

## Source Property Information

CLOSURE DATE: 03/18/2014

**BRRTS #:** 02-32-535757  
**ACTIVITY NAME:** Jolivette Dry Cleaners and Laundry  
**PROPERTY ADDRESS:** 1645 Caroline St.  
**MUNICIPALITY:** La Crosse  
**PARCEL ID #:** 4-807-2

**FID #:** 632053840  
**DATCP #:**  
**PECFA#:**

**\*WTM COORDINATES:**

X: 418525 Y: 375802

*\* Coordinates are in  
WTM83, NAD83 (1991)*

**WTM COORDINATES REPRESENT:**

- Approximate Center Of Contaminant Source  
 Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

### CONTINUING OBLIGATIONS

#### Contaminated Media for Residual Contamination:

Groundwater Contamination > ES (236)

Contamination in ROW

Off-Source Contamination

*(note: for list of off-source properties  
see "Impacted Off-Source Property Information,  
Form 4400-246")*

Soil Contamination > \*RCL or \*\*SSRCL (232)

Contamination in ROW

Off-Source Contamination

*(note: for list of off-source properties  
see "Impacted Off-Source Property Information,  
Form 4400-246")*

#### Site Specific Obligations:

Soil: maintain industrial zoning (220)

*(note: soil contamination concentrations  
between non-industrial and industrial levels)*

Structural Impediment (224)

Site Specific Condition (228)

Cover or Barrier (222)

Direct Contact

Soil to GW Pathway

Vapor Mitigation (226)

Maintain Liability Exemption (230)

*(note: local government unit or economic  
development corporation was directed to  
take a response action )*

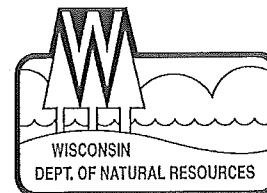
#### Monitoring Wells:

Are all monitoring wells properly abandoned per NR 141? (234)

Yes  No  N/A

*\* Residual Contaminant Level*

*\*\*Site Specific Residual Contaminant Level*



March 18, 2014

Scott Suhr  
Jolivette Cleaners and Laundry  
605 2<sup>nd</sup> Ave., South; Suite 100  
Onalaska, WI 54650

Al Doucet  
1506 Barlow St.  
La Crosse, WI 54601

**KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS**

SUBJECT: Final Case Closure with Continuing Obligations  
Former Jolivette Dry Cleaners and Laundry, 1645 Caroline Street, La Crosse, Wisconsin;  
WDNR BRRTS # 02-32-535757

Dear Mr. Suhr and Mr. Doucet:

The Department of Natural Resources (DNR) considers the Former Jolivette Dry Cleaners and Laundry 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 West Central Regional Closure Committee reviewed the request for closure on Feb. 6, 2014. The Closure Committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases.

This former dry cleaner site had soil, groundwater and indoor air contaminated with chlorinated VOCs. Responses included the replacement of two adjacent private wells, provision of bottled water to downgradient apartment complexes and the construction of a vapor mitigation system within the former dry cleaner building. 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 Closure Conditions.

- Groundwater contamination is present above ch. NR 140, Wis. Adm. Code enforcement standards.
- Residual soil contamination exists that must be properly managed should it be excavated or removed.
- A vapor mitigation system must be operated and maintained, and inspections must be documented.

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 at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

#### GIS Registry

This site will be included on the Bureau for Remediation and Redevelopment Tracking System (BRRTS on the Web) at <http://dnr.wi.gov/topic/Brownfields/clean.html>, 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, under the Geographic Information System (GIS) Registry layer, at the same web address.

DNR approval prior to well construction or reconstruction is required for all sites shown on the GIS Registry, in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. This requirement applies to private drinking water wells and high capacity wells. 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 <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>.

All site information is also on file at the West Central Regional DNR office, at 1300 W. Clairemont Ave, Eau Claire, WI. 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 BRRTS on the Web.

#### Closure Conditions

Compliance with the requirements of this letter is a responsibility to which you, as the current property owner, 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  
1300 W. Clairemont Ave.  
Eau Claire, WI 54701.

#### Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present both on this contaminated property and off this contaminated property, as shown on the **attached map** "Groundwater PCE Concentration Map – Figure B.3.b.". If you intend to construct a new well, or reconstruct an existing well, you'll need prior DNR approval. Affected property owners and right-of-way holders were notified of the presence of groundwater contamination.

#### Residual Soil Contamination (ch. NR 718, chs. 500 to 536, Wis. Adm. Code or ch. 289, Wis. Stats.)

Soil contamination remains on the south end of the Former Jolivette Dry Cleaner building as indicated on the **attached map** "Pre/Post-Remedial Soil PCE Concentration Map – Figure B.2.c.". 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.

Vapor Mitigation or Evaluation (s. 292.12 (2), Wis. Stats., s. NR 726.15, s. NR 727.07, Wis. Adm. Code)

Vapor intrusion is the movement of vapors coming from volatile chemicals in the soil or groundwater, into buildings where people may breathe air contaminated by the vapors. Vapor mitigation systems are used to interrupt the pathway, thereby reducing or preventing vapors from moving into the building.

Vapor Mitigation System: Soil vapor beneath the building contains chlorinated VOCs at levels that would pose a long-term risk to human health, if allowed to migrate into an occupied building on the property. The vapor mitigation system, installed in October, 2012, must be operated, maintained and inspected in accordance with the **attached** maintenance plan. System components must be repaired or replaced immediately upon discovery of a malfunction. Annual inspections and any system repairs must be documented in the inspection log (DNR form 4400-305). The inspection log shall 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 annually, starting one year after the date of this letter.

The integrity of the floor that exists on the property, shown on the **attached map** "Sub-Slab Depressurization System Layout – Figure 2", must be maintained in compliance with the **attached maintenance plan**. This will help ensure proper functioning of the vapor mitigation system, limiting vapor intrusion to indoor air spaces.

A copy of the maintenance plan must be provided to the property owner. The property owner must notify occupants, and provide the maintenance plan to any occupant that is responsible for continued operation of the vapor mitigation system.

#### 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 Doug Joseph at 715-839-1602, or at Doug.Joseph@Wisconsin.gov.

Sincerely,



William Evans, Team Supervisor  
West Central Region Remediation & Redevelopment Program

Attachments:

- Groundwater PCE Concentration Map – Figure B.3.b.
- Pre/Post-Remedial Soil PCE Concentration Map – Figure B.2.c.
- Vapor Mitigation System Maintenance Plan w/ Inspection Log (DNR Form 4400-305)

c: Kevin Nestingen, Braun Intertec, 2309 Palace St., La Crosse, WI 54603  
Mark Vehrmkamp, Tinman LLC, 383 Tilson St. E., West Salem, WI 54669  
Darla Chester, 1640 Caroline St., La Crosse, WI 54603  
Mary Heisz, DGK Laundymats LLC, P.O. Box 773, La Crosse, WI 54602-0773  
Roy Jerome, 1642 Caroline St., La Crosse, WI 54603  
William Pickett, 1644 Caroline St., La Crosse, WI 54603  
Mark Prokes, Bainbridge Properties LLC, 905 Breezy Point Rd., La Crosse, WI 54603  
John Korish, 341 Tellin Ct., La Crosse, WI 54603  
Todd Delegrave, 221 Main St., Onalaska, WI 54650

The Vapor Mitigation System Maintenance Plan may be seen in Attachment D.



**MONITORING WELL LOCATION**



**GRAB-GROUNDWATER SAMPLE LOCATION**

**NOTES:**

- PCE CONCENTRATIONS IN ug/L
- BOLD INDICATES PCE CONCENTRATION EXCEEDS NR140 ENFORCEMENT STANDARD (ES)
- ITALICS INDICATES PCE CONCENTRATION EXCEEDS NR140 PREVENTATIVE ACTION LIMIT (PAL)

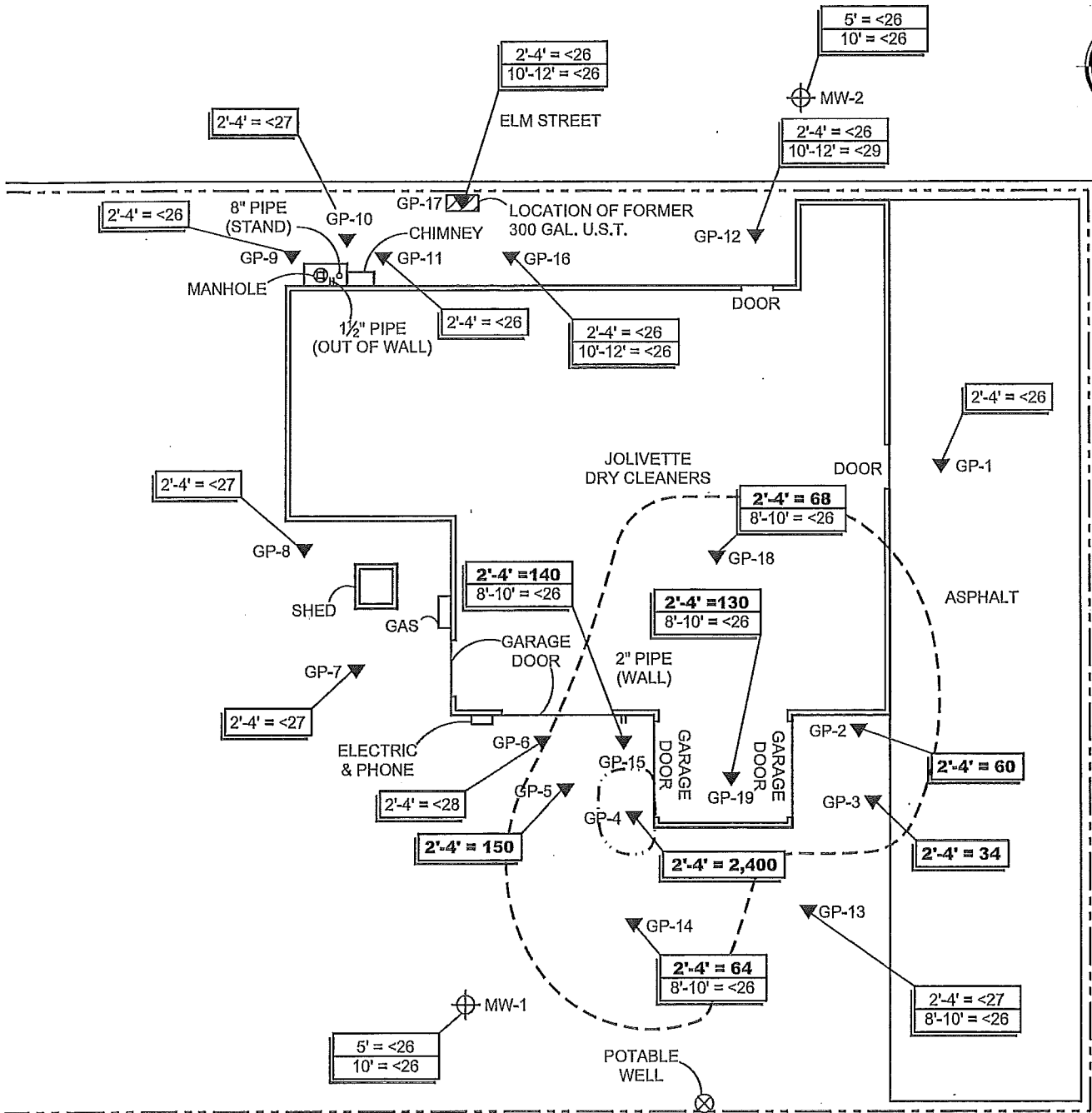


Sheet of Fig. B.3.b	Project No:	LC0501218
	Drawing No:	LC0501218C
	Scale:	1"= 150'
	Drawn By:	JAG
	Date Drawn:	11/1/13
	Checked By:	KDN
	Last Modified:	2/11/14

**GROUNDWATER PCE CONCENTRATION MAP (OCT. 2012 AND APR. 2013)**  
 JOLIVETTE CLEANERS AND LAUNDRY  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

**BRAUN  
 INTERTEC**

11001 Hampshire Avenue So.  
 Minneapolis, MN 55438  
 PH. (952) 995-2000  
 FAX (952) 995-2020



⊕ DENOTES LOCATION OF MONITORING WELL

▼ DENOTES LOCATION OF DIRECT PUSH PROBE SOIL SAMPLING LOCATION



ESTIMATED EXTENT OF PCE SOIL CONCENTRATION EXCEEDING THE US EPA GENERIC SOIL SCREENING LEVEL FOR GROUNDWATER PROTECTION



ESTIMATED EXTENT OF PCE SOIL CONCENTRATION EXCEEDING THE US EPA GENERIC SOIL SCREENING LEVEL FOR INGESTION (DIRECT-CONTACT RCL)

NOTES:

- PCE CONCENTRATIONS IN mg/Kg
- BOLD INDICATES CONCENTRATION EXCEEDS US EPA SOIL SCREENING LEVEL

NOTE: SCALE IS APPROXIMATE

Sheet of	Project No:	LC0501218
	Drawing No:	LC0501218A
Fig. B.2.c	Scale:	1" = 20' ±
	Drawn By:	BJB
	Date Drawn:	11/6/13
	Checked By:	KDN
	Last Modified:	11/6/13

PRE/POST-REMEDIAL SOIL PCE CONCENTRATION MAP  
 JOLIVETTE DRY CLEANERS  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

**BRAUN  
 INTERTEC**

11001 Hampshire Avenue So.  
 Minneapolis, MN 55438  
 PH. (952) 995-2000  
 FAX (952) 995-2020



March 18, 2014

This letter applies to properties B - E and G - J  
as shown on the Impacted Property Notification  
Information form in Attachment F.

Darla Chester  
1640 Caroline St.  
La Crosse, WI 54603

SUBJECT: Continuing Obligations and Property Owner Requirements for 1640 Caroline St., La Crosse, WI; Parcel Identification Number: 4-743-1  
Final Case Closure for the Former Jolivette Dry Cleaner, 1645 Caroline St., La Crosse, WI; DNR BRRTS Activity #: 02-32-535757

Dear Ms. Chester:

The purpose of this letter is to notify you that certain continuing obligations apply to the property at 1640 Caroline St., La Crosse, WI, (referred to in this letter as the "Property") due to contamination remaining on the Property. The continuing obligations are part of the cleanup and case closure approved for the above referenced case, located at 1645 Caroline Street, La Crosse, WI. (The case is referenced by the location of the source property, i.e. the property where the original discharge occurred, prior to contamination migrating to the Property.) The continuing obligations that apply to the Property are stated as conditions in the attached closure approval letter, and are consistent with s. 292.12, Wis. Stats., and ch. NR 700, Wis. Adm. Code, rule series. They are meant to limit exposure to any remaining environmental contamination at the Property. These continuing obligations will also apply to future owners of the Property, until the conditions no longer exist at the Property.

It is common for properties with approved cleanups to have continuing obligations as part of cleanup/closure approvals. Information on continuing obligations on properties can be found by using the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web. This database is found at <http://dnr.wi.gov/topic/Brownfields/clean.html>. This page also provides information on how to find further information about the closure and residual contamination, and how to use the map application, RR Sites Map, including the GIS Registry layer, which shows sites closed with residual contamination and continuing obligations.

The Department reviewed and approved the case closure request regarding the perchloroethylene (PCE) in groundwater at this site, based on the information submitted by Braun Intertec. As required by state law, you received notification about the requested closure from the person conducting the cleanup. No further investigation or cleanup is required at this time. However, the closure decision is conditioned on the long-term compliance with certain continuing obligations, as described below.

#### Continuing Obligations Applicable to Your Property

A number of continuing obligations are described in the attached case closure letter to Scott Suhr and Al Doucet, dated March 18, 2014. However, only the following continuing obligations apply to your Property.



### Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present both on this contaminated property and off this contaminated property, as shown on the **attached map** "Groundwater PCE Concentration Map – Figure B.3.b.". If you intend to construct a new well, or reconstruct an existing well, you'll need prior DNR approval. Affected property owners and right-of-way holders were notified of the presence of groundwater contamination.

### GIS Registry – Well Construction Approval Needed

Because of the residual groundwater contamination and the continuing obligations, this site, which includes your Property, will be listed on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web, at <http://dnr.wi.gov/topic/Brownfields/clean.html>. If you intend to construct or reconstruct a well on the Property, you will need to get Department approval in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. A well driller can help with this form. This form can be obtained on-line at: <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>. If at some time, all these continuing obligations are fulfilled, and the remaining contamination is either removed or meets applicable standards, you may request the removal of the Property from the GIS Registry.

### Property Owner Responsibilities

The owner (you and any subsequent property owner) of this Property is responsible for compliance with these continuing obligations, pursuant to s. 292.12, Wis. Stats. You are required to pass on the information about these continuing obligations to anyone who purchases this property from you (i.e. pass on this letter), in accordance with s. NR 727.05. For residential property transactions, you are required to make disclosures under Wis. Stats. s. 709.02. You may have additional obligations to notify buyers of the condition of the property and the continuing obligations set out in this letter and the closure letter.

If you lease or rent the property to an occupant who will be responsible for maintaining a continuing obligation, you will need to include that responsibility in a lease agreement, in accordance with s. NR 727.05, Wis. Adm. Code.

Please be aware that failure to comply with the continuing obligations may result in enforcement action by the Department. The Department intends to conduct inspections in the future to ensure that the conditions included in this letter, including compliance with referenced maintenance plans, are met.

These responsibilities are the property owner's. A property owner may enter into a legally binding agreement (such as a contract) with someone else (the person responsible for the cleanup) to take responsibility for compliance with the continuing obligations. If the person with whom any property owner has an agreement fails to adequately comply with the appropriate continuing obligations, the Department has the authority to require the property owner to complete the necessary work.

A legal agreement between you and another party to carry out any of the continuing obligations listed in this letter does not automatically transfer to a new owner of the property. If a subsequent property owner cannot negotiate a new agreement, the responsibility for compliance with the applicable continuing obligations resides with that Property owner.

When maintenance of a continuing obligation is required, the Property owner is responsible for inspections, repairs, or replacements as needed. Such actions should be documented by the Property owner and the records kept accessible for the Department to review for as long as the Department directs.

You and any subsequent Property owners are responsible for notifying the Department at least 45 days before making a change to a continuing obligation, and obtaining approval, before making any changes to the property that would affect the obligations applied to the Property. Send all written notifications in accordance with the above requirements to the Department of Natural Resources, 1300 W. Clairemont Ave., Eau Claire, WI 54701, to the attention of the Environmental Program Associate.

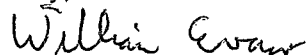
DNR fact sheet, RR-819, "Continuing Obligations for Environmental Protection" helps explain a property owner's responsibility for continuing obligations on their property. This fact sheet should have been sent to you when you received a notification letter before the closure request was submitted to the DNR. You may obtain a copy at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

Under s. 292.13, Wis. Stats., owners of properties affected by contamination from another property are generally exempt from investigating or cleaning up a hazardous substance discharge that has migrated onto a property from another property, through the soil, groundwater or sediment pathway. However, the exemption under s. 292.13, Wis. Stats., does not exempt the property owner from the responsibility to maintain a continuing obligation placed on the property in accordance with s. 292.12, Wis. Stats. To maintain this exemption, that statute requires the current property owner and any subsequent property owners, to meet the conditions in the statute, including:

- Granting reasonable access to DNR or responsible party, or their contractors;
- Avoiding interference with response actions taken; and
- Avoiding actions that make the contamination worse (e.g., demolishing a structure and causing or worsening the discharges to the environment).

The Department appreciates your efforts. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Doug Joseph at 715-839-1602.

Sincerely,



William Evans

West Central Region Remediation & Redevelopment Team Supervisor

Attach.

- Case Closure Letter
- Groundwater PCE Concentration Map – Figure B.3.b.
- Pre/Post-Remedial Soil PCE Concentration Map – Figure B.2.c.

c: Scott Suhr, Jolivette Cleaners, 605 2<sup>nd</sup> Ave., South; Suite 100, Onalaska, WI 54650  
Kevin Nestingen, Braun Intertec, 2309 Palace St., La Crosse, WI 54603

**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. Incomplete forms will be considered "administratively incomplete" and processing of the request will stop until required information is provided. Any section of the form not relevant to the case closure request must be fully filled out or explained on a separate page and attached to the relevant section of this form. 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.).

**Site Information**

BRRTS No. 02-32-535757		Parcel ID No. 4-807-2	
BRRTS Activity (Site) Name Jolivette Dry Cleaners and Laundry		WTM Coordinates X 418525 Y 375802	
Street Address 1645 Caroline Street		City La Crosse	State ZIP Code WI 54603
Responsible Party (RP) Name RP Contact: Scott Suhr			
Company Name Jolivette Dry Cleaners and Laundry			
Street Address 605 2nd Avenue South, Suite 100		City Onalaska	State ZIP Code WI 54650
Phone Number (608) 784-1599		Email	

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

Environmental Consultant Name Kevin D. Nestingen			
Consulting Firm Braun Intertec Corporation			
Street Address 2309 Palace Street		City La Crosse	State ZIP Code WI 54603
Phone Number (608) 781-7277		Email knestingen@braunintertec.com	
Acres Ready For Use 0.29		Voluntary Party Liability Exemption Site? <input type="radio"/> Yes <input checked="" type="radio"/> No	

**Fees and Mailing of Closure Request**

*If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.*

- Send a copy of page one of this form and the applicable ch. NR 749, Wis. Adm. Code, fee(s) to the DNR regional Environmental Program Associate at <http://dnr.wi.gov/topic/Brownfields/Contact.html>. Check all fees that apply:
  - \$1,050 Closure Fee
  - \$300 Database Fee for Soil
  - \$350 Database Fee for Groundwater or Other Condition (MW Not Abandoned)

Total Amount of Payment \$ \$1,700.00
- Send one paper copy and one e-copy on compact disk of the entire closure package to the Regional Project Manager assigned to your site. Submit as unbound, separate documents in the order and with the titles prescribed by this form. For electronic document submittal requirements, see <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

**Site Summary**

*If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may 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 Former Jolivette Cleaners and Laundry site is located at 1645 Caroline Street in La Crosse (French Island), Wisconsin. The site is in the southeast quarter of the northwest quarter of Section 19, Township 16 North, Range 7 West, La Crosse, Wisconsin. The area surrounding the site is characterized by residential and commercial development. Topography in the area is relatively flat. The Black River is located approximately 750 feet east of the site and the Mississippi River (French Slough) is located approximately 1,200 feet west of the site.

