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Site Investigation Work Plan

N7660 Industrial Drive
Portage, Wisconsin

BRRTS No. 02-11-000824

MAY 2007

ARCADIS

Site Investigation Work Plan

N7660 Industrial Drive
Portage, Wisconsin

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Our Ref.:
WI001163.0001

Date:
May 21, 2007

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Introduction

ARCADIS, on behalf of Leonard Street and Deinard, as legal counsel to TriMend, LLC, has prepared this Work Plan to conduct investigation activities at N7660 Industrial Road (the "Site") in Portage, Wisconsin (Figure 1). The purpose of the investigation is to provide preliminary information regarding water quality in the unconsolidated formation beneath the Site.

Site Background

Background information was collected from the previous Site investigations. For further details regarding previous investigations, please refer to the following reports:

- *"Hydrogeologic Investigation Report"* (RMT, January 1990).
- *"Final Ground Water Quality Assessment Plan for Penda Corporation, Portage, Wisconsin"* (RMT, July 1990).
- *"Summary of Soil Gas Survey for the Penda Corporation Lewiston Facility, Portage Wisconsin"* (RMT, April 1991).
- *"Summary of Source Identification Investigations for Penda Corporation, Portage, Wisconsin"* (RMT, August 1991).
- *"Remedial Action Plan for the Penda Corporation Lewiston Facility, Portage Wisconsin"* (RMT, 1992).
- *"1992 Annual Groundwater Monitoring Summary for Penda Corporation, Portage, Wisconsin"* (RMT, 1993).
- *"1998 Annual Groundwater Monitoring Report"* (RMT, 1999).
- *"Year 2005 Annual Groundwater Monitoring Report"* (RMT, 2006).

In 1987 and 1988, the Wisconsin Department of Natural Resources (WDNR) Bureau of Water Supply personnel sampled three water-supply wells (PW-1, PW-2, and PW-5) on the Site. All three wells drew water from the sandstone bedrock at depths of approximately 90 to 130 feet below ground surface (ft bgs). Samples collected contained volatile organic compounds (VOCs). In 1991, PW-2 and PW-5 were abandoned and replaced with PW-2R and PW-5R. These wells were installed in the

sandstone bedrock with intake zones between depths of approximately 250 to 300 ft bgs. An aerial view of the Site and surrounding area is presented as Figure 2.

Potable Water Supply Wells

Eleven private potable water-supply wells were sampled by the WDNR between October 2006 and February 2007 including the Gary Morris, Sean McMahon, Michael Johnson, Theodolinde Yeager, Gary Schultz, Patrick McMahon, William Payne, Matthew Bremer, Jon Jakeman, Lance Pence, and James Solvik residences, all located southeast of the Site. Concentrations of VOCs were detected above the NR 140 enforcement standards at the Sean McMahon and Theodolinde Yeager residences. Concentrations of VOCs exceeded the NR 140 preventive action limits at the Sean McMahon, Theodolinde Yeager, Gary Morris, and Michael Johnson residences.

Based on a review of private well construction reports from the Wisconsin Geological and Natural History Survey, Sean McMahon's potable well was constructed in bedrock to a depth of 120 feet with steel casing to 90 ft bgs. Well construction reports were not available for the other private wells south of the Site. Based on our observations the potable well at the Theodolinde Yeager residence appears to be a sand point located beneath the residence. Sand points are driven into the ground, thus this well is likely installed at a shallower depth in the unconsolidated material.

Geology and Hydrogeology

Based on a review of potable water-supply logs from the area private wells, the unconsolidated material in the area has been described as three units: sand; sand clay; and sand and gravel. The unconsolidated material has been observed onsite at depths extending from approximately 64 to 88 feet beneath ground surface. The sandstone bedrock beneath the Site has been explored to a maximum depth of 300 feet. Well construction reports for the Sean McMahon property and Well P-5R on the Site are included in Appendix A.

Groundwater is encountered at approximately 25 ft bgs. Specific capacity testing of the onsite production wells yielded results of 3.6 to 7.8 gallons per minute per foot. The groundwater flow direction based on previous investigations is southwest, south, and southeast in the unconsolidated material, and south in the bedrock.

Objectives for this Scope of Work

Water quality may vary at different depths below the ground surface depending on the nature of contaminants and the geologic and hydrogeologic conditions at the Site. There are three main objectives for this next phase of work at the Site including:

- Identification of potential source area(s).
- Onsite and offsite evaluation of the horizontal and vertical nature of chlorinated VOCs in groundwater in the unconsolidated soils.
- Obtain additional data regarding the geologic and hydrogeologic conditions of the unconsolidated soils beneath the Site and the surrounding area.

