State of Wisconsin
Department of Natural Resources
P.O. Box 7921, Madison, WI 53707-7921

GIS REGISTRY (Cover Sheet)
Form 4400-280 (R 6/13)

Source Property Information

CLOSURE DATE: 06/18/2015

BRRTS #: 02-69-000092

FID #: 469006230

ACTIVITY NAME: J & J CLEANERS - WAUPACA WELL #4

DATCP #:

PROPERTY ADDRESS: 801 Churchill St

PECFA#:

MUNICIPALITY: Waupaca

PARCEL ID #: 34 29 42 16

***WTM COORDINATES:**

X: **593984** Y: **431166**

** 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")*
- [x] Soil Contamination > *RCL or **SSRCL *(232)*
  - [ ] Contamination in ROW
  - [x] 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)*
- [x] Cover or Barrier *(222)*
  - [ ] Direct Contact
  - [x] Soil to GW Pathway
- [x] 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*

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
2984 SHAWANO AVENUE
GREEN BAY, WI 54313-6727

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 18, 2015

VAN PAGEL
801 CHURCHILL AVENUE
WAUPACA, WI 54981

KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS

SUBJECT: Final Case Closure with Continuing Obligations
Former J&J Laundry, 801 Churchill Avenue, Waupaca, WI
DNR BRRTS Activity #: 02-69-000092

Dear Mr. Pagel:

The Department of Natural Resources (DNR) considers the Former J & J Laundry site 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. Certain continuing obligations also apply to affected property owners or rights-of-way holders. These are identified within each continuing obligation.

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 Northeast Region Closure Committee (NER CC) reviewed the request for closure on March 2, 2015. The DNR NER CC reviewed this environmental remediation case for compliance with state laws and standards to maintain consistency in the closure of these cases.

In summary, the former J & J Cleaners had historic discharges of chlorinated solvents from the dry cleaning processes. The discharges caused soil and groundwater contamination both immediately below the property and offsite in a groundwater plume that extended to the Waupaca River. The WDNR and original property owner filed a court settlement, and the WDNR proceeded with investigation and remediation of the site. Soil and groundwater have been remediated to the extent practicable; and a vapor mitigation system has been installed in the building remaining on site. The conditions of closure and continuing obligations required were based on the property being used for commercial purposes.

Continuing Obligations

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

- Residual soil contamination exists that must be properly managed should it be excavated or removed.
- Current building and pavement must be maintained over contaminated soil and the DNR must be notified and approve any changes to this barrier.
- 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 Northeast Region DNR office, at 2984 Shawano Avenue, Green Bay, WI 54313. This letter and information that was submitted with the closure request application, including any maintenance plan and maps, can be found as a Portable Document Format (PDF) in BRRTS on the Web.

Prohibited Activities

Certain activities are prohibited at closed sites because maintenance of a barrier is intended to prevent contact with any remaining contamination. When a barrier is required, the condition of closure requires notification of the DNR before making a change, in order to determine if further action is needed to maintain the protectiveness of the remedy employed. The following activities are prohibited on any portion of the property where pavement, a building foundation, a vapor mitigation system or barrier is required, as shown on the attached maintenance plan, dated January 29, 2015 (page 4, annotated aerial photo), unless prior written approval has been obtained from the DNR:

- removal of the existing barrier or cover;
- replacement with another barrier or cover;
- excavating or grading of the land surface;
- filling on covered or paved areas;
- plowing for agricultural cultivation;
- construction or placement of a building or other structure;
- changing the use or occupancy of the property to a residential exposure setting, which may include certain uses, such as single or multiple family residences, a school, day care, senior center, hospital, or similar residential exposure settings.

Closure Conditions

Compliance with the requirements of this letter is a responsibility to which you or 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.

Residual Soil Contamination (ch. NR 718, chs. 500 to 536, Wis. Adm. Code or ch. 289, Wis. Stats.)
Soil contamination remains in areas beneath the building as indicated on the annotated aerial photo located on page 4 of the attached maintenance plan. 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. This continuing obligation also applies to the owners of 725 & 727 Churchill Avenue.

In addition, all current and future owners and occupants of the property and right-of-way holders need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct contact health threat to humans.

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

Cover or Barrier (s. 292.12 (2) (a), Wis. Stats., s. NR 726.15, s. NR 727.07 Wis. Adm. Code)
The pavement, building or other impervious cover that exists in the location shown on the annotated aerial photo on page 4 of the attached maintenance plan shall be maintained in compliance with that plan in order to minimize the infiltration of water and prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health.

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

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

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

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 could 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 November 2014, 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 only upon request.

If a decision is made to no longer use the vapor mitigation system, or to make a change to the vapor mitigation system, the property owner must notify the DNR at least 45 days before shutting the vapor mitigation system off, or before making any other change to the system, and evaluate whether conditions are protective of public health and safety. Additional response actions may be necessary.

The integrity of the floor, building, and pavement that exists on the property, shown on n page 4 of the maintenance plan, must be maintained in compliance with the plan. This will help ensure proper functioning of the vapor mitigation system, limiting vapor intrusion to indoor air spaces.

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, 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 Rick Joslin at (920) 662-5165 or at richard.joslin@wisconsin.gov.

Sincerely,

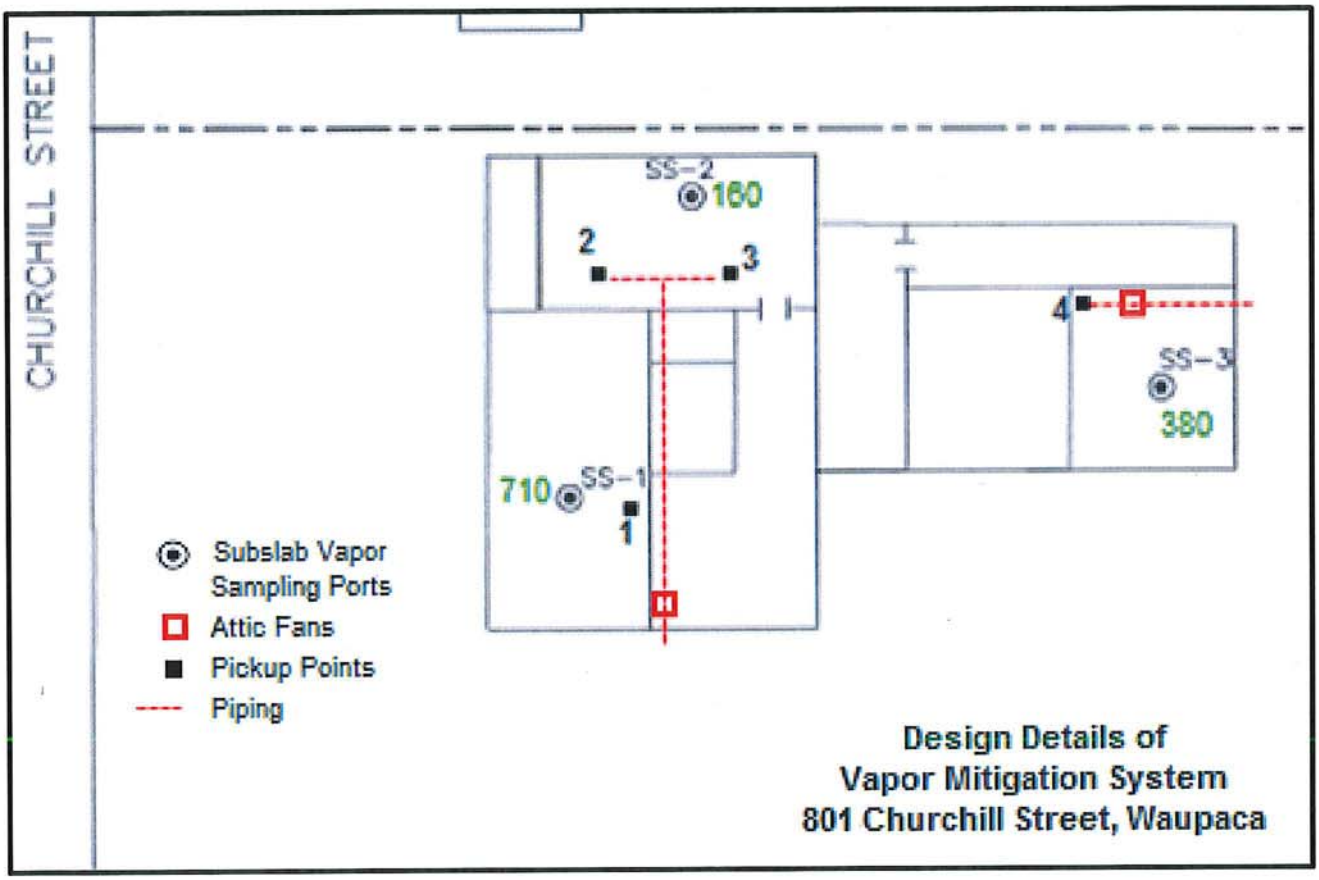
Roxanne N. Chronert
Northeast Region Team Supervisor
Remediation & Redevelopment Program

Attachments:

- Remaining Soil contamination map, page 4 of maintenance plan
- Maintenance Plan including map of required cap area and maintenance requirements for the vapor mitigation system, Attachment D → **See Att D**
- Inspection Log, DNR Form 4400-305

cc: Case File
Joan Panzenhagen, PO Box 244, Waupaca, WI 54981


Approximate Parcel Lines
725
727
Approximate Extent of Soil Contamination
J & J Laundry
801 Churchill Street
BRRTS #02-69-000092
Cap=Building & Pavement
801
N
12m
75ft
© 2014 Di


CHURCHILL STREET
SS-2
160
2
3
4
SS-3
380
710
SS-1
1
Subslab Vapor Sampling Ports
Attic Fans
Pickup Points
Piping
Design Details of
Vapor Mitigation System
801 Churchill Street, Waupaca

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
2984 SHAWANO AVENUE
GREEN BAY, WI 54313-6727

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

WISCONSIN
DEPT. OF NATURAL RESOURCES

June 18, 2015

SOURCE PROPERTY

Joan Panzenhagen
PO Box 244
Waupaca, WI 54981

SUBJECT: Continuing Obligations and Property Owner Requirements for
725 & 727 Churchill Avenue, Waupaca, WI
Parcel Identification Numbers: 34 29 42 14 & 34 29 42 15
Final Case Closure for Former J & J Cleaners, 801 Churchill Avenue, Waupaca
DNR BRRTS Activity #: 02-69-000092

Dear Ms. Panzenhagen

The purpose of this letter is to notify you that certain continuing obligations apply to the property at 725 & 727 Churchill Avenue (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 801 Churchill Avenue. 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 chlorinated solvent contamination in soil, groundwater, and vapor pathways at J&J site, based on the information submitted by WDNR contractors. 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 Mr. Van Pagel, dated June 18, 2015. However, only the following continuing obligations apply to your Property:

- Residual soil contamination exists that must be properly managed should it be excavated or removed.

The residual soil contamination is located on the south property line of your Property. It is estimated to be a minimal volume and at a depth greater than 1-2 feet.

Residual Soil Contamination (ch. NR 718, chs. 500 to 536, Wis. Adm. Code or ch. 289, Wis. Stats.)
Soil contamination remains in areas beneath the building as indicated on the annotated aerial photo located on page 4 of the attached maintenance plan. 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.

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.

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 WDNR Northeast Region Headquarters, 2984 Shawano Avenue, Green Bay, WI 54313, to the attention of Rick Joslin.

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.

The Department appreciates your efforts. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Rick Joslin at (920) 662-5165.

Sincerely,

Roxanne N. Chronert, Team Supervisor
Northeast Region Remediation & Redevelopment

Attach. Closure Letter with Maintenance Plan

cc: Case File

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

Case Closure - GIS Registry

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.	Parcel ID No.		
02-69-000092	34 29 42 16		
BRRTS Activity (Site) Name	**WTM Coordinates**		
	X	Y	
J & J Latmdry I Waupaca Well #4	593984	431166	
Street Address	**City**	**State**	**ZIP Code**
801 Churchill Ave	Waupaca	WI	54981

Responsible Party (RP) Name
George Jorgenson ** (State Lead-WDNR)

Company Name
J & J Laundry

Street Address	City	State	ZIP Code
801 Churchill Ave	Waupaca	WI	54981
Phone Number	**Email**		

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

Environmental Consultant Name
None - paperwork completed by WDNR

Consulting Firm

Street Address	City	State	ZIP Code
Phone Number	**Email**		
Acres Ready For Use	**Voluntary Party Liability Exemption Site?** ○ Yes ◉ No		
0.2			

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.

1. **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)

   Rec 01/21/2015

   Total Amount of Payment $ 1350

2. **Send one paper copy and one e-copy on compact disk of the entire closure package** to the Regional Project Manager assigned to your site. Submit as *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 site is located at 801 Churchill Avenue in Waupaca, WI. The area is mixed use with commercial/industrial to the west and south of the property, and residential to the east. Waupaca Municipal Well #4 is ~1500' east (downgradient) of the site, and the river is ~2500' east of the site.

B. **Prior and current site usage**: Specifically describe the current and historic occupancy and types of use.
The site was formerly operated as a dry cleaning business. Currently it is a laundromat and leased storage spaces.

C. Describe how and when site contamination was discovered.
In 1982, the City of Waupaca notified WDNR that Municipal Well #4 sampling results indicated contamination with Tetrachloroethene (perc/PCE). In 1986, WDNR proceeded with site investigation work which led to the identification of a source at J & J Laundry.

D. Describe the type(s) and source(s) or suspected source(s) of contamination.
Dry cleaning solvents (CVOCs, specifically PCE and Vinyl Chloride) from processes, spills, leaking underground chemical tank.

E. Other relevant site description information (or enter Not Applicable).
1992 legal settlement with RP / recent property owners are not RPs.

F. List BRRTS activity site name and number for all other BRRTS activities at this property, including closed cases.
02-69-000092

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.
Upgradient BRRTs Sites include:
02-69-552837 Waupaca Publishing
03-69-001462 Hanson Property
03-69-000824 Auto Stop Self Serve
Upgradient of MW-8 ... 02-69-550680 Waupaca Motor Sales (had PCE in soils, never installed permanent wells)

H. **Current zoning** (e.g. industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).
The site is zoned commercial and adjacent properties to the north and east are residential.

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.
At the source site, the lithology includes sand from surface to approximately 40' depth, then a thin layer of silty sand and clayey silt, followed by silty clay up to approximately 100' below surface.

ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.
none present

iii. Depth to bedrock, bedrock type, and whether or not it was encountered during the investigation.
At the site, bedrock was not encountered and the deepest well was approximately 100' depth. It is estimated that bedrock in this area is Precambrian granites or gabbros.

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).
Currently the site is capped by the building structure and asphalt parking areas.

Save...

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.

Depth to groundwater is approximately 25' to 30'.

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

Groundwater flow is east to the Waupaca River.

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

In a 1988 site investigation by Eder Associates, hydraulic conductivity is estimated to be 670 to 1000 feet per day. Transmissivity is approximately 270,000 to 500,000 gallons per day.

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

Mmlicipal Well #4 is directly downgradient approximately 1500' from the site. The municipal well was impacted by PCE from the site at concentrations as high as 180 ug/L.

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.

Refer to attached Site Summary, C.O.

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.

Currently, there are no off-site groundwater impacts. There are NR 140 PAL exceedances for PCE at MW-8, and the municipal well CW-4 has been consistently at or below the NR 140 PAL. Soil contamination is limited to on-site and two adjacent parcels located at 725 and 727 Churchill Street.
The lithology consists of sand and sandy silts. Groundwater was impacted rapidly through these highly conductive sands and impacted the municipal well approximately 1500' downgradient. Nearby residential homes had private wells for gardening purposes and some of those had been impacted prior to groundwater remediation work.

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.

A majority of the contaminated soils are below the existing building. Both the building and paved parking lots act as a barrier against infiltration to groundwater and will be part of the conditions of closure.

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.

On-site soil contamination is located below the building structure at depths up to 30'. Off-site soil contamination is located at a depth greater than 3'-4' and extends approximately 5'-10' onto parcels at 725 and 727 Churchill Street.

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

No exceedances to the SSRCLs for direct contact of chlorinated solvents documented from 0' to 4'.

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.

All active remediation took place between 1995-2000; At the time there were no formal standards for the CVOCs so for this closure we will use the current default NR 720 RCLs.

Save...

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.

Chlorinated VOC contamination present in sandy soils migrated downward and impacted groundwater. The groundwater plume extended downgradient over 1500' and impacted the City of Waupaca municipal well #4. The furthest well nest was placed near the river and indicated only minor impacts.

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

No free product has ever been detected at the site.

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 pathway was assessed using WDNR contractors. Subs lab sampling ports were installed in the main structure, garage, and also at a neighboring residential home.

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).

Subslab action levels for a small commercial building are: PCE = 270 ppbv I TCE = 16 ppbv I VC = 110 ppbv. Exceedances were detected in the main building at SS-1 for PCE=710 ppbv and one in the garage area at SS-3 for PCE=380 ppbv.

E. Surface Water and Sediment

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

The Waupaca River is approximately 2500' east. It has not been impacted.

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 - no impacts to surface water or sediments were documented.

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.

Between 1996 and 2000 several remedial actions were taken:
-Removal of an UST discovered in 1995-96, and excavation of some contaminated soil.
- Installation of a Recovery Well in 1998 and groundwater treatment system, with subsequent monitoring.
-Installation of a Vapor Mitigations System in November 2014.

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

N/A - no immediate actions taken.

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.

The groundwater pump and treat system was very effective and reduced concentrations significantly. The system ran until 2000 when maintenance and parts began to limit the effectiveness.

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.

The only residual contamination is in soils on the site itself. Depth of contan1inated soils is between 3' to 30' below ground surface. A potential for soil contamination deeper tl1an 4' exists at the adjacent property to the north, but no sampling of this area was documented.

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.

There are no direct contact threats.

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F. Describe the remaining soil contamination in the vadose zone that attains or exceeds the soil standard(s) for the groundwater pathway.
Refer to concentration maps in the attachments. There are three distinct hot spots: one in the area of the former UST located on the northwest corner of the main building; one in the garage area; and one in the south end of the main building. Soils contaminated above the RCLs are almost entirely below the building structure and extend to a depth of ~30' bgs.

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.
Residual soil contamination is currently capped with the building slab and asphalt parking areas. A vapor mitigation system is in place and operating.

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).
N/A- no groundwater plume present after remediation.

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.
Remaining soil contamination is capped by building and pavement.
Groundwater plume was remediated using a recovery well and treatment.
Vapor Depressurization was installed in the building.

J. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain.
The VMS will remain in place until such time as additional tests are run to determine the ability to shut it down.

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.
The groundwater plume was effectively remediated from the source area to the municipal well. Only one remaining PAL exceedance of PCE remains at the furthest downgradient well, MW-8.

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.
Subslab action levels for a small commercial building are: PCE = 270 ppbv I TCE = 16 ppbv I VC = 110 ppbv.
Exceedances were detected in the main building at SS-1 for PCE=710 ppbv and one in the garage area at SS-3 for PCE=380 ppbv.

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.
Chlorinated solvents are highly volatile, and there are no indications or documentation of any surface water or sediment impacts.

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.	☐	☐	Engineering Control/Barrier for Direct Contact	✓	✓
ii.	☒	☐	Engineering Control/Barrier for Groundwater Infiltration	✓	✓
iii.	☐	☐	Vapor Mitigation - post closure passive system	✓	✓
iv.	☒	☐	Vapor Mitigation - post closure active system	✓	✓
v.	☐	☒	None of the above scenarios apply to this case closure	NA	NA

Save...

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.	☒	☒	Residual soil contamination exceeds ch. NR 720 generic or site-specific RCLs	✓
ii.	☐	☐	Sites with groundwater contamination equal to or greater than the ch. NR 140, enforcement standards (ES)	✓
iii.	☐	☐	Monitoring wells: lost, transferred or remaining in use	✓
iv.	☐	☐	Structural Impediment (not as a performance standard)	✓
v.	☐	☐	Residual soil contamination remaining at ch. NR 720 Industrial Use levels	✓
vi.	☐	☐	Vapor intrusion may be future, post-closure issue if building use or land use changes	✓
vii.	☐	☐	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.
- 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

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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://dnrmaps.wi.gov/sl/?Viewer=RR Sites) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

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 Contaminate 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.

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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)

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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 a 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.

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) and 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) 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.

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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.	☐	☐	☐	Residual groundwater contamination exceeds Ch. NR 140 Wis. Administrative Code enforcement standards.
2.	☒	☐	☒	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.	☒	☐	☐	An engineered cover or a soil barrier (e.g. pavement) must be maintained over contaminated soil for direct contact or groundwater infiltration concerns.
4.	☐	☐	☐	Industrial land use soil standards were used for the clean-up standard.
5.	☒	☐	☐	A vapor mitigation system (or other specific vapor protection) must be operated and maintained.
6.	☐	☐	☐	Vapor assessment needed if use changes.
7.	☐	☐	☐	Structural impediment.
8.	☐	☐	☐	Lost, transferred or open monitoring wells.
9.	☐	☒	☐	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, 1 (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.

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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.

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

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

Engineering Certification

I _____ 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."

Printed Name _____ Title _____

Signature _____ Date _____ P.E. Stamp and Number _____

Hydrogeologist Certification

I Kathleen M Sylvester, on behalf of WDNR 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."

Kathleen M Sylvester, on behalf of WDNR (Printed Name) Hydrogeologist (Title)

Kathleen M Sylvester on behalf of WDNR (Signature) 1/6/2015 (Date)

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ATTACHMENT A

A.1 GROUNDWATER ANALYTICAL TABLES
- a. 1997 to 2002 Sampling Data
- b. 2003 Sampling Data
- c. Historical Sampling Data from Waupaca Well #4
  - i. PCE Concentrations Plot

A.2 PRE-REMEDIAL SOIL ANALYTICAL TABLE

A.3 POST-REMEDIAL SOIL ANALYTICAL TABLE

Not applicable: Since no soil remediation occurred, all identified soil contamination still exists below the building structure. Refer to A.2 for data.

A.4 PRE/POST REMAINING SOIL ANALYTICAL TABLE

Not applicable: Since no soil remediation occurred, all identified soil contamination still exists below the building structure. Refer to A.2 for data.

A.5 VAPOR ANALYTICAL TABLE

A.6 OTHER MEDIA OF CONCERN (sediment, surface water)

Not applicable, no sediment or surface water issues.