B. **Prior and current site usage:** Specifically describe the current and historic occupancy and types of use.

A dry cleaning and laundromat facility was reportedly constructed at the site in the 1950s. Dry cleaning operations continued until March, 2005. The site building is currently split into two separate units. The northern portion is occupied by the current property owner (AND Pursuits LLC, Contact: Al Doucet) who collects and restores vintage stereo equipment in this space. The southern portion is rented by a construction contractor.

C. Describe how and when site contamination was discovered.

During previous environmental site assessment at the adjacent former Quad City Sealers property (BRRTS #02-32-553379), dissolved tetrachloroethene (PCE) was discovered in a groundwater sample collected beneath the property. Based on these results, the Wisconsin Department of Natural Resources (WDNR) considered potential sources of PCE in the area. The WDNR subsequently issued a Responsible Party letter to Jolivette Cleaners and Laundry on November 11, 2004, directing them to conduct a site investigation.

D. Describe the type(s) and source(s) or suspected source(s) of contamination.

The dry cleaning solvent PCE was the primary contaminant of concern. PCE-impacted soil from historical dry cleaning operations was the suspected source of contamination.

E. Other relevant site description information (or enter Not Applicable).

N/A

F. List BRRTS activity site name and number for all other BRRTS activities at this property, including closed cases.

N/A

G. List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to this site, and those impacted by contamination from this site.

Quad City Sealers (BRRTS #02-32-553379)

H. **Current zoning** (e.g. industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).

Site: Commercial  
Neighboring properties - mixed (commercial and residential)

Current zoning was based on the 2012 Property Record obtained on the La Crosse County GIS web-site.

**2. General Site Conditions**

A. Soil/Geology

i. Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.

The surficial deposits in the La Crosse area are defined as unpitted outwash consisting of stratified sand and gravel. The thickness of the glacial deposits in the area of the site likely range from 100 to 200 feet. Sand and gravel deposits present beneath the site are typically brown, fine-to medium-grained, poorly graded sand (SP) and silty sand (SM).

ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.

N/A

iii. Depth to bedrock, bedrock type, and whether or not it was encountered during the investigation.

Save...

The approximate depth to bedrock is 100 to 200 feet. The first underlying bedrock is likely the Eau Claire Sandstone (Young, H.L., and Borman, R.G., 1973, Water Resources of the Wisconsin-Trempealeau-Black River Basin). Bedrock was not encountered during the investigation

- 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 site building is centrally located and occupies a majority of the property. Asphalt and concrete surfaces are located north, east, and south of the building, with limited green space to the west. A gravel area is also present in the southwest portion of the property.

#### B. Groundwater

- i. **Discuss depth to groundwater and piezometric elevations.** Describe and explain depth variations, and whether free product affects measurement or water table elevation. Describe the stratigraphic unit(s) where water table was found or which were measured for piezometric levels.

The water table depth ranges from approximately 7 to 12 feet (depending on the location within the area of the site and time of the year) and is within the alluvial sand and gravel soils. Free product was not encountered during the investigation.

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

The regional groundwater flow direction is likely southeast, toward the Black River. However, the groundwater flow direction fluctuates seasonally in this area of La Crosse. Fluctuating river stages of both the Mississippi (French Slough) and Black rivers influence the groundwater flow direction.

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

These additional groundwater flow characteristics were not calculated during the investigation due to the seasonal fluctuation and close proximity to surface waters.

- iv. Identify and describe locations/distance of potable and/or municipal Wells within 1200 feet of the site.

Municipal water is not available in the area of the site; therefore, water is provided to area homes and businesses via private wells. The WDNR identified and requested sampling of sixteen private potable wells immediately adjacent and/or down-gradient of the site during the investigation. These wells were located at 1640, 1641, 1642, 1644, 1645, 1646 and 1703 Caroline Street, 234 Elm Street and 1629, 1631, 1632, 1638, 1639, 1642, 1646 and 1648 Bainbridge Street.

### 3. Site Investigation Summary

#### A. General

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

During a previous environmental site assessment at the adjacent former Quad City Sealers property, dissolved tetrachloroethene (PCE) was discovered in a groundwater sample collected beneath the property. Based on these results, the Wisconsin Department of Natural Resources (WDNR) considered potential sources of PCE in the area. The WDNR subsequently issued a Responsible Party letter to Jolivette Cleaners and Laundry on November 11, 2004, directing them to conduct a site investigation.

Municipal water is not available in the area of the site and therefore, water is provided to area homes and businesses via private wells. In December 2004, the WDNR identified and sampled eight private potable wells located at 1640, 1641, 1642, 1644, 1645, 1646 and 1703 Caroline Street and 234 Elm Street. The December 2004 laboratory analytical results indicated that the PCE concentration was greater than the ES in groundwater sample collected from the potable well at 1642 Caroline Street. Based on these results, bottled water was provided to the household and in June 2005, a new well was installed. Subsequent laboratory results indicated that PCE concentrations were less than the method detection limits in groundwater samples collected from the new well.

Braun Intertec completed the following as part of the site investigation:

- May 13, 2005: Advanced twelve direct-push borings (GP-1 through GP-12) for soil and/or groundwater analysis.
- July, 2005: Installed, developed and sampled groundwater monitoring wells MW-1 through MW-3.
- November 18, 2005: Advanced ten direct-push borings (GW-1 through GW-10) for grab-groundwater

sampling.

- June, 2006: Installed and developed monitoring wells MW-3 through MW-6 and sampled MW-1 through MW-6.
- June/July, 2006: Conducted potable well water sampling from the six private wells (1640, 1641, 1642, 1644, 1645 and 1646 Caroline Street) specified by the WDNR.
- February, June, September and December, 2009: Collected groundwater samples from MW-1 through MW-6.
- March, 2009: Advanced seven direct-push borings (GP-13 through GP-19) for soil and groundwater analysis. Sub-slab vapor samples were also collected at GP-18 and GP-19.
- March 31, 2009: Collected an indoor air sample from within the site building.
- February/March, June, September/October and December 2009: Conducted potable well water sampling from six private wells (1640, 1641, 1642, 1644, 1645 and 1646 Caroline Street) as specified by the WDNR.
- December, 2009: Coordinated installation of a new well at 1644 Caroline Street.
- June, 2010: METCO conducted potable well water sampling for the Former Quad City Sealers site (BRRTS #02-32-553379) from five private wells on Bainbridge Street (1629, 1631, 1632, 1639 and 1642 Bainbridge Street).
- July, 2010: The WDNR conducted potable well water sampling from five private wells (1638, 1639, 1642, 1646 and 1648 Bainbridge Street).
- August, 2010: Advanced two direct-push borings (GP-20 and GP-21) adjacent to monitoring wells MW-4 and MW-6 for grab-groundwater analysis at multiple depth intervals.
- October, 2010: Conducted potable well water sampling from the six private wells (1640, 1641, 1642, 1644, 1645 and 1646 Caroline Street) specified by the WDNR. Groundwater samples were also collected from MW-1 through MW-6.
- March, 2011: Conducted potable well water sampling from the eight private wells (1629, 1631, 1632, 1638, 1639, 1642, 1646 and 1648 Bainbridge Street) specified by the WDNR.
- April 22, 2011: Advanced three direct-push borings (GP-22 through GP-24) at the 1638, 1639 and 1642 properties for grab-groundwater analysis at multiple depth intervals. Groundwater samples were also collected from MW-1, MW-3 and MW-5.
- August, 2011: Conducted potable well water sampling from the three private wells (1638, 1639 and 1642 Bainbridge Street) specified by the WDNR.
- October, 2011: Conducted potable well water sampling from the fourteen private wells (1629, 1631, 1632, 1638, 1639, 1642, 1646 and 1648 Bainbridge Street and 1640, 1641, 1642, 1644, 1645, and 1646 Caroline Street) specified by the WDNR. Groundwater samples were also collected from MW-1 through MW-6.
- April, 2012: Conducted potable well water sampling from the three private wells (1638, 1639 and 1642 Bainbridge Street) specified by the WDNR. Groundwater samples were also collected from MW-3, MW-4 and MW-5.
- October, 2012: Conducted potable well water sampling from the thirteen private wells (1631, 1632, 1638, 1639, 1642, 1646 and 1648 Bainbridge Street and 1640, 1641, 1642, 1644, 1645, and 1646 Caroline Street) specified by the WDNR. A water sample was unable to be collected from the 1629 Bainbridge Street residence. Groundwater samples were also collected from MW-1 through MW-6.
- October, 2012: A SSDS was installed to actively vent sub-slab vapors from beneath the site building.
- April, 2013: Conducted potable well water sampling from the three private wells (1638, 1639 and 1642 Bainbridge Street) specified by the WDNR. Groundwater samples were also collected from MW-3, MW-4 and MW-5.
- May, 2013: Conducted an additional vapor intrusion assessment by collecting 24-hour composite samples within the crawl spaces at the adjacent 1640, 1642 and 1644 Caroline Street properties.

- ii. Identify whether contamination extends beyond the source property boundary, describe the off-site media (e.g., soil, groundwater, etc.) impacted, and the vertical and horizontal extent of off-site impacts.

Residual soil contamination exceeding United States Environmental Protection Agency (U.S. EPA) generic soil screening levels based on the web calculator remains in the southeast portion of the site property in the top 4 feet of soil.

At the time of this closure request, residual groundwater contamination exceeding the Wisconsin Administrative Code, Chapter NR 140 enforcement standard (ES) remains at the site property and extends east into the Caroline Street right-of-way (ROW) and four off-site properties (1640, 1641, 1642 and 1644 Caroline Street) based on the April 2013 groundwater monitoring results.

Residual vapor impacts exceeding the Vapor Action Level (VAL) based on U.S. EPA regional screening level summary table remains at the site property.

- 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.

None

## B. Soil

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

Residual PCE-impacted soil contamination exceeding the U.S. EPA generic soil screening level for groundwater protection (groundwater RCL) remains in the southeast portion of the site. This includes an area beneath the southern portion of the site building.

- ii. Describe the level and types of **soil contaminants** found in the upper four feet of the soil column.

PCE-impacted soil exceeding the U.S. EPA groundwater RCL remains in the upper four feet of the soil column in the southeast portion of the site. The highest PCE concentration of 2,400 µg/kg was detected at GP-4 (2-4') on 5/13/05. Please note additional soil samples were not collected vertically deeper than 4 feet at many boring locations due to the shallow depth to groundwater.

- 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.

Chlorinated solvent soil standards were established using the U.S. EPA Regional Screening Level Web Calculator in accordance with WDNR Guidance Document PUB-RR-890.

## C. Groundwater

- i. Describe degree and extent of groundwater contamination at or from this site. 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.

At the time of this closure request, residual groundwater contamination exceeding the Wisconsin Administrative Code, Chapter NR 140 enforcement standard (ES) remains at the site property and extends east into the Caroline Street right-of-way (ROW), Bainbridge Street ROW and eight off-site properties (1638,1640, 1641, 1642 and 1644 Caroline Street 1639 and 1638/1642 (one property) Bainbridge Street and parcel #4-1127-0) based on the April 2013 groundwater monitoring results.

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

Free product was not encountered during investigation.

## D. Vapor

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

The vapor intrusion assessment work consisted of collecting one 24-hour composite indoor air sample and two sub-slab vapor samples at the site in March, 2009. The WDNR also collected one 24-hour composite indoor air sample and three sub-slab vapor samples at the site in May and November, 2011. Additionally, Braun Intertec collected 24-hour composite air samples from within the crawl spaces at 1640, 1642 and 1644 Caroline Street on May 28-29, 2013.

- 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).

The DNR action levels utilized were residential for samples collected at the adjacent 1640, 1642 and 1644 Caroline Street properties and non-residential for the site. WDNR Guidance Document PUB-RR-880, Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin (rev. 12/10), states that Wisconsin vapor action levels (VALs) for indoor air exposures are based, in part, upon standard U.S. EPA risk calculation methods. Action levels utilized were based on the U.S. EPA regional screening level summary table (rev. 5/13). Additionally, a standard vapor attenuation factor of 0.01 sub-slab vapor to indoor air for large commercial/industrial buildings was used to calculate sub-slab VALs. The land use classification was based on the 2012 property record obtained from the La Crosse County GIS web-site.

Sub-slab sampling results beneath the site building indicated tetrachloroethene (PCE) and benzene concentrations above the non-residential sub-slab VAL. Based on these results, the WDNR requested a SSDS be installed at the site building to actively vent sub-slab vapors.

Laboratory analytical results from within the crawl spaces at 1640, 1642 and 1644 Caroline Street indicated PCE concentrations below the residential VAL at each sample location. 1,3-Butadiene was the only VOC constituent

detected above the residential VAL, which was in the 1640 Caroline sample. The remaining VOC concentrations were below laboratory detection limits and/or the respective residential VAL.

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.

Surface water and sediment was not assessed as part of this investigation. Several private well samples were collected immediately adjacent to the Black River.

- 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.

N/A

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.

Active remediation was not conducted at the site. However, long-term groundwater and potable well sampling was conducted since 2005 and a sub-slab depressurization system (SSDS) was installed at the site building in October 2012. A SSDS Installation Report dated December 5, 2012 was previously submitted.

- B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code.

The December 2004 laboratory analytical results indicated a PCE concentration greater than the ES in the sample collected from the potable well at 1642 Caroline Street. Based on these results, bottled water was provided to the household and in June 2005, a new well was installed. Subsequent laboratory results indicated that PCE concentrations were less than the method detection limits in groundwater samples collected from the new well.

The September 2009 laboratory analytical results indicated a PCE concentration greater than the ES in the sample collected from the potable well at 1644 Caroline Street. Based on these results, bottled water was provided to the household and in December 2009, a new well was installed. Subsequent laboratory results indicated that PCE concentrations were less than the method detection limits in groundwater samples collected from the new well.

The June 2010 laboratory analytical results also indicated PCE concentrations greater than the ES in the samples collected from the potable wells at 1638, 1639 and 1642 Bainbridge Street. The 1638 and 1642 Bainbridge Street properties are both 8-plex apartment units. The 1638 Bainbridge Street property is an auto repair shop. Based on these results, bottled water was provided in the interim while the potable wells were sampled to evaluate PCE concentration trends. Additional potable well water samples were collected from these three properties in March, August and October 2011, April and October 2012, and April 2013 (six sampling events). Laboratory results from the last four sampling events (October 2011, April and October 2012, and April 2013) indicated that PCE concentrations were less than the NR140 ES of 5 ug/L.

- C. Describe the *active* remedial actions taken at the site, including: type of remedial system(s) used for each media impacted; 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.

N/A

- D. Provide a discussion of the nature, degree and extent of residual contamination that will remain at the site or on off-site affected properties after case closure.

Residual PCE-impacted soil contamination exceeding the U.S. EPA groundwater RCL remains in the southeast portion of the site. This includes an area beneath the southern portion of the site building.

At the time of this closure request, residual groundwater contamination exceeding the Wisconsin Administrative Code, Chapter NR 140 enforcement standard (ES) remains at the site property and extends east into the Caroline Street right-of-way (ROW), Bainbridge Street ROW and eight off-site properties (1638, 1640, 1641, 1642 and 1644 Caroline Street 1639 and 1638/1642 (one property) Bainbridge Street and parcel #4-1127-0) based on the April 2013 groundwater monitoring results.

Residual vapor impacts exceeding the VAL based on U.S. EPA regional screening level summary table remains at the site property.



- E. Describe the remaining soil contamination within four feet of ground surface (direct contact zone) that attains or exceeds Residual Contaminant Levels established under s. NR 720. 12, the ch. NR720, Wis. Adm. Code, for protection of human health from direct contact.

PCE-impacted soil exceeding the U.S. EPA non-industrial direct-contact RCL of 30,700 ug/kg was not identified in soil samples collected during the investigation.

- F. Describe the remaining soil contamination in the vadose zone that attains or exceeds the soil standard(s) for the groundwater pathway.

PCE-impacted soil exceeding the U.S. EPA groundwater RCL remains in the upper four feet of the soil column in the southeast portion of the site.

- G. 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.

Natural attenuation will be utilized as the long-term groundwater remedy.

Residual vapor impacts beneath the site building were addressed by installing an active SSDS. A Vapor Mitigation Maintenance Plan is included.

- H. 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).

Groundwater monitoring results indicate stable or decreasing PCE concentration trends from monitoring wells associated with the site. Private potable well sampling from WDNR-specified wells also indicated stable or receding PCE concentrations during the most recent sampling event.

- I. Identify how all exposure pathways were removed and/or adequately addressed by immediate and/or remedial action(s) described above in paragraphs, B, C, D, E and F.

The potable well at 1642 Caroline Street was replaced in June 2005 and the potable well at 1644 Caroline Street was replaced in December 2009. The former shallow sand-point wells were replaced with 105-foot deep wells.

- J. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain.

The SSDS will be left in place at the site building following closure to address residual sub-slab vapor impacts.

- K. 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.

N/A

- L. 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.

In October, 2012, a SSDS was installed to actively vent sub-slab vapors from beneath the site building. Sub-slab vapor impacts were related to the chlorinated solvent release at the site. The SSDS was installed by Healthy Homes of St. Paul, Minnesota. The contact for Healthy Homes is Mr. Robert Carlson, who can be reached at (952) 220-9409. According to Healthy Homes, the system installation was completed in accordance with ASTM standard E2121-09, Standard Practice for Installing Radon Mitigation Systems in Existing Low-Rise Residential Buildings.

The SSDS consists of two Radon Away RP265 suction fans and four three-inch diameter suction points located throughout the building. According to Healthy Homes, two separate systems were required to effectively vent beneath the building. System #1 is located in the northern half of the site building and includes three separate suction points manifolded to one fan. System #2 is located in the southern half of the site building and includes one suction point and fan. The system piping is routed out the west side of the building where the fans are mounted. The fans are plugged directly into a power source and the exhaust pipes extend at least twelve inches above the building roof. Verification testing was performed following system installation to determine effectiveness of the installed systems. Post-installation testing was conducted by Healthy Homes and observed by Braun Intertec. A digital micro-manometer was used to measure pressure difference between the sub-slab and indoor air. Based on post-installation verification testing, a pressure gradient existed at the locations tested such that pressure below the slab was lower than the indoor air pressure. U-tube monometers were applied to each system to evaluate continued function and are located above the suction drop points.

- M. 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.

N/A

**5. Continuing Obligations: Situations where a maintenance plan(s) and inclusion on DNR's GIS Registry are required.**

Directions: Check all that apply to this case closure request:

	This scenario Applies to this Case Closure		Case Closure Scenario: Maintenance Plans and GIS Registry	Maintenance Plan (s) Required in Attachment D	GIS Registry Listing
	A. On-Site	B. Off-Site			
i.	<input type="checkbox"/>	<input type="checkbox"/>	Engineering Control/Barrier for Direct Contact	✓	✓
ii.	<input type="checkbox"/>	<input type="checkbox"/>	Engineering Control/Barrier for Groundwater Infiltration	✓	✓
iii.	<input type="checkbox"/>	<input type="checkbox"/>	Vapor Mitigation - post closure passive system	✓	✓
iv.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Vapor Mitigation - post closure active system	✓	✓
v.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None of the above scenarios apply to this case closure	NA	NA

**6. Continuing Obligations: Situations where inclusion on DNR's GIS Registry is required.**

Directions: Check all that apply to this case closure request:

	This scenario Applies to this Case Closure		Case Closure Scenario: GIS Registry Only	GIS Registry Listing
	A. On-Site	B. Off-Site		
i.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination exceeds ch. NR 720 generic or site-specific RCLs	✓
ii.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sites with groundwater contamination equal to or greater than the ch. NR 140, enforcement standards (ES)	✓
iii.	<input type="checkbox"/>	<input type="checkbox"/>	Monitoring wells: lost, transferred or remaining in use	✓
iv.	<input type="checkbox"/>	<input type="checkbox"/>	Structural Impediment (not as a performance standard)	✓
v.	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination remaining at ch. NR 720 Industrial Use levels	✓
vi.	<input type="checkbox"/>	<input type="checkbox"/>	Vapor intrusion may be future, post-closure issue if building use or land use changes	✓
vii.	<input type="checkbox"/>	<input type="checkbox"/>	None of the above scenarios apply to this case closure	NA

**7. Underground Storage Tanks**

- A. Were any tanks, piping or other associated tank system components removed as part of the investigation or remedial action?  Yes  No
- B. Do any upgraded tanks meeting the requirements of ch. SPS 310, Wis. Adm. Code, exist on the property?  Yes  No
- C. If the answer to question 7b is yes, is the leak detection system currently being monitored?  Yes  No

**Data Tables (Attachment A)**

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

**General directions for Data Tables:**

- Use bold and italics font on information of importance on tables and figures. Use **bold font** for ch. NR 140, Wis. Adm. Code, groundwater enforcement standard (ES) attainments or exceedances, and *italicized font* for ch. NR 140, Wis. Adm. Code, groundwater preventive action limit (PAL) standard attainments or exceedances.
- 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.

Save...

- Summaries of all data must include information collected by previous consultants.
- Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15 (3)(c), Wis. Adm. Code, in the format required in s. NR 716.15(4)(e), Wis. Adm. Code.
- Include in Attachment A all of the following tables, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: A.1. Groundwater Analytical Table; A.2. Pre-remedial Soil Analytical Table, etc).
- For required documents, each table (e.g., A.1., A.2., etc.) should be a separate 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, any potable wells and any other wells, extraction wells and any potable wells for which samples have been collected.
- A.2. **Pre-remedial Soil Analytical Table(s):** Table(s) showing the soil analytical results and collection dates - prior to conducting the interim and/or remedial action. Indicate if sample was collected above or below the all-time low water table (unsaturated verses saturated).
- A.3. **Post-remedial Soil Analytical Table(s):** Table(s) showing the post-remedial action soil analytical results and collection dates. Indicate if sample was collected above or below the all-time low water table (unsaturated verses saturated).
- A.4. **Pre and Post Remaining Soil Contamination Soil Analytical Table(s):** Table(s) showing only the pre and post remedial action soil analytical results that exceed a Residual Contaminate Level (RCL) or a Site-Specific Residual Level (SSRCL).
- A.5. **Vapor Analytical Table:** 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.6. **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, time period for sample collection, method and results sampling.
- A.7. **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.8. **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 and Figures (Attachment B)

*If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.*

#### General Directions for all Maps and Figures:

- If any map or figure is not relevant to the case closure request, you must fully explain the reason(s) why and attach that explanation (properly labeled with the map/ figure title) in Attachment B.
- 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 11x17 inches, in a portable document format (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.
- Do not use shading or highlights on any of the analytical tables.
- Include all sample locations.
- Contour lines should be clearly labeled and defined.
- Include in Attachment B all of the following maps and figures, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: B.1. Location Map; B.2. Detailed Site Map, etc).
- For the electronic copies that are required, each map (e.g., B.1.a., B.2.a, etc.) should be a separate PDF.

