



**CONESTOGA-ROVERS
& ASSOCIATES**

1801 Old Highway 8 Northwest, Suite 114, St. Paul, Minnesota 55112
Telephone: 651-639-0913 Facsimile: 651-639-0923
www.CRAworld.com

June 18, 2009

Reference No. 003978

Ms. Sheri Bianchin
UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY
77 West Jackson
Chicago, Illinois 60604

Mr. Gary Edelstein
WISCONSIN DEPARTMENT OF
NATURAL RESOURCES
P.O. Box 7921
Madison, Wisconsin 53707-7921

Dear Ms. Bianchin and Mr. Edelstein:

Re: 2008 Annual Monitoring Report
Wausau Water Supply NPL Site

On behalf of the Wausau Water Supply PRP Group, Conestoga-Rovers and Associates (CRA) is pleased to submit this 2008 Annual Monitoring Report for the Wausau Water Supply NPL Site. This Report has been prepared as required by the Groundwater Monitoring Plan for the Wausau Water Supply NPL Site.

Please note that we have recommended a new minimum pumping rate for extraction well EW1 of 600 gpm due to declining pumping capacity of the well. The recommendation is made in Section 5.2 and discussed in Section 3.2. This change was discussed with Jeff Gore before the project manager change was made. If this change is acceptable to you, please provide a written response with your approval for our records.

Please call me at (651) 639-0439, extension 305, if you have any questions or comments.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Jason Twaddle

JT/sb/2
Encl.

cc: Dave Erickson, City of Wausau
Wally Mattson, Marathon Electric
Art Flashinski, Wausau Chemical

Received

JUN 22 2009

**REMEDIATION &
REDEVELOPMENT**

Equal
Employment
Opportunity Employer

REGISTERED COMPANY FOR
ISO 9001
ENGINEERING DESIGN



2008 ANNUAL MONITORING REPORT

**WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN**

PRINTED ON
JUN 18 2009



2008 ANNUAL MONITORING REPORT

WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

Received

JUN 22 2009

REMEDICATION &
REDEVELOPMENT

JUNE 2009

REF. NO. 003978 (27)

This report is printed on recycled paper.

Prepared by:
Conestoga-Rovers
& Associates

1801 Old Highway 8 Northwest, Suite 114
St. Paul, Minnesota 55112

Office: 651-639-0913
Fax: 651-639-0923

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION.....	1
1.1 HISTORY.....	1
1.2 BACKGROUND.....	2
1.3 SITE GEOLOGY	3
1.4 GROUNDWATER CLEANUP STANDARDS.....	3
2.0 2008 MONITORING	4
2.1 WATER LEVEL MONITORING	4
2.2 GROUNDWATER SAMPLING.....	4
2.3 EXTRACTION WELL (EW1) SAMPLING	5
3.0 OPERATION AND MAINTENANCE	6
3.1 EXTRACTION WELL (EW1) OPERATION.....	6
3.2 CITY PRODUCTION WELLS	7
3.3 EAST BANK SOURCE REMEDIATION SYSTEM.....	8
4.0 EVALUATION OF GROUNDWATER DATA	9
4.1 WEST BANK	9
4.1.1 GROUNDWATER FLOW DIVIDE AND CVOC MIGRATION	11
4.2 EAST BANK	12
4.3 EW1.....	13
4.4 HYDRAULIC CAPTURE.....	14
5.0 CONCLUSIONS AND RECOMMENDATIONS.....	15
5.1 CONCLUSIONS.....	15
5.2 RECOMMENDATIONS	16

LIST OF FIGURES
(Following Report)

FIGURE 1.1	SITE LOCATION
FIGURE 1.2	SITE PLAN
FIGURE 2.1	WATER TABLE CONTOURS (10/13-14/08)
FIGURE 4.1	TOTAL CHLORINATED VOCS IN GROUNDWATER (OCTOBER 2008)

LIST OF TABLES
(Following Report)

TABLE 2.1	GROUNDWATER ELEVATIONS - 2008
TABLE 2.2	SITE SPECIFIC VOC LIST
TABLE 2.3	GROUNDWATER SAMPLING SUMMARY - OCTOBER 2008
TABLE 3.1	EXTRACTION WELL (EW1) PUMPING RATES - 2008
TABLE 3.2	CITY SUPPLY WELL PUMPING SUMMARY - 2008
TABLE 4.1	MONITORING WELL LABORATORY RESULTS - 2008
TABLE 4.2	EW1 LABORATORY RESULTS - 2008

LIST OF APPENDICES

APPENDIX A	DATA QUALITY VALIDATION MEMORANDUMS
APPENDIX B	PAVEMENT COVER AND BUILDING BARRIER MAINTENANCE INSPECTION REPORT
APPENDIX C	ABANDONMENT FORMS - EAST BANK SVE WELLS, GAS PROBES, AND GROUNDWATER EXTRACTION WELLS

1.0 INTRODUCTION

Conestoga-Rovers and Associates (CRA) has prepared this 2008 Annual Monitoring Report (Report) for the Wausau Water Supply NPL Site (Site) in Wausau, Wisconsin, on behalf of the Wausau Potential Responsible Party (PRP) Group. This Report presents the results of groundwater and extraction well monitoring at the Site during 2008. This Report also presents operational data for the remediation systems.

1.1 HISTORY

The Wausau PRP Group initiated remedial action at the Site in the early 1990s in accordance with the September 29, 1990, Record of Decision (ROD) and the Consent Decree (CD) entered with the court on January 24, 1991. The final remedial action at the Site consisted of two soil vapor extraction (SVE) systems to address the source areas and groundwater extraction and treatment utilizing existing municipal production wells and an extraction well. The Site location is shown on Figure 1.1 and a Site plan is presented on Figure 1.2.

Source area remediation was accomplished by the installation of SVE systems at Marathon Electric (West Bank) and Wausau Chemical (East Bank) in January 1994. Off-gas treatment was provided by vapor phase carbon. The SVE system at Marathon Electric operated until April 1996, when the West Bank source remediation was approved as complete. The East Bank SVE system was modified in 1996 and continued to operate. In January 2001 the East Bank system was shut down while evaluation for final closure occurred. The East Bank source remediation was approved as complete in 2007.

Groundwater remediation is provided through two existing municipal production wells (CW3 and CW6) and one extraction well installed at Marathon Electric (EW1). Air strippers at the Wausau water treatment plant treat water from the municipal supply wells. Water from EW1 is also treated by air stripping (over riprap on the riverbank) before being discharged to the Wisconsin River.

The pumping rates for the three extraction wells were originally defined in the CD. In the Groundwater Flow Model report (CRA, May 1993), CRA established a range of pumping rates that would maintain capture of the groundwater plume. Then, in an August 4, 1995 letter, the United States Environmental Protection Agency (USEPA) approved a pumping configuration range from that report for the three extraction wells. Those pumping rates are:

- CW3: 65 hours per week at 1,200 gallons per minute (gpm) to 100 hours per week at 1,100 gpm;
- CW6: 85 hours to 100 hours per week at 1,400 gpm; and
- EW1: 800 to 900 gpm continuously.

Additional groundwater remediation was provided by an extraction system operated by Wausau Chemical between 1985 and 1996 as an interim remediation measure. The extraction system at Wausau Chemical consisted of a series of shallow wells at the south end of the Wausau Chemical property. Groundwater was treated by air stripping. This system was not part of the ROD or the CD and operation ceased in 1996.

From 1993 through 2000 groundwater monitoring was conducted according to the Monitoring Program Plan (CRA, 1994). The Monitoring Program Plan consisted of a complex system of monthly, quarterly, semiannual, and annual monitoring. In June 2000, the Groundwater Monitoring Plan replaced the Monitoring Program Plan as the approved groundwater-monitoring program. The Groundwater Monitoring Plan consists of annual monitoring well sampling and quarterly sampling of EW1.

The Groundwater Monitoring Plan requires an annual report on the activities occurring the previous calendar year. This Report fulfills the requirement for 2008.

1.2 BACKGROUND

Groundwater monitoring at this Site is a combination of hydraulic and water quality monitoring designed to verify that the groundwater extraction wells are containing the contaminant plume and that groundwater quality is improving because of past source remediation and volatile organic compound (VOC) removal from the aquifer.

Groundwater remediation at a site like Wausau is a long-term process that cannot be readily measured on a short-term basis using water quality data alone. Because of the time necessary to achieve groundwater remediation, containment of contaminated groundwater is the primary measurable and achievable short-term objective.

Actual remediation of the groundwater is a slower process that is more difficult to measure using field data on a short-term basis. Accordingly, water quality data is measured annually on a long-term basis to show the downward trend of VOC concentrations in groundwater. Significant VOC reductions are measured over a period of years.

For the purpose of evaluation, groundwater monitoring at Wausau has been divided into two areas, the East Bank and the West Bank of the Wisconsin River, corresponding to the two original source areas. The river forms a natural hydraulic division of the Site. There are three active groundwater extraction wells designed to contain and remove VOC contaminated groundwater. Two of the extraction wells are on the West Bank, (CW6 and EW1) and one is on the East Bank (CW3) (see Figure 1.2).

1.3 SITE GEOLOGY

The Site is underlain by glacial outwash and alluvial sediments that have filled in the preglacial stream valley in which the Wisconsin River now flows. This alluvial aquifer ranges from 0 to 160 feet thick and has an irregular base and lateral boundaries. The relatively impermeable bedrock that underlies the aquifer and forms its lateral boundaries within the preglacial valley defines the boundaries of the aquifer. Six production wells in the Site area provide drinking water for the City of Wausau. These wells are screened in the glacial outwash and alluvial sand and gravel deposits that underlie and are adjacent to the Wisconsin River.

1.4 GROUNDWATER CLEANUP STANDARDS

The Groundwater Monitoring Plan was developed to monitor compliance with cleanup standards for the groundwater at the Site. The groundwater cleanup standards for the Site are the United States Environmental Protection Agency (USEPA) maximum drinking water contaminant levels (MCLs). The MCLs for the primary VOC contaminants of concern at the Site are:

- Trichloroethylene (TCE) 5 µg/L;
- Tetrachloroethylene (PCE) 5 µg/L;
- cis-1,2-Dichloroethylene (DCE) 70 µg/L; and
- Vinyl chloride 2 µg/L.

2.0 2008 MONITORING

Groundwater monitoring during 2008, which included water level measurements and water sampling, was conducted in October in accordance with the Groundwater Monitoring Plan with the following exceptions. As reported in the 2000 Annual Monitoring Report, two monitoring wells (WC2 and W51A) are no longer monitored because they were abandoned in 2000 due to damage. Also, as approved by the USEPA and Wisconsin Department of Natural Resources (WDNR) through the 2002 Annual Monitoring Report, the analysis of bis(2-ethylhexyl)phthalate at C4S and W53A was discontinued in 2003. Monitoring of EW1 was completed quarterly in January, April, July, and October in accordance with the Groundwater Monitoring Plan.

2.1 WATER LEVEL MONITORING

Table 2.1 presents the groundwater elevation data measured on October 13-14, 2008. Water table contours based on these measurements are presented on Figure 2.1. Field staff measured water levels on the East Bank on October 13, 2008, while CW3 was running. CW3 was shut-off and CW6 was turned on that afternoon, after water levels were measured in the East Bank wells. West Bank water levels were then measured on October 14, 2008, after CW6 had been running overnight. Water levels in the City production wells were measured with the assistance of the City staff.

The East Bank and West Bank contours are consistent with flow patterns observed in previous years. The flow patterns are controlled by the operation of EW1 and the City production wells. Under natural conditions, groundwater would flow toward and discharge to the Wisconsin River and its tributary, Bos Creek. Under existing conditions however, groundwater flows toward EW1 and the production wells. The operation of EW1 has created groundwater flow divides between the west and east City well fields and has isolated the former landfill source of contaminated groundwater from the production wells.

2.2 GROUNDWATER SAMPLING

Annual groundwater samples were collected on October 13-15, 2008, according to the Groundwater Monitoring Plan. Monitoring well samples were analyzed for the Site specific VOC list, presented in Table 2.2, by EPA Method 8260. A summary of the groundwater-sampling event, including field parameter measurements, is presented in Table 2.3.

Groundwater sampling was conducted according to the Quality Assurance Project Plan (QAPP), February 1994, as amended by a June 11, 1999, letter to the USEPA. TestAmerica Laboratories, Inc. in North Canton, Ohio, analyzed all samples. Laboratory results are being submitted electronically in the Region V Electronic Data Deliverable (EDD) format for inclusion in the Region V EPA database. A copy of the Data Quality Validation memorandum for the 2008 data is included in Appendix A.

2.3 EXTRACTION WELL (EW1) SAMPLING

The monitoring program for EW1 was designed to measure long-term water quality improvement in the groundwater and to measure the treatment of the groundwater extracted by EW1. This data is also used to measure the contaminant levels discharged to the Wisconsin River from the EW1 treatment system. The discharge should meet the substantive requirements of the Wisconsin Pollutant Discharge Elimination System (WPDES).

Influent and Effluent samples were collected from EW1 quarterly in January, April, July, and October according to the Groundwater Monitoring Plan. Both the influent and effluent samples were analyzed by EPA Method 8260 for the Site specific VOCs (Table 2.2).

Each quarterly sample was analyzed by TestAmerica. Laboratory results are being submitted electronically in the Region V EDD format for inclusion in the Region V EPA database. Copies of the Data Quality Validation memorandums for the 2008 data are included in Appendix A.

3.0 OPERATION AND MAINTENANCE

Operation and maintenance activities reported in this section cover EW1, the city production wells, the groundwater monitoring wells, and the annual inspection of the East Bank source area.

3.1 EXTRACTION WELL (EW1) OPERATION

In 2008, approximately 410,120,000 gallons of water were extracted and treated by the West Bank extraction well (EW1) at Marathon Electric. The extraction well pumped at an average flow rate of 787 gallons per minute during 2008 and at an average rate of 792 gallons per minute while the pump was running. Table 3.1 summarizes EW1 operational data for 2008, including the number of gallons pumped and flow rate.

The West Bank extraction well had one major shutdown in 2008 and several minor shutdowns. The pump was shut down for 51 hours starting February 26, 2008, to update the pump motor controls. Minor shutdowns related to maintenance of the pump and motor included:

- | | | | |
|---|-------------|------------|---------------------------------------|
| • | April 3 | 0.25 hours | Measure head |
| • | June 2 | 1.5 hours | Clean strainer screen |
| • | August 22 | 1.5 hours | Clean strainer screen |
| • | September 8 | 1.5 hours | Repair pump seal and change motor oil |

In addition, the pump shut down on the following dates because of a power failure or electrical repairs at the plant unrelated to the pump operation:

- | | | |
|---|-------------|-----------|
| • | June 6 | 3.5 hours |
| • | September 6 | 0.5 hours |
| • | October 4 | 1.5 hours |

Through regular maintenance of the well screen and pump at EW1, the pumping rate has been maintained within the USEPA-approved 800 to 900 gpm over the eighteen year period that it has been operating. However, the attainable flow rate continues to slowly decline, likely due to plugging of the pore spaces in the surrounding sand pack and aquifer material. As stated above, the average EW1 pumping rate for 2008 was 792 gpm. This rate is still more than sufficient to meet the EW1 performance criteria. The original performance criteria for EW1 specified that the well should pump sufficient

groundwater to create groundwater flow divides beneath the river to the east and beneath Bos Creek to the north. Groundwater modeling conducted in 1993¹ tested various pumping rates for EW1 ranging from 300 gpm to 1600 gpm. Comparison of the resulting capture zones indicated that pumping rates of 500 gpm and greater met the performance criteria. Therefore, the 800 gpm flow rate is not a critical lower limit relative to achieving sufficient groundwater capture at EW1. CRA will continue monitoring the performance of EW1 to ensure that it continues operating at its optimal attainable rate.

3.2 CITY PRODUCTION WELLS

CW3 operated as required in 2008 with minimal shutdowns or repairs. CW6 was shutdown from February through April for well screen cleaning and rehabilitation, and again later in April to resize the pump. The City of Wausau also completed maintenance work on CW11, which is not part of the remediation system. CW11 was not used during most of February and March to remedy problems with its meter.

Tables 3.2 presents 2008 pumping data for all six City wells. While only CW3 and CW6 are part of the remediation system, data for all six City wells is presented, as has been done historically. The table shows, by month, the number of hours each well was operated, the number of gallons pumped from each well, and the average pumping rate while the pump was operating.

CW3 and CW6 operated on alternate schedules at rates that generally exceeded the operating requirements established in the Groundwater Flow Model report. CW3 operated for at least 290 hours each month (with the exception of 255 hours in January) at pumping rates greater than 1,360 gpm, exceeding the requirements of 65 hours per week at 1,200 gpm.

As noted in the 2007 Annual Monitoring Report, the production from CW6 had been declining throughout 2007. After well rehabilitation was completed (April 2008) CW6 operated at a higher capacity. From May through the end of the year, CW6 operated for at least 340 hours each month (with the exception of 274 hours in August) at pumping rates greater than 1650 gpm, generally exceeding the requirement of 85 hours per week at 1400 gpm.

¹ Groundwater Flow Model, Wausau Water Supply NPL Site, Wausau, Wisconsin. Conestoga-Rovers & Associates, May, 1993.

The USEPA and WDNR approved final closure of the East Bank source remediation system in September 2007. A requirement of the closure was an annual inspection of the paved areas surrounding the Wausau Chemical property, as described in the Pavement Cover and Building Maintenance Plan. The purpose of the inspection is to inspect the integrity of the paved areas of the property and make recommendations as needed to minimize rainwater infiltration and prevent direct human contact with soils. The April 2008 inspection noted some cracks in the pavement next to the building. The cracks were filled with asphalt. A copy of the inspection report is presented in Appendix B.

In September 2008, the SVE wells and soil gas probes that had composed the soil gas extraction and monitoring system for the East Bank SVE system were abandoned according to WDNR requirements. At the same time, the fifteen shallow groundwater extraction wells at the south side of the Wausau Chemical property were also abandoned. As discussed in Section 1.1, these fifteen wells had been operated by Wausau Chemical between 1985 and 1996 as an interim groundwater remediation system. Copies of the abandonment forms for the SVE wells, gas probes and groundwater extraction wells are located in Appendix C.

4.0 EVALUATION OF GROUNDWATER DATA

The objectives of groundwater monitoring at the Wausau Site are to monitor the containment of the contaminant plume and the long-term improvement in groundwater quality.

Table 4.1 presents the laboratory results for monitoring well samples collected in October 2008. The data indicate that, in general, the plumes are stable or decreasing in size and concentration. Total chlorinated VOC data, included in Table 4.1 and presented on Figure 4.1, illustrates the plume configuration based on the October 2008 data.

4.1 WEST BANK

The primary VOC found in the West Bank groundwater is trichloroethene (TCE). The degradation product cis-1,2-dichloroethene (C12DCE) was detected at three locations with relatively low concentrations. Vinyl chloride was detected in one well on the West Bank. Monitoring wells with TCE concentrations greater than the MCL of 5 µg/L include R2D, R3D, R4D, and W53A. The MCL for TCE was also exceeded in the samples from the two extraction wells, EW1 and CW6 (see Table 4.1).

In the portion of the plume north of extraction well EW1, chlorinated volatile organic compounds (CVOCs) are located in the deeper portions of the aquifer. Wells north of EW1 that exceeded the MCL for TCE (R2D, R3D, R4D, and CW6) are screened in the deeper portion of the aquifer. In the southern portion of the plume, in the vicinity of the old landfill, CVOCs are located in the shallower portions of the aquifer at relatively lower concentrations. MW53A, which also exceeded the MCL for TCE is screened in the shallower portion of the aquifer south of EW1.

In general, the West Bank plume concentrations decreased in 2008 compared to 2007 results. Most of the monitoring wells on the West Bank had total CVOC concentrations in 2008 lower than their 2007 concentrations.

Previous Annual Monitoring Reports discuss the probable migration of a relatively high concentration slug of CVOCs towards extraction well EW1. The slug of CVOCs began in the vicinity of R2D, near the flow divide between EW1 and CW6 in 1993, and has been slowly moving towards EW1. 2008 data indicate that this slug continues to move south toward EW1 (see Figure 4.1). Historical data for R2D, R3D, and R4D are shown below:

Total CVOCs (µg/L)

<u>Year</u>	<u>R2D</u>	<u>R3D</u>	<u>R4D</u>
1993	3635	4	1016
1994	2130	11	1019
1995	152	5	720
1996	1600	2	540
1997	720	5	65/65
1998	320	580	52/58
1999	110	1200	33
2000	45	1800	58
2001	17	1500	13/13
2002	15	1200	36
2003	10	980	39/37
2004	11	899	51
2005	7.5	400	56/57
2006	8.2	480/500	42
2007	9.9	280	1.3
2008	6.5	180	13

As shown above, concentrations in R3D continued to decrease in 2008, and have decreased by 90 percent from 1,800 µg/L in 2000 to 180 µg/L in 2008.

While most of the mass in this CVOC slug has migrated well past R3D, it has not appeared in the wells down gradient of R3D. The CVOC concentration at R4D, has remained relatively steady during the same time period, actually decreasing since 2000. The CVOC concentrations at W52 (0.85 µg/L in 2008), which is between R3D and R4D, have remained below 3 µg/L since 2000. Since it is unlikely that the CVOC slug has attenuated almost completely between R3D and R4D, it may be migrating toward EW1 along a narrow and more permeable lens within the aquifer that is not monitored by W52 and R4D (R4D and W52 are screened 6 feet and 15 feet higher than R3D respectively):

In the far north portion of the plume, within the capture area of City production well CW6 (see Figure 4.1), the total CVOC concentration in CW6 and W55 (almost exclusively TCE) has steadily declined since 2000. There has been a decrease in TCE concentration

at CW6 from 14 µg/L to 5.6 µg/L during this time period. The TCE concentration at W55 decreased from 11 µg/L to 2.9 µg/L (less than the MCL) during this time period. This area of the plume appears to be stable with gradually decreasing CVOC concentrations.

In the southern portion of the West Bank plume, under the old landfill, CVOC concentrations remained relatively stable in 2008. While the total CVOC concentrations at W53A increased to 39 µg/L in 2008, the CVOC concentrations at C4S, and WSWD were less than 1 µg/L and no CVOCs were detected at W54.

4.1.1 GROUNDWATER FLOW DIVIDE AND CVOC MIGRATION

In the vicinity of R3D there is a groundwater flow divide between the capture zones of CW6 and EW1. Depending on the pumping schedule at CW6, groundwater flow in this area may be to the north toward CW6 when it is pumping, but to the south toward EW1 when CW6 is not pumping. The net effect is that the movement of groundwater in the flow divide area is much slower or stagnate. Since this area contains a significant slug of CVOC, a decrease in the average pumping rate at CW6 could accelerate CVOC migration toward EW1 by moving the divide closer to CW6 and increasing the hydraulic gradient toward EW1. This could be accomplished with a moderate reduction in the average pumping rate of CW6 that would still achieve its performance standard of creating a hydraulic barrier between the CVOC plume and the other City wells in the West well field.

The current USEPA-approved pumping schedule for CW6 requires a minimum average pumping rate of 708 gpm on a weekly basis (85 hours per week at 1,400 gpm). When the groundwater flow model was constructed in 1993, several model runs were conducted to estimate lower limits for the City well pumping rates. The lower limits represented the approximate pumping rate for individual wells at which the CVOC plume was no longer contained. Based on the flow model estimates, the minimum pumping rate required for CW6 to contain the plume was 4,200,000 gallons/week (420 gpm weekly average or 50 hours per week at 1,400 gpm). Hence, pumping of CW6 could potentially be reduced up to 40 percent (708 gpm to 420 gpm weekly average) while maintaining the hydraulic containment performance standard.

4.2 EAST BANK

While tetrachloroethene (PCE) was the original contaminant on the East Bank, the presence of TCE, C12DCE, and vinyl chloride at concentrations that equal or exceed the

PCE concentration in most wells indicates an active natural biodegradation process (see Table 4.1). For example, at E23A, and E37A the C12DCE concentrations were higher than the PCE and TCE concentrations combined.

Three East Bank wells had PCE concentrations that exceeded the MCL of 5 µg/L (out of seven detections). The highest PCE concentration was 110 µg/L at E23A. Two wells (E37A and E23A) also had TCE, C12DCE, and vinyl chloride concentrations that exceeded the MCLs of 5 µg/L, 70 µg/L, and 2 µg/L respectively.

Overall, the data indicate that CW3 continues to effectively capture the East Bank plume and is effectively remediating the groundwater on the East Bank. The extent of the East Bank contaminant plume (see Figure 4.1) remained relatively stable in 2008; however, concentration trends were variable. Total CVOC concentrations from 2004 through 2008 for key East Bank wells are shown below:

Total CVOCs (µg/L)

<u>Well</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
WC3B	10.2	1.4	18	4.2	1.5
WC5A	10.1	12	8.4	1.8	2.8
E24A	2.6	1.6	3.7	1.1	1
E22A	9.2	ND	14	10	ND
E37A	16.4	17	8.5	34	460
E23A	15.2	66	47	130	260
WW6	10.1	28	78	35	12
CW3	7.2	6.4	4.6	4.8	6.4
IWD	8.9	6.6	13	11	4.4

The two wells closest to the source at the south end of the Wausau Chemical building, WC3B and WC5A, had historically low CVOC concentrations in 2008, with none of the detected VOCs at these two wells exceeding the MCLs.

Higher CVOC concentrations were exhibited at monitoring wells E37A and E23A, which are midway between the source and City extraction well CW3, continuing a trend observed in 2007. Meanwhile the CVOC concentration at WW6, which is farther down gradient, continued to decrease in 2008. These changes in CVOC concentrations are probably due to ongoing movement of contaminant slugs as they migrate toward CW3. Although individual monitoring well concentrations generally have not shown a clear

downward trend from 2007 through 2008, the CVOC concentrations at CW3 remained steady.

Concentrations at the edge of the plume have remained relatively constant. As shown above, the CVOC concentration at E24A has remained below 3.7 µg/L since 2002. CVOC concentrations at E22A have been near 10 µg/L since 2002, with the exception of 2005, and 2008, when no CVOCs were detected. CVOC concentrations at MW10A, MW10B, and WW4 (see Figure 4.1) have been below the detection limit since 2001.

The island well, IWD, had a generally increasing TCE concentration beginning in 2000 that stabilized in 2007 at 11 µg/L, and decreased to 4.4 µg/L in 2008. The aquifer at IWD appears to have been impacted by West Bank contaminants based on the depth and the composition (TCE only). Most likely, prior to operation of EW1, CW3 captured some groundwater from the West Bank and caused it to migrate beneath the river towards the east side. There is likely a low concentration remnant of the West Bank contaminants in a relatively stagnant area between the capture zones of EW1 and CW3. This remnant will move slowly toward one side or the other, depending on the pumping rates and pumping patterns of EW1 and CW3.

The 2008 concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) at monitoring well FVD5 were consistent with historical data. The BTEX parameters found in this well are independent of the Wausau NPL site remediation process. During 2004, a third party conducted an investigation at the former Wausau Energy property where FVD5 is located.

4.3 EW1

The 2008 influent and effluent laboratory results for EW1 are presented in Table 4.2. TCE was the primary VOC detected. C12DCE was also detected in samples from all sampling events, but its concentration was less than 1 µg/L.

Influent concentrations of TCE remained steady between 6 µg/L and 9 µg/L, a slight decrease since 2007. The influent concentration has shown a steady decrease over the past several years. The effluent concentrations indicate that the EW1 treatment system removes about 50 percent of the VOCs in the extracted groundwater.

The results of the effluent samples were compared to surface water discharge limits for discharge to the Wisconsin River, as calculated by the WDNR. Those discharge limits were presented in the Remedial Action Plan, Groundwater Extraction, Treatment, and Discharge System, Marathon Electric Manufacturing Co., Wausau, Wisconsin. None of

the discharge limits were exceeded during 2008. EW1 influent and effluent sampling results are also reported quarterly.

4.4 HYDRAULIC CAPTURE

Hydraulic capture of the contaminant plume is demonstrated by the water table contours illustrated on Figure 2.1. The water table contours indicate that groundwater flow in the contaminated portions of the Site is toward the three extraction wells (CW3, CW6, and EW1) which is supported by the analytical data as discussed in Sections 4.1 and 4.2. At nested well locations, the water table elevations for shallow and deep wells are similar, indicating horizontal flow and hydraulic containment of the shallow and deeper portions of the aquifer. Figure 4.1 also demonstrates that hydraulic containment of the contaminants was maintained through 2008.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

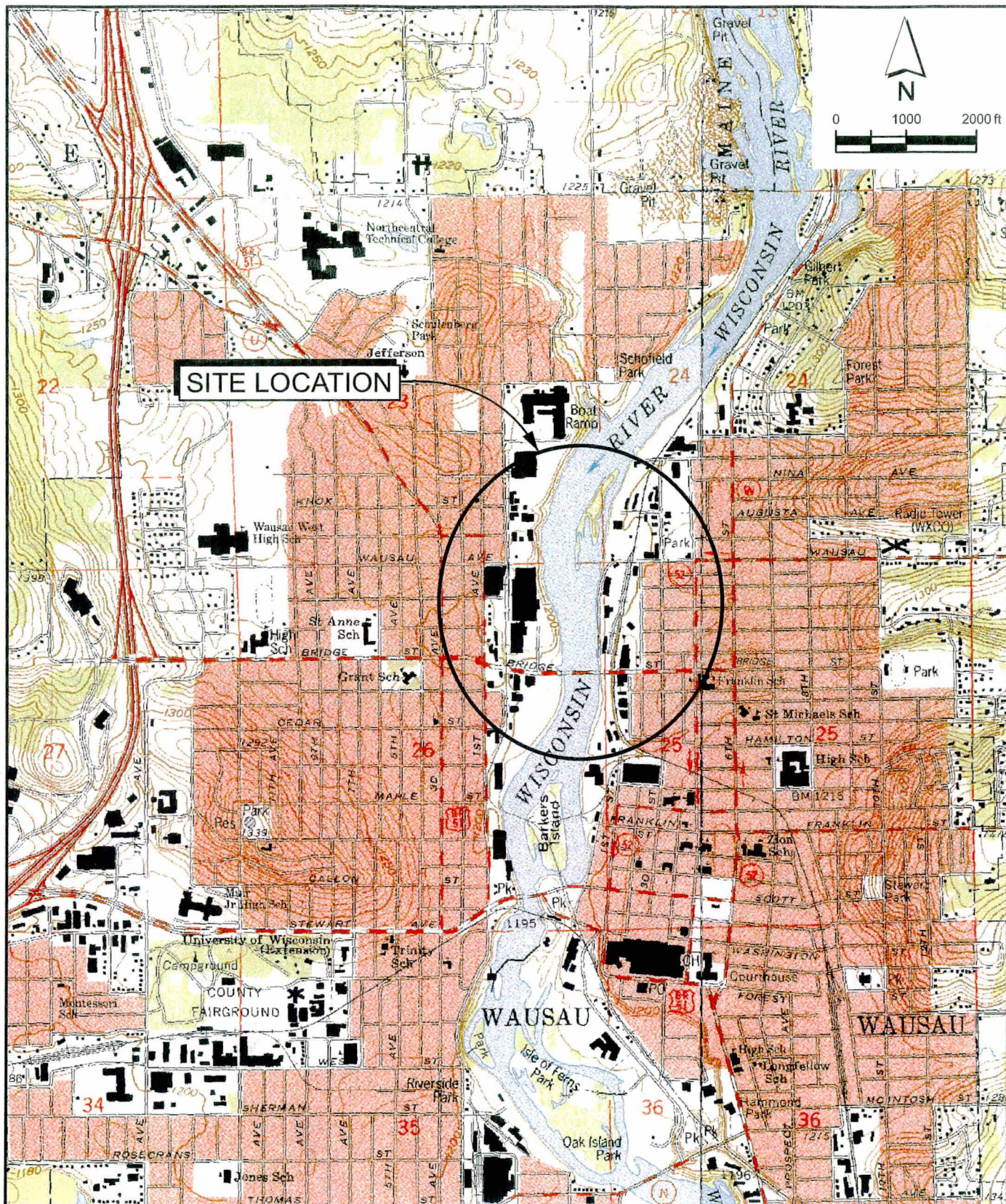
- The Marathon Electric extraction well (EW1) and the two City production wells (CW3 and CW6) continue to capture the CVOC plume as evidenced by analysis of the hydraulic data and the chemical data.
- The East Bank CVOC plume has decreased in size and concentration historically and remained fairly stable from 2007 to 2008. CVOC concentrations near the source have decreased while CVOC concentrations at the midpoint of the plume have increased. There is significant evidence of natural attenuation of the East Bank plume.
- The CVOC plume on the West Bank remained stable in its extent. The high concentration slug of CVOCs near R3D decreased in concentration and tended to dissipate as it moved towards EW1. The plume is shallower and less concentrated under the old landfill than it is north of EW1.
- Four West Bank monitoring wells (W53A, R2D, R3D, and R4D) and the two West Bank pumping wells (EW1 and CW6) had TCE concentrations greater than the MCL of 5 µg/L.
- Three East Bank wells had a PCE concentration greater than the MCL of 5 µg/L (WW6, E37A, and E23A). Two of these wells (E37A and E23A) also had TCE, C12DCE, and vinyl chloride concentration greater than the MCLs of 5 µg/L, 70 µg/L and 2 µg/L respectively.
- EW1 removed approximately 410,120,000 gallons of water in 2008 at an average pumping rate of 787 gallons per minute. The well was shut down for 51 hours in February to update the pump motor controls and for periods less than 3.5 hours on seven other occasions for minor maintenance and electrical outages. EW1 operated at an average rate of 792 gpm while the pump was running.
- The EW1 treatment system removed approximately 50 percent of the VOCs from the extracted groundwater. The effluent concentrations from the treatment system were well below the discharge limits.
- The City production wells operated as scheduled and generally within the requirements established in the Groundwater Flow Model Report. Production at CW6 had been declining throughout 2007 and had fallen below the minimum required pumping rate; therefore, it was shutdown for cleaning and rehabilitation from February through April 2008. Since pumping resumed, the pumping rate has exceed the minimum required rate.
- The SVE wells and soil gas probes that had composed the East Bank soil gas extraction and monitoring system at Wausau Chemical were abandoned in September 2008. The shallow groundwater extraction wells that were part of the

interim groundwater remediation system at Wausau Chemical from 1985 to 1996 were also abandoned at that time.

- During the annual inspection of the pavement and building barrier at Wausau Chemical, some minor cracks were noted in the pavement next to the building. These were filled with asphalt.