A.7 GROUNDWATER ELEVATIONS DATA TABLE

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL DETECTIONS

WDNR-CITY OF WAUPACA
WAUPACA, WISCONSIN

978507.GW-TBL-2.xls

Analytical Parameters	NR 140* PAL (in ug/L)	NR 140* ES (in ug/L)	MW-2								MW-8					MW-8A				MW-9					
			Mar-97	Apr-97	May-98	Feb-99	Aug-99	Jul-00	Jan-01	May-02	Mar-97	Apr-97	Jul-00	Jan-01	May-02	Apr-97	Jul-00	Jan-01	May-02	May-98	Feb-99	Aug-99	Jul-00	Jan-01	May-02
Volatile Organic Compounds (VOCs)																									
Analytical Methods: US EPA 8021 & 8021A																									
Benzene	**0.5**	**5**	<0.21	<0.21	<0.32	<0.32	<0.25	<0.39	NT	<0.43	<0.21	<0.21	<0.39	NT	<0.43	<0.21	<0.39	NT	<0.43	<0.32	<0.32	<0.25	<0.39	NT	<0.43
Bromodichloromethane	**0.06**	**0.6**	**0.25**	<0.073	**0.43"J"**	<0.38	<0.38	<0.38	NT	<0.55	<0.073	<0.073	<0.38	NT	<0.55	<0.073	<0.38	NT	<0.55	<0.38	<0.38	<0.38	<0.38	NT	<0.55
sec-Butylbenzene	**	**	<0.6	<0.6	**0.42"J"**	**0.34**	<0.37	<0.48	NT	<0.46	<0.6	<0.6	<0.48	NT	<0.46	<0.6	<0.48	NT	<0.46	<0.34	<0.34	<0.37	<0.48	NT	<0.46
Chloroform	**0.6**	**6**	**0.43**	**0.209"J"**	**0.66"J"**	<0.4	<0.26	<0.38	NT	<0.56	<0.095	<0.095	<0.38	NT	<0.56	<0.095	<0.38	NT	<0.56	<0.4	**1"J"**	<0.26	<0.38	NT	<0.56
Dibromochloromethane	**6**	**60**	**0.17"J"**	<0.066	<0.37	<0.37	<0.31	<0.5	NT	<0.56	**0.098"J"**	<0.066	<0.5	NT	<0.56	<0.066	<0.5	NT	<0.56	<0.37	<0.37	<0.31	<0.5	NT	<0.56
1,4 Dichlorobenzene	**15**	**75**	<0.23	<0.23	<0.28	<0.28	<0.26	<0.42	NT	<0.26	<0.23	<0.23	<0.42	NT	<0.26	<0.23	<0.42	NT	<0.26	<0.28	<0.28	<0.26	<0.42	NT	<0.26
1,1-Dichloroethane	**85**	**850**	<0.31	<0.31	<0.34	<0.34	<0.32	<0.35	NT	<0.57	**1.1**	**1.1**	<0.35	NT	<0.57	<0.31	<0.35	NT	<0.57	<0.34	<0.34	<0.32	<0.35	NT	<0.57
1,2-Dichloroethane	**0.5**	**5**	<0.14	<0.14	<0.36	<0.36	<0.14	<0.35	NT	<0.54	<0.14	<0.14	<0.35	NT	<0.54	<0.14	<0.35	NT	<0.54	<0.36	<0.36	<0.14	<0.35	NT	<0.54
MTBE	**12**	**60**	<0.21	<0.21	<0.31	**0.51 "J"**	<0.21	<0.47	NT	<0.49	<0.21	<0.21	<0.47	NT	<0.49	<0.21	<0.47	NT	<0.49	<0.21	<0.31	<0.21	<0.47	NT	<0.49
Tetrachloroethene	**0.5**	**5**	**0.25"J"**	**1.2**	**0.83"J"**	**0.42 "J"**	<0.56	<0.34	<0.34	<0.49	**2.7**	**3.3**	**3.2**	**6.1**	**2.2**	<0.13	<0.34	<0.34	<0.49	<0.35	<0.35	<0.56	**0.39"J"**	<0.34	<0.49
Toluene	**68.6**	**343**	<1.5	<1.5	<0.35	<0.35	<0.38	<0.37	NT	<0.63	<1.5	<1.5	<0.37	NT	<0.63	<1.5	<0.37	NT	<0.63	<0.35	<0.35	<0.38	<0.37	NT	<0.63
1,1,1 Trichloroethane	**40**	**200**	<0.37	<0.37	<0.45	<0.45	<0.35	<0.54	NT	<0.57	**3.0**	**3.5**	**0.55"J"**	NT	<0.57	<0.37	<0.54	NT	<0.57	<0.45	<0.45	<0.35	<0.54	NT	<0.57
Trichloroethene	**0.5**	**5**	<0.13	<0.13	<0.48	<0.48	<0.39	<0.46	NT	<0.73	**0.18"J"**	<0.13	<0.46	NT	<0.73	<0.13	<0.46	NT	<0.73	<0.48	<0.48	<0.39	<0.46	NT	<0.73

EXPLANATION:

All analytical results presented in parts per billion (ppb).

* = Chapter NR140 groundwater quality standards, Wisconsin Administrative Code.

** = No standards currently exist.

0.5 Shading indicates Preventive Action Limit Exceedances

1.5 Shading indicates Enforcement Standard Exceedances

(G.S.) Indicates Grab Sample

NT Not Tested

"J" Flag Analyte detected between Limit of Detection and Limit of Quantitation

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL DETECTIONS

WDNR-CITY OF WAUPACA
WAUPACA, WISCONSIN

978507.GW-TBL-2.xls

Analytical Parameters	NR 140* PAL	NR 140* ES	MW-10						MW-11					MW-12									
	(in ug/L)		May-98	Feb-99	Aug-99	Jul-00	Jan-01	May-02	May-98	Feb-99	Aug-99	Jul-00	Jan-01	May-98	Oct-98	Feb-99	Feb-99 DUP-1	Aug-99	Aug-99 DUP	Jul-00	Jul-00 DUP	Jan-01	Jan-01 DUP-1	May-02
Volatile Organic Compounds (VOCs)																							
Analytical Methods: US EPA 8021 & 8021A																							
Benzene	**0.5**	**5**	<0.32	<0.32	<0.25	<0.39	NT	<0.43	<0.32	<0.32	<0.25	<0.39	NT	<0.32	<0.32	<0.32	<0.32	<0.25	<0.25	<0.39	<0.39	NT	NT	<0.43
Bromodichloromethane	**0.06**	**0.6**	<0.38	<0.38	<0.38	<0.38	NT	<0.55	<0.38	<0.38	<0.38	<0.38	NT	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	NT	NT	<0.55
sec-Butylbenzene	**	**	<0.34	<0.34	<0.37	<0.48	NT	<0.46	<0.34	<0.34	<0.37	<0.48	NT	<0.34	<0.34	<0.34	<0.34	<0.37	<0.37	<0.48	<0.48	NT	NT	<0.46
Chloroform	**0.6**	**6**	<0.4	<0.4	<0.26	<0.38	NT	<0.56	**0.44"J"**	<0.4	<0.26	<0.38	NT	**1.4**	<0.4	<0.4	<0.4	**0.34"J"**	**0.45"J"**	<0.38	<0.38	NT	NT	<0.56
Dibromochloromethane	**6**	**60**	<0.37	<0.37	<0.31	<0.5	NT	<0.56	<0.37	<0.37	<0.31	<0.5	NT	<0.37	<0.37	<0.37	<0.37	<0.31	<0.31	<0.5	<0.5	NT	NT	<0.56
1,4 Dichlorobenzene	**15**	**75**	<0.28	<0.28	<0.26	<0.42	NT	<0.26	<0.28	<0.28	<0.26	<0.42	NT	<0.28	<0.28	<0.28	<0.28	<0.26	<0.26	<0.42	<0.42	NT	NT	<0.26
1,1-Dichloroethane	**85**	**850**	<0.34	<0.34	<0.32	<0.35	NT	<0.57	<0.34	<0.34	<0.32	<0.35	NT	<0.34	<0.34	<0.34	<0.34	<0.32	<0.32	<0.35	<0.35	NT	NT	<0.57
1,2-Dichloroethane	**0.5**	**5**	<0.36	<0.36	<0.14	<0.35	NT	<0.54	<0.36	<0.36	<0.14	<0.35	NT	<0.36	<0.36	<0.36	<0.36	<0.14	<0.14	<0.35	<0.35	NT	NT	<0.54
MTBE	**12**	**60**	<0.31	<0.31	<0.21	<0.47	NT	<0.49	<0.31	<0.31	<0.21	<0.47	NT	<0.31	<0.31	**0.32"J"**	**0.32"J"**	<0.21	<0.21	<0.47	<0.47	NT	NT	<0.49
Tetrachloroethene	**0.5**	**5**	**0.39"J"**	<0.35	<0.56	<0.34	**0.58"J"**	<0.49	<0.35	<0.35	<0.56	<0.34	<0.34	<0.35	**6.3**	**0.63"J"**	**0.63"J"**	<0.56	<0.56	<0.34	<0.34	<0.34	<0.34	<0.49
Toluene	**68.6**	**343**	<0.35	<0.35	<0.38	<0.37	NT	<0.63	<0.35	<0.35	<0.38	<0.37	NT	<0.35	<0.35	<0.35	<0.35	<0.38	<0.38	<0.37	<0.37	NT	NT	<0.63
1,1,1 Trichloroethane	**40**	**200**	<0.45	<0.45	<0.35	<0.54	NT	<0.57	<0.45	<0.45	<0.35	<0.54	NT	<0.45	<0.45	<0.45	<0.45	<0.35	<0.35	<0.54	<0.54	NT	NT	<0.57
Trichloroethene	**0.5**	**5**	<0.48	<0.48	<0.39	<0.46	NT	<0.73	<0.48	<0.48	<0.39	<0.46	NT	<0.48	<0.48	<0.48	<0.48	<0.39	<0.39	<0.46	<0.46	NT	NT	<0.73

EXPLANATION:

All analytical results presented in parts per billion (ppb).

* = Chapter NR140 groundwater quality standards, Wisconsin Administrative Code.

** = No standards currently exist.

0.5 Shading indicates Preventive Action Limit Exceedances

1.5 Shading indicates Enforcement Standard Exceedances

(G.S.) Indicates Grab Sample

NT Not Tested

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL DETECTIONS

WDNR-CITY OF WAUPACA
WAUPACA, WISCONSIN

978507.GW-TBL-2.xls

Analytical Parameters	NR 140* PAL (in ug/L)	NR 140* ES (in ug/L)	MW-13						MW-13A								MW-14	MW-15		RW-1					
			May-98	Oct-98	Feb-99	Aug-99	Jul-00	Jan-01	May-98	May-98 DUP-1	Oct-98	Feb-99	Aug-99	Jul-00	Jan-01	May-02	May-98	May-98	May-98 DUP-2	Mar-97	Apr-97	Apr-97 DUP-18	May-98	Sep-99	Jul-00	Jan-01	May-02
Volatile Organic Compounds (VOCs)																										
Analytical Methods: US EPA 8021 & 8021A																										
Benzene	**0.5**	**5**	<0.32	<0.32	<0.32	<0.25	<0.39	NT	<0.32	<0.32	<0.32	<0.32	<0.25	<0.39	NT	<0.43	<0.32	<0.32	<0.32	<0.21	<0.21	<0.21	**0.54"J"**	<0.32	<0.39	NT	<0.43
Bromodichloromethane	**0.06**	**0.6**	**0.72"J"**	<0.38	<0.38	<0.38	<0.38	NT	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	NT	<0.55	<0.38	<0.38	<0.38	<0.073	<0.073	<0.073	<0.25	<0.38	<0.38	NT	**2**
sec-Butylbenzene	**	**	<0.34	<0.34	<0.34	<0.37	<0.48	NT	<0.34	<0.34	<0.34	<0.34	<0.37	<0.48	NT	<0.46	<0.34	<0.34	<0.34	<0.6	<0.6	<0.6	<0.6	<0.34	<0.48	NT	<0.46
Chloroform	**0.6**	**6**	**1.7**	**0.69"J"**	<0.4	**0.42"J"**	<0.38	NT	<0.4	<0.4	<0.4	<0.4	<0.26	<0.38	NT	<0.56	<0.4	<0.4	<0.4	<0.095	<0.095	<0.095	**0.69"J"**	**1.2 "J"**	<0.38	NT	**4.7**
Dibromochloromethane	**6**	**60**	<0.37	<0.37	<0.37	<0.31	<0.5	NT	<0.37	<0.37	<0.37	<0.37	<0.31	<0.5	NT	<0.56	<0.37	<0.37	<0.37	<0.066	<0.066	<0.066	<0.31	<0.37	<0.5	NT	<0.56
1,4 Dichlorobenzene	**15**	**75**	<0.28	<0.28	<0.28	<0.26	<0.42	NT	<0.28	<0.28	<0.28	<0.28	<0.26	<0.42	NT	<0.26	<0.28	<0.28	<0.28	<0.23	<0.23	<0.23	<0.26	<0.28	<0.42	NT	<0.26
1,1-Dichloroethane	**85**	**850**	<0.34	<0.34	<0.34	<0.32	<0.35	NT	<0.34	<0.34	<0.34	<0.34	<0.32	<0.35	NT	<0.57	<0.34	<0.34	<0.34	<0.31	<0.31	<0.31	<0.32	<0.34	<0.35	NT	<0.57
1,2-Dichloroethane	**0.5**	**5**	<0.36	<0.36	<0.36	<0.14	<0.35	NT	<0.36	<0.36	<0.36	<0.36	<0.14	<0.35	NT	<0.54	<0.36	<0.36	<0.36	<0.14	<0.14	<0.14	<0.14	<0.36	<0.35	NT	<0.54
MTBE	**12**	**60**	<0.31	<0.31	<0.31	<0.21	<0.47	NT	<0.31	<0.31	<0.31	<0.31	<0.21	<0.47	NT	<0.49	<0.31	<0.31	<0.31	<0.21	<0.21	<0.21	<0.31	<0.31	<0.47	NT	<0.49
Tetrachloroethene	**0.5**	**5**	**0.43"J"**	**5.5**	<0.35	<0.56	<0.34	<0.34	<0.35	<0.35	<0.35	<0.35	<0.56	<0.34	<0.34	<0.49	<0.35	<0.35	<0.35	**1,100**	**310**	**310**	**370**	**18**	**0.69"J"**	**1.5**	**1.2"J"**
Toluene	**68.6**	**343**	<0.35	<0.35	<0.35	<0.38	<0.37	NT	<0.35	<0.35	<0.35	<0.35	<0.38	<0.37	NT	<0.63	<0.35	<0.35	<0.35	<1.5	<1.5	<1.5	**0.85"J"**	<0.35	<0.37	NT	<0.63
1,1,1 Trichloroethane	**40**	**200**	<0.45	<0.45	<0.45	<0.35	<0.54	NT	<0.45	<0.45	<0.45	<0.45	<0.35	<0.54	NT	<0.57	<0.45	<0.45	<0.45	<0.37	<0.37	<0.37	<0.35	<0.45	<0.54	NT	<0.57
Trichloroethene	**0.5**	**5**	<0.48	<0.48	<0.48	<0.39	<0.46	NT	<0.48	<0.48	<0.48	<0.48	<0.39	<0.46	NT	<0.73	<0.48	<0.48	<0.48	**0.5**	<0.13	<0.13	<0.39	<0.48	<0.46	NT	<0.73

EXPLANATION:

All analytical results presented in parts per billion (ppb).

* = Chapter NR140 groundwater quality standards, Wisconsin Administrative Code.

** = No standards currently exist.

0.5 Shading indicates Preventive Action Limit Exceedances

1.5 Shading indicates Enforcement Standard Exceedances

(G.S.) Indicates Grab Sample

NT Not Tested

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL DETECTIONS

WDNR-CITY OF WAUPACA
WAUPACA, WISCONSIN

978507.GW-TBL-2.xls

Analytical Parameters	NR 140* PAL (in ug/L)	NR 140* ES (in ug/L)	PZ-1 Mar-97	PZ-1 Apr-97	PZ-1 May-98	PZ-1 Feb-99	PZ-1 Aug-99	PZ-1 Jul-00	PZ-1 Jan-01	PZ-1 May-02	PZ-2 Mar-97	PZ-2 Apr-97	PZ-2 May-98	PZ-2 Feb-99	PZ-2 Aug-99	PZ-2 Jul-00	PZ-2 Jan-01	PZ-2 May-02	SB-2 (G.S.) Mar-97 45'	SB-3 (G.S.) Mar-97 45'	SB-4 (G.S.) Mar-97 45'	SB-5A (G.S.) Mar-97 30'	SB-5A (G.S.) Mar-97 52'	SB-6A (G.S.) Mar-97 30'	SB-6A (G.S.) Mar-97 50'	SB-6 (G.S.) Apr-97 90'	SB-6 (G.S.) Apr-97 DUP 17
Volatile Organic Compounds (VOCs)																											
Analytical Methods: US EPA 8021 & 8021A																											
Benzene	**0.5**	**5**	<0.21	<0.021	<0.32	<0.32	<0.25	<0.39	NT	<0.43	<0.21	<0.021	<0.32	<0.32	<0.25	<0.39	NT	<0.43	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
Bromodichloromethane	**0.06**	**0.6**	<0.073	<0.073	<0.38	<0.38	<0.38	<0.38	NT	<0.55	<0.073	<0.073	<0.38	<0.38	<0.38	<0.38	NT	<0.55	<0.073	<0.073	<0.073	**0.62**	<0.073	<0.073	<0.073	<0.073	<0.073
sec-Butylbenzene	**	**	<0.6	<0.6	<0.34	<0.34	<0.37	<0.48	NT	<0.46	<0.6	<0.6	<0.34	<0.34	<0.37	<0.48	NT	<0.46	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chloroform	**0.6**	**6**	<0.095	<0.095	<0.4	<0.4	<0.26	<0.38	NT	<0.56	**0.15"J"**	<0.095	**0.52"J"**	<0.4	<0.26	<0.38	NT	<0.56	<0.095	<0.095	<0.095	**1.5**	**0.12"J"**	<0.095	<0.095	<0.095	<0.095
Dibromochloromethane	**6**	**60**	<0.066	<0.066	<0.37	<0.37	<0.31	<0.5	NT	<0.56	<0.066	<0.066	<0.37	<0.37	<0.31	<0.5	NT	<0.56	<0.066	**0.19"J"**	<0.066	**0.33**	<0.066	<0.066	**0.088"J"**	<0.066	<0.066
1,4 Dichlorobenzene	**15**	**75**	<0.23	<0.23	<0.28	<0.28	<0.26	<0.42	NT	<0.26	<0.23	<0.23	<0.28	<0.28	<0.26	<0.42	NT	<0.26	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23	<0.23
1,1-Dichloroethane	**85**	**850**	<0.31	<0.31	<0.34	<0.34	<0.32	<0.35	NT	<0.57	<0.31	<0.31	<0.34	<0.34	<0.32	<0.35	NT	<0.57	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31
1,2-Dichloroethane	**0.5**	**5**	<0.14	<0.14	<0.36	<0.36	<0.14	<0.35	NT	<0.54	<0.14	<0.14	<0.36	<0.36	<0.14	<0.35	NT	<0.54	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
MTBE	**12**	**60**	<0.21	<0.21	<0.31	<0.31	<0.21	<0.47	NT	<0.49	<0.21	<0.21	<0.31	**0.67"J"**	<0.21	<0.47	NT	<0.49	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
Tetrachloroethene	**0.5**	**5**	**0.26"J"**	**0.21"J"**	<0.35	<0.35	<0.56	<0.34	<0.34	<0.49	<0.13	**0.17"J"**	<0.35	<0.35	<0.56	<0.34	<0.34	<0.49	**0.21"J"**	**9.6**	**0.51**	<0.13	**1.5**	<0.13	**0.35"J"**	**21**	**24**
Toluene	**68.6**	**343**	<1.5	<1.5	<0.35	<0.35	<0.38	<0.37	NT	<0.63	<1.5	<1.5	<0.35	<0.35	<0.38	<0.37	NT	<0.63	<1.5	<1.5	<1.5	<1.5	<1.5	**1.8**	<1.5	<1.5	<1.5
1,1,1 Trichloroethane	**40**	**200**	<0.37	<0.37	<0.45	<0.45	<0.35	<0.54	NT	<0.57	<0.37	<0.37	<0.45	<0.45	<0.35	<0.54	NT	<0.57	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
Trichloroethene	**0.5**	**5**	<0.13	<0.13	<0.48	<0.48	<0.39	<0.46	NT	<0.73	<0.13	<0.13	<0.48	<0.48	<0.39	<0.46	NT	<0.73	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13

EXPLANATION:

All analytical results presented in parts per billion (ppb).

* = Chapter NR140 groundwater quality standards, Wisconsin Administrative Code.

** = No standards currently exist.

0.5 Shading indicates Preventive Action Limit Exceedances

1.5 Shading indicates Enforcement Standard Exceedances

(G.S.) Indicates Grab Sample

NT Not Tested

"J" Flag Analyte detected between Limit of Detection and Limit of Quantitation

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL DETECTIONS

WDNR-CITY OF WAUPACA
WAUPACA, WISCONSIN

978507.GW-TBL-2.xls

Analytical Parameters	NR 140* PAL	NR 140* ES	SP-3A					SP-5	SP-8	SP-10	SP-12		CW-4			Trip Blank								
	(in ug/L)		Apr-97	May-98	Aug-98	Oct-98	Jul-00	Apr-97	Apr-97	Apr-97	Mar-97	Apr-97	Mar-97	Mar-97 DUP-16	Apr-97	Mar-97	May-97	May-98	Oct-98	Feb-99	Aug-99	Jul-00	Jan-01	May-02
Volatile Organic Compounds (VOCs)																								
Analytical Methods: US EPA 8021 & 8021A																								
Benzene	**0.5**	**5**	<0.21	<0.32	<0.32	<0.32	<0.39	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.32	<0.32	<0.32	<0.32	<0.25	<0.39	NT	<0.43
Bromodichloromethane	**0.06**	**0.6**	<0.073	<0.38	<0.38	<0.38	<0.38	**0.133"J"**	<0.073	<0.073	**0.4**	**0.3**	<0.073	<0.073	<0.073	<0.073	<0.38	<0.38	<0.38	<0.38	<0.22	<0.38	NT	<0.55
sec-Butylbenzene	**	**	<0.6	<0.34	<0.34	<0.34	<0.48	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.34	<0.34	<0.34	<0.34	<0.37	<0.48	NT	<0.46
Chloroform	**0.6**	**6**	<0.095	<0.4	<0.4	<0.4	<0.38	**0.69**	<0.095	<0.095	**1.2**	**1**	**0.15"J"**	**0.15"J"**	<0.095	<0.095	<0.4	<0.4	<0.4	<0.4	<0.26	<0.38	NT	<0.56
Dibromochloromethane	**6**	**60**	<0.066	<0.37	<0.37	<0.37	<0.5	<0.066	<0.066	<0.066	**0.17"J"**	**0.126"J"**	**0.18"J"**	**0.19"J"**	<0.066	<0.066	<0.37	<0.37	<0.37	<0.37	<0.31	<0.5	NT	<0.56
1,4 Dichlorobenzene	**15**	**75**	<0.23	<0.28	<0.28	<0.28	<0.42	<0.23	<0.23	<0.23	**0.66**	**0.77**	<0.23	<0.23	<0.23	<0.23	<0.28	<0.28	<0.28	<0.28	<0.26	<0.42	NT	<0.26
1,1-Dichloroethane	**85**	**850**	<0.31	<0.34	<0.34	<0.34	<0.35	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.34	<0.34	<0.34	<0.34	<0.32	<0.35	NT	<0.57
1,2-Dichloroethane	**0.5**	**5**	<0.14	<0.36	<0.36	<0.36	<0.35	<0.14	**0.52**	<0.14	<0.14	<0.31	<0.14	<0.14	<0.14	<0.14	<0.36	<0.36	<0.36	<0.36	<0.14	<0.35	NT	<0.54
MTBE	**12**	**60**	<0.21	<0.31	<0.31	<0.31	<0.47	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.31	<0.31	<0.31	<0.21	<0.47	NT	<0.49
Tetrachloroethene	**0.5**	**5**	**3,400**	**1,440**	**36**	**77**	**20**	**0.45**	**0.151"J"**	**3.1**	**0.41**	**0.31"J"**	**17**	**17**	**8.4**	<0.13	<0.35	<0.35	<0.35	<0.35	<0.56	<0.34	<0.34	<0.49
Toluene	**68.6**	**343**	<1.5	<0.35	<0.35	<0.35	<0.37	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.35	<0.35	<0.35	<0.35	<0.38	<0.37	NT	<0.63
1,1,1 Trichloroethane	**40**	**200**	<0.37	<0.45	<0.45	<0.45	<0.54	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.45	<0.45	<0.45	<0.45	<0.35	<0.54	NT	<0.57
Trichloroethene	**0.5**	**5**	**4.6**	**6.37**	**0.71"J"**	<0.48	<0.46	<1.4	<0.13	<0.13	<0.13	<013	<0.13	<0.13	<0.13	<0.13	<0.48	<0.48	<0.48	<0.48	<0.39	<0.46	NT	<0.73

EXPLANATION:

All analytical results presented in parts per billion (ppb).

* = Chapter NR140 groundwater quality standards, Wisconsin Administrative Code.