#### B.1. Location Maps

- B.1.a. **Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all impacted 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 on-site and applicable off-site 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 exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) established in accordance with the provisions

contained in s. NR 720.10 or s. NR 720.12, Wis. Adm. Code.

- B.1.c. **RR Site Map:** From RR Sites Map ([http://dnrm.wisconsin.gov/si/?Viewer=RR Sites](http://dnrm.wisconsin.gov/si/?Viewer=RR%20Sites)) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

## B.2. Soil Figures

- B.2.a. **Pre-remedial Soil Contamination:** Figure(s) showing the sample location of all pre-remedial, unsaturated contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeded a Residual Contaminant Level (RCL) established in accordance with the provisions contained in s. NR 720.10 or s. NR 720.12, Wis. Adm. Code.
- B.2.b. **Post-remedial Soil Contamination :** Figure(s) showing the sample location of all post-remedial, unsaturated contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) established in accordance with the provisions contained in s. NR 720.10 or s. NR 720.12, Wis. Adm. Code. A separate contour line should be used to indicate the extent of residual direct contact exceedances.
- B.2.c. **Pre/Post Remaining Soil Contamination:** Figure(s) showing the only location of all pre and post remedial residual soil sample location(s) where unsaturated contaminated soil remains after remediation and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) established in accordance with the provisions contained in s. NR 720.10 or s. NR 720.12, Wis. Adm. Code. A separate contour line should be used to indicate the extent of residual direct contact exceedances.

## 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 a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).
  - Source location(s) and lateral and vertical extent if groundwater contamination exceeds a ch. NR 140 Enforcement Standard (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.1b)
- 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, Preventive Action Limit (PAL) and/or an Enforcement Standard (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 previously 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 remaining soil and groundwater contamination, including sub-slab, indoor air, soil vapor, 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)

## Documentation of Remedial Action (Attachment C)

*If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.*

### General Directions:

- 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 is "not applicable" to the site-specific circumstances, include a brief explanation to support that conclusion.
- If the documentation requested below has already been submitted to the Department, please note the title and date of the report for that particular document requested.

- C.1. **Site investigation documentation**, that has not otherwise been previously submitted.
- C.2. **Investigative waste disposal documentation**.
- C.3. **Provide a description of the methodology used along with all supporting documentation if the Residual Contaminant Levels are different than those contained in the Department's RCL Spreadsheet available at: <http://dnr.wi.gov/topic/Brownfields/Professionals.html>.**
- 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 upon receiving conditional closure.
- C.6. **Photos.** For sites 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 should be visible and discernible. Photographs must be labeled with the site name, the features shown, location and the date on which the photograph was taken.
- C.7. **Other.** Include any other relevant documentation not otherwise noted above. (This section may remain blank)

#### **Maintenance Plan(s) and Photographs (Attachment D)**

*If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.*

When one or more "maintenance plans" are required for a site closure, include in each maintenance plan all required information listed below, and attach the plan(s) in Attachment D. The following "model" maintenance plans can be located at: (1) Maintenance plan for an engineering control or cover: <http://dnr.wi.gov/topic/Brownfields/documents/maintenance-plan.pdf>; and (2) Maintenance plan for vapor intrusion: [http://dnr.wi.gov/topic/Brownfields/documents/appendix5\\_606.pdf](http://dnr.wi.gov/topic/Brownfields/documents/appendix5_606.pdf).

- D.1. **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.2. **Brief descriptions** of the type, depth and location of residual contamination.
- D.3. **Description 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.4. **Inspection log**, to be maintained on site, or at a location specified in the maintenance plan or approval letter.
- D.5. **Contact information**, including the name, address and phone number of the individual or facility who will be conducting the maintenance.
- D.6. Photographs
  - D.6.a. 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.
  - D.6.b. Photographs shall be submitted with a title related to the site name and location, and the date on which it was taken.

#### **Monitoring Well Information (Attachment E)**

*If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.*

##### **General Directions:**

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](http://dnr.wi.gov/topic/groundwater/documents/forms/4400_113_1_2.pdf)) for all wells that will remain in-use, be transferred to another party or that could not be located. A figure of these wells should be included in Attachment B.3.d.

##### **Select One:**

- No monitoring wells were required as part of this response action.
- All monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site
- Select One or More:**
- Not all monitoring wells can be located, despite good faith efforts. Attachment E must include description of efforts made to locate the "lost" wells.
- One or more 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).
- 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.

**Notifications to Owners of Impacted Properties (Attachment F)**

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

**General Directions:**

- State law requires that the responsible party provide a 30-day, written advance notice (i.e., a letter) 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 of Form 4400-286, Notification of Residual Contamination and Continuing Obligations, is required under ch. NR 725 for notifying property owners and right-of-way holders about residual contamination affecting their properties, and of continuing obligations which may be imposed. This form can be downloaded at <http://dnr.wi.gov/files/PDF/forms/4400/4400-286.pdf>.

**Check all that apply to the site-specific circumstances of this case closure:**

	A. Impacted Source Property and Owner is not Conducting Cleanup	B. Impacted Right of Way	C. Impacted Off-Site Property Owner	Impacted Property Notification Situations: Ch. NR 726 Appendix A Letter
1.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Residual groundwater contamination exceeds Ch. NR 140 Wis. Administrative Code enforcement standards.
2.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination that attains or exceeds standards is present after the remedial action is complete, and must be properly managed should it be excavated or removed.
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An engineered cover or a soil barrier (e.g. pavement) must be maintained over contaminated soil for direct contact or groundwater infiltration concerns.
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Industrial land use soil standards were used for the clean-up standard.
5.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A vapor mitigation system (or other specific vapor protection) must be operated and maintained.
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vapor assessment needed if use changes.
7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Structural impediment.
8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lost, transferred or open monitoring wells.
9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Applicable.

If any of the previous boxes in rows 1 thru 8 were checked, include the following as part of Attachment F:

- FORM 4400-246;
- Copy of each letter sent, 30 days or more prior to requesting closure; and
- Proof of receipt for each letter.
- For this site closure, 11 (number) property (ies) has/have been impacted, the owners have been notified, and copies of the letters and receipts are included in Attachment F.

**Source Legal Documents (Attachment G)**

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

Include all of the following documents, in this order, in Attachment G:

- G.1. **Deeds - Source Property and Other Impacted Properties:** The most recent deed with legal descriptions clearly labeled for (1) the **Source Property** (where the contamination originated) and (2) all **off-source** (off-site) properties where letters were required to be sent per the ch. NR 700, Wis. Adm. Code, rule series (e.g., off-site cover maintenance required, lost monitoring well, off-site cover property impacts to groundwater exceeding the ch. NR 140, Wis. Adm. Code.  
*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.*
- G.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. (Lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).
- G.3. **Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- G.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.

Save...

BRRTS No.

Activity (Site) Name

Source Legal Documents (Attachment G)

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

Include all of the following documents, in this order, in Attachment G:

- G.1. Deeds - Source Property and Other Impacted Properties: The most recent deed with legal descriptions clearly labeled for (1) the Source Property (where the contamination originated) and (2) all off-source (off-site) properties where letters were required to be sent per the ch. NR 700, Wis. Adm. Code, rule series (e.g., off-site cover maintenance required, lost monitoring well, off-site cover property impacts to groundwater exceeding the ch. NR 140, Wis. Adm. Code. 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. G.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. (Lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)). G.3. Verification of Zoning: Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status. G.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.

Signatures and Findings for Closure Determination

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

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

- [X] A response action(s) for this site addresses groundwater contamination (including natural attenuation remedies). [X] The response action(s) for this site addresses media other than groundwater.

Engineering Certification

I Christopher D. McElligott hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this case closure request has been prepared by me or prepared under my supervision in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this case closure request is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code. Specifically, with respect to compliance with the rules, in my professional opinion a site investigation has been conducted in accordance with ch. NR 716, Wis. Adm. Code, and all necessary remedial actions have been completed in accordance with chs. NR 140, NR 718, NR 720, NR 722, NR 724 and NR 726, Wis. Adm. Codes."

Christopher D. McElligott

Printed Name

Senior Engineer

Title

[Signature]

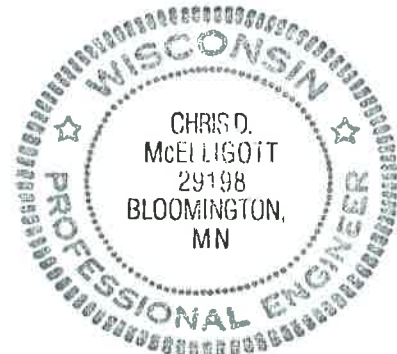
Signature

12/20/13

Date

# 29198-6

P.E. Stamp and Number

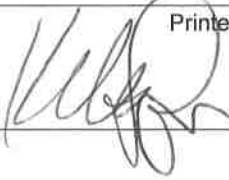


**Hydrogeologist Certification**

I, Kelton Barr hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this case closure request is correct and the document was prepared by me or prepared by me or prepared under my supervision and, in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code. Specifically, with respect to compliance with the rules, in my professional opinion a site investigation has been conducted in accordance with ch. NR 716, Wis. Adm. Code, and all necessary remedial actions have been completed in accordance with chs. NR 140, NR 718, NR 720, NR 722, NR 724 and NR 726, Wis. Adm. Codes."

Kelton Barr

Printed Name



Signature

Principal Hydrogeologist

Title

12/20/13

Date



Project #: LC-05-01218  
 Jolivette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

Table A.1.1  
 MW-1 Groundwater Analytical Results  
 (concentrations are in µg/L)

Date	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene	Naphthalene	Tetrachloroethene	Toluene	Trichloroethene	Trimethylbenzenes, Combined	Xylenes, Total
NR140 ES <sup>1</sup>	70	100	700	100	5	1,000	5	480	10,000
NR 140 PAL <sup>2</sup>	7	20	140	10	0.5	200	0.5	96	1,000
7/14/2005	<0.50	<0.50	<0.50	<0.25	<b>6.3</b>	<0.20	<0.20	<0.40	<0.50
6/5/2006	<0.50	<0.50	<0.50	<0.25	<b>9.8</b>	<0.20	0.26	<0.40	<0.50
2/25/2009	<0.50	<0.50	<0.50	<0.25	<b>7.0</b>	<0.50	<0.20	<0.40	<0.50
6/9/2009	<0.50	<0.50	<0.50	<0.25	<b>10</b>	<0.50	<0.20	<0.40	<0.50
9/30/2009	<0.50	<0.50	<0.50	<0.25	<b>8.8</b>	<0.50	<0.20	<0.40	<0.50
12/14/2009	<0.50	<0.50	<0.50	<0.25	<b>9.2</b>	<0.50	<0.20	<0.40	<0.50
10/11/2010	<0.50	<0.50	<0.50	<0.25	3.5	<0.50	<0.20	<0.40	<0.50
4/4/2011	<0.50	<0.50	<0.50	<0.25	4.7	<0.50	<0.20	<0.40	<0.50
10/11/2011	<0.50	<0.50	<0.50	0.38	<b>12</b>	<0.50	<0.20	<0.40	<0.50
10/8/2012	<0.12	<0.25	<0.13	<0.16	<b>8.6</b>	<0.11	<0.19	<0.32	<0.068

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES  
 values in *italics* exceed NR140 PAL

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 Joliette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

Table A.1.2.  
 MW-2 Groundwater Analytical Results  
 (concentrations are in µg/L)

<i>Date</i>	<i>cis-1,2-Dichloroethene</i>	<i>trans-1,2-Dichloroethene</i>	<i>Ethylbenzene</i>	<i>Naphthalene</i>	<i>Tetrachloroethene</i>	<i>Toluene</i>	<i>Trichloroethene</i>	<i>Trimethylbenzenes, Combined</i>	<i>Xylenes, Total</i>
NR140 ES <sup>1</sup>	70	100	700	100	5	1,000	5	480	10,000
NR 140 PAL <sup>2</sup>	7	20	140	10	0.5	200	0.5	96	1,000
7/14/2005	<0.50	<0.50	<0.50	<0.25	<i>1.4</i>	<0.20	<0.20	<0.40	<0.50
6/5/2006	<0.50	<0.50	<0.50	<0.25	<i>1.2</i>	<0.20	<0.20	<0.40	<0.50
2/25/2009	<0.50	<0.50	<0.50	<0.25	<i>0.96</i>	<0.50	<0.20	<0.40	<0.50
6/9/2009	<0.50	<0.50	<0.50	<0.25	<i>1.0</i>	<0.50	<0.20	<0.40	<0.50
9/30/2009	<0.50	<0.50	<0.50	<0.25	<i>1.5</i>	<0.50	<0.20	<0.40	<0.50
12/14/2009	<0.50	<0.50	<0.50	0.25	<i>1.1</i>	<0.50	<0.20	<0.40	<0.50
10/11/2010	<0.50	<0.50	<0.50	<0.25	<i>1.6</i>	<0.50	<0.20	<0.40	<0.50
10/11/2011	<0.50	<0.50	<0.50	<0.25	<0.50	<0.50	<0.20	<0.40	<0.50
10/8/2012	<0.12	<0.25	<0.13	<0.16	<i>1.2</i>	<0.11	<0.19	<0.32	<0.069

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES  
 values in *italics* exceed NR140 PAL

Project #: LC-05-01218  
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 La Crosse, Wisconsin

Table A.1.3.  
 MW-3 Groundwater Analytical Results  
 (concentrations are in µg/L)

Date	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene	Naphthalene	Tetrachloroethene	Toluene	Trichloroethene	Trimethylbenzenes, Combined	Xylenes, Total
NR140 ES <sup>1</sup>	70	100	700	100	5	1,000	5	480	10,000
NR 140 PAL <sup>2</sup>	7	20	140	10	0.5	200	0.5	96	1,000
7/14/2005	<0.50	<0.50	<0.50	<0.25	<b>10</b>	<0.20	<0.20	<0.40	<0.50
6/5/2006	<0.50	<0.50	<0.50	<0.25	<b>5.6</b>	<0.20	<0.20	<0.40	<0.50
2/25/2009	<0.50	<0.50	<0.50	<0.25	<b>7.6</b>	<0.50	<0.20	<0.40	<0.50
6/9/2009	<0.50	<0.50	<0.50	<0.25	<b>6.9</b>	<0.50	<0.20	<0.40	<0.50
9/30/2009	<0.50	<0.50	<0.50	<0.25	<i>4.1</i>	<0.50	<0.20	<0.40	<0.50
12/14/2009	<0.50	<0.50	<0.50	<0.25	<i>3.7</i>	<0.50	<0.20	<0.40	<0.50
10/11/2010	<0.50	<0.50	<0.50	<0.25	<b>8.6</b>	<0.50	<0.20	<0.40	<0.50
4/4/2011	<0.50	<0.50	<0.50	<0.25	<b>9.6</b>	<0.50	<0.20	<0.40	<0.50
10/11/2011	<0.50	<0.50	<0.50	<0.25	<b>6.1</b>	<0.50	<0.20	<0.40	<0.50
4/9/2012	<0.22	<0.27	<0.14	<0.24	<b>8.2</b>	<0.15	<0.18	<0.55	<0.30
10/8/2012	<0.12	<0.25	<0.13	<0.16	<b>8.8</b>	<0.11	<0.19	<0.32	<0.068
4/1/2013	<0.12	<0.25	<0.13	<0.16	<b>11</b>	<0.11	<0.19	<0.32	<0.068

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES  
 values in *italics* exceed NR140 PAL

Project #: LC-05-01218  
 Jolivette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

Table A.1.4.  
 MW-4 Groundwater Analytical Results  
 (concentrations are in µg/L)

Date	<i>cis</i> -1,2-Dichloroethene	<i>trans</i> -1,2-Dichloroethene	Ethylbenzene	Naphthalene	Tetrachloroethene	Toluene	Trichloroethene	Trimethylbenzenes, Combined	Xylenes, Total
NR140 ES <sup>1</sup>	70	100	700	100	5	1,000	5	480	10,000
NR 140 PAL <sup>2</sup>	7	20	140	10	0.5	200	0.5	96	1,000
6/5/2006	<0.50	<0.50	<0.50	<0.25	<b>20</b>	<0.20	<0.20	<0.40	<0.50
2/25/2009	<0.50	<0.50	<0.50	<0.25	<b>13</b>	<0.50	<0.20	<0.40	<0.50
6/9/2009	<0.50	<0.50	<0.50	<0.25	<b>15</b>	<0.50	<0.20	<0.40	<0.50
9/30/2009	<0.50	<0.50	<0.50	<0.25	<b>14</b>	<0.50	<0.20	<0.40	<0.50
12/14/2009	<0.50	<0.50	<0.50	<0.25	<b>12</b>	<0.50	<0.20	<0.40	<0.50
10/11/2010	1.5	<0.50	<0.50	<0.25	<b>16</b>	<0.50	0.49	<0.40	<0.50
10/11/2011	0.81	<0.50	<0.50	<0.25	<b>16</b>	<0.50	0.41	<0.40	<0.50
4/9/2012	<0.22	<0.27	<0.14	<0.24	<b>16</b>	<0.15	<0.18	<0.55	<0.30
10/8/2012	0.65	<0.25	<0.13	<0.16	<b>14</b>	<0.11	0.36	<0.32	<0.068
4/1/2013	1.3	<0.25	<0.13	<0.16	<b>16</b>	<0.11	0.39	<0.32	<0.068

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES  
 values in *italics* exceed NR140 PAL

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Table A.1.5.  
 MW-5 Groundwater Analytical Results  
 (concentrations are in µg/L)

Date	<i>cis</i> -1,2-Dichloroethene	<i>trans</i> -1,2-Dichloroethene	Ethylbenzene	Naphthalene	Tetrachloroethene	Toluene	Trichloroethene	Trimethylbenzenes, Combined	Xylenes, Total
NR140 ES <sup>1</sup>	70	100	700	100	5	1,000	5	480	10,000
NR 140 PAL <sup>2</sup>	7	20	140	10	0.5	200	0.5	96	1,000
6/5/2006	<0.50	<0.50	<0.50	<0.25	3.8	<0.20	<0.20	<0.40	<0.50
2/25/2009	1.4	<0.50	<0.50	<0.50	<b>43</b>	<0.50	<i>0.91</i>	<0.40	<0.50
6/9/2009	0.70	<0.50	<0.50	<0.25	<b>16</b>	<0.50	0.31	<0.40	<0.50
9/30/2009	2.3	<0.50	<0.50	<0.25	<b>58</b>	<0.50	<i>1.4</i>	<0.40	<0.50
12/14/2009	4.4	<0.50	<0.50	<0.25	<b>47</b>	<0.50	<i>1.6</i>	<0.40	<0.50
10/11/2010	<0.50	<0.50	<0.50	<0.25	<b>8.8</b>	<0.50	0.22	<0.40	<0.50
4/4/2011	0.92	<0.50	<0.50	<0.25	<b>16</b>	<0.50	0.36	<0.40	<0.50
10/12/2011	5.6	<0.50	<0.50	<0.25	<b>31</b>	<0.50	<i>1.9</i>	<0.40	<0.50
4/9/2012	<0.22	<0.27	<0.14	<0.24	<i>1.2</i>	<0.15	<0.18	<0.55	<0.30
10/8/2012	1.1	<0.25	<0.13	<0.16	<b>14</b>	<0.11	<i>0.69</i>	<0.32	<0.068
4/1/2013	2.3	<0.25	<0.13	<0.16	<b>10</b>	<0.11	0.45	<0.32	<0.068

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES

values in *italics* exceed NR140 PAL

Project #: LC-05-01218  
 Jolivette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

Table A.1.6.  
 MW-6 Groundwater Analytical Results  
 (concentrations are in µg/L)

Date	<i>cis</i> -1,2-Dichloroethene	<i>trans</i> -1,2-Dichloroethene	Ethylbenzene	Naphthalene	Tetrachloroethene	Toluene	Trichloroethene	Trimethylbenzenes, Combined	Xylenes, Total
NR140 ES <sup>1</sup>	70	100	700	100	5	1,000	5	480	10,000
NR 140 PAL <sup>2</sup>	7	20	140	10	0.5	200	0.5	96	1,000
6/5/2006	<0.50	<0.50	<0.50	<0.25	<0.50	<0.20	<0.20	<0.40	<0.50
2/25/2009	<0.50	<0.50	<0.50	<0.25	<0.50	<0.50	<0.20	<0.40	<0.50
6/9/2009	<0.50	<0.50	<0.50	<0.25	<0.50	<0.50	<0.20	<0.40	<0.50
9/30/2009	<0.50	<0.50	<0.50	<0.25	<0.50	<0.50	<0.20	<0.40	<0.50
12/14/2009	<0.50	<0.50	<0.50	<0.25	<0.50	<0.50	<0.20	<0.40	<0.50
10/11/2010	<0.50	<0.50	<0.50	<0.25	<0.50	<0.50	<0.20	<0.40	<0.50
10/11/2011	<0.50	<0.50	<0.50	<0.25	<0.50	<0.50	<0.20	<0.40	<0.50
10/8/2012	<0.12	<0.25	<0.13	<0.16	<0.17	<0.11	<0.19	<0.32	<0.068

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES  
 values in *italics* exceed NR140 PAL

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 Jolivette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

Table A.1.7.  
 GP-1, 2, 5, 7, 10 & 12 Groundwater Analytical Results - May 13, 2005

PARAMETER (µg/L):	GP-1	GP-2	GP-5	GP-7	GP-10	GP-12	NR140 ES <sup>1</sup>	NR 140 PAL <sup>2</sup>
sec-Butylbenzene	<1.0	<2.5	<2.5	<0.50	<1.0	<1.0	NS	NS
Ethylbenzene	<2.0	<5.0	<5.0	1.2	<2.0	<2.0	700	140
Isopropylbenzene	<0.80	<2.0	<2.0	<0.40	<0.80	<0.80	NS	NS
Naphthalene	1.3	<2.5	<2.5	<0.50	<1.0	<1.0	40	8
n-Propylbenzene	<2.0	<5.0	<5.0	<1.0	<2.0	<2.0	NS	NS
Tetrachloroethene	<2.0	<5.0	<b>15</b>	<i>3.1</i>	<2.0	<2.0	5	0.5
Toluene	0.92	<2.0	<2.0	0	<0.80	<0.80	1,000	200
Trimethylbenzene (combined)	1.6	7.3	13.1	0.52	1.6	1.6	480	96
Total Xylenes	6.4	17	12	5.4	3.3	3.1	10,000	1,000