5.2 RECOMMENDATIONS

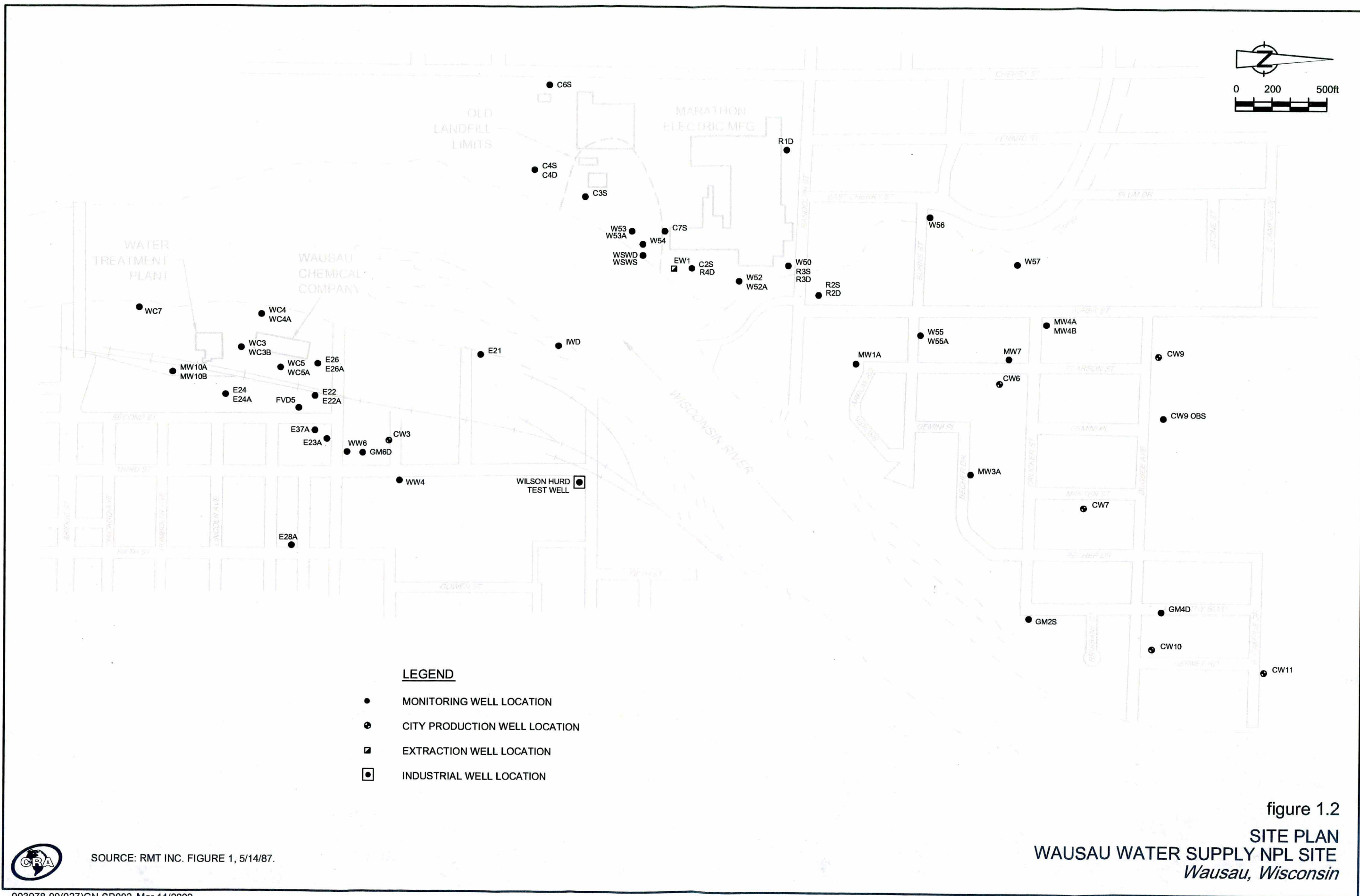
- Monitoring in 2009 should continue as described in the Groundwater Monitoring Plan with slight modifications discussed in previous reports. WC2 and W51A have been eliminated from the monitoring schedule because of abandonment as described in the 2000 Annual Monitoring Report. Analysis of bis(2-ethylhexyl)phthalate was eliminated as recommended in the 2002 Annual Monitoring Report.
- Despite ongoing maintenance, the EW1 pumping rate continues to decline slowly, likely due to plugging of the pore spaces in the surrounding sand pack and aquifer material. The current USEPA-approved pumping rate for EW1 is 800 to 900 gpm. The original performance criteria for EW1 specified that the well should pump sufficient groundwater to create groundwater flow divides beneath the river to the east and beneath Bos Creek to the north. Groundwater modeling performed in 1993 indicated that pumping rates of 500 gpm and greater met the performance criteria. Therefore, the 800 gpm flow rate is not a critical lower limit relative to achieving sufficient groundwater capture at EW1. Due to declining pumping capacity, a new lower limit of 600 gpm for the EW1 pumping rate is recommended.
- A 20 percent reduction in the minimum average pumping rate of CW6 is recommended as it will maintain the hydraulic containment and potentially increase the hydraulic gradient between R3D and EW1. The current USEPA-approved pumping schedule for CW6 requires a minimum average pumping rate of 708 gpm (85 hours per week at 1,400 gpm) on a weekly basis. Groundwater modeling in 1993 indicated that a CW6 minimum pumping rate of 4,200,000 gallons per week (420 gpm weekly average) was sufficient to maintain containment of the CVOC plume. Hence, pumping of CW6 could be reduced by 20 percent from the current USEPA-approved rate to a weekly average of 5,700,000 gallons (565 gpm weekly average) while maintaining the hydraulic containment performance standard. The City will continue to operate CW6 at pumping rates above this minimum average to meet City water supply demands.



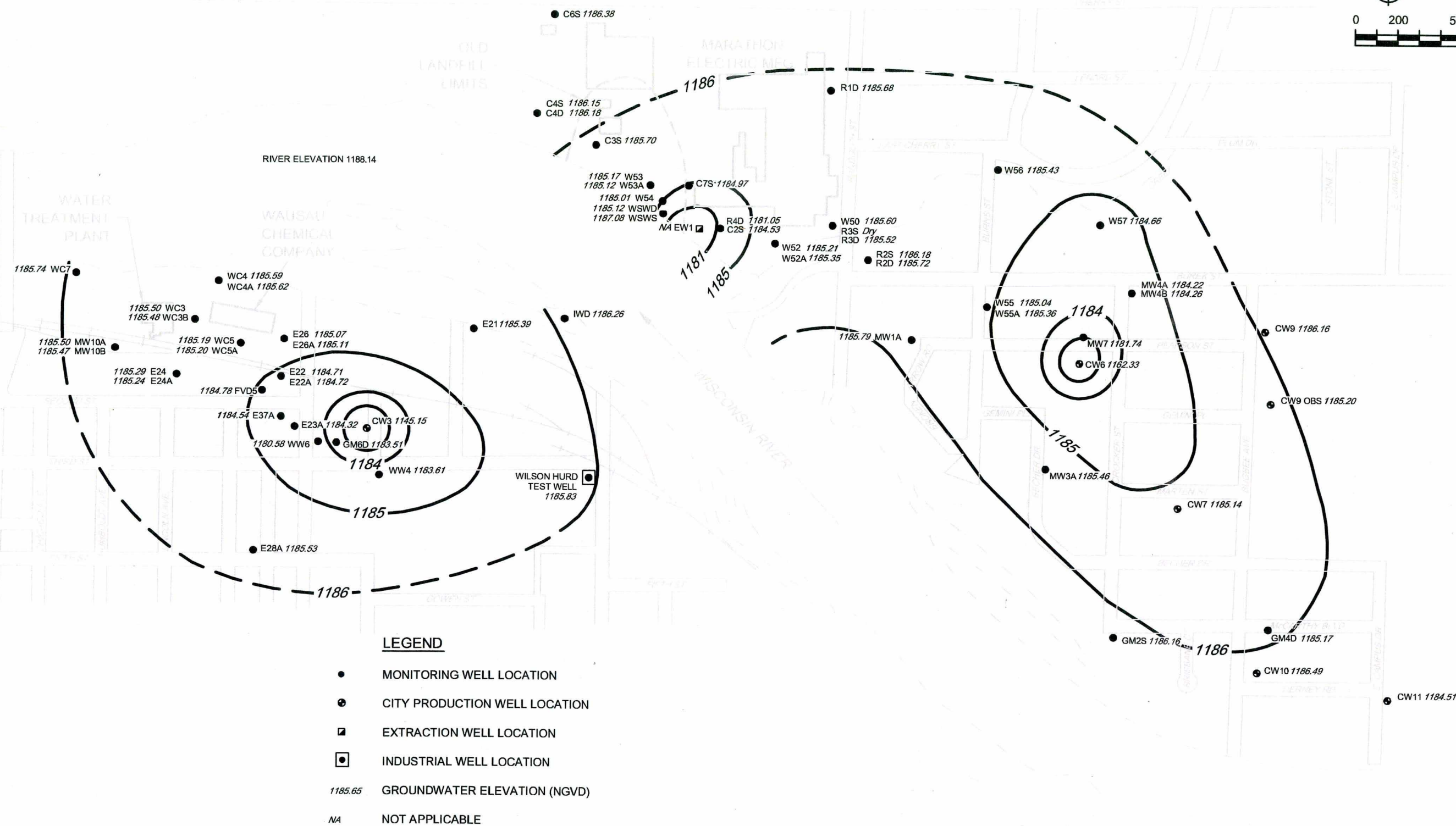
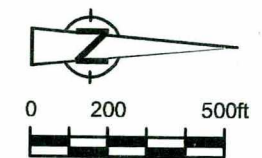
SOURCE: USGS 7.5 MINUTE QUADS - WAUSAU EAST; WAUSAU WEST



figure 1.1
SITE LOCATION
WAUSAU WATER SUPPLY NPL LOCATION
Wausau, Wisconsin



SOURCE: RMT INC. FIGURE 1, 5/14/87.



LEGEND

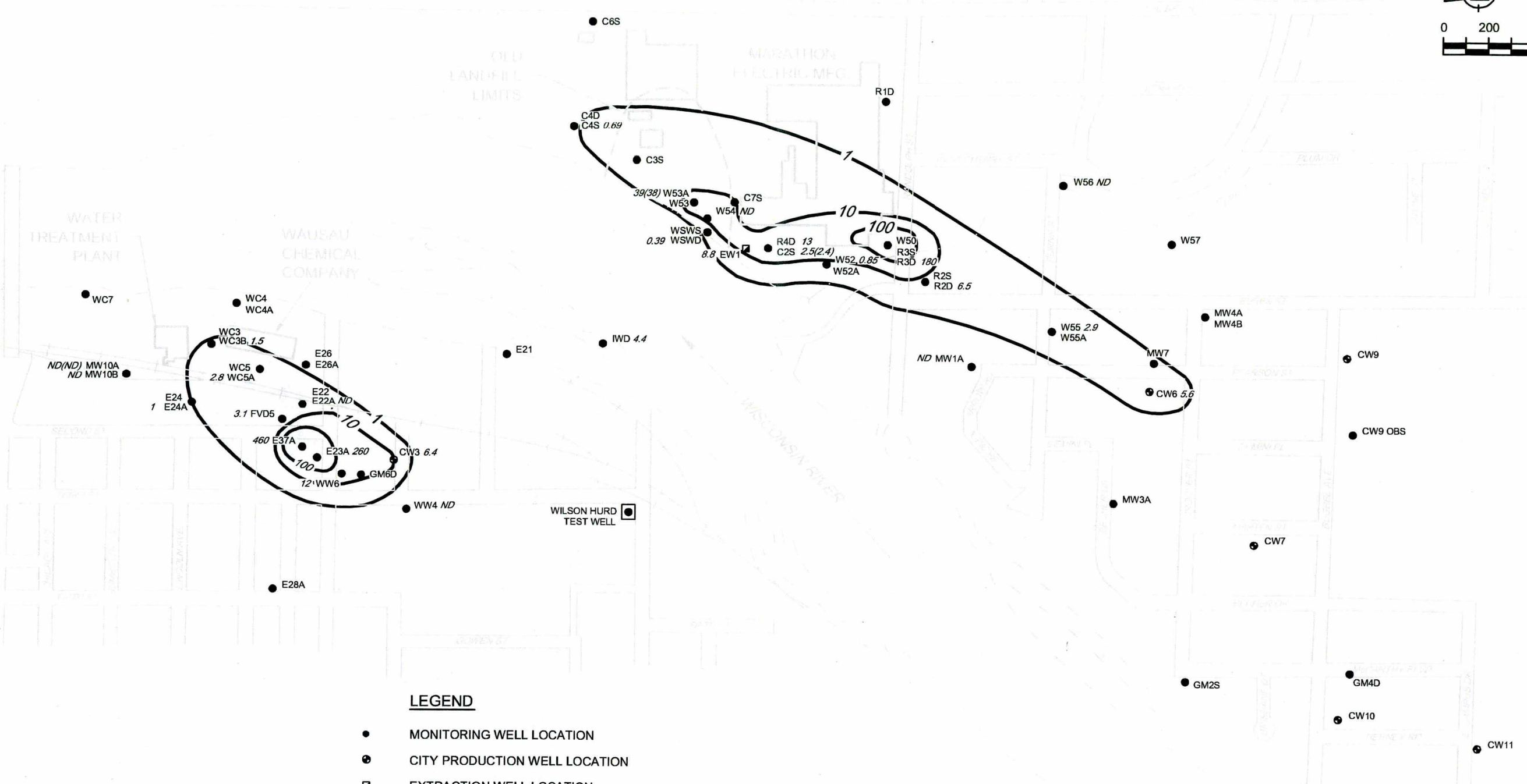
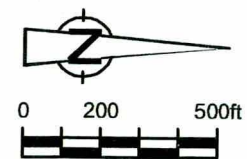
- MONITORING WELL LOCATION
- ⊙ CITY PRODUCTION WELL LOCATION
- ⊠ EXTRACTION WELL LOCATION
- ⊡ INDUSTRIAL WELL LOCATION
- 1185.65 GROUNDWATER ELEVATION (NGVD)
- NA NOT APPLICABLE
- 1185 ——— GROUNDWATER CONTOUR (NGVD)
- 1186 - - - GROUNDWATER CONTOUR (NGVD) ASSUMED

NOTE: EAST BANK WATER LEVELS MEASURED ON OCTOBER 13, 2008.
WEST BANK WATER LEVELS MEASURED ON OCTOBER 14, 2008.

figure 2.1
WATER TABLE CONTOURS (10/13-14/08)
WAUSAU WATER SUPPLY NPL SITE
Wausau, Wisconsin



SOURCE: RMT INC. FIGURE 1, 5/14/87.



LEGEND

- MONITORING WELL LOCATION
 - ⊙ CITY PRODUCTION WELL LOCATION
 - ⊠ EXTRACTION WELL LOCATION
 - ⊡ INDUSTRIAL WELL LOCATION
 - 1.9 TOTAL CHLORINATED VOC CONCENTRATION IN ug/L
 - ND NOT DETECTED
 - () DUPLICATE SAMPLE
 - 10 ——— TOTAL CHLORINATED VOC CONTOUR
- WHERE NO VALUE IS SHOWN, WELL WAS NOT SAMPLED

figure 4.1
TOTAL CHLORINATED VOCs IN GROUNDWATER (OCTOBER 2008)
WAUSAU WATER SUPPLY NPL SITE
Wausau, Wisconsin



SOURCE: RMT INC. FIGURE 1, 5/14/87.

TABLE 2.1
GROUNDWATER ELEVATIONS - 2008
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

	<i>Reference Elevation</i>	<i>Water Level 10/13-14/2008</i>	<i>Water Table Elevation 10/13-14/2008</i>
<i>East Bank</i>			
CW3	1202.15	57.00	1145.15
E21	1197.51	12.12	1185.39
E22	1195.47	10.76	1184.71
E22A	1195.88	11.16	1184.72
E23A	1197.61	13.29	1184.32
E24	1210.01	24.72	1185.29
E24A	1211.07	25.83	1185.24
E26	1199.02	13.95	1185.07
E26A	1199.13	14.02	1185.11
E28A	1211.60	26.07	1185.53
E37A	1197.84	13.30	1184.54
FVD5	1198.89	14.11	1184.78
GM6D	1198.57	15.06	1183.51
W. HURD	1200.23	14.40	1185.83
IWD	1192.10 ⁽¹⁾	5.84	1186.26
MW10A	1210.67	25.17	1185.50
MW10B	1210.37	24.90	1185.47
WC3	1198.26	12.76	1185.50
WC3B	1198.04	12.56	1185.48
WC4	1196.74	11.15	1185.59
WC4A	1196.57	10.95	1185.62
WC5	1196.62	11.43	1185.19
WC5A	1196.66	11.46	1185.20
WC7	1196.77	11.03	1185.74
WW4	1202.23	18.62	1183.61
WW6	1200.53	19.95	1180.58

Notes:

Elevations relative to National Geodetic Vertical Datum.

⁽¹⁾ All reference elevations based on 2003 survey data except IWI which was last surveyed in 1993.

TABLE 2.1
GROUNDWATER ELEVATIONS - 2008
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

	<i>Reference Elevation</i>	<i>Water Level 10/13-14/2008</i>	<i>Water Table Elevation 10/13-14/2008</i>
<i>West Bank</i>			
EW1	NA	NA	NA
CW6	1220.33	58.00	1162.33
CW7	1224.14	39.00	1185.14
CW9	1226.16	40.00	1186.16
CW9 OBS	1224.24	39.04	1185.20
CW10	1218.49	32.00	1186.49
CW11	1216.51	32.00	1184.51
C2S	1219.05	34.52	1184.53
C3S	1220.58	34.88	1185.70
C4S	1216.70	30.55	1186.15
C4D	1216.16	29.98	1186.18
C6S	1221.58	35.20	1186.38
C7S	1220.87	35.90	1184.97
GM2S	1211.78	25.62	1186.16
GM4D	1216.35	31.18	1185.17
MW1A	1215.69	29.90	1185.79
MW3A	1220.87	⁽²⁾ 35.41	1185.46
MW4A	1215.48	31.26	1184.22
MW4B	1215.10	30.84	1184.26
MW7	1218.53	36.79	1181.74
R1D	1222.24	36.56	1185.68
R2S	1209.70	23.52	1186.18
R2D	1209.42	23.70	1185.72
R3S	1215.17	Dry	Dry
R3D	1215.42	29.90	1185.52
R4D	1218.90	37.85	1181.05
W50	1215.54	29.94	1185.60
W52	1219.16	33.95	1185.21
W52A	1218.95	33.60	1185.35
W53	1216.67	31.50	1185.17
W53A	1216.90	31.78	1185.12
W54	1216.19	31.18	1185.01
W55	1217.04	32.00	1185.04
W55A	1217.31	31.95	1185.36
W56	1200.01	14.58	1185.43
W57	1205.17	20.51	1184.66
WSWS	1193.04	5.96	1187.08
WSWD	1193.02	7.90	1185.12

Notes:

Elevations relative to National Geodetic Vertical Datum.

⁽¹⁾ All reference elevations based on 2003 survey data except IWI which was last surveyed in 1993.

⁽²⁾ Well MW3A was converted to a flush mount in 2006 and the reference elevation was resurveyed.

TABLE 2.3

GROUNDWATER SAMPLING SUMMARY - OCTOBER 2008
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

<i>Well</i>	<i>pH</i>	<i>Conductivity (us)</i>	<i>Temperature (°C)</i>	<i>Water Clarity</i>	<i>Gallons Removed</i>	<i>Sample ID Number</i>	<i>QA/QC</i>
CW3	6.38	814.0	14.3	Clear	Grab	W-081013-RA-01	
MW-10A	7.16	179.3	12.9	Clear	27.0	W-081013-RA-02/03	Duplicate
MW-10B	6.89	205.0	12.6	Clear	9.0	W-081013-RA-04	
WC5A	6.99	273.0	15.9	Clear	4.5	W-081013-RA-05	
WC3B	6.95	242.0	13.8	Clear	7.5	W-081013-RA-06	
WW4	6.43	567.0	12.1	Clear	15.0	W-081013-RA-08 W-081013-RA-07	Rinsate
WW6	7.02	211.0	12.5	Clear	10.0	W-081013-RA-09	
CW6	7.02	198.0	9.3	Clear	Grab	W-081014-RA-10	

TABLE 2.3

**GROUNDWATER SAMPLING SUMMARY - OCTOBER 2008
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN**

<i>Well</i>	<i>pH</i>	<i>Conductivity (us)</i>	<i>Temperature (°C)</i>	<i>Water Clarity</i>	<i>Gallons Removed</i>	<i>Sample ID Number</i>	<i>QA/QC</i>
E22A	10.10	65.4	10.5	Sl. Cloudy	10.0	W-081014-RA-11	
E23A	6.81	368.0	11.1	Light Brown	9.0	W-081014-RA-12	
E37A	6.81	403.0	12.6	Sl. Cloudy	6.0	W-081014-RA-13	
FVD 5	6.59	279.0	11.9	Suspended Solids	3.0	W-081014-RA-14	
E24A	6.71	244.0	10.2	Sl. Rusty	6.0	W-081014-RA-15	
W54	7.18	176.1	11.3	Clear	6.0	W-081014-RA-16	MS/MSD
W53A	6.71	448.0	14.0	Clear	4.5	W-081014-RA-17/18	Duplicate
WSWD	7.27	167.3	16.1	Clear	3.0	W-081014-RA-20 W-081014-RA-19	Field Blank
IWD	6.95	1371.0	14.0	Clear	3.0	W-081014-RA-21	
R2D	7.22	153.3	12.3	Clear	8.0	W-081014-RA-22	
W55	7.31	142.5	18.5	Clear	12.0	W-081014-RA-23	
MW-1A	10.07	123.3	18.5	Clear	10.0	W-081014-RA-24	

TABLE 2.3

**GROUNDWATER SAMPLING SUMMARY - OCTOBER 2008
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN**

<i>Well</i>	<i>pH</i>	<i>Conductivity (us)</i>	<i>Temperature (°C)</i>	<i>Water Clarity</i>	<i>Gallons Removed</i>	<i>Sample ID Number</i>	<i>QA/QC</i>
R4D	6.02	244.0	13.8	Clear	3.0	W-081015-RA-25	
W52	7.01	130.1	15.6	Clear	3.0	W-081015-RA-27 W-081015-RA-26	Field Blank
C2S	6.64	114.7	NA	Clear	3.0	W-081015-RA-28/29	Duplicate
W56	7.60	169.4	NA	Clear	27.0	W-081015-RA-30	MS/MSD
C4S	6.58	819.0	10.2	Clear	3.0	W-081015-RA-31	
EW-1 Influent	6.97	268.0	8.8	Clear	Grab	W-081015-RA-32	
EW-1 Effluent	7.05	232.0	10.5	Clear	Grab	W-081015-RA-33	
R3D	6.65	170.1	NA	Clear	51.0	W-081015-RA-34	

TABLE 3.1

EXTRACTION WELL (EW1) PUMPING RATES - 2008
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

<i>Date</i>	<i>Elapsed Time</i>	<i>Meter Reading</i>	<i>Total Flow¹ (gallons)</i>	<i>Flow Rate¹ (gpm)</i>
01/03/08		328,926,000		
01/21/08	25,797	350,120,000	21,194,000	822
02/28/08	55,210	389,889,000	39,769,000	720 ²
03/31/08	45,900	429,241,000	39,352,000	857
04/23/08	33,180	455,417,000	26,176,000	789 ³
06/02/08	57,635	499,277,000	43,860,000	761
07/03/08	44,688	537,024,000	37,747,000	845 ^{3,4}
08/11/08	55,756	580,452,000	43,428,000	779
09/02/08	31,732	604,314,000	23,862,000	752 ^{3,4}
10/01/08	41,729	640,119,000	35,805,000	858 ^{3,4}
10/31/08	43,200	674,408,000	34,289,000	794 ⁴
12/01/08	44,625	704,604,000	30,196,000	677
12/30/08	41,775	739,046,000	34,442,000	824
2008 Total	521,227		410,120,000	787

Flow rate while pump was running (excluding downtimes) 792

Notes:

¹ The total flows and the average flow rates shown are for the period preceding the date.

² Pump was shut down for 51 hours February 26-28 to update pump motor controls

³ Pump was shut down to do well maintenance and measure head on the following dates:
 April 3 (0.25 hours), June 2 (1.5 hours), August 22 (1.5 hours), September 8 (1.5 hours).

⁴ Pump was shut down due to an electrical failure or electrical repairs at the plant on the following dates:
 June 6 (3.5 hours), September 6 (0.5 hours), October 4 (1.5 hours).

TABLE 3.2

**CITY SUPPLY WELL PUMPING SUMMARY - 2008
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN**

<i>Month</i>		<i>Well #3</i>	<i>Well #6</i>	<i>Well #7</i>	<i>Well #9</i>	<i>Well #10</i>	<i>Well #11</i>
January	Hours ¹	255.5	486.5	184.8	147.6	162.3	133.8
	MG ²	21.917	30.144	22.677	8.656	31.782	24.574
	gpm ³	1430	1033	2045	977	3264	3061
February	Hours	496.8	196.9	196.7	197.2	213.3	4.3
	MG	41.922	12.241	24.029	11.55	40.998	0.529
	gpm	1406	1036	2036	976	3203	2050
March	Hours	742.5	0	226.8	189.3	158.9	69
	MG	60.679	0	27.991	11.138	30.721	13.574
	gpm	1362	0	2057	981	3222	3279
April	Hours	429	290.5	188.7	176.8	132	155
	MG	35.539	16.479	23.251	10.37	25.09	30.309
	gpm	1381	945	2054	978	3168	3259
May	Hours	314.9	402	205.8	210.7	134.4	93.7
	MG	27.294	40.161	25.2	11.378	25.8	18.511
	gpm	1445	1665	2041	900	3199	3293
June	Hours	310	406.7	229.4	172.2	135	163.6
	MG	27.516	41.154	28.564	8.674	25.201	31.43
	gpm	1479	1687	2075	840	3111	3202
July	Hours	310.4	430.3	221.7	176.5	230.7	216.2
	MG	27.849	44.988	27.302	7.888	42.941	41.38
	gpm	1495	1743	2052	745	3102	3190
August	Hours	466.3	273.8	319.3	160.6	184.4	293.8
	MG	44.058	29.513	38.714	5.961	34.432	56.923
	gpm	1575	1797	2021	619	3112	3229
September	Hours	379.4	338	330.9	124.1	163.6	111.9
	MG	35.903	36.011	41.467	4.069	31.555	21.457
	gpm	1577	1776	2089	546	3215	3196
October	Hours	339.1	401.7	262.2	66.8	117.9	73.6
	MG	32.131	42.585	33.377	2.272	22.804	14.668
	gpm	1579	1767	2122	567	3224	3322
November	Hours	354.8	361.4	255.9	39.8	85.4	74.4
	MG	33.855	38.242	32.564	1.339	16.428	14.62
	gpm	1590	1764	2121	561	3206	3275
December	Hours	294.3	445.8	235	70.2	91.9	128
	MG	27.39	47.263	30.176	2.368	17.605	24.148
	gpm	1551	1767	2140	562	3193	3144
Average gpm		1478	1565	2073	824	3180	3209

Notes:

¹ Hours indicates total hours pumped each month.

² MG indicates millions of gallons pumped each month.

³ gpm indicates the average flow rate for the month while the pump is operating.

⁴ Well #6 was shutdown from February through April for screen cleaning and rehabilitation. The pump was then resized in April.

⁵ Well #11 was not used during parts of February and March because of problems with the meter.

TABLE 4.1

MONITORING WELL LABORATORY RESULTS - 2008 (µg/L)
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

			Acetone	Benzene	Ethylbenzene	Toluene	Xylenes (total)	Carbon tetrachloride	Chloroform	1,1-Dichloroethene	Methylene chloride	1,1,2-Trichloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Total CVOCs
Location	Date	MCL	--	5	700	1000	10000	5	--	7	--	5	5	5	70	2	--
<u>East Bank</u>																	
CW3	10/13/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.6	1.1	2.2	0.5 J	6.4
E22A	10/14/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	ND
E23A	10/14/08		< 50	< 5	< 5	< 5	< 5	< 5	< 5	1.2 J	< 5	< 5	110	14	130	5.9	260
E24A	10/14/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	1
E37A	10/14/08		< 80	< 8	< 8	< 8	< 8	< 8	< 8	3.4 J	4.8 J	< 8	57	23	320	53	460
FVD5	10/14/08		< 91	86	240	18	960	< 9.1	< 9.1	< 9.1	7.8 J	< 9.1	3.1 J	< 9.1	< 9.1	< 9.1	3.1
IWD	10/14/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.4	< 1	< 1	4.4
MW10A	10/13/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	ND
MW10A	10/13/08	D	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	ND
MW10B	10/13/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	ND
WC3B	10/13/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.92 J	0.54 J	1.5
WC5A	10/13/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.8	0.48 J	0.53 J	< 1	2.8
WW4	10/13/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	ND
WW6	10/13/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5.4	1.1	3.5	1.6	12

TABLE 4.1

MONITORING WELL LABORATORY RESULTS - 2008 (µg/L)
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

Location	Date	MCL	Acetone --	Benzene 5	Ethylbenzene 700	Toluene 1000	Xylenes (total) 10000	Carbon tetrachloride 5	Chloroform --	1,1-Dichloroethene 7	Methylene chloride --	1,1,2-Trichloroethane 5	Tetrachloroethene 5	Trichloroethene 5	cis-1,2-Dichloroethene 70	Vinyl chloride 2	Total CVOCs --
West Bank																	
C2S	10/15/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.5	< 1	< 1	2.5
C2S	10/15/08	D	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.4	< 1	< 1	2.4
C4S	10/15/08		3.8 J	1.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.69 J	0.69
CW6	10/14/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5.6	< 1	< 1	5.6
MW1A	10/14/08		< 10	< 1	< 1	0.39 J	0.82 J	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	ND
R2D	10/14/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	6.5	< 1	< 1	6.5
R3D	10/15/08		< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	2.4 J	< 5	< 5	180	2.8 J	< 5	180
R4D	10/15/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	12	0.66 J	< 1	13
W52	10/15/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.85 J	< 1	< 1	0.85
W53A	10/14/08		< 10	< 1	< 1	< 1	< 1	0.91 J	0.85 J	< 1	< 1	< 1	< 1	26	11	< 1	39
W53A	10/14/08	D	< 10	< 1	< 1	< 1	< 1	0.87 J	0.89 J	< 1	< 1	< 1	< 1	26	10	< 1	38
W54	10/14/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	ND
W55	10/14/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.9	< 1	< 1	2.9
W56	10/15/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	ND
WSWD	10/14/08		< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.39 J	< 1	< 1	0.39

Notes:

MCL - Maximum Contaminant Levels for drinking water published by the United States Environmental Protection Agency

Total CVOCs - Total chlorinated volatile organic compounds.

D - Duplicate Sample

J - Estimated value, value is below the reporting limit

ND - All CVOCs are less than the reporting limit.

Shaded values exceed the MCL.

TABLE 4.2

EW1 LABORATORY RESULTS - 2008 (µg/L)
WAUSAU WATER SUPPLY NPL SITE
WAUSAU, WISCONSIN

		<i>Acetone</i>	<i>Benzene</i>	<i>Ethylbenzene</i>	<i>Toluene</i>	<i>Xylenes (total)</i>	<i>Carbon tetrachloride</i>	<i>Chloroform</i>	<i>1,1-Dichloroethene</i>	<i>Methylene chloride</i>	<i>1,1,2-Trichloroethane</i>	<i>Tetrachloroethene</i>	<i>Trichloroethene</i>	<i>cis-1,2-Dichloroethene</i>	<i>Vinyl chloride</i>
	<i>MCL</i>	1	5	700	1000	10000	5	1	7	1	5	5	5	70	2
<i>Location</i>	<i>Date</i>														
Effluent	1/3/08	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.8	0.31 J	< 1
Effluent	4/1/08	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.9	0.34 J	< 1
Effluent	7/9/08	< 10	< 1	< 1	< 1 U	< 1 U	< 1	0.6 J	< 1	< 1	< 1	< 1	4.1	0.31 J	< 1
Effluent	10/8/08	< 10	< 1	< 1	< 1	< 1	< 1	1.6	< 1	< 1	< 1	< 1	4.2	0.25 J	< 1
Influent	1/3/08	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	9	0.46 J	< 1
Influent	4/1/08	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	6.7	0.47 J	< 1
Influent	7/9/08	< 10	< 1	< 1	< 1 U	< 1 U	< 1	< 1	< 1	< 1	< 1	< 1	9	0.49 J	< 1
Influent	10/8/08	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	8.4	0.43 J	< 1

Notes:

MCL - Maximum Contaminant Level for drinking water.

U - Estimated detection limit

J - Estimated value, value is below the reporting limit

APPENDIX A
DATA QUALITY VALIDATION MEMORANDUMS



**CONESTOGA-ROVERS
& ASSOCIATES**

1801 Old Highway 8 NW, Suite #114
St. Paul, Minnesota 55112
Telephone: (651) 639-0913 Fax: (651) 639-0923
www.CRAworld.com

MEMORANDUM

TO: Jason Twaddle; CRA

REF. NO.: 003978-10

FROM: Ruth L. Mickle *[Signature]*

DATE: February 21, 2008

C.C.: Analytical Data File

RE: Data Quality Assessment
January 3, 2008 Sampling Event
Wausau Superfund Site - Wausau, Wisconsin (COC 374455)

The following details a data quality assessment for groundwater samples collected January 3, 2008, at the Wausau Superfund Site in Wausau, Wisconsin. The samples identified as W080103MT-470 (Influent) and W080103MT-471 (Effluent) were analyzed for volatile organic compounds (VOCs).¹ The analyses were performed by Test America in North Canton, Ohio. The quality assurance criteria were defined by the quality assurance project plan (QAPP).²

HOLDING TIME PERIOD

The holding time period for VOC analyses is 14 days from sample collection to completion of analyses.

On the basis of the sample collection date on the chain-of-custody form and the analytical report provided by Test America, the analyses were completed within the specified holding time period.

SURROGATE COMPOUND PERCENT RECOVERIES (SURROGATE RECOVERIES)

Individual sample performance for VOC analyses was monitored using surrogate recoveries. The surrogate recoveries were within acceptance criteria.

¹ VOC Method 8260B was derived from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, November 1986 and updates.

² Application of quality assurance criteria was consistent with "National Functional Guidelines for Organic Data Review", October 1999.

METHOD BLANK SAMPLE

Contamination of samples contributed by laboratory conditions or procedures was monitored by the concurrent preparation and analyses of a method blank sample. The VOC blank was free of target analytes.

**LABORATORY CONTROL SAMPLE/
LABORATORY CONTROL SAMPLE DUPLICATE (LCS/LCSD)**

Overall performance of the analyses was monitored by means of LCS/LCSD data. The LCS recovery and RPD data for the analyses were within control limits criteria, indicating that overall performance was adequate.

**MATRIX SPIKE/MATRIX SPIKE DUPLICATE
(MS/MSD) RESULTS**

To assess the long-term accuracy and precision of the analytical method on various matrices, matrix spike percent recoveries and relative percent difference (RPD) of the spike recoveries were determined for the analyses. Since the MS/MSD spike samples were non-project samples, no evaluation of project samples was made based on matrix spike results.