Scope of Work

ARCADIS has developed a scope of work for completing the next phase of work to meet the objectives identified above. The scope of work consists of the following elements:

- Prepare a Health and Safety Plan (HSP) for the field activities and have utilities cleared.
- Advancement of six soil borings to approximately 90 ft bgs for subsurface geological characterization of the unconsolidated material using cone penetrometer testing (CPT).
- Collection and laboratory VOC analysis of up to seven discrete water samples from each soil boring advanced within the unconsolidated material.
- Survey the locations and ground elevations of the soil borings.
- Collection of investigation-derived wastewater.
- Prepare an investigation summary report with recommendations.

ARCADIS proposes to advance six soil borings to evaluate the lateral and vertical extent of impact in the unconsolidated material onsite, and evaluate the geologic and hydrogeologic properties beneath the Site. The proposed soil boring locations are presented on Figure 3.

Methodology

The following sections present a brief summary of the proposed methodology for the investigation activities.

Health and Safety

Prior to beginning the additional activities, a HSP will be prepared to cover all Site activities. Utilities marking arrangements will be made through Digger's Hotline, private utility locator, and discussions with site owners. Prior to beginning work each day, a "tailgate" health and safety briefing will be held to discuss the activities and identify ways to ensure the health and safety of Site workers. If conditions are encountered during Site investigation activities that differ from those outlined in the HASP, the Site activities will be revaluated to determine the appropriate actions that will ensure the health and well-being of Site workers.

CPT

CPT was the selected drilling method for completing the soil borings because of the ability of the method to provide rapid accurate geologic characterization of the subsurface and relatively low volume of investigation-derived waste.

Cone penetrometer testing, combined with discrete-depth ground water sampling methods, is a cost-effective approach for the development of a preliminary site conceptual model by understanding the geology, hydrogeology, and horizontal and vertical distribution of VOCs in the unconsolidated soils.

CPT is accomplished by pushing an instrumented probe into the ground using a hydraulic load frame mounted on a heavy truck, with the weight of the truck providing the necessary force (up to 40,000 pounds of pressure) to advance the probe. The penetrometer probe consists of a conical tip attached to a friction sleeve. The sensor in the cone tip measures soil resistance to penetration (tip resistance). Tip resistance is a measure of the pressure exerted (force per area) on the tip of the cone as it is advanced at a constant speed. A sensor also measures the amount of friction (sleeve friction) on the sides of the probe rods. Sleeve friction is the sum of friction and adhesion on the side of the rods when advanced at a constant speed. The pressure and friction sensors inside the cone are connected to a data acquisition system at the surface using cables or data transmitters. The end bearing resistance on the conical tip and soil friction along the sides of the penetrometer are simultaneously measured, allowing resolution between materials of differing grain size (e.g. differentiation of clays

and sands). The analog data are digitized, recorded, and plotted by computer in the penetrometer truck.

Drilling equipment and associated tooling that come in contact with soil and groundwater during the investigation activities at the Site will be decontaminated prior to advancing each borehole using a pressure washer with water obtained from the TriEnda facility.

Discrete Water Sampling

Groundwater samples will be collected from discrete sampling depths at each drilling location to evaluate both the lateral and vertical extent of impacts. Water samples will be collected in the unconsolidated material using retractable well screens. Water samples will be collected by advancing the well screen to the desired interval, retracting the outer casing to expose the well screen, and utilizing an inertial pump to purge a volume of water and collect groundwater samples. The well screen will be advanced to the next sampling interval, and the process will be repeated. Discrete water samples will be collected at approximate 10-foot intervals beginning at the water table, estimated at approximately 20 to 25 feet, to a depth of approximately 90 ft bgs where bedrock is encountered.

Dedicated polyethylene tubing will be used to collect each groundwater sample. Samples will be placed in clean, laboratory-supplied sample containers, and placed in a cooler filled with ice. Groundwater sample will be submitted to TestAmerica, Inc. of Watertown, Wisconsin for analysis of VOCs by Method 8260B. Level III data package will be provided by the laboratory including laboratory blank results, control calibration verification results, matrix spike/matrix spike duplicate results, trip blank results, and associated gas chromatographs for the above quality control/quality assurance samples and field samples.

Surveying

A Wisconsin-licensed surveyor will locate the horizontal location to Wisconsin state plane coordinates and vertical elevation for each boring location. Ground elevations will be surveyed to an accuracy of +/-1 foot.

Collection of Investigative-Derived Wastes

Limited water will be generated from the sampling and decontamination of down-hole equipment. The excess water generated from the investigation and sampling activities

described herein will be containerized in a steel 55-gallon drum until arrangements can be made for proper disposal.