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES

values in *italics* exceed NR140 PAL

NS - No Wisconsin Groundwater Standards have been established

Project #: LC-05-01218  
 Jolivette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

Table A.1.8.  
 GW-1 - GW-10 Groundwater Analytical Results - November 18, 2005

PARAMETER (µg/L):	GW-1	GW-2	GW-3	GW-4	GW-5	GW-6	NR140 ES <sup>1</sup>	NR 140 PAL <sup>2</sup>
Chloroform	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	6	0.6
Chloromethane	0.27	<i>1.5</i>	<0.20	<0.20	<0.20	<0.20	3	0.3
cis-1,2-Dichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	70	7
Methylene Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5	0.5
Naphthalene	0.29	0.31	0.72	<0.25	<0.25	<0.25	40	8
Tetrachloroethene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5	0.5
Toluene	0.66	1.2	0.7	0.29	0.37	0.23	1,000	200
Trichloroethene	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	5	0.5
Trimethylbenzene (combined)	<0.20	0.41	0.21	<0.20	<0.20	<0.20	480	96
Total Xylenes	1.1	1.2	<0.50	<0.50	<0.50	<0.50	10,000	1,000

PARAMETER (µg/L):	GW-7	GW-8	GW-9	GW-10	Field Blank	Trip Blank	NR140 ES <sup>1</sup>	NR 140 PAL <sup>2</sup>
Chloroform	<0.20	<0.20	<0.20	<0.20	<i>0.92</i>	<0.20	6	0.6
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	3	0.3
cis-1,2-Dichloroethene	<0.50	<0.50	2	<0.50	<0.50	<0.50	70	7
Methylene Chloride	<1.0	<1.0	<1.0	<i>1.7</i>	<1.0	<1.0	5	0.5
Naphthalene	<0.25	0.38	0.69	<0.25	<0.25	<0.25	40	8
Tetrachloroethene	<0.50	<0.50	<b>7.4</b>	<b>15</b>	<0.50	<0.50	5	0.5
Toluene	<0.20	0.35	0.3	0.44	<0.20	<0.20	1,000	200
Trichloroethene	<0.20	<0.20	<b>6.6</b>	<0.20	<0.20	<0.20	5	0.5
Trimethylbenzene (combined)	<0.20	0.27	0.3	<0.20	<0.20	<0.20	480	96
Total Xylenes	<0.50	1.9	1.3	<0.50	<0.50	<0.50	10,000	1,000

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES

values in *italics* exceed NR140 PAL

NS - No Wisconsin Groundwater Standards have been established



Project #: LC-05-01218  
 Joliette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

**Table A.1.9.**  
**GP-13 - GP-19 Groundwater Analytical Results - March 10, 2009**

PARAMETER (µg/L):	GP-13	GP-14	GP-15	GP-16	GP-17	GP-18	GP-19	NR140 ES <sup>1</sup>	NR 140 PAL <sup>2</sup>
Chloroform	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	6	0.6
Chloromethane	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<b>10</b>	3	0.3
cis-1,2-Dichloroethene	<0.50	0.58	<0.50	<0.50	<0.50	<0.50	<0.50	70	7
Methylene Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5	0.5
Naphthalene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	100	10
Tetrachloroethene	<b>20</b>	<b>42</b>	<b>41</b>	<i>0.67</i>	<0.50	<b>17</b>	<b>22</b>	5	0.5
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1,000	200
Trichloroethene	<0.20	0.37	<0.20	<0.20	<0.20	<0.20	<0.20	5	0.5
Trimethylbenzene (combined)	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	480	96
Total Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	10,000	1,000

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES  
 values in *italics* exceed NR140 PAL

NS - No Wisconsin Groundwater Standards have been established

**Project #: LC-05-01218**  
**Jolivette Cleaners and Laundry**  
**1645 Caroline Street**  
**La Crosse, Wisconsin**

**Table A.1.10.**  
**GP-20 & GP-21 Groundwater Analytical Results - August 30, 2010**

PARAMETER (µg/L):	GP-20 20 - 23'	GP-20 33 - 36'	GP-20 46 - 49'	GP-21 27 - 30'	GP-21 40 - 43'	NR140 ES <sup>1</sup>	NR 140 PAL <sup>2</sup>
Chloroform	<0.20	<0.20	<0.20	<0.20	<0.20	6	0.6
Chloromethane	<0.30	<0.30	<0.30	<0.30	<0.30	3	0.3
cis-1,2-Dichloroethene	0.72	<0.50	<0.50	<0.50	<0.50	70	7
Methylene Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	5	0.5
Naphthalene	<0.25	<0.25	<0.25	<0.25	<0.25	100	10
Tetrachloroethene	<b>9.2</b>	<i>1.6</i>	<i>1.2</i>	<i>1.6</i>	<i>1.9</i>	5	0.5
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	1,000	200
Trichloroethene	<i>0.67</i>	<0.20	0.32	<0.20	<0.20	5	0.5
Trimethylbenzene (combined)	<0.40	<0.40	<0.40	<0.40	<0.40	480	96
Total Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	10,000	1,000

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES

values in *italics* exceed NR140 PAL

NS - No Wisconsin Groundwater Standards have been established

**Table A.1.11.**  
**GP-22, 23 & 24 Groundwater Analytical Results - April 22, 2011**

PARAMETER (µg/L):	GP-22 17 - 20'	GP-22 37 - 40'	GP-22 57 - 60'	GP-22 77 - 80'	GP-22 97 - 100'	GP-22 117 - 120'	NR140 ES <sup>1</sup>	NR 140 PAL <sup>2</sup>
Chloroform	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	6	0.6
Chloromethane	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	3	0.3
1,2-Dichlorobenzene	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	600	6
cis-1,2-Dichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	70	7
Methylene Chloride	<1.0	<1.0	<1.0	<0.10	<1.0	<1.0	5	0.5
Naphthalene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	100	10
Tetrachloroethene	<i>1.3</i>	<i>4.9</i>	<i>3.1</i>	<i>1.2</i>	<0.50	<0.50	5	0.5
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1,000	200
Trichloroethene	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	5	0.5
Trimethylbenzene (combined)	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	480	96
Total Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	10,000	1,000
Vinyl chloride	<0.20	<0.20	<i>0.20</i>	<0.20	<0.20	<0.20	0.2	0.02
Iron (mg/L)	<b>26</b>	<b>31</b>	<b>19</b>	<b>18</b>	<b>28</b>	<b>14</b>	0.3 <sup>3</sup>	0.15 <sup>4</sup>
Manganese (mg/L)	<b>2.3</b>	<b>9.0</b>	<b>2.1</b>	<b>3.1</b>	<b>0.89</b>	<b>0.61</b>	0.05 <sup>3</sup>	0.025 <sup>4</sup>

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standard (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limit (PAL)

<sup>3</sup> - Wisconsin Administrative Code, Chapter NR140, Public Welfare Groundwater Quality Enforcement Standard (ES)

<sup>4</sup> - Wisconsin Administrative Code, Chapter NR140, Public Welfare Groundwater Quality Preventative Action Limit (PAL)

**BOLD** values exceed NR140 ES

values in *italics* exceed NR140 PAL

NS - No Wisconsin Groundwater Standards have been established

**Table A.1.11.**  
**GP-22, 23 & 24 Groundwater Analytical Results - April 22, 2011**

PARAMETER (µg/L):	GP-23 17 - 20'	GP-23 37 - 40'	GP-23 57 - 60'	GP-23 77 - 80'	GP-23 97 - 100'	GP-23 117 - 120'	NR140 ES <sup>1</sup>	NR 140 PAL <sup>2</sup>
Chloroform	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	6	0.6
Chloromethane	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	3	0.3
1,2-Dichlorobenzene	<0.20	<0.20	0.46	0.78	0.32	0.22	600	6
cis-1,2-Dichloroethene	1.1	4.1	3.7	53	39	40	70	7
trans-1,2-Dichloroethene	<0.50	<0.50	<0.50	1.9	1.9	1.7	100	20
Methylene Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5	0.5
Naphthalene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	100	10
Tetrachloroethene	2.0	<b>40</b>	<b>70</b>	<b>25</b>	<b>7.1</b>	<b>6.5</b>	5	0.5
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1,000	200
Trichloroethene	0.28	4.4	4.5	<b>20</b>	4.5	3.8	5	0.5
Trimethylbenzene (combined)	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	480	96
Total Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	10,000	1,000
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.2	0.02
Iron (mg/L)	<b>28</b>	<b>43</b>	<b>40</b>	<b>41</b>	<b>69</b>	<b>1.4</b>	0.3 <sup>3</sup>	0.15 <sup>4</sup>
Manganese (mg/L)	<b>10</b>	<b>7.0</b>	<b>4.9</b>	<b>2.8</b>	<b>3.6</b>	<b>0.21</b>	0.05 <sup>3</sup>	0.025 <sup>4</sup>

Notes:

Sources for Wisconsin groundwater standards:

- <sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)
- <sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)
- <sup>3</sup> - Wisconsin Administrative Code, Chapter NR140, Public Welfare Groundwater Quality Enforcement Standard (ES)
- <sup>4</sup> - Wisconsin Administrative Code, Chapter NR140, Public Welfare Groundwater Quality Preventative Action Limit (PAL)

**BOLD** values exceed NR140 ES

values in *italics* exceed NR140 PAL

NS - No Wisconsin Groundwater Standards have been established

**Table A.1.11.**  
**GP-22, 23 & 24 Groundwater Analytical Results - April 22, 2011**

PARAMETER (µg/L):	GP-24 17 - 20'	GP-24 37 - 40'	GP-24 57 - 60'	GP-24 77 - 80'	GP-24 97 - 100'	GP-24 117 - 120'	NR140 ES <sup>1</sup>	NR 140 PAL <sup>2</sup>
Chloroform	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	6	0.6
Chloromethane	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	3	0.3
1,2-Dichlorobenzene	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	600	6
cis-1,2-Dichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	70	7
Methylene Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5	0.5
Naphthalene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	100	10
Tetrachloroethene	<i>0.54</i>	<i>4.4</i>	<i>2.2</i>	<i>2.3</i>	<i>0.57</i>	<0.50	5	0.5
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1,000	200
Trichloroethene	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	5	0.5
Trimethylbenzene (combined)	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	480	96
Total Xylenes	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	10,000	1,000
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.2	0.02
Iron (mg/L)	<b>22</b>	<b>29</b>	<b>42</b>	<b>64</b>	<b>39</b>	<b>12</b>	0.3 <sup>3</sup>	0.15 <sup>4</sup>
Manganese (mg/L)	<b>4.9</b>	<b>4.2</b>	<b>4.7</b>	<b>7.8</b>	<b>2.4</b>	<b>0.71</b>	0.05 <sup>3</sup>	0.025 <sup>4</sup>

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

<sup>3</sup> - Wisconsin Administrative Code, Chapter NR140, Public Welfare Groundwater Quality Enforcement Standard (ES)

<sup>4</sup> - Wisconsin Administrative Code, Chapter NR140, Public Welfare Groundwater Quality Preventative Action Limit (PAL)

**BOLD** values exceed NR140 ES

values in *italics* exceed NR140 PAL

NS - No Wisconsin Groundwater Standards have been established

Table A.1.12.  
 Private Well Analytical Results  
 (concentrations are in µg/L)

	1640 Caroline		1641 Caroline		1642 Caroline <sup>3</sup>		1644 Caroline <sup>5</sup>		1645 Caroline		1646 Caroline		1703 Caroline		234 Elm	
	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE
NR140 ES <sup>1</sup>	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
NR 140 PAL <sup>2</sup>	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
12/21/2004	ND	ND	ND	ND	<b>7.0</b>	ND	4.5	0.16	ND	ND	2.1	ND	ND	ND	ND	ND
6/13/2005	---	---	---	---	ND <sup>4</sup>	ND <sup>4</sup>	3.2	ND	---	---	---	---	---	---	---	---
6/28/2006	ND	ND	ND	ND	ND	ND	3.3	ND	ND	ND	---	---	ND	ND	ND	ND
7/28/2006	---	---	---	---	---	---	---	---	---	---	1.9	ND	---	---	---	---
2/25/2009	---	---	ND	ND	---	---	3.3	ND	ND	ND	---	---	---	---	---	---
2/27/2009	---	---	---	---	---	---	---	---	---	---	1.5	ND	---	---	---	---
3/6/2009	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3/17/2009	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---	---	---
6/9/2009	ND	ND	ND	ND	---	---	---	---	ND	ND	2.0	ND	---	---	---	---
6/10/2009	---	---	---	---	ND	ND	4.9	ND	---	---	---	---	---	---	---	---
9/30/2009	ND	ND	ND	ND	ND	ND	<b>5.6</b>	ND	ND	ND	2.0	ND	---	---	---	---
10/13/2009	---	---	---	---	---	---	<b>6.0</b>	<i>0.69</i>	---	---	---	---	---	---	---	---
12/7/2009	---	---	---	---	---	---	ND	ND	---	---	---	---	---	---	---	---
12/14/2009	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12/15/2009	---	---	ND	ND	---	---	---	---	ND	ND	---	---	---	---	---	---
12/16/2009	---	---	---	---	---	---	ND	ND	---	---	1.6	ND	---	---	---	---
10/11/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	---	---	---	---
10/11/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---
10/14/2011	---	---	---	---	---	---	---	---	---	---	0.55	ND	---	---	---	---
10/11/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.70	ND	---	---	---	---

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES

values in *italics* exceed NR140 PAL

--- indicates no sample taken

<sup>3</sup> - New well was constructed on 6/13/05

<sup>4</sup> - both new and old well sampling result

<sup>5</sup> - new well constructed on 12/4/09

Table A.1.12.  
 Private Well Analytical Results  
 (concentrations are in µg/L)

	1629 Bainbridge		1631 Bainbridge		1632 Bainbridge		1638 Bainbridge		1639 Bainbridge		1642 Bainbridge		1646 Bainbridge		1648 Bainbridge	
	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE
NR140 ES <sup>1</sup>	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
NR 140 PAL <sup>2</sup>	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
6/18/2010 <sup>6</sup>	<0.43	<0.39	<i>1.94</i>	<i>0.57</i>	<0.43	<i>0.78</i>	---	---	<b>7.9</b>	<0.39	<b>5.2</b>	<i>1.16</i>	---	---	---	---
7/22/2010 <sup>7</sup>	---	---	---	---	---	---	<b>7.0</b>	<b>7.4</b>	<b>9.6</b>	<0.15	<b>5.2</b>	2.3	<0.15	<0.15	<i>1.1</i>	<0.15
3/11/2011	<0.50	<0.20	<i>1.1</i>	0.22	<0.50	<i>1.1</i>	4.0	3.3	<b>6.7</b>	<0.20	4.8	<i>1.1</i>	<0.50	<0.20	<i>0.94</i>	<0.20
8/2/2011	---	---	---	---	---	---	3.2	<i>1.7</i>	<b>5.1</b>	<0.20	4.1	<i>0.65</i>	---	---	---	---
10/11/2011	---	---	<i>0.71</i>	<0.20	<i>0.75</i>	<i>1.8</i>	---	---	4.5	<0.20	3.6	<0.20	ND	ND	<i>0.66</i>	<0.20
10/12/2011	---	---	---	---	---	---	2.8	<i>0.52</i>	---	---	---	---	---	---	---	---
10/14/2011	<i>0.63</i>	<0.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4/9/2012	---	---	---	---	---	---	3.0	<i>1.4</i>	4.0	<0.18	3.5	<i>0.53</i>	---	---	---	---
10/11/2012	---	---	<i>0.66</i>	<0.19	<i>0.87</i>	<i>1.5</i>	2.9	<i>1.7</i>	3.9	<0.19	4.0	<i>0.66</i>	<0.17	<0.19	<i>0.69</i>	<0.19
4/1/2013	---	---	---	---	---	---	2.7	<i>1.5</i>	4.5	<0.19	---	---	---	---	---	---
4/2/2013	---	---	---	---	---	---	---	---	---	---	4.0	<i>1.4</i>	---	---	---	---

Notes:

Sources for Wisconsin groundwater standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Enforcement Standards (ES)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR140 Groundwater Preventive Action Limits (PALs)

**BOLD** values exceed NR140 ES

values in *italics* exceed NR140 PAL

--- indicates no sample taken

<sup>3</sup> - New well was constructed on 6/13/05

<sup>4</sup> - both new and old well sampling result

<sup>5</sup> - new well constructed on 12/4/09

<sup>6</sup> - sampled by METCO for Former Quad City Sealers site (BRRTS #02-32-553379)

<sup>7</sup> - sampled by the Wisconsin Department of Natural Resources

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 Joliette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

Table A.2.1.  
 GP-1 - GP-10 Soil Analytical Results - May 13, 2005

PARAMETER (µg/kg):	GP-1 2 - 4 feet 05/13/05	GP-2 2 - 4 feet 05/13/05	GP-3 2 - 4 feet 05/13/05	GP-4 2 - 4 feet 05/13/05	GP-5 2 - 4 feet 05/13/05	GP-6 2 - 4 feet 05/13/05	GP-7 2 - 4 feet 05/13/05	NR720 RCLs <sup>1</sup>	NR746.06 Table 1 <sup>2</sup>	NR746.06 Table 2 <sup>3</sup>	U.S. EPA Groundwater RCL <sup>4</sup>	U.S. EPA Direct Contact RCL <sup>5</sup>
Unsaturated or Saturated?	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	-	-	-	-	-
sec-Butylbenzene	<26	<27	<27	<26	<27	<28	<27	NS	NS	NS	-	-
Ethylbenzene	<26	<27	<27	<26	<27	<28	<27	2,900	4,600	NS	-	-
Isopropylbenzene	<26	<27	<27	<26	<27	<28	<27	NS	NS	NS	-	-
Naphthalene	<53	<54	<54	<53	<54	<55	<53	NS	2,700	NS	-	-
n-Propylbenzene	<26	<27	<27	<26	<27	<28	<27	NS	NS	NS	-	-
Tetrachloroethene	<26	<b>60</b>	<b>34</b>	<b>2,400</b>	<b>150</b>	<28	<27	NS	NS	NS	4.6	30,700
Toluene	<26	<27	<27	<26	<27	<28	<27	1,500	3,800	NS	-	-
1,2,4-Trimethylbenzene	<26	<27	<27	<26	<27	<28	<27	NS	83,000	NS	-	-
1,3,5-Trimethylbenzene	<26	<27	<27	<26	<27	<28	<27	NS	11,000	NS	-	-
Total Xylene	<90	<92	<91	<90	<92	<94	<90	NS	NS	NS	-	-

PARAMETER (µg/kg):	GP-8 2 - 4 feet 05/13/05	GP-9 2 - 4 feet 05/13/05	GP-10 2 - 4 feet 05/13/05	GP-11 2 - 4 feet 05/13/05	GP-12 2 - 4 feet 05/13/05	GP-12 10 - 12 feet 05/13/05	Methanol Blank 05/13/05	NR720 RCLs <sup>1</sup>	NR746.06 Table 1 <sup>2</sup>	NR746.06 Table 2 <sup>3</sup>	U.S. EPA Groundwater RCL <sup>4</sup>	U.S. EPA Direct Contact RCL <sup>5</sup>
Unsaturated or Saturated?	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	-	-	-	-	-
sec-Butylbenzene	<27	<26	<27	<26	<26	<29	<25	NS	NS	NS	-	-
Ethylbenzene	<27	<26	<27	<26	<26	<29	<25	2,900	4,600	NS	-	-
Isopropylbenzene	<27	<26	<27	<26	<26	<29	<25	NS	NS	NS	-	-
Naphthalene	<53	<53	<53	<53	<52	<59	<50	NS	2,700	NS	-	-
n-Propylbenzene	<27	<26	<27	<26	<26	<29	<25	NS	NS	NS	-	-
Tetrachloroethene	<27	<26	<27	<26	<26	<29	<25	NS	NS	NS	4.6	30,700
Toluene	<27	<26	<27	<26	<26	<29	<25	1,500	3,800	NS	-	-
1,2,4-Trimethylbenzene	<27	<26	<27	<26	<26	<29	<25	NS	83,000	NS	-	-
1,3,5-Trimethylbenzene	<27	<26	<27	<26	<26	<29	<25	NS	11,000	NS	-	-
Total Xylene	<91	<89	<91	<90	<88	<100	<85	NS	NS	NS	-	-

Notes:

Sources for Wisconsin soil standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR720, Table 1 and Table 2, Residual Contaminant Levels (metals standards are Industrial)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR746, Table 1 - Indicators of Residual Petroleum Product in Soil Pores

<sup>3</sup> - Wisconsin Administrative Code, Chapter NR746, Table 2 - Protection of Human Health from Direct Contact with Contaminated Soil

<sup>4</sup> - U.S. EPA Generic Soil Screening Level for Groundwater Protection (Groundwater RCL)

<sup>5</sup> - U.S. EPA Generic Soil Screening Level for Ingestion (Non-Industrial Direct-Contact RCL)

**BOLD** values exceed one or more Wisconsin soil standard

NS - No Wisconsin Soil Standards have been established



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 Jolivette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

**Table A.2.2.**  
**MW-1 & MW-2 Soil Analytical Results - July 13, 2005**

PARAMETER (µg/kg):	MW-1 5 feet 07/13/05	MW-1 10 feet 07/13/05	MW-2 5 feet 07/13/05	MW-2 10 feet 07/13/05	NR720 RCLs <sup>1</sup>	NR746.06 Table 1 <sup>2</sup>	NR746.06 Table 2 <sup>3</sup>	U.S. EPA Groundwater RCL <sup>4</sup>	U.S. EPA Direct Contact RCL <sup>5</sup>
Unsaturated or Saturated?	Unsaturated	Unsaturated	Unsaturated	Unsaturated	-	-	-	-	-
sec-Butylbenzene	<26	<26	<26	<26	NS	NS	NS	-	-
Ethylbenzene	<26	<26	<26	<26	2,900	4,600	NS	-	-
Isopropylbenzene	<26	<26	<26	<26	NS	NS	NS	-	-
Naphthalene	<53	<52	<52	<52	NS	2,700	NS	-	-
n-Propylbenzene	<26	<26	<26	<26	NS	NS	NS	-	-
Tetrachloroethene	<26	<26	<26	<26	NS	NS	NS	4.6	30,700
Toluene	<26	<26	<26	<26	1,500	3,800	NS	-	-
1,2,4-Trimethylbenzene	<26	<26	<26	<26	NS	83,000	NS	-	-
1,3,5-Trimethylbenzene	<26	<26	<26	<26	NS	11,000	NS	-	-
Total Xylenes	<90	<89	<88	<88	NS	NS	NS	-	-