**FIELD QUALITY ASSURANCE/
QUALITY CONTROL (QA/QC) SAMPLES**

The field QA/QC associated with the sampling event consisted of one trip blank sample.

To evaluate the possibility of contamination arising from sample transport, the environment, and/or shipping, a trip blank sample was submitted to the laboratory for VOC analysis. The trip blank yielded acetone and methylene chloride detections. Since the associated sample data were nondetect for these parameters, no data qualification was required based on trip blank results.

OVERALL ASSESSMENT

The data were found to exhibit acceptable levels of accuracy and precision and may be used without qualification.

RLM/jla/79



**CONESTOGA-ROVERS
& ASSOCIATES**

1801 Old Highway 8 NW, Suite #114
St. Paul, Minnesota 55112
Telephone: (651) 639-0913 Fax: (651) 639-0923
www.CRAworld.com

MEMORANDUM

TO: Jason Twaddle; CRA

REF. NO.: 003978-10

FROM: Grant Anderson *GA*

DATE: April 28, 2008

C.C.: Analytical Data File

RE: Data Quality Assessment
April 1, 2008 Sampling Event
Wausau Superfund Site - Wausau, Wisconsin (COC 372331)

The following details a data quality assessment for water samples collected April 1, 2008, at the Wausau Superfund Site in Wausau, Wisconsin. The samples identified as W080401MT-472 (Influent) and W071002MT-473 (Effluent) were analyzed for volatile organic compounds (VOCs).¹ The analyses were performed by Test America Laboratories, Inc. (Test America) in North Canton, Ohio. The quality assurance criteria were defined by the quality assurance project plan (QAPP).²

HOLDING TIME PERIOD

The holding time period for VOC analyses is 14 days from sample collection to completion of analyses.

On the basis of the sample collection date on the chain-of-custody form and the analytical report provided by Test America, the analyses were completed within the specified holding time period.

SURROGATE COMPOUND PERCENT RECOVERIES (SURROGATE RECOVERIES)

Individual sample performance for VOC analyses was monitored using surrogate recoveries. The surrogate recoveries were within acceptance criteria.

¹ VOC Method 8260B was derived from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, November 1986 and updates.

² Application of quality assurance criteria was consistent with "National Functional Guidelines for Organic Data Review", October 1999.

METHOD BLANK SAMPLE

Contamination of samples contributed by laboratory conditions or procedures was monitored by the concurrent preparation and analysis of a method blank sample. The VOC method blank was reported to be free from detectable concentrations of target analytes, indicating that laboratory contamination was unlikely.

**LABORATORY CONTROL SAMPLE/
LABORATORY CONTROL SAMPLE DUPLICATE (LCS/LCSD)**

Overall performance of the analyses was monitored by means of LCS/LCSD data. The LCS recovery and RPD data for the analyses were within control limits criteria, indicating that overall performance was adequate.

**MATRIX SPIKE/MATRIX SPIKE DUPLICATE
(MS/MSD) RESULTS**

To assess the long-term accuracy and precision of the analytical method on various matrices, matrix spike percent recoveries and relative percent difference (RPD) of the spike recoveries were determined for the analyses. Since the MS/MSD spike samples were non-project samples, no evaluation of project samples was made based on matrix spike results.

**FIELD QUALITY ASSURANCE/
QUALITY CONTROL (QA/QC) SAMPLES**

The field QA/QC associated with the sampling event consisted of a trip blank sample.

To evaluate the possibility of contamination arising from sample transport, the environment, and/or shipping, a trip blank sample was submitted to the laboratory for VOC analysis. The trip blank yielded a methylene chloride detection. However, methylene chloride was not detected in any of the associated samples; therefore, no qualification of data was required based on trip blank results.

OVERALL ASSESSMENT

The data were found to exhibit acceptable levels of accuracy and precision and may be used without qualification.

GDA/ma/81



**CONESTOGA-ROVERS
& ASSOCIATES**

1801 Old Highway 8 NW, Suite #114

St. Paul, Minnesota 55112

Telephone: (651) 639-0913

Fax: (651) 639-0923

www.CRAworld.com

MEMORANDUM

TO: Jason Twaddle; CRA

REF. NO.: 003978-10

FROM: Ruth L. Mickel *R. Mickel*

DATE: October 14, 2008

C.C.: Analytical Data File

RE: Data Quality Assessment
July 9, 2008 Sampling Event
Wausau Superfund Site - Wausau, Wisconsin (COC 012767)

The following details a data quality assessment for water samples collected July 9, 2008, at the Wausau Superfund Site in Wausau, Wisconsin. The samples identified as W080709RL-474 (Effluent) and W080709RL-475 (Influent) were analyzed for volatile organic compounds (VOCs).¹ The analyses were performed by Test America Laboratories, Inc. (Test America) in North Canton, Ohio. The quality assurance criteria were defined by the quality assurance project plan (QAPP).²

HOLDING TIME PERIOD

The holding time period for VOC analyses is 14 days from sample collection to completion of analyses.

On the basis of the sample collection date on the chain-of-custody form and the analytical report provided by Test America, the analyses were completed within the specified holding time period.

SURROGATE COMPOUND PERCENT RECOVERIES (SURROGATE RECOVERIES)

Individual sample performance for VOC analyses was monitored using surrogate recoveries. The surrogate recoveries were within acceptance criteria.

¹ VOC Method 8260B was derived from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, November 1986 and updates.

² Application of quality assurance criteria was consistent with "National Functional Guidelines for Organic Data Review", October 1999.

METHOD BLANK SAMPLE

Contamination of samples contributed by laboratory conditions or procedures was monitored by the concurrent preparation and analysis of a method blank sample. The VOC method blank yielded methylene chloride, toluene and xylenes detections. There were no associated methylene chloride detections in project samples. Therefore, no data qualification of methylene chloride data was required. The associated toluene and xylenes detections in samples identified in Table 1 should be qualified as nondetect (U).

**LABORATORY CONTROL SAMPLE/
LABORATORY CONTROL SAMPLE DUPLICATE (LCS/LCSD)**

Overall performance of the analyses was monitored by means of LCS/LCSD data. The LCS recovery and RPD data for the analyses were within control limits criteria, indicating that overall performance was adequate.

**MATRIX SPIKE/MATRIX SPIKE DUPLICATE
(MS/MSD) RESULTS**

To assess the long-term accuracy and precision of the analytical method on various matrices, matrix spike percent recoveries and relative percent difference (RPD) of the spike recoveries were determined for the analyses. Since the MS/MSD spike samples were non-project samples, no evaluation of project samples was made based on matrix spike results.

**FIELD QUALITY ASSURANCE/
QUALITY CONTROL (QA/QC) SAMPLES**

The field QA/QC associated with the sampling event consisted of a trip blank sample.

To evaluate the possibility of contamination arising from sample transport, the environment, and/or shipping, a trip blank sample was submitted to the laboratory for VOC analysis. The trip blank yielded acetone and toluene detections. Acetone was not detected in any of the associated samples; therefore, no qualification of acetone data was required based on trip blank results. The associated toluene detections were previously qualified as nondetect (U) based on method blank results; therefore, no qualification of toluene data was required based on trip blank results.

OVERALL ASSESSMENT

The data were found to exhibit acceptable levels of accuracy and precision and may be used with the qualifications noted.

RLM/sb/82
Enc.



**CONESTOGA-ROVERS
& ASSOCIATES**

1801 Old Highway 8 NW, Suite #114
St. Paul, Minnesota 55112
Telephone: (651) 639-0913 Fax: (651) 639-0923
www.CRAworld.com

MEMORANDUM

TO: Jason Twaddle; CRA REF. NO.: 003978-10
FROM: Ruth Mickle *Ruth Mickle* DATE: December 17, 2008
C.C.: Analytical Data File
RE: Data Quality Assessment
October 8, 2008 Sampling Event
Wausau Superfund Site - Wausau, Wisconsin (COC 6045)

The following details a data quality assessment for water samples collected October 8, 2008, at the Wausau Superfund Site in Wausau, Wisconsin. The samples identified as W081008MV-476 (Effluent) and W081008MV-477 (Influent) were analyzed for Site list volatile organic compounds (VOCs).¹ The analyses were performed by Test America Laboratories, Inc. (Test America) in North Canton, Ohio. The quality assurance criteria were defined by the quality assurance project plan (QAPP).²

HOLDING TIME PERIOD

The holding time period for VOC analyses is 14 days from sample collection to completion of analyses.

On the basis of the sample collection date on the chain-of-custody form and the analytical report provided by Test America, the analyses were completed within the specified holding time period.

SURROGATE COMPOUND PERCENT RECOVERIES (SURROGATE RECOVERIES)

Individual sample performance for VOC analyses was monitored using surrogate recoveries. The surrogate recoveries were within acceptance criteria.

¹ VOC Method 8260B was derived from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, November 1986 and updates.

² Application of quality assurance criteria was consistent with "National Functional Guidelines for Organic Data Review", October 1999.

METHOD BLANK SAMPLE

Contamination of samples contributed by laboratory conditions or procedures was monitored by the concurrent preparation and analysis of a method blank sample. The method blank yielded a methylene chloride detection. However, methylene chloride was not detected in any of the associated samples; therefore, no qualification of data was required based on method blank results.

**LABORATORY CONTROL SAMPLE/
LABORATORY CONTROL SAMPLE DUPLICATE (LCS/LCSD)**

Overall performance of the analyses was monitored by means of LCS/LCSD data. The LCS recovery and RPD data for the analyses were within control limits criteria, indicating that overall performance was adequate.

**MATRIX SPIKE/MATRIX SPIKE DUPLICATE
(MS/MSD) RESULTS**

To assess the long-term accuracy and precision of the analytical method on various matrices, matrix spike percent recoveries and relative percent difference (RPD) of the spike recoveries were determined for the analyses. Since the MS/MSD spike samples were non-project samples, no evaluation of project samples was made based on matrix spike results.

**FIELD QUALITY ASSURANCE/
QUALITY CONTROL (QA/QC) SAMPLES**

The field QA/QC associated with the sampling event consisted of a trip blank sample.

To evaluate the possibility of contamination arising from sample transport, the environment, and/or shipping, a trip blank sample was submitted to the laboratory for VOC analysis. The trip blank yielded a acetone detection. However, acetone was not detected in any of the associated samples; therefore, no qualification of data was required based on trip blank results.

OVERALL ASSESSMENT

The data were found to exhibit acceptable levels of accuracy and precision and may be used without qualification.

RLM/sb/84



**CONESTOGA-ROVERS
& ASSOCIATES**

1801 Old Highway 8 NW, Suite #114

St. Paul, Minnesota 55112

Telephone: (651) 639-0913

Fax: (651) 639-0923

www.CRAworld.com

MEMORANDUM

TO: Jason Twaddle; CRA

REF. NO.: 003978

FROM: Ruth Mickle *R. Mickle*

DATE: December 17, 2008

C.C.: Analytical Data File

RE: Data Quality Assessment
October 13-15, 2008, Annual Sampling Event
Wausau Superfund Site - Wausau, Wisconsin (COC 15036-38)

The following details a data quality assessment for water samples collected October 13-15, 2008, at the Wausau Superfund Site in Wausau, Wisconsin. The samples identified in Table 1 were analyzed for Site list volatile organic compounds (VOCs).¹ The analyses were performed by Test America Laboratories, Inc. (Test America) in North Canton, Ohio. The quality assurance criteria were established in the Quality Assurance Project Plan (QAPP).²

HOLDING TIME PERIODS

The holding time period for VOC analyses is 14 days from sample collection to analysis.

On the basis of sample collection dates on the chain-of-custody forms and the analytical report provided by Test America, the analyses were completed within the specified holding time period.

METHOD BLANK SAMPLES

Contamination of the samples contributed by laboratory conditions or procedures was monitored by the concurrent preparation and analyses of method blank samples. With one exception, the method blank samples were free of target analytes. One method blank (batch 8301454) yielded a detection of methylene chloride. Since the associated data were nondetect, no qualification was required based on method blank results.

¹ VOC Method 8260B was derived from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW 846, Third Edition, November 1986 and updates.

² Application of relevant quality assurance criteria was consistent with "National Functional Guidelines for Organic Data Review", October 1999.

**SURROGATE COMPOUND PERCENT
RECOVERIES (SURROGATE RECOVERIES)**

Individual sample performance for the analyses was monitored by surrogate recoveries. The surrogate recoveries were within acceptance criteria, indicating that individual sample performance was adequate.

**LABORATORY CONTROL SAMPLE/
LABORATORY CONTROL SAMPLE DUPLICATE (LCS/LCSD)**

Overall performance for the analyses was monitored by means of a LCS/LCSD. The percent recoveries were within acceptance criteria.

**MATRIX SPIKE/MATRIX SPIKE DUPLICATE
(MS/MSD) RESULTS**

To assess the long-term accuracy and precision of the analytical method on various matrices, matrix spike percent recoveries and relative percent difference (RPD) of the spike recoveries were determined for the analyses. The percent recovery and RPD data for project samples were within acceptance criteria.

**FIELD QUALITY ASSURANCE/
QUALITY CONTROL (QA/QC) SAMPLES**

The field QA/QC associated with the sampling event consisted of one trip blank sample, one rinsate blank, two field blanks and three field duplicate sets.

To evaluate the possibility of contamination arising from sample transport, the environment, and/or shipping, a trip blank sample was submitted to the laboratory for VOC analysis. The trip blank yielded a detection of acetone. Since the associated data were nondetect, no qualification was required based on trip blank results.

As a check for cleanliness of sampling equipment, one rinsate blank was collected as authentic sample for labeling and submission to the lab. The rinsate sample is identified in Table 1. The rinsate blank sample yielded a acetone detection. However, since the associated data were nondetect, no qualification was required based on rinsate blank results.

As a check for cleanliness of overall sampling conditions, two field blanks were collected as authentic sample for labeling and submission to the lab. The field blank samples are identified in Table 1. The field blank samples yielded acetone detections. However, since the associated data were nondetect, no qualification was required based on field blank results.

Overall precision for the sampling event was monitored using field duplicate samples identified in Table 1. The RPD values for positive parameter results were found to be acceptable (RPD values less than or equal to 25 where both results are 5+ times the reporting limit), indicating an adequate level of precision was achieved.

OVERALL ASSESSMENT

The data were found to exhibit acceptable levels of accuracy and precision pertaining to the above criteria, and may be used without qualification.

RLM/sb/85

Enc.

TABLE 1

**SAMPLE IDENTIFICATION NUMBERS
WAUSAU SUPERFUND SITE
OCTOBER 13-15, 2008 SAMPLING EVENT**

<i>Sample ID</i>	<i>Sample Location</i>
W-081013-RA-01	CW3
W-081013-RA-02	MW10A
W-081013-RA-03	MW10A dup
W-081013-RA-04	MW10B
W-081013-RA-05	WC5A
W-081013-RA-06	WC3B
W-081013-RA-07	WW4 rinsate blk
W-081013-RA-08	WW4
W-081013-RA-09	WW6
W-081014-RA-10	CW6
W-081014-RA-11	E22A
W-081014-RA-12	E23A
W-081014-RA-13	E37A
W-081014-RA-14	FVD5
W-081014-RA-15	E24A
W-081014-RA-16	W54
W-081014-RA-17	W53A
W-081014-RA-18	W53A dup
W-081014-RA-19	WSWD field blk
W-081014-RA-20	WSWD
W-081014-RA-21	IWD
W-081014-RA-22	R2D
W-081014-RA-23	W55
W-081014-RA-24	MW1A
W-081015-RA-25	R4D
W-081015-RA-26	W52 field blk
W-081015-RA-27	W52
W-081015-RA-28	C2S
W-081015-RA-29	C2S dup
W-081015-RA-30	W56
W-081015-RA-31	C4S
W-081015-RA-32	Influent
W-081015-RA-33	Effluent
W-081015-RA-34	R3D

APPENDIX B

PAVEMENT COVER AND BUILDING BARRIER
MAINTENANCE INSPECTION REPORT

**ANNUAL INSPECTION RECORD
PAVEMENT AND BUILDING BARRIER
WAUSAU CHEMICAL CORPORATION, WAUSAU, WI**

Annual inspections completed as required by the Pavement Cover and Building Barrier Maintenance Plan, October 17, 2006, for the Wausau Chemical Corporation property in Wausau, Wisconsin.

May 10, 2007, Inspection by Art Flashinski - Surfaces were intact. No action required.

April 15, 2008, Inspection by Art Flashinski. A few cracks along the building had developed and were packed with asphalt-sand mix. The cracks were repaired during the last week of April.

APPENDIX C

ABANDONMENT FORMS

EAST BANK SVE WELLS, GAS PROBES, AND
GROUNDWATER EXTRACTION WELLS

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	Map # _____
Latitude / Longitude (Degrees and Minutes) _____'N _____'W		
Method Code (see instructions) _____'N _____'W		
1/4 1/4 NW 1/4 NW or Gov't Lot #	Section 25	Township 29 N 7
Well Street Address 2001 N. River Drive		
Well City, Village or Town Wausau		
Subdivision Name _____		
Well ZIP Code 54402-0953		
Lot # _____		

2. Facility / Owner Information

Facility Name Wausau Chemical		
Facility ID (FID or PWS) 73 7105820		
License/Permit/Monitoring # _____		
Original Well Owner Wausau Chemical		
Present Well Owner Wausau Chemical		
Mailing Address of Present Owner 2001 N. River Drive		
City of Present Owner Wausau	State WI	ZIP Code 54402-0953

Reason For Removal From Service: ☐ Not in Service
WI Unique Well # of Replacement Well: _____

3. Well / Drillhole / Borehole Information

☐ Monitoring Well ☒ Water Well ☐ Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) 10/15/85 If a Well Construction Report is available, please attach. _____
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____	

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock	Total Well Depth From Ground Surface (ft.) 23	Casing Diameter (in.) 4
Lower Drillhole Diameter (in.) _____	Casing Depth (ft.) 13	Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown
If yes, to what depth (feet)? 5'	Depth to Water (feet) 12	

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	Sacks Sealant
Surface	23.4	2

6. Comments

Groundwater Extraction Well (WC-X-1)

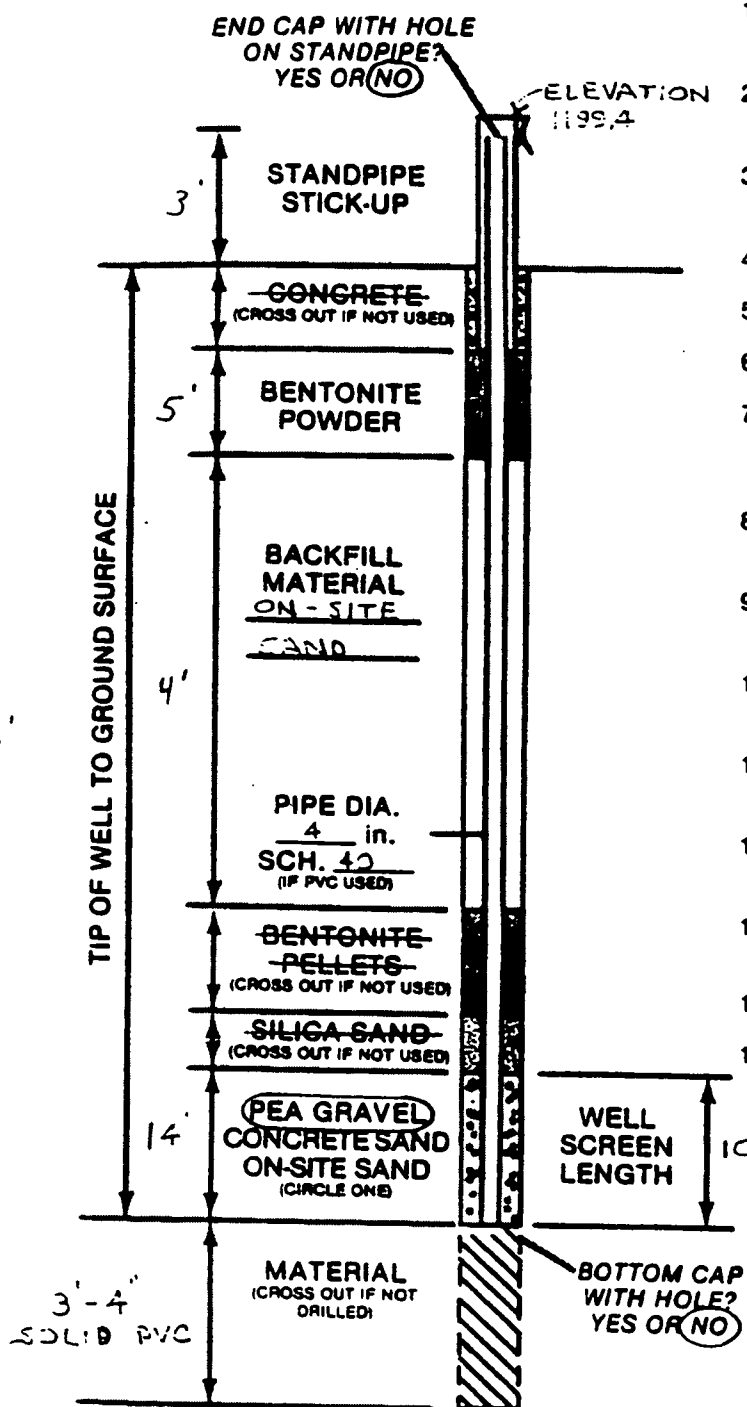
7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/3/2008	DNR Use Only	
Street or Route 101 Alderson St.	Telephone Number (715) 359-7090	Comments _____	Date Received _____	Noted By _____
City Schofield	State WI	ZIP Code 54476	Signature of Person Doing Work <i>[Signature]</i>	Date Signed 6-8-09



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE?
(PVC) GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS?
BELLED, COUPLINGS, (THREADED) OTHER _____
- 3) TYPE OF WELL SCREEN
(PVC) GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE 0.15"
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR (NO)
- 6) WAS SOLVENT USED? YES OR (NO)
- 7) WAS DRILLING MUD USED?
SOLID AUGER, HOLLOW STEM AUGER,
WATER, (REVERT) BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED?
YES OR (NO)
- 9) HOW WAS WELL DEVELOPED?
BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT?
5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED?
5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY

1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT?
13 Ft. or DRY

2) OTHER MEASUREMENTS:

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

Well No. 1 WCX1 DATE INSTALLED 10-15-95 DRILL RIG CME 45

RILLER JOHN WRIGHT DRILL CREW DAVID WANCH

JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-8

☐ Other

2. Facility / Owner Information

3. Well / Drillhole / Borehole Information

4. Pump, Liner, Screen, Casing & Sealing Material

5. Material Used To Fill Well / Drillhole

6. Comments

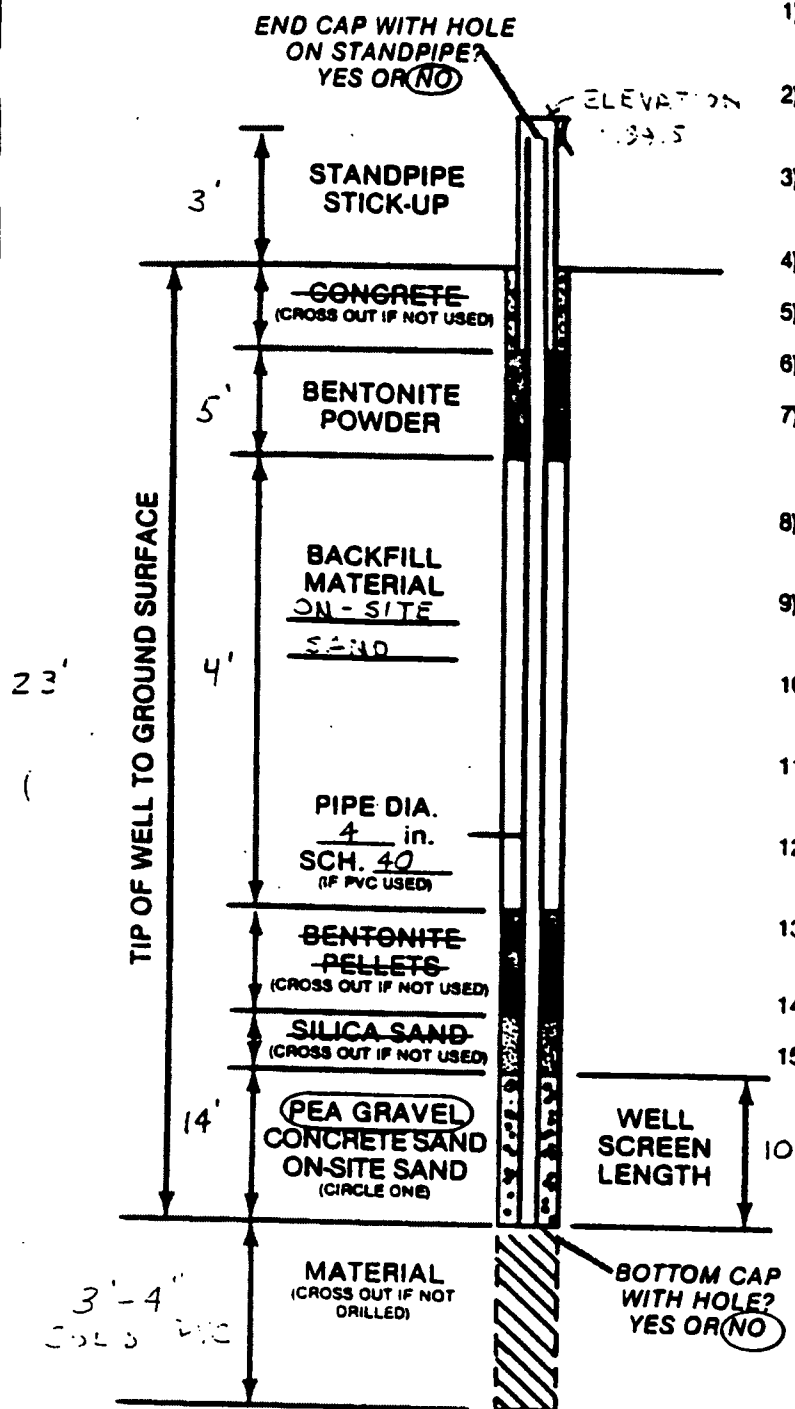
7. Supervision of Work

Name of Person or Firm Doing Filing & Sealing		License #	Date of Filing & Sealing (mm/dd/yyyy)	Date Received	Noted By
Boart Longyear		6189	9/3/2008		
Street or Route			Telephone Number	Comments	
101 Alderson St.			(715) 359-7090		
City	State	ZIP Code	Signature of Person Doing Work		Date Signed
Schofield	WI	54476-			6-8-09



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE? PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS? BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE 2.15"
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED? SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT, BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED? BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT? 5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED? 5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY
 - 1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT? 13 Ft. or DRY
 - 2) OTHER MEASUREMENTS:

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

Well No. 2 WCLX2 DATE INSTALLED 10-15-35 DRILL RIG CME 45

RILLER JOHN WILSON DRILL CREW DAVID WILSON

JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-B

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
		☐ Waste Management	☐ Other:	

1. Well Location Information				2. Facility / Owner Information			
County MARATHON	WI Unique Well # of Removed Well	Map #		Facility Name Wausau Chemical			
Latitude / Longitude (Degrees and Minutes)			Method Code (see instructions)	Facility ID (FID or PWS) 737105820			
_____ 'N _____ 'W				License/Permit/Monitoring #			
1/4 NW	1/4 NW	Section 25	Township 29 N	Range 7	☒ E	☐ W	Original Well Owner Wausau Chemical
or Gov't Lot #				Present Well Owner Wausau Chemical			
Well Street Address 2001 N. River Drive				Mailing Address of Present Owner 2001 N. River Drive			
Well City, Village or Town Wausau			Well ZIP Code 54402-0953		City of Present Owner Wausau		
Subdivision Name			Lot #		State WI		
					ZIP Code 54402-0953		

Reason For Removal From Service		WI Unique Well # of Replacement Well	4. Pump, Liner, Screen, Casing & Sealing Material			
Not in Service			Pump and piping removed?	☐ Yes	☐ No	☒ N/A
			Liner(s) removed?	☐ Yes	☐ No	☒ N/A
			Screen removed?	☐ Yes	☒ No	☐ N/A
			Casing left in place?	☐ Yes	☒ No	☐ N/A
			Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
			Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
			Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
			If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
			If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

3. Well / Drillhole / Borehole Information		5. Material Used To Fill Well / Drillhole	
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 10/14/85	From (ft.)	To (ft.)
☒ Water Well	If a Well Construction Report is available, please attach.	Surface	23
☐ Borehole / Drillhole			
Construction Type:		Sacks Sealant	
☒ Drilled	☐ Driven (Sandpoint)		2
☐ Other (specify):	☐ Dug		
Formation Type:			
☒ Unconsolidated Formation	☐ Bedrock		
Total Well Depth From Ground Surface (ft.) 23	Casing Diameter (in.) 4		
Lower Drillhole Diameter (in.)	Casing Depth (ft.) 13		
Was well annular space grouted?	☒ Yes ☐ No ☐ Unknown		
If yes, to what depth (feet)? 5	Depth to Water (feet) 17.9		

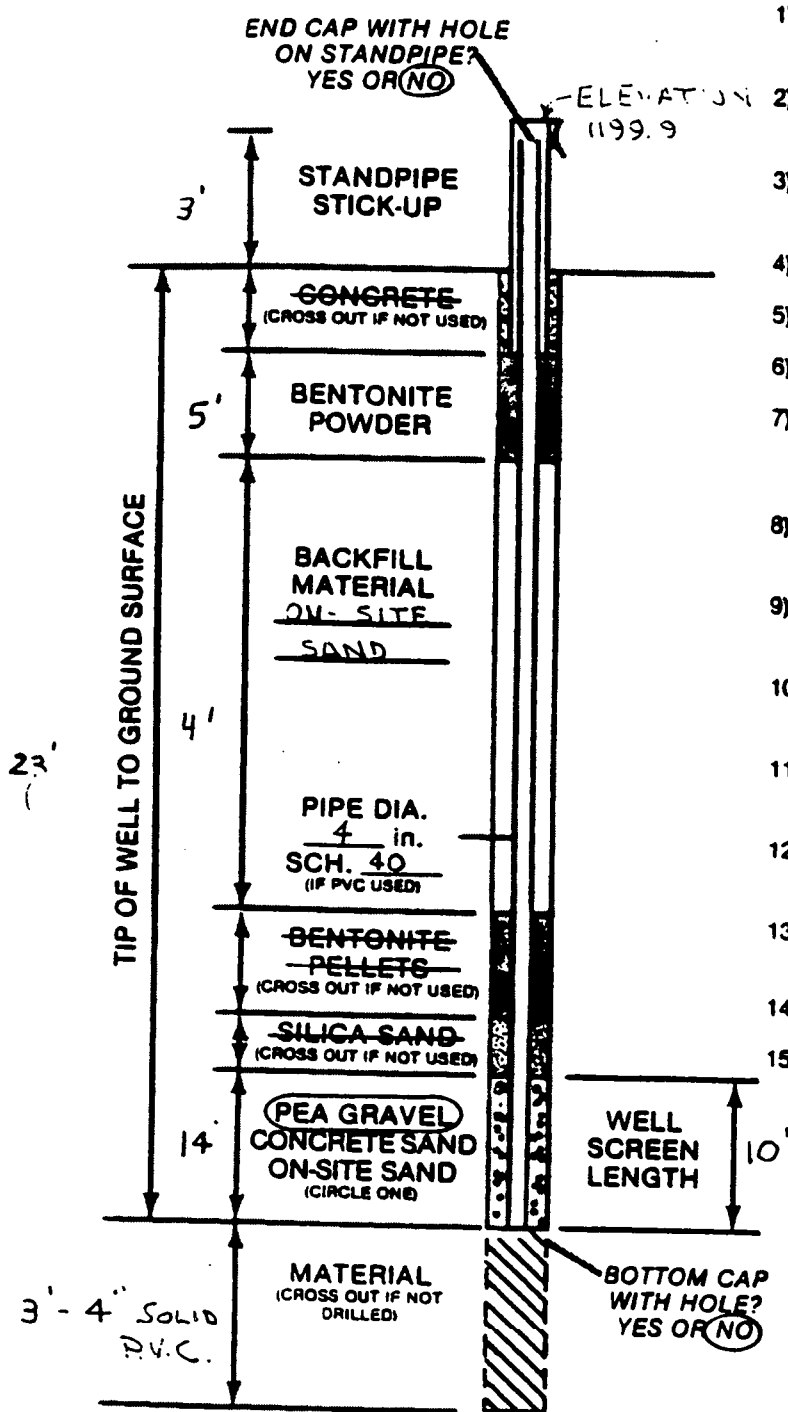
6. Comments	
Groundwater Extraction Well (WEX-3)	

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/3/2008	Date Received	Noted By	
Street or Route 101 Alderson St.		Telephone Number (715) 359-7090	Comments		
City Schofield	State WI	ZIP Code 54476-	Signature of Person Doing Work <i>[Signature]</i>		Date Signed 6-8-09



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE? (PVC) GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS? BELLED, COUPLINGS, (THREADED) OTHER _____
- 3) TYPE OF WELL SCREEN (PVC) GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR (NO)
- 6) WAS SOLVENT USED? YES OR (NO)
- 7) WAS DRILLING MUD USED? SOLID AUGER, HOLLOW STEM AUGER, WATER, (REVERT) BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR (NO)
- 9) HOW WAS WELL DEVELOPED? BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT? 5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED? 5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY
 - 1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT? 13 Ft. or DRY
 - 2) OTHER MEASUREMENTS:
DATE _____ Ft. FROM T. ST. PIPE
DATE _____ Ft. FROM T. ST. PIPE
DATE _____ Ft. FROM T. ST. PIPE
DATE _____ Ft. FROM T. ST. PIPE

Well No. 3 WCX3 DATE INSTALLED 10-14-85 DRILL RIG CME 45
DRILLER JOHN WRIGHT DRILL CREW DAVID WONCH
JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-B
FW: 1-983

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County

MARATHON

WI Unique Well # of
Removed Well

Tricap #

Latitude / Longitude (Degrees and Minutes)

Method Code (see instructions)

_____'N
_____'W

1/4 NW

1/4 NW

Section

Township

Range

☒ E

or Gov't Lot #

25

29

N

7

☐ W

Well Street Address

2001 N. River Drive

Well City, Village or Town

Wausau

Well ZIP Code

54402-0953

Subdivision Name

Lot #

Reason For Removal From Service

WI Unique Well # of Replacement Well

Not in Service

3. Well / Drillhole / Borehole Information

☐ Monitoring Well

☒ Water Well

☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)

10/19/85

If a Well Construction Report is available,
please attach.

Construction Type:

☒ Drilled

☐ Driven (Sandpoint)

☐ Dug

☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation

☐ Bedrock

Total Well Depth From Ground Surface (ft.)

27.2

Casing Diameter (in.)

4

Lower Drillhole Diameter (in.)

Casing Depth (ft.)