** = No standards currently exist.

0.5 Shading indicates Preventive Action Limit Exceedances

1.5 Shading indicates Enforcement Standard Exceedances

(G.S.) Indicates Grab Sample

NT Not Tested

Table 2 Ground-Water Analytical Results, Waupaca Well #4/Former JJ Laundromat, Waupaca, Wisconsin

Well ID	Date Sampled	Relevant and Significant Analytical Results (µg/l)																												
		Benzene	Bromobenzene	Bromodichloromethane	Bromochloromethane	Bromoform	Bromomethane	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	1,2-Dibromo-3-Chloropropane	Dibromochloromethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	Dibromomethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3-Dichloropropane	cis-1,2-Dichloroethene
NR 140 Preventive Action Limit (ug/l)		0.5	NE	0.06	NE	0.44	10	NE	NE	NE	0.5	NE	80	0.6	0.3	NE	NE	0.02	6	60	125	0.02	15	NE	200	85	0.7	0.5	0.7	7
NR 140 Enforcement Standard (ug/l)		5	NE	0.6	NE	4.4	1	NE	NE	NE	5	NE	400	6	3	NE	NE	0.2	60	600	1250	0.2	75	NE	1000	850	7	5	7	70
RW1	12/09/03	< 0.41	< 0.82	< 0.56	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	< 0.37	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW2	12/09/03	< 0.41	< 0.82	< 0.56	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	2	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW8	12/09/03	< 0.41	< 0.82	< 0.56	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	< 0.37	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW8A	12/09/03	< 0.41	< 0.82	< 0.56	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	< 0.37	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW9	12/09/03	< 0.41	< 0.82	1.8 J	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	2.8	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW10	12/09/03	< 0.41	< 0.82	< 0.56	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	< 0.37	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW11	12/09/03	< 0.41	< 0.82	< 0.56	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	< 0.37	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW12	12/09/03	< 0.41	< 0.82	2.1	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	4	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW13	12/09/03	< 0.41	< 0.82	1.8 J	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	3.4	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW13A	12/09/03	< 0.41	< 0.82	< 0.56	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	< 0.37	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
MW14	12/09/03	< 0.41	< 0.82	0.91 J	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	0.75 J	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
PZ1	12/09/03	< 0.41	< 0.82	< 0.56	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	< 0.37	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
PZ2	12/09/03	< 0.41	< 0.82	0.95 J	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	1.2 J	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
Dup 1 (MW8)	12/09/03	< 0.41	< 0.82	< 0.56	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	< 0.37	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83
Dup 2 (MW2)	12/09/03	< 0.41	< 0.82	1.6 J	< 0.97	< 0.94	< 0.91	< 0.93	< 0.89	< 0.97	< 0.49	< 0.41	< 0.97	1.9	< 0.24	< 0.85	< 0.74	< 0.87	< 0.81	< 0.83	< 0.87	< 0.61	< 0.95	< 0.60	< 0.99	< 0.75	< 0.57	< 0.36	< 0.75	< 0.83

Key:

µg/l = micrograms per liter
NE = Not established by Wisconsin Administrative Code
J = Analyte detected between Limit of Detection and Limit of Quantitation
--- = Not analyzed
32 = NR 140 Preventive Action Limit Exceeded
32 = NR 140 Enforcement Standard Exceeded

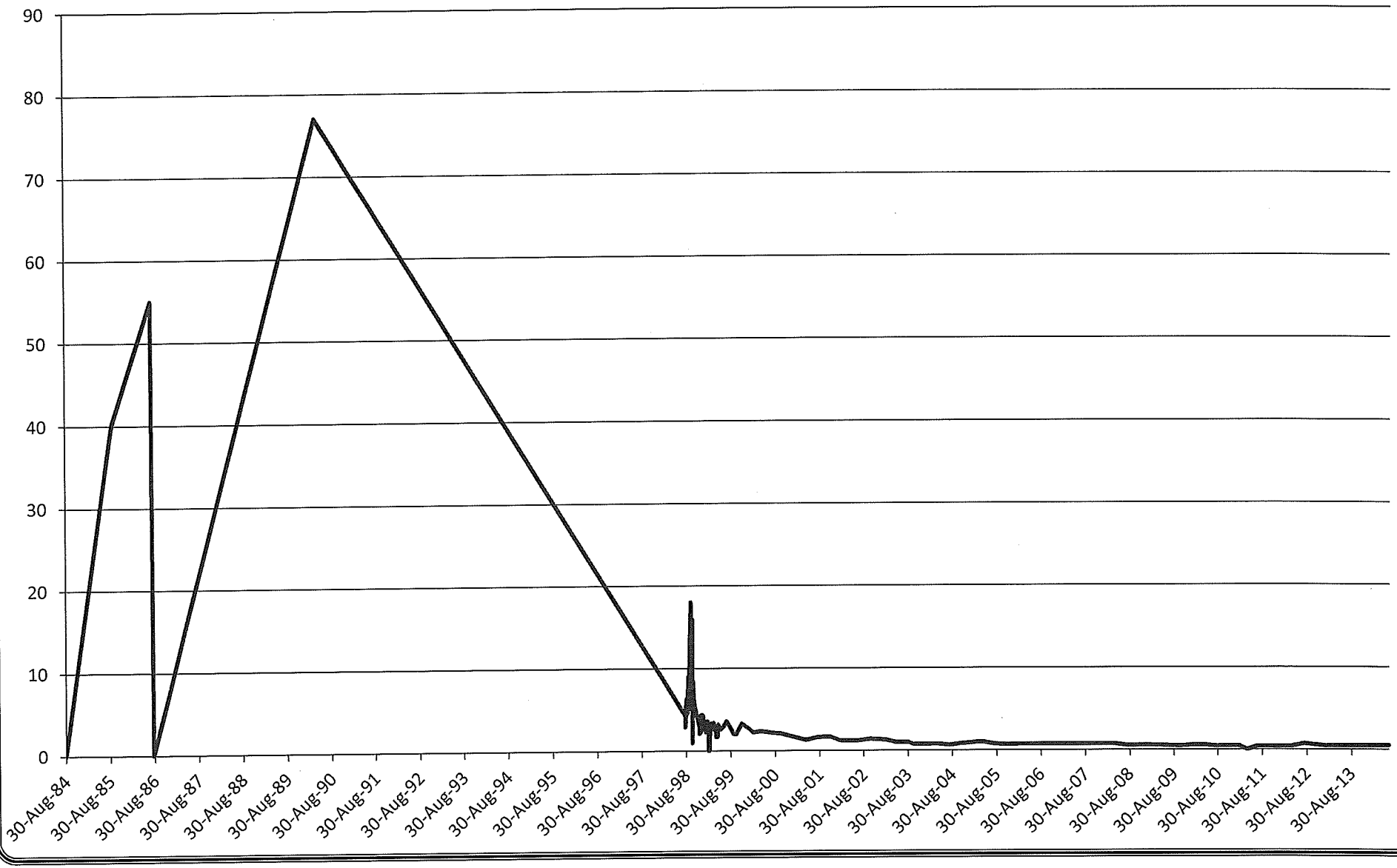
A.1.b. Groundwater Analytical Table

Table 2 Ground-Water Analytical Results, Waupaca Well #4/Former JJ Laundromat, Waupaca, Wisconsin

Well ID	Date Sampled	Relevant and Significant Analytical Results (µg/l)																											
		trans-1,2- Dichloroethene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	1,2-Dichloropropane	2,2-Dichloropropane	Di-Isopropyl Ether	Ethylbenzene	EDB (1,2- Dibromoethane)	Hexachlorobutadiene	Isopropylbenzene	p-Isopropyltoluene	Methylene Chloride	MTBE	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Trimethylbenzene	Vinyl Chloride	Xylenes
NR 140 Preventive Action Limit (µg/l)		20	0.02	0.02	0.5	NE	NE	140	0.005	NE	NE	NE	0.5	12	8	NE	10	7	0.02	0.5	200	NE	12	14	40	0.5	0.5	NE	96	0.02	1,000
NR 140 Enforcement Standard (µg/l)		100	0.2	0.2	5	NE	NE	700	0.05	NE	NE	NE	5	60	40	NE	100	70	0.2	5	1,000	NE	60	70	200	5	5	NE	480	0.2	10,000
RW1	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW2	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW8	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	3.1	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW8A	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW9	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW10	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW11	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW12	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW13	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW13A	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
MW14	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
PZ1	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
PZ2	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
Dup 1 (MW8)	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	2.3	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63
Dup 2 (MW2)	12/09/03	< 0.89	< 0.19	< 0.19	< 0.46	< 0.62	< 0.76	< 0.54	< 0.56	< 0.67	< 0.59	< 0.67	< 0.43	< 0.61	< 0.74	< 0.81	< 0.86	< 0.92	< 0.20	< 0.45	< 0.67	< 0.74	< 0.99	< 0.97	< 0.90	< 0.42	< 0.48	< 0.79	< 1.8	< 1.8	< 2.63

A.1.b. Groundwater Analytical Table

CW-4 Municipal Well
City of Waupaca
PCE concentrations



ATTACHMENT A.1.c.i. PCE PLOT

TABLE 4

SUMMARY OF SOIL ANALYTICAL DETECTIONS (MARCH 1997)
(HAND DRIVEN BORINGS)

WDNR-CITY OF WAUPACA
WAUPACA, WISCONSIN

9689081TBLISOIL-HB6.XLS

Parameter	Soil Standards	HB-1					HB-2				HB-3				HB-4				
		(3-5')	(8-10')	(8-10') DUP-10	(13-15')	(18-20')	(3-5')	(8-10')	(13-15')	(18-20')	(3-5')	(8-10')	(13-15')	(18-20')	(3-5')	(8-10')	(13-15')	(18-20')	(18-20') DUP-11
Volatile Organic Compounds (VOCs) **Analytical Methods: US EPA 8021**																			
n-Butylbenzene	**	<25	950	970	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Naphthalene	440*	<25	56	92	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Tetrachloroethene 30,700 / 4.5		1,300	53,000	1,100	1,200	271	71	43	154	82	86	29	<25	37	44	<25	75	256	<25
1,2,4-Trimethylbenzene	**	<25	45	74	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	**	<25	134	176	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25

Parameter	Soil Standards	HB-5		HB-6		HB-7		HB-8		HB-9		HB-10	
		(3-5')	(18-20')	(3-5')	(18-20')	(3-5')	(18-20')	(3-5')	(18-20')	(3-5')	(18-20')	(3-5')	(18-20')
Volatile Organic Compounds (VOCs) **Analytical Methods: US EPA 8021**													
n-Butylbenzene	**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Naphthalene	440*	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Tetrachloroethene 30,700 / 4.5		115	51	<25	26	37	<25	36	<25	<25	28	188	<25
1,2,4-Trimethylbenzene	**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	**	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25

EXPLANATION:

All analytical results presented in parts per billion (ppb).

* = WDNR Interim Guidance on Soil Cleanup levels for PAH's, Publication RR-519-97

** = No standards currently exist.

*** = Site specific RCL established by WDNR

Exceedances of the NR720 Soil Standards are shaded.

A.2. Preremedial Soil Analytical Table

TABLE 5
SUMMARY OF SOIL ANALYTICAL DETECTIONS (MARCH 1997

WAUPACA, WISCONSIN

9689021TBL\SOIL-ABs.XLS

Parameter	Soil * Standards	AB-1 (30 degree angle)							AB-2 (45 degree angle)				
		Distance Along Drill Stem											
		(6-7')	16.5-17.5	(26-27')	(30-32')	(40-42')	(45-47')	(47-48')	(13-15')	(22-24')	(33-35')	(38-40')	(61-63')
		Actual Vertical Depth [1] (midpoint of soil sample)											
		5.6'	14.7'	22.9'	26.8'	35.5'	39.8'	41.1'	14'	23'	34'	39'	62'
Volatile Organic Compounds (VOCs) **Analytical Methods: US EPA 8021**													
n-Butylbenzene	**	<25	<25	<25	<25	<25	<25	**42**	<25	<25	<0.073	<0.073	<25
Ethylbenzene	**2900**	<25	<25	<25	<25	<25	<25	**52**	<25	<25	<0.095	<0.095	<25
Tetrachloroethene	30,700 / 4.5	<25	**30**	**330**	**1,030**	**125**	**47**	<25	<25	<25	**126**	**135**	<25
Toluene	**1500**	<25	<25	<25	<25	<25	<25	**157**	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	**	<25	<25	<25	<25	<25	<25	**52**	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	**	<25	<25	<25	<25	<25	<25	**39**	<25	<25	<25	<25	<25
Xylenes - Total	**4100**	<50	<50	<50	<50	<50	<50	**124**	<50	<50	<50	<50	<25

EXPLANATION:

All analytical results presented in parts per billion (ppb).

* = WDNR NR720 Soil Standards

** = No standards currently exist.

*** = Site specific RCL established by WDNR

Exceedances of the NR720 Soil Standards are shaded.

Note:

[1] The calculations for actual vertical depth (AVD) from distance along drill stem (DDS) are:

AB-1; AVD = DDS (Cosine 30 degrees)

AB-2; AVD = DDS

A.2. Preremedial Soil Analytical Table

TABLE 6

SUMMARY OF SOIL ANALYTICAL DETECTIONS (MARCH 1997)
(VERTICAL BORINGS)
WDNR-CITY OF WAUPACA
WAUPACA, WISCONSIN

268502178\LSOIL-SBs.XLS

Parameter	PZ-1					PZ-2						SB-2					SB-3				SB-4			
	(8-10')	(18-20')	(23-25')	(43-45')	(45-47')	(8-10')	(13-15')	(18-20')	(23-25')	(38-40')	(43-45')	(8-10')	(18-20')	(33-35')	(46-47')	(46-47') DUP-12	(3-5')	(13-15')	(23-25')	(33-35')	(8-10')	(18-20')	(23-25')	(33-35')
Volitile Organic Compounds (VOCs) Analytical Methods: US EPA 8021																								
Tetrachloroethene 30,700 / 4.5	<25	<25	142	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	36	<25

Parameter	SB-5A								SB-5		SB-6A								SB-6B	
	(20-22')	(20-22') DUP-13	(28-30')	(28-30') DUP-14	(35-37')	(43-45')	(43-45') DUP-15	(48-50')	(63-65')	(73-75')	(22-24')	(28-30')	(32-34')	(36-38')	(40-42')	(48-50')	(50-52')	(58-60')	(63-65')	(88-90')
Volitile Organic Compounds (VOCs) Analytical Methods: US EPA 8021																				
Tetrachloroethene 20 ***	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25

EXPLANATION:
All analytical results presented in parts per billion (ppb).
** = No standards currently exist.
Exceedances of the NR720 Soil Standards are shaded.
*** = Site specific RCL established by WDNR

A.2. Preremedial Soil Analytical Table

ATTACHMENT A.5.
VAPOR ANALYTICAL TABLE

DATE	ADDRESS/LOCATION	PCE (ppbv)	WI VAL/RSL
07/23/2014	801 Churchill SS-1	710	270 (ss)
07/23/2014	801 Churchill SS-2	160	270 (ss)
07/23/2014	801 Churchill SS-3	380	270 (ss)
09/16/2014	727 Churchill Basement Indoor Air	0.13	6.2 (ia)
09/16/2014	727 Churchill Background Air	<0.085	
09/16/2014	727 Churchill Sub-Slab Vapor	20	62 (ss)

ia = indoor air

ss = sub-slab

VAL = Vapor Action Level

RSL = Risk Screening Level

Table 1 Water Level Data, Waupaca Well #4/Former JJ Laundromat, Waupaca, Wisconsin

Well I.D.	Riser Elevation (feet)	Date	Depth to Water (feet) Below Riser	Water Table Elevation (feet)
MW2	843.49	12/09/03	27.46	816.03
MW8	812.21	12/09/03	5.92	806.29
MW8A	816.6	12/09/03	2.23	814.37
MW9	841.68	12/09/03	28.95	812.73
MW10	843.01	12/09/03	30.43	812.58
MW11	842.41	12/09/03	29.86	812.55
MW12	839.11	12/09/03	27.31	811.80
MW13	842.12	12/09/03	30.97	811.15
MW13A	841.67	12/09/03	30.09	811.58
MW14	844.82	12/09/03	35.04	809.78
MW15	840.74	12/09/03	27.08	813.66
PZ1	845.58	12/09/03	27.71	817.87
PZ2	843.02	12/09/03	28.45	814.57

ATTACHMENT B

B.1. LOCATION MAPS
- a. Location Map
- b. Detailed Site Map
- c. RR Sites Map

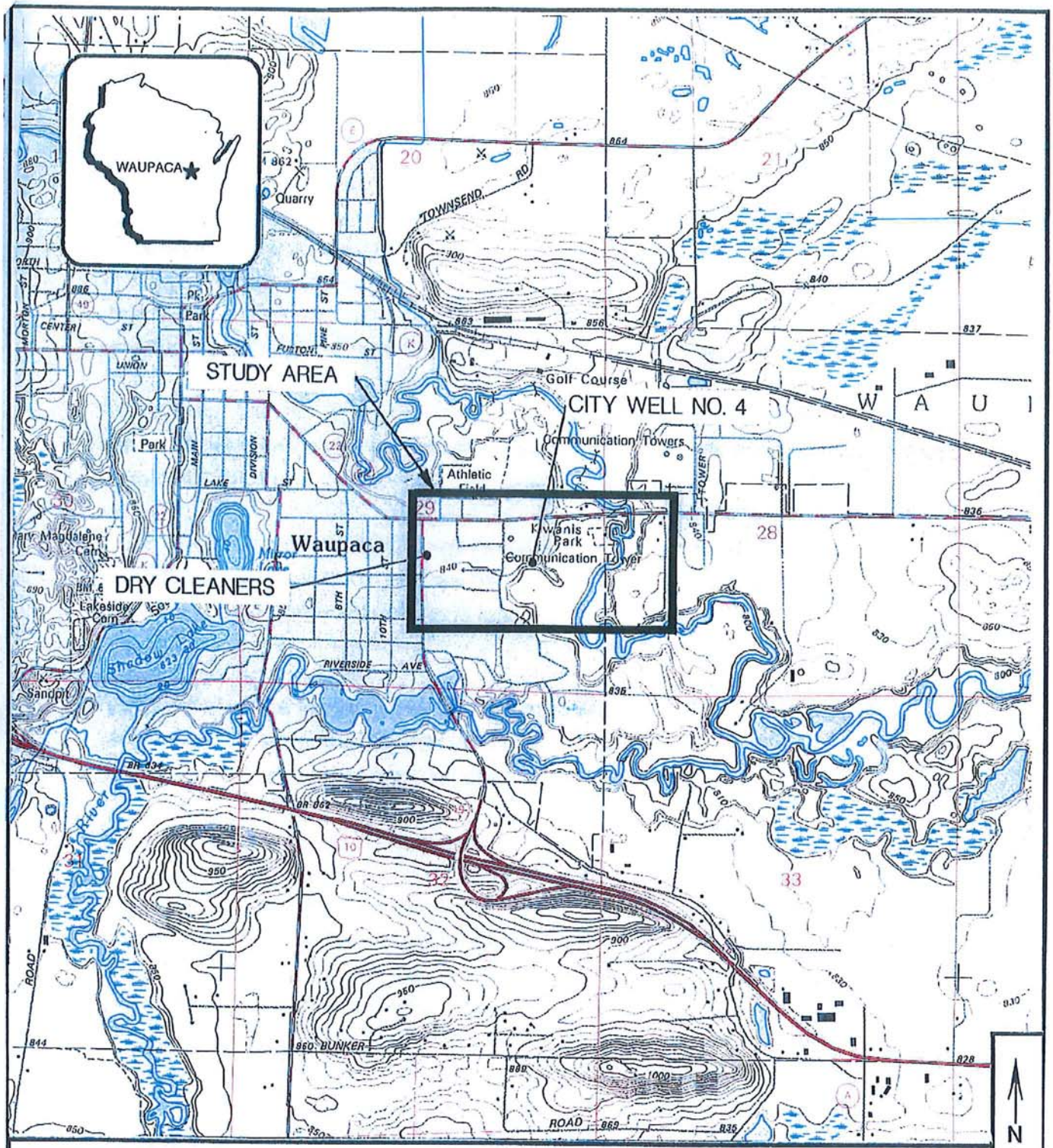
B.2. SOIL FIGURES
- a. Pre-Remedial Soil Contamination
  - 1- PCE concentrations from 3’-5’ below ground surface
  - 2- PCE concentrations from 8’-10’ below ground surface
  - 3- PCE concentrations from 13’-15’ below ground surface
  - 4- PCE concentrations from 18’-20’ below ground surface
  - 5- PCE concentrations from 23’-25’ below ground surface
- b. Post-Remedial Soil Contamination

  Not Applicable: Soil contamination is located below the building and has not been excavated or actively treated. Refer to figures in B.2.a.
- c. Pre/Post Remaining Soil Contamination

B.3. GROUNDWATER FIGURES
- a. Geologic Cross-Section Figure
- b. Groundwater Isoconcentration
- c. Groundwater Flow Direction
- d. Monitoring Wells

B.4. VAPOR MAPS AND OTHER MEDIA
- a. Vapor Intrusion Map
- b. Other Media of Concern

  Not Applicable – no sediment or surface water impacts
- c. Other - Not Applicable



SOURCE: USGS, WAUPACA QUADRANGLE, WISCONSIN-WAUPACA CO., 7.5 MINUTE SERIES (TOPOGRAPHIC)

SITE LOCATION MAP

WDNR-WAUPACA
CITY WELL NO. 4
WAUPACA, WISCONSIN

SCALE:	1:24,000
DATE:	06-06-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
JOB NUMBER:	978507
REVISION DATE:	

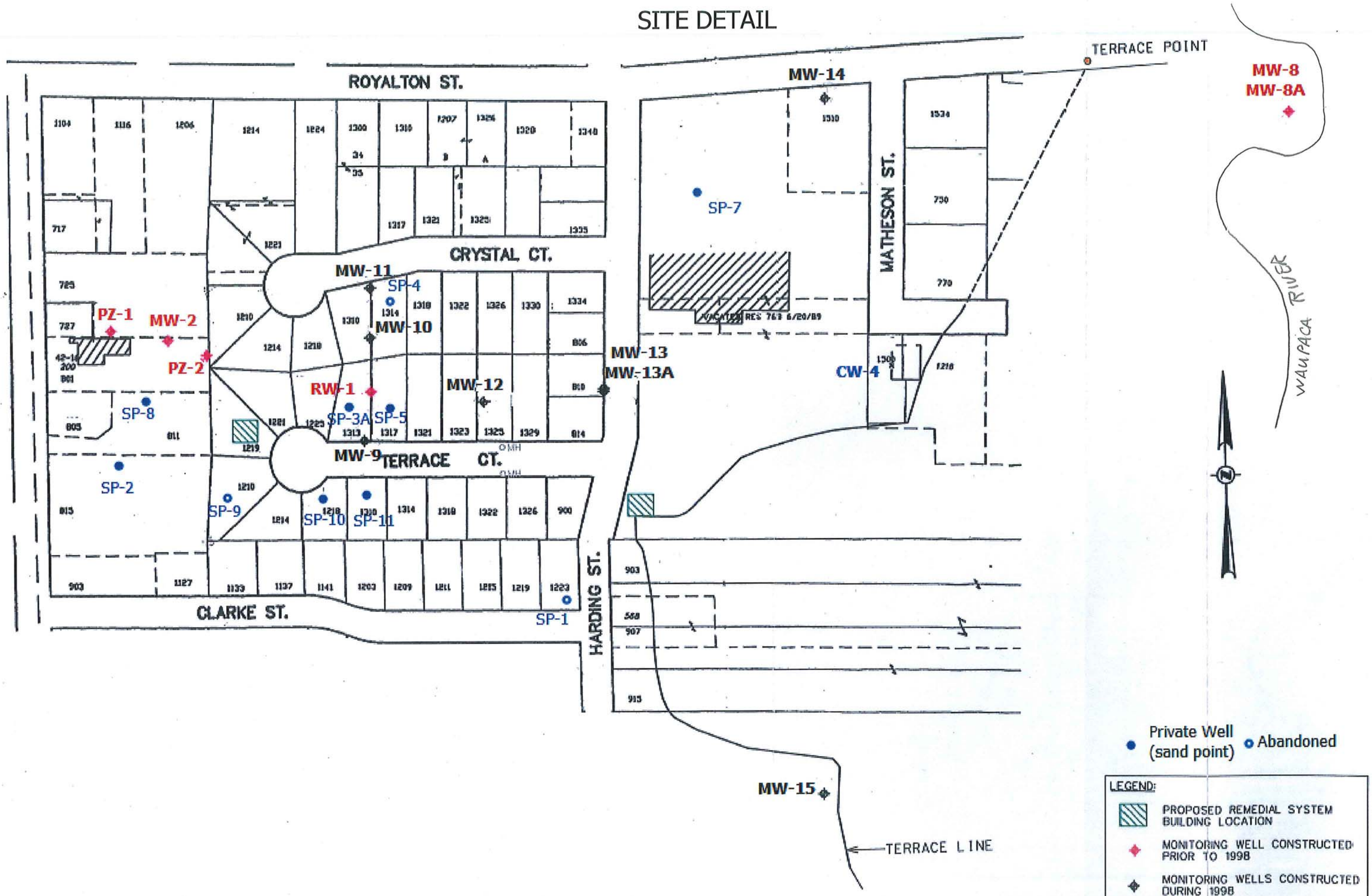
GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS & SCIENTISTS