Notes:

Sources for Wisconsin soil standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR720, Table 1 and Table 2, Residual Contaminant Levels (metals standards are Industrial)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR746, Table 1 - Indicators of Residual Petroleum Product in Soil Pores

<sup>3</sup> - Wisconsin Administrative Code, Chapter NR746, Table 2 - Protection of Human Health from Direct Contact with Contaminated Soil

<sup>4</sup> - U.S. EPA Generic Soil Screening Level for Groundwater Protection (Groundwater RCL)

<sup>5</sup> - U.S. EPA Generic Soil Screening Level for Ingestion (Non-Industrial Direct-Contact RCL)

**BOLD** values exceed one or more Wisconsin soil standard

NS - No Wisconsin Soil Standards have been established

Project #: LC-05-01218  
 Jolivette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

Table A.2.3.  
 GP-13 - GP-19 Soil Analytical Results - March 10, 2009

PARAMETER (µg/kg):	GP-13		GP-14		GP-15		GP-16		NR720 RCLs <sup>1</sup>	NR746.06 Table 1 <sup>2</sup>	NR746.06 Table 2 <sup>3</sup>	U.S. EPA Groundwater RCL <sup>4</sup>	U.S. EPA Direct Contact RCL <sup>5</sup>
	2 - 4 feet 03/10/09	8 - 10 feet 03/10/09	2 - 4 feet 03/10/09	8 - 10 feet 03/10/09	2 - 4 feet 03/10/09	8 - 10 feet 03/10/09	2 - 4 feet 03/10/09	10 - 12 feet 03/10/09					
Unsaturated or Saturated?	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	-	-	-	-	-
sec-Butylbenzene	<27	<26	<26	<26	<26	<26	<26	<26	NS	NS	NS	-	-
Ethylbenzene	<27	<26	<26	<26	<26	<26	<26	<26	2,900	4,600	NS	-	-
Isopropylbenzene	<27	<26	<26	<26	<26	<26	<26	<26	NS	NS	NS	-	-
Naphthalene	<54	<52	<52	<52	<53	<51	<51	<51	NS	2,700	NS	-	-
n-Propylbenzene	<27	<26	<26	<26	<26	<26	<26	<26	NS	NS	NS	-	-
Tetrachloroethene	<27	<26	<b>64</b>	<26	<b>140</b>	<26	<26	<26	NS	NS	NS	4.6	30,700
Toluene	<27	<26	<26	<26	<26	<26	<26	<26	1,500	3,800	NS	-	-
1,2,4-Trimethylbenzene	<27	<26	<26	<26	<26	<26	<26	<26	NS	83,000	NS	-	-
1,3,5-Trimethylbenzene	<27	<26	<26	<26	<26	<26	<26	<26	NS	11,000	NS	-	-
Total Xylenes	<91	<89	<89	<88	<90	<87	<87	<87	NS	NS	NS	-	-

PARAMETER (µg/kg):	GP-17		GP-18		GP-19		Methanol Blank 03/10/09	NR720 RCLs <sup>1</sup>	NR746.06 Table 1 <sup>2</sup>	NR746.06 Table 2 <sup>3</sup>	U.S. EPA Groundwater RCL <sup>4</sup>	U.S. EPA Direct Contact RCL <sup>5</sup>
	2 - 4 feet 03/10/09	10 - 12 feet 03/10/09	2 - 4 feet 03/10/09	8 - 10 feet 03/10/09	2 - 4 feet 03/10/09	8 - 10 feet 03/10/09						
Unsaturated or Saturated?	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	-	-	-	-	-	-
sec-Butylbenzene	<26	<26	<26	<26	<26	<26	<25	NS	NS	NS	-	-
Ethylbenzene	<26	<26	<26	<26	<26	<26	<25	2,900	4,600	NS	-	-
Isopropylbenzene	<26	<26	<26	<26	<26	<26	<25	NS	NS	NS	-	-
Naphthalene	<53	<52	<52	<51	<53	<52	<50	NS	2,700	NS	-	-
n-Propylbenzene	<26	<26	<26	<26	<26	<26	<25	NS	NS	NS	-	-
Tetrachloroethene	<26	<26	<b>68</b>	<26	<b>130</b>	<26	<25	NS	NS	NS	4.6	30,700
Toluene	<26	<26	<26	<26	<26	<26	<25	1,500	3,800	NS	-	-
1,2,4-Trimethylbenzene	<26	<26	<26	<26	<26	<26	<25	NS	83,000	NS	-	-
1,3,5-Trimethylbenzene	<26	<26	<26	<26	<26	<26	<25	NS	11,000	NS	-	-
Total Xylenes	<90	<88	<89	<87	<90	<88	<85	NS	NS	NS	-	-

Notes:

Sources for Wisconsin soil standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR720, Table 1 and Table 2, Residual Contaminant Levels (metals standards are Industrial)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR746, Table 1 - Indicators of Residual Petroleum Product in Soil Pores

<sup>3</sup> - Wisconsin Administrative Code, Chapter NR746, Table 2 - Protection of Human Health from Direct Contact with Contaminated Soil

<sup>4</sup> - U.S. EPA Generic Soil Screening Level for Groundwater Protection (Groundwater RCL)

<sup>5</sup> - U.S. EPA Generic Soil Screening Level for Ingestion (Non-Industrial Direct-Contact RCL)

**BOLD** values exceed one or more Wisconsin soil standard

NS - No Wisconsin Soil Standards have been established

### **A.3. Post-remedial Soil Analytical Table(s)**

No soil remediation was completed at the site.

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**Table A.4.**  
**Pre and Post Remaining Soil Contamination Soil Analytical Table**

PARAMETER (µg/kg):	GP-2 2 - 4 feet 05/13/05	GP-3 2 - 4 feet 05/13/05	GP-4 2 - 4 feet 05/13/05	GP-5 2 - 4 feet 05/13/05	GP-14 2 - 4 feet 03/10/09	GP-15 2 - 4 feet 03/10/09	GP-18 2 - 4 feet 03/10/09	GP-19 2 - 4 feet 03/10/09	NR720 RCLs <sup>1</sup>	NR746.06 Table 1 <sup>2</sup>	NR746.06 Table 2 <sup>3</sup>	U.S. EPA Groundwater RCL <sup>4</sup>	U.S. EPA Direct Contact RCL <sup>5</sup>
Unsaturated or Saturated?	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	-	-	-	-	-
sec-Butylbenzene	<27	<27	<26	<27	<26	<26	<26	<26	NS	NS	NS	-	-
Ethylbenzene	<27	<27	<26	<27	<26	<26	<26	<26	2,900	4,600	NS	-	-
Isopropylbenzene	<27	<27	<26	<27	<26	<26	<26	<26	NS	NS	NS	-	-
Naphthalene	<54	<54	<53	<54	<52	<53	<52	<53	NS	2,700	NS	-	-
n-Propylbenzene	<27	<27	<26	<27	<26	<26	<26	<26	NS	NS	NS	-	-
Tetrachloroethene	<b>60</b>	<b>34</b>	<b>2,400</b>	<b>150</b>	<b>64</b>	<b>140</b>	<b>68</b>	<b>130</b>	NS	NS	NS	4.6	30,700
Toluene	<27	<27	<26	<27	<26	<26	<26	<26	1,500	3,800	NS	-	-
1,2,4-Trimethylbenzene	<27	<27	<26	<27	<26	<26	<26	<26	NS	83,000	NS	-	-
1,3,5-Trimethylbenzene	<27	<27	<26	<27	<26	<26	<26	<26	NS	11,000	NS	-	-
Total Xylene	<92	<91	<90	<92	<89	<90	<89	<90	NS	NS	NS	-	-

Notes:

Sources for Wisconsin soil standards:

<sup>1</sup> - Wisconsin Administrative Code, Chapter NR720, Table 1 and Table 2, Residual Contaminant Levels (metals standards are Industrial)

<sup>2</sup> - Wisconsin Administrative Code, Chapter NR746, Table 1 - Indicators of Residual Petroleum Product in Soil Pores

<sup>3</sup> - Wisconsin Administrative Code, Chapter NR746, Table 2 - Protection of Human Health from Direct Contact with Contaminated Soil

<sup>4</sup> - U.S. EPA Generic Soil Screening Level for Groundwater Protection (Groundwater RCL)

<sup>5</sup> - U.S. EPA Generic Soil Screening Level for Ingestion (Non-Industrial Direct-Contact RCL)

**BOLD** values exceed one or more Wisconsin soil standard

NS - No Wisconsin Soil Standards have been established

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 Jolivette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin

Table A.5.  
 Vapor Analytical Table

PARAMETER ( $\mu\text{g}/\text{m}^3$ ):	GP-18 (sub-slab) Non-Res. 3/10/2009	GP-18D <sup>1</sup> (sub-slab) Non-Res. 11/11/2009	GP-19 (sub-slab) Non-Res. 3/10/2009	GP-19D <sup>1</sup> (sub-slab) Non-Res. 11/11/2009	Indoor Air (Site Bldg) Non-Res. 3/31/2009	GP-20D <sup>1</sup> (sub-slab) Non-Res. 5/27/2010	Ambient Air <sup>1</sup> (indoor air) - 5/27/2010	1640 Caroline (crawl space) Res. Indoor Air 5/29/2013	1642 Caroline (crawl space) Res. Indoor Air 5/29/2013	1644 Caroline (crawl space) Res. Indoor Air 5/29/2013	Non-Residential Indoor Air VAL ( $\alpha = 1.0$ )	Non-Residential Sub-Slab VAL ( $\alpha = 0.1$ )	Residential Indoor Air VAL ( $\alpha = 1.0$ )
1,2,4-Trimethylbenzene	138	<4.4	135	<4.4	<b>84.1</b>	<133	<80	<4.86	<5.60	<4.49	31	310	7.3
1,2-Dichlorobenzene	3.75	<4.4	<2.66	<4.4	<2.73	<133	<80	<2.86	<3.29	<2.64	880	8,800	210
1,3,5-Trimethylbenzene	42.9	<4.4	41.0	<4.4	23.7	<133	<80	<2.43	<2.80	<2.25	NS	NS	NS
1,3-Butadiene	10.9	<4.4	26.6	<4.4	<1.04	<133	<80	<b>3.04</b>	<1.31	<1.05	4.1	41	0.81
2-Butanone (MEK)	25.5	NA	33.9	NA	1,560	NA	NA	4.18	<1.74	<1.40	22,000	220,000	5,200
2-Hexanone	5.51	NA	2.58	NA	<1.93	NA	NA	<2.10	<2.42	<1.94	130	1,300	31
2-Propanol	20.1	NA	8.33	NA	180	NA	NA	6.45	3.00	<1.17	NS	NS	NS
4-Ethyltoluene	38.0	NA	35.8	NA	22.1	NA	NA	<2.43	<2.80	<2.25	NS	NS	NS
4-Methyl-2-pentanone	13.0	NA	4.19	NA	14.3	NA	NA	<2.03	<2.33	<1.87	13,000	130,000	3,100
Acetone	455	<16	151	<67	663	<133	267	28.7	13.6	4.76	140,000	1,400,000	32,000
Benzene	123	<4.4	<b>187</b>	<4.4	<b>134</b>	<133	<80	<3.28	<3.78	<3.03	16.0	160	3.1
Carbon Disulfide	30.0	<4.4	47.7	<4.4	<1.41	<133	<80	<1.54	<1.77	<1.42	3,100	31,000	730
Chloroethane	<2.35	<4.4	3.09	<4.4	105	<133	<80	<2.71	<3.12	<2.51	NS	NS	NS
Chloromethane	<0.921	<4.4	1.72	<4.4	<0.937	<133	<80	4.99	1.27	<0.980	390	3,900	94
Cyclohexane	35.9	<4.4	38.9	<4.4	74.0	<133	<80	<1.70	<1.96	<1.57	26,000	260,000	6,300
Dichlorodifluoromethane	2.33	<4.4	<2.27	4.4	22.7	<133	<80	2.96	<2.93	2.73	440	4,400	100
Ethanol	467	NA	485	NA	1,060	NA	NA	104	8.15	5.16	NS	NS	NS
Ethylbenzene	39.7	<4.4	39.8	<4.4	147	<133	<80	<2.23	<2.57	<2.06	49	490	9.7
m,p-Xylenes	203	<8.8	169	<8.8	202	<133	<80	4.63	<5.04	<4.05	440	4,400	100
Methylene chloride	<1.61	<4.4	<1.60	<4.4	59.9	<133	<80	<1.78	2.13	<1.65	2,600	26,000	630
Naphthalene	<4.50	NA	6.06	NA	<4.58	NA	NA	<5.18	<5.97	<4.79	3.6	36	0.72
n-Heptane	140	<4.4	129	<4.4	225	<133	<80	<2.03	<2.33	<1.87	NS	NS	NS
n-Hexane	123	<4.4	140	<4.4	472	<133	<80	<1.74	<2.01	<1.61	3,100	31,000	730
o-Xylene	74.0	<4.4	65.6	<4.4	75.4	<133	<80	<2.23	<2.57	<2.06	440	4,400	100
Propylene	271	<4.4	508	17	235	<133	<80	12.6	<3.92	<3.15	13,000	130,000	3,100
Styrene	4.38	<4.4	6.27	<4.4	20.9	<133	<80	<2.11	<2.43	<1.95	4,400	44,000	1,000
Tetrachloroethene	<b>4,330</b>	<b>3,200</b>	<b>3,830</b>	700	88.3	1,140	<80	<3.35	11.8	<3.10	180	1,800	42
Tetrahydrofuran	<1.32	<22	<1.31	<22	271	<133	<80	<1.46	<1.68	<1.35	8,800	88,000	2,100
Toluene	776	<4.4	857	<4.4	2,790	<133	122	8.8	2.58	<1.79	22,000	220,000	5,200
trans-1,2-Dichloroethene	<1.77	<4.4	2.34	<4.4	<1.80	<133	<80	<1.96	5.95	<1.81	260	2,600	63
Trichloroethene	11.0	<4.4	6.04	<4.4	<2.44	<133	<80	<2.66	<3.06	<2.46	8.8	88	2.1

Notes:

<sup>1</sup> - Sample collected by the WDNR

$\mu\text{g}/\text{m}^3$  = Micrograms per cubic meter.

< = Less than the reporting limit indicated

NE = Not Established

NA = Not Analyzed

VAL = Vapor Action Level based on United States Environmental Protection Agency (EPA) Regional Screening Level Summary Table, May 2013

$\alpha$  = attenuation factor

**BOLD** indicated concentration exceeds corresponding VAL

**A.6. Other Media of Concern (e.g., sediment or surface water):**

There is no other media of concern.

**Project #: LC-05-01218**  
**Jolivette Cleaners and Laundry**  
**1645 Caroline Street**  
**La Crosse, Wisconsin**

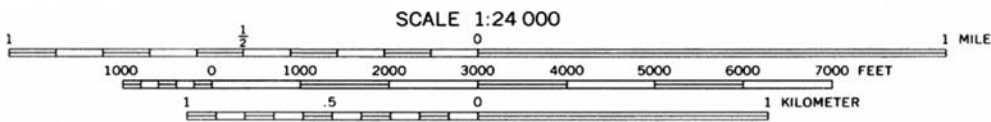
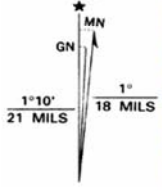
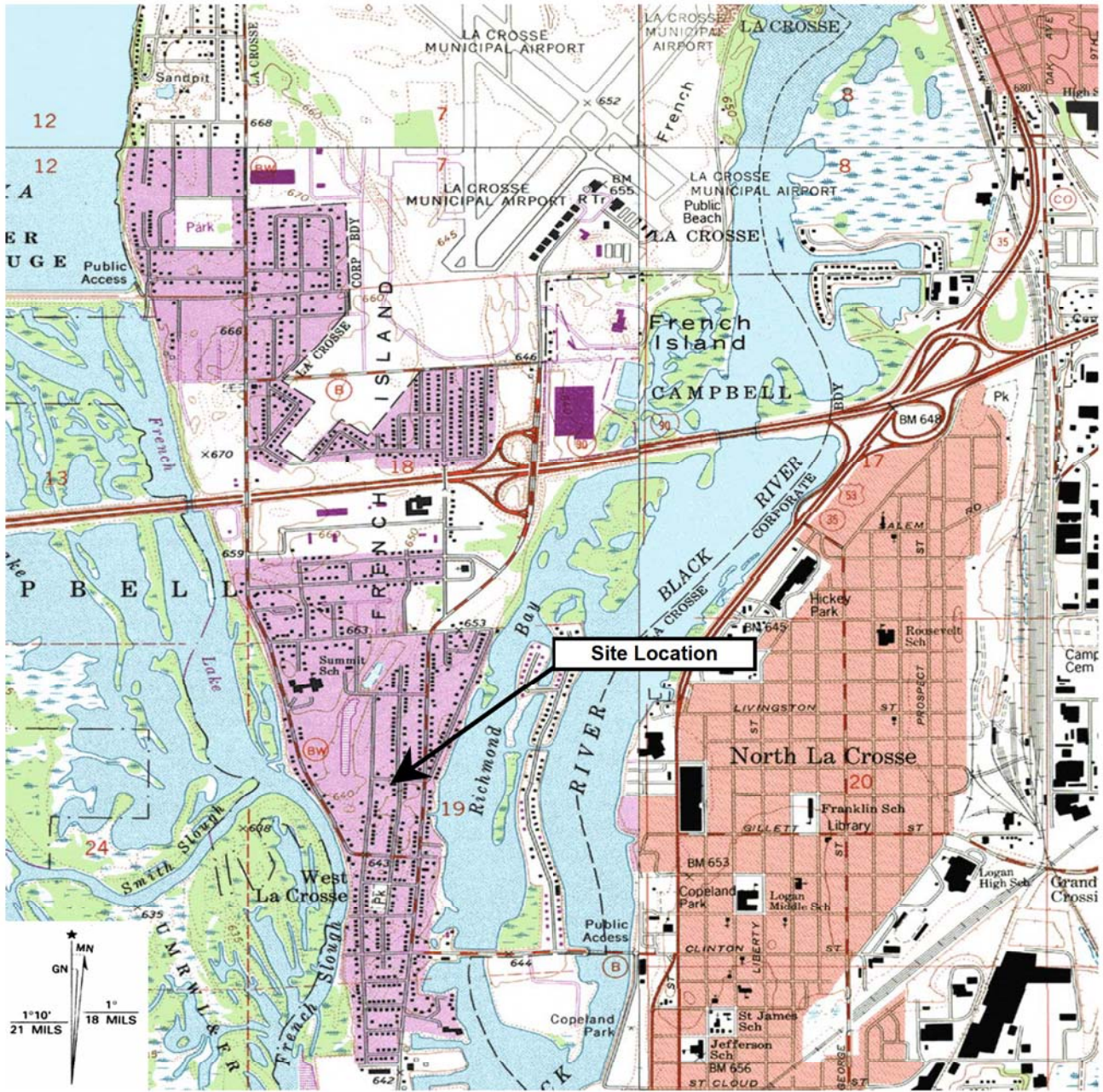
**Table A.7.**  
**Water Level Elevations (in feet)**

Location	Top of Riser Elevation	07/14/05	08/23/05	12/02/05	Top of Riser Elevation <sup>1</sup>	06/05/06	06/16/06	02/25/09	06/09/09	09/30/09	12/14/09	10/11/10	04/04/11	10/11/11	04/09/12	10/08/12	04/01/13
MW-1	98.41	89.21	87.88	88.59	98.40	89.86	88.87	88.37	88.43	87.85	87.86	94.75	95.03	88.11	88.50	87.72	88.48
MW-2	100.64	89.39	87.93	88.63	100.63	89.92	88.90	88.39	88.45	87.87	87.90	94.70	94.97	88.12	88.55	87.73	88.48
MW-3	97.59	89.29	87.88	88.62	97.33	89.80	88.82	88.36	88.42	87.86	87.85	94.75	95.12	88.08	88.49	87.73	88.51
MW-4	---	---	---	---	97.02	89.81	88.83	88.36	88.42	87.86	87.85	94.77	95.11	88.11	88.51	87.76	88.51
MW-5	---	---	---	---	96.77	89.76	88.80	88.36	88.38	87.85	87.81	94.78	95.01	88.04	88.50	87.74	88.54
MW-6	---	---	---	---	97.51	89.81	88.78	88.33	88.39	87.83	87.78	94.70	95.14	88.06	88.46	87.73	88.56

<sup>1</sup> New wells were installed on 6/1/2006 and the corresponding elevations were reported

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LA CRESCENT QUADRANGLE  
MINNESOTA-WISCONSIN  
7.5 MINUTE SERIES (TOPOGRAPHIC)



CONTOUR INTERVAL 20 FEET  
DOTTED LINES REPRESENT 5-FOOT CONTOURS



**BRAUN**  
**INTERTEC**

Site Location Map  
Jolivette Cleaners and Laundry  
1645 Caroline Street  
La Crosse, Wisconsin

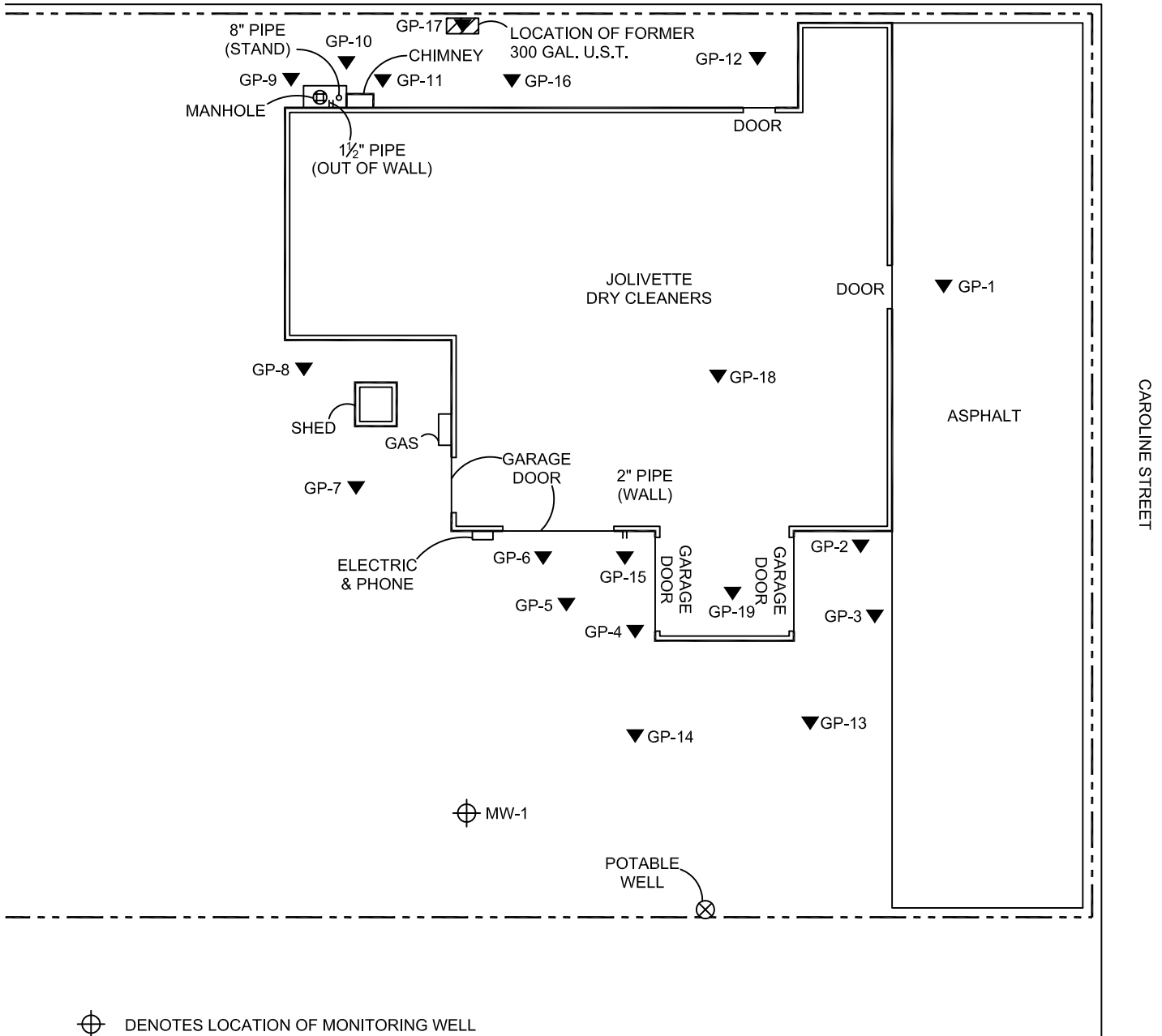
	DATE	SHEET
DRAWN BY: KLH	3/28/2005	OF
APP'D BY: MLG	3/28/2005	
JOB NO. LC-05-01218		
DWG. NO.	FIGURE NO.	
SCALE		B.1.a.