17.2

Was well annular space grouted?

☒ Yes

☐ No

☐ Unknown

If yes, to what depth (feet)?

5

Depth to Water (feet)

13.75

2. Facility / Owner Information

Facility Name

Wausau Chemical

Facility ID (FID or PWS)

737105820

License/Permit/Monitoring #

Original Well Owner

Wausau Chemical

Present Well Owner

Wausau Chemical

Mailing Address of Present Owner

2001 N. River Drive

City of Present Owner

Wausau

State

WI

ZIP Code

54402-0953

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?

☐ Yes

☐ No

☒ N/A

Liner(s) removed?

☐ Yes

☐ No

☒ N/A

Screen removed?

☒ Yes

☐ No

☐ N/A

Casing left in place?

☐ Yes

☒ No

☐ N/A

Was casing cut off below surface?

☐ Yes

☐ No

☒ N/A

Did sealing material rise to surface?

☒ Yes

☐ No

☐ N/A

Did material settle after 24 hours?

☐ Yes

☒ No

☐ N/A

If yes, was hole retopped?

☐ Yes

☐ No

☒ N/A

If bentonite chips were used, were they hydrated
with water from a known safe source?

☒ Yes

☐ No

☐ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity

☐ Conductor Pipe-Pumped

☒ Screened & Poured
(Bentonite Chips)

☐ Other (Explain): _____

Sealing Materials

☐ Neat Cement Grout

☐ Clay-Sand Slurry (11 lb./gal. wt.)

☐ Sand-Cement (Concrete) Grout

☐ Bentonite-Sand Slurry

☐ Concrete

☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☐ Bentonite Chips

☐ Bentonite - Cement Grout

☐ Granular Bentonite

☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

3/8" Hole Plug

From (ft.)

Surface

To (ft.)

27

Sacks Sealant

4

6. Comments

Groundwater Extraction Well (WCR-4)

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing

Boart Longyear

License #

6189

Date of Filling & Sealing (mm/dd/yyyy)

9/1/2008

DNR Use Only

Date Received

Noted By

Street or Route

101 Alderson St.

Telephone Number

(715) 359-7090

Comments

City

Schofield

State

WI

ZIP Code

54476

Signature of Person Doing Work

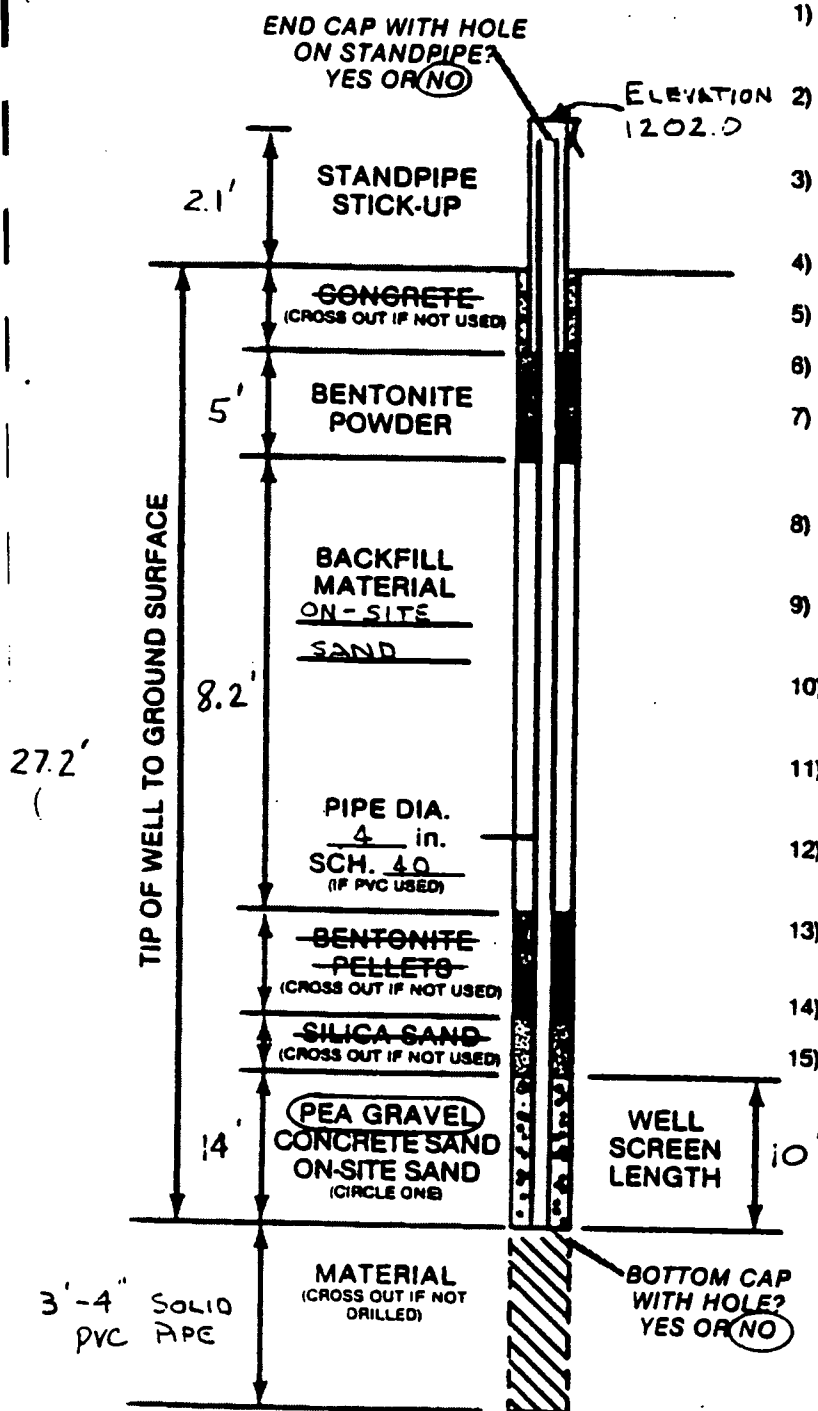
Date Signed

6-8-09



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE?
PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS?
BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN
PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED?
SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT, BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED?
BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT?
5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED?
5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY
 - 1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT?
15.2 Ft. or DRY
 - 2) OTHER MEASUREMENTS:

DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE

Well No. 4 WCK4 DATE INSTALLED 10-9-35 DRILL RIG CME 45

DRILLER JOHN WRIGHT DRILL CREW DAVID MONCH

JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12775-B

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
	☐ Waste Management	☐ Other: _____		

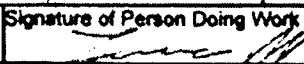
1. Well Location Information		2. Facility / Owner Information	
County MARATHON	WI Unique Well # of Removed Well _____	Facility Name Wausau Chemical	
Latitude / Longitude (Degrees and Minutes) _____. _____. _____. 'N _____. _____. _____. 'W	Method Code (see instructions) _____	Facility ID (FID or PWS) 737105020	
1/4 NW 1/4 NW Section Township Range [X] E or Gov't Lot # 25 29 N 7 [] W		License/Permit/Monitoring # _____	
Well Street Address 2001 N. River Drive		Original Well Owner Wausau Chemical	
Well City, Village or Town Wausau	Well ZIP Code 54402-0953	Present Well Owner Wausau Chemical	
Subdivision Name _____	Lot # _____	Mailing Address of Present Owner 2001 N. River Drive	
		City of Present Owner Wausau	State WI
			ZIP Code 54402-0953

Reason For Removal From Service Not In Service	WI Unique Well # of Replacement Well _____	4. Pump, Liner, Screen, Casing & Sealing Material	
3. Well / Drillhole / Borehole Information		Pump and piping removed?	☒ Yes ☐ No ☐ N/A
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 10/9/95	Liner(s) removed?	☐ Yes ☐ No ☒ N/A
☒ Water Well	If a Well Construction Report is available, please attach.	Screen removed?	☒ Yes ☐ No ☐ N/A
☐ Borehole / Drillhole		Casing left in place?	☐ Yes ☒ No ☐ N/A
Construction Type:		Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug		Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
☐ Other (specify): _____		Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
		If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
		If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A

Formation Type:	☒ Unconsolidated Formation ☐ Bedrock	Required Method of Placing Sealing Material	☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)	☒ Screened & Poured (Bentonite Chips)	☐ Other (Explain): _____
26.9	4	Sealing Materials	
Lower Drillhole Diameter (in.)	Casing Depth (ft.)	☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)	
17	17	☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry	
Was well annular space grouted?	☒ Yes ☐ No ☐ Unknown	☐ Concrete ☒ Bentonite Chips	
If yes, to what depth (feet)?	Depth to Water (feet)	For Monitoring Wells and Monitoring Well Boreholes Only:	
5	14.25	☐ Bentonite Chips ☐ Bentonite - Cement Grout	
		☐ Granular Bentonite ☐ Bentonite - Sand Slurry	

5. Material Used To Fill Well / Drillhole	From (ft.)	To (ft.)	Sacks Sealant
3/8" Hole Plug	Surface	27	4

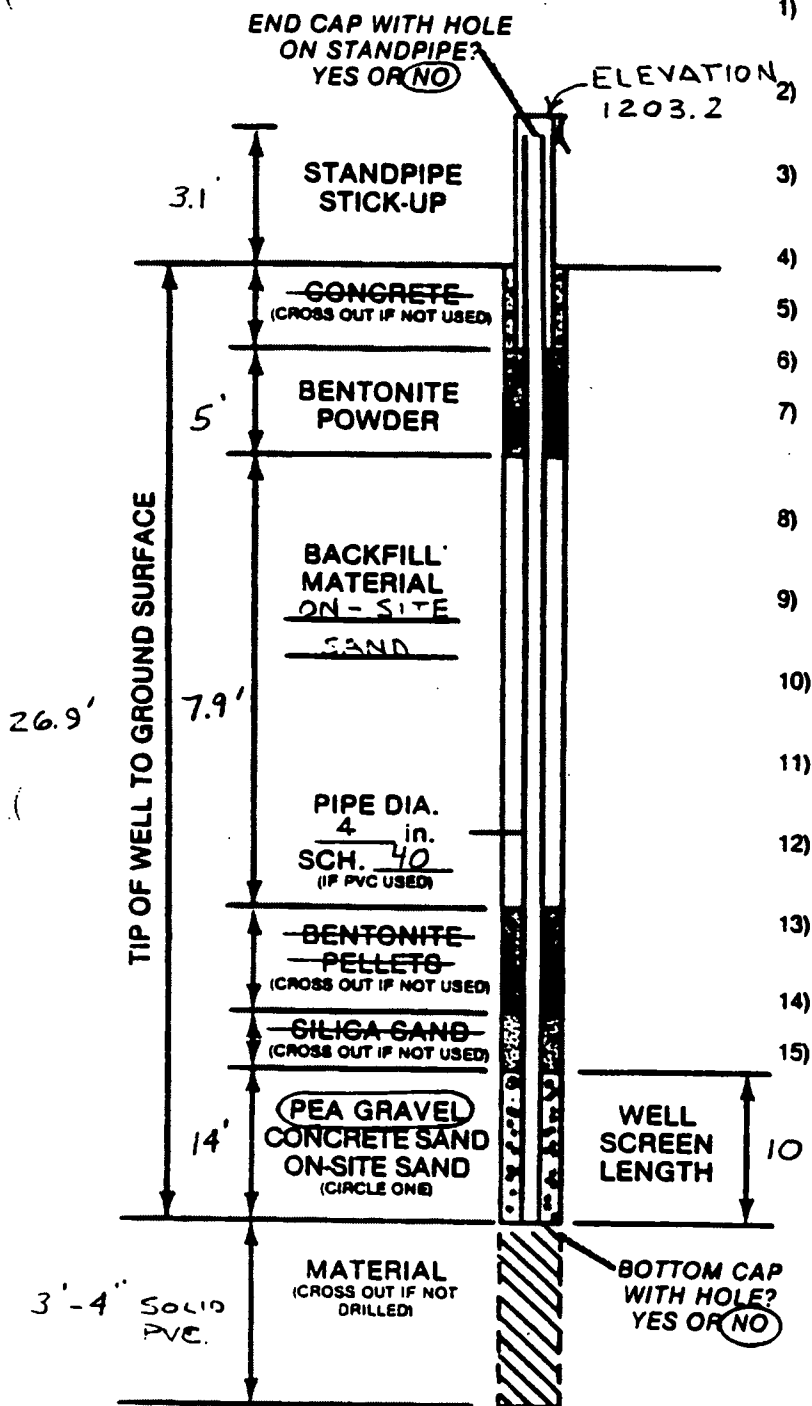
6. Comments
Groundwater Extraction Well (WUX-5)

7. Supervision of Work		DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/5/2008	Date Received _____
Street or Route 101 Alderson St.	Telephone Number (715) 359-7090	Noted By _____	
City Schofield	State WI	ZIP Code 54476	Signature of Person Doing Work 
			Date Signed 6-8-09



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE? PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS? BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED? SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED? BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT? 5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED? 5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY

1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT? 16.3 Ft. or DRY

2) OTHER MEASUREMENTS:

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

Well No. 5 WCLS DATE INSTALLED 10-9-85 DRILL RIG CME 45

DRILLER JOHN WRIGHT DRILL CREW DAVID WONCH

JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-B

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
	☐ Waste Management	☐ Other:		

1. Well Location Information

County	MI Unique Well # of Removed Well	Map #
MARATHON		
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)
____° ____' ____" N		
____° ____' ____" W		
1/4 NW	1/4 NW	Section
or Gov't Lot #		25
Township		29 N
Range		7 E
Well Street Address		
2001 N. River Drive		
Well City, Village or Town		Well ZIP Code
Wausau		54402-0953
Subdivision Name		Lot #

2. Facility / Owner Information

Facility Name	Wausau Chemical	
Facility ID (FID or PWS)	737105820	
License/Permit/Monitoring #		
Original Well Owner	Wausau Chemical	
Present Well Owner	Wausau Chemical	
Mailing Address of Present Owner	2001 N. River Drive	
City of Present Owner	State	ZIP Code
Wausau	WI	54402-0953

Reason For Removal From Service	MI Unique Well # of Replacement Well
Not in Service	

3. Well / Drillhole / Borehole Information

☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 10/14/85	
☒ Water Well		
☐ Borehole / Drillhole		
If a Well Construction Report is available, please attach.		
Construction Type:		
☒ Drilled	☐ Driven (Sandpoint)	☐ Dug
☐ Other (specify):		

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Formation Type:

☒ Unconsolidated Formation	☐ Bedrock		
Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)		
23	4		
Lower Drillhole Diameter (in.)	Casing Depth (ft.)		
	13		
Was well annular space grouted?	☒ Yes	☐ No	☐ Unknown
If yes, to what depth (feet)?	Depth to Water (feet)		
5	11		

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity	☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips)	☐ Other (Explain):
Sealing Materials	
☐ Neat Cement Grout	☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout	☐ Bentonite-Sand Slurry "
☐ Concrete	☒ Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	
☐ Bentonite Chips	☐ Bentonite - Cement Grout
☐ Granular Bentonite	☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	Sacks Sealant
3/8" Hole Plug	Surface	23

6. Comments

Groundwater Extraction Well (WCA-6)

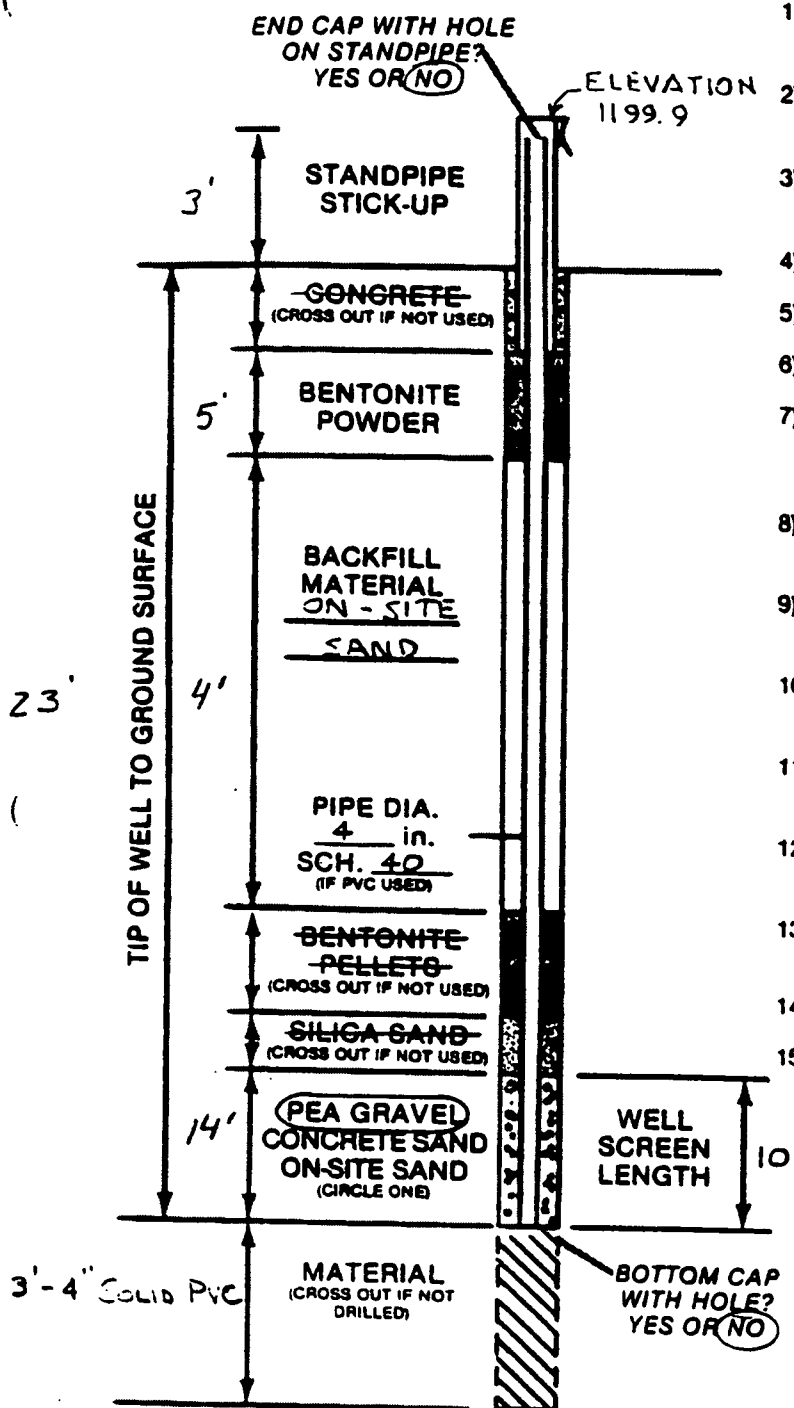
7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing		License #	Date of Filling & Sealing (mm/dd/yyyy)	DNR Use Only	
Boart Longyear		6189	9/3/2008	Date Received	Noted By
Street or Route		Telephone Number		Comments	
101 Alderson St.		(715) 359-7090			
City	State	ZIP Code	Signature of Person Doing Work		Date Signed
Schofield	WI	54476			6-8-09



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE?
PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS?
BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN
PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED?
SOLID AUGER, HOLLOW STEM AUGER,
WATER, REVERT BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED?
YES OR NO
- 9) HOW WAS WELL DEVELOPED?
BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT?
5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED?
5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY

1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT?
12' Ft. or DRY

2) OTHER MEASUREMENTS:

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

Well No. 6 WCK6 DATE INSTALLED 10-14-95 DRILL RIG CME 45

DRILLER JOHN WRIGHT DRILL CREW DAVID WRIGHT

JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12766-B

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
		☐ Waste Management	☐ Other:	

1. Well Location Information		2. Facility / Owner Information	
County MARATHON	WI Unique Well # of Removed Well _____	Facility Name Wausau Chemical	Facility ID (FID or PWS) 737105 820
Latitude / Longitude (Degrees and Minutes) _____. _____. _____ N _____. _____. _____ W		License/Permit/Monitoring # _____	
Method Code (see instructions) _____		Original Well Owner Wausau Chemical	
1/4 NW 1/4 NW or Gov't Lot #	Section 25	Township 29 N	Range 7 E
Well Street Address 2001 N. River Drive		Present Well Owner Wausau Chemical	
Well City, Village or Town Wausau		Mailing Address of Present Owner 2001 N. River Drive	
Subdivision Name _____		City of Present Owner Wausau	State WI
Well ZIP Code 54402-0953		ZIP Code 54402-0953	

Reason For Removal From Service Not In Service	WI Unique Well # of Replacement Well _____	4. Pump, Liner, Screen, Casing & Sealing Material	
3. Well / Drillhole / Borehole Information		Pump and piping removed? ☐ Yes ☐ No ☒ N/A Liner(s) removed? ☐ Yes ☐ No ☒ N/A Screen removed? ☐ Yes ☒ No ☐ N/A Casing left in place? ☐ Yes ☒ No ☐ N/A	
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 10/8/85	Was casing cut off below surface? ☐ Yes ☐ No ☒ N/A	
☒ Water Well	If a Well Construction Report is available, please attach.	Did sealing material rise to surface? ☒ Yes ☐ No ☐ N/A	
☐ Borehole / Drillhole		Did material settle after 24 hours? ☐ Yes ☒ No ☐ N/A	
Construction Type:		If yes, was hole retopped? ☐ Yes ☐ No ☒ N/A	
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug		If bentonite chips were used, were they hydrated with water from a known safe source? ☒ Yes ☐ No ☐ N/A	
☐ Other (specify): _____		Required Method of Placing Sealing Material	
Formation Type:		☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped	
☒ Unconsolidated Formation ☐ Bedrock		☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____	
Total Well Depth From Ground Surface (ft.) 27	Casing Diameter (in.) 4	Sealing Materials	
Lower Drillhole Diameter (in.)	Casing Depth (ft.) 17	☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)	
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown		☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry	
If yes, to what depth (feet)? 5	Depth to Water (feet) 13.5	☒ Concrete ☒ Bentonite Chips	

5. Material Used To Fill Well / Drillhole		For Monitoring Wells and Monitoring Well Boreholes Only:	
From (ft.)	To (ft.)	Sacks Sealant	
Surface	27	4	

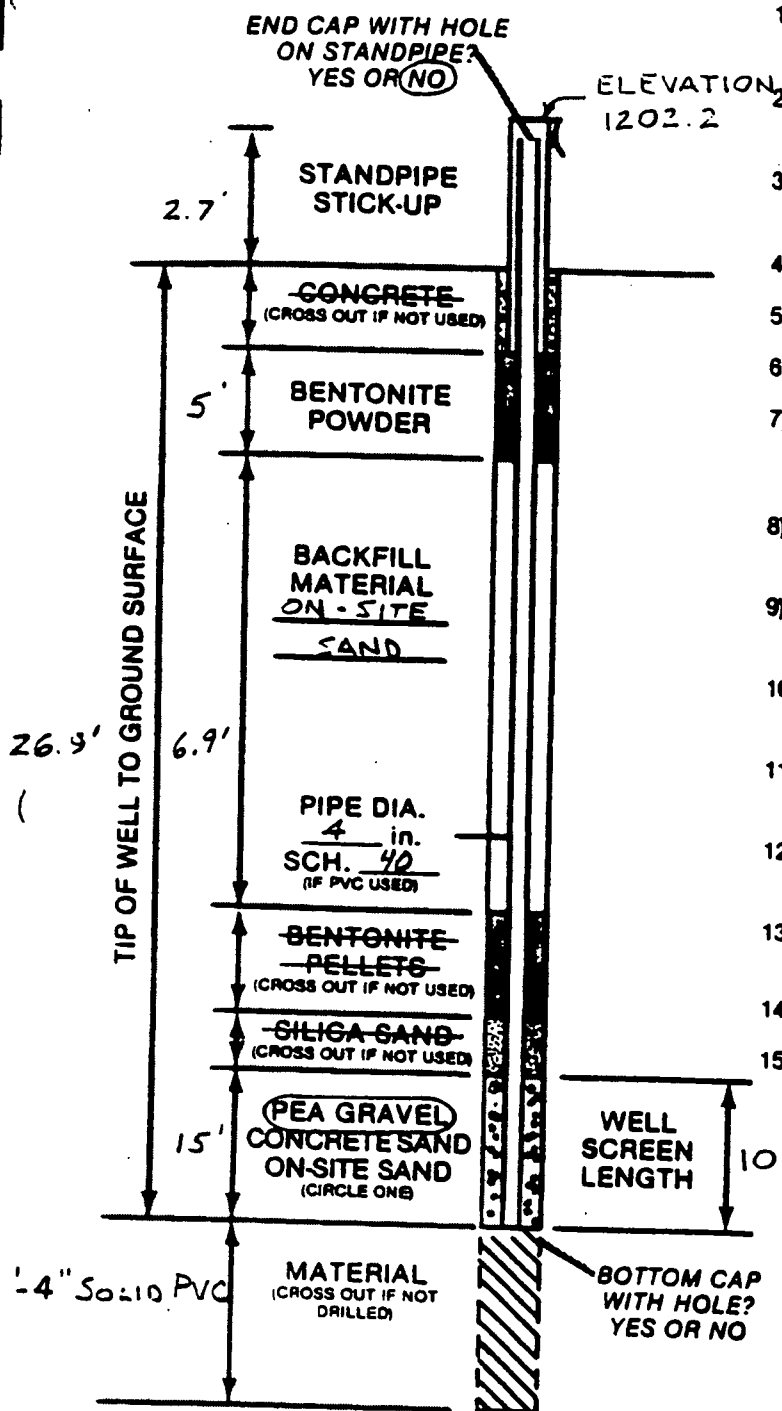
6. Comments			
Groundwater Extraction Well (WEX-7)			

7. Supervision of Work		DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/3/2008	Date Received _____
Street or Route 101 Alderson St.	Telephone Number (715) 359-7090	Noted By _____	
City Schofield	State WI	ZIP Code 54476	Comments _____
Signature of Person Doing Work <i>[Signature]</i>			Date Signed 6-8-09



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE? PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS? BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED? SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED? BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT? 5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED? 5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY
 - 1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT? 15.4 Ft. or DRY
 - 2) OTHER MEASUREMENTS:

DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE

Well No. 7 WCK 7 DATE INSTALLED 10-3-95 DRILL RIG CME 45

DRILLER JOHN WRIGHT DRILL CREW DAVID BUNCH

JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-B

FW: 1-983

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	Map # _____
Latitude / Longitude (Degrees and Minutes) _____' N _____' W		Method Code (see instructions) _____
1/4 NW or Govt Lot #	Section 25	Township 29 N
Well Street Address 2001 N. River Drive	Range 7	☒ E ☐ W
Well City, Village or Town Wausau	Well ZIP Code 54402-0953	
Subdivision Name	Lot # _____	

2. Facility / Owner Information

Facility Name Wausau Chemical		
Facility ID (FID or PWS) 737125820		
License/Permit/Monitoring # _____		
Original Well Owner Wausau Chemical		
Present Well Owner Wausau Chemical		
Mailing Address of Present Owner 2001 N. River Drive		
City of Present Owner Wausau	State WI	ZIP Code 54402-0953

Reason For Removal From Service
Not In Service

3. Well / Drillhole / Borehole Information

☐ Monitoring Well ☒ Water Well ☐ Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) 10/10/85 If a Well Construction Report is available, please attach.
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____	

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock	
Total Well Depth From Ground Surface (ft.) 27	Casing Diameter (in.) 4
Lower Drillhole Diameter (in.)	Casing Depth (ft.) 17
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown	
If yes, to what depth (feet)? 5	Depth to Water (feet) 13.7

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☒ Yes ☐ No ☐ N/A
Liner(s) removed?	☐ Yes ☐ No ☒ N/A
Screen removed?	☒ Yes ☐ No ☐ N/A
Casing left in place?	☐ Yes ☒ No ☐ N/A
Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A

Required Method of Placing Sealing Material	
☐ Conductor Pipe-Gravity	☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips)	☐ Other (Explain): _____
Sealing Materials	
☐ Neat Cement Grout	☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout	☐ Bentonite-Sand Slurry
☐ Concrete	☒ Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	
☐ Bentonite Chips	☐ Bentonite - Cement Grout
☐ Granular Bentonite	☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	Sacks Sealant
3/8" Hole Plug	Surface	26
		4

6. Comments

Groundwater Extraction Well (WCK-4)

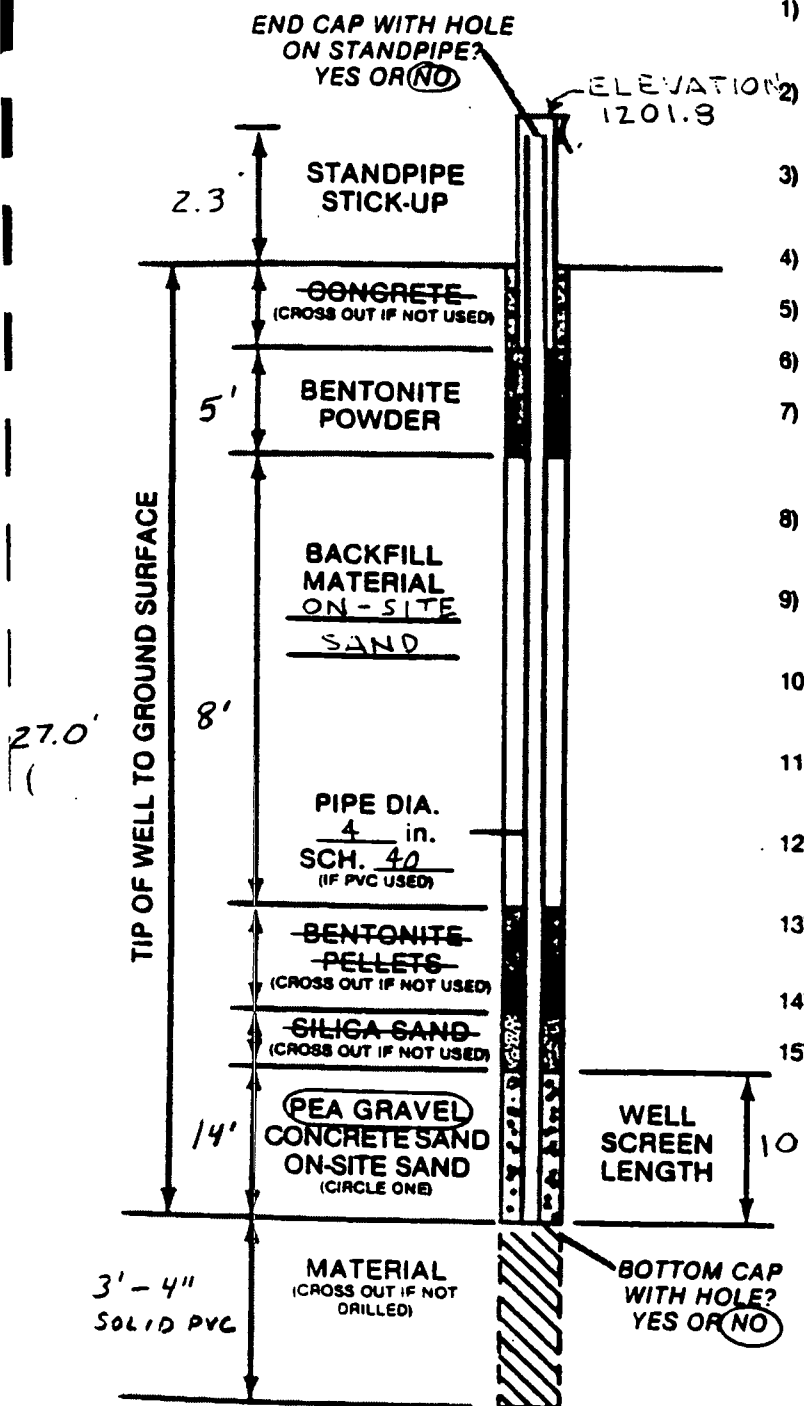
7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/4/2008	DNR Use Only	
Street or Route 101 Alderson St.	Telephone Number (715) 359-7090	Comments	Date Received	Noted By
City Schofield	State WI	ZIP Code 54476	Signature of Person Doing Work <i>[Signature]</i>	Date Signed 6-8-09



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE?
PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS?
BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN
PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED?
SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED?
BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT?
5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED?
5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY

1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT?
15.0' Ft. or DRY

2) OTHER MEASUREMENTS:

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

Well No. 3 WCLX8 DATE INSTALLED 10-10-35 DRILL RIG CME 45

RILLER JOHN WRIGHT DRILL CREW DAVID WONCH

JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-B

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	Hexap # _____
Latitude / Longitude (Degrees and Minutes) _____. _____. _____. 'N _____. _____. _____. 'W		Method Code (see instructions) _____
1/4 NW or Gov't Lot #	1/4 NW Section 25	Township 29 N
Well Street Address 2001 N. River Drive		Range 7
Well City, Village or Town Wausau		☒ E ☐ W
Subdivision Name _____		Well ZIP Code 54402-0953
Reason For Removal From Service Not in Service		WI Unique Well # of Replacement Well _____

2. Facility / Owner Information

Facility Name Wausau Chemical		
Facility ID (FID or PWS) 737105820		
License/Permit/Monitoring # _____		
Original Well Owner Wausau Chemical		
Present Well Owner Wausau Chemical		
Mailing Address of Present Owner 2001 N. River Drive		
City of Present Owner Wausau	State WI	ZIP Code 54402-0953

3. Well / Drillhole / Borehole Information

☐ Monitoring Well ☒ Water Well ☐ Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) 10/13/85 If a Well Construction Report is available, please attach.
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____	
Formation Type: ☒ Unconsolidated Formation ☐ Bedrock	
Total Well Depth From Ground Surface (ft.) 23	Casing Diameter (in.) 4
Lower Drillhole Diameter (in.) _____	Casing Depth (ft.) 13
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown	
If yes, to what depth (feet)? 5	Depth to Water (feet) 10.3

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☒ Yes ☐ No ☐ N/A
Liner(s) removed?	☐ Yes ☐ No ☒ N/A
Screen removed?	☒ Yes ☐ No ☐ N/A
Casing left in place?	☐ Yes ☒ No ☐ N/A
Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity	☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips)	☐ Other (Explain): _____
Sealing Materials	
☐ Neat Cement Grout	☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout	☐ Bentonite-Sand Slurry
☐ Concrete	☒ Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	
☐ Bentonite Chips	☐ Bentonite - Cement Grout
☐ Granular Bentonite	☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	Sacks Sealant
3/8" Hole Plug	Surface	23.1
_____	_____	_____
_____	_____	_____

6. Comments

Groundwater Extraction Well (WCR-9)