QUAD-MAP.CVS

FIGURE 1

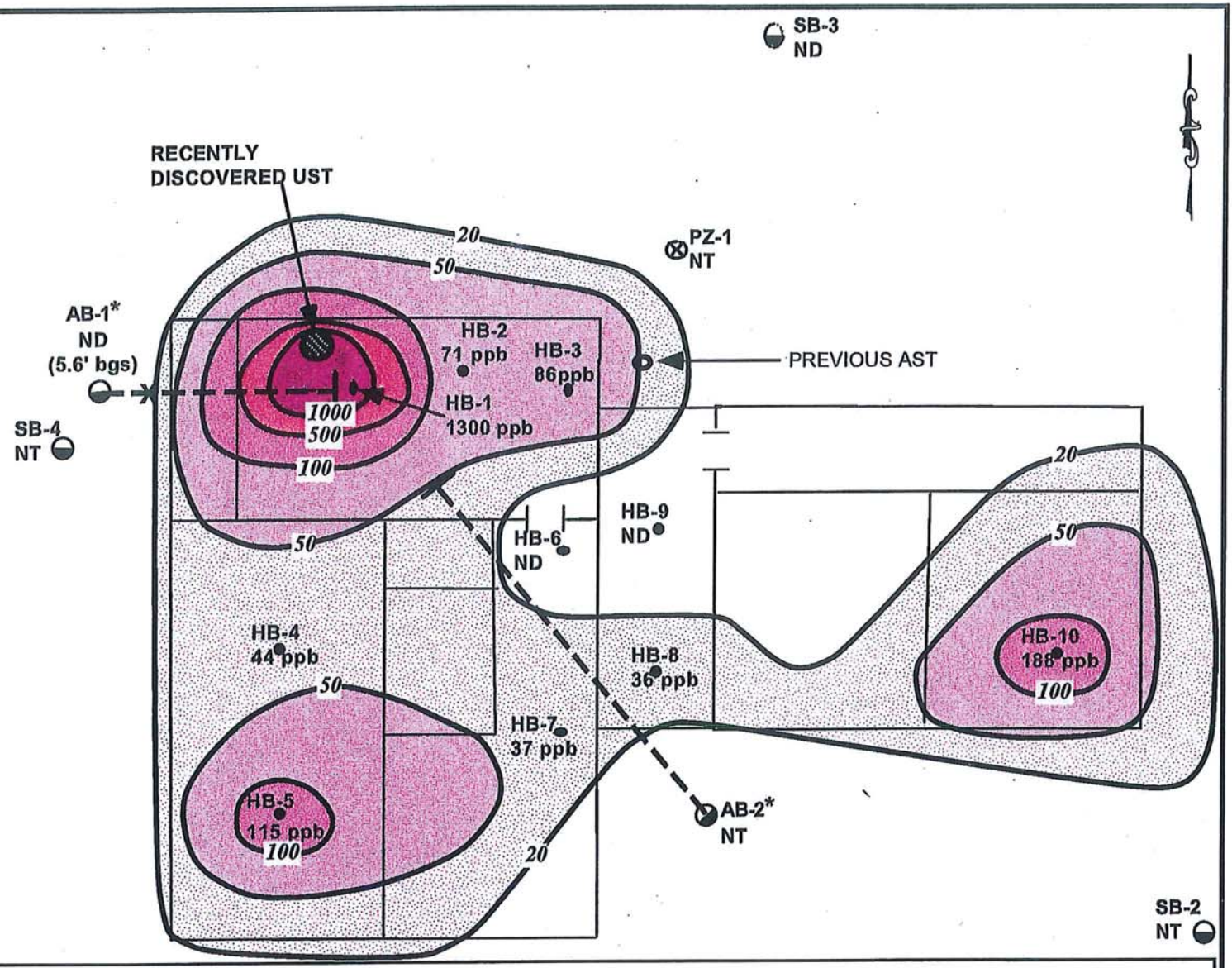
B.1.a. LOCATION MAP

SITE DETAIL



B.1.b DETAILED SITE MAP


B.1.c.
RR SITES MAP
WAUPACA MOTOR SALES (FORMER)
WAUPACA MOTOR SALES
AUTO STOP SELF-SERVICE STATION
HANSON PROPERTY
WAUPACA PUBLISHING CO
J & J CLEANERS - WAUPACA WELL #4
ZWICKER KNITTING MILLS
Michigan St
Tarriet St
Crystal Ct
Matheson St
Terrace Ct
Columbia St
Clark St
9Th St
Th St



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 — PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ("X' indicates lateral sample location at the depth interval indicated in parenthesis)

*NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

bgs BELOW GROUND SURFACE

PCE CONTAMINATION CONTOURS AT 3 TO 5 FEET BELOW GROUND SURFACE

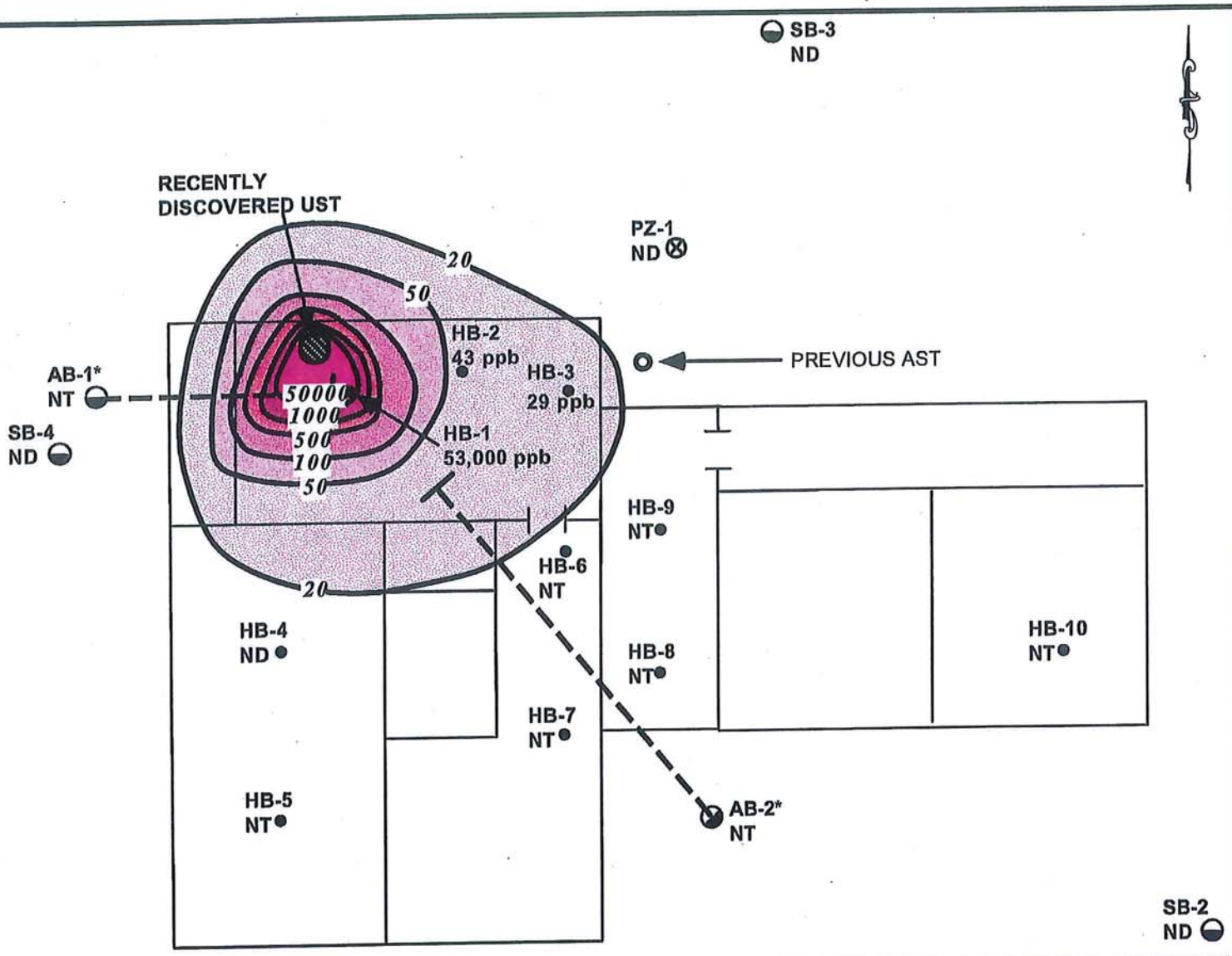
WDNR-WAUPACA CITY WELL NO. 4 WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	02-13-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	3-5CONT.CVS
SCALE:	1"=15'
REVISED:	11-06-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE

B.2.a. PRE-REMEDIAL SOIL



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 — PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ("X' indicates lateral sample location at the depth interval indicated in parenthesis)

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

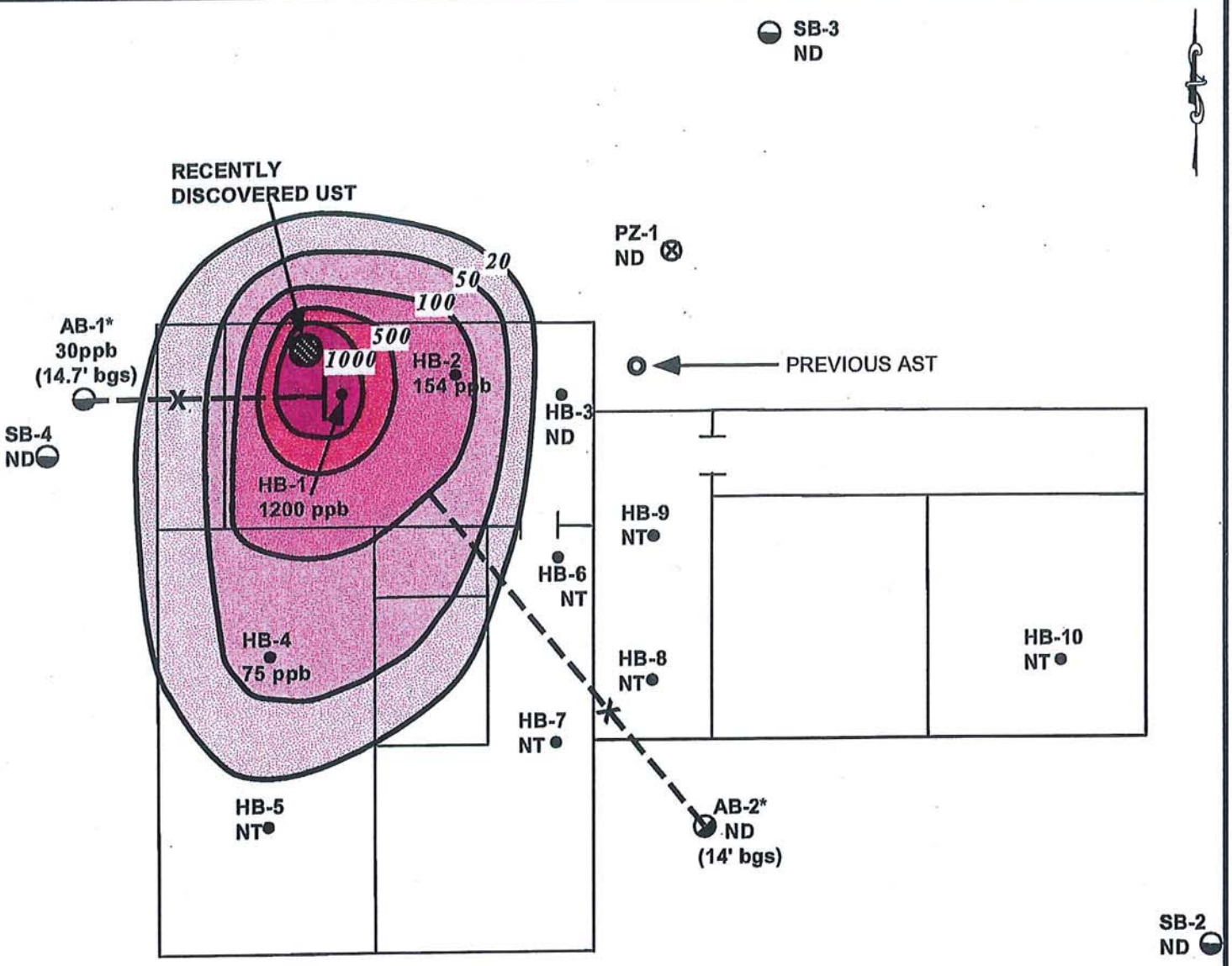
PCE CONTAMINATION CONTOURS AT 8 TO 10 FEET BELOW GROUND SURFACE

WDNR-WAUPACA CITY WELL NO. 4 WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	06-25-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	8-10CONT.CVS
SCALE:	1"=15'
REVISED:	11-06-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE 2



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 — PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ("X' indicates lateral sample location at the depth interval indicated in parenthesis)

*NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

bgs BELOW GROUND SURFACE

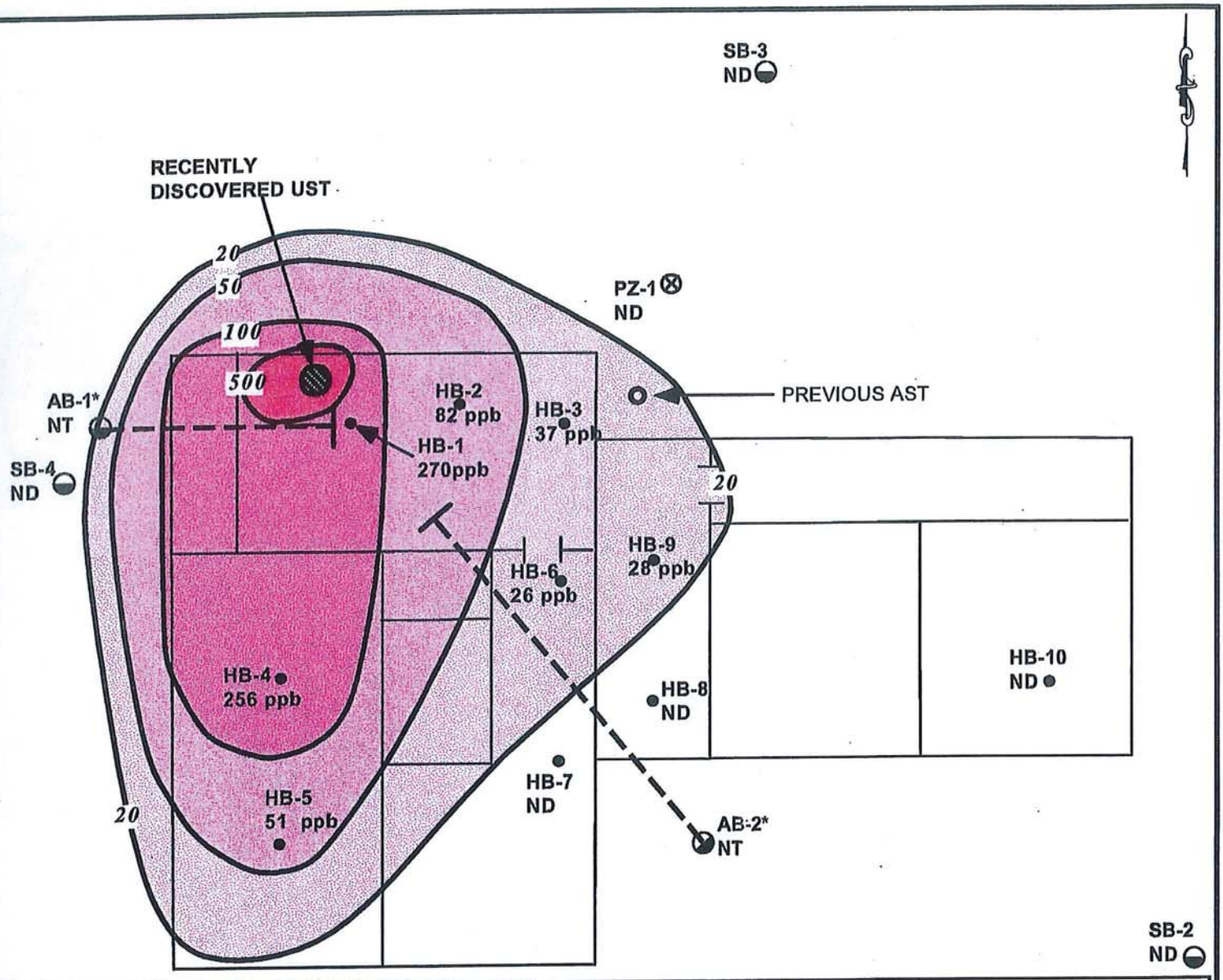
PCE CONTAMINATION CONTOURS AT 13 TO 15 FEET BELOW GROUND SURFACE

WDNR-WAUPACA CITY WELL NO. 4 WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	06-25-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	13-15CON.CVS
SCALE:	1"=15'
REVISED:	11-06-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE 3



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 — PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ('X' indicates lateral sample location at the depth interval indicated in parenthesis)

*NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

bgs BELOW GROUND SURFACE

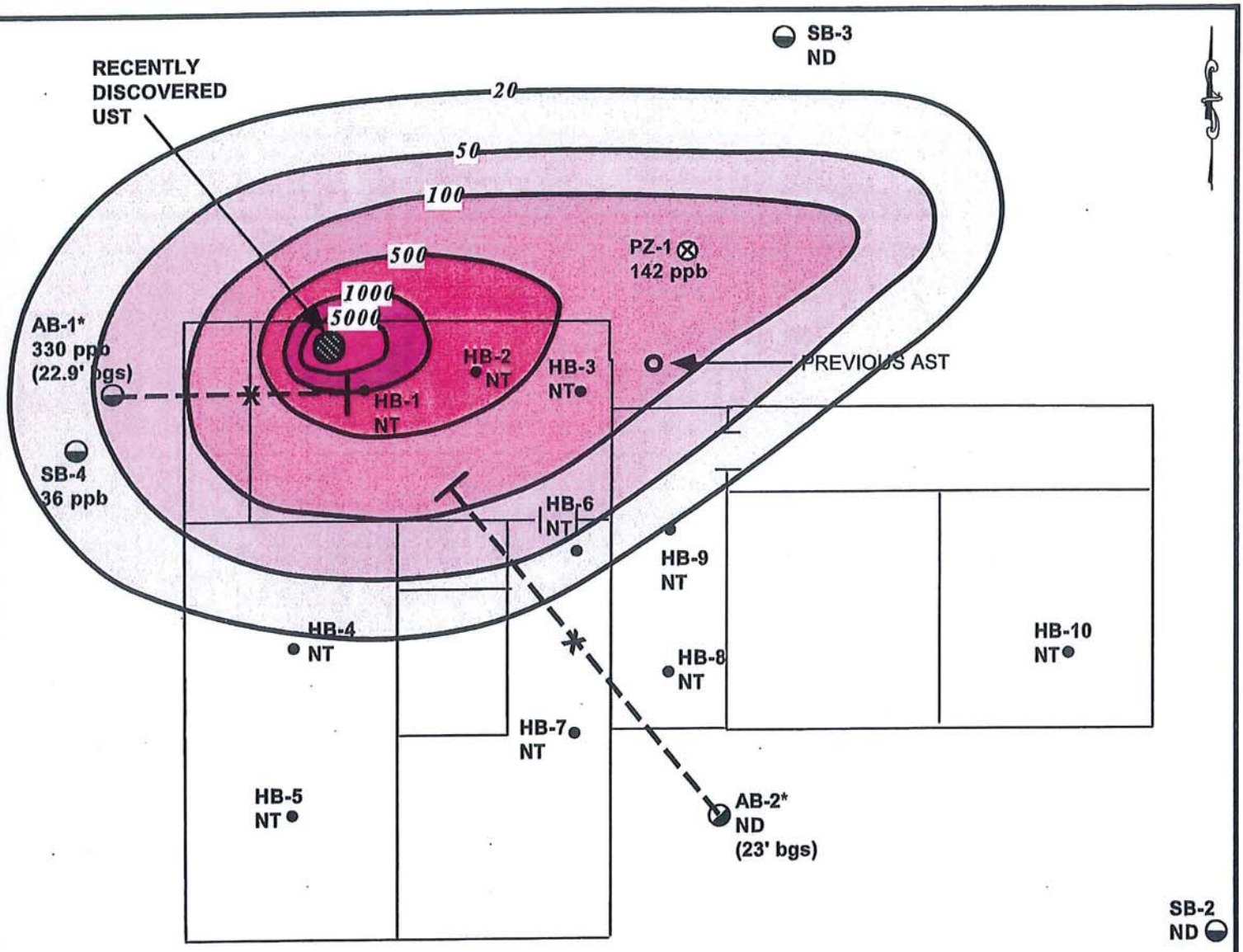
PCE CONTAMINATION CONTOURS AT 18 to 20 FEET BELOW GROUND SURFACE

WDNR-WAUPACA CITY WELL NO. 4 WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	06-25-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	18-20coCON.CVS
SCALE:	1"=15'
REVISED:	11-06-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE 4



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ("X' indicates lateral sample location at the depth interval indicated in parenthesis)

*NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

bgs BELOW GROUND SURFACE

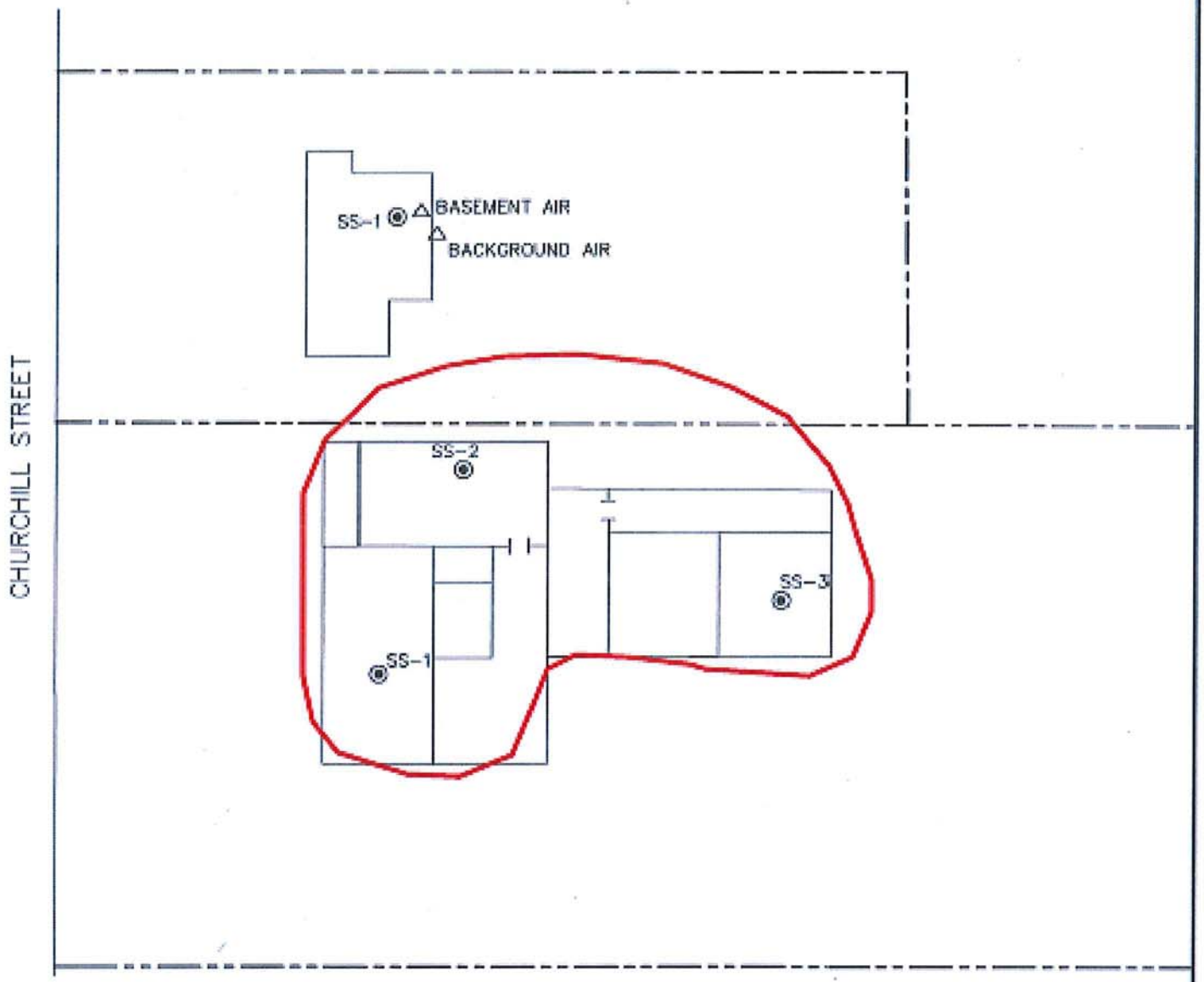
PCE CONTAMINATION CONTOURS AT 23 TO 25 FEET BELOW GROUND SURFACE

WDNR-WAUPACA CITY WELL NO. 4 WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	02-13-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	23-25CON.CVS
SCALE:	1"=15'
REVISED:	11-07-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE 5



N

30 0 30

SCALE: 1" = 30'

LEGEND

- SUB-SLAB VAPOR SAMPLE LOCATION
- INDOOR OR OUTDOOR AIR SAMPLE LOCATION
- APPROXIMATE PROPERTY LINE

NOTES:

1. SITE PLAN BASED ON GRAEF ANHALT SCHLOEMER FIGURE 7, PROJECT 968902 DATED JUNE 17, 1997.
2. SAMPLE LOCATIONS ARE APPROXIMATE.