ELM STREET

MW-2



⊕ DENOTES LOCATION OF MONITORING WELL

▼ DENOTES LOCATION OF DIRECT PUSH PROBE SOIL SAMPLING LOCATION

NOTE: SCALE IS APPROXIMATE

Sheet of Fig: B.1.b	Project No:	LC0501218
	Drawing No:	LC0501218A
	Scale:	± 1" = 20'
	Drawn By:	BJB
	Date Drawn:	1/17/08
	Checked By:	KLH
	Last Modified:	12/20/13

DETAILED SITE MAP  
 JOLIVETTE DRY CLEANERS  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

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 Minneapolis, MN 55438  
 PH. (952) 995-2000  
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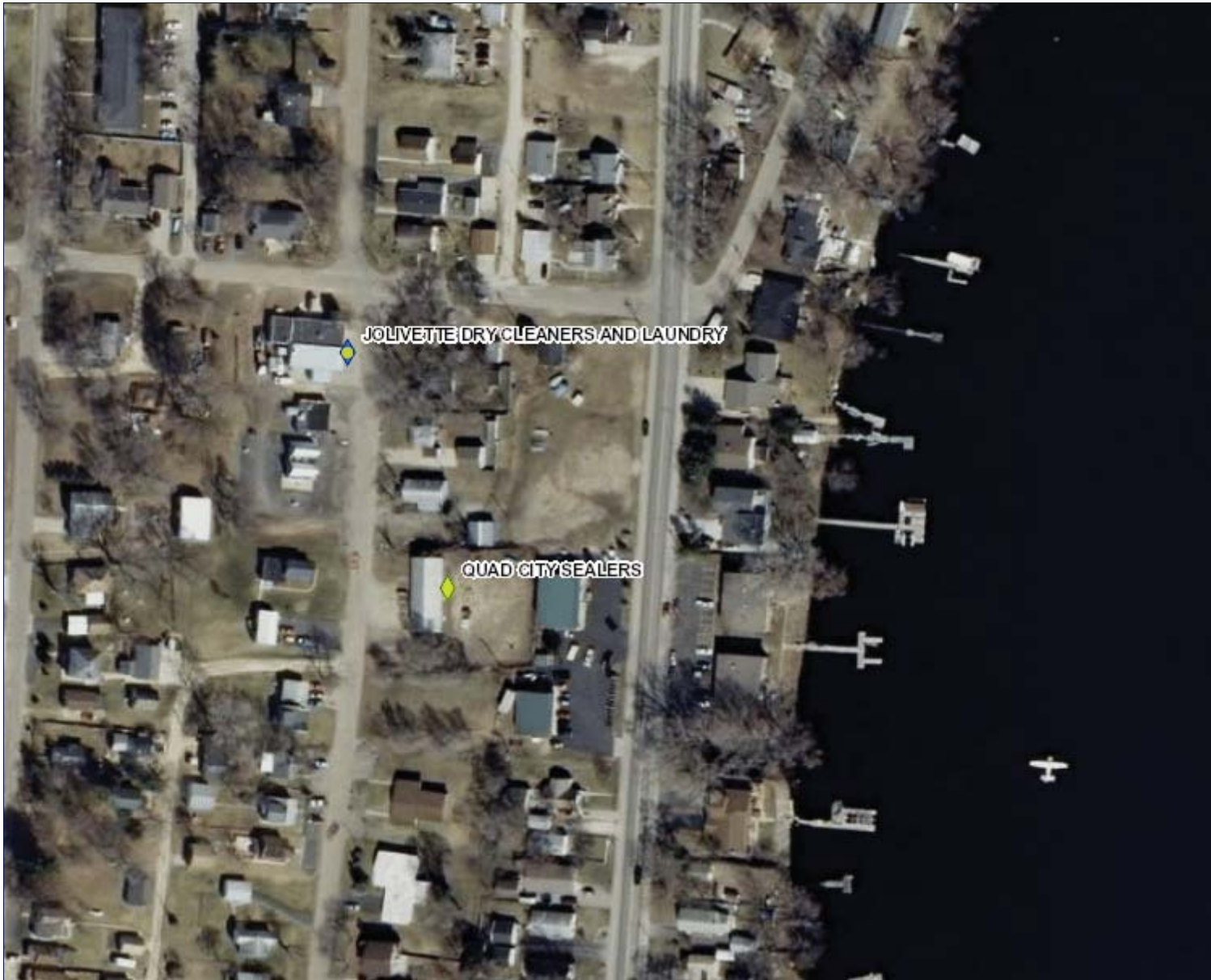
**BRAUN**<sup>SM</sup>  
**INTERTEC**

**Aerial Overview Map  
 Jolivette Cleaners and Laundry  
 1645 Caroline Street  
 La Crosse, Wisconsin**

		DATE	SHEET
DRAWN BY	KDN	5/9/2011	OF
APP'D BY:	MLG	5/9/2011	
JOB NO.	LC-05-01218		
DWG. NO.			FIGURE NO.
SCALE			<b>B.1.b.2.</b>



# RR Site Map



### Legend

- Open Site (ongoing cleanup)
- Open Site Boundary
- Closed Site (completed cleanup)
- Closed Site Boundary
- 2010 Air Photos (WROC)
- Cities
- Villages



NAD\_1983\_HARN\_Wisconsin\_TM

© Latitude Geographics Group Ltd.

1: 2,081

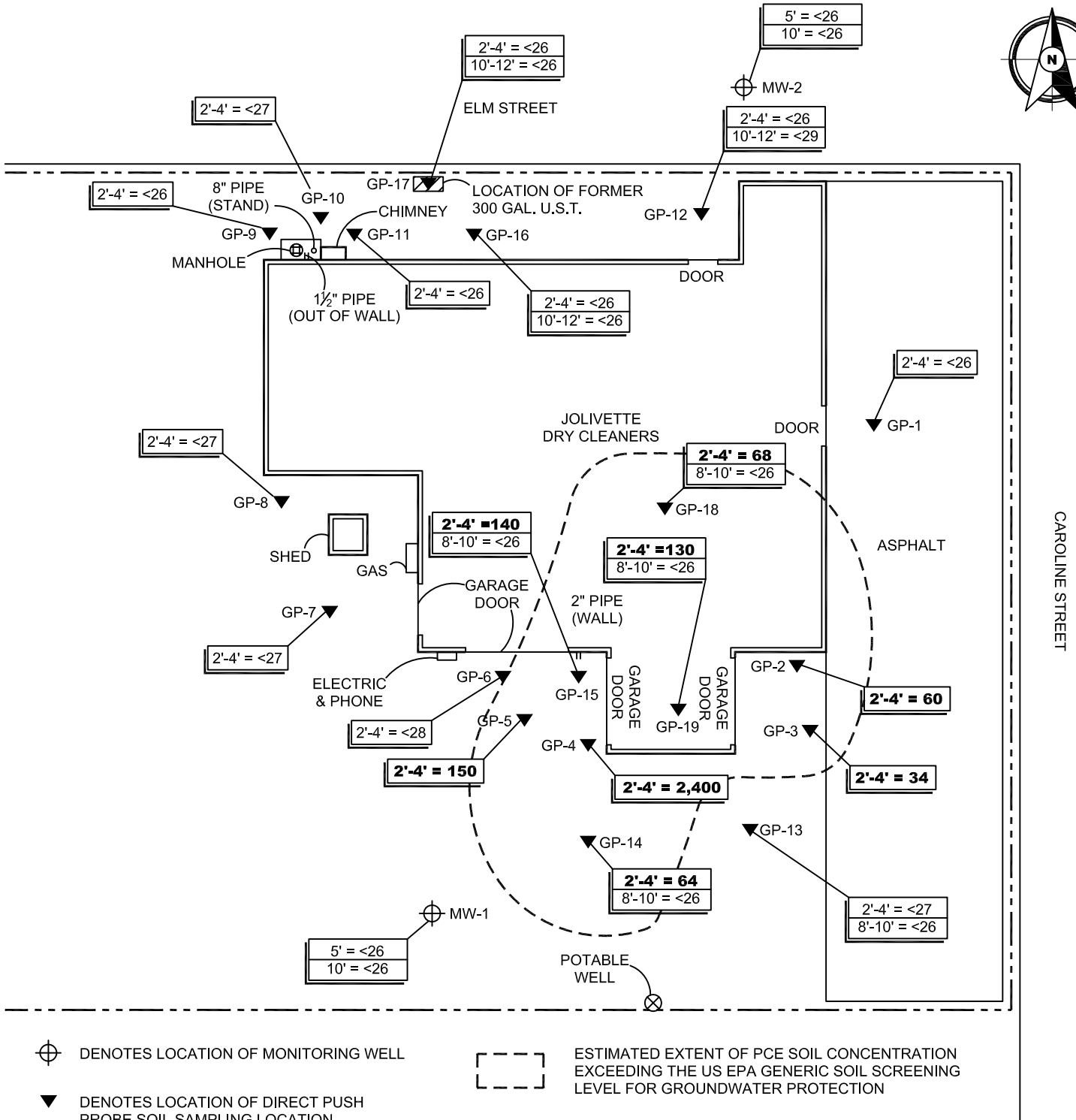


DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No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

*Note: Not all sites are mapped.*

### Notes

Figure B.1.c.



- ⊕ DENOTES LOCATION OF MONITORING WELL
- ▼ DENOTES LOCATION OF DIRECT PUSH PROBE SOIL SAMPLING LOCATION

[ - - - ] ESTIMATED EXTENT OF PCE SOIL CONCENTRATION EXCEEDING THE US EPA GENERIC SOIL SCREENING LEVEL FOR GROUNDWATER PROTECTION

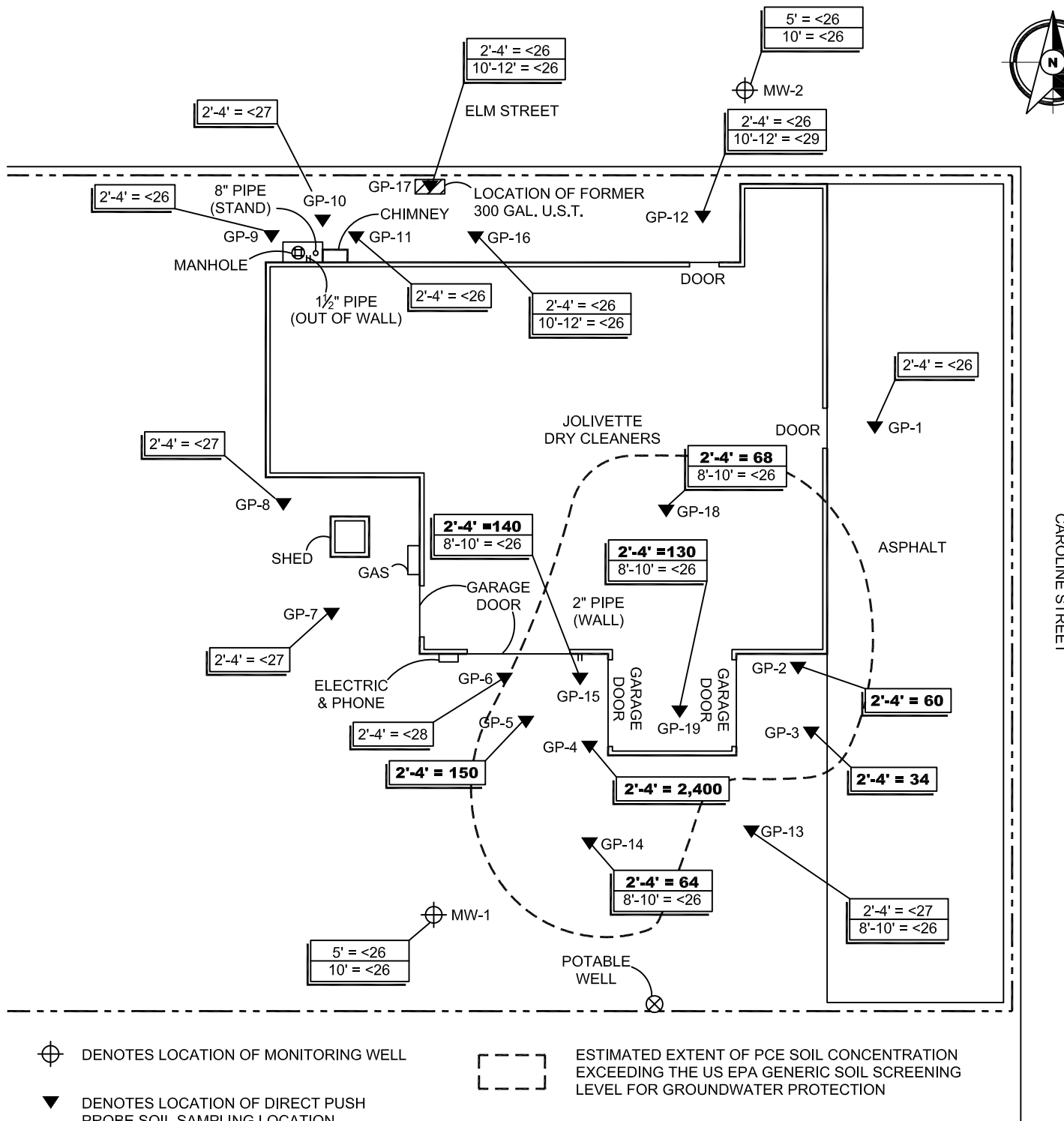
NOTES:  
 - PCE CONCENTRATIONS IN mg/Kg  
 - BOLD INDICATES CONCENTRATION EXCEEDS US EPA SOIL SCREENING LEVEL

NOTE: SCALE IS APPROXIMATE

Sheet of Fig: B.2.a	Project No:	LC0501218
	Drawing No:	LC0501218A
	Scale:	1"= 20'±
	Drawn By:	BJB
	Date Drawn:	1/17/08
	Checked By:	KDN
	Last Modified:	2/11/14

**PRE-REMEDIATION SOIL PCE CONCENTRATION MAP**  
 JOLIVETTE DRY CLEANERS  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

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- ⊕ DENOTES LOCATION OF MONITORING WELL
- ▼ DENOTES LOCATION OF DIRECT PUSH PROBE SOIL SAMPLING LOCATION

[ - - - ] ESTIMATED EXTENT OF PCE SOIL CONCENTRATION EXCEEDING THE US EPA GENERIC SOIL SCREENING LEVEL FOR GROUNDWATER PROTECTION

**NOTES:**

- PCE CONCENTRATIONS IN mg/Kg
- BOLD INDICATES CONCENTRATION EXCEEDS US EPA SOIL SCREENING LEVEL

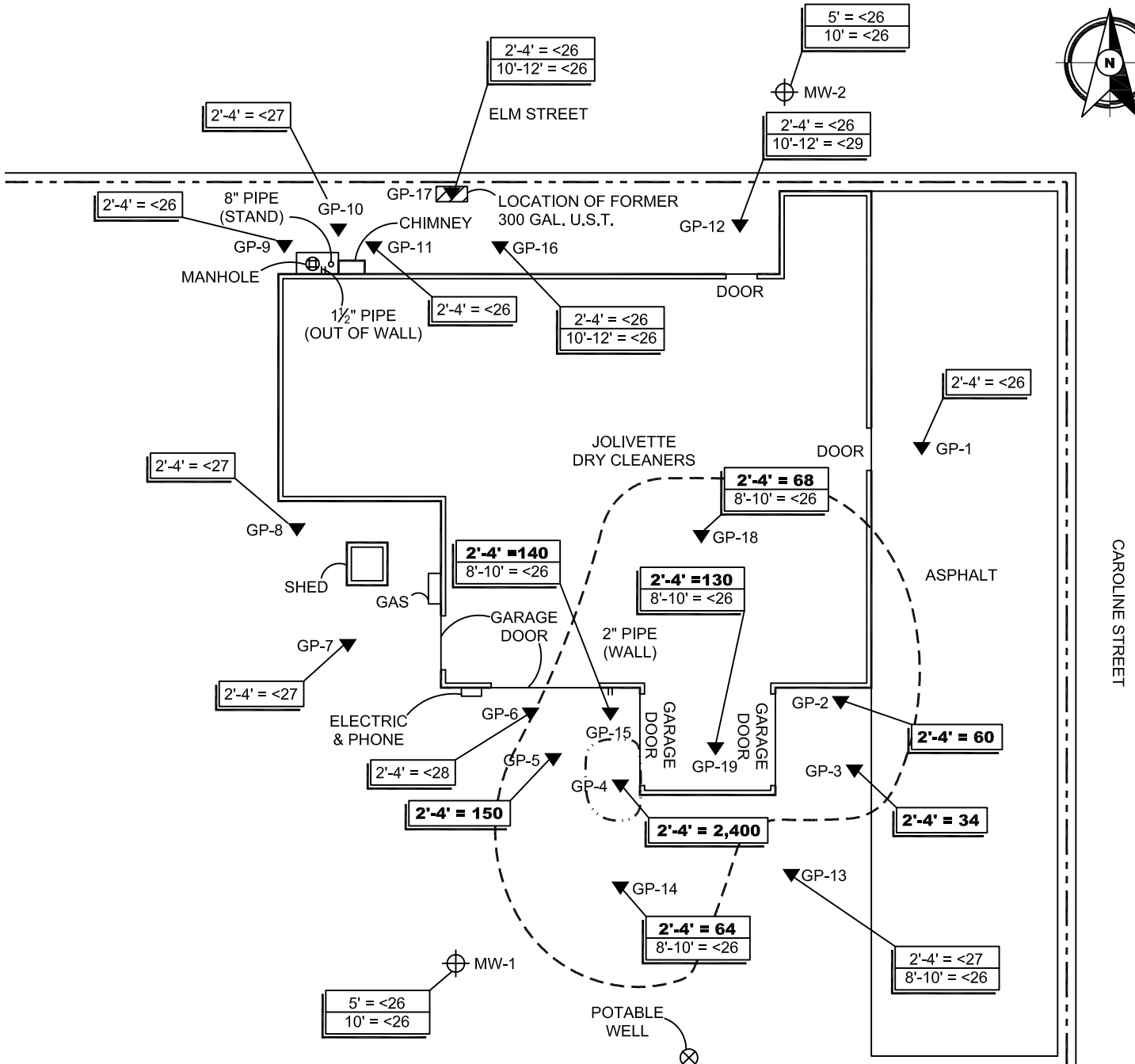
NOTE: SCALE IS APPROXIMATE

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	Drawn By:	BJB
	Date Drawn:	1/17/08
	Checked By:	KDN
	Last Modified:	2/11/14

**POST-REMEDIATION SOIL PCE CONCENTRATION MAP**  
 JOLIVETTE DRY CLEANERS  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

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- ⊕ DENOTES LOCATION OF MONITORING WELL
- ▼ DENOTES LOCATION OF DIRECT PUSH PROBE SOIL SAMPLING LOCATION



ESTIMATED EXTENT OF PCE SOIL CONCENTRATION EXCEEDING THE US EPA GENERIC SOIL SCREENING LEVEL FOR GROUNDWATER PROTECTION



ESTIMATED EXTENT OF PCE SOIL CONCENTRATION EXCEEDING THE US EPA GENERIC SOIL SCREENING LEVEL FOR INGESTION (DIRECT-CONTACT RCL)

NOTES:

- PCE CONCENTRATIONS IN mg/Kg
- BOLD INDICATES CONCENTRATION EXCEEDS US EPA SOIL SCREENING LEVEL

NOTE: SCALE IS APPROXIMATE

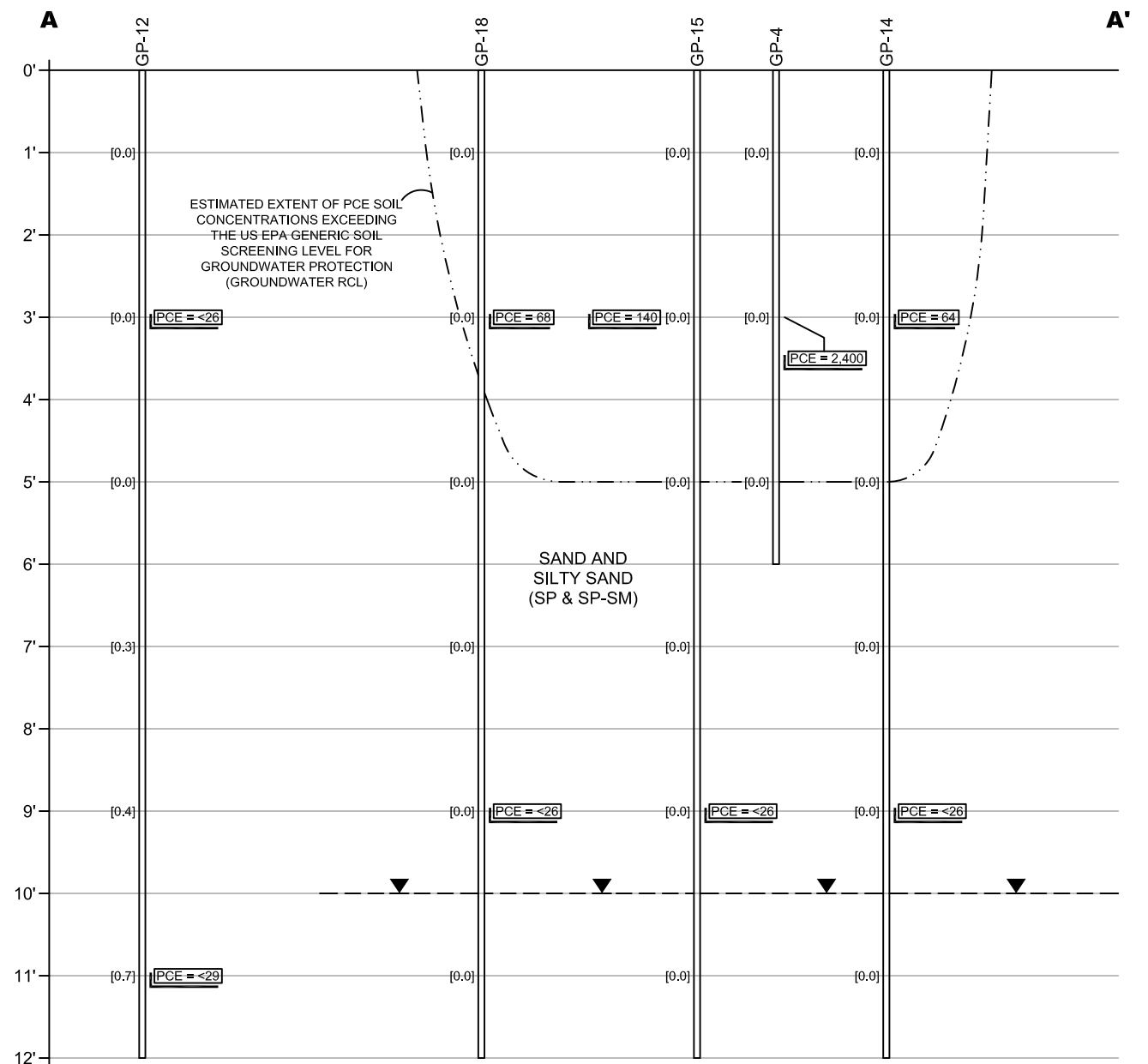
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	Drawn By:	BJB
	Date Drawn:	11/6/13
	Checked By:	KDN
	Last Modified:	11/6/13

PRE/POST-REMEDIATION SOIL PCE CONCENTRATION MAP  
 JOLIVETTE DRY CLEANERS  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

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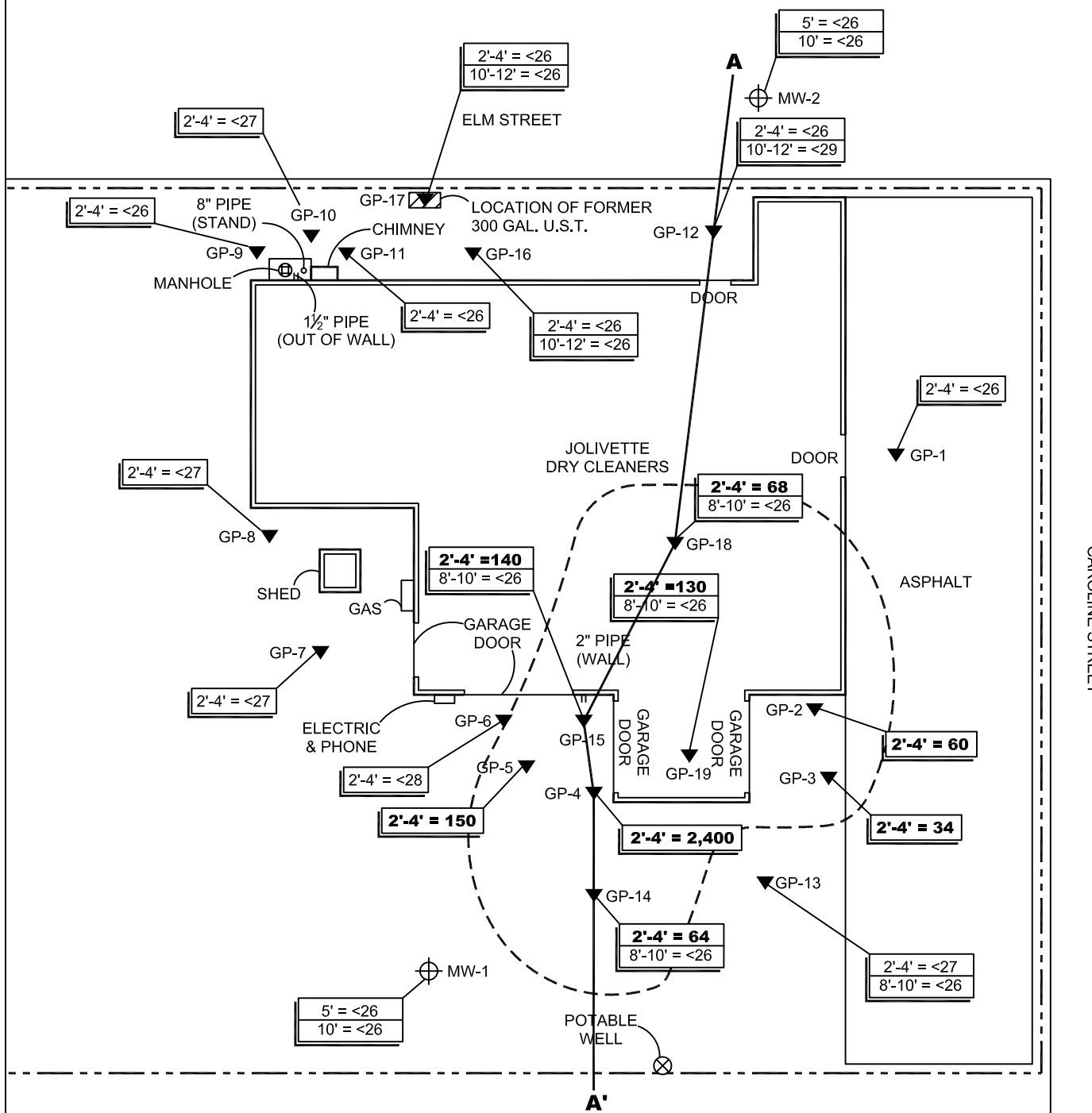
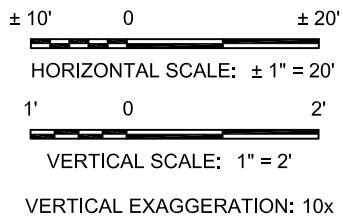
GEOLOGIC CROSS SECTION A-A'  
JOLIVETTE DRY CLEANERS  
1645 CAROLINE STREET  
LACROSSE, WISCONSIN



[x.x] PID READING (ppm)

**[PCE = xx]** SOIL TETRACHLOROETHENE (PCE)  
CONCENTRATIONS IN µg/kg

▼ GROUNDWATER ELEVATION



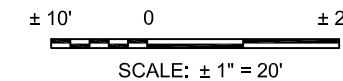
⋮ ESTIMATED EXTENT OF PCE SOIL CONCENTRATION  
EXCEEDING THE US EPA GENERIC SOIL SCREENING  
LEVEL FOR GROUNDWATER PROTECTION

⊕ DENOTES LOCATION OF MONITORING WELL

▼ DENOTES LOCATION OF DIRECT PUSH  
PROBE SOIL SAMPLING LOCATION

NOTES:

- PCE CONCENTRATIONS IN mg/Kg
- BOLD INDICATES CONCENTRATION EXCEEDS  
US EPA SOIL SCREENING LEVEL



Project No: LC0501218A	
Drawing No: LC0501218A	
Scale:	AS SHOWN
Drawn By:	BJB
Date Drawn:	1/17/08
Checked By:	KDN
Last Modified:	2/11/14
Sheet: of	Fig: B.3.a



**MONITORING WELL LOCATION**



**GRAB-GROUNDWATER SAMPLE LOCATION**

**NOTES:**

- PCE CONCENTRATIONS IN ug/L
- BOLD INDICATES PCE CONCENTRATION EXCEEDS NR140 ENFORCEMENT STANDARD (ES)
- ITALICS INDICATES PCE CONCENTRATION EXCEEDS NR140 PREVENTATIVE ACTION LIMIT (PAL)



75' 0 150'



SCALE: 1"= 150'

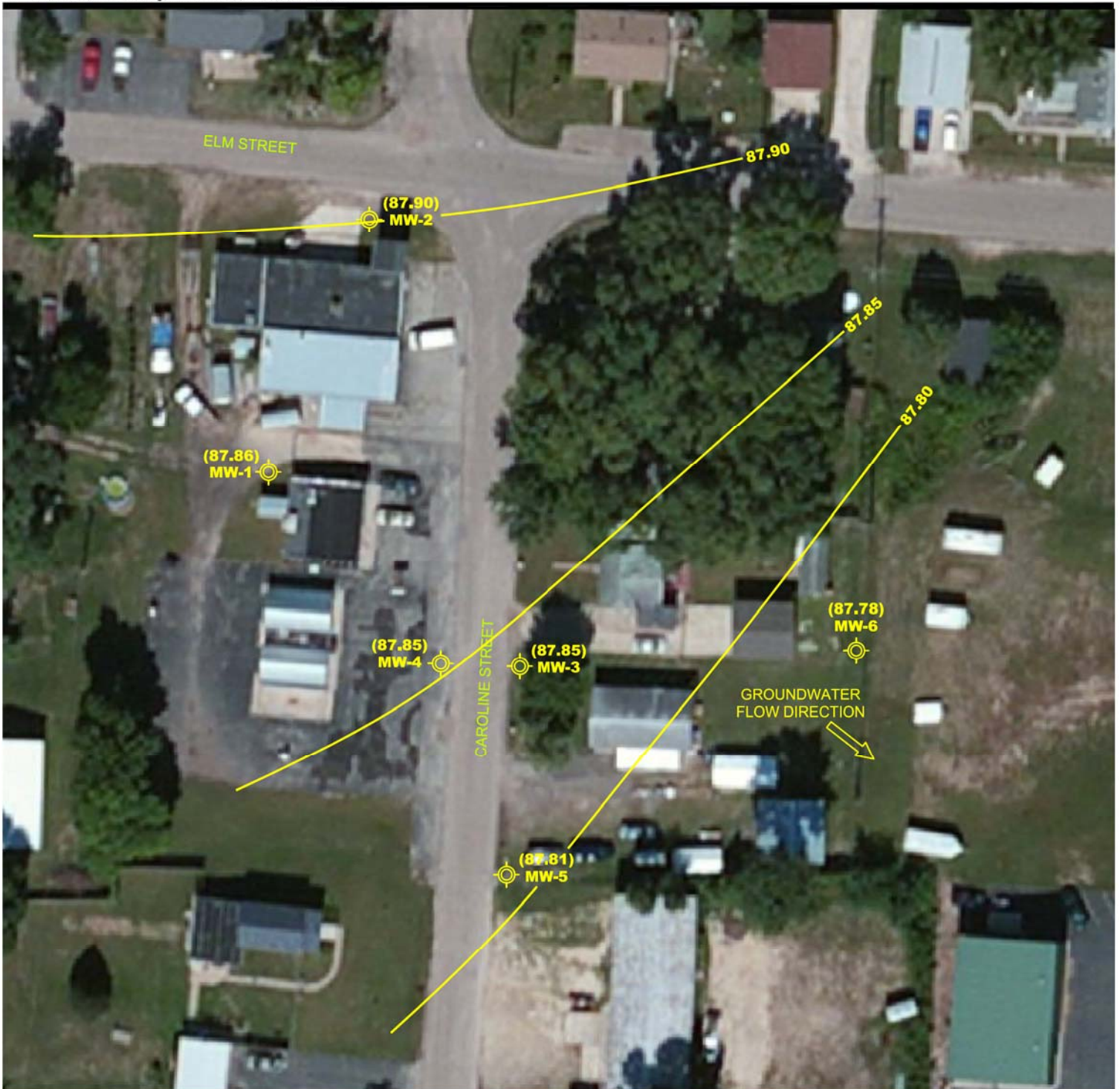
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	Drawn By: JAG
	Date Drawn: 11/1/13
	Checked By: KDN
	Last Modified: 2/11/14



**GROUNDWATER PCE CONCENTRATION MAP (OCT. 2012 AND APR. 2013)**  
 JOLIVETTE CLEANERS AND LAUNDRY  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

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 **MONITORING WELL LOCATION**  
**(87.86) GROUNDWATER ELEVATION (FT.)**  
 **GROUNDWATER CONTOUR (FT.)**



  
**SCALE: 1" = 60'**



Sheet of B.3.c.1	Project No:	LC0501218
	Drawing No:	LC0501218B
	Scale:	1" = 60'
	Drawn By:	JAG
	Date Drawn:	11/1/13
	Checked By:	KDN
	Last Modified:	12/20/13

**GROUNDWATER CONTOUR MAP (12-14-09)**  
 JOLIVETTE CLEANERS AND LAUNDRY  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN


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 **MONITORING WELL LOCATION**  
**(88.48) GROUNDWATER ELEVATION (FT.)**  
 **GROUNDWATER CONTOUR (FT.)**



  
**SCALE: 1" = 60'**

Sheet: _____ of _____ Fig: B.3.c.2	Project No:	LC0501218
	Drawing No:	LC0501218B
	Scale:	1" = 60'
	Drawn By:	JAG
	Date Drawn:	11/1/13
	Checked By:	KDN
	Last Modified:	12/20/13

**GROUNDWATER CONTOUR MAP (4-1-13)**  
 JOLIVETTE CLEANERS AND LAUNDRY  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

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**MONITORING WELL LOCATION**



SCALE: 1" = 60'

Sheet: of: Fig: B.3.D	Project No:	LC0501218
	Drawing No:	LC0501218B
	Scale:	1" = 60'
	Drawn By:	JAG
	Date Drawn:	11/1/13
	Checked By:	KDN
	Last Modified:	12/20/13

**MONITORING WELL LOCATION MAP**  
 JOLIVETTE CLEANERS AND LAUNDRY  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

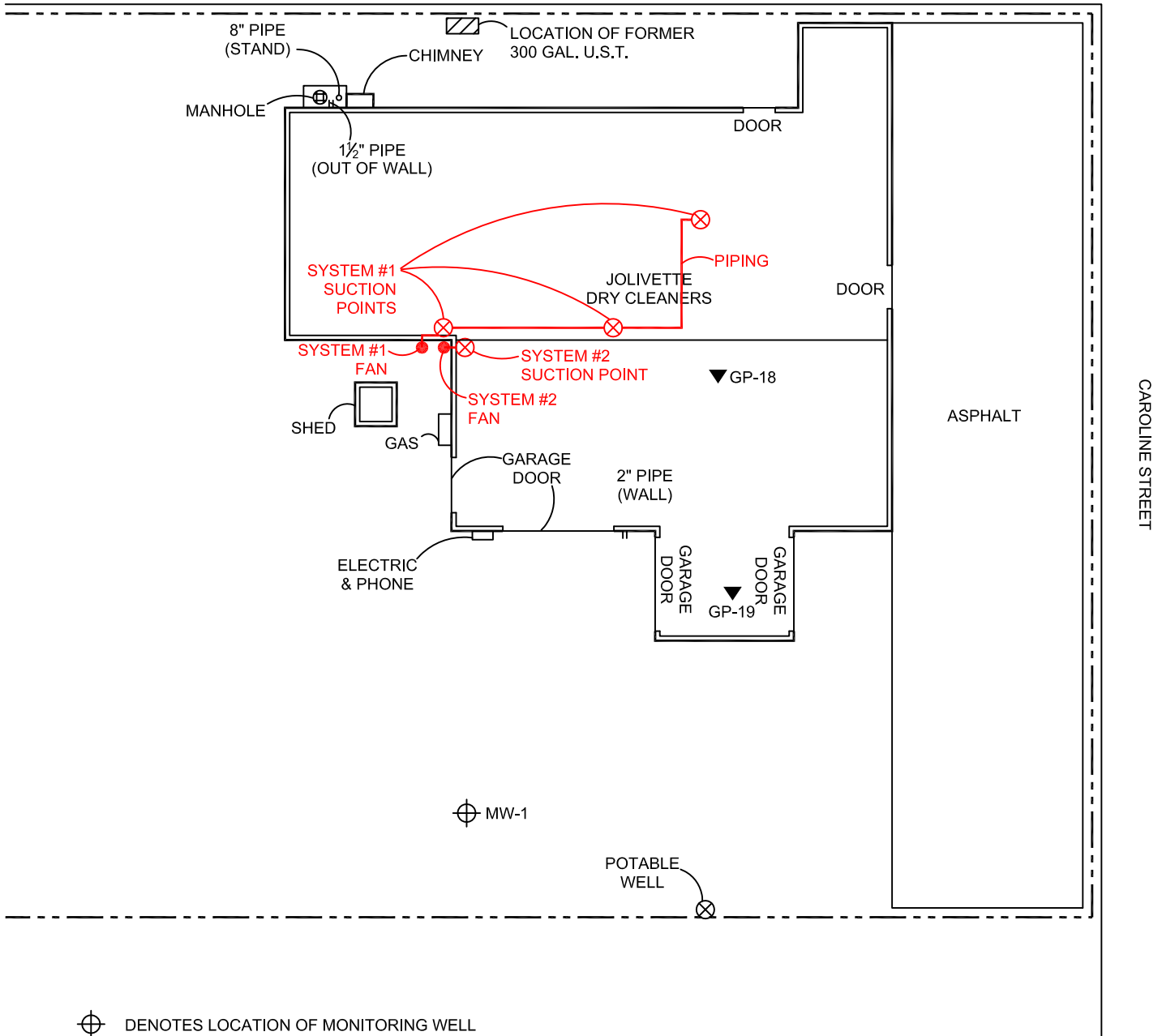
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ELM STREET

MW-2



⊕ DENOTES LOCATION OF MONITORING WELL

▼ DENOTES LOCATION OF DIRECT PUSH PROBE SOIL SAMPLING LOCATION

NOTE: SCALE IS APPROXIMATE

Sheet of B.4.a.1	Project No:	LC0501218A
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	Drawn By:	BJB
	Date Drawn:	1/17/08
	Checked By:	KLH
	Last Modified:	12/20/13

VAPOR INTRUSION MAP  
 JOLIVETTE DRY CLEANERS  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

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## Documentation of Remedial Action (Attachment C)

# DISCLAIMER

Documents contained in Attachment C of the Case Closure – GIS Registry (Form 4400-202) are not included in the electronic version (GIS Registry Packet) available on RR Sites Map to limit file size.

For information on how to obtain a copy or to review the file, please contact the Remediation & Redevelopment (RR) Environmental Program Associate (EPA) at [dnr.wi.gov/topic/Brownfields/Contact.html](http://dnr.wi.gov/topic/Brownfields/Contact.html)



# VAPOR MITIGATION SYSTEM MAINTENANCE PLAN

Date: November 4, 2013

Property Located at: 1645 Caroline Street, La Crosse, WI

FID # 632053840, WDNR BRRTS # 02-32-535757

Parcel ID # 4-807-2

## Introduction

This document is the Maintenance Plan for the sub-slab depressurization system (SSDS) at the above-referenced property. In October, 2012, a SSDS was installed to actively vent sub-slab vapors from beneath the site building. Sub-slab vapor impacts were related to the chlorinated solvent release (tetrachloroethene, PCE, PERC) at the site. The system suction points and fan locations are show on the attached Sub-Slab Depressurization System Layout map and photographs.

## System Design

The SSDS was installed by Healthy Homes of St. Paul, Minnesota. The contact for Healthy Homes is Mr. Robert Carlson, who can be reached at (952) 220-9409. According to Healthy Homes, the system installation was completed in accordance with ASTM standard E2121-09, Standard Practice for Installing Radon Mitigation Systems in Existing Low-Rise Residential Buildings.

The SSDS consists of two Radon Away RP265 suction fans and four three-inch diameter suction points located throughout the building. According to Healthy Homes, two separate systems were required to effectively vent beneath the building. System #1 is located in the northern half of the site building and includes three separate suction points manifolded to one fan. System #2 is located in the southern half of the site building and includes one suction point and fan. The system piping is routed out the west side of the building where the fans are mounted. The fans are plugged directly into a power source and the exhaust pipes extend at least twelve inches above the building roof. Verification testing was performed following system installation to determine effectiveness of the installed systems. Post-installation testing was conducted by Healthy Homes and observed by Braun Intertec. A digital micro-manometer was used to measure pressure difference between the sub-slab and indoor air. Based on post-installation verification testing, a pressure gradient existed at the locations tested such that pressure below the slab was lower than the indoor air pressure.