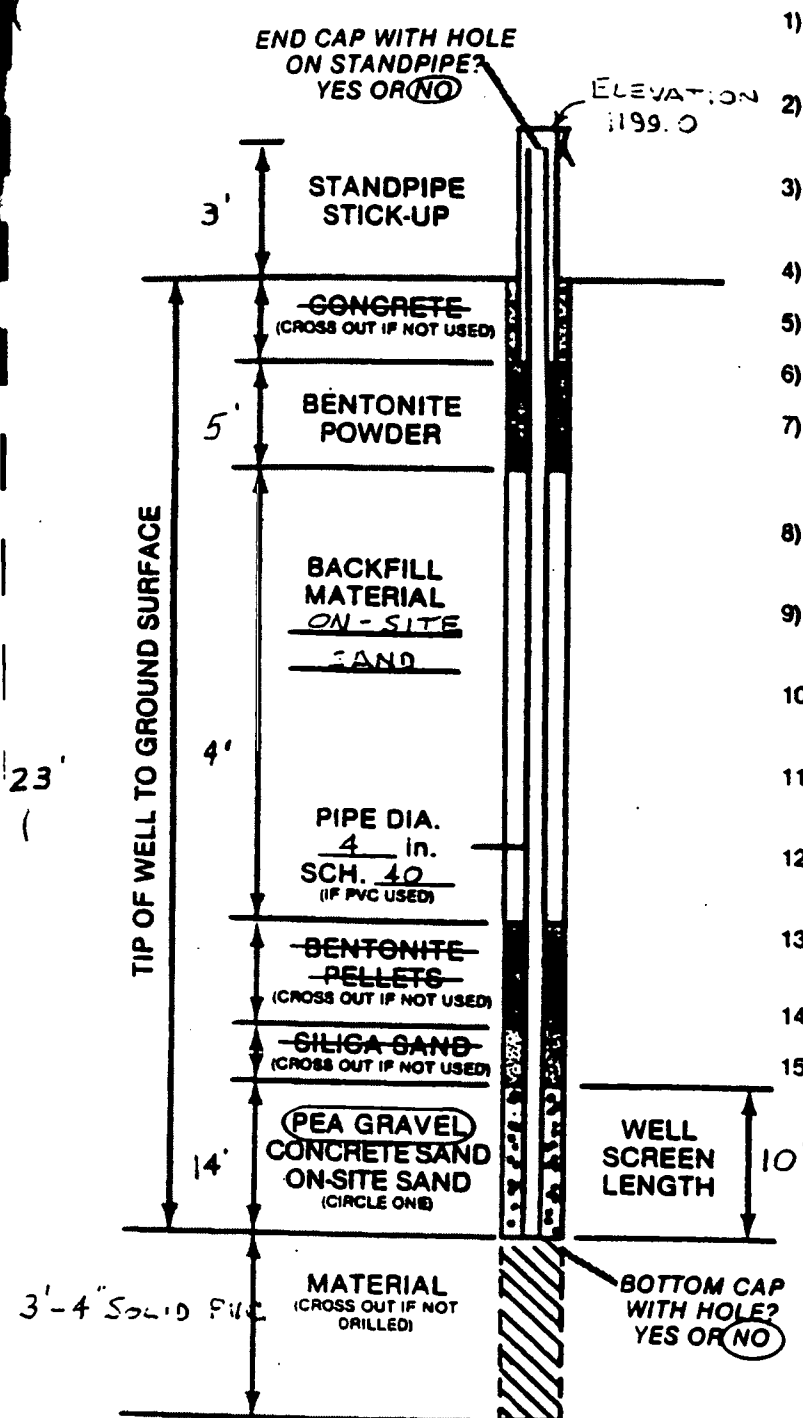
7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/3/2008	DNR Use Only	
Street or Route 101 Alderson St.		Telephone Number (715) 359-7090	Date Received	Noted By
City Schofield	State WI	ZIP Code 54476	Signature of Person Doing Work <i>[Signature]</i>	
			Date Signed 6-8-09	



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE?
PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS?
BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN
PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED?
SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED?
YES OR NO
- 9) HOW WAS WELL DEVELOPED?
BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT?
5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED?
5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY
 - 1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT?
12.6' Ft. or DRY
 - 2) OTHER MEASUREMENTS:

DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE

Well No. 9 WCK9 DATE INSTALLED 10-13-35 DRILL RIG CME 45
 DRILLER JOHN WRIGHT DRILL CREW DAVID WOLCH
 JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-B

☐ Verification Only of Fill and Seal

Route to:

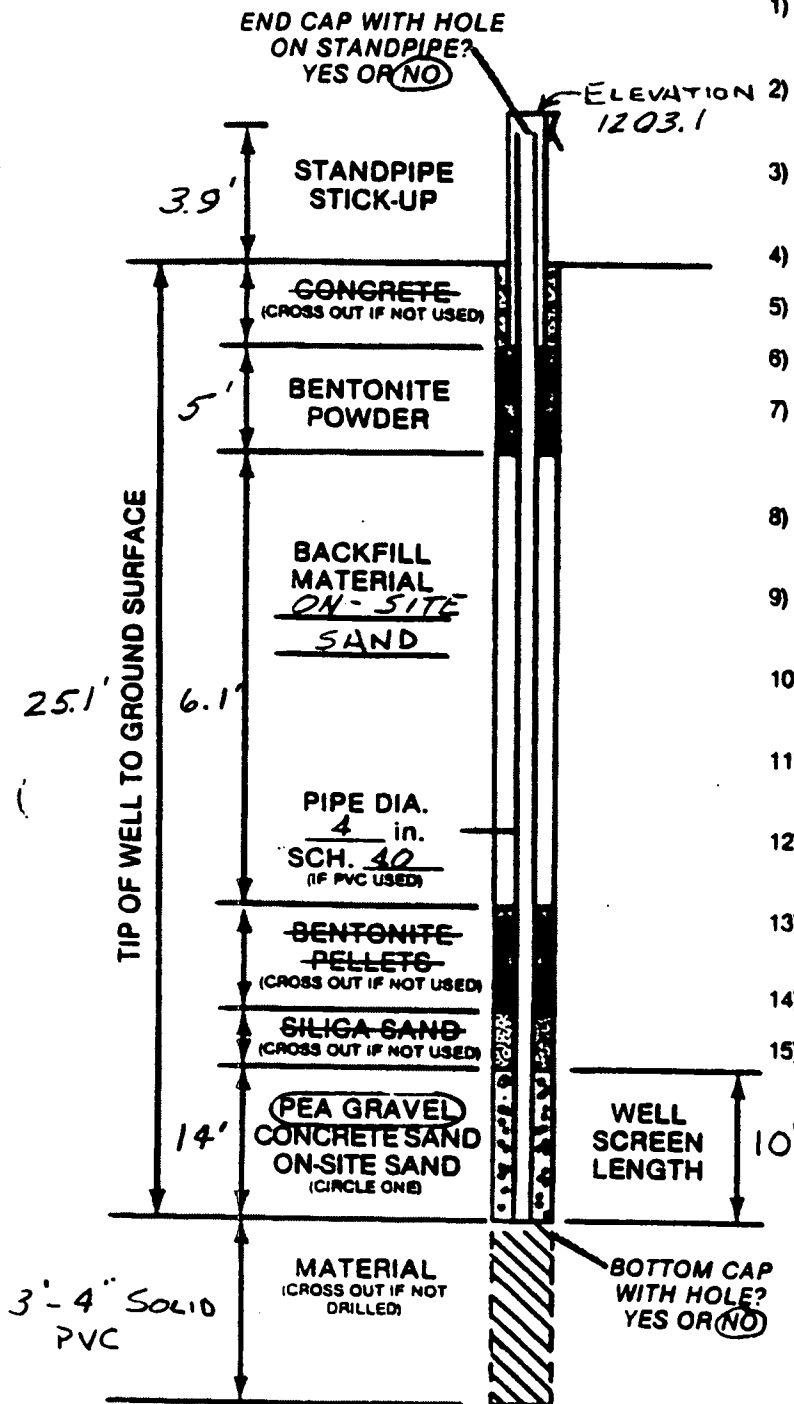
☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
☐ Waste Management	☐ Other:	

1. Well Location Information					2. Facility / Owner Information				
County MARATHON		WI Unique Well # of Removed Well _____		Hcap # _____	Facility Name Wausau Chemical				
Latitude / Longitude (Degrees and Minutes) _____. _____. _____ 'N _____. _____. _____ 'W			Method Code (see instructions) _____		Facility ID (FID or PWS) _____				
License/Permit/Monitoring # _____		Original Well Owner Wausau Chemical			Present Well Owner Wausau Chemical				
Mailing Address of Present Owner 2001 N. River Drive		City of Present Owner Wausau			State WI		ZIP Code 54402-0953		
Well Street Address 2001 N. River Drive		Well City, Village or Town Wausau			Well ZIP Code 54402-0953				
Subdivision Name _____		Lot # _____			Reason For Removal From Service Not In Service				
WI Unique Well # of Replacement Well _____		3. Well / Drillhole / Borehole Information							
☐ Monitoring Well ☒ Water Well ☐ Borehole / Drillhole		Original Construction Date (mm/dd/yyyy) 10/11/85 If a Well Construction Report is available, please attach.							
Construction Type:									
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____									
Formation Type:									
☒ Unconsolidated Formation ☐ Bedrock									
Total Well Depth From Ground Surface (ft.) 25.1			Casing Diameter (in.) 4						
Lower Drillhole Diameter (in.) _____			Casing Depth (ft.) 15						
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown									
If yes, to what depth (feet)? 5			Depth to Water (feet) 13.7						
5. Material Used To Fill Well / Drillhole									
3/8" Hole Plug			From (ft.) Surface		To (ft.) 26		Sacks Sealant 3		
6. Comments Groundwater Extraction Well (WCR-1A)									
7. Supervision of Work					DNR Use Only				
Name of Person or Firm Doing Filling & Sealing Boart Longyear			License # 6189		Date of Filling & Sealing (mm/dd/yyyy) 9/1/2008		Date Received _____		
Street or Route 101 Alderson St.			Telephone Number (715) 359-7090		Noted By _____				
City Schofield			State WI		ZIP Code 54476		Signature of Person Doing Work <i>[Signature]</i>		
							Date Signed 6-8-09		



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE? PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS? BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN PVC, GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED? SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT, BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED? BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT? 5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED? 5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY
 - 1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT? 16.4 Ft. or DRY
 - 2) OTHER MEASUREMENTS:

DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE
DATE _____	_____ Ft. FROM T. ST. PIPE

Well No. 10 AUX10A DATE INSTALLED 10-11-95 DRILL RIG CME 45
 DRILLER JOHN WRIGHT DRILL CREW DAVID WLONGH
 JOBCLIENT NAUSAU CHEMICAL STS JOB No. 12776-B

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
	☐ Waste Management	☐ Other:		

1. Well Location Information				2. Facility / Owner Information			
County MARATHON		WI Unique Well # of Removed Well		Facility Name Wausau Chemical		Facility ID (FID or PWS) 737105020	
Latitude / Longitude (Degrees and Minutes) ____' ____' ____" N ____' ____' ____" W		Method Code (see instructions)		License/Permit/Monitoring #		Original Well Owner Wausau Chemical	
1/4 NW 1/4 NW or Gov't Lot #		Section 25	Township 29 N	Range 7 E	Present Well Owner Wausau Chemical		Mailing Address of Present Owner 2001 N. River Drive
Well Street Address 2001 N. River Drive				City of Present Owner Wausau			
Well City, Village or Town Wausau				State WI			
Subdivision Name				ZIP Code 54402-0953			
Reason For Removal From Service Not in Service				WI Unique Well # of Replacement Well			

3. Well / Drillhole / Borehole Information				4. Pump, Liner, Screen, Casing & Sealing Material			
☐ Monitoring Well ☒ Water Well ☐ Borehole / Drillhole		Original Construction Date (mm/dd/yyyy) 10/13/45		Pump and piping removed? ☐ Yes ☐ No ☒ N/A		Liner(s) removed? ☐ Yes ☐ No ☒ N/A	
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):		If a Well Construction Report is available, please attach.		Screen removed? ☐ Yes ☒ No ☐ N/A		Casing left in place? ☐ Yes ☒ No ☐ N/A	
Formation Type: ☒ Unconsolidated Formation ☐ Bedrock		Total Well Depth From Ground Surface (ft.) 25		Was casing cut off below surface? ☒ Yes ☐ No ☐ N/A		Did sealing material rise to surface? ☐ Yes ☒ No ☐ N/A	
Lower Drillhole Diameter (in.)		Casing Diameter (in.) 4		Did material settle after 24 hours? ☐ Yes ☒ No ☐ N/A		If yes, was hole retopped? ☐ Yes ☐ No ☒ N/A	
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown		Depth to Water (feet) 14		If bentonite chips were used, were they hydrated with water from a known safe source? ☒ Yes ☐ No ☐ N/A		Required Method of Placing Sealing Material ☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):	

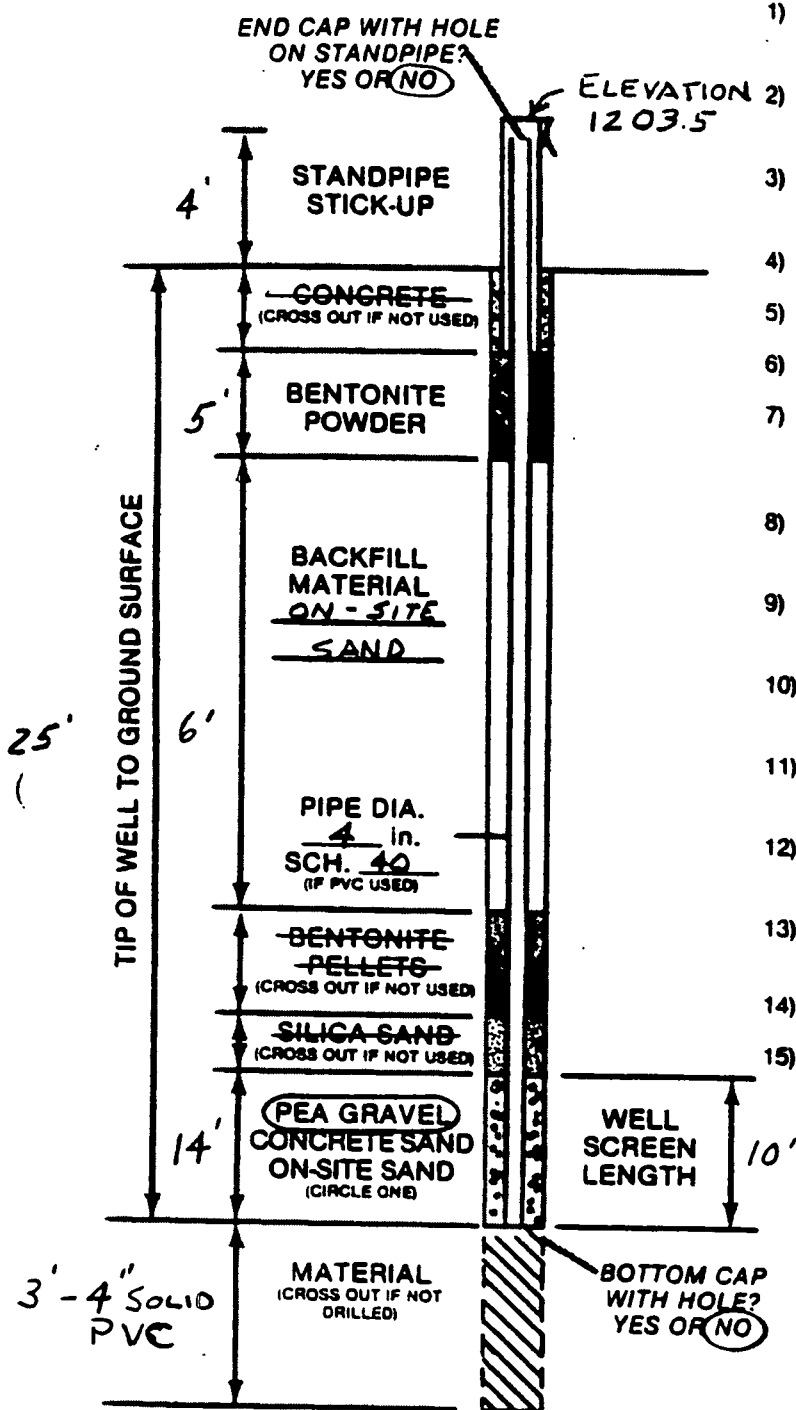
Sealing Materials ☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.) ☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry ☐ Concrete ☒ Bentonite Chips		For Monitoring Wells and Monitoring Well Boreholes Only: ☐ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry	
5. Material Used To Fill Well / Drillhole		6. Comments	
From (ft.)	To (ft.)	Sacks Sealant	
Surface	25	3.5	
Groundwater Extraction Well (WCK-11)			

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Boart Longyear		License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 7/4/2008	Date Received	Noted By
Street or Route 101 Alderson St.		Telephone Number (715) 359-7090		Comments	
City Schofield	State WI	ZIP Code 54476	Signature of Person Doing Work <i>[Signature]</i>	Date Signed 6-8-09	



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE? PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS? BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE 15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED? SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT, BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED? BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT? 5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED? 5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY

1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT? 17.5 Ft. or DRY

2) OTHER MEASUREMENTS:

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

Well No. 11 well DATE INSTALLED 10-13-85 DRILL RIG CME 45

DRILLER JOHN WRIGHT DRILL CREW DAVID WANCH

JOB/CLIENT WAUSAU CHEMICAL

STS JOB No. 12776-B

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	Map # _____
Latitude / Longitude (Degrees and Minutes) _____'N _____'W		Method Code (see instructions) _____
1/4 NW 1/4 NW or Gov't Lot #	Section 25	Township 29 N
Well Street Address 2001 N. River Drive		Range 7 E
Well City, Village or Town Wausau		Well ZIP Code 54402-0953
Subdivision Name _____		Lot # _____

2. Facility / Owner Information

Facility Name Wausau Chemical		
Facility ID (FID or PWS) 737105820		
License/Permit/Monitoring # _____		
Original Well Owner Wausau Chemical		
Present Well Owner Wausau Chemical		
Mailing Address of Present Owner 2001 N. River Drive		
City of Present Owner Wausau	State WI	ZIP Code 54402-0953

Reason For Removal From Service
Not In Service

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 10/13/85 If a Well Construction Report is available, please attach.
☒ Water Well	
☐ Borehole / Drillhole	
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____	

Formation Type:

☒ Unconsolidated Formation

☐ Bedrock

Total Well Depth From Ground Surface (ft.)

23

Casing Diameter (in.)

4

Lower Drillhole Diameter (in.)

Casing Depth (ft.)

13

Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?

5

Depth to Water (feet)

10.67

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	Sacks Sealant
Surface	23	2.5

6. Comments

Groundwater Extraction Well (WCA-12)

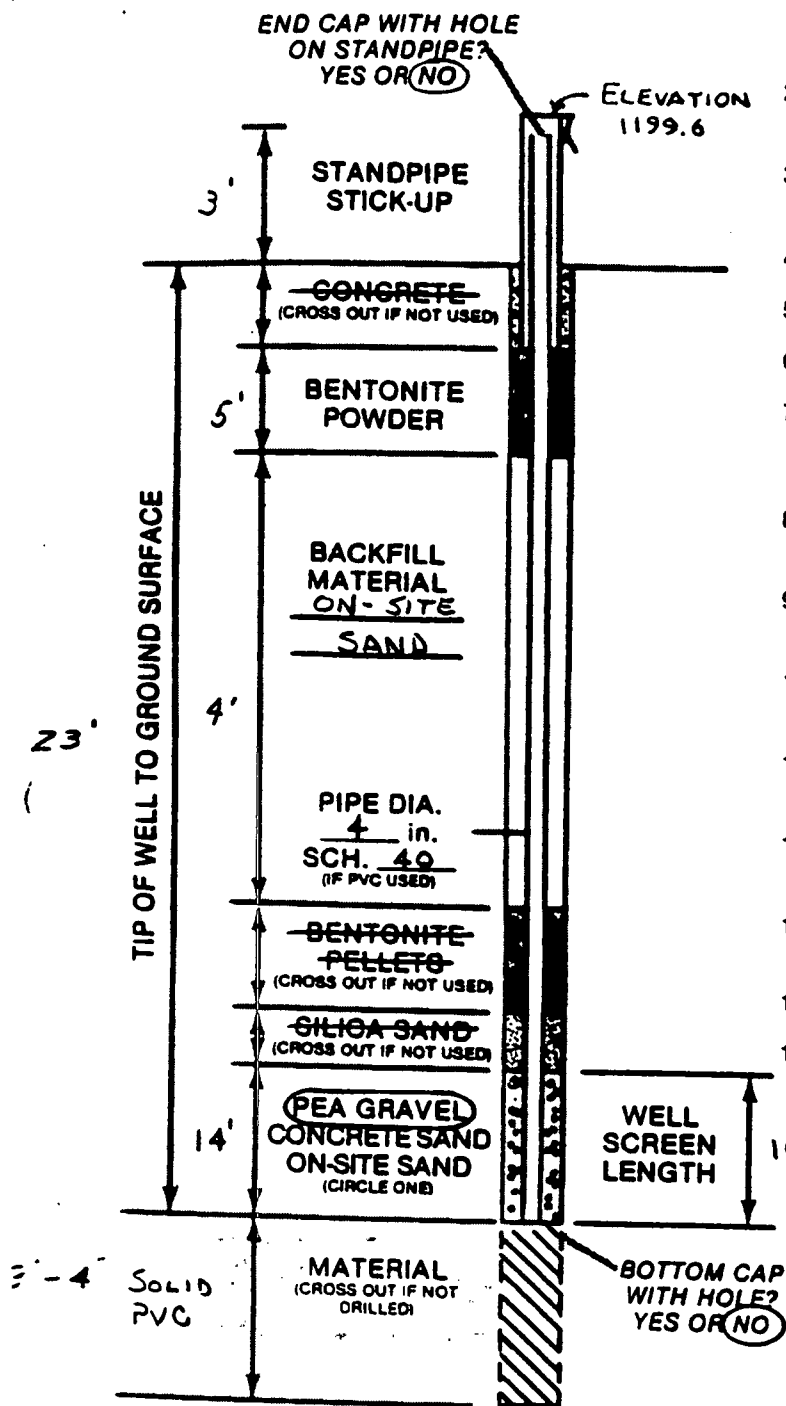
7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/3/2008	DNR Use Only	
Street or Route 101 Alderson St.		Telephone Number (715) 359-7090	Date Received	Noted By
City Schofield	State WI	ZIP Code 54476	Signature of Person Doing Work <i>[Signature]</i>	
Date Signed 9-8-09			Comments	



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE?
PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS?
BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN
PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED?
SOLID AUGER, HOLLOW STEM AUGER,
WATER, REVERT BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED?
YES OR NO
- 9) HOW WAS WELL DEVELOPED?
BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT?
5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED?
5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT?
CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY

1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT?
13 Ft. or DRY

2) OTHER MEASUREMENTS:

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

Well No. 12 WOX12 DATE INSTALLED 10-13-85 DRILL RIG CME 45

DRILLER JOHN WRIGHT DRILL CREW DAVID WOLCH

JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-B

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County: **MARATHON** MI Unique Well # of Removed Well: _____ Hcap #: _____

Latitude / Longitude (Degrees and Minutes): _____ N
_____ W Method Code (see instructions): _____

1/4 NW 1/4 NW Section: **25** Township: **29 N** Range: **7** ☒ E ☐ W
or Govt Lot #

Well Street Address: **2001 N. River Drive**

Well City, Village or Town: **Wausau** Well ZIP Code: **54402-0953**

Subdivision Name: _____ Lot #: _____

Reason For Removal From Service: **Not In Service** MI Unique Well # of Replacement Well: _____

3. Well / Drillhole / Borehole Information

☐ Monitoring Well
☒ Water Well
☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): **10/10/65**
If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.): **23.4** Casing Diameter (in.): **4**

Lower Drillhole Diameter (in.): _____ Casing Depth (ft.): **13.4**

Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)? **5** Depth to Water (feet): **DRY**

5. Material Used To Fill Well / Drillhole

3/8" Hole Plug

2. Facility / Owner Information

Facility Name: **Wausau Chemical**

Facility ID (FID or PWS): **737105820**

License/Permit/Monitoring #: _____

Original Well Owner: **Wausau Chemical**

Present Well Owner: **Wausau Chemical**

Mailing Address of Present Owner: **2001 N. River Drive**

City of Present Owner: **Wausau** State: **WI** ZIP Code: **54402-0953**

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed? ☐ Yes ☐ No ☒ N/A

Liner(s) removed? ☐ Yes ☐ No ☒ N/A

Screen removed? ☐ Yes ☒ No ☐ N/A

Casing left in place? ☒ Yes ☐ No ☐ N/A

Was casing cut off below surface? ☒ Yes ☐ No ☐ N/A

Did sealing material rise to surface? ☒ Yes ☐ No ☐ N/A

Did material settle after 24 hours? ☐ Yes ☒ No ☐ N/A

If yes, was hole retopped? ☐ Yes ☐ No ☒ N/A

If bentonite chips were used, were they hydrated with water from a known safe source? ☒ Yes ☐ No ☐ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials

☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry
☐ Concrete ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

6. Comments

Groundwater Extraction Well (WCX-13)

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing: **Boart Longyear** License #: **6189** Date of Filling & Sealing (mm/dd/yyyy): **9/3/2008** Date Received: _____ Noted By: _____

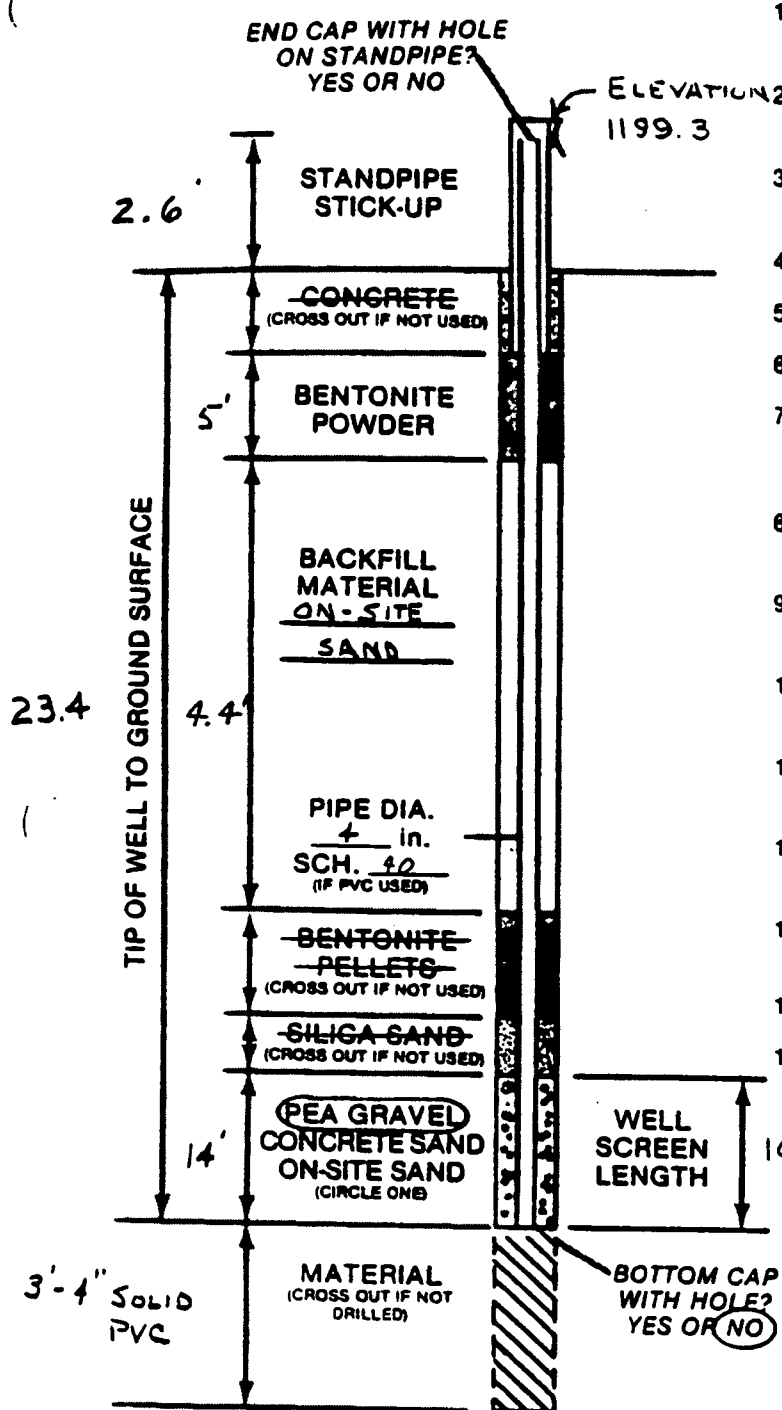
Street or Route: **101 Alderson St.** Telephone Number: **(715) 359-7090** Comments: _____

City: **Schofield** State: **WI** ZIP Code: **54476** Signature of Person Doing Work: *[Signature]* Date Signed: **6-8-09**



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE? PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS? BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE 15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED? SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED? BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT? 5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED? 5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY
 - 1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT? 12.6 Ft. or DRY
 - 2) OTHER MEASUREMENTS:
DATE _____ Ft. FROM T. ST. PIPE
DATE _____ Ft. FROM T. ST. PIPE
DATE _____ Ft. FROM T. ST. PIPE
DATE _____ Ft. FROM T. ST. PIPE

Well No. 13 WEX13 DATE INSTALLED 10-10-85 DRILL RIG CME 45
DRILLER JOHN WRIGHT DRILL CREW DAVID WONCH
JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-B
FW: 1-983

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County **MARATHON** WI Unique Well # of Removed Well _____ Hicap # _____

Latitude / Longitude (Degrees and Minutes) _____ 'N _____ 'W Method Code (see instructions) _____

1/4 NW 1/4 NW Section **25** Township **29** Range **7** ☒ E ☐ W or Govt Lot # _____

Well Street Address **2001 N. River Drive**

Well City, Village or Town **Wausau** Well ZIP Code **54402-0953**

Subdivision Name _____ Lot # _____

Reason For Removal From Service _____ WI Unique Well # of Replacement Well _____ Not in Service _____

3. Well / Drillhole / Borehole Information

☐ Monitoring Well ☒ Water Well ☐ Borehole / Drillhole Original Construction Date (mm/dd/yyyy) **10/20/85** If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.) **23.2** Casing Diameter (in.) **4**

Lower Drillhole Diameter (in.) _____ Casing Depth (ft.) **13**

Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)? **5** Depth to Water (feet) **12**

5. Material Used To Fill Well / Drillhole

3/8" Hole Plug

2. Facility / Owner Information

Facility Name **Wausau Chemical**

Facility ID (FID or PWS) **737105820**

License/Permit/Monitoring # _____

Original Well Owner **Wausau Chemical**

Present Well Owner **Wausau Chemical**

Mailing Address of Present Owner **2001 N. River Drive**

City of Present Owner **Wausau** State **WI** ZIP Code **54402-0953**

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed? ☒ Yes ☐ No ☐ N/A
Liner(s) removed? ☐ Yes ☐ No ☒ N/A
Screen removed? ☐ Yes ☒ No ☐ N/A
Casing left in place? ☒ Yes ☐ No ☐ N/A
Was casing cut off below surface? ☒ Yes ☐ No ☐ N/A
Did sealing material rise to surface? ☒ Yes ☐ No ☐ N/A
Did material settle after 24 hours? ☐ Yes ☒ No ☐ N/A
If yes, was hole retopped? ☐ Yes ☐ No ☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source? ☒ Yes ☐ No ☐ N/A

Required Method of Placing Sealing Material ☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials ☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.) ☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry ☒ Concrete ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only: ☐ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

6. Comments

Groundwater Extraction Well (CWCX-74)

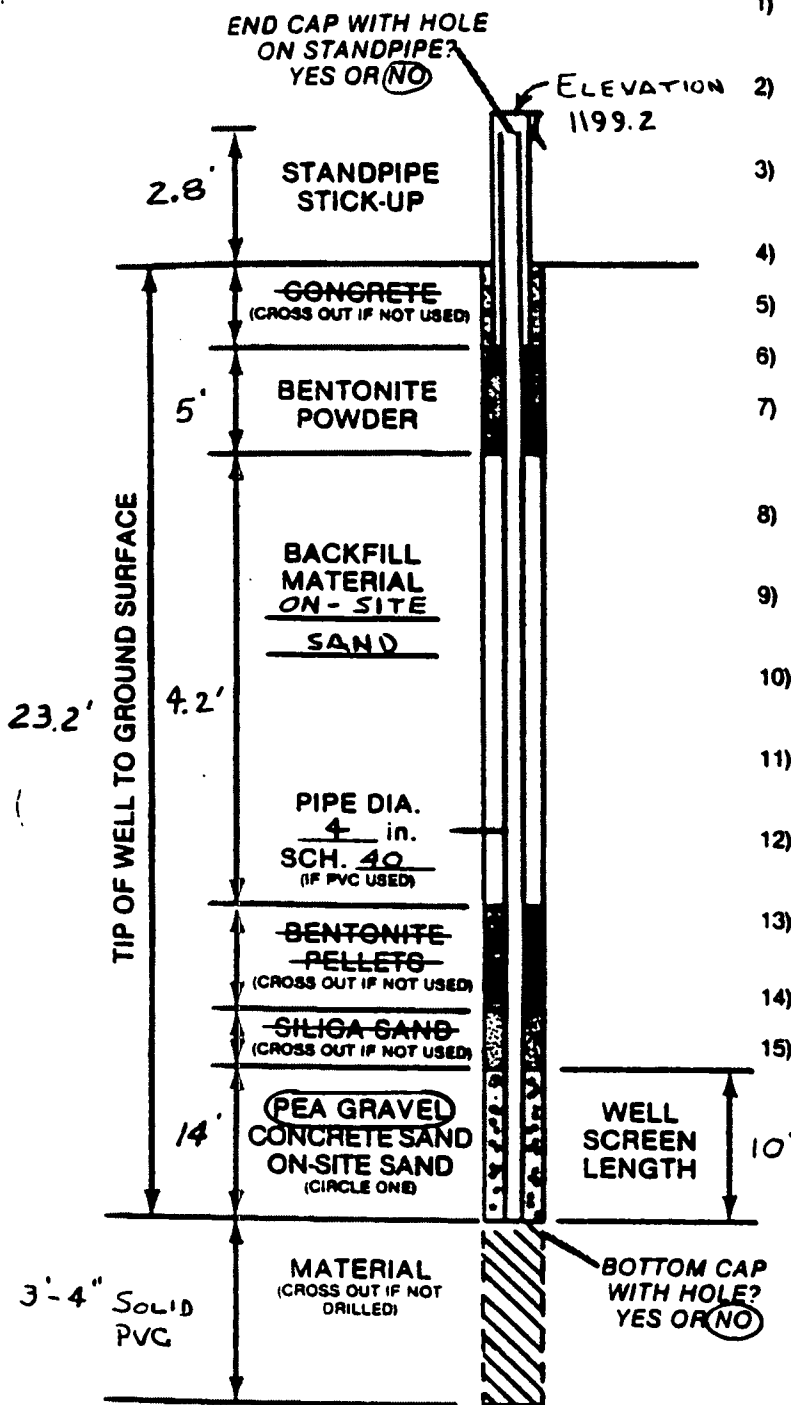
7. Supervision of Work

Supervision of Work			DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/3/2008	Date Received	Noted By
Street or Route 101 Alderson St.		Telephone Number (715) 359-7090	Comments	
City Schofield	State WI	ZIP Code 54476	Signature of Person Doing Work <i>[Signature]</i>	Date Signed 6-3-09