CLIENT		SITE	J & J LAUNDRY 801 CHURCHILL ST. WAUPACA, WISCONSIN

B.2.c. Extent of Soil Contamination

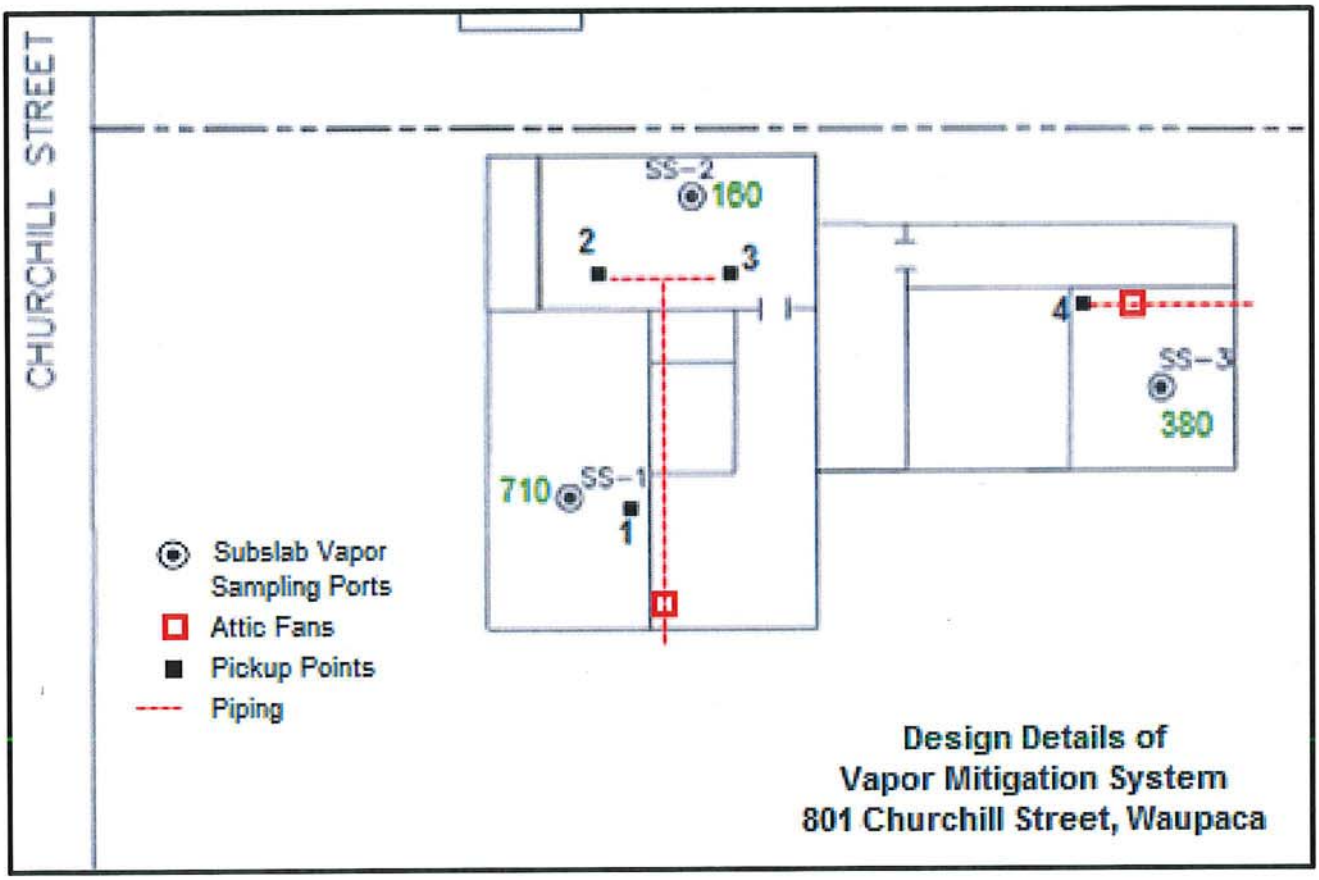
PROJECT NO.	25213180.08	DRAWN BY:	AHB
DRAWN:	07/31/14	CHECKED BY:	REL
REVISED:	08/01/14	APPROVED BY:	REL 09/29/14

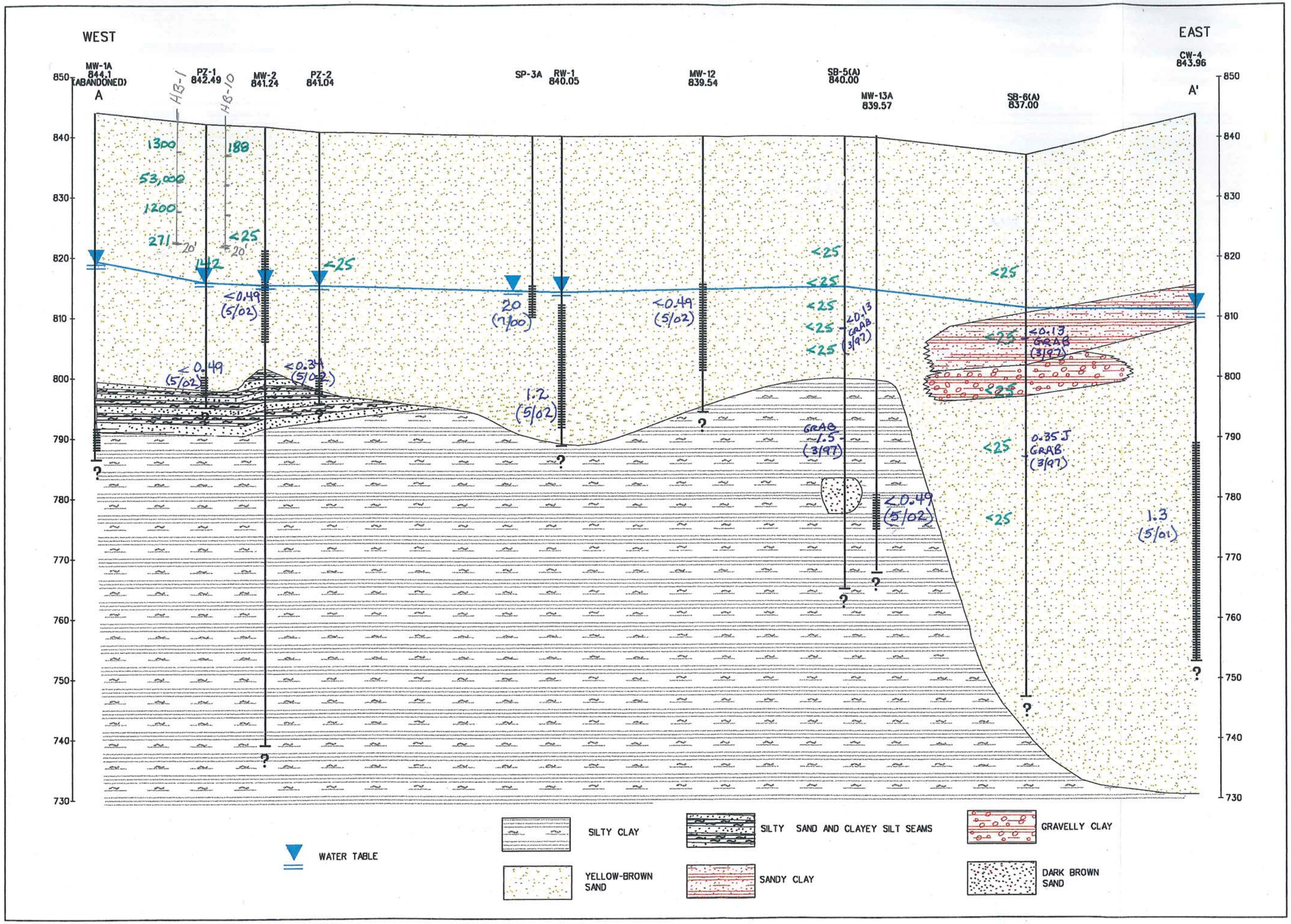
ENGINEER

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

FIGURE 1


Approximate Parcel Lines
725
727
Approximate Extent of Soil Contamination
J & J Laundry
801 Churchill Street
BRRTS #02-69-000092
Cap=Building & Pavement
801
N
12m
75ft
© 2014 Di


CHURCHILL STREET
SS-2
160
2
3
4
SS-3
380
710
SS-1
1
Subslab Vapor Sampling Ports
Attic Fans
Pickup Points
Piping
Design Details of
Vapor Mitigation System
801 Churchill Street, Waupaca



GRAEF
ANHALT
SCHLOEMER
and Associates Inc.
ENGINEERS & SCIENTISTS

ENVIRONMENTAL SERVICES
DIVISION

OTHER OFFICES LOCATED AT:

GREEN BAY, WISCONSIN
MADISON, WISCONSIN
CHICAGO, ILLINOIS

PROJECT NAME:

WDNR - WAUPACA
CITY WELL NO. 4
WAUPACA, WISCONSIN

SHEET TITLE:

GEOLOGIC CROSS-SECTION
A-A'

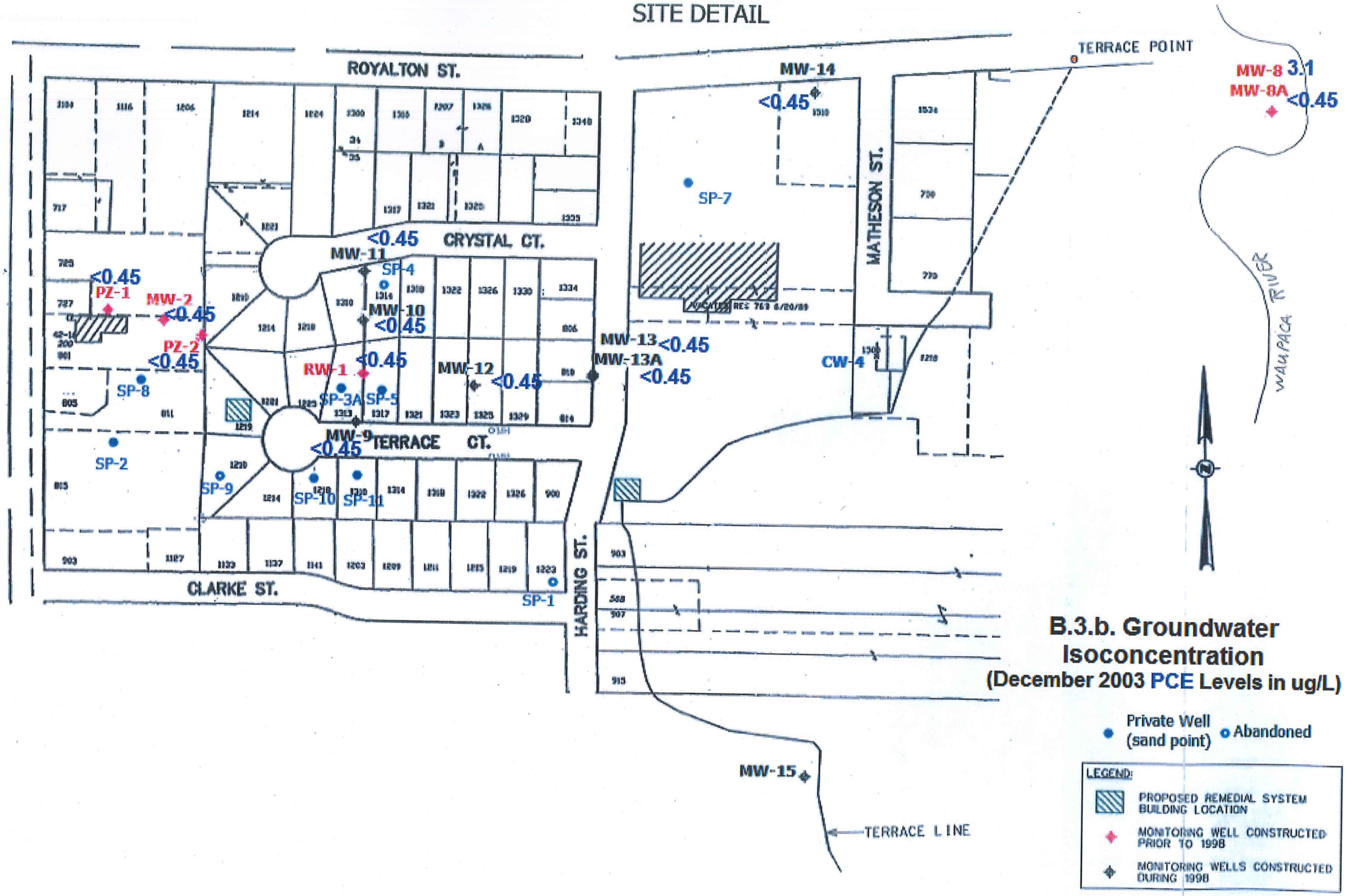
Soil PCE (ppb)
GW PCE (ppb)
(DATE)

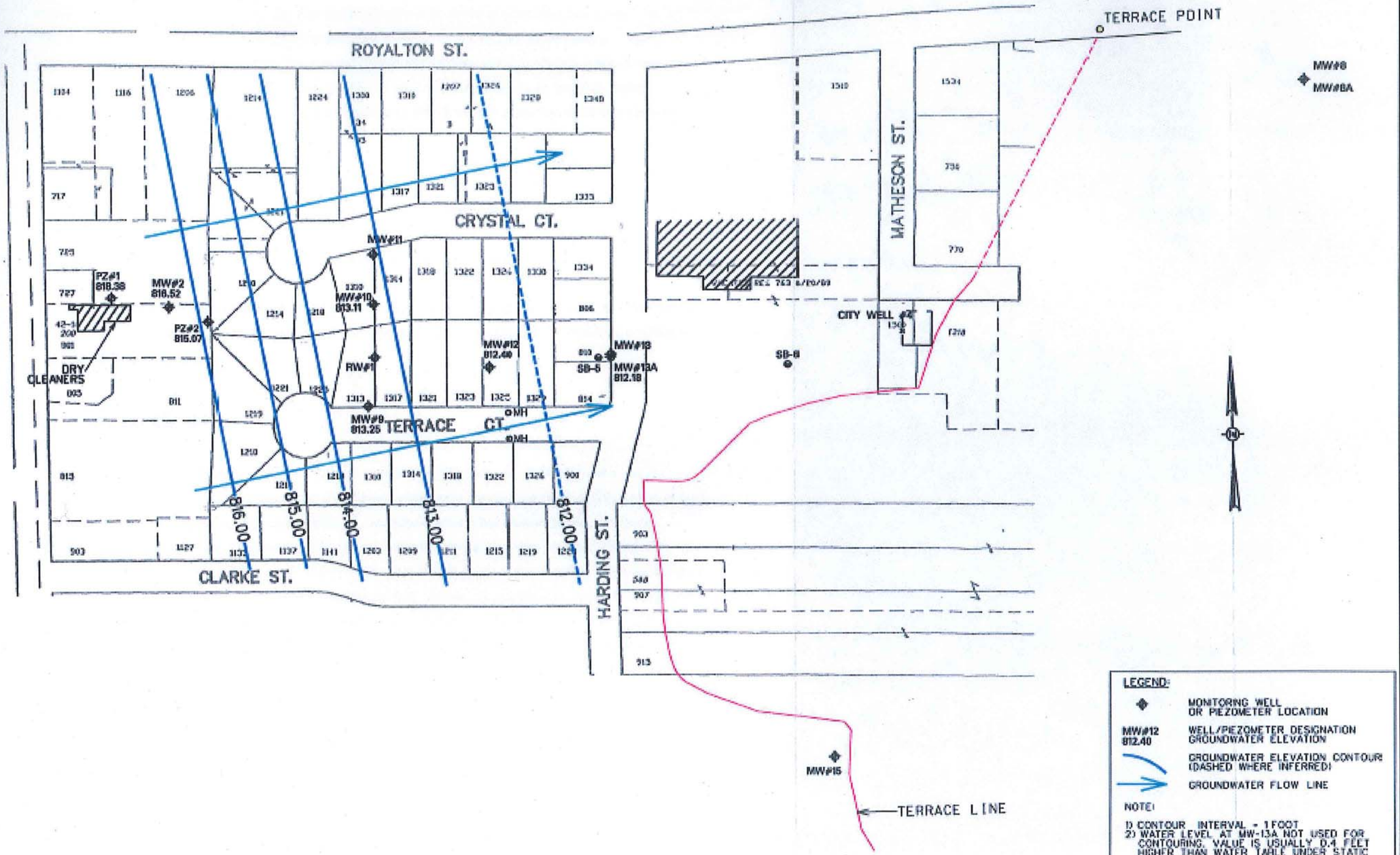
PROJECT NUMBER:	978507
DATE:	06-11-97
PROJECT MGR:	WPF
DRAWN BY:	JZ/TMW
FILE NAME:	CROSS-WE.DGN
SCALE:	HOR. 1" = 150' VERT. 1" = 15' VERT. EXAG. = 10X
REVISED:	11-18-98

FIGURE 4

B.3.a. GEOLOGIC CROSS SECTION

SITE DETAIL


ROYALTON ST.
CRYSTAL CT.
TERRACE CT.
CLARKE ST.
HARDING ST.
MATHESON ST.
TERRACE POINT
WAIPACA RIVER
MW-11 <0.45
MW-10 <0.45
MW-12 <0.45
MW-13 <0.45
MW-13A <0.45
MW-14 <0.45
MW-9 <0.45
MW-8 3.1
MW-8A <0.45
MW-15
PZ-1 <0.45
MW-2 <0.45
PZ-2 <0.45
RW-1 <0.45
SP-1
SP-2
SP-3A
SP-4
SP-5
SP-7
SP-8
SP-9
SP-10
SP-11
CW-4
VACATED RES 769 6/20/89
TERRACE LINE
B.3.b. Groundwater Isoconcentration
(December 2003 PCE Levels in ug/L)
Private Well (sand point)
Abandoned
LEGEND:
PROPOSED REMEDIAL SYSTEM BUILDING LOCATION
MONITORING WELL CONSTRUCTED PRIOR TO 1998
MONITORING WELLS CONSTRUCTED DURING 1998



GRAEF ANHALT SCHLOEMER and Associates Inc.

One Honey Creek Corporate Center
125 South 84th Street, Suite 401
Milwaukee, WI 53214-1470
414 259-1500
FAX 259-0037

Other offices located in:

Green Bay, Wisconsin
Madison, Wisconsin
Chicago, Illinois

PROJECT NAME:

WDNR - WAUPACA
CITY WELL NO. 4
WAUPACA, WISCONSIN

SHEET TITLE:

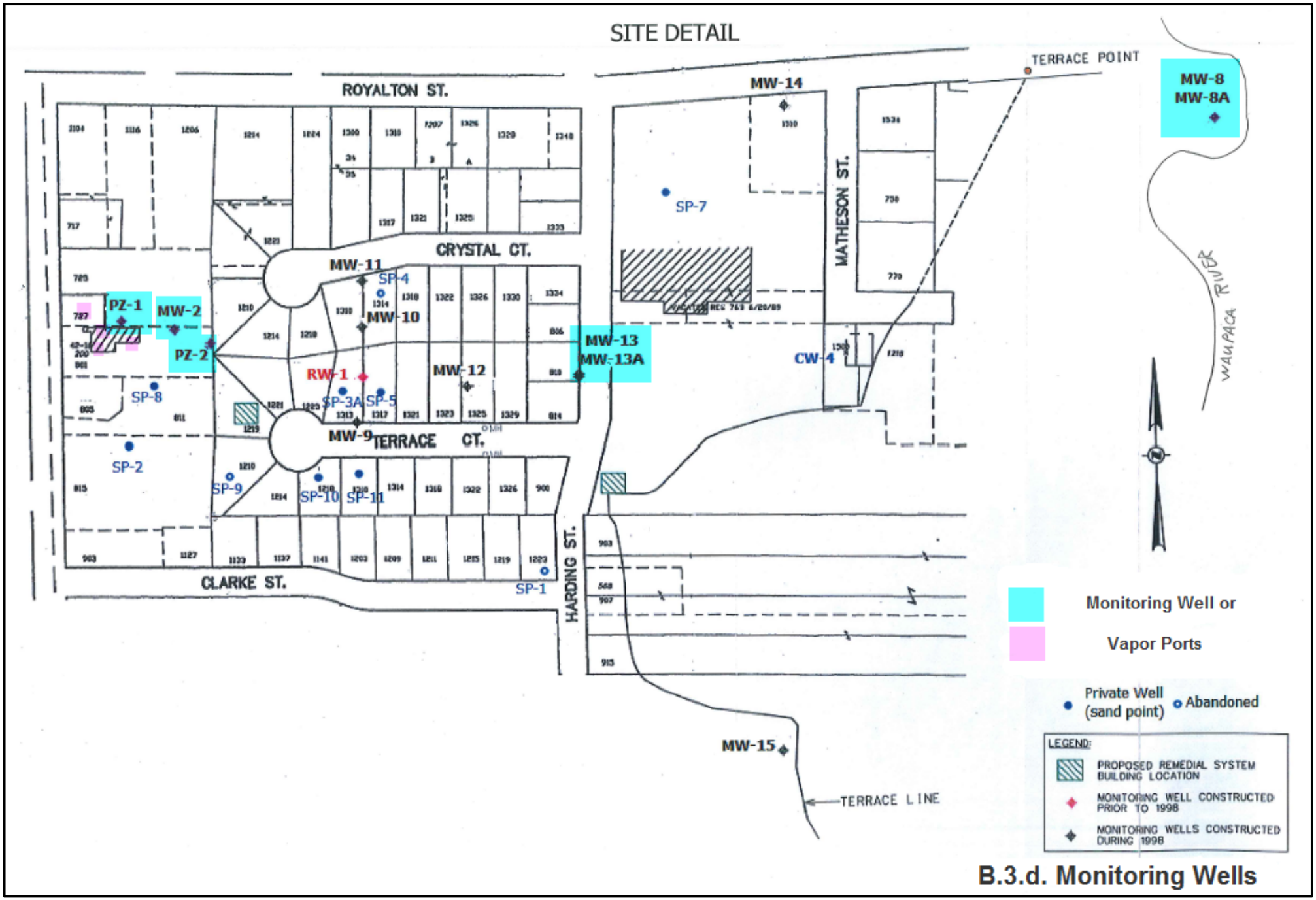
WATER TABLE CONTOURS

ON MAY 9, 2002

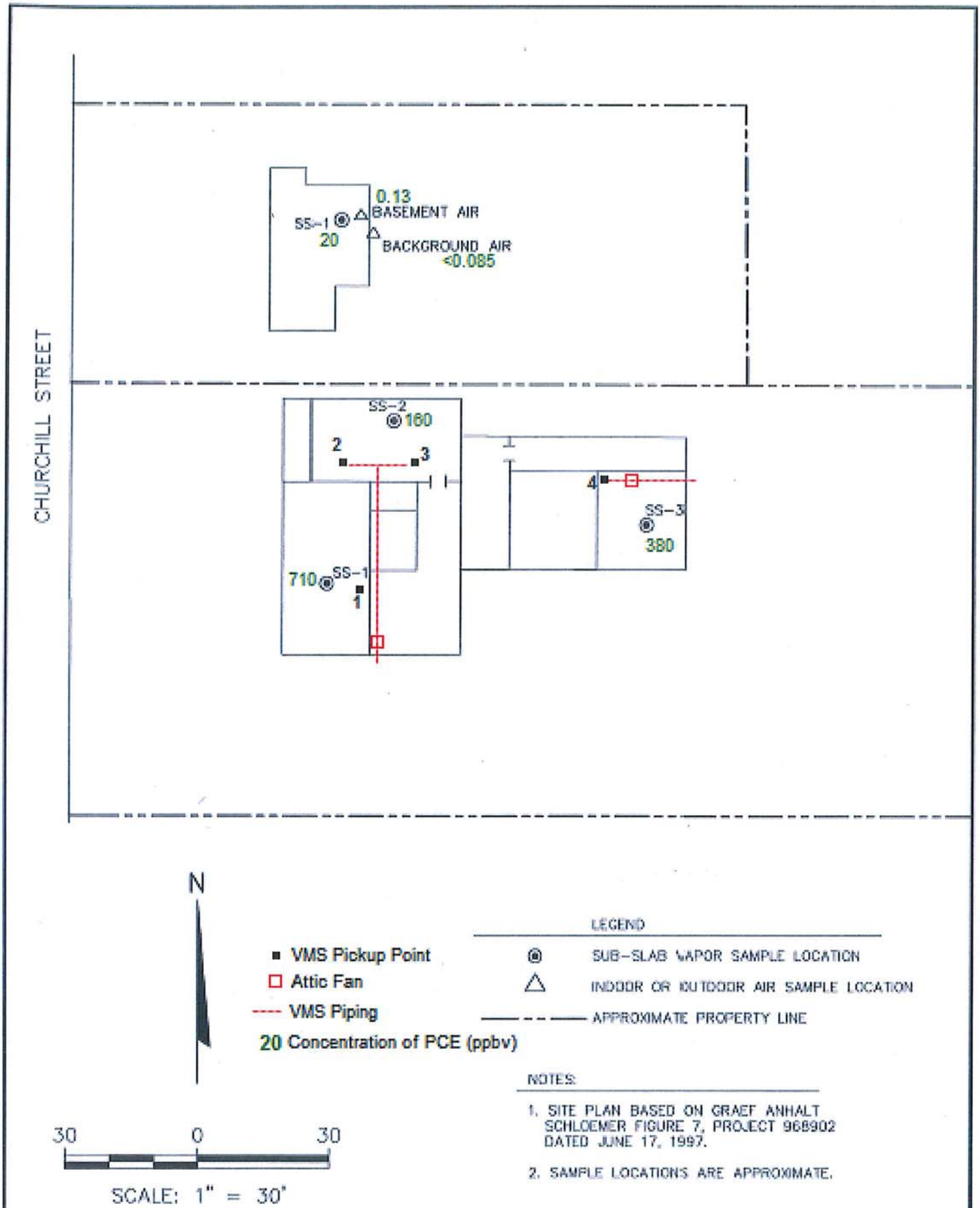
NO.	DATE	REVISIONS	BY

PROJECT NUMBER: 978507
DATE: 09-18-02
DESIGNED BY: CBP
DRAWN BY: JZ
CHECKED BY: CBP
PROJECT MANAGER: WPF
FILE: 507ps5-03.dgn
SCALE: HORZ.: 1" = 200'

B.3.c. Groundwater Flow Direction



B.3.d. Monitoring Wells



NOTES:

1. SITE PLAN BASED ON GRAEF ANHALT SCHLOEMER FIGURE 7, PROJECT 968902 DATED JUNE 17, 1997.
2. SAMPLE LOCATIONS ARE APPROXIMATE.