U-tube monometers were applied to each system to evaluate continued function and are located above the suction drop points. The attached photographs show where the level should be to indicate proper system operation. Initial monometer readings are as follows:

System #1 = 0.5"

System #2 = 1.25"

## System Maintenance

The structural integrity of the floor must be maintained and kept as impermeable as at the time of closure. Any system components requiring repair or replacement must be completed immediately upon discovery of a malfunction. Log the repair activities in the attached inspection log.

The manufacturer's specification sheet for the SSDS fan/blower is attached for reference.

### **Annual Inspection**

The SSDS will be inspected once a year to verify that the active system is operating properly. Inspections will include reading the monometers and identifying if repairs are required for the system. The inspection log to be completed during each event is included. This inspection log must be maintained on-site at all times. If repairs are required during 2 or more successive inspections, the Wisconsin Department of Natural Resources (WDNR) project manager, Mr. Doug Joseph, must be contacted at (715) 839-1602.

### **Notifications**

Changes in land or property use or system changes are required to be reported to Mr. Rozeboom. His contact information and other pertinent contacts are included in the following section.

### **Contact Information**

Current as of: November 4, 2013

Property Owner: AND Pursuits LLC (Contact: Al Doucet)  
1506 Barlow Street  
La Crosse, WI 54601  
(608) 788-4160

Consultant: Braun Intertec Corporation (Contact: Kevin Nestingen)  
2309 Palace Street, La Crosse, WI 54603  
(608) 781-7277

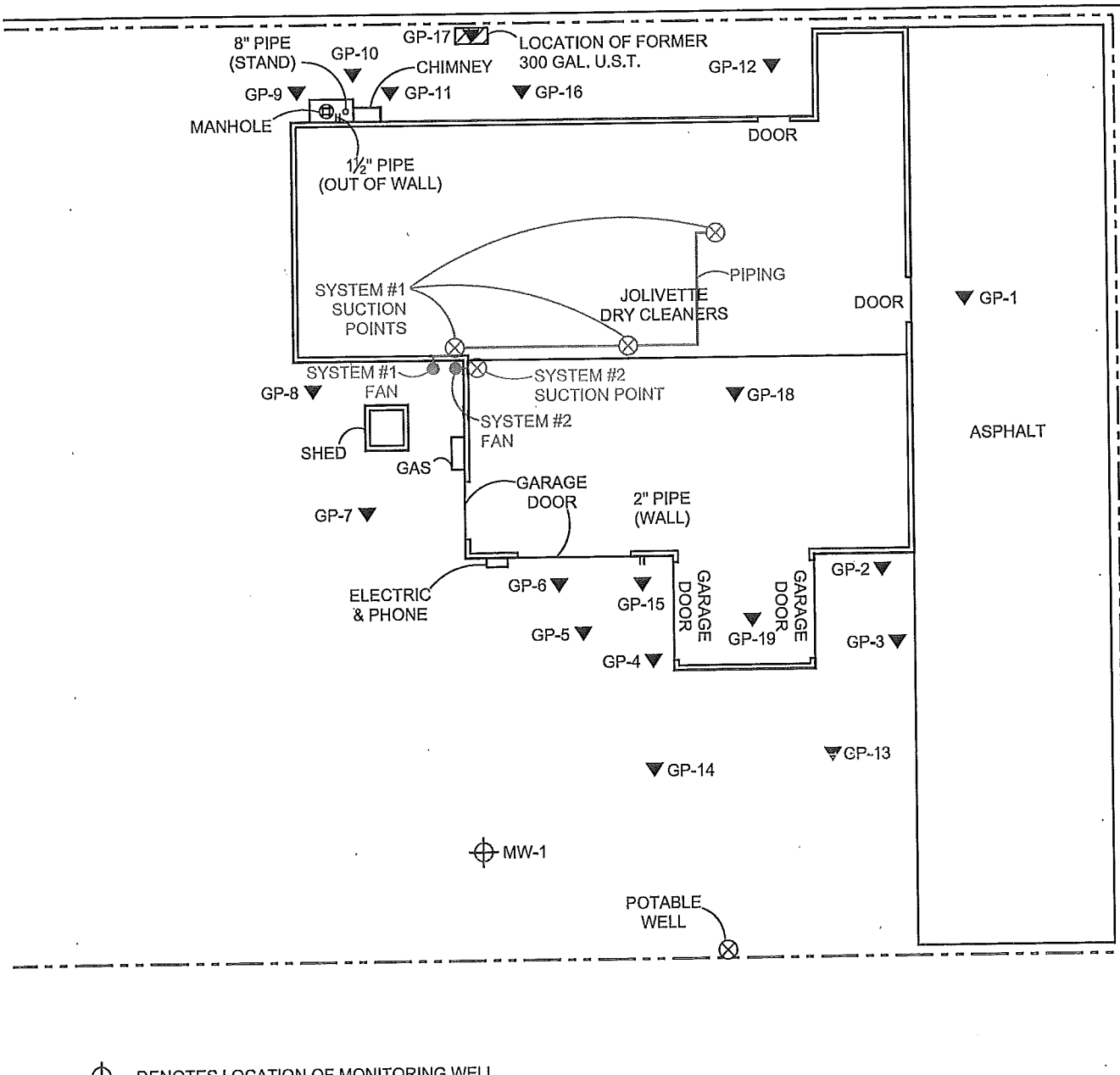
SSDS Contact: Healthy Homes (Contact: Robert Carlson)  
674 Nebraska Avenue E  
St. Paul, MN 55106  
952-220-9409  
[healthyhomemn@hotmail.com](mailto:healthyhomemn@hotmail.com)  
[www.healthyhomesradon.com](http://www.healthyhomesradon.com)

WDNR: Doug Joseph  
1300 West Clairemont Avenue, Eau Claire, WI 54702-4001  
(715) 839-1602



⊕ MW-2

ELM STREET



⊕ DENOTES LOCATION OF MONITORING WELL

▼ DENOTES LOCATION OF DIRECT PUSH PROBE SOIL SAMPLING LOCATION

NOTE: SCALE IS APPROXIMATE

Sheet of Fig. 2	Project No:	LC0501218A
	Drawing No:	LC0501218A
	Scale:	± 1" = 20'
	Drawn By:	BJB
	Date Drawn:	10/23/12
	Checked By:	KLH
	Last Modified:	10/23/12

**SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT**  
**JOLIVETTE DRY CLEANERS**  
 1645 CAROLINE STREET  
 LACROSSE, WISCONSIN

**BRAUN**  
**INTERTEC**

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Photograph #: 1

Date: 10/11/2012

Direction: System #1

Subject: Sub-slab depressurization system eastern suction point

LC-05-01218A

**BRAUN**  
INTERTEC



Photograph #: 2

Date: 10/11/2012

Direction: System #1

Subject: Sub-slab depressurization system middle suction point

LC-05-01218A

**BRAUN**  
INTERTEC



Photograph #: 3  
Date: 10/11/2012  
Direction: System #1  
Subject: Sub-slab depressurization system western suction point

LC-05-01218A

**BRAUN**  
INTERTEC



Photograph #: 4  
Date: 10/11/2012  
Direction: System #1  
Subject: Piping manifolded together

LC-05-01218A

**BRAUN**  
INTERTEC



Photograph #: 5  
Date: 10/11/2012  
Direction: System #1  
Subject: Piping routed to exterior where fan is mounted

LC-05-01218A

**BRAUN**  
INTERTEC



Photograph #: 6  
Date: 10/11/2012  
Direction: System #1  
Subject: U-tube monometer above eastern suction point

LC-05-01218A

**BRAUN**  
INTERTEC



Photograph #: 7  
Date: 10/11/2012  
Direction: System #2  
Subject: Sub-slab depressurization system suction point

LC-05-01218A

**BRAUN**  
INTERTEC



Photograph #: 8  
Date: 10/11/2012  
Direction: System #2  
Subject: U-tube monometer

LC-05-01218A

**BRAUN**  
INTERTEC



Photograph #: 9  
Date: 10/11/2012  
Direction: Southern half of site building  
Subject: Post-installation verification testing

LC-05-01218A

**BRAUN**  
INTERTEC



Photograph #: 10  
Date: 10/11/2012  
Direction: Facing east  
Subject: Fans mounted on west side of building

LC-05-01218A

**BRAUN**  
INTERTEC



## **Attachment E**

### **Monitoring Well Information**

All monitoring wells were properly abandoned.







SOURCE PROPERTY

State Bar of Wisconsin Form 7-2003  
TRUSTEE'S DEED

1479808

LACROSSE COUNTY  
REGISTER OF DEEDS  
CHERYL A. MCBRIDE

Document Number

Document Name

RECORDED ON  
07/09/2007 02:58PM

REC FEE: 11.00  
TRANSFER FEE: 198.00  
EXEMPT #:

PAGES: 1

THIS DEED, made between Scott A. Suhr and Roxanna L. Suhr  
as Trustee of Scott A. & Roxanna L. Suhr Joint Revocable Trust dated  
September 26, 2001

("Grantor," whether one or more), and AND Pursuits, LLC, a Wisconsin limited  
liability company

("Grantee," whether one or more).  
Grantor conveys to Grantee, without warranty, the following described real estate,  
together with the rents, profits, fixtures and other appurtenant interests, in  
La Crosse County, State of Wisconsin ("Property") (if more space is  
needed, please attach addendum):

Recording Area

Name and Return Address

AND Pursuits  
1506 Barlow St  
La Crosse WI 54601

Lot 1 of Certified Survey Map filed September 1, 1995 in Volume 6 of Certified  
Survey Maps, page 143, as Document Number 1138889, being located on part of  
Government 7 (being the SE 1/4 of the NW 1/4 and that part of the Fractional SW  
1/4 of the NE 1/4 lying Westerly of Richmond Slough) of Section 19, Township 16  
North of Range 7 West, Town of Campbell, La Crosse County, Wisconsin.

4-807-2

Parcel Identification Number (PIN)

TOGETHER WITH AND SUBJECT TO rights of others in a Joint Driveway Easement Agreement created in Volume 1073  
of Records, page 102, as Document Number 1127757, and being located over Lots 1 and 2 of the above-described Certified  
Survey Map.

Dated June 29, 2007

\_\_\_\_\_  
(SEAL)

\* \_\_\_\_\_

\_\_\_\_\_  
(SEAL)

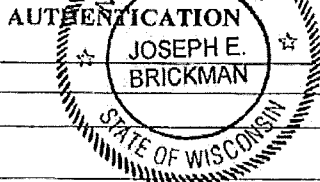
\* \_\_\_\_\_

[Signature]

\* Scott A. Suhr, Trustee

[Signature]

\* Roxanna L. Suhr, Trustee



Signature(s) \_\_\_\_\_

authenticated on \_\_\_\_\_

\* \_\_\_\_\_  
My Comm. Expires 11-02-08

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

THIS INSTRUMENT DRAFTED BY:  
Darla A. Krzoska, Atty. @ BOSSHARD PARKE, LTD.  
P O Box 966, La Crosse, WI 54602-0966

ACKNOWLEDGMENT

STATE OF WISCONSIN )  
 ) ss.  
LA CROSSE COUNTY )

Personally came before me on June 29, 2007  
the above-named Scott A. Suhr and Roxanna L. Suhr,  
Trustees

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

[Signature]  
\* Joseph E. Brickman  
Notary Public, State of WISCONSIN

My commission (is permanent) (expires: 11-02-08)

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

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

TRUSTEE'S DEED

STATE BAR OF WISCONSIN

FORM NO. 7-2003

\*Type name below signatures.

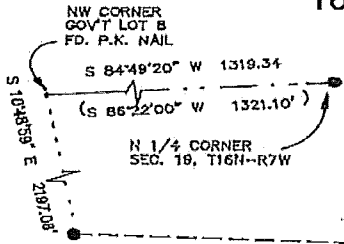
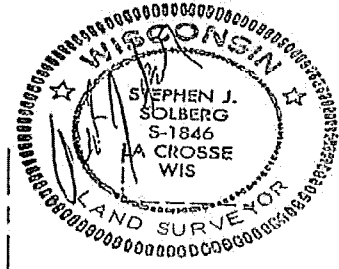
© State Bar of Wisconsin 2003

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SOURCE  
PROPERTY

# CERTIFIED SURVEY MAP

PART OF  
GOV. LOT 7, SEC. 19, T16N-R7W  
TOWN OF CAMPBELL, LA CROSSE COUNTY, WIS.



UNPLATTED LAND

ELM STREET

UNPLATTED LANDS

GOV'T LOT 7  
SEC. 19 T16N-R7W

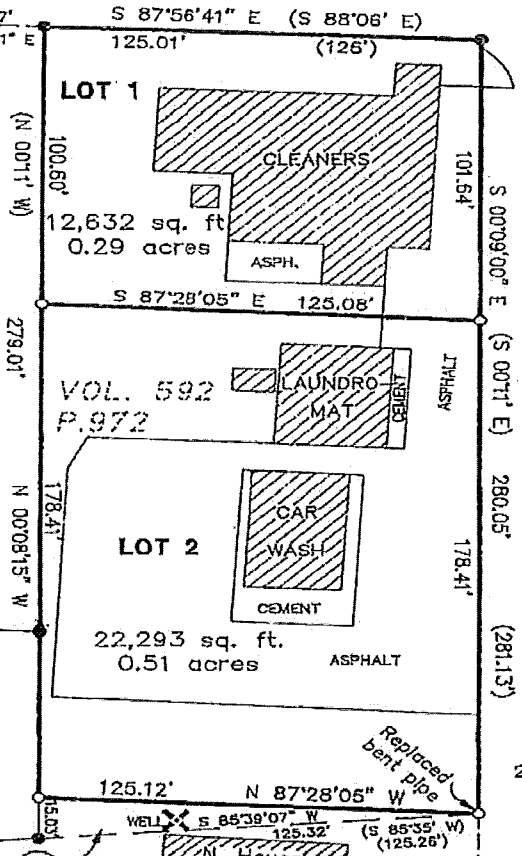
CSM VOL. 5, PG. 81

LOT 2

VOL. 874 P.724  
UNPLATTED LANDS

UNPLATTED LANDS  
BY OWNER

VOL. 584, P. 432



CAROLINE STREET

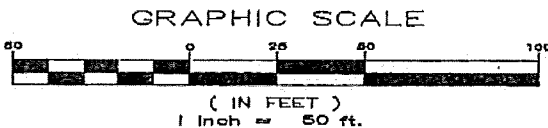
BEARING BASIS: South R.O.W. Line of Elm Street per CSM Vol. 5 Pg. 81 (S 87°36'41\"/>

1138889

Vol. 6 Page 143

### LEGEND

- = Found iron pipe
- = Set 3/4" x 30" iron bar (1.5 lb. / lin. ft.)
- = Boundary of this survey
- - - = Centerline
- ( ) = Recorded dimensions



NOTE: Street width based on found iron pipes.

SHEET 1 OF 2

**CERTIFIED SURVEY MAP**  
PART OF  
GOV. LOT 7, SEC. 19, T16N-R7W  
TOWN OF CAMPBELL, LA CROSSE COUNTY, WIS.

SURVEYOR'S CERTIFICATE

I, Stephen J. Solberg, Registered Land Surveyor, do hereby certify that I have surveyed and mapped this Certified Survey Map being part of Government Lot 7, Section 19, T16N-R7W, Town of Campbell, La Crosse County, Wisconsin described as follows:

Commencing at the North 1/4 corner of said Section 19; thence S 84°49'20" W 1319.34 feet to the northwest corner of Gov. Lot 8; thence, S 10°48'59" E 2197.06 feet to the intersection of the easterly R.O.W. line of La Crescent Street and the southerly R.O.W. line of Elm Street; thence, along said southerly R.O.W. line, S 87°56'41" E 213.27 feet to the northeasterly corner of Lot 1, CSM Vol. 5, Pg. 81 and the point of beginning.

thence, continuing along said southerly R.O.W. line, S 87°56'41" E 125.01 feet to the intersection of said southerly R.O.W. line and the westerly R.O.W. line of Caroline Street;  
thence, along said westerly R.O.W. line, S 00°09'00" E 280.05 feet to the northeasterly corner of that parcel described in Vol. 58-4, Pg. 432;  
thence N 87°28'05" W 125.12 feet to the easterly line of Lot 2, CSM Vol. 5, Pg. 81;  
thence N 00°08'15" W 279.01 feet to the point of beginning.

That I have made such survey, map and division of land at the direction of William C. and Almina M. Heisz, owner of said land.

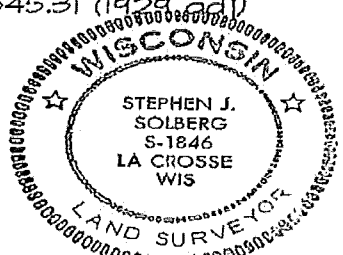
That such map is a correct representation of the exterior boundaries of the land surveyed and subdivision thereof made.  
That I have fully complied with the provision of s.236.34, Wisconsin Statutes and with the Subdivision Ordinances of the Town of Campbell and the County of La Crosse in surveying and mapping the same.

*Stephen J. Solberg*  
Stephen J. Solberg, RLS #18-46  
Aug. 28, 1995  
Solbergs and Associates, Inc.  
PO Box 1235  
La Crosse, Wisconsin  
5-2614

OWNER: William C. & Almina M. Heisz  
1645 Caroline Street  
La Crosse, WI

I hereby certify that this survey complies with the provisions of the La Crosse County Subdivision Control Ordinance *William E. Jung*  
County Surveyor

NOTE:  
All or part of Lots 1 and 2 are in the 100 year regional flood zone. Flood Elev. = 645.31 (1929 adj)



*Vol. 6 Page 143 A*

Run Date: June 24, 2013

SOURCE PROPERTY

2012 Property Record  
La Crosse County, WI  
City of La Crosse

Parcel ID: 4-807-2 (SITE)

Deed Information:

Property Description:	Assessed Acreage:	0.29	Volume	Page	Document	Recorded	Type
1645 CAROLINE ST			1073	98	1127756	1995-01-04	Land Contract
**Multiple Addresses on file			1236	695	1195941	1998-04-29	AMEND TO LAND CONTRACT
Sec/Twn/Rng/Qtr: 19-16-07 SE-NW			1522	220	1290951	2001-10-25	ASSIGN OF LAND CONTRACT
CERTIFIED SURVEY MAP NO. 143			1605	527	1310197	2002-05-03	HT110
VOL 6 LOT 1			1641	76	1318952	2002-08-14	AFFIDAVIT
			0	0	1374597	2003-10-01	AMEND TO LAND CONTRACT
			0	0	1384433	2004-01-27	AMEND TO LAND CONTRACT
			0	0	1479807	2007-07-09	Warranty Deed
			0	0	1479808	2007-07-09	TRUSTEE DEED

Owner(s):	Relation	Mailing Address	City	St	Zip
AND PURSUITS LLC	Owner	1506 BARLOW ST	LA CROSSE	WI	54601

Districts:

Additional Parcel Information:

Code	Description	Taxation District	Category	Description
2849	LA CROSSE SCHOOL	Y	County Zoning Expired	Town Zoning Applies
			2012+ VOTING SUPERV ISOR	2012+ Supervisor District 14
			2012 + VOTING WARDS	2012+ Ward 5
			POSTAL DISTRICT	LACROSSE POSTAL DISTRICT 54603
			T	

Tax Information:

Tax Year: 2012

General Tax: \$1,987.29	Total Woodlands: \$0.00	Total Due: \$2,787.21	Total Mill Rate: 0.020551056
Lottery Credit: \$0.00	First Dollar Credit: 80.08	Special Charges: \$880.00	
Total Assessed Value: \$96,700.00	Total Fair Market Value: \$97,700.00		

Assessments: Values are still subject to SS70.43 for corrections; or SS70.44 for omitted property; or SS70.47 for Certiorari appeals.

!!!!These values have not been finalized through the Local Board of Review Adjournment and are subject to change!!!!

Class	Description	Acreage	Land	Improvement	Total	Last Modified
G2	Commercial	0.29	\$31,200.00	\$65,500.00	\$96,700.00	2012-06-04

Permits:

Permit Description	Permit #	Applicant	Status	Status Date	Activity
Zoning Occupancy	23445	AND PURSUITS LLC	Issued	2007-08-22	Alteration to Roofline
Zoning Occupancy	23445	AND PURSUITS LLC	Issued	2007-08-22	Alteration to Foundation Wall

(for more detailed and complete information on any category, go to Land Records Information Website at <http://www.co.la-crosse.wi.us/LandRecordsPortal/Default.aspx>)

**Jolivette Dry Cleaners and Laundry**  
02-32-535757

RE: Impacted Off-Source Property Deeds

Due to the amount of off-source property deeds the file size became too large to include them on the GIS Registry.

These deeds are in the case file and can be reviewed by contacting the Project Manager.

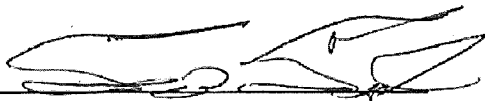


Re: Geographic Information System Registry for Former Jolivette Cleaners and Laundry Site,  
1645 Caroline Street, La Crosse, Wisconsin, WDNR BRRTS # 02-32-535757

Regulatory file closure has been requested for the above referenced site. Chlorinated solvent impacted soil and groundwater exceeding United States Environmental Protection Agency soil screening levels and WDNR ch. NR 140 groundwater enforcement standards (ESs) may be still be present beneath the site. Therefore, pursuant to WDNR ch. NR 726, the required Geographic Information System (GIS) registry information must include legal descriptions and/or plat maps. Legal descriptions and/or plat maps must be included for all properties (within or partially within the site's boundaries), which have soil contamination that exceeds the RCLs and/or groundwater contamination that exceeds the ESs at the time closure is requested. Additionally, the GIS registry information must include a statement signed by the responsible party, which states that he or she believes that the legal description has been attached for each property that is within, or partially within, the contaminated site boundary. (The purpose of this requirement is that a legal description for each of the contaminated properties has been submitted. The responsible party is not required to attest to the accuracy of the attached legal descriptions.) Therefore, the following statement has been included:

I, Scott Suhr, representing the Former Jolivette Cleaners and Laundry, certify that to the best of my knowledge the legal description has been attached for each property that is within, or partially within, the contaminated site boundary for the Former Jolivette Cleaners and Laundry site.

Signature: \_\_\_\_\_



Date: \_\_\_\_\_

10/4/13