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE? PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS? BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED? SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED? BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT? 5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED? 5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY
 - 1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT? 12.3 Ft. or DRY
 - 2) OTHER MEASUREMENTS:

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

Well No. 14 WCK14 DATE INSTALLED 10-10-85 DRILL RIG CME 45
 DRILLER JOHN WRIGHT DRILL CREW DAVID WONCH
 JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 17226-B
 FW: 1-983

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

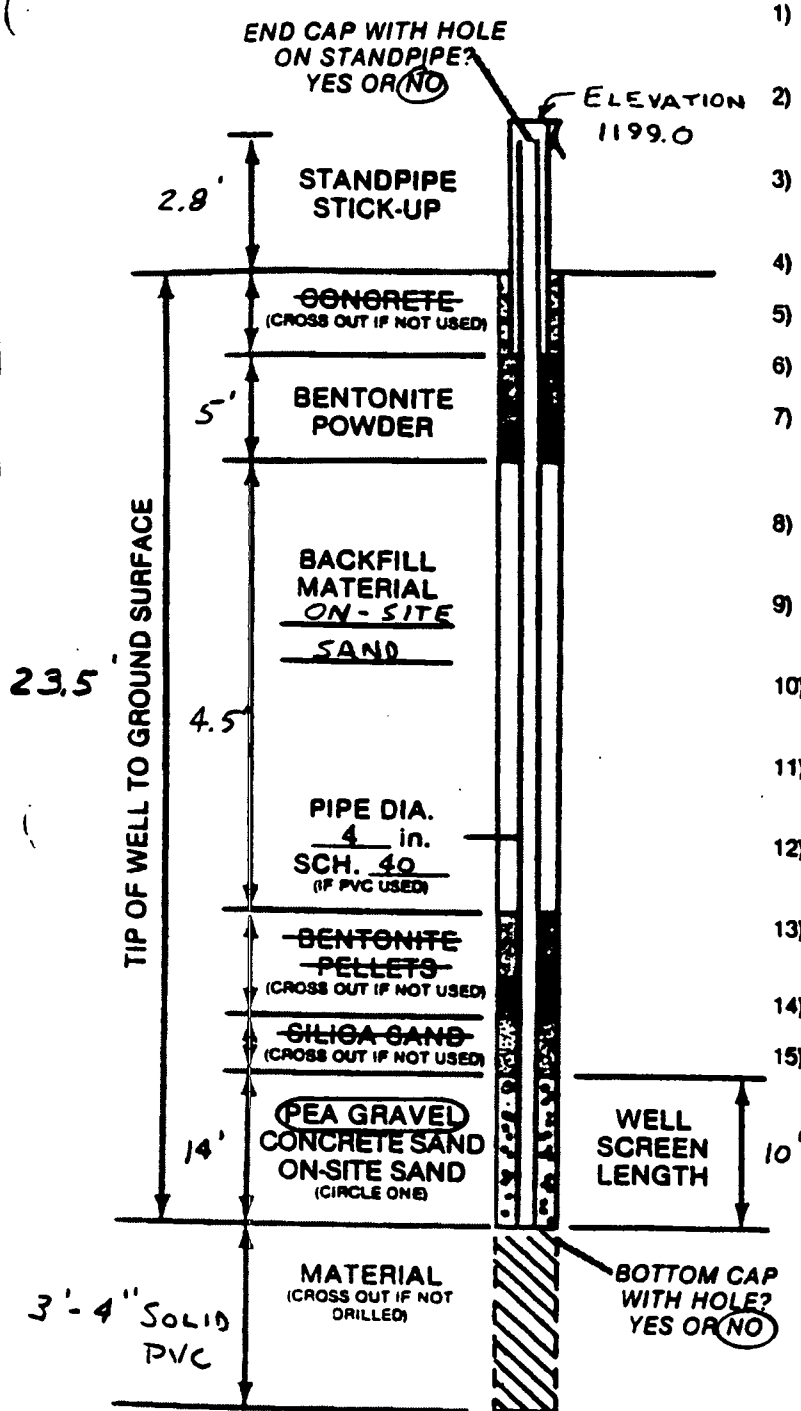
☐ Other: _____

1. Well Location Information County: MARATHON Latitude / Longitude (Degrees and Minutes): _____ 'N _____ 'W Method Code (see instructions): _____ <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>1/4 NW</td> <td>1/4 NW</td> <td>Section</td> <td>Township</td> <td>Range</td> <td>☒ E</td> </tr> <tr> <td>or Gov't Lot #</td> <td></td> <td>25</td> <td>29 N</td> <td>7</td> <td>☐ W</td> </tr> </table> Well Street Address: 2001 N. River Drive Well City, Village or Town: Wausau Well ZIP Code: 54402-0953 Subdivision Name: _____ Lot #: _____					1/4 NW	1/4 NW	Section	Township	Range	☒ E	or Gov't Lot #		25	29 N	7	☐ W	2. Facility / Owner Information Facility Name: Wausau Chemical Facility ID (FID or PWS): 737105820 License/Permit/Monitoring #: _____ Original Well Owner: Wausau Chemical Present Well Owner: Wausau Chemical Mailing Address of Present Owner: 2001 N. River Drive City of Present Owner: Wausau State: WI ZIP Code: 54402-0953												
1/4 NW	1/4 NW	Section	Township	Range	☒ E																								
or Gov't Lot #		25	29 N	7	☐ W																								
3. Well / Drillhole / Borehole Information Reason For Removal From Service: Not in Service WI Unique Well # of Replacement Well: _____ ☐ Monitoring Well Original Construction Date (mm/dd/yyyy): 10/10/85 ☒ Water Well if a Well Construction Report is available, please attach. ☐ Borehole / Drillhole Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____					4. Pump, Liner, Screen, Casing & Sealing Material Pump and piping removed? ☒ Yes ☐ No ☐ N/A Liner(s) removed? ☐ Yes ☐ No ☒ N/A Screen removed? ☐ Yes ☒ No ☐ N/A Casing left in place? ☐ Yes ☒ No ☐ N/A Was casing cut off below surface? ☐ Yes ☐ No ☒ N/A Did sealing material rise to surface? ☒ Yes ☐ No ☐ N/A Did material settle after 24 hours? ☐ Yes ☒ No ☐ N/A If yes, was hole retopped? ☐ Yes ☐ No ☒ N/A If bentonite chips were used, were they hydrated with water from a known safe source? ☒ Yes ☐ No ☐ N/A Required Method of Placing Sealing Material: ☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____ Sealing Materials: ☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.) ☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " " ☐ Concrete ☒ Bentonite Chips For Monitoring Wells and Monitoring Well Boreholes Only: ☐ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry																								
Formation Type: ☒ Unconsolidated Formation ☐ Bedrock Total Well Depth From Ground Surface (ft.): 23.5 Casing Diameter (in.): 4 Lower Drillhole Diameter (in.): _____ Casing Depth (ft.): 13.5 Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown If yes, to what depth (feet)? 5 Depth to Water (feet): 10.6					5. Material Used To Fill Well / Drillhole <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>From (ft.)</th> <th>To (ft.)</th> <th>Sacks Sealant</th> </tr> <tr> <td>Surface</td> <td>23.5</td> <td>2</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>					From (ft.)	To (ft.)	Sacks Sealant	Surface	23.5	2														
From (ft.)	To (ft.)	Sacks Sealant																											
Surface	23.5	2																											
6. Comments Groundwater Extraction Well (CWC-R-15)					7. Supervision of Work <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="3">Name of Person or Firm Doing Filling & Sealing</th> <th colspan="2">DNR Use Only</th> </tr> <tr> <td colspan="3">Boart Longyear</td> <td>Date Received</td> <td>Noted By</td> </tr> <tr> <td colspan="3">Street or Route: 101 Alderson St.</td> <td colspan="2">Comments</td> </tr> <tr> <td colspan="3">City: Schofield State: WI ZIP Code: 54476</td> <td colspan="2">Signature of Person Doing Work: _____ Date Signed: 6-8-09</td> </tr> </table>					Name of Person or Firm Doing Filling & Sealing			DNR Use Only		Boart Longyear			Date Received	Noted By	Street or Route: 101 Alderson St.			Comments		City: Schofield State: WI ZIP Code: 54476			Signature of Person Doing Work: _____ Date Signed: 6-8-09	
Name of Person or Firm Doing Filling & Sealing			DNR Use Only																										
Boart Longyear			Date Received	Noted By																									
Street or Route: 101 Alderson St.			Comments																										
City: Schofield State: WI ZIP Code: 54476			Signature of Person Doing Work: _____ Date Signed: 6-8-09																										



STS Consultants Ltd.

FIELD WELL INSTALLATION DIAGRAM



- 1) TYPE OF PIPE? PVC GALVANIZED, STAINLESS, OTHER _____
- 2) TYPE OF PIPE JOINTS? BELLED, COUPLINGS, THREADED OTHER _____
- 3) TYPE OF WELL SCREEN PVC GALVANIZED, STAINLESS, OTHER _____
- 4) SCREEN SIZE .15
- 5) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO
- 6) WAS SOLVENT USED? YES OR NO
- 7) WAS DRILLING MUD USED? SOLID AUGER, HOLLOW STEM AUGER, WATER, REVERT, BENTONITE
- 8) DID STANDPIPE COME UP WHEN CASING WAS PULLED? YES OR NO
- 9) HOW WAS WELL DEVELOPED? BAILING, PUMPING, SURGING, COMPRESSED AIR
- 10) TIME SPENT FOR WELL DEVELOPMENT? 5 min., 15 min., 30 min., OTHER _____
- 11) APPROXIMATE WATER VOLUME REMOVED OR ADDED? 5 gal., 10 gal., 15 gal., OTHER _____
- 12) WATER CLARITY BEFORE DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 13) WATER CLARITY AFTER DEVELOPMENT? CLEAR, TURBID, OPAQUE
- 14) DID THE WATER SMELL? YES OR NO
- 15) WATER LEVEL SUMMARY
 - 1) DEPTH FROM T. STANDPIPE AFTER DEVELOPMENT? 12.2 Ft. or DRY
 - 2) OTHER MEASUREMENTS:

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

DATE _____ Ft. FROM T. ST. PIPE

Well No. 15 WEXIS DATE INSTALLED 10-11-85 DRILL RIG CME 45
 DRILLER JOHN WRIGHT DRILL CREW DAVID WONCH
 JOB/CLIENT WAUSAU CHEMICAL STS JOB No. 12776-B

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
	☐ Waste Management	☐ Other:		

1. Well Location Information				2. Facility / Owner Information			
County MARATHON		WI Unique Well # of Removed Well		Facility Name Wausau Chemical		Facility ID (FID or PWS) 737105820	
Latitude / Longitude (Degrees and Minutes) ____' ____' ____" N ____' ____' ____" W		Method Code (see instructions)		License/Permit/Monitoring #			
1/4 NW 1/4 NW or Gov't Lot #		Section 25	Township 29 N	Range 7 E	Original Well Owner Wausau Chemical		
Well Street Address 2001 N. River Drive				Present Well Owner Wausau Chemical			
Well City, Village or Town Wausau				Mailing Address of Present Owner 2001 N. River Drive			
Subdivision Name				City of Present Owner Wausau	State WI	ZIP Code 54402-0953	
Reason For Removal From Service Not In Service				WI Unique Well # of Replacement Well			

3. Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material	
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 10/30/91	Pump and piping removed?	☐ Yes ☐ No ☒ N/A
☐ Water Well	If a Well Construction Report is available, please attach.	Liner(s) removed?	☐ Yes ☐ No ☒ N/A
☐ Borehole / Drillhole		Screen removed?	☐ Yes ☒ No ☐ N/A
Construction Type:		Casing left in place?	☐ Yes ☒ No ☐ N/A
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug		Was casing cut off below surface?	☒ Yes ☐ No ☐ N/A
☐ Other (specify):		Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Formation Type:		Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
☒ Unconsolidated Formation ☐ Bedrock		If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
Total Well Depth From Ground Surface (ft.) 14		If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A
Casing Diameter (in.) 3		Required Method of Placing Sealing Material	
Lower Drillhole Diameter (in.)		☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped	
Casing Depth (ft.) 5 bags		☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):	
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown		Sealing Materials	
If yes, to what depth (feet)? 5 (1 foot below bottom manhole)		☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)	
Depth to Water (feet) N/A		☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry	
		☐ Concrete ☒ Bentonite Chips	

5. Material Used To Fill Well / Drillhole		For Monitoring Wells and Monitoring Well Boreholes Only:	
From (ft.)	To (ft.)	Sacks Sealant	
3/8" Hole Plug	1'	1	
6. Comments			
Soil Vapor Extraction Well (WC-SVE-1) well installed in bottom of 4' deep manhole			

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Boart Longyear		License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/4/08	Date Received	Noted By
Street or Route 101 Alderson St.		Telephone Number (715) 359-7090		Comments	
City Schofield	State WI	ZIP Code 54476	Signature of Person Doing Work <i>[Signature]</i>		Date Signed 9-8-09

Route To:

- ☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other

Facility/Project Name Wausau Water Supply NPL Site License/Permit/Monitoring Number NA Boring Number WC-SVE-1
Boring Drilled By (Firm name and name of crew chief) Wisconsin Test Drilling (WTD) Date Drilling Started 10/30/91 Date Drilling Completed 10/30/91 Drilling Method Rotary Auger

Common Well Name WC-SVE-1 Final Static Water Level NA Feet MSL Surface Elevation 1195 Feet MSL Borehole Diameter 10 inches

Boring Location State Plane N E S/C/N Lat 0 Long 0 Local Grid Location (If applicable) Feet Feet Feet Feet

County Marathon DNR County Code 37 Civil Town/City/Village Wausau

Sample		Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					P 200	RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index			
NA	NA	NA		Asphalt	NA			NA	NA	NA	NA	NA	NA	NA	NA
			2.5	SP- sand with slight clay and gravel	Bentonite grout			3" Ø Schedule 40 PVC casing							
			5.0	SP-GP Sand with gravel	Fine Sand pack										
			7.5	SP Sand with slight clay and gravel											
			10.0	SW- sand with slight gravel	water #30 Sand pack			well screen							
			12.5												
			15.0	End of Hole											

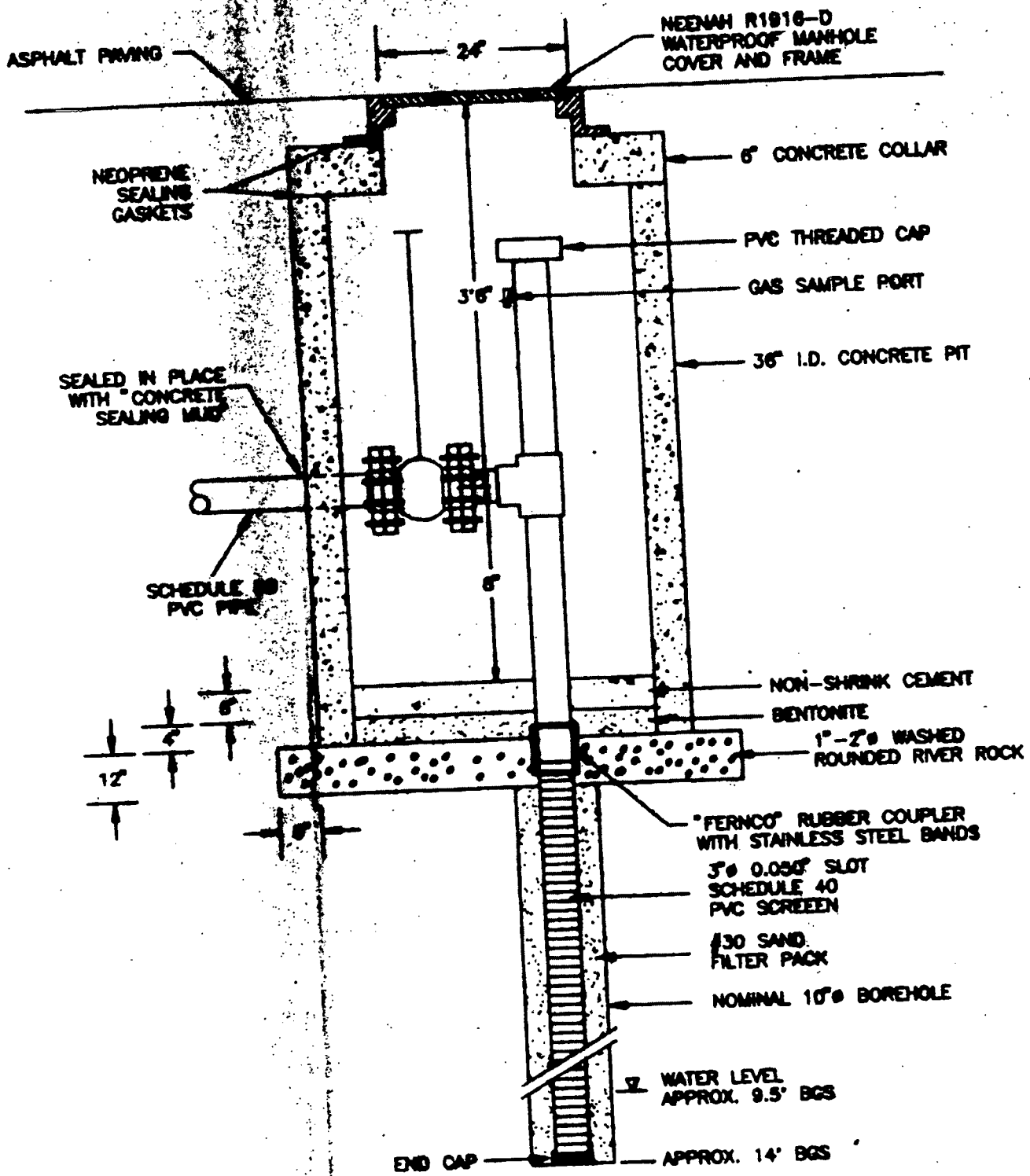
I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature R. T. Webb

Firm

WTD Environmental Drilling

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.



EXISTING VENT WELL WC-SVE-1
NOT TO SCALE

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
		☐ Waste Management	☐ Other:	

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	Map # _____
Latitude / Longitude (Degrees and Minutes) _____. _____. _____ 'N _____. _____. _____ 'W		Method Code (see instructions) _____
1/4 NW or Gov't Lot #	1/4 NW Section 25	Township 29 N
Well Street Address 2001 N. River Drive		Range 7 E
Well City, Village or Town Wausau		Well ZIP Code 54402-0953
Subdivision Name _____		Lot # _____

2. Facility / Owner Information

Facility Name Wausau Chemical		
Facility ID (FID or PWS) 737125820		
License/Permit/Monitoring # _____		
Original Well Owner Wausau Chemical		
Present Well Owner Wausau Chemical		
Mailing Address of Present Owner 2001 N. River Drive		
City of Present Owner Wausau	State WI	ZIP Code 54402-0953

Reason For Removal From Service

Not in Service

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 10/31/91
☐ Water Well	
☐ Borehole / Drillhole	
If a Well Construction Report is available, please attach. _____	
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____	

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Formation Type:

☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.) Casing Diameter (in.)

10 **3**

Lower Drillhole Diameter (in.) Casing Depth (ft.)

_____ **56.95**

Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)? Depth to Water (feet)

5' (1 ft below bottom manhole) **N/A**

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials

☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry
☐ Concrete ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	Sacks Sealant
4	12	2

6. Comments

Soil Vapor Extraction Well (CWC-SVE-2) Well installed in bottom of 4' deep manhole

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Boart Longyear		License # 6189	Date of Filing & Sealing (mm/dd/yyyy) 11/4/06	DNR Use Only	
Street or Route 101 Alderson St.		Telephone Number (715) 359-7090		Date Received	Noted By
City Schofield	State WI	ZIP Code 54476-	Signature of Person Doing Work <i>[Signature]</i>	Date Signed 6-8-09	

Route To:

- ☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Superfund ☐ Other

Facility/Project Name

Wausau Water Supply NPL Site

License/Permit/Monitoring Number

NA

Boring Number

WC-SVE-2

Boring Drilled By (Firm name and name of crew chief)

Wisconsin Test Drilling (WTD)

Date Drilling Started

10/31/91
MM DD YY

Date Drilling Completed

10/31/91
MM DD YY

Drilling Method

Rotary

Common Well Name

WC-SVE-2

Final Static Water Level

NA Feet MSL

Surface Elevation

1200 Feet MSL

Borehole Diameter

10 inches

Boring Location

State Plane

N

B S/C/N

Lat

0

Local Grid Location (If applicable)

☐ N

☐ E

Feet

☐ S

Feet

☐ W

NW 1/4 of NW 1/4 of Section 25, T29 N, R 7 W

County

Marathon

DNR County Code

3 F

Civil Town/City/ or Village

Wausau

Sample			Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD Comments
Number and Type	Length At & Recovered (in)	Blow Count							Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
NA	NA	NA	0	sm-sp silty sand, slight gravel	NA			NA	NA	NA	NA	NA	NA	NA
			2.5					10" locking cover						
			5.0	sp sand with trace gravel				3" schedule 40 PVC casing						
			7.5											
			10.0											
			12.5											
			15.0	End of hole										

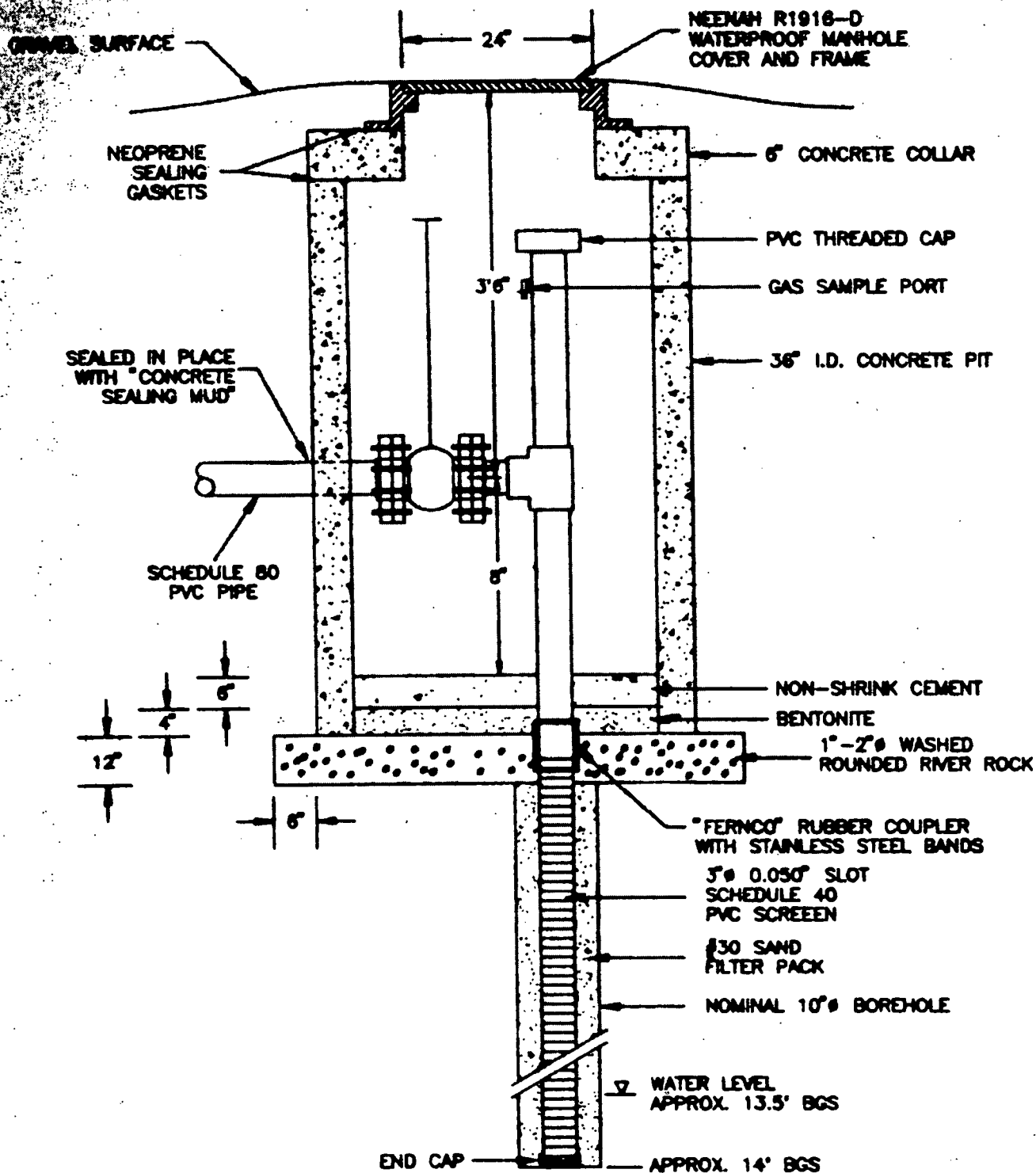
I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm

WTD Environmental Drilling

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.



EXISTING VENT WELL WC-SVE-2

NOT TO SCALE

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	Escap # _____
Latitude / Longitude (Degrees and Minutes) _____. _____. _____. 'N _____. _____. _____. 'W		Method Code (see instructions) _____
1/4 NW or Gov't Lot #	1/4 NW 25	Section 29
Township N		Range 7
Well Street Address 2001 N. River Drive		Well ZIP Code 54402-0953
Well City, Village or Town Wausau		Subdivision Name Lot #

2. Facility / Owner Information

Facility Name Wausau Chemical
Facility ID (FID or PWS) 737105820
License/Permit/Monitoring # _____
Original Well Owner Wausau Chemical
Present Well Owner Wausau Chemical
Mailing Address of Present Owner 2001 N. River Drive
City of Present Owner Wausau
State WI
ZIP Code 54402-0953

Reason For Removal From Service
Not In Service

3. Well / Drillhole / Borehole Information

☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 10/13/93
☐ Water Well	If a Well Construction Report is available, please attach.
☐ Borehole / Drillhole	
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____	

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes ☐ No ☒ N/A
Liner(s) removed?	☐ Yes ☐ No ☒ N/A
Screen removed?	☐ Yes ☐ No ☒ N/A
Casing left in place?	☐ Yes ☒ No ☐ N/A
Was casing cut off below surface?	☒ Yes ☐ No ☐ N/A
Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A

Formation Type:

☒ Unconsolidated Formation	☐ Bedrock
Total Well Depth From Ground Surface (ft.) 6	Casing Diameter (in.) 4
Lower Drillhole Diameter (in.)	Casing Depth (ft.) 5 6 + 5
Was well annular space grouted?	☒ Yes ☐ No ☐ Unknown
If yes, to what depth (feet)? 5' (1' below bottom mud)	Depth to Water (feet) N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity	☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips)	☐ Other (Explain): _____
Sealing Materials	
☐ Neat Cement Grout	☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout	☐ Bentonite-Sand Slurry " "
☐ Concrete	☒ Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	
☐ Bentonite Chips	☐ Bentonite - Cement Grout
☐ Granular Bentonite	☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	Sacks Sealant
4	6	2.5

6. Comments

Soil Vapor Extraction Well (WC-SVE-3) Well installed in bottom of 4' deep manhole

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9-4-08	DNR Use Only	
Street or Route 101 Alderson St.	Telephone Number (715) 359-7090	Comments	Date Received	Noted By
City Schofield	State WI	ZIP Code 54476-	Signature of Person Doing Work <i>[Signature]</i>	Date Signed 6-8-09

State of Wisconsin
Department of Natural Resources

Route 1

- ☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Recreational ☐ Other

SOIL BORING LOG INFORMATION
Form 4400-122
Rev. 5-92

Facility/Project Name

Wausau Water Supply NPL Site

Working Defined by (if this name and name of order client)

LAYNE-NORTHWEST CO.

Contract/Order/Estimating Number

NA

Page of

Boring Number

WC-SVE-3

Date Logging Started

10/11/93

Date Drilling Completed

10/13/93

Drilling Method

4 1/2" SOHSA

Contract Well Name

WC-SVE-3

Final Static Water Level

NA Feet MSL

Surface Elevation

119.5 Feet MSL

Screening Diameter

8 inches

Logging Location

State

W

E NCM

Lat

0

Local Grid Location (if applicable)

0

AL 14 of AL 14 of Section 25, T 29 N, R 7 W

County

Marathon

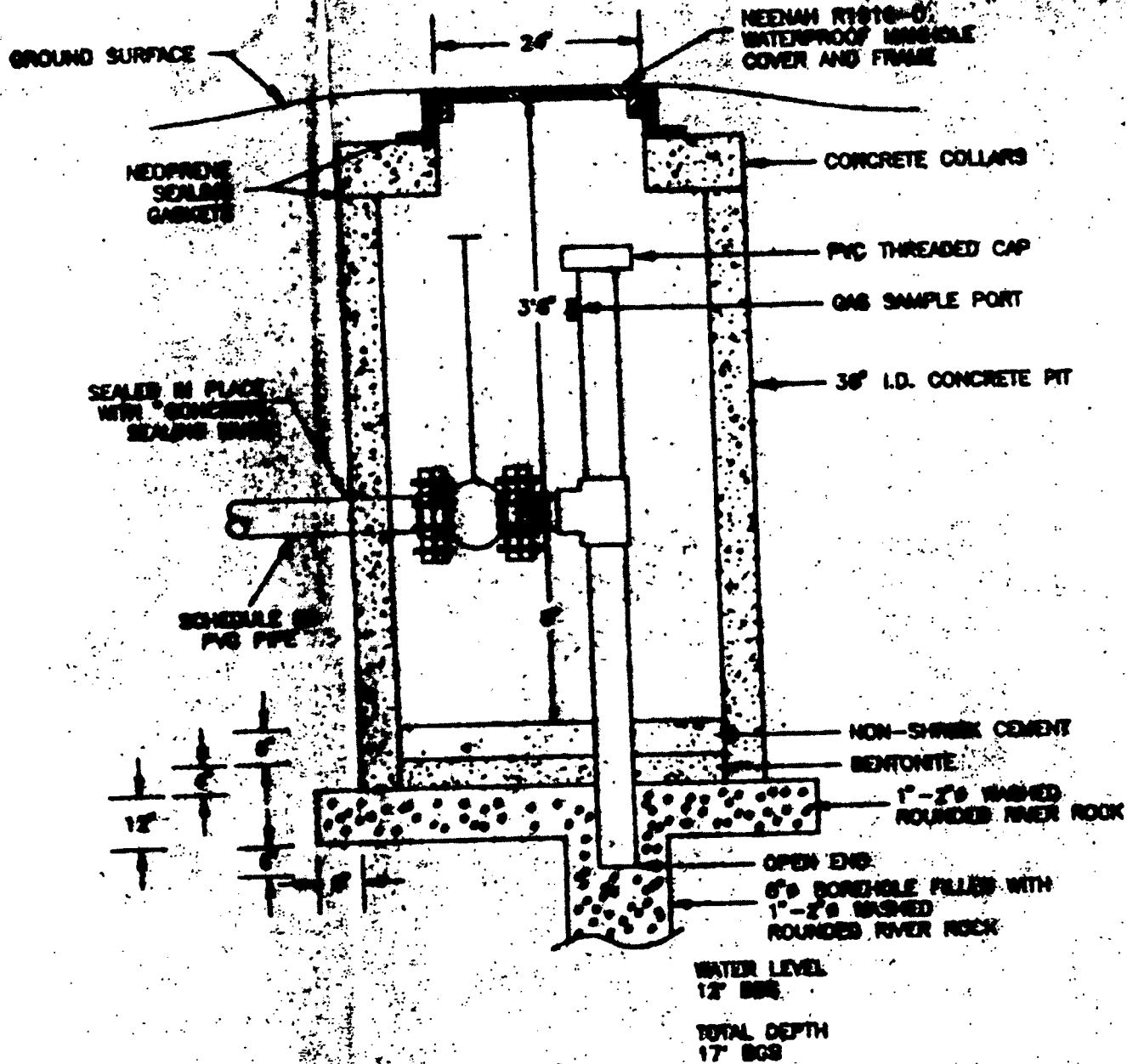
DNV County Code

2-1

City/Town/Village

Wausau

General Data				Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Grain Size	Moisture Content	Liquid Limit	Plastic Limit	Shrinkage	Soil Properties				
Number and Type	Length At. or Interval (ft)	Notes	Depth in Feet								Grain Size	Moisture Content	Liquid Limit	Plastic Limit	Shrinkage
NA	NA	NA		GP - gravel, some sand, fine to medium gravel, roots, dark brown, moist	NA		NA	NA	NA	NA	NA	NA	NA	NA	
			0.5												
			1.0												
			1.5												
			2.0												
			2.5												
			3.0												
			3.5												
			4.0												
			4.5												
			5.0												
			5.5												
			6.0												
			6.5												
			7.0												
			7.5												
			8.0												
			8.5												
			9.0												
			9.5												
			10.0												
			10.5												
			11.0												
			11.5												
			12.0												
			12.5												
			13.0												
			13.5												
			14.0												
			14.5												
			15.0												
			15.5												
			16.0												
			16.5												
			17.0												
			17.5												
			18.0												
			18.5												
			19.0												
			19.5												
			20.0												
			20.5												
			21.0												
			21.5												
			22.0												
			22.5												
			23.0												
			23.5												
			24.0												
			24.5												
			25.0												
			25.5												
			26.0												
			26.5												
			27.0												
			27.5												
			28.0												
			28.5												
			29.0												
			29.5												
			30.0												
			30.5												
			31.0												
			31.5												
			32.0												
			32.5												
			33.0												
			33.5												
			34.0												
			34.5												
			35.0												
			35.5												
			36.0												
			36.5												
			37.0												
			37.5												
			38.0												
			38.5												
			39.0												
			39.5												
			40.0												
			40.5												
			41.0												
			41.5												
			42.0												
			42.5												
			43.0												
			43.5												
			44.0												
			44.5												
			45.0												
			45.5												
			46.0												
			46.5												
			47.0												
			47.5												
			48.0												
			48.5												
			49.0												
			49.5												
			50.0												
			50.5												
			51.0												
			51.5												
			52.0												
			52.5												
			53.0												
			53.5												
			54.0												
			54.5												
			55.0												
			55.5												
			56.0												
			56.5												
			57.0												
			57.5												
			58.0												
			58.5												
			59.0												
			59.5												
			60.0												
			60.5												
			61.0												
			61.5												
			62.0												
			62.5												
			63.0												
			63.5												
			64.0												
			64.5												
			65.0												
			65.5												
			66.0												
			66.5												
			67.0												
			67.5												
			68.0												
			68.5												
			69.0												
			69.5												
			70.0												
			70.5												
			71.0												
			71.5												
			72.0												
			72.5												
			73.0												
			73.5												
			74.0												
			74.5												
			75.0												
			75.5												
			76.0												
			76.5												
			77.0												
			77.5												
			78.0												
			78.5												
			79.0												
			79.5												
			80.0												
			80.5												
			81.0												
			81.5												
			82.0												
			82.5												
			83.0												
			83.5												
			84.0												
			84.5												
			85.0												
			85.5												
			86.0												
			86.5												
			87.0												
			87.5												
			88.0												



NEW VENT WELL WC-SVE-3
NOT TO SCALE

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	
	☐ Drinking Water ☐ Waste Management	☐ Watershed/Wastewater ☒ Remediation/Redevelopment ☐ Other: _____

1. Well Location Information				2. Facility / Owner Information			
County MARATHON		WI Unique Well # of Removed Well _____		Facility Name Wausau Chemical		Facility ID (FID or PWS) 737105820	
Latitude / Longitude (Degrees and Minutes) _____. _____. _____ 'N _____. _____. _____ 'W		Method Code (see instructions) _____		License/Permit/Monitoring # _____		Original Well Owner Wausau Chemical	
1/4 NW	1/4 NW	Section 25	Township 29 N	Range 7 E	Present Well Owner Wausau Chemical		
or Gov't Lot #				Mailing Address of Present Owner 2001 N. River Drive			
Well Street Address 2001 N. River Drive				City of Present Owner Wausau			
Well City, Village or Town Wausau				Well ZIP Code 54402-0953		State WI	
Subdivision Name				Lot #		ZIP Code 54402-0953	

Reason For Removal From Service		WI Unique Well # of Replacement Well		4. Pump, Liner, Screen, Casing & Sealing Material			
Not in Service		_____		Pump and piping removed? ☐ Yes ☐ No ☒ N/A Liner(s) removed? ☐ Yes ☐ No ☒ N/A Screen removed? ☐ Yes ☐ No ☒ N/A Casing left in place? ☐ Yes ☒ No ☐ N/A			
3. Well / Drillhole / Borehole Information				Was casing cut off below surface? ☒ Yes ☐ No ☐ N/A Did sealing material rise to surface? ☒ Yes ☐ No ☐ N/A Did material settle after 24 hours? ☐ Yes ☒ No ☐ N/A If yes, was hole retopped? ☐ Yes ☐ No ☒ N/A If bentonite chips were used, were they hydrated with water from a known safe source? ☒ Yes ☐ No ☐ N/A			
☐ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole		Original Construction Date (mm/dd/yyyy) 10/13/93		Required Method of Placing Sealing Material			
Construction Type:		If a Well Construction Report is available, please attach.		☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____			
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____				Sealing Materials			
Formation Type:				☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.) ☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " " ☐ Concrete ☒ Bentonite Chips			
Total Well Depth From Ground Surface (ft.) 6		Casing Diameter (in.) 4		For Monitoring Wells and Monitoring Well Boreholes Only:			
Lower Drillhole Diameter (in.)		Casing Depth (ft.) 5 bgs		☐ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry			
Was well annular space grouted?		☒ Yes ☐ No ☐ Unknown					
If yes, to what depth (feet)? 5' (1' below bottom manhole)		Depth to Water (feet) N/A					

5. Material Used To Fill Well / Drillhole				6. Comments			
From (ft.)	To (ft.)	Sacks Sealant		Soil Vapor Extraction Well (GWL-SVE-4) well installed in bottom of 4' deep manhole			
3/8" Hole Plug	4	6	0.5				
7. Supervision of Work				DNR Use Only			
Name of Person or Firm Doing Filling & Sealing		License #	Date of Filling & Sealing (mm/dd/yyyy)	Date Received		Noted By	
Boart Longyear		6189	9/4/06				
Street or Route		Telephone Number		Comments			
101 Alderson St.		(715) 359-7090					
City	State	ZIP Code	Signature of Person Doing Work		Date Signed		
Schofield	WI	54476	<i>[Signature]</i>		6-8-09		

State of Wisconsin
Department of Natural Resources

Route 1

- ☐ Solid Waste ☐ Haz. Waste
☐ Emergency Response ☐ Underground Tanks
☐ Wastewater ☐ Water Resources
☐ Sewerage ☐ Other

SOIL BORING LOG INFORMATION
Form 4400-122
Rev. 3-92

Facility/Project Name

Wausau Water Supply Well Site

Boring Defined by Owner name and name of crew chief

Owner/Permitting Agency Name

Page 1 of 1

Boring Number

WC-SVE-4

LAYNE-NORTHWEST CO.