Reporting

ARCADIS will prepare a Site Investigation Summary Report that will outline the procedures followed in the field, a summary of the results, and recommendations for the next phase of investigation. The report will present a summary of the geologic and hydrogeologic conditions and VOC distribution in the groundwater samples.

Schedule

The anticipated schedule for the completion of the CPT investigation activities is mid-June 2007. This schedule is based on availability of the drilling company, access agreements with the property owners and operators, and weather conditions.

References

RMT, January 1990. Hydrogeologic Investigation Report. January 1990.

RMT, July 1990. Final Ground Water Quality Assessment Plan for Penda Corporation, Portage, WI. July 1990.

RMT. April 1991. Summary of Soil Gas Survey for the Penda Corporation Lewiston Facility, Portage Wisconsin. April 1991.

RMT. August 1991. Summary of Source Identification Investigations for Penda Corporation, Portage, Wisconsin. August 1991.

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RMT. 1993. 1992 Annual Groundwater Monitoring Summary for Penda Corporation, Portage, Wisconsin. January 1993.

RMT. 1999. 1998 Annual Groundwater Monitoring Report. February 1999.

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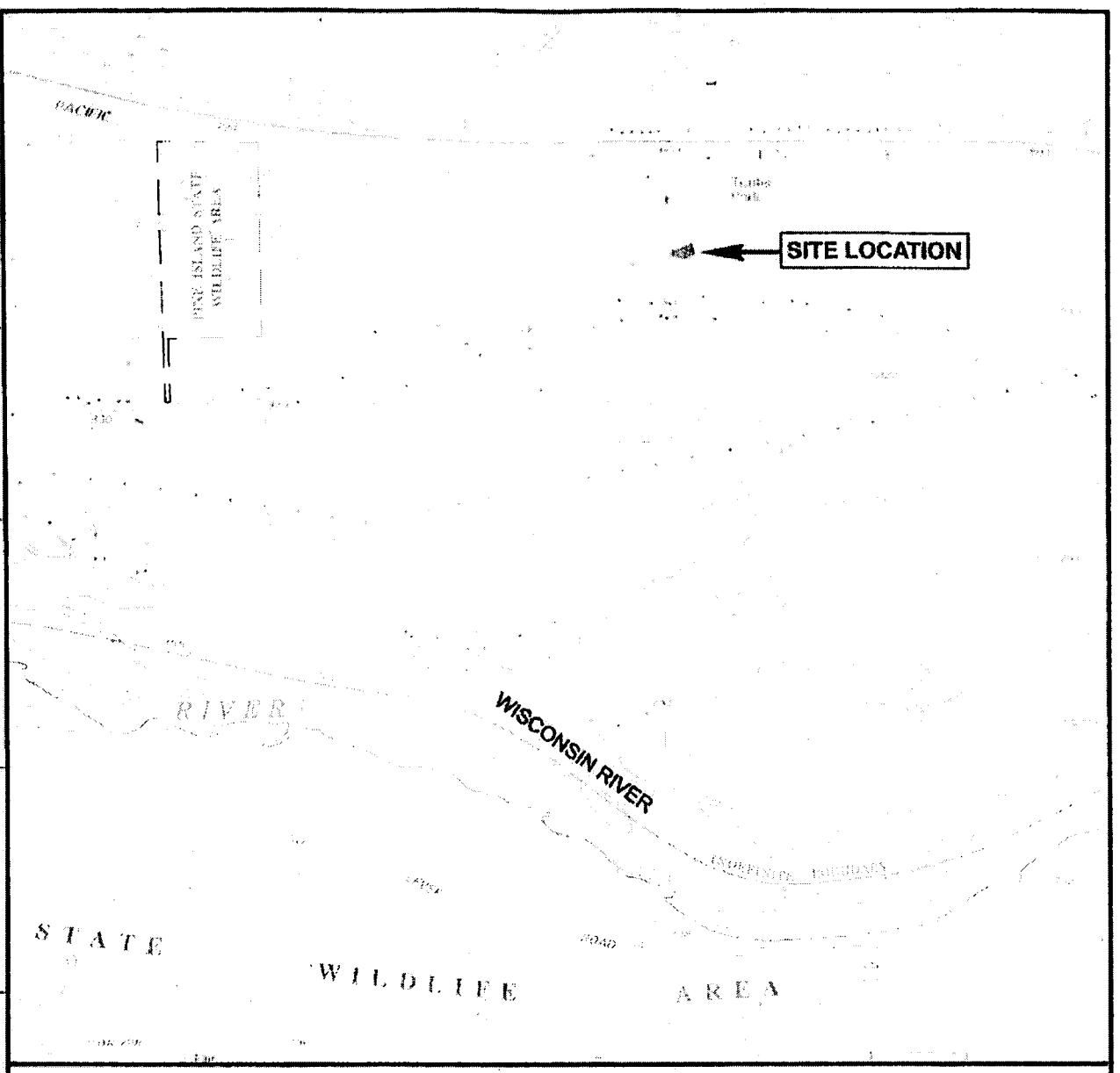
WDNR. Groundwater Sampling Desk Reference. PUBL-DG-037 96. September 1996.