CLIENT		SITE	J & J LAUNDRY 801 CHURCHILL ST. WAUPACA, WISCONSIN
			B.4.a. Vapor Map

PROJECT NO.	25213180.08	DRAWN BY:	AHB	ENGINEER	SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830
DRAWN:	07/31/14	CHECKED BY:	REL		FIGURE 1
REVISED:	08/01/14	APPROVED BY:	REL 09/29/14		

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 http://dnr.wi.gov/topic/Brownfields/Contact.html

WISCONSIN
DEPT. OF NATURAL RESOURCES

ATTACHMENT D

D.1. LOCATION MAPS
- Figures 1 thru 7

D.2. BRIEF DESCRIPTIONS

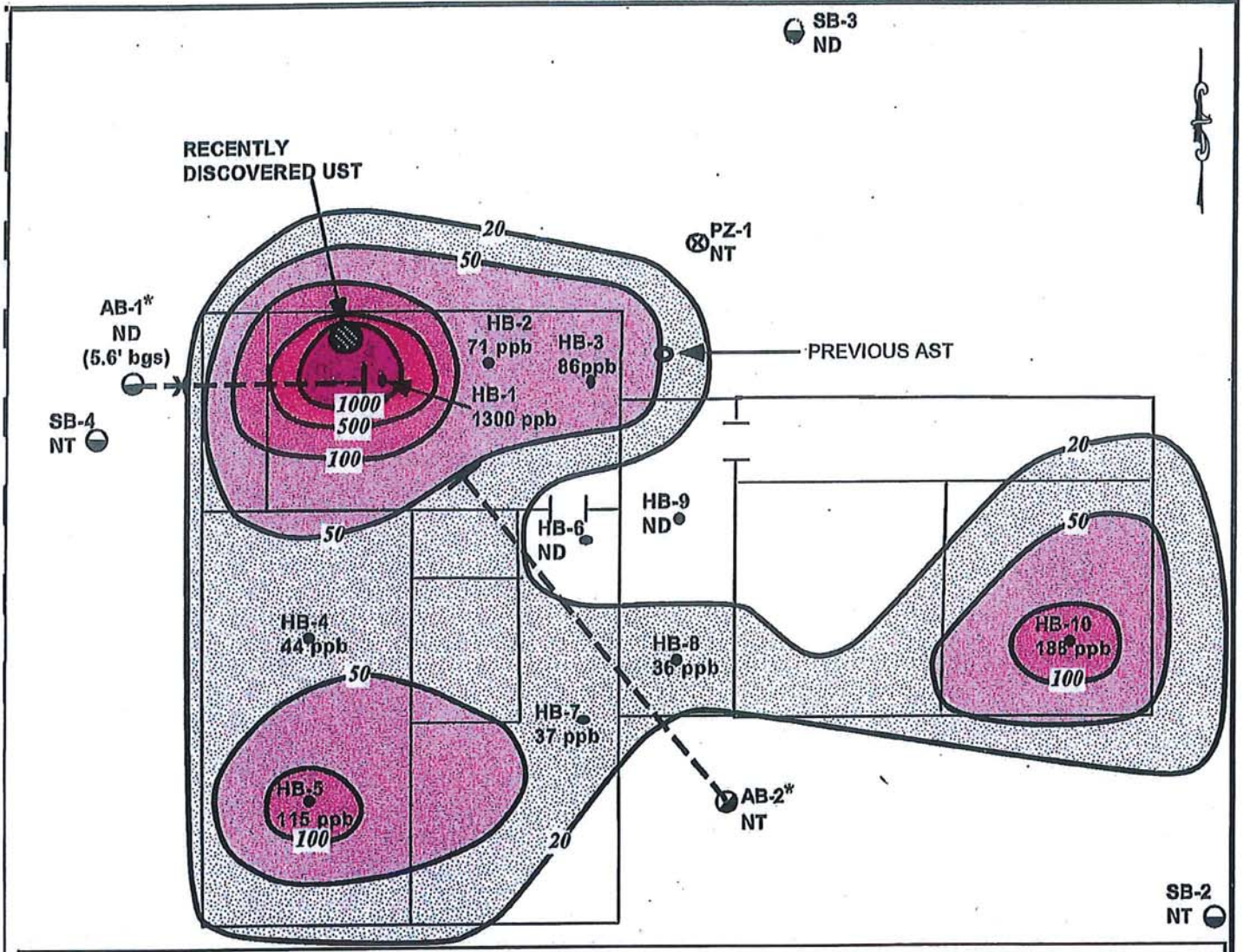
D.3. DESCRIPTION OF MAINTENANCE ACTION(S)
a. Cap Maintenance Plan
b. Vapor Mitigation System Maintenance Plan

D.4. INSPECTION LOG

D.5. CONTACT INFORMATION
Refer to D.3.

D.6. PHOTOS
Refer to D.3. and D.4.

D.1.
LOCATION MAPS



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ("X' Indicates lateral sample location at the depth interval indicated in parenthesis)

*NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

bgs BELOW GROUND SURFACE

PCE CONTAMINATION CONTOURS AT 3 TO 5 FEET BELOW GROUND SURFACE

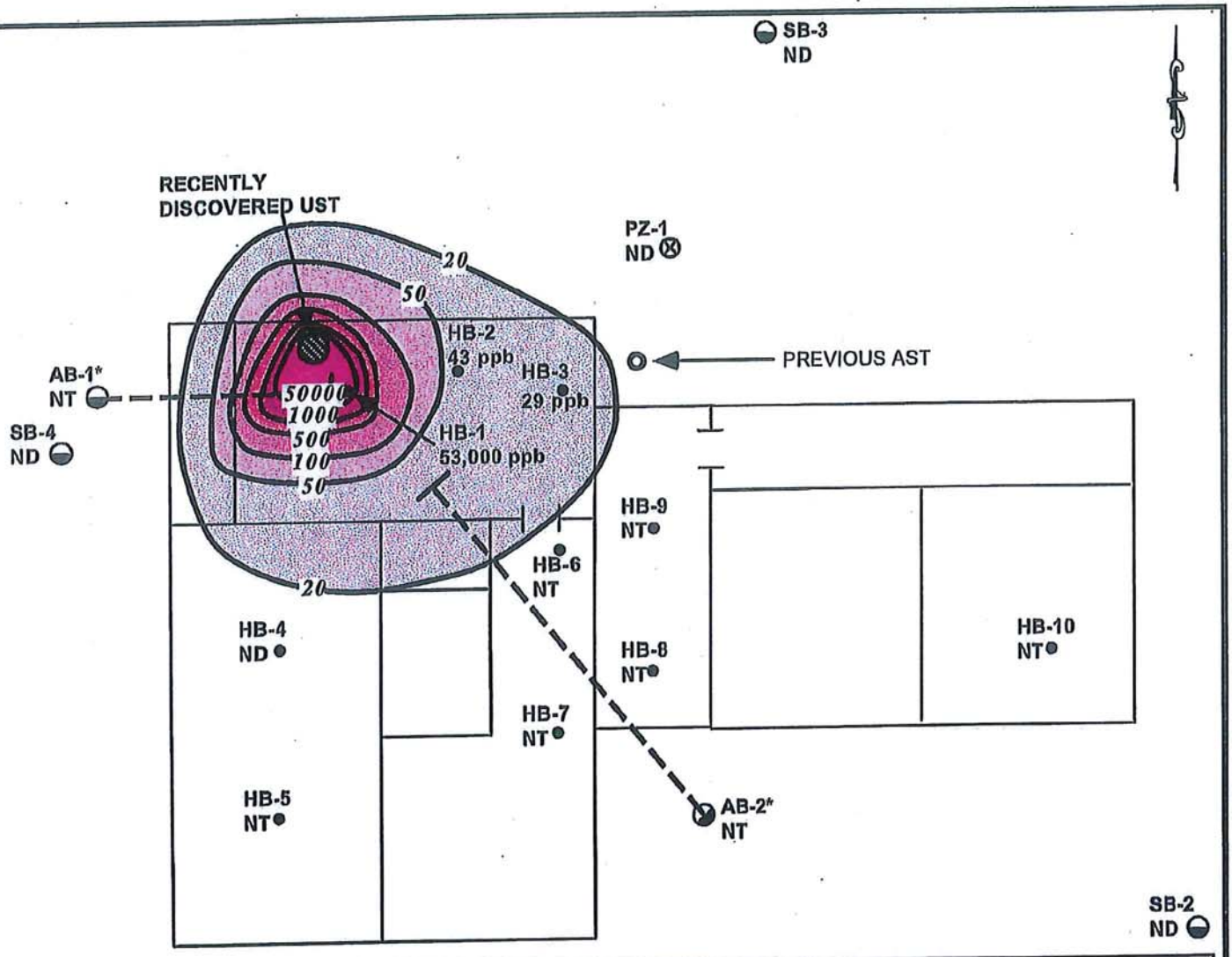
WDNR-WAUPACA CITY WELL NO. 4 WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	02-13-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	3-5CONT.CVS
SCALE:	1"=15'
REVISED:	11-06-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE 1

B.2.a. PRE-REMEDIAL SOIL



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 — PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ("X' indicates lateral sample location at the depth interval indicated in parenthesis)

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

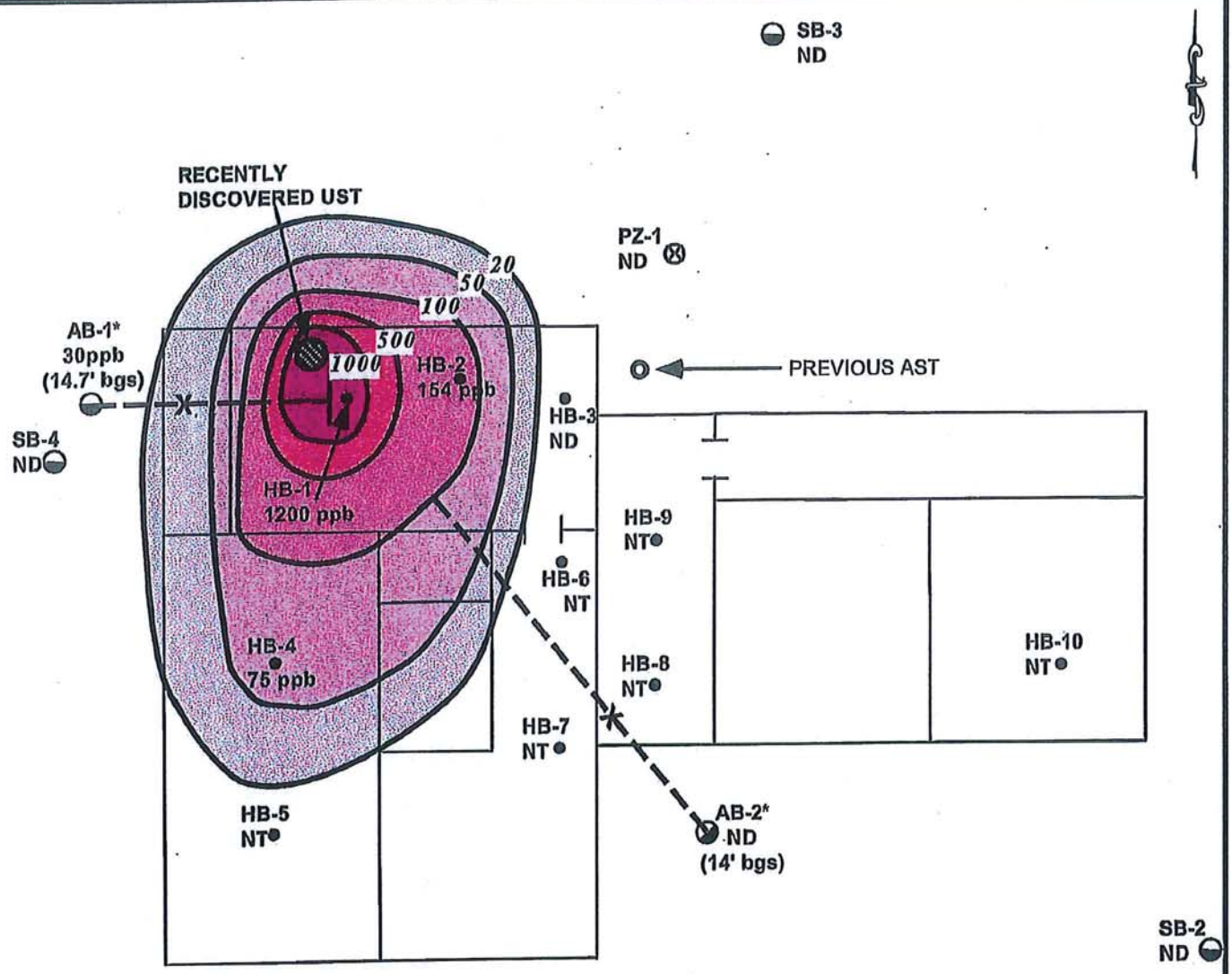
PCE CONTAMINATION CONTOURS AT 8 TO 10 FEET BELOW GROUND SURFACE

WDNR-WAUPACA
CITY WELL NO. 4
WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	06-25-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	8-10CONT.CVS
SCALE:	1"=15'
REVISED:	11-06-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE 2



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 — PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ("X' indicates lateral sample location at the depth interval indicated in parenthesis)

*NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

bgs BELOW GROUND SURFACE

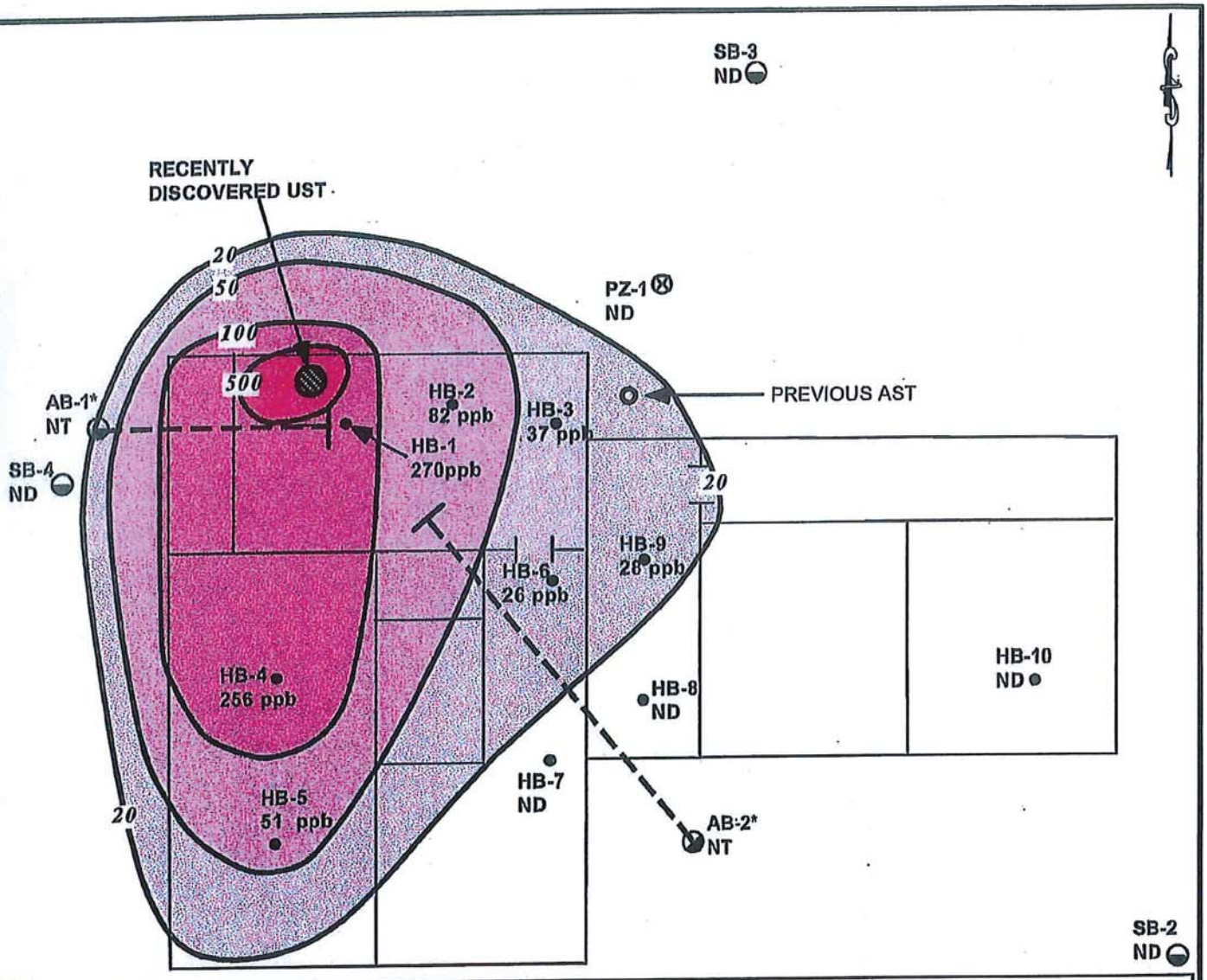
PCE CONTAMINATION CONTOURS AT 13 TO 15 FEET BELOW GROUND SURFACE

WDNR-WAUPACA CITY WELL NO. 4 WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	06-25-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	13-15CON.CVS
SCALE:	1"=15'
REVISED:	11-06-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE 3



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 — PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ("X' indicates lateral sample location at the depth interval indicated in parenthesis)

*NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

bgs BELOW GROUND SURFACE

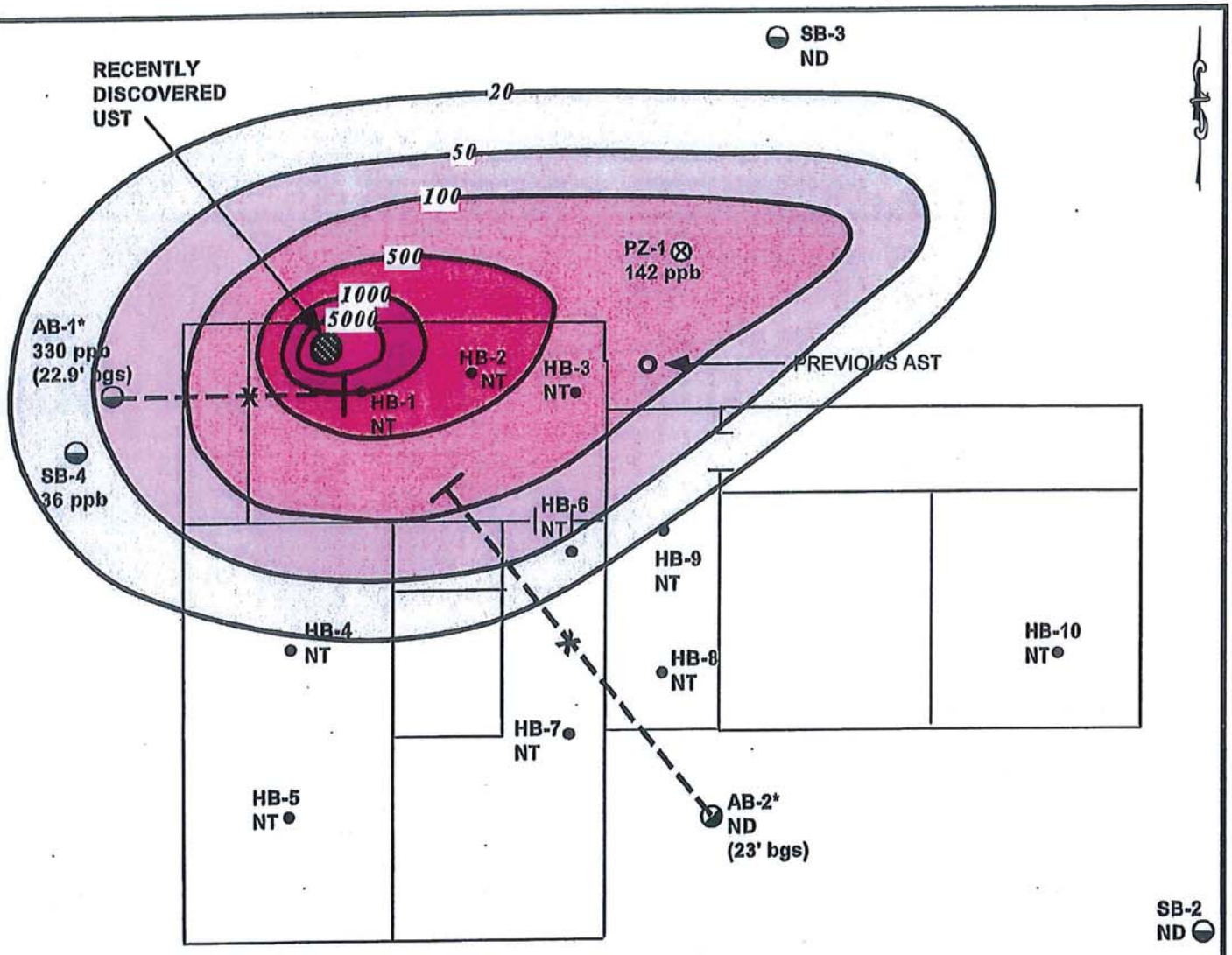
PCE CONTAMINATION CONTOURS AT 18 to 20 FEET BELOW GROUND SURFACE

WDNR-WAUPACA CITY WELL NO. 4 WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	06-25-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	18-20coCON.CVS
SCALE:	1"=15'
REVISED:	11-06-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE 4



KEY

- >20 ppb <50 ppb PCE
- >50 ppb <100 ppb PCE
- >100 ppb <500 ppb PCE
- >500 ppb <1,000 ppb PCE
- >1,000 ppb <5,000 ppb PCE
- >5,000 ppb <50,000 ppb PCE

20 PCE CONTAMINATION CONTOUR (concentrations in parts per billion)

VERTICAL SOIL BORING

ANGLED SOIL BORING SHOWING LOCATION OF END OF BORING ('X' Indicates lateral sample location at the depth interval indicated in parenthesis)

*NOTE: AB-1 Drilled at 30 degrees from vertical
AB-2 Drilled at 45 degrees from vertical