Date Drilling Started

11/1/83

Date Drilling Completed

11/1/83

Drilling Method

4 1/4" ID HSA

Common Well Name

WC-SVE-4

Final Static Water Level

Foot MSL

Surface Elevation

1200 Foot MSL

Drilling Diameter

8 inches

Drilling Location

State Plane

N.

E 84°N

Lat

0

Long

0

Local Grid Location (if applicable)

1/4 Sec NW 1/4 of Section 2, T. 29 N. R. 7 W.

County

Marathon

City/Town/Village

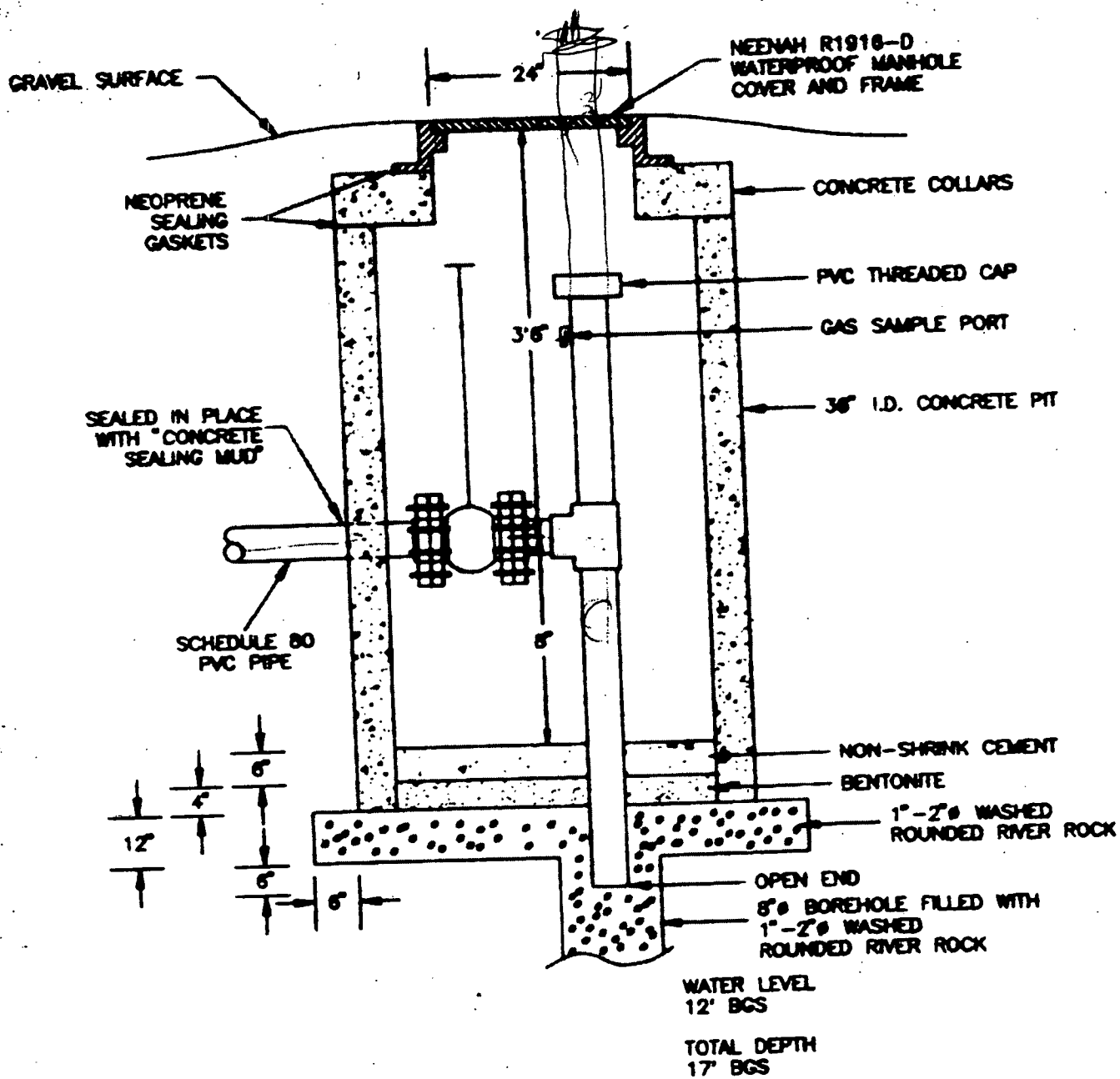
Wausau

Depth Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Soil Properties									
			Moisture Content (%)	Shrinkage (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	Unified Soil Classification	Relative Density (%)	Standard Penetration Test (blows/ft)	Field Compression (%)	Field Expansion (%)
0-2.0	SW-sand, some gravel, medium to coarse grained, brown, moist	MA						MA	MA	MA	MA	MA
2.0-5.0	GP-gravel, some sand, fine to medium gravel, brown, moist											
5.0-7.5												
7.5-10.0												
10.0-12.5												
12.5-15.0												
15.0-17.5												
17.5-20.0												
20.0-22.5												
22.5-25.0												
25.0-27.5												
27.5-30.0												
30.0-32.5												
32.5-35.0												
35.0-37.5												
37.5-40.0												
40.0-42.5												
42.5-45.0												
45.0-47.5												
47.5-50.0												
50.0-52.5												
52.5-55.0												
55.0-57.5												
57.5-60.0												
60.0-62.5												
62.5-65.0												
65.0-67.5												
67.5-70.0												
70.0-72.5												
72.5-75.0												
75.0-77.5												
77.5-80.0												
80.0-82.5												
82.5-85.0												
85.0-87.5												
87.5-90.0												
90.0-92.5												
92.5-95.0												
95.0-97.5												
97.5-100.0												
End of Hole												

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

This form is authorized by Chapters 144.147 and 142, Wis. Stat. Completion of this report is mandatory. Penalties: Forfeits not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 142.06, Wis. Stat.

Layne Northcutt



NEW VENT WELL WC-SVE-4
NOT TO SCALE

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
	☐ Waste Management	☐ Other: _____		

1. Well Location Information				2. Facility / Owner Information			
County MARATHON		WI Unique Well # of Removed Well _____		Facility Name Wausau Chemical		Facility ID (FID or PWS) 737105820	
Latitude / Longitude (Degrees and Minutes) _____. _____. _____. 'N _____. _____. _____. 'W		Method Code (see instructions) _____. _____. _____. 'E _____. _____. _____. 'W		License/Permit/Monitoring # _____		Original Well Owner Wausau Chemical	
1/4 NW 1/4 NW or Gov't Lot #		Section 25	Township 29 N	Range 7	☒ E ☐ W	Present Well Owner Wausau Chemical	
Well Street Address 2001 N. River Drive				Mailing Address of Present Owner 2001 N. River Drive			
Well City, Village or Town Wausau				Well ZIP Code 54402-0953		City of Present Owner Wausau	
Subdivision Name _____				Lot # _____		State WI	ZIP Code 54402-0953

Reason For Removal From Service		WI Unique Well # of Replacement Well		4. Pump, Liner, Screen, Casing & Sealing Material			
Not in Service		_____		Pump and piping removed? ☐ Yes ☐ No ☒ N/A			
3. Well / Drillhole / Borehole Information		Original Construction Date (mm/dd/yyyy) 3/20/96		Liner(s) removed? ☐ Yes ☐ No ☒ N/A			
☐ Monitoring Well		If a Well Construction Report is available, please attach.		Screen removed? ☐ Yes ☒ No ☐ N/A			
☐ Water Well				Casing left in place? ☐ Yes ☒ No ☐ N/A			
☐ Borehole / Drillhole				Was casing cut off below surface? ☒ Yes ☐ No ☐ N/A			
Construction Type:				Did sealing material rise to surface? ☒ Yes ☐ No ☐ N/A			
☒ Drilled		☐ Driven (Sandpoint)		Did material settle after 24 hours? ☐ Yes ☒ No ☐ N/A			
☐ Other (specify): _____				If yes, was hole retopped? ☐ Yes ☐ No ☒ N/A			
Formation Type:				If bentonite chips were used, were they hydrated with water from a known safe source? ☒ Yes ☐ No ☐ N/A			
☒ Unconsolidated Formation		☐ Bedrock		Required Method of Placing Sealing Material			
Total Well Depth From Ground Surface (ft.) 17		Casing Diameter (in.) 2		☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped			
Lower Drillhole Diameter (in.)		Casing Depth (ft.) 5		☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____			
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown				Sealing Materials			
If yes, to what depth (feet)? 4		Depth to Water (feet) N/A		☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)			
				☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry			
				☐ Concrete ☒ Bentonite Chips			

5. Material Used To Fill Well / Drillhole				For Monitoring Wells and Monitoring Well Boreholes Only:			
From (ft.)		To (ft.)		Sacks Sealant			
3/8" Hole Plug		Surface		16		7	
6. Comments							
Soil Vapor Extraction Well (WC-SVE-5)							

7. Supervision of Work				DNR Use Only			
Name of Person or Firm Doing Filling & Sealing		License #		Date of Filling & Sealing (mm/dd/yyyy)		Date Received	
Boart Longyear		6189		1/4/08			
Street or Route		Telephone Number		Comments			
101 Alderson St.		(715) 359-7090					
City		State		ZIP Code		Signature of Person Doing Work	
Schofield		WI		54476-		Date Signed	
						6-8-09	

Facility/Project Name Wausau Chemical	Local Grid Location of Well ft. ☐ N. ☐ E. ☐ S. ☐ W.	Well Name SVE-5
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. N. _____ ft. E.	Wis. Unique Well Number: _____ DNR Well Number: _____
Type of Well Water Table Observation Well ☐ 11 Piezometer ☐ 12	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ ☐ E. ☐ W.	Date Well Installed 03/20/96
Distance Well Is From Waste/Source Boundary ft. _____	Location of Well Relative to Waste/Source u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Well Installed By: (Person's Name and Firm) Jon Weeks Boart Longyear
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No		

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? ☐ Yes ☒ No
B. Well casing, top elevation 5.00 ft. MSL	2. Protective cover pipe: a. Inside diameter: 4.0 in. b. Length: 7.0 c. Material: Steel ☒ 0.4 Other ☐
C. Land surface elevation _____ ft. MSL	d. Additional protection? ☐ Yes ☒ No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or 2.0 ft.	3. Surface seal: Bentonite ☐ 3.0 Concrete ☒ 0.1 Other ☐
12. USC classification of soil near screen: GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐ SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐ Bedrock ☐	4. Material between well casing and protective pipe: Bentonite ☐ 3.0 Annular space seal ☐ Other ☐
13. Sieve analysis attached? ☐ Yes ☐ No	5. Annular space seal: a. Granular Bentonite ☐ 3.3 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3.5 c. _____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3.1 d. _____ % Bentonite . . . Bentonite-cement grout ☐ 5.0 e. _____ Ft ³ volume added for any of the above
14. Drilling method used: Rotary ☐ 5.0 Hollow Stem Auger ☒ 4.1 Other ☐	f. How installed: Tremie ☐ 0.1 Tremie pumped ☐ 0.2 Gravity ☐ 0.8
15. Drilling fluid used: Water ☐ 0.2 Air ☐ 0.1 Drilling Mud ☐ 0.3 None ☒ 9.9	6. Bentonite seal: a. Bentonite granules ☐ 3.3 b. ☐ 1/4 in. ☐ 3/8 in. ☒ 1/2 in. Bentonite pellets ☐ 3.2 c. _____ Other ☐
16. Drilling additives used? ☐ Yes ☐ No	7. Fine sand material: Manufacturer, product name and mesh size a. _____ b. Volume added _____ ft ³
Describe _____	8. Filter pack material: Manufacturer, product name and mesh size a. Pea Gravel b. Volume added _____ ft ³
17. Source of water (attach analysis): _____	9. Well casing: Flush threaded PVC schedule 40 ☒ 2.3 Flush threaded PVC schedule 80 ☐ 2.4 Other ☐
E. Bentonite seal, top _____ ft. MSL or 2.0 ft.	10. Screen material: PVC a. Screen Type: Factory cut ☒ 1.1 Continuous slot ☐ 0 Other ☐
F. Fine sand, top _____ ft. MSL or _____ ft.	b. Manufacturer Boart Longyear
G. Filter pack, top _____ ft. MSL or 4.0 ft.	c. Slot size: 0.100 in.
H. Screen joint, top _____ ft. MSL or 5.0 ft.	d. Slotted length: 12.0
I. Well bottom _____ ft. MSL or 17.0 ft.	11. Backfill material (below filter pack): None ☒ 1 Other ☐
J. Filter pack, bottom _____ ft. MSL or 19.0 ft.	
K. Borehole, bottom _____ ft. MSL or 19.0 ft.	
L. Borehole, diameter 8.0 in.	
M. O.D. well casing 2.37 in.	
N. I.D. well casing 2.06 in.	

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

Signature *[Signature]*

Firm **Boart Longyear**
101 Alderson Street

Tel: (715) 359-7090
Fax: (715) 355-5715

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

☐ Other

54402-0953

☐ Bentonite - Sand Slurry

165

Signature of Person Doing Work	Date Signed
<i>James M. [Signature]</i>	6-8-09

Facility/Project Name

Wausau Chemical

Facility License, Permit or Monitoring Number

Local Grid Location of Well

ft. ☐ N. ☐ E.
ft. ☐ S. ☐ W.

Well Name

SVE-6

Grid Origin Location

Lat. 0' 0" Long. 0' 0" or

Wis. Unique Well Number: DNR Well Number

Type of Well Water Table Observation Well ☐ 11

Piezometer ☐ 12

Date Well Installed

03/20/96

Distance Well Is From Waste/Source Boundary

Section Location of Waste/Source

1/4 of 1/4 of Sec. T. N. R. ☐ E.
ft. ☐ W.

Well Installed By: (Person's Name and Firm)

Jon Weeks

Is Well A Point of Enforcement Std. Application?

☐ Yes ☐ No

Location of Well Relative to Waste/Source

u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known

Boart Longyear

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation 6.00 ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 1.0 ft.

12. USC classification of soil near screen:

GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☐ No

14. Drilling method used: Rotary ☐ 5 0
Hollow Stem Auger ☒ 4 1
Other ☐

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1
Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☐ No

Describe _____

17. Source of water (attach analysis):

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

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

G. Filter pack, top _____ ft. MSL or 3.0 ft.

H. Screen joint, top _____ ft. MSL or 4.0 ft.

I. Well bottom _____ ft. MSL or 16.0 ft.

J. Filter pack, bottom _____ ft. MSL or 16.0 ft.

K. Borehole, bottom _____ ft. MSL or 17.0 ft.

L. Borehole, diameter 8.0 in.

M. O.D. well casing 2.37 in.

N. I.D. well casing 2.06 in.

1. Cap and lock? ☐ Yes ☒ No

2. Protective cover pipe:

a. Inside diameter: 4.0 in.

b. Length: 7.0 ft.

c. Material: Steel ☒ 0 4

Other ☐

d. Additional protection? ☐ Yes ☒ No

If yes, describe: _____

3. Surface seal: Bentonite ☐ 3 0

Concrete ☒ 0 1

Other ☐

4. Material between well casing and protective pipe:

Bentonite ☐ 3 0

Annular space seal ☐

Other ☐

5. Annular space seal: a. Granular Bentonite ☐ 3 3

b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5

c. _____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1

d. _____ % Bentonite . . . Bentonite-cement grout ☐ 5 0

e. _____ Ft³ volume added for any of the above

f. How installed: Tremie ☐ 0 1

Tremie pumped ☐ 0 2

Gravity ☐ 0 8

6. Bentonite seal: a. Bentonite granules ☐ 3 3

b. ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 3 2

c. _____ Other ☐

7. Fine sand material: Manufacturer, product name and mesh size

a. _____

b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name and mesh size

a. Pea Gravel

b. Volume added _____ ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3

Flush threaded PVC schedule 80 ☐ 2 4

Other ☐

10. Screen material: PVC

a. Screen Type: Factory cut ☒ 1 1

Continuous slot ☐ 0 1

Other ☐

b. Manufacturer Boart Longyear

c. Slot size: 0.100 in.

d. Slotted length: 12.0

11. Backfill material (below filter pack): None ☒ 1 4

Other ☐

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

Signature

[Signature]

Firm

Boart Longyear
101 Alderson Street

Tel: (715) 359-709

Fax: (715) 355-5715

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

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
		☐ Waste Management	☐ Other:	

1. Well Location Information		2. Facility / Owner Information	
County MARATHON	WI Unique Well # of Removed Well _____	Facility Name Wausau Chemical	
Latitude / Longitude (Degrees and Minutes) _____'N _____'W	Method Code (see instructions) _____	Facility ID (FID or PWS) 737105820	
1/4 NW 1/4 NW or Gov't Lot #	Section 25	License/Permit/Monitoring # _____	
Well Street Address 2001 N. River Drive	Township 29 N	Original Well Owner Wausau Chemical	
Well City, Village or Town Wausau	Range 7	Present Well Owner Wausau Chemical	
Subdivision Name _____	Well ZIP Code 54402-0953	Mailing Address of Present Owner 2001 N. River Drive	
	Lot # _____	City of Present Owner Wausau	State WI
		ZIP Code 54402-0953	

Reason For Removal From Service Not in Service	WI Unique Well # of Replacement Well _____	4. Pump, Liner, Screen, Casing & Sealing Material	
3. Well / Drillhole / Borehole Information		Pump and piping removed?	☐ Yes ☐ No ☒ N/A
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 12/10/93	Liner(s) removed?	☐ Yes ☐ No ☒ N/A
☐ Water Well	If a Well Construction Report is available, please attach.	Screen removed?	☒ Yes ☐ No ☐ N/A
☐ Borehole / Drillhole		Casing left in place?	☐ Yes ☒ No ☐ N/A
Construction Type:		Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
☒ Drilled	☐ Driven (Sandpoint)	Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
☐ Other (specify): _____	☐ Dug	Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
		If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
		If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A

Formation Type:	☒ Unconsolidated Formation	☐ Bedrock	Required Method of Placing Sealing Material
Total Well Depth From Ground Surface (ft.)	12	Casing Diameter (in.)	☒ Conductor Pipe-Gravity
Lower Drillhole Diameter (in.)		Casing Depth (ft.)	☐ Conductor Pipe-Pumped
Was well annular space grouted?	☒ Yes		☒ Screened & Poured (Bentonite Chips)
If yes, to what depth (feet)?	2	Depth to Water (feet)	☐ Other (Explain): _____
			Sealing Materials
			☐ Neat Cement Grout
			☐ Sand-Cement (Concrete) Grout
			☐ Concrete
			☐ Clay-Sand Slurry (11 lb./gal. wt.)
			☐ Bentonite-Sand Slurry
			☒ Bentonite Chips
			For Monitoring Wells and Monitoring Well Boreholes Only:
			☐ Bentonite Chips
			☐ Bentonite - Cement Grout
			☐ Granular Bentonite
			☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole		From (ft.)	To (ft.)	Sacks Sealant
Hole Plug		Surface	12	0.5

6. Comments	
Gas Probe (GP- 14)	

7. Supervision of Work		DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/3/09	Date Received
Street or Route 101 Alderson St.	City Schofield	State WI	Noted By
	ZIP Code 54476-	Telephone Number (715) 359-7090	Comments
		Signature of Person Doing Work <i>James M. [Signature]</i>	Date Signed 6-8-09

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN) G

(L-68)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GP-14

PROJECT NO.: 3978

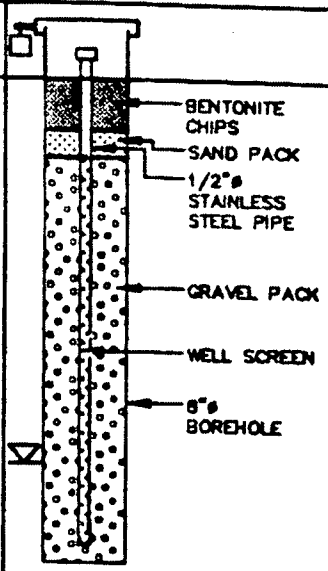
DATE COMPLETED: DECEMBER 10, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLUCK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
	TOPSOIL, vegetation	-0.2	 BENTONITE CHIPS SAND PACK 1/2" STAINLESS STEEL PIPE GRAVEL PACK WELL SCREEN 8" BOREHOLE				
2.5	ML-SILT, little sand, little fine gravel, brown, moist	-3.0					
5.0	SP-SAND, trace coarse gravel, fine grained, light brown, moist	-10.0					0
7.5		-12.5					0
10.0	END OF HOLE • 12.5 FT. BGS						
12.5			SCREEN DETAILS: Screened Interval: 2.0 to 12.0' BGS Length -10.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1" on Center Material -Stainless Steel Sand pack interval: 2.0 to 12.5' BGS Material -Pea Gravel				
15.0							
17.5							
20.0							
22.5							
25.0							
27.5							
30.0							
32.5							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	HiCap # _____
Latitude / Longitude (Degrees and Minutes) _____. _____. _____. 'N _____. _____. _____. 'W		Method Code (see instructions) _____
1/4 NW or Gov't Lot #	1/4 NW Section 25	Township 29 N
Well Street Address 2001 N. River Drive		Range 7
Well City, Village or Town Wausau		☒ E ☐ W
Subdivision Name _____		Well ZIP Code 54402-0953
_____		Lot # _____

2. Facility / Owner Information

Facility Name Wausau Chemical		
Facility ID (FID or PWS) 737105820		
License/Permit/Monitoring # _____		
Original Well Owner Wausau Chemical		
Present Well Owner Wausau Chemical		
Mailing Address of Present Owner 2001 N. River Drive		
City of Present Owner Wausau	State WI	ZIP Code 54402-0953

Reason For Removal From Service

WI Unique Well # of Replacement Well

Not in Service

3. Well / Drillhole / Borehole Information

☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 12/13/93
☐ Water Well	
☐ Borehole / Drillhole	
If a Well Construction Report is available, please attach. _____	
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____	
Formation Type: ☒ Unconsolidated Formation ☐ Bedrock	
Total Well Depth From Ground Surface (ft.) 12	Casing Diameter (in.) 0.5
Lower Drillhole Diameter (in.) _____	Casing Depth (ft.) 2
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown	
If yes, to what depth (feet)? 2	Depth to Water (feet) N/A

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes ☐ No ☒ N/A
Liner(s) removed?	☐ Yes ☐ No ☒ N/A
Screen removed?	☒ Yes ☐ No ☐ N/A
Casing left in place?	☐ Yes ☒ No ☐ N/A
Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A
Required Method of Placing Sealing Material	
☐ Conductor Pipe-Gravity	☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips)	☐ Other (Explain): _____
Sealing Materials	
☐ Neat Cement Grout	☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout	☐ Bentonite-Sand Slurry
☐ Concrete	☒ Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	
☐ Bentonite Chips	☐ Bentonite - Cement Grout
☐ Granular Bentonite	☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

Hole Plug	From (ft.) Surface	To (ft.) 12	Sacks Sealant 14
_____	_____	_____	_____
_____	_____	_____	_____

6. Comments

Gas Probe (GP-15)

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Boart Longyear		License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 4/3/04	DNR Use Only	
Street or Route 101 Alderson St.		Telephone Number (715) 359-7090		Date Received _____	Noted By _____
City Schofield	State WI	ZIP Code 54476	Signature of Person Doing Work <i>[Signature]</i>		Date Signed 6-8-09

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

(L-69)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GP-15

PROJECT NO.: 3978

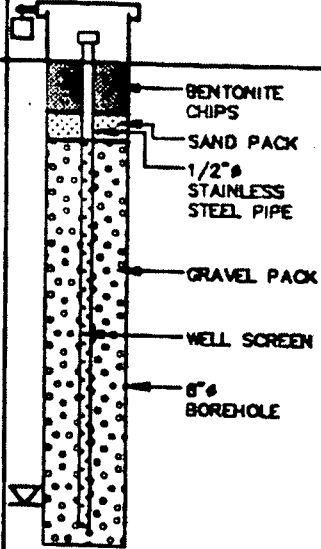
DATE COMPLETED: DECEMBER 13, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLICK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
	TOPSOIL, vegetation	-0.2	 BENTONITE CHIPS SAND PACK 1/2" STAINLESS STEEL PIPE GRAVEL PACK WELL SCREEN 6" BOREHOLE				
	ML-SILT, little fine sand, dark brown, moist	-2.0					
2.5	SP-SAND, trace silt, trace fine and coarse gravel, fine grained, brown, moist						
5.0							
7.5	- no silt, light brown						
10.0							
12.5	END OF HOLE • 12.5 FT. BGS	-12.5					
15.0							
17.5							
20.0							
22.5							
25.0							
27.5							
30.0							
32.5							

SCREEN DETAILS:
 Screened Interval:
 2.0 to 12.0' BGS
 Length -10.0'
 Diameter -1/2"
 Slot # Drilled 3/32"
 Holes-1" on Center
 Material -Stainless Steel
 Sand pack interval:
 2.0 to 12.5' BGS
 Material -Peg Gravel

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	Hicap # _____
Latitude / Longitude (Degrees and Minutes) _____. _____. _____. 'N _____. _____. _____. 'W		Method Code (see instructions) _____
1/4 NW or Gov't Lot #	1/4 NW 25	Section 29
Township N		Range 7
Well Street Address 2001 N. River Drive		Well ZIP Code 54402-0953
Well City, Village or Town Wausau		Subdivision Name Lot #

2. Facility / Owner Information

Facility Name Wausau Chemical		
Facility ID (FID or PWS) 737105820		
License/Permit/Monitoring # _____		
Original Well Owner Wausau Chemical		
Present Well Owner Wausau Chemical		
Mailing Address of Present Owner 2001 N. River Drive		
City of Present Owner Wausau	State WI	ZIP Code 54402-0953

Reason For Removal From Service
Not in Service

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) 12/13/1993
If a Well Construction Report is available, please attach.	
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____	
Formation Type: ☒ Unconsolidated Formation ☐ Bedrock	
Total Well Depth From Ground Surface (ft.) 12	Casing Diameter (in.) 0.5
Lower Drillhole Diameter (in.) _____	Casing Depth (ft.) 2
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown	
If yes, to what depth (feet)? 2	Depth to Water (feet) N/A

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes ☐ No ☒ N/A
Liner(s) removed?	☐ Yes ☐ No ☒ N/A
Screen removed?	☒ Yes ☐ No ☐ N/A
Casing left in place?	☐ Yes ☒ No ☐ N/A
Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity	☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips)	☐ Other (Explain): _____

Sealing Materials

☐ Neat Cement Grout	☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout	☐ Bentonite-Sand Slurry
☐ Concrete	☒ Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	
☐ Bentonite Chips	☐ Bentonite - Cement Grout
☐ Granular Bentonite	☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

Hole Plug	From (ft.) Surface	To (ft.) 12	Sacks Sealant 14

6. Comments

Gas Probe (GP- *66*)

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/4/04	DNR Use Only	
Street or Route 101 Alderson St.			Telephone Number (715) 359-7090	Noted By
City Schofield			State WI	Date Signed 6-8-09
ZIP Code 54476-			Signature of Person Doing Work <i>[Signature]</i>	Comments

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN) 3

(L-70)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GP-16

PROJECT NO.: 3978

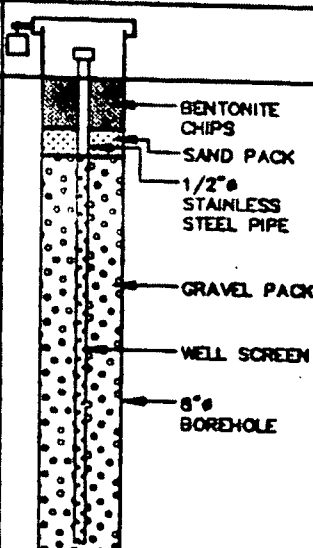
DATE COMPLETED: DECEMBER 13, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLICK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
2.5	TOPSOIL, vegetation	-0.5	 BENTONITE CHIPS SAND PACK 1/2" STAINLESS STEEL PIPE GRAVEL PACK WELL SCREEN 8" BOREHOLE				
5.0	SP-SAND, little fine gravel, fine grained, brown						0
7.5							
10.0							0
12.5	END OF HOLE • 12.5 FT. BGS	-12.5					0
15.0							
17.5							
20.0							
22.5							
25.0							
27.5							
30.0							
32.5							

SCREEN DETAILS:
 Screened Interval:
 2.0 to 12.0' BGS
 Length -10.0'
 Diameter -1/2"
 Slot # Drilled 3/32"
 Holes-1" on Center
 Material -Stainless Steel
 Sand pack interval:
 2.0 to 12.5' BGS
 Material -Pea Gravel

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	Map # _____
Latitude / Longitude (Degrees and Minutes) _____. _____. _____. N _____. _____. _____. W		Method Code (see instructions) _____
1/4 1/4 NW 1/4 NW or Gov't Lot #	Section 25	Township 29 N
Well Street Address 2001 N. River Drive	Range 7 E	☒ E ☐ W
Well City, Village or Town Wausau	Well ZIP Code 54402-0953	
Subdivision Name	Lot # _____	

2. Facility / Owner Information

Facility Name Wausau Chemical		
Facility ID (FID or PWS) 737105820		
License/Permit/Monitoring # _____		
Original Well Owner Wausau Chemical		
Present Well Owner Wausau Chemical		
Mailing Address of Present Owner 2001 N. River Drive		
City of Present Owner Wausau	State WI	ZIP Code 54402-0953

Reason For Removal From Service
Not in Service

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) 12/13/1993
If a Well Construction Report is available, please attach. _____	
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____	
Formation Type: ☒ Unconsolidated Formation ☐ Bedrock	
Total Well Depth From Ground Surface (ft.) 12	Casing Diameter (in.) 0.5
Lower Drillhole Diameter (in.) _____	Casing Depth (ft.) 2
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown	
If yes, to what depth (feet)? 2	Depth to Water (feet) N/A

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes ☐ No ☒ N/A
Liner(s) removed?	☐ Yes ☐ No ☒ N/A
Screen removed?	☒ Yes ☐ No ☐ N/A
Casing left in place?	☐ Yes ☒ No ☐ N/A
Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A
Required Method of Placing Sealing Material ☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____	
Sealing Materials ☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.) ☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry ☐ Concrete ☒ Bentonite Chips	
For Monitoring Wells and Monitoring Well Boreholes Only: ☐ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry	

5. Material Used To Fill Well / Drillhole

Hole Plug	From (ft.) Surface	To (ft.) 12	Sacks Sealant 14
_____	_____	_____	_____
_____	_____	_____	_____

6. Comments

Gas Probe (GP- **17**)

7. Supervision of Work

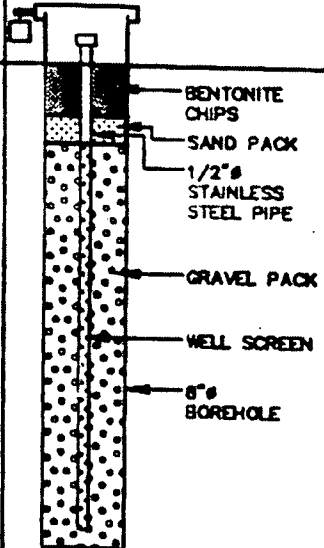
Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/3/2004	DNR Use Only	
Street or Route 101 Alderson St.	Telephone Number (715) 359-7090	Comments _____	Date Received _____	Noted By _____
City Schofield	State WI	ZIP Code 54476-	Signature of Person Doing Work <i>[Signature]</i>	Date Signed 6-8-09

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

(L-71)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE
 PROJECT NO.: 3978
 CLIENT: WAUSAU PRP GROUP
 LOCATION: WAUSAU CHEMICAL

HOLE DESIGNATION: GP-17
 DATE COMPLETED: DECEMBER 13, 1993
 DRILLING METHOD: 4 1/4" ID HSA
 CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
							
2.5	SP-SAND, little fine gravel, fine grained, brown						
5.0							
7.5							
10.0							
12.5	END OF HOLE ● 12.5 FT. BGS	-12.5					
15.0							
17.5							
20.0							
22.5							
25.0							
27.5							
30.0							
32.5							

SCREEN DETAILS:
 Screened Interval:
 2.0 to 12.0' BGS
 Length -10.0'
 Diameter -1/2"
 Slot # Drilled 3/32"
 Holes-1" on Center
 Material -Stainless Steel
 Sand pack interval:
 2.0 to 12.5' BGS
 Material -Pea Gravel

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
 CHEMICAL ANALYSIS ○ WATER FOUND ∇ STATIC WATER LEVEL ▼

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County: **MARATHON**

WI Unique Well # of Removed Well

Hicap #

Latitude / Longitude (Degrees and Minutes) Method Code (see instructions)

_____'N
_____'W

1/4 NW 1/4 NW Section: **25** Township: **29 N** Range: **7** ☒ E ☐ W

Well Street Address: **2001 N. River Drive**

Well City, Village or Town: **Wausau** Well ZIP Code: **54402-0953**

Subdivision Name: _____ Lot #: _____

Reason For Removal From Service: **Not in Service** WI Unique Well # of Replacement Well: _____

3. Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)

12/10/1993

If a Well Construction Report is available, please attach.