United States Geological Survey. 1975. Pine Island Quadrangle Wisconsin Maps. 7.5 Minute Series: 1:24,000.

United States Geological Survey. 1984. Portage Quadrangle Wisconsin Maps. 7.5 Minute Series: 1:24,000.



SOURCE: USGS 7.5 Minute Topographic Map, Pine Island, WISCONSIN, 1975

N

0 1000 2000 4000

SCALE IN FEET

DRAFT

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Prepared at the Request of Counsel

WISCONSIN

ARCADIS

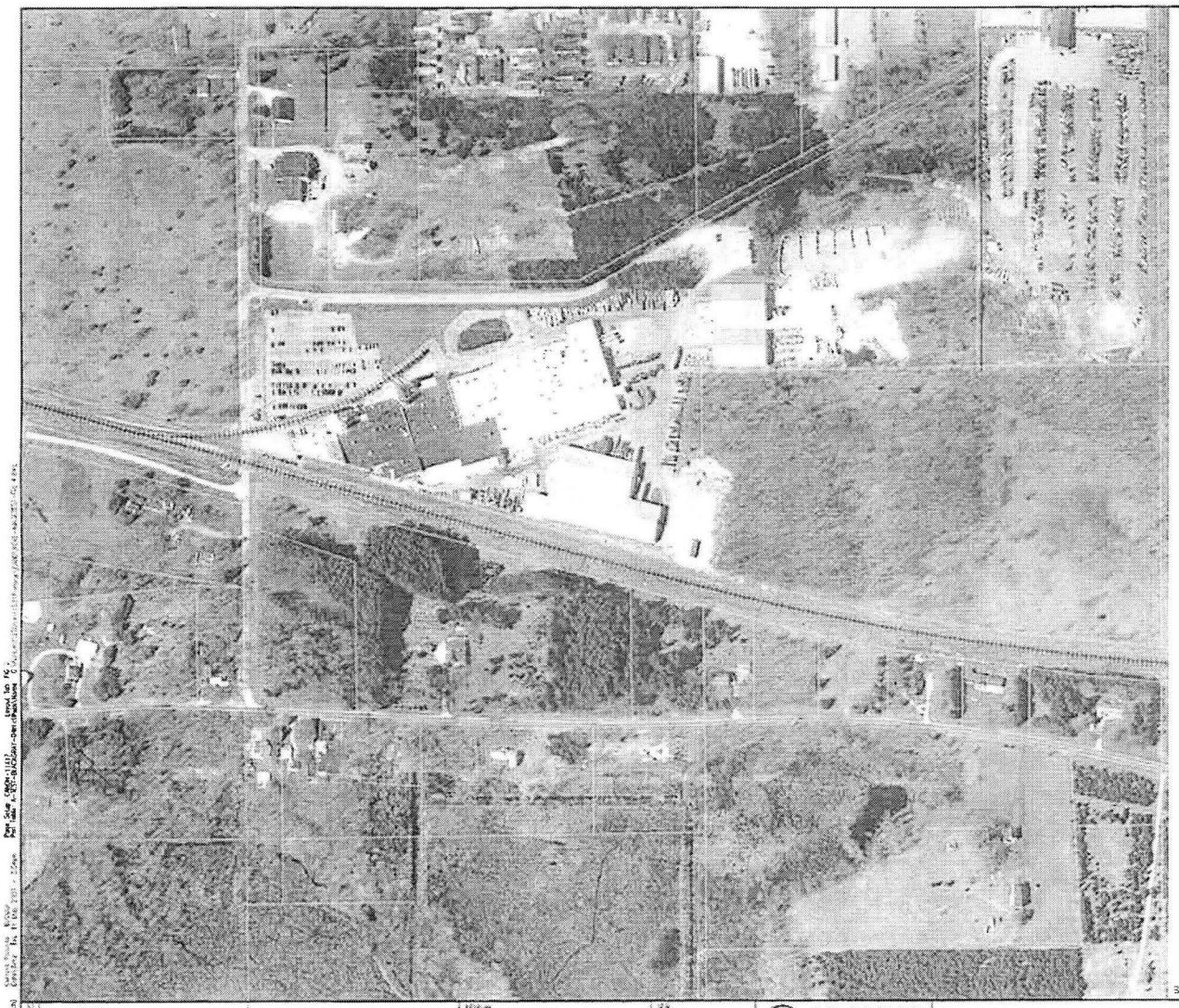
SITE LOCATION MAP

N7660 INDUSTRIAL ROAD
PORTAGE, WISCONSIN

FIGURE

1