PIEZOMETER

HAND DRIVEN SOIL BORING

NT NOT TESTED

ND NOT DETECTED

ppb PARTS PER BILLION

bgs BELOW GROUND SURFACE

PCE CONTAMINATION CONTOURS AT 23 TO 25 FEET BELOW GROUND SURFACE

WDNR-WAUPACA CITY WELL NO. 4 WAUPACA, WISCONSIN

PROJECT NO.	968902
DATE:	02-13-97
PROJECT MGR:	WPF
DRAWN BY:	TMW
FILE NAME:	23-25CON.CVS
SCALE:	1"=15'
REVISED:	11-07-97

GRAEF ANHALT SCHLOEMER and Associates Inc.
ENGINEERS AND SCIENTISTS

FIGURE 5

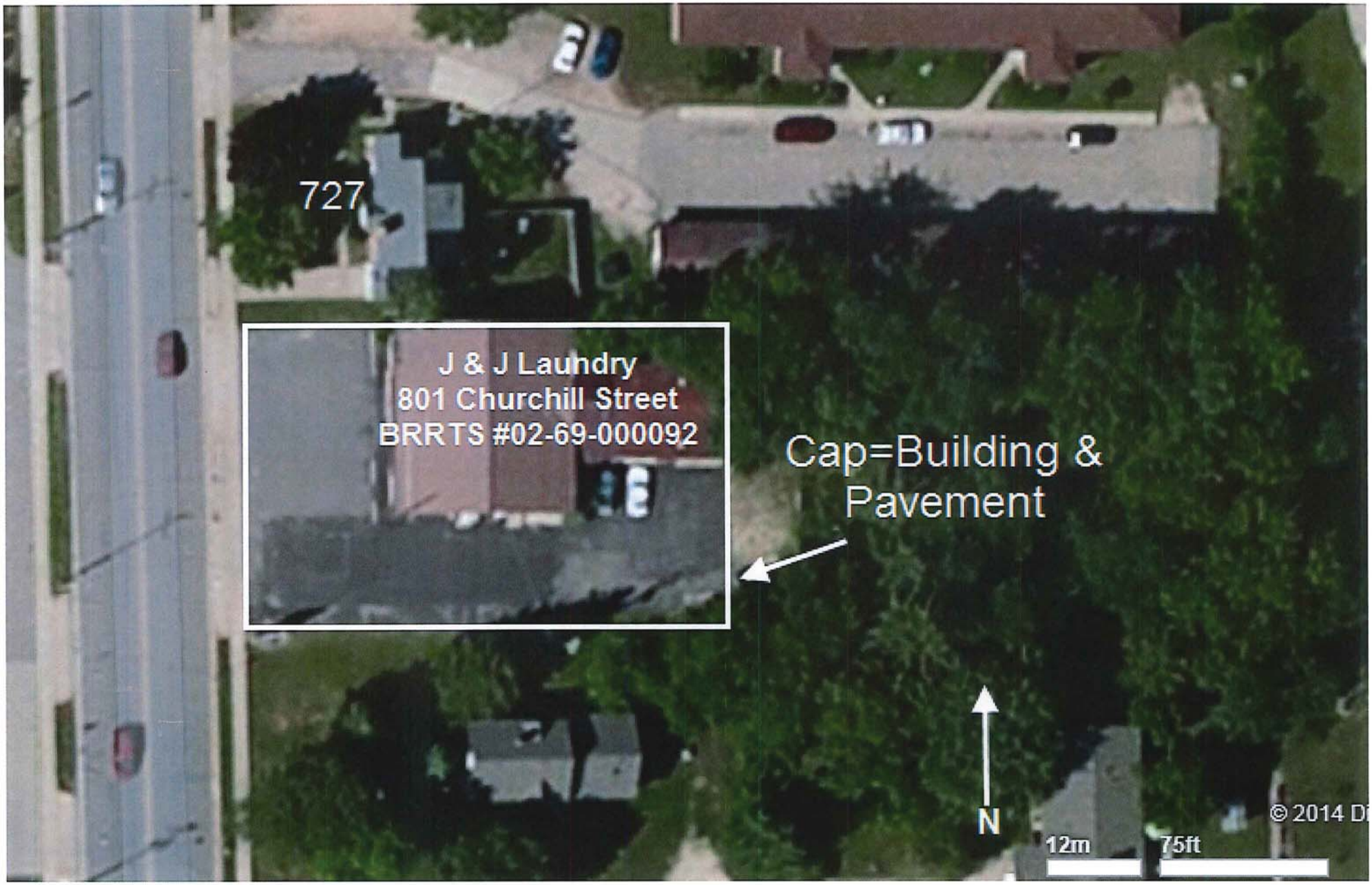
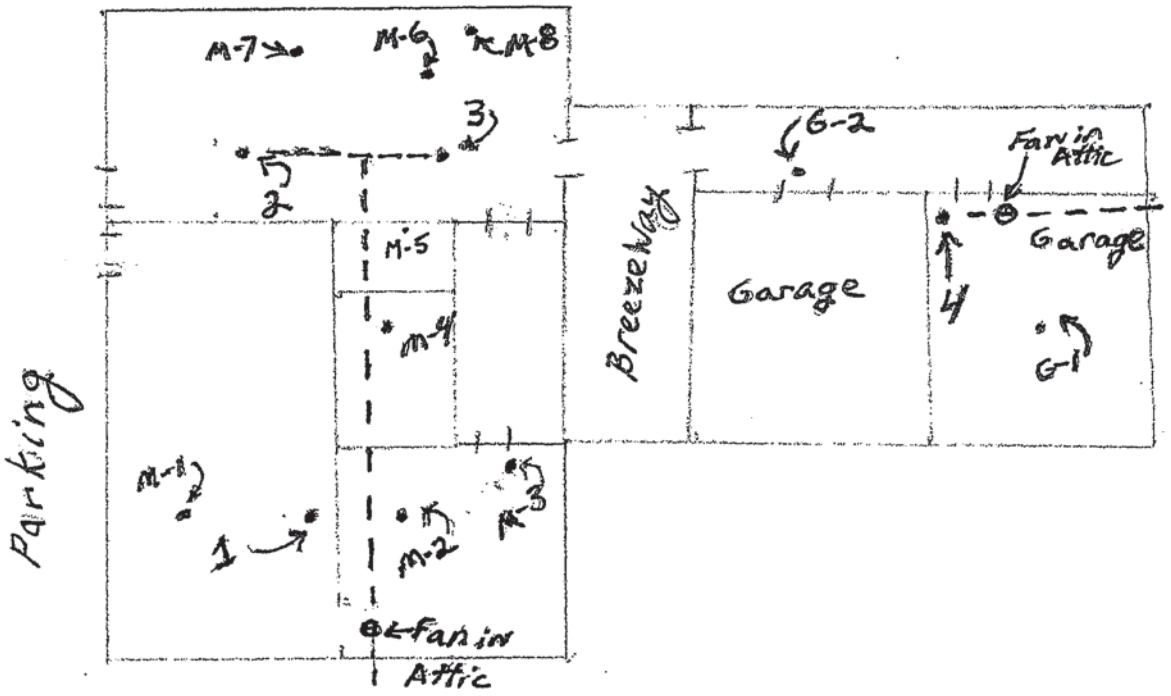


FIGURE 6
Map of Capped Area

Everclean Laundromat
Waupaca, WI
Not to Scale



M-1 thru M-8 Test Points in Main Building
G-1 & G-2 Test Points in Garage Area
----- Piping

Pickup 1 = 1
Pickup 2 = 2
Pickup 3 = 3
Garage Pickup = 4

MAP by ACURA
11/2014

FIGURE 7

ATTACHMENT D.2.

Description of Residual Contamination

Remaining soil contamination is located from approximately 3 feet below ground surface to a depth of 25 to 30 feet. Soil is yellow-brown sand to a depth of approximately 40 feet, then changes to a 10-foot layer of silty sand with clayey silt seams, which overlies silty clay.

ATTACHMENT D.3.

CAP and VAPOR MITIGATION SYSTEM MAINTENANCE PLAN

January 29, 2015

PLEASE REVIEW ALL MAINTENANCE DOCUMENTS AND REQUIREMENTS CAREFULLY

Property Located at: 801 Churchill Street, Waupaca, WI

WDNR BRRTS #02-69-000092 J & J Laundry (former)

Tax Parcel ID# 34-29-42-16

- a parcel located in the SE ¼ of Section 29, Township 22 North, Range 12 East, City of Waupaca, Waupaca County, WI.

INTRODUCTION

This document is the Maintenance Plan for continuing obligations at the above-referenced property in accordance with the requirements of s. NR 724.13 (2), Wis. Adm. Code. The maintenance activities relate to the existing building, vapor mitigation system, and asphalt parking area which address or occupy the area over the contaminated soil.

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

- The case file in the Department of Natural Resources (DNR) Northeast Region office in Green Bay, WI;
- BRRTS on the Web (DNR's internet based data base of contaminated sites) for the link to a PDF for site-specific information at the time of closure and on continuing obligations;
- RR Sites Map/GIS Registry layer for a map view of the site, and
- The DNR project manager for Waupaca County.

CAP MAINTENANCE

Description of Contamination

Soil contaminated by chlorinated solvents (PCE) is located at a depth of 3 to 30 feet below the location of the former dry cleaning machine and underground storage tank and also at areas where product was stored and/or spilled. These areas are currently under the building structure and the asphalt parking lot. The extent of the soil contamination is shown on the attached maps (Figures 1, 2, 3, 4, & 5 of Attachment D.1.) representing various soil depth intervals. A summary diagram of the cap area, approximate extent of soil contamination, and design details of the vapor mitigation system is attached as part of this document.

Description and Purpose of the Cap

The building and asphalt parking areas that currently exist at the site (shown on Figure 6 of Attachment D.1.) serve as an infiltration barrier to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch. NR 140, Wisconsin Administrative Code. They also act as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health. Based on the current commercial use of the property, the barrier should function as intended unless disturbed.

Cap Maintenance Activities

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

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

ACTIVE VAPOR MITIGATION SYSTEMS AND BARRIERS

Description and Purpose of the Vapor Mitigation System (VMS)

Subslab vapor sampling was performed at 801 Churchill Street, Waupaca, WI in July 2014. The results of the testing showed exceedance of the current vapor action level (VAL), and the State of Wisconsin DNR installed a VMS to address any potential health impacts from contaminated soils below the building.

System Design, Construction, and Maintenance Requirements

Please refer to the Post Mitigation Report by Acura Services LLC is attached to this maintenance plan. It contains a system diagram, photographs, and additional details on maintenance of the VMS.

ANNUAL INSPECTION

The building and parking areas overlying the contaminated soil and as depicted in Figure 6 must be inspected once a year, normally in the spring after all snow and ice is gone, for deterioration, cracks and other potential problems that can cause exposure or infiltration to underlying soils. The inspections must be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to become exposed will be documented and repaired appropriately.

A log of the inspections and any repairs must be maintained by the property owner. The attached Form 4400-305 Continuing Obligations Inspection and Maintenance Log is to be used for this documentation. Use DNR Fillable Form located at http://dnr.wi.gov/files/PDF/forms/4400/4400-305.pdf. The log will include recommendations for necessary repair of any areas where underlying soils are exposed and where infiltration from the surface will not be effectively minimized. Once repairs are completed, they will be documented in the inspection log. A copy of the maintenance plan and inspection log will be kept at the site and available for submittal or inspection by DNR representatives upon their request.

Prohibited Activities and Notification of DNR Prior to Actions Affecting a Cover/Barrier

The following activities are prohibited on any portion of the property where asphalt and building is required as shown on the attached map (Figure 6), unless prior written approval has been obtained

from the Wisconsin Department of Natural Resources: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; 6) construction or placement of a building or other structure; 7) changing the use or occupancy of the property to a residential exposure setting, which may include certain uses, such as single or multiple family residences, a school, day care, senior center, hospital, or similar residential exposure settings; 8) changing the construction of a building that has a vapor mitigation system in place.

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

D.4. Continuing Obligations Inspection and Maintenance Log

Please use DNR Fillable Form 4400-305 attached to this maintenance plan as D.4.

D.5. Contact Information

Amendment or Withdrawal of Maintenance Plan

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

January 2015

Signature: Van Pagel

Print Name: Van Pagel
Property Owner
801 Churchill Avenue, Waupaca, WI

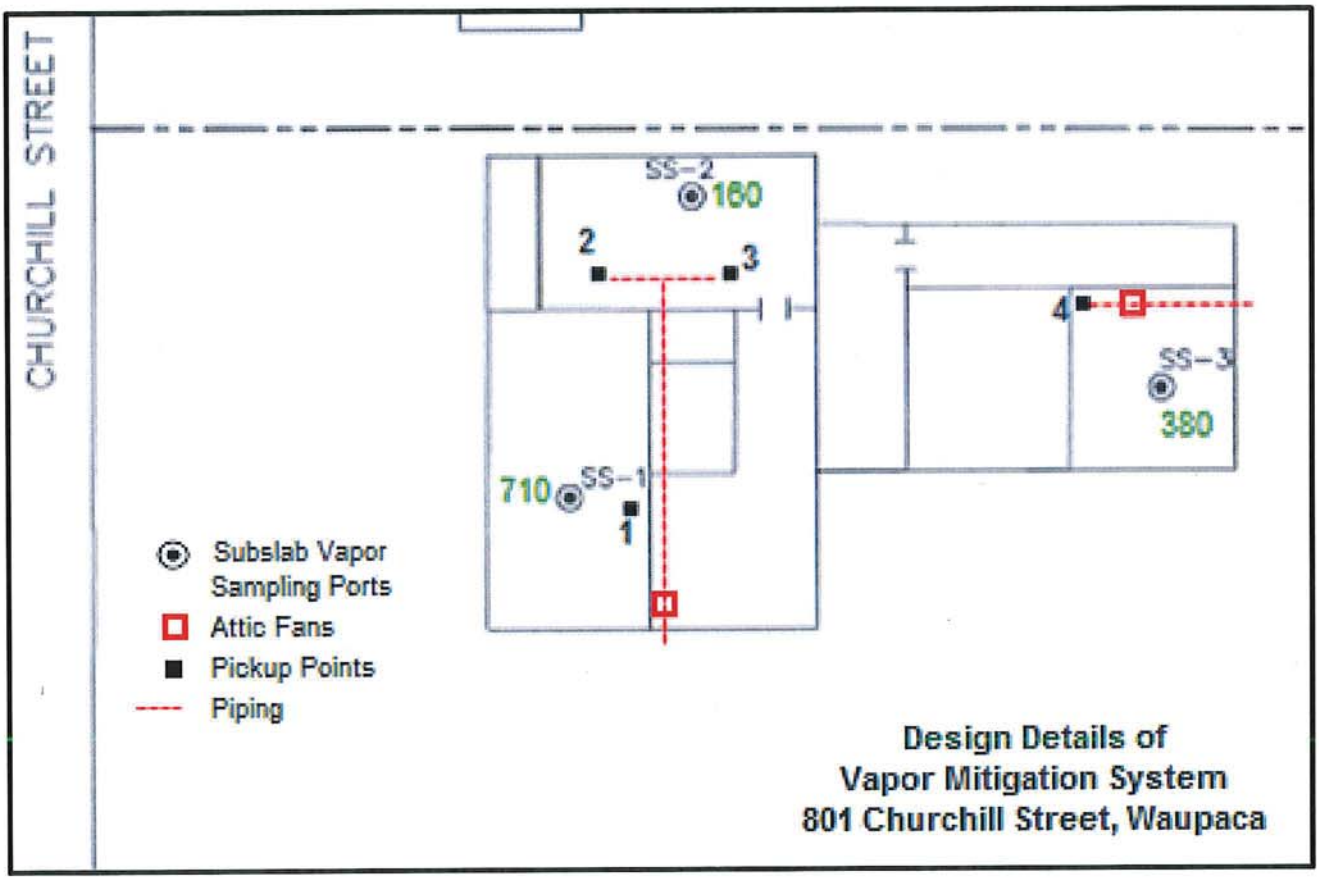
Phone: (715) 701-0438

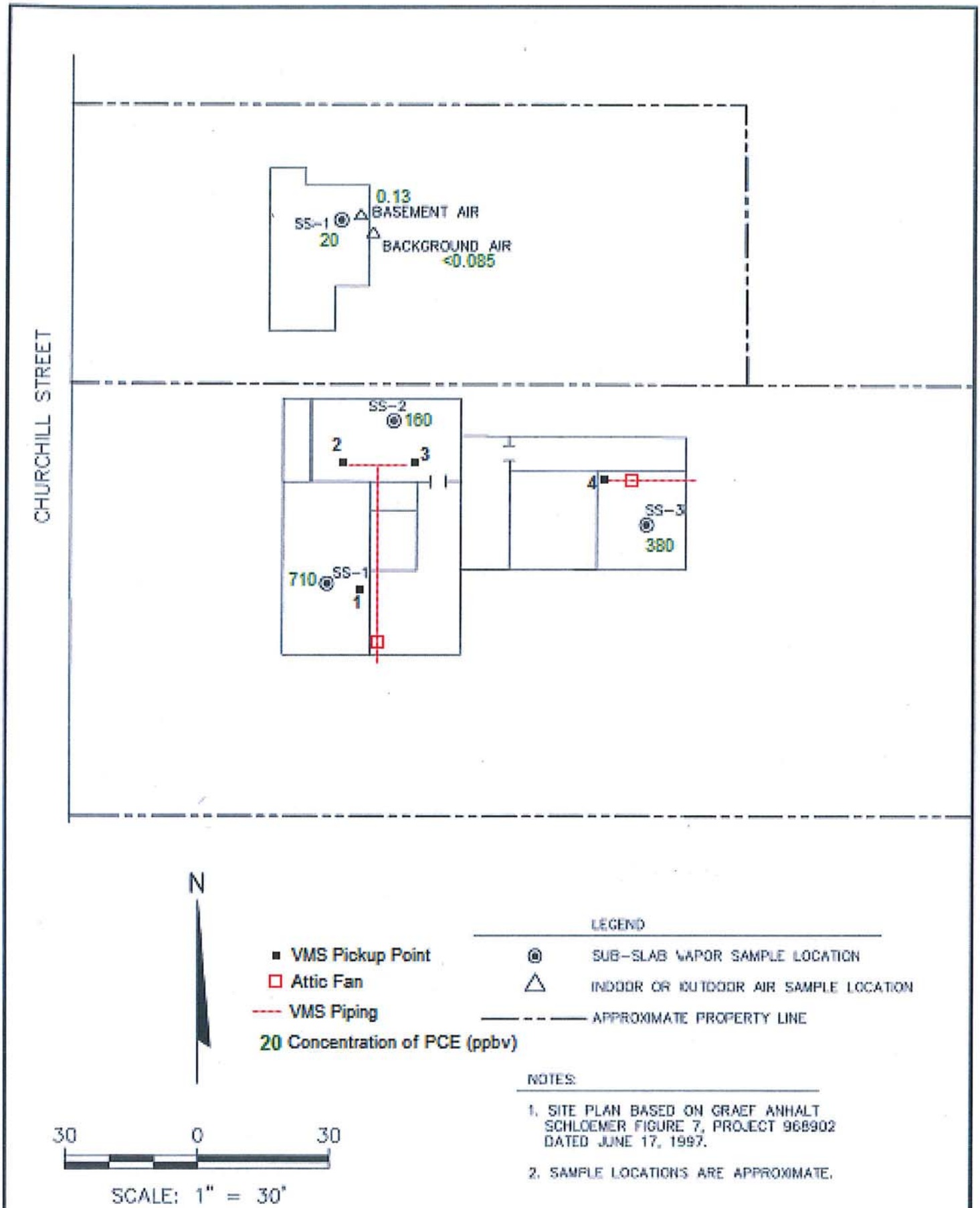
Email: vnpagel@hotmail.com

WDNR: Remediation & Redevelopment
ATTN: Waupaca County Project Manager
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, WI 54313

ACURA Systems: 105 Chelsea Court
Oregon, WI 53575
(608) 772-2349 or (608) 835-8812


Approximate Parcel Lines
725
727
Approximate Extent of Soil Contamination
J & J Laundry
801 Churchill Street
BRRTS #02-69-000092
Cap=Building & Pavement
801
N
12m
75ft
© 2014 Di


CHURCHILL STREET
SS-2
160
2
3
4
SS-3
380
710
SS-1
1
Subslab Vapor Sampling Ports
Attic Fans
Pickup Points
Piping
Design Details of
Vapor Mitigation System
801 Churchill Street, Waupaca



NOTES:

1. SITE PLAN BASED ON GRAEF ANHALT SCHLOEMER FIGURE 7, PROJECT 968902 DATED JUNE 17, 1997.
2. SAMPLE LOCATIONS ARE APPROXIMATE.

CLIENT		SITE	J & J LAUNDRY 801 CHURCHILL ST. WAUPACA, WISCONSIN
			B.4.a. Vapor Map

PROJECT NO.	25213180.08	DRAWN BY:	AHB	ENGINEER	SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830
DRAWN:	07/31/14	CHECKED BY:	REL		FIGURE 1
REVISED:	08/01/14	APPROVED BY:	REL 09/29/14		

Acura Services LLC

Radon & Soil Gas Mitigation Services
Anthony G. Hendricks P.E.

November 23, 2014

SCS Engineers
Mr. Robert Langdon
rlangdon@scsengineers.com
(608) 216-7329

Post Mitigation Report For
Everclean Coin Laundromat, 801 Churchill St., Waupaca, WI

.On September 19, 2014, Acura Services LLC conducted communication testing at the Everclean Coin Laundromat. This building is currently divided between a Laundromat side and a storage side. Previously this building was a Dry Cleaners and contamination of soil with PCE under the slab has been detected. Acura Services LLC was not involved in collecting, testing or assessment of contamination or risk in regards to sub slab vapors.

Based on the communication testing a design concept was developed. November 18 thru 21, 2014 two mitigation systems were installed

Building(s) Footprint

The main building is approximately 3000 square feet and is slab on grade. Attached to the building in the back by an enclosed breeze way are two garages of approximately 1200 square feet total.

Mitigation System Description

Two mitigation systems were installed from November 18 thru 21, 1914. One system was installed in the main building consisting of three pickup points connected by 3 inch PVC with the fan installed in the attic space. (See drawing for approximate location of pickup points.) A second system was installed in the garage consisting of one pickup point, 3 inch PVC and a fan located in the attic space above the garage.

Main Building Pickup Points: The sub slab material found in the three pickup points consisted of well compacted fine dirty granular material. In pickup point 2, two boulders (granite) were found at the near the bottom of the hole; Pickup point 3 was first attempted about 5 feet away, but a concrete tank was discovered about six inches down and the soil was replaced and then the hole filled with concrete. The second attempt at pickup three was very thick concrete, tough to get through and then highly

105 Chelsea Ct.
Oregon, WI 53575

(608) 772-2349 or (608) 835-8812
hendricks_at@yahoo.com

compacted dirty granular material. Three to four, five gallon buckets was removed from each pickup point.

Garage Pickup Point: A single pickup point was excavated in the garage. The material found was a highly compacted dirty gravel that had to be loosened with a rotary hammer before it could be removed. Excavation was stopped when a clay layer was encountered. Approximately three buckets of material was removed.

Fans Installed and System Startup Characteristics

Main Building; System 1: An AMG Prowler Fan was installed capable of pulling 2.7 inches of WC; 115 V, 130 Watts, 1.32 Max. amps. After startup the manometer read 1.9 inches of WC. The fan was pulling approximately 50 cfm.

Garage; System 2: An AMG Eagle Fan was installed capable of pulling 3.985 inches of WC; 115 V, 160 Watts, Max amps 1.37. After startup the manometer read 3.7 inches WC. The fan was pulling approximately 10 cfm.

Depressurization Measurements Made After System Startup With Micro manometer

System 1 In the Main Building (See Drawing for Approximate Location of Test Points)

M-1: SCS Sample point in Main Laundry area; 14 feet from pickup pt. 1; minus -0.068 WC;
M-2: 10 feet from pickup pt. 1; 1) minus -0.017 WC
M-3: by dryers in back laundry area; 20 feet from pickup point 1; minus -0.004 WC; (bounced around from 0.000 to -0.004)
M-4; In Boiler Room; between pickup 1 and pickup 3; minus -0.021 WC;
M-5; In Storage Room 4; 8 feet from pickup 3; minus -0.047 WC;
M-6; In Storage Room 4 in the SCS sample point; about 12 feet from pickup 3; minus -0.010 WC;
M-7 In Storage Room 2; 15 feet from pickup 2; minus -0.006 WC;
M-8 In Storage Room 5; 15 feet from pickup 3; minus -0.004 WC; (about 2 feet off the outside wall)

System 2 In the Garage (See drawing for the approximate location of test points.)

G-1) SCS sample point: 13 feet from the pickup point ; minus -0.068 WC
G- 2) 15 feet from pickup point; minus -0.063 WC

105 Chelsea Ct.
Oregon, WI 53575

(608) 772-2349 or (608) 835-8812
hendricks_at@yahoo.com

Everclean Coin Laundromat (formerly J & J Laundry)
801 Churchill St., Waupaca, Wisconsin
SCS Engineers Project #25213180.08 T4
November 21, 2014

Photo 1: Prowler fan and connecting piping in attic space. System #1, main building.

Photo 2: Pickup point #2 in storage unit 1 of main building – boulders at bottom.

Everclean Coin Laundromat (formerly J & J Laundry)
801 Churchill St., Waupaca, Wisconsin
SCS Engineers Project #25213180.08 T4
November 21, 2014

Photo 3: Pickup point #2 in storage unit 1 of main building – boulders at bottom.

