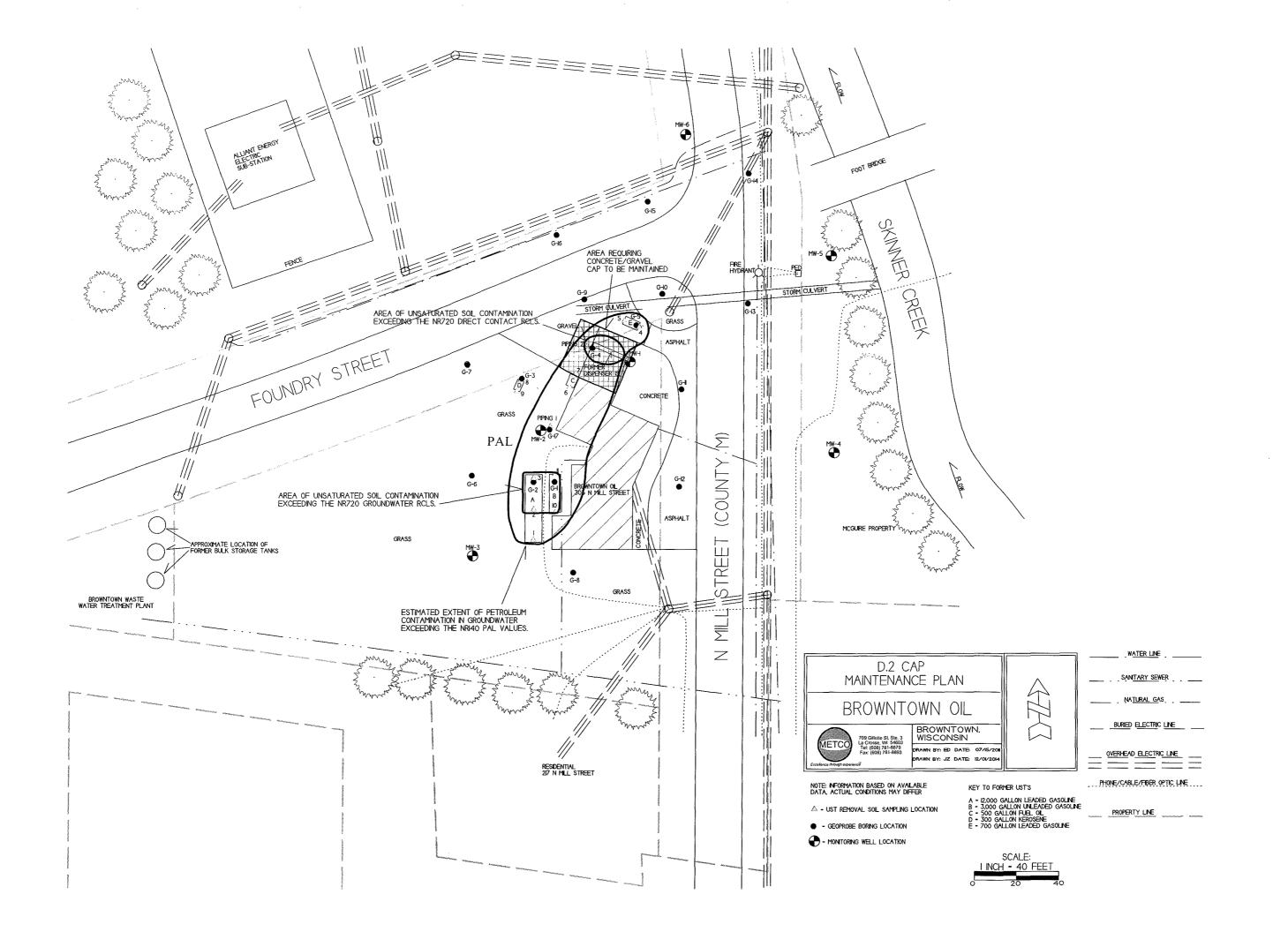
Signature:					
(DNR may	request signatur	e of affected	property owners.	on a case-by	-case basis

#### Consultant:

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

#### WDNR:

Will Meyers 3911 Fish Hatchery Road Fitchburg, WI 53711 (608) 273-5613





1) 3 Obstaczachs



D. J. Photo acarehs



State of Wisconsin Department of Natural Resources dnr.wi.gov

## **Continuing Obligations Inspection and Maintenance Log**

Form 4400-305 (2/14)