DRAFTER: LMB | APPROVED: | CHECKED: TS | DRAWING: SITE LOC.AI | FILE NO.: GRAPHICS | PN: LSD\WI1163\PORTAGE | DWG DATE: 11MAY07



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LEGEND

RAILROAD LINE

SURFACE WATER

0 150 300
SCALE IN FEET

BASE MAP FROM COLUMBIA COUNTY LAND INFORMATION CO FOR THE TOWN OF LEWISTON DATED JANUARY 4, 2007

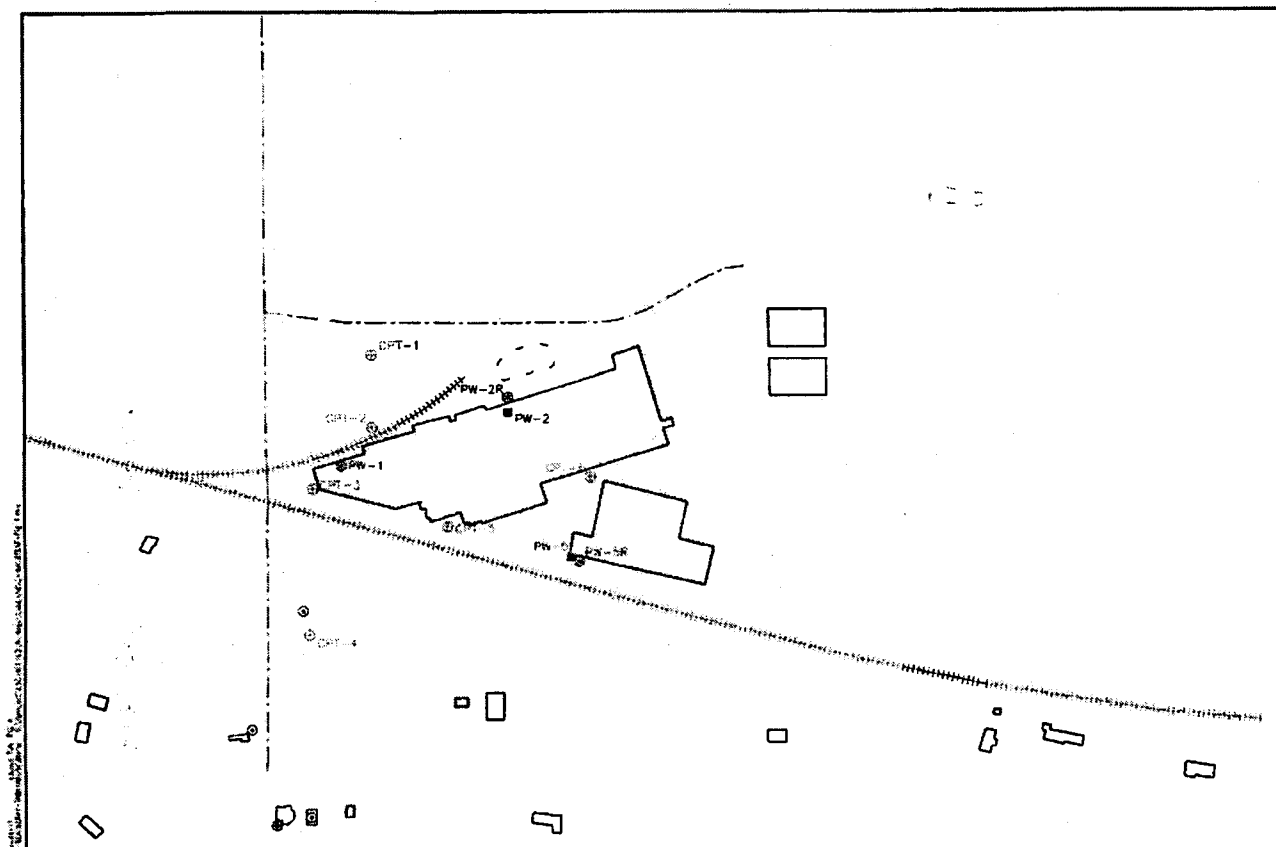
ARCADIS

N7660 INDUSTRIAL ROAD
PORTAGE, WISCONSIN

SITE AERIAL MAP

WI001163

2



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LEGEND

- RAILROAD LINE
- SURFACE WATER
- PRIVATE WELL
- PROPOSED SAMPLE LOCATIONS
- WILBERT CO WATER SUPPLY WELL
- WILBERT CO ABANDONED WATER SUPPLY WELL