Photo 4: Manometer on system #2, garage.

Everclean Coin Laundromat (formerly J & J Laundry)
801 Churchill St., Waupaca, Wisconsin
SCS Engineers Project #25213180.08 T4
November 21, 2014

Photo 5: Pickup location in garage – system #2.

Photo 6: Eagle fan in attic above garage – system #2.

Everclean Coin Laundromat (formerly J & J Laundry)
801 Churchill St., Waupaca, Wisconsin
SCS Engineers Project #25213180.08 T4
November 21, 2014

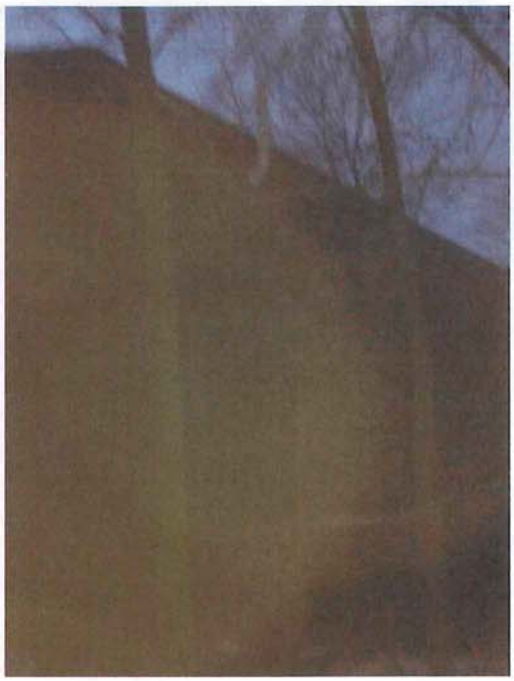


Photo 7: Discharge piping – system #2.

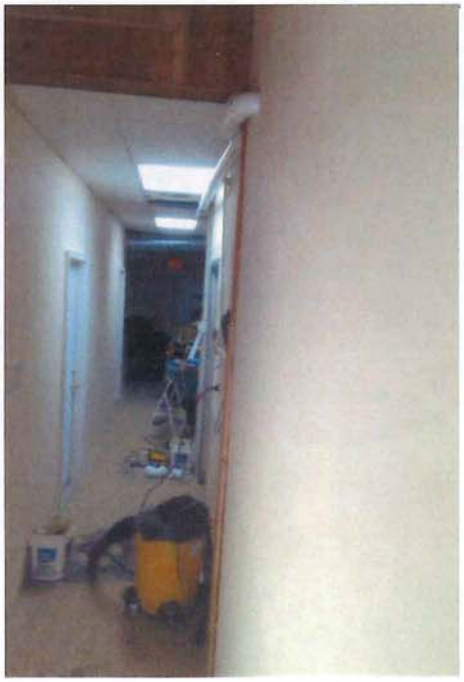


Photo 8: Piping connecting pickup points #2 and #3 in main building.

Photo 9: Manometer installed on pickup point #3 in main building. Note caulking on crack to the left of the pipe. Smoke detected leaks in the crack.

Photo 10: Failed pickup point #3; concrete tank underneath. Resealed with concrete (hole #3 moved).

Everclean Coin Laundromat (formerly J & J Laundry)
801 Churchill St., Waupaca, Wisconsin
SCS Engineers Project #25213180.08 T4
November 21, 2014

Photo 11: Hole/pickup point #3 in hall of storage area of main building (beside crack/joint).

Photo 12: Piping connecting pickup points #2 and #3 in main building.

Photo 13: Maintenance access behind dryers in main building.

Photo 14: Garage where mitigation system #2 installed.

Everclean Coin Laundromat (formerly J & J Laundry)
801 Churchill St., Waupaca, Wisconsin
SCS Engineers Project #25213180.08 T4
November 21, 2014

Photo 15: Attic access and discharge piping on main building.

Photo 16: One-half-inch crack/joint in locker/storage area of main building. Crack later sealed where exposed.

Everclean Coin Laundromat (formerly J & J Laundry)
801 Churchill St., Waupaca, Wisconsin
SCS Engineers Project #25213180.08 T4
November 21, 2014

Photo 17: Sub-slab cuttings from pickup points.

Maintenance Plan For The Sub Slab Depressurization System For

Everclean Laundromat, Waupaca, WI
Systems Installed November 2014
Installed by Acura Services LLC

System Description

General: Soil gas enters a building due to a positive pressure under the slab (floor). A sub slab depressurization system works by changing that positive pressure into a negative pressure. The negative pressure created by the pickup point and fan sucking on the pickup point causes the soil gas to flow to the pickup point and to be exhausted through the fan outside the home. As long as that negative pressure is maintained the soil gas that would enter the home is captured and exhausted outside along with any harmful constituents of that gas. Harmful constituents of the gas include volatile organic compounds and radon for example.

Specifics: Two sub slab mitigation systems were installed in the Everclean Building Complex. One system was installed in the main building consisting of three pickup points connected by piping and run into the attic. The vacuum fan is in the attic, piping conveys the soil gas outside the building to discharge above eave height. A manometer was installed on the riser pipe in the locker/storage side of the main building accessible for view in the hallway. The second system was installed in the most eastern garage. One pickup point was installed and the riser pipe routed into the attic where the fan is mounted. Discharge piping was routed outside to discharge soil gas above eave height. A manometer was installed on the riser pipe beside the door that exits into the hallway.

Fan Operation & Maintenance

The fan and the manometer are the only moving parts. The fan is designed to run all day year round. If the fan stops or is shut down the pressure under the slab will probably return to positive and potentially allow sub slab soil vapors to enter the building. The functioning of the fan is therefore the most essential component of the system.

The manometer, which reads inches of water column, indicates the proper operation of the fan. The manometer reading at startup is recorded on a label affixed on the riser pipe beside the manometer. This reference allows you to compare that initial reading with any current reading. The manometer may bounce around a small amount due to changing weather conditions overall that variation will be small compared to the initial reading. Any significant change needs to be evaluated to insure that the system is operating properly.

If the manometer reading drops to zero, that is both sides of the manometer are at the same level the system needs to be checked out.

Step One: Determine if the manometer is hooked up properly. A small tube on one side of the manometer has been placed in a hole drilled in the riser pipe. If for any reason that tube has been pulled out of the riser pipe or from the manometer the manometer will not read properly. To correct reinsert the tube into the hole in the riser pipe or the tube of the manometer. Once this is done the manometer reading should return to approximately the initial startup reading.

Step Two: After checking the manometer you find that the fan is not running. First check the breaker in the electric panel to see if it is on. If the breaker is off turn it to on. If the breaker is in the proper position go into the attic to check operation of the fan. Someone may have unplugged the fan. If unplugged reinstall the plug in the convenience outlet and listen for the fan to start up. Once the fan is running go check the manometer reading to verify that the fan is operating normally.

Step Three: What if after checking the fan operation you find it's not running. On the riser pipe is the contact information for Acura Services LLC. Call for assistance. Although these are high quality fans made specifically for mitigation systems all mechanical devices can and will fail. When calling please have the following information handy to communicate; 1) Startup Date; 2) Initial manometer reading; 3) Fan Model (this will be on the fan name plate and/or the label on the riser pipe.

Warning Check The Manometer Regularly

The manometer is the primary run indicator for the system. Get in the habit of checking the manometer regularly. All fans wear out eventually and since these systems are user friendly they tend to get ignored over time. If your laundry is in the basement a good habit is to check the manometer every time you do laundry. Checking the manometer a minimum of once a week is recommended. Daily is better.

The mitigation system is designed to protect your health from harmful soil vapors including radon. You are responsible to see that the system is functioning properly. By keeping a regular check on the manometer you can feel confident that you and your family are being protected.

If You Plan on Remodeling or Ad an Addition to Your Home?

Some remodeling may impact the effectiveness of the system. Call Acura Services LLC to discuss the planned project so any potential impact to the mitigation system may be evaluated. **Warning;** Most builders do not understand the importance of mitigation systems and may give you assurances that the system will not be impacted. These assurances may <u>not</u> be valid.

Maintenance

The fan is the only major moving part. The fan is maintenance free. By checking the manometer regularly you'll be checking the proper operation of the fan. There is an Ice/Debris trap with a stainless steel screen just above the fan. The manufacture recommends that this be cleaned annually. Shut off the fan then remove the screw in plug. Clean out any debris trapped on the screen. Screw the plug back in and turn the fan back on.

If you have any further questions about your mitigation system call Acura Services LLC; (608) 772-2349.

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

Continuing Obligations Inspection and Maintenance Log

Form 4400-305 (2/14)

Directions: In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at http://dnr.wi.gov/botw/SetUpBasicSearchForm.do, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name	BRRTS No.
Former J & J Laundry, 801 Churchill, Waupaca	02-69-000092

Inspections are required to be conducted (see closure approval letter):

- (●) annually
- ( ) semi-annually
- ( ) other – specify ______________________

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
		☐ monitoring well ☐ cover/barrier ☐ vapor mitigation system ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier ☐ vapor mitigation system ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier ☐ vapor mitigation system ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier ☐ vapor mitigation system ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier ☐ vapor mitigation system ☐ other:			○ Y ○ N	○ Y ○ N
		☐ monitoring well ☐ cover/barrier ☐ vapor mitigation system ☐ other:			○ Y ○ N	○ Y ○ N

{Click to Add/Edit Image} Date added: 12/22/2014

Title: 2008 Google Street View of site

{Click to Add/Edit Image} Date added: 12/22/2014

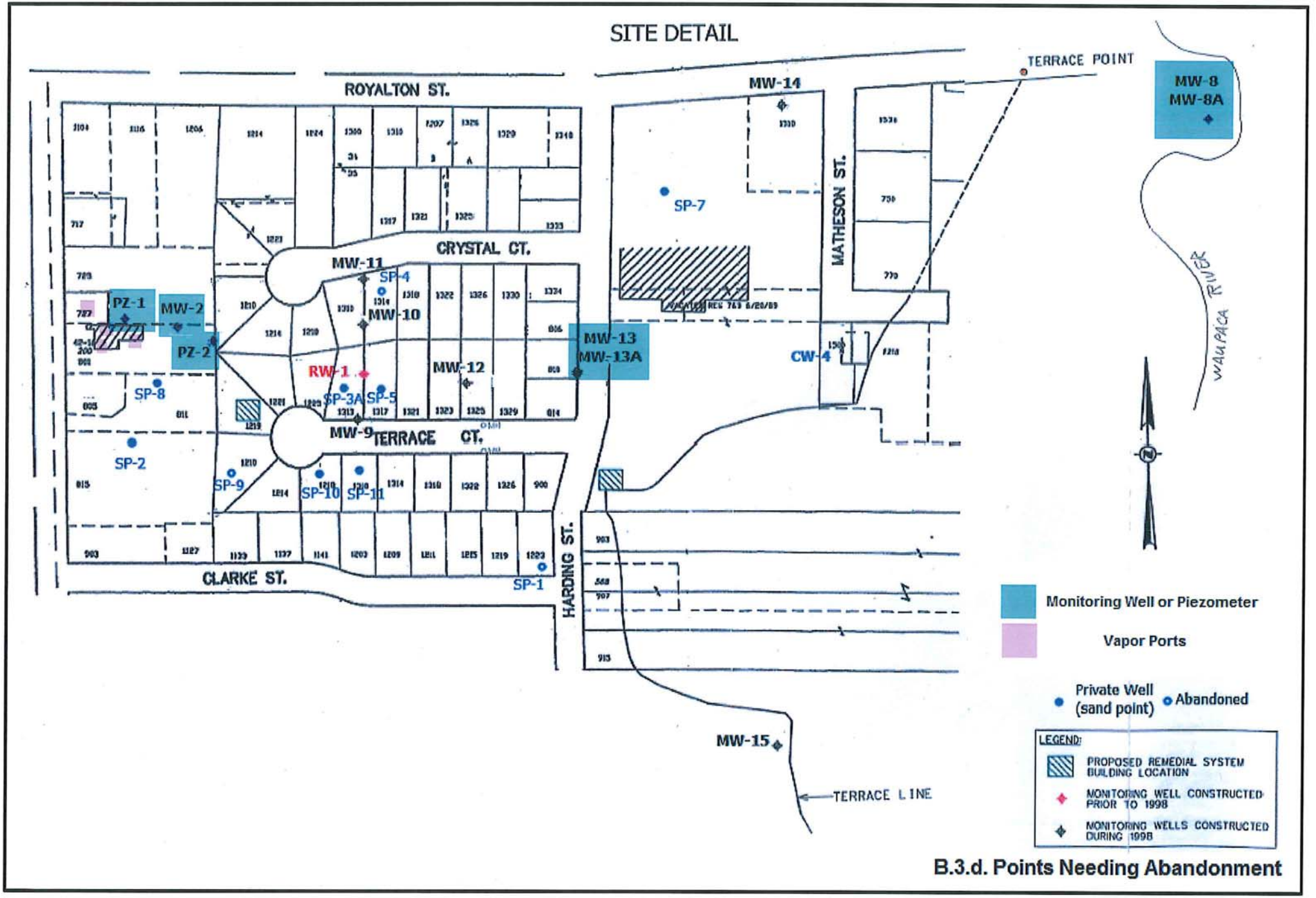
Title: Google Aerial View of site

{Click to Add/Edit Image} Date added: 01/29/2015

Title: Manometer at pickup point #3

ATTACHMENT E

Map showing the remaining monitoring wells, piezometers, and vapor points that remain to be abandoned upon site closure.



B.3.d. Points Needing Abandonment

ATTACHMENT F

NOTIFICATIONS TO OWNERS OF IMPACTED PROPERTIES

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

Impacted Property Notification Information

Form 4400-246 (R 10/12)

Notice: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, where specific circumstances exist at the time of case closure. This form applies to situations where: (1) the party conducting the cleanup does not own the source property; (2) contamination has impacted a neighboring property to a certain degree; and (3) not all monitoring wells can/will be abandoned at the time of closure. A letter notifying these property owners is required of the responsible party if certain circumstances exist. The DNR's "Guidance on Case Closure and the Requirements for Managing Continuing Obligations" (PUB-RR-606) specifies those notification requirements. A model "Template for Notification of Residual Contamination and Continuing Obligations" (PUB-RR-919) can be downloaded at: http://dnr.wi.gov/files/PDF/pubs/rr/RR919.pdf. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. 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.].

BRRTS No.	Activity Name
02-69-000092	J & J CLEANERS - WAUPACA WELL #4

						Letter Sent To:			Reasons Letter Sent:							
ID	Impacted Property Address	Parcel No.	Date of Letter	WTMX	WTMY	Source Property Owner is not RP	Right of Way Government or Other	Impacted Off-Site Property Owner	Groundwater Exceeds ES	Residual Soil Exceeds Standards	Cap/Engineerd Control	Industrial Use Soil Standards	Vapor System in Place	Vapor Asmt Needed if use Changes	Structural Impediment	Lost, Transferred or Open Wells
A	801 Churchill Street, Waupaca, WI	34 29 42 16	12/01/2014	593984	431166	X				X	X		X			
B	727 Churchill Street, Waupaca, WI	34 29 42 15	01/12/2015	593975	431183			X		X						
C	725 Churchill Street, Waupaca, WI	34 29 42 14	01/12/2015	593994	431187			X		X						
D																
E																
F																
G																

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
625 E COUNTY ROAD Y, SUITE 700
OSHKOSH, WI 54901-9731

SOURCE PROPERTY

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

WISCONSIN DEPT. OF NATURAL RESOURCES

January 12, 2015

KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS

JOAN PANZENHAGEN
P.O. BOX 244
WAUPACA, WI 54981

SUBJECT: Notification of Continuing Obligations and Residual Contamination located at
725 Churchill Street, Waupaca – Parcel ID 34 29 42 14
727 Churchill Street, Waupaca – Parcel ID 34 29 42 15
Former J & J Laundry, 801 Churchill Avenue, Waupaca, WI
WDNR BRRTS # 02-69-000092

Ms. Panzenhagen:

NOTE: This letter replaces the letter dated January 6, 2015.

I am providing this letter to inform you of the location and extent of contamination remaining on your property, and of certain long-term responsibilities (continuing obligations) for which you will be responsible. The State of Wisconsin Department of Natural Resources (DNR) has investigated a release of chlorinated solvents, specifically perchloroethene (PCE) also known as tetrachloroethene or 'perc' at 801 Churchill Avenue, Waupaca, WI, 54981. Investigation and remediation of the release has been completed to the extent practical and we will be requesting site closure. Closure means that the DNR will not be requiring any further investigation or cleanup action to be taken. However, continuing obligations may be imposed as a condition of closure approval.

You have 30 days to comment on the attached legal description of your property and on the proposed closure request:
Please review the enclosed legal description of your property, and notify Kathy Sylvester at WDNR, 625 East County Road Y, Suite 700, Oshkosh, WI, 54901 within the next 30 days if the legal description is incorrect.

As an affected property owner, you have a right to contact the DNR to provide any technical information that you may have that indicates that closure should not be granted for this site. If you would like to submit any information that is relevant to this closure request, you should mail that information by February 6, 2015 to Kathy Sylvester at the address above. You may also email me prior to that date with your concurrence on closure.

Your Long-Term Responsibilities as a Property Owner and Occupant:
The cleanup at the site included: tank removal, excavation of near-surface soils, groundwater pumping and treatment, and groundwater monitoring. The continuing obligations that affect your property are listed below, under the heading **Continuing Obligations**. Under s. 292.12 (5), Wis. Stats., current and future owners and occupants of this property are responsible for complying with continuing obligations imposed as part of an approved closure.

The fact sheet "Continuing Obligations for Environmental Protection" (DNR publication RR 819) has been included with this letter, to help explain the responsibilities you may have for maintenance of a certain continuing obligation, the limits of any liability for investigation and cleanup of contamination, and how these differ. If the fact sheet is lost, you may obtain a copy at http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf.

Continuing Obligations on Your Property:
As part of the cleanup, continuing obligations will be used at your property to address future exposure to the remaining contamination, specifically maintaining the current soil/vegetative cover. If the closure request is approved, you or the current property owner will also be responsible for the following continuing obligations:

Residual Soil Contamination:

If soil is excavated from the areas with residual contamination, the property owner at the time of excavation will be responsible for the following:

- Determine if contamination is present;
- Determine whether the material would be considered solid or hazardous waste;
- Ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules.

Contaminated soil may be managed in-place, in accordance with ch. NR 718, Wis. Adm. Code, with prior DNR approval. In addition, all current and future property 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 during excavation activities to prevent a health threat to humans.

The DNR understands that the property is connected to municipal water supply. If for any reason the property owner wishes to construct a well, the property owner at the time of construction will need to obtain prior approval from the DNR. See the section under the heading **GIS Registry and Well Construction Requirements**. Typically, this results in casing off a portion of the aquifer during drilling, when needed, to protect the water supply from any remaining contamination.

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

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

Site Closure:
When the DNR grants closure, we will proceed with abandonment of any remaining vapor sampling ports and monitoring wells. After abandonment of wells and vapor ports, a final closure letter will be written to the owner of 801 Churchill. It will be available to view on our database website:
http://dnr.wi.gov/botw/GetActivityDetail.do?adn=0269000092&siteId=1181000&crumb=1&search=b .
You will also receive a letter which will contain a description of the continuing obligations and any prohibitions on activities applicable to your property at 725 and 727 Churchill Street.

If you have any questions regarding this notification, I can be reached at (920) 424-0399, or via email: kathy.sylvester@wisconsin.gov.

Sincerely,

Kathleen M. Sylvester, Hydrogeologist
Remediation & Redevelopment Program

Attachments: Map of Soil Contamination Area
Publication RR-819
Publication RR-589

cc: Case File
Jonathon & Victoria Nipps, 727 Churchill Ave


Approximate Parcel Lines
725
727
J & J Laundry
801 Churchill Street
BRRTS #02-69-000092
Approximate Extent of Soil Contamination
Cap=Building & Pavement
801
N
12m
75ft
© 2014 Di

ATTACHMENT G

G.1. PROPERTY DEED

G.2. CERTIFIED SURVEY MAP

Not Applicable

G.3. VERIFICATION OF ZONING

G.4. SIGNED STATEMENT

DOC# 727874

State Bar of Wisconsin Form 1-2003
WARRANTY DEED

Document Number | Document Name

Certified, Filed and or Recorded on
JULY 28, 2006 AT 01:26PM
WAUPACA COUNTY
RECEIVED FOR RECORD
GEORGE E. JORGENSEN REGISTER OF DEEDS
Fee Amount: $13.00
Transfer Fee: $150.86

THIS DEED, made between J & J Laundry & Dry Cleaning Village, Inc. ("Grantor," whether one or more), and Frederick J. Haas and Bonnie J. Haas, husband and wife, as survivorship marital property ("Grantee," whether one or more). Grantor, for a valuable consideration, conveys to Grantee the following described real estate, together with the rents, profits, fixtures and other appurtenant interests, in Waupaca County, State of Wisconsin ("Property") (if more space is needed, please attach addendum):

(See attached addendum)

Recording Area 13/2

Name and Return Address TO-8581
First National Bank
PO Box 269
Waupaca, WI 54981
Attn: Julie

34-29-42-16
Parcel Identification Number (PIN)

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

Grantor warrants that the title to the Property is good, indefeasible in fee simple and free and clear of encumbrances except:
Exceptions of record. Grantees hold Grantor harmless for any environmental issues.

Dated July 24, 2006

J & J Laundry & Dry Cleaning Village, Inc.

* _____ (SEAL) By: _____ (SEAL)
* George Jorgensen, President

* _____ (SEAL) * _____ (SEAL)

AUTHENTICATION

Signature(s) _____
authenticated on _____

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

THIS INSTRUMENT DRAFTED BY:
Attorney Richard G. Johnson
State Bar No. 1010929

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) ss.
Waupaca COUNTY)

Personally came before me on July 24, 2006
the above-named George Jorgensen
to me known to be the person(s) who executed the foregoing instrument and acknowledged the same. and officer of Grantor.

* _____
Notary Public, State of Wisconsin
My Commission (is permanent) (expires: 11-2-08)

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

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

* Type name below signatures.

G.1. DEED

DOC# [illegible]974

ADDENDUM
TO
DEED

LEGAL DESCRIPTION:

Part of the Southeast ¼ of Section 29, Township 22 North, Range 12 East, City of Waupaca, Waupaca County, Wisconsin described as follows:
Beginning at a point 79 rods and 3 ½ feet North of the Southwest corner of said Southeast ¼, thence running East 2345.5 feet, more or less, to the center line of the Waupaca River, thence Northerly along said center line of Waupaca River to a point which is 60 rods and 8 ½ feet South of the East and West quarter line 338.7 feet North of the last described line, thence West 2170 feet, more or less, to a point 52 rods South of the center line of the Royalton Highway and 336 feet East of the North and South quarter line of said Section 29, thence Northerly 368.5 feet along the West line of the former Fair Grounds to a point 29 rods and 11 feet South of the center line of said Royalton Highway, thence West parallel with said Royalton Highway 348 feet to the North and South quarter line of said Section 29, and this shall be the place of beginning, thence South along said quarter section line 100 feet, more or less, thence East parallel with said Royalton Street 348 feet, thence North 100 feet to a cedar stake, thence West 348 feet to the place of beginning.

City of Waupaca
Zoning Districts

801 Churchill

ROYALTON ST

CHURCHILL ST

HARDING ST

CRYSTAL CT

TERRACE CT

801

B5, Planned Commercial District

Municipal Boundary

R1, Single Family Residence District
R2, Two Family Residence District
R3, Multiple Family Residence District
B1, Neighborhood Business District
B2, Central Business District
B3, General Commercial District
B4, Strip Commercial District
B5, Planned Commercial District
PUD, Planned Unit Development District
I1, Light Industrial District
I2, Heavy Industrial District
AG, Agricultural District
RC, Resource Conservation District
Q, Quarrying District
MH, Mobile Home District
NOT CITY ZONED

ATTENTION!
G.I.S. maps are for informational purposes only and are not evidence in title. The representations on these maps could in fact be in error and should not be relied upon as the sole determining factor in the location of any given parcel. The City of Waupaca is not responsible for any inaccuracies contained herein. Individuals should consult legal representation or professional surveyor/engineer for more accuracy of a given parcel description.

Prepared by City of Waupaca Planning and Development April 30, 2008
Base Data provided by Waupaca County

G.3. Zoning Map

G.4. Signed Statement

I, Cathie Lyons, to the best of my knowledge do hereby attest that the attached Warranty Deed, recorded as Document Number 727874, is a complete and accurate description of 801 Churchill Street in Waupaca, Wisconsin.

Cathie Lyons — 1-15-15

Signature — Date

Cathie Lyons

Print Name

Closing agent

Relationship to Property