Page 1 of 2

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 <a href="http://dnr.wi.gov/botw/SetUpBasicSearchForm.do">http://dnr.wi.gov/botw/SetUpBasicSearchForm.do</a>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

using the Bh	RRISID number, a	and then looking in the "VVho	o" section.				
Activity (Site	e) Name				BRRTS No.		
Browntown Oil Inspections are required to be conducted (see closure approval letter):  annually semi-annually			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):  will.myers@wi.gov				
							Other - specify
Inspection Date	Inspector Name	Item					Describe the condition of the item that is being inspected
		monitoring well cover/barrier vapor mitigation system other:			(	OY ON	$\bigcirc$ Y $\bigcirc$ N
		monitoring well cover/barrier vapor mitigation system other:			(	OY ON	OY ON
		monitoring well cover/barrier vapor mitigation system other:			(	)Y ○N	OY ON
		monitoring well cover/barrier vapor mitigation system other:			(	)Y ⊝N	OY ON
		monitoring well cover/barrier vapor mitigation system other:			(	OY ON	OY ON
		monitoring well cover/barrier vapor mitigation system other:			. (	OY ON	O Y O N

## **Attachment E/Monitoring Well Information**

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

WDNR Site Name: Browntown Oil

## **Attachment F/Source Legal Documents**

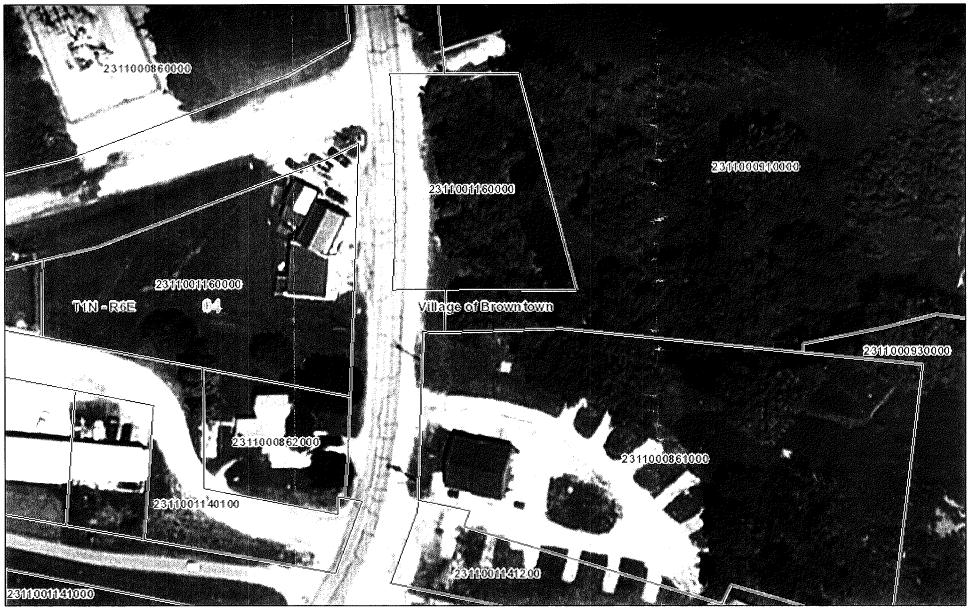
- F.1 Deeds Source Property
- F.2 Certified Survey Map
- F.3 Verification of Zoning
- F.4 Signed Statement