NOTES

LOCATIONS OF PW-2R AND PW-5R ARE ESTIMATED

CONCENTRATIONS IN GREEN EXCEED NR140 PREVENTIVE ACTION LIMIT (PAL)

CONCENTRATIONS IN RED EXCEED NR140 ENFORCEMENT STANDARD (ES)

CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (ug/L)

Sample Date	PAL	ES	S McMahon 10/23/2006	Yaeger 1/4/2007	Morris 2/14/2007	Johnson 2/13/2007
1,1,1-TRICHLOROETHANE	40	200	[illegible]	[illegible]	22	13
1,1-DICHLOROETHENE	0.7	7	[illegible]	[illegible]	[illegible]	[illegible]
TETRACHLOROETHENE	0.5	5	[illegible]	[illegible]	[illegible]	<0.5
TRICHLOROETHENE	0.5	5	[illegible]	[illegible]	<0.5	<0.5

Sample Date	PAL	ES	Schultz 11/4/2006	Slovik 12/11/2006	Pence 12/11/2006	H McMahon 2/14/2007
1,1,1-TRICHLOROETHANE	40	200	<0.14	0.48	<0.15	<0.5
1,1-DICHLOROETHENE	0.7	7	<0.21	<0.15	<0.15	<0.5
TETRACHLOROETHENE	0.5	5	<0.13	<0.15	<0.15	<0.5
TRICHLOROETHENE	0.5	5	<0.17	<0.15	<0.15	<0.5

Sample Date	PAL	ES	Jakeman 2/13/2007	Bremer 2/13/2007	Payne 2/13/2007
1,1,1-TRICHLOROETHANE	40	200	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	0.7	7	<0.5	<0.5	<0.5
TETRACHLOROETHENE	0.5	5	<0.5	<0.5	<0.5
TRICHLOROETHENE	0.5	5	<0.5	<0.5	<0.5

0 150 300
SCALE IN FEET

BASE MAP FROM COLUMBIA COUNTY LAND INFORMATION CD FOR THE TOWN OF LEWISTON DATED JANUARY 4, 2007

ARCADIS

N7660 INDUSTRIAL ROAD
PORTAGE, WISCONSIN

PROPOSED SOIL BORING LOCATIONS

WA001163

3

ARCADIS

Appendix A

Well Construction Reports

Construction Report
WISN UNIQUE WELL NUMBER TP 123

State of WI - Public Water Systems-DOH
Department of Natural Resources, Box 7921
Madison, WI 53707
Form 3300-77A (R 7/03)

Sean McMahon | Telephone Number (608) 742-3283
Mailing Address N7628 Industrial Rd.
City Portage | State WI | Zip Code 53901
County of Well Location Columbia | Co. Well permit No. W____ | Well Completion Date (mm-dd-yyyy) 09-19-2006
Well Constructor (Business Name) Marshall Well Drilling Corp. | License # 16941c | Facility ID Number (Public Wells)
Address 3774 Hwy. 13 | Public Well Plan Approval # W-
City Wisc. Dells | State WI | Zip Code 53965 | Date of Approval (mm/dd/yyyy)
Hicap Permanent Well # ____ | Common Well # ____ | Specific Capacity ____ gpm/ft

3. Well serves 1 # of homes and or — (Eg: barn, restaurant, church, school, industry, etc.)
High Capacity: Well? ☐ Yes ☒ No; Property? ☐ Yes ☒ No

1. Well Location
☒ Town ☐ City ☐ Village of Lewiston | Fire # (If avail.) N7628
Street Address or Road Name and Number N7628 Industrial Rd.
Subdivision Name — | Lot # — | Block # —
Gov't Lot # — or SW 1/4 of SW 1/4 of Section 35, T 13 N, R 8 ☒ E ☐ W
Latitude Deg. 43 Min. 33 Sec. 405
Longitude Deg. 089 Min. 31 Sec. 389
Lat/Long Method GPS006

2. Well Type ☐ Replacement (see item 12 below) ☒ New ☐ Reconstruction
of previous unique well # ____ constructed in ____
Reason for replaced or reconstructed well?
☒ Drilled ☐ Driven Point ☐ Jetted ☐ Other ____

4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties? ☒ Yes ☐ No If no, explain on back side.
Well located in floodplain? ☐ Yes ☒ No
Distance in feet from well to nearest: (include proposed)

- ___ 1. Landfill
- 50 2. Building Overhang
- 70 3. Septic ☒ Holding Tank ☐
- 74 4. Sewage Absorption Unit
- ___ 5. Nonconforming Pit
- ___ 6. Buried Home Heating Oil Tank
- ___ 7. Buried Petroleum Tank
- ___ 8. Shoreline ☐ Swimming Pool ☐
- ___ 9. Downspout/Yard Hydrant
- ___ 10. Privy
- 49 11. Foundation Drain to Clearwater
- ___ 12. Foundation Drain to Sewer
- 50 13. Building Drain ☒ Cast Iron or Plastic ☐ Other
- 74 14. Building Sewer ☒ Gravity ☐ Pressure ☒ Cast Iron or Plastic ☐ Other
- ___ 15. Collector Sewer: ___ units ___ in. diam.
- N/A 16. Clearwater Sump
- N/A 17. Wastewater Sump
- ___ 18. Paved Animal Barn Pen
- ___ 19. Animal Yard or Shelter
- ___ 20. Silo
- ___ 21. Barn Gutter
- ___ 22. Manure Pipe ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other
- ___ 23. Other Manure Storage ____
- ___ 24. Ditch
- ___ 25. Other NR 812 Waste Source

5. Drillhole Dimensions and Construction Method

Dia. (in.)	From (ft.)	To (ft.)	Upper Enlarged Drillhole	Lower Open Bedrock
9	surface	9	☐ 1. Rotary - Mud Circulation	☐
			☒ 2. Rotary - Air	☒
			☐ 3. Rotary - Air and Foam	☐
6	9	120	☐ 4. Drill-Through Casing Hammer	
			☐ 5. Reverse Rotary	
			☐ 6. Cable-tool Bit ____ in. dia.	
			☐ 7. Temp. Outer Casing ____ in. dia.	☐
			Removed? ____ depth ft. Yes No - If no, explain on back side.	☐ ☐

6. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
6	P.E. Steel Pipe	surface	91
	Astm A-53 Gr. B		
	19.97 LBS/Ft.		
	Wheatland Steel		

Dia. (in.)	Screen type, material & slot size	From	To

7. Grout or Other Sealing Material
Method Gravity

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
#8 Granular Bentonite	surface	9	4
(Gravel pack if applicable)			

8. Geology

Geology Codes	Type, Caving/Noncaving, Color, Hardness, etc.	From (ft.)	To (ft.)
	Sand	surface	12
	Coarse Sand + Gravel w/Clay	12	30
	Coarse Sand	30	49
	Coarse Sand + Gravel w/ Clay	49	70
	Soft Broken-up Sandstone	70	91
	Firm Sandstone	91	120
	Note: Fracture In Lower		
	Drillhole @ 100'-101'		

9. Static Water Level
____ ft. above ground surface
25 ft. below ground surface

10. Pump Test
Pumping level 25 ft. below surface
Pumping at 20 GPM for 24 Hrs.

11. Well is: 18 in. ☒ Above ☐ Below Grade
Developed? ☒ Yes ☐ No
Disinfected? ☒ Yes ☐ No
Capped? ☒ Yes ☐ No

12. Did you permanently abandon and fill all unused, noncomplying or unsafe wells on this property? ☐ Yes ☐ No If no, explain on reverse.

13. Signature of Well Constructor or Supervisory Driller: Larry R. Marshall | Date Signed 9-20-06
Signature of Drill Rig Operator (Mandatory unless same as above): Larry R. Marshall | Date Signed 9-20-06

Make additional comments on reverse side about geology, additional screens, water quality, etc. DNR Notif.# 0236097758
Comments on reverse side ____ (CHECK ✓ IF YES) Variance Issued ☐ Yes ☐ No

(24)

Well Construction Report For

WISCONSIN UNIQUE WELL NUMBER EK 301

State of Wisconsin
Department of Natural Resources
Private Water Supply — WS/2
Box 7921
Madison, WI 53707

AUG 19 1991

Property Owner: Penda Corp Telephone Number: ( )

Mailing Address: N 7660 Industrial Rd

City: Portage State: WI Zip Code: 53901

County of Well Location: Columbia County Well Location Permit No.: W Well Completion Date: 7/31/91 (M M D D Y Y)

Well Constructor (Business Name): Rooswell Drilling Inc Registration #: 249

Address: Box 223

City: OXFORD State: WIS Zip Code: 53952

2. Mark well location in correct 40-acre parcel of section.

N / W / E / S

1. Location (Please type or print using a black pen.)

☒ Town ☐ City ☐ Village of Lewiston Fire # (if available)

Grid or Street Address or Road Name and Number (if available): N7640 Industrial Rd

Subdivision Name Lot # Block #

Gov't Lot # ____ or SW ¼ of SW ¼ of Section 35; T 13 N; R 8 ☒ E ☐ W

3. Well Type ☒ New Well #7 ☒ Replacement ☐ Reconstruction 00585

Replaces Well #5 of unique well # ____ constructed in 19____.