# F.1 Deed - Source Property

WARRANTY DEED-STATE BAR OF WISCONSIN, FORM NO. 1-1977

VOL 345 PAGE \$54 DOCUMENT NO. STATE BAR OF WISCONSIN-FORM 1
WARRANTY DEED
THIS SPACE RESERVED FOR RECORDING DATA TRANSFER 278372 \$ 20.00 FEE A MEDILIAN CAPICE (SS LEON ROCKOW THIS DEED, made between - OCA WILCONSIN Proceed to record this 18 day of A.U. 1980 at 3 15 och & P. M., and To in volume 345 of Lean JOHN F. SIGAFUS ablen Batifice Register Witnesseth, That the said Grantor, for a valuable consideration Green conveys to Grantee the following described real estate in \_ Benkert, Spielman, Asmus & Deininger County, State of Wisconsin: Commencing at the intersection of the South line of State Trunk Highway Eleven (11) and the West line of Mill Street extended as Due 2.00 at present located in the Village of Browntown, thence South along the Street 148 feet, thence Northwesterly in a straight line and following the North line of the right of way of the Chicago, Milwaukee & St.Paul Railway to the South line of said State Trunk Highway Eleven (11), thence Easterly along the South line of said Highway to the place of beginning. Being part and parcel of the South half of the Southwest quarter (St SWk) of Section Four (4), Town One (1) North, Range Six (6) East, Green County, Wisconsin. Commencing at a point in the center of Mill Street extended, said point being 318.99 feet North and 159.06 feet East of the Southwest corner of the Southeast quarter of the Southwest quarter (SE½ of SW½) of Section 4, Town One North, Range Six East, thence East 130 feet to creek bank, thence North along creek bank to South edge of bridge, said point being 160.5 feet North and 53 feet East of the point of beginning, thence West 53 feet to center of Mill Street extended, thence South along the said center line of Mill Street extension 160.5 feet to point of beginning, containing an area This 1S NOt homestead property. (continued on reverse) (is) (is not) warrants that the title is good, indefeasible in fee simple and free and clear of encumbrances except restrictions and easements of record and will warrant and defend the same. day of \_\_\_\_\_ July (SEAL) ACKNOWLEDGMENT AUTHENTICATION STATE OF WISCONSIN authenticated this County Personally came before me, this · Ronald M. Spielman the above named TITLE: MEMBER STATE BAR OF WISCONSIN authorized by § 706.06, Wis. Stats.) This instrument was drafted by to me known to be the person \_\_\_ who executed the fore-Ronald M. Spielman, Attv. going instrument and acknowledged the same Monroe, WI 53566 (Signatures may be authenticated or acknowledged. Both Notary Public. are not necessary.) 278372 My Commission is permanent. (If not, state expiration

## ArcGIS Web Map



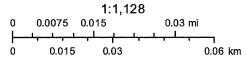
October 22, 2015

PLSS Townships

Parcels

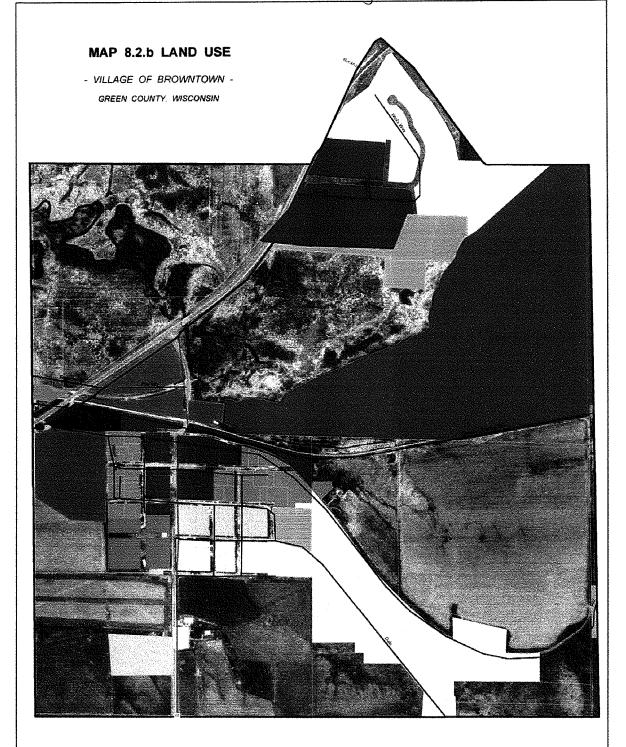
PLSS Sections

Municipalities



Source: Esri, DigitalGbbe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and

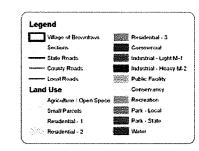
F.3. Verification of Zoning





SOUTHWESTERN WISCONSIN REGIONAL PLANNING COMMISSION 719 Plancer Tower 1 University Paza Platteville, WI 53818

June 20, 2005



1 inch equals 0.11 miles



The map is person a legate recorded map not a factorial acures and in not intended to be one. SWARPC to not responsible for any macroproper meson contained.

## F.4. Signed Statement

WDNR BRRTS Case #: 03-23-001503

WDNR Site Name: Browntown Oil

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.

Responsible Par	ty:	
John	Sigatus	
	J	(print name/title)
John	Signafus	Oct. 26-15
	(signature)	(date)

## **Attachment G/Notification to Owners of Impacted Properties**

- G.1 Deeds Other Impacted Properties No other properties were impacted.
- G.2 Certified Survey Map No other properties were impacted.
- G.3 Verification of Zoning No other properties were impacted.
- G.4 Signed Statement No other properties were impacted.