Reason for new, replaced or reconstructed well? Contaminated

☒ Drilled ☐ Driven Point ☐ Jetted ☐ Other ____

4. Well serves 1 # of homes and/or ____ (ex: barn, restaurant, church, school, industry, etc.)

High Capacity Well? ☐ Yes ☒ No

High Capacity Property? ☐ Yes ☒ No

5. Well Located on Highest Point of Property, Consistent with the General Layout and Surroundings? ☒ Yes ☐ No If no, explain on back side.

Well Located in Floodplain? ☐ Yes ☒ No

Distance In Feet From Well To Nearest:

- ____ 1. Landfill
- 20 2. Building Overhang
- 65 3. Septic or Holding Tank
- ____ 4. Sewage Absorption Unit
- ____ 5. Nonconforming Pit
- ____ 6. Buried Home Heating Oil Tank
- ____ 7. Buried Petroleum Tank
- ____ 8. Shoreline/Swimming Pool
- ____ 9. Downspout/Yard Hydrant
- ____ 10. Privy
- ____ 11. Foundation Drain to Clearwater
- ____ 12. Foundation Drain to Sewer
- ____ 13. Building Drain ☐ Cast Iron or Plastic ☐ Other
- 65 14. Building Sewer ☒ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other
- ____ 15. Collector or Street Sewer
- ____ 16. Clearwater Sump
- ____ 17. Wastewater Sump
- ____ 18. Paved Animal Barn Pen
- ____ 19. Animal Yard or Shelter
- ____ 20. Silo — Type ____
- ____ 21. Barn Gutter
- ____ 22. Manure Pipe ☐ Gravity ☐ Pressure ☐ Cast Iron or Plastic ☐ Other
- ____ 23. Other Manure Storage ____ Other NR 112 Waste Source
- ____ 24. ____

6. Drillhole Dimensions

Dia. (in.)	From (ft.)	To (ft.)
10	surface	200
6		250

Method of constructing upper enlarged drillhole only.

- ☒ 1. Rotary — Mud Circulation
- ☐ 2. Rotary — Air
- ☐ 3. Rotary — Foam
- ☐ 4. Reverse Rotary
- ☐ 5. Cable-tool Bit ____ in. dia.
- ☐ 6. Temp. Outer Casing ____ in. dia. Removed? ☐ Yes ☐ No If no, explain N/A
- ☐ 7. Other ____

9. Geology

DNR USE ONLY	Type, Caving/Noncaving, Color, Hardness, Etc.	From (ft.)	To (ft.)
	Sand & Gravel	surface	88
	Sandstone	88	250

7. Casing, Liner, Screen

Dia. (in.)	Material, Weight, Specification Mfg. & Method of Assembly	From (ft.)	To (ft.)
6	Welding Tube of America	surface	200
	PE weld. WT		
	953B WT 18.97		
	0.280 wall		

Dia. (in.)	screen type and material	From	To
	N/A		

10. Static Water Level: ____ ft. above ground level; 24 ft. below ground surface

11. Pump Test: Pumping Level 24 ft. below surface; Pumping at 15 GPM for 20 hours

12. Well is: 36 in. ☒ Above ☐ Below Grade

Developed? ☒ Yes ☐ No

Disinfected? ☒ Yes ☐ No

Capped? ☒ Yes ☐ No

8. Grout or Other Sealing Material

Method ~~TREMIE~~ PUMPED

Kind of Sealing Material	From (ft.)	To (ft.)	Sacks Cement
NEAT CEMENT	surface	200	80

13. Did you permanently seal all unused, noncomplying, or unsafe wells? ☒ Yes ☐ No If no, explain ____

14. Signature of Point Driver or Registered Driller: Thomas D'Agro Date Signed: 7-31-91 TDR

Signature of Drill Rig Operator: Mark Ahlgren Date Signed: 7-31-91 MH

Make additional comments on reverse side about geology, etc.

WELL CONSTRUCTION REPORT