Construction Type:

☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.): **12** Casing Diameter (in.): **0.5**

Lower Drillhole Diameter (in.): _____ Casing Depth (ft.): **2**

Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)? **2** Depth to Water (feet): **N/A**

5. Material Used To Fill Well / Drillhole

Hole Plug: _____

2. Facility / Owner Information

Facility Name: **Wausau Chemical**

Facility ID (FID or PWS): **737105820**

License/Permit/Monitoring #: _____

Original Well Owner: **Wausau Chemical**

Present Well Owner: **Wausau Chemical**

Mailing Address of Present Owner: **2001 N. River Drive**

City of Present Owner: **Wausau** State: **WI** ZIP Code: **54402-0953**

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed? ☐ Yes ☐ No ☒ N/A

Liner(s) removed? ☐ Yes ☐ No ☒ N/A

Screen removed? ☒ Yes ☐ No ☐ N/A

Casing left in place? ☐ Yes ☒ No ☐ N/A

Was casing cut off below surface? ☐ Yes ☐ No ☒ N/A

Did sealing material rise to surface? ☒ Yes ☐ No ☐ N/A

Did material settle after 24 hours? ☐ Yes ☒ No ☐ N/A

If yes, was hole retopped? ☐ Yes ☐ No ☒ N/A

If bentonite chips were used, were they hydrated with water from a known safe source? ☒ Yes ☐ No ☐ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped

☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials

☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)

☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry

☐ Concrete ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☐ Bentonite Chips ☐ Bentonite - Cement Grout

☐ Granular Bentonite ☐ Bentonite - Sand Slurry

6. Comments

Gas Probe (GP-16)

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing				DNR Use Only	
License #		Date of Filling & Sealing (mm/dd/yyyy)		Date Received	Noted By
Boart Longyear		6189		9/3/2004	
Street or Route				Telephone Number	Comments
101 Alderson St.				(715) 359-7090	
City		State	ZIP Code	Signature of Person Doing Work	Date Signed
Schofield		WI	54476	<i>[Signature]</i>	6-8-09

STRATIGRAPHIC AND INSTRUMENTATION 3 (OVERBURDEN)

(L-72)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GP-18

PROJECT NO.: 3978

DATE COMPLETED: DECEMBER 10, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
	TOPSOIL, vegetation						
	ML-SILT, some clay, little fine gravel, brown	-0.3					
2.5							
	SM-SAND, some silt, trace fine gravel, fine to medium grained, dark brown	-4.0					
5.0							
7.5							
10.0							
12.5	END OF HOLE @ 12.5 FT. BGS	-12.5					
15.0							
17.5							
20.0							
22.5							
25.0							
27.5							
30.0							
32.5							

SCREEN DETAILS:
 Screened Interval:
 2.0 to 12.0' BGS
 Length -10.0'
 Diameter -1/2"
 Slot # Drilled 3/32"
 Holes-1" on Center
 Material -Stainless Steel
 Sand pack interval:
 2.0 to 12.5' BGS
 Material -Pea Gravel

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



☐ Other:

Date Signed _____

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN) 3

(L-73)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GP-19

PROJECT NO.: 3978

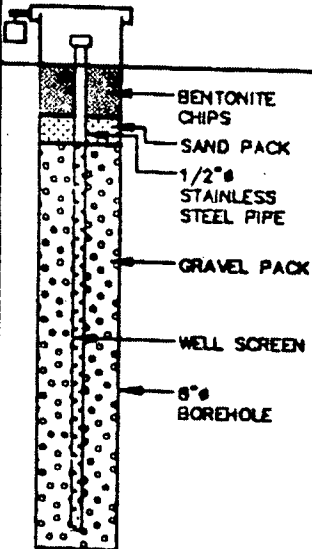
DATE COMPLETED: DECEMBER 10, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLICK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
	TOPSOIL, vegetation	-0.3	 BENTONITE CHIPS SAND PACK 1/2" STAINLESS STEEL PIPE GRAVEL PACK WELL SCREEN 6" BOREHOLE				
2.5	SP-SAND, trace fine and coarse gravel, brown						
5.0							
7.5							
10.0							
12.5	END OF HOLE • 12.5 FT. BGS	-12.5					
15.0							
17.5							
20.0							
22.5							
25.0							
27.5							
30.0							
32.5							

SCREEN DETAILS:
 Screened Interval:
 2.0 to 12.0' BGS
 Length -10.0'
 Diameter -1/2"
 Slot # Drilled 3/32"
 Holes-1" on Center
 Material -Stainless Steel
 Sand pack interval:
 2.0 to 12.5' BGS
 Material -Pea Gravel

NOTES:

MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
		☐ Waste Management	☐ Other:	

1. Well Location Information		2. Facility / Owner Information	
County MARATHON	WI Unique Well # of Removed Well _____	Facility Name Wausau Chemical	
Latitude / Longitude (Degrees and Minutes) _____'N _____'W	Method Code (see instructions) _____	Facility ID (FID or PWS) 737125820	
1/4 NW 1/4 NW or Gov't Lot #	Section 25	Township 29 N	Range 7 E
Well Street Address 2001 N. River Drive	Well City, Village or Town Wausau	Well ZIP Code 54402-0953	
Subdivision Name	Lot #	City of Present Owner Wausau	State WI
		ZIP Code 54402-0953	

Reason For Removal From Service Not in Service	WI Unique Well # of Replacement Well _____	4. Pump, Liner, Screen, Casing & Sealing Material	
3. Well / Drillhole / Borehole Information		Pump and piping removed?	☐ Yes ☐ No ☒ N/A
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 12/13/1993	Liner(s) removed?	☐ Yes ☐ No ☒ N/A
☐ Water Well	If a Well Construction Report is available, please attach.	Screen removed?	☒ Yes ☐ No ☐ N/A
☐ Borehole / Drillhole		Casing left in place?	☐ Yes ☒ No ☐ N/A
Construction Type:		Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
☒ Drilled	☐ Driven (Sandpoint)	Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
☐ Other (specify):	☐ Dug	Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
		If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
		If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A

Formation Type:	☒ Unconsolidated Formation	☐ Bedrock	Required Method of Placing Sealing Material
Total Well Depth From Ground Surface (ft.)	12	Casing Diameter (in.)	☐ Conductor Pipe-Gravity
Lower Drillhole Diameter (in.)		Casing Depth (ft.)	☒ Screened & Poured (Bentonite Chips)
Was well annular space grouted?	☒ Yes	☐ No	☐ Other (Explain):
If yes, to what depth (feet)?	2	Depth to Water (feet)	
			Sealing Materials
			☐ Neat Cement Grout
			☐ Sand-Cement (Concrete) Grout
			☐ Concrete
			☒ Bentonite Chips
			For Monitoring Wells and Monitoring Well Boreholes Only:
			☐ Bentonite Chips
			☐ Bentonite - Cement Grout
			☐ Granular Bentonite
			☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole	From (ft.)	To (ft.)	Sacks Sealant
Hole Plug	Surface	12	

6. Comments
Gas Probe (GP- 20)

7. Supervision of Work		DNR Use Only	
Name of Person or Firm Doing Filling & Sealing Boart Longyear	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 9/3/2008	Date Received
Street or Route 101 Alderson St.	Telephone Number (715) 359-7090	Comments	
City Schofield	State WI	ZIP Code 54476-	Signature of Person Doing Work <i>June M. Longyear</i>
			Date Signed 6-8-09

STRATIGRAPHIC AND INSTRUMENTATION (3) (OVERBURDEN)

(L-74)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GP-20

PROJECT NO.: 3978

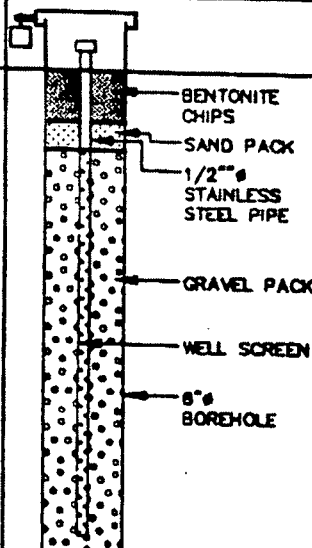
DATE COMPLETED: DECEMBER 13, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLICK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
2.5	TOPSOIL, sand, vegetation	-0.2	 BENTONITE CHIPS SAND PACK 1/2" STAINLESS STEEL PIPE GRAVEL PACK WELL SCREEN 6" BOREHOLE				
5.0	SP-SAND, trace fine gravel, fine grained with trace coarse grains, brown, moist						0
7.5							
10.0							0
12.5	END OF HOLE • 12.5 FT. BGS	-12.5					0
15.0							
17.5							
20.0							
22.5							
25.0							
27.5							
30.0							
32.5							

SCREEN DETAILS:
 Screened Interval:
 2.0 to 12.0' BGS
 Length -10.0'
 Diameter -1/2"
 Slot # Drilled 3/32"
 Holes-1" on Center
 Material -Stainless Steel
 Sand pack interval:
 2.0 to 12.5' BGS
 Material -Pea Gravel

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
 CHEMICAL ANALYSIS ○ WATER FOUND ∇ STATIC WATER LEVEL ▼

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County
MARATHON

WI Unique Well # of
Removed Well

Hicap #

Latitude / Longitude (Degrees and Minutes)

Method Code (see instructions)

____° ____' ____" N
____° ____' ____" W

1/4 NW
or Gov't Lot #

1/4 NW

Section

25

Township

29 N

Range

☒ E

☐ W

Well Street Address

2001 N. RIVER DRIVE

Well City, Village or Town

WAUSAU

Well ZIP Code

54402-0953

Subdivision Name

Lot #

Reason For Removal From Service

NOT IN SERVICE

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well

☐ Water Well

☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)

12/08/1993

If a Well Construction Report is available,
please attach.

Construction Type:

☒ Drilled

☐ Driven (Sandpoint)

☐ Dug

☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation

☐ Bedrock

Total Well Depth From Ground Surface (ft.)

4.5 & 8.5 (NESTED)

Casing Diameter (in.)

0.5

Lower Drillhole Diameter (in.)

Casing Depth (ft.)

3.5 & 7.5

Was well annular space grouted?

☒ Yes

☐ No

☐ Unknown

If yes, to what depth (feet)?

0-2.5 & 5-6.5

Depth to Water (feet)

NOT APPLICABLE

5. Material Used To Fill Well / Drillhole

HOLE PLUG

HOLE PLUG

From (ft.)	To (ft.)	No. Yards (Sacks) Sealant or Volume (Circle one)	Mix Ratio or Mud Weight
Surface	4.5		
Surface	8.5	1	

6. Comments

SOIL GAS PROBE (GPN-6) TWO PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing
BOART LONGYEAR

License #
6189

Date of Filling & Sealing (mm/dd/yyyy)
09/03/2008

Street or Route

101 ALDERSON ST.

Telephone Number

(715) 359-7090

City

SCHOFIELD

State

WI

ZIP Code

54476

Signature of Person Doing Work

DNR Use Only

Date Received

Noted By

Comments

Date Signed

6-8-09

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN)

(L-80)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GPN-6

PROJECT NO.: 3978

DATE COMPLETED: DECEMBER 8, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLICK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
	TOPSOIL, vegetation						
1.0	SP-SAND, little fine gravel, trace coarse gravel, trace coarse sand, fine grained, light brown, moist	-0.5					
2.0							
3.0							
4.0							
5.0							
6.0							
7.0							
8.0							
9.0	END OF HOLE • 9.0 FT. BGS	-9.0					
10.0			SCREEN A DETAILS: Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel				
11.0			SCREEN B DETAILS: Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
12.0							
13.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County

MARATHON

WI Unique Well # of
Removed Well

Hicap #

Latitude / Longitude (Degrees and Minutes)

Method Code (see instructions)

____° ____' ____" N
____° ____' ____" W

1/4 NW
or Gov't Lot #

1/4 NW

Section

25

Township

29

Range

N

☒ E
☐ W

Well Street Address

2001 N. RIVER DRIVE

Well City, Village or Town

WAUSAU

Well ZIP Code

54402-0953

Subdivision Name

Lot #

2. Facility / Owner Information

Facility Name

Facility ID (FID or PWS)

737105820

License/Permit/Monitoring #

Original Well Owner

WAUSAU CHEMICAL

Present Well Owner

WAUSAU CHEMCIAL

Mailing Address of Present Owner

2001 N. RIVER DRIVE

City of Present Owner

WAUSAU

State

WI

ZIP Code

54402-0953

Reason For Removal From Service

NOT IN SERVICE

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well

☐ Water Well

☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)

12/08/1993

If a Well Construction Report is available,
please attach.

Construction Type:

☒ Drilled

☐ Driven (Sandpoint)

☐ Dug

☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation

☐ Bedrock

Total Well Depth From Ground Surface (ft.)

4.5 & 8.5 (NESTED)

Casing Diameter (in.)

0.5

Lower Drillhole Diameter (in.)

Casing Depth (ft.)

3.5 & 7.5

Was well annular space grouted?

☒ Yes

☐ No

☐ Unknown

If yes, to what depth (feet)?

0-2.5 & 5-6.5

Depth to Water (feet)

NOT APPLICABLE

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?

☐ Yes

☐ No

☒ N/A

Liner(s) removed?

☐ Yes

☐ No

☒ N/A

Screen removed?

☒ Yes

☐ No

☐ N/A

Casing left in place?

☐ Yes

☒ No

☐ N/A

Was casing cut off below surface?

☐ Yes

☐ No

☒ N/A

Did sealing material rise to surface?

☒ Yes

☐ No

☐ N/A

Did material settle after 24 hours?

☐ Yes

☒ No

☐ N/A

If yes, was hole retopped?

☐ Yes

☐ No

☒ N/A

If bentonite chips were used, were they hydrated
with water from a known safe source?

☒ Yes

☐ No

☐ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity

☐ Conductor Pipe-Pumped

☒ Screened & Poured

☐ Other (Explain): _____

(Bentonite Chips)

Sealing Materials

☐ Neat Cement Grout

☐ Clay-Sand Slurry (11 lb./gal. wt.)

☐ Sand-Cement (Concrete) Grout

☐ Bentonite-Sand Slurry "

☐ Concrete

☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☐ Bentonite Chips

☐ Bentonite - Cement Grout

☐ Granular Bentonite

☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

HOLE PLUG

From (ft.)

Surface

To (ft.)

4.5

No. Yards (Sacks) Sealant
or Volume (circle one)

1

Mix Ratio or
Mud Weight

HOLE PLUG

Surface

8.5

1

6. Comments

SOIL GAS PROBE (GPN-7) TWO PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing

BOART LONGYEAR

License #

6189

Date of Filling & Sealing (mm/dd/yyyy)

09/03/2008

DNR Use Only

Date Received

Noted By

Street or Route

101 ALDERSON ST.

Telephone Number

(715) 359-7090

Comments

City

SCHOFIELD

State

WI

ZIP Code

54476

Signature of Person Doing Work

[Signature]

Date Signed

6-8-09

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN)

(L-81)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GPN-7

PROJECT NO.: 3978

DATE COMPLETED: DECEMBER 8, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
	TOPSOIL, vegetation		Diagram labels: BENTONITE CHIPS, 1/2" STAINLESS STEEL CASING, SAND PACK, GRAVEL PACK, WELL SCREEN, 8" BOREHOLE, BENTONITE CHIPS, SAND PACK, GRAVEL PACK, WELL SCREEN.				
1.0	SM-SAND, little silt, trace fine and coarse gravel, fine grained with trace coarse grains, dark brown to black, moist	-0.5					
2.0							
3.0							
4.0							
5.0	SP-SAND, trace silt, trace fine and coarse gravel, fine grained with trace coarse grains, brown, moist	-5.0					0
6.0							
7.0							
8.0							
9.0	END OF HOLE • 9.0 FT. BGS	-9.0					0
10.0			SCREEN A DETAILS: Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack Interval: 7.0 to 9.0' BGS Material -Pea Gravel				
11.0			SCREEN B DETAILS: Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
12.0							
13.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS: ○ WATER FOUND ∇ STATIC WATER LEVEL ▼

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County

MARATHON

WI Unique Well # of
Removed Well

Hicap #

Latitude / Longitude (Degrees and Minutes)

Method Code (see instructions)

____ ° ____ ' N
____ ° ____ ' W

1/4 1/4 NW

1/4 NW

Section

25

Township

29

Range

☒ E

☐ W

or Gov't Lot #

Well Street Address

2001 N. RIVER DRIVE

Well City, Village or Town

WAUSAU

Well ZIP Code

54402-0953

Subdivision Name

Lot #

Reason For Removal From Service
NOT IN SERVICE

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well

☐ Water Well

☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)
12/09/1993

If a Well Construction Report is available,
please attach.

Construction Type:

☒ Drilled

☐ Driven (Sandpoint)

☐ Dug

☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation

☐ Bedrock

Total Well Depth From Ground Surface (ft.)
4.5 & 8.5 (NESTED)

Casing Diameter (in.)
0.5

Lower Drillhole Diameter (in.)

Casing Depth (ft.)
3.5 & 7.5

Was well annular space grouted?

☒ Yes

☐ No

☐ Unknown

If yes, to what depth (feet)?

0-2.5 & 5-6.5

Depth to Water (feet)

NOT APPLICABLE

5. Material Used To Fill Well / Drillhole

HOLE PLUG

HOLE PLUG

From (ft.)	To (ft.)	No. Yards, Sacks, Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	4.5		
Surface	8.5	3	

6. Comments

SOIL GAS PROBE (GPN-8) TWO PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing
BOART LONGYEAR

License #
6189

Date of Filling & Sealing (mm/dd/yyyy)
09/04/2008

Street or Route

101 ALDERSON ST.

Telephone Number

(715) 359-7090

City

SCHOFIELD

State

WI

ZIP Code

54476

Signature of Person Doing Work

Date Signed

6-8-09

DNR Use Only

Date Received

Noted By

Comments

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN) 3

(L-82)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GPN-8

PROJECT NO.: 3978

DATE COMPLETED: DECEMBER 9, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLICK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
	TOPSOIL, vegetation		BENTONITE CHIPS 1/2" STAINLESS STEEL CASING SAND PACK GRAVEL PACK WELL SCREEN 8" BOREHOLE BENTONITE CHIPS SAND PACK GRAVEL PACK WELL SCREEN				
-0.5	SP-SAND, trace silt, trace fine and coarse gravel, fine grained, brown, moist						
1.0							
2.0							
3.0							
4.0							
5.0							
6.0							
7.0							
8.0							
9.0	END OF HOLE • 9.0 FT. BGS	-9.0					
10.0			SCREEN A DETAILS: Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel				
11.0			SCREEN B DETAILS: Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
12.0							
13.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL

Well / Drillhole / Borehole Filling & Sealing
Form 3300-005 (R 4/08) Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

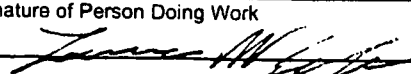
☐ Verification Only of Fill and Seal	Route to:	
	☐ Drinking Water ☐ Waste Management	☐ Watershed/Wastewater ☒ Remediation/Redevelopment ☐ Other: _____

1. Well Location Information				2. Facility / Owner Information			
County MARATHON		WI Unique Well # of Removed Well _____		Hicap # _____		Facility Name _____	
Latitude / Longitude (Degrees and Minutes) ____° ____' ____" N ____° ____' ____" W		Method Code (see instructions) _____		Facility ID (FID or PWS) 737105820		License/Permit/Monitoring # _____	
1/4 NW 1/4 NW or Gov't Lot # _____		Section 25	Township 29 N	Range ☒ E ☐ W	Original Well Owner WAUSAU CHEMICAL		
Well Street Address 2001 N. RIVER DRIVE				Present Well Owner WAUSAU CHEMCIAL			
Well City, Village or Town WAUSAU				Mailing Address of Present Owner 2001 N. RIVER DRIVE			
Subdivision Name _____				City of Present Owner WAUSAU	State WI	ZIP Code 54402-0953	

Reason For Removal From Service NOT IN SERVICE	WI Unique Well # of Replacement Well _____
--	---

3. Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material	
☐ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) 12/10/1993 If a Well Construction Report is available, please attach. _____	Pump and piping removed? ☐ Yes ☐ No ☒ N/A	Liner(s) removed? ☐ Yes ☐ No ☒ N/A
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____		Screen removed? ☒ Yes ☐ No ☐ N/A	Casing left in place? ☐ Yes ☒ No ☐ N/A
Formation Type: ☒ Unconsolidated Formation ☐ Bedrock		Was casing cut off below surface? ☐ Yes ☐ No ☒ N/A	Did sealing material rise to surface? ☒ Yes ☐ No ☐ N/A
Total Well Depth From Ground Surface (ft.) 4.5 & 8.5 (NESTED)		Did material settle after 24 hours? ☐ Yes ☒ No ☐ N/A	If yes, was hole retopped? ☐ Yes ☐ No ☒ N/A
Lower Drillhole Diameter (in.) _____		If bentonite chips were used, were they hydrated with water from a known safe source? ☒ Yes ☐ No ☐ N/A	
Casing Diameter (in.) 0.5		Required Method of Placing Sealing Material ☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____	
Casing Depth (ft.) 3.5 & 7.5		Sealing Materials ☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.) ☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " " ☐ Concrete ☒ Bentonite Chips	
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown		For Monitoring Wells and Monitoring Well Boreholes Only: ☐ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry	
If yes, to what depth (feet)? 0-2.5 & 5-6.5		Depth to Water (feet) NOT APPLICABLE	

5. Material Used To Fill Well / Drillhole			
HOLE PLUG	From (ft.)	To (ft.)	No. Yards (Sacks) Sealant or Volume (circle one)
HOLE PLUG	Surface	4.5	
	Surface	8.5	1
6. Comments			
SOIL GAS PROBE (GPN-9) TWO PROBES NESTED IN SAME BOREHOLE			

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing BOART LONGYEAR		License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 09/03/2008	Date Received	Noted By
Street or Route 101 ALDERSON ST.		Telephone Number (715) 359-7090		Comments	
City SCHOFIELD	State WI	ZIP Code 54476	Signature of Person Doing Work 	Date Signed 6-8-09	

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

(L-83)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

PROJECT NO.: 3978

CLIENT: WAUSAU PRP GROUP

LOCATION: WAUSAU CHEMICAL

HOLE DESIGNATION: GPN-9

DATE COMPLETED: DECEMBER 10, 1993

DRILLING METHOD: 4 1/4" ID HSA

CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
	TOPSOIL, vegetation						
1.0	SP-SAND, trace fine and coarse gravel, fine grained, brown	-0.3					
2.0							
3.0							
4.0							
5.0							
6.0							
7.0							
8.0							
9.0	END OF HOLE • 9.0 FT. BGS	-9.0					
10.0			SCREEN A DETAILS: Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel		SCREEN B DETAILS: Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel		
11.0							
12.0							
13.0							

NOTES:

MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County

MARATHON

WI Unique Well # of
Removed Well

Hicap #

Latitude / Longitude (Degrees and Minutes)

Method Code (see instructions)

____° ____' ____" N
____° ____' ____" W

1/4 1/4 NW

1/4 NW

Section

25

Township

29 N

Range

☒ E

☐ W

or Gov't Lot #

Well Street Address

2001 N. RIVER DRIVE

Well City, Village or Town

WAUSAU

Well ZIP Code

54402-0953

Subdivision Name

Lot #

Reason For Removal From Service
NOT IN SERVICE

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well

☐ Water Well

☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)
12/09/1993

If a Well Construction Report is available,
please attach.

Construction Type:

☒ Drilled

☐ Driven (Sandpoint)

☐ Dug

☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation

☐ Bedrock

Total Well Depth From Ground Surface (ft.)

4.5 & 8.5 (NESTED)

Casing Diameter (in.)

0.5

Lower Drillhole Diameter (in.)

Casing Depth (ft.)

3.5 & 7.5

Was well annular space grouted?

☒ Yes

☐ No

☐ Unknown

If yes, to what depth (feet)?

0-2.5 & 5-6.5

Depth to Water (feet)

NOT APPLICABLE

5. Material Used To Fill Well / Drillhole

HOLE PLUG

From (ft.)

Surface

To (ft.)

4.5

No. Yards (Sacks Sealant
or Volume (circle one))

Mix Ratio or
Mud Weight

HOLE PLUG

Surface

8.5

1

6. Comments

SOIL GAS PROBE (GPN-10) TWO PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing

BOART LONGYEAR

License #

6189

Date of Filling & Sealing (mm/dd/yyyy)

09/04/2008

DNR Use Only

Date Received

Noted By

Street or Route

101 ALDERSON ST.

Telephone Number

(715) 359-7090

Comments

City

SCHOFIELD

State

WI

ZIP Code

54476

Signature of Person Doing Work

James M. [Signature]

Date Signed

6-8-09

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN)

(L-84)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GPN-10

PROJECT NO.: 3978

DATE COMPLETED: DECEMBER 9, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLICK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
							ppm
	ASPHALT	-0.3					
1.0	SP-SAND, trace silt, fine grained, brown, dry						
2.0	SM-SAND, some silt, trace coarse gravel, fine grained, brown, moist	-2.0					
3.0							
4.0							
5.0							
6.0							0
7.0	SP-SAND, fine grained with trace medium grains, light brown, moist	-7.0					
8.0							
9.0							0
	END OF HOLE • 9.0 FT. BGS	-9.0					
10.0	SCREEN A DETAILS: Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel		SCREEN B DETAILS: Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
11.0							
12.0							
13.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:		
	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
	☐ Waste Management	☐ Other: _____	

1. Well Location Information				2. Facility / Owner Information				
County MARATHON		WI Unique Well # of Removed Well _____		Facility Name _____		Facility ID (FID or PWS) 737105820		
Latitude / Longitude (Degrees and Minutes) ____° ____' ____" N ____° ____' ____" W		Method Code (see instructions) _____		License/Permit/Monitoring # _____		Original Well Owner WAUSAU CHEMICAL		
1/4 1/4 NW 1/4 NW or Gov't Lot # _____		Section 25	Township 29 N	Range ☒ E ☐ W	Present Well Owner WAUSAU CHEMCIAL		Mailing Address of Present Owner 2001 N. RIVER DRIVE	
Well Street Address 2001 N. RIVER DRIVE				City of Present Owner WAUSAU				State WI
Well City, Village or Town WAUSAU				ZIP Code 54402-0953				
Subdivision Name _____				Lot # _____				

Reason For Removal From Service NOT IN SERVICE	WI Unique Well # of Replacement Well _____
--	---

3. Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material	
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 12/08/1993	Pump and piping removed?	☐ Yes ☐ No ☒ N/A
☐ Water Well	If a Well Construction Report is available, please attach.	Liner(s) removed?	☐ Yes ☐ No ☒ N/A
☐ Borehole / Drillhole		Screen removed?	☒ Yes ☐ No ☐ N/A
Construction Type:		Casing left in place?	☐ Yes ☒ No ☐ N/A
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug		Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
☐ Other (specify): _____		Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Formation Type:		Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
☒ Unconsolidated Formation ☐ Bedrock		If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
Total Well Depth From Ground Surface (ft.) 4.5 & 8.5 (NESTED)		If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A
Casing Diameter (in.) 0.5		Required Method of Placing Sealing Material	
Lower Drillhole Diameter (in.) 3.5 & 7.5		☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped	
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown		☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____	
If yes, to what depth (feet)? 0-2.5 & 5-6.5		Sealing Materials	
Depth to Water (feet) NOT APPLICABLE		☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)	
		☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "	
		☐ Concrete ☒ Bentonite Chips	

Formation Type:		Required Method of Placing Sealing Material	
☒ Unconsolidated Formation ☐ Bedrock		☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped	
Total Well Depth From Ground Surface (ft.) 4.5 & 8.5 (NESTED)		☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____	
Casing Diameter (in.) 0.5		Sealing Materials	
Lower Drillhole Diameter (in.) 3.5 & 7.5		☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)	
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown		☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "	
If yes, to what depth (feet)? 0-2.5 & 5-6.5		☐ Concrete ☒ Bentonite Chips	
Depth to Water (feet) NOT APPLICABLE		For Monitoring Wells and Monitoring Well Boreholes Only:	
		☐ Bentonite Chips ☐ Bentonite - Cement Grout	
		☐ Granular Bentonite ☐ Bentonite - Sand Slurry	

5. Material Used To Fill Well / Drillhole		From (ft.)		To (ft.)		No. Yards (Sacks) Sealant or Volume (circle one)		Mix Ratio or Mud Weight	
HOLE PLUG		Surface		4.5					
HOLE PLUG		Surface		8.5		1			

6. Comments	
SOIL GAS PROBE (GPN-11) TWO PROBES NESTED IN SAME BOREHOLE	

7. Supervision of Work		DNR Use Only	
Name of Person or Firm Doing Filling & Sealing BOART LONGYEAR	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 09/04/2008	Date Received _____
Street or Route 101 ALDERSON ST.		Telephone Number (715) 359-7090	Noted By _____
City SCHOFIELD		Signature of Person Doing Work <i>[Signature]</i>	Comments _____
State WI		ZIP Code 54476	Date Signed 6-8-09

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN)

(L-85)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GPN-11

PROJECT NO.: 3978

DATE COMPLETED: DECEMBER 8, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
1.0	ASPHALT	-0.3					
2.0	SP-SAND, trace fine and coarse gravel, fine grained, light brown, moist						
3.0							
4.0							
5.0							0
6.0							
7.0							
8.0							
9.0	END OF HOLE • 9.0 FT. BGS	-9.0					0
10.0			<u>SCREEN A DETAILS:</u> Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel				
11.0			<u>SCREEN B DETAILS:</u> Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
12.0							
13.0							

NOTES:

MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ○

WATER FOUND ∇

STATIC WATER LEVEL ▼

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:		
	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
	☐ Waste Management	☐ Other: _____	

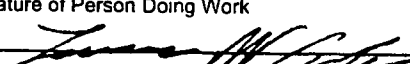
1. Well Location Information				2. Facility / Owner Information			
County MARATHON		WI Unique Well # of Removed Well _____		Hicap # _____		Facility Name _____	
Latitude / Longitude (Degrees and Minutes) ____ ° ____ ' N ____ ° ____ ' W		Method Code (see instructions) _____		Facility ID (FID or PWS) 737105820		License/Permit/Monitoring # _____	
1/4 1/4 NW 1/4 NW or Gov't Lot #		Section 25	Township 29 N	Range ☒ E ☐ W	Original Well Owner WAUSAU CHEMICAL		
Well Street Address 2001 N. RIVER DRIVE				Present Well Owner WAUSAU CHEMCIAL			
Well City, Village or Town WAUSAU				Mailing Address of Present Owner 2001 N. RIVER DRIVE			
Subdivision Name _____				City of Present Owner WAUSAU		State WI	ZIP Code 54402-0953

Reason For Removal From Service NOT IN SERVICE	WI Unique Well # of Replacement Well _____
--	---

3. Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material	
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 12/10/1993	Pump and piping removed?	☐ Yes ☐ No ☒ N/A
☐ Water Well	If a Well Construction Report is available, please attach. _____	Liner(s) removed?	☐ Yes ☐ No ☒ N/A
☐ Borehole / Drillhole		Screen removed?	☒ Yes ☐ No ☐ N/A
Construction Type:		Casing left in place?	☐ Yes ☒ No ☐ N/A
☒ Drilled	☐ Driven (Sandpoint)	Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
☐ Other (specify): _____	☐ Dug	Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Formation Type:		Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
☒ Unconsolidated Formation	☐ Bedrock	If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
Total Well Depth From Ground Surface (ft.) 4.5 & 8.5 (NESTED)	Casing Diameter (in.) 0.5	If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A
Lower Drillhole Diameter (in.) _____	Casing Depth (ft.) 3.5 & 7.5	Required Method of Placing Sealing Material	
Was well annular space grouted?	☒ Yes ☐ No ☐ Unknown	☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped	
If yes, to what depth (feet)? 0-2.5 & 5-6.5	Depth to Water (feet) NOT APPLICABLE	☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____	

5. Material Used To Fill Well / Drillhole		Sealing Materials	
HOLE PLUG	From (ft.) Surface	To (ft.) 4.5	No. Yards (Sacks) Sealant or Volume (circle one) 0.5
HOLE PLUG	Surface	8.5	0.5

6. Comments			
SOIL GAS PROBE (GPN-12) TWO PROBES NESTED IN SAME BOREHOLE			

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing BOART LONGYEAR		License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 09/03/2008	Date Received	Noted By
Street or Route 101 ALDERSON ST.		Telephone Number (715) 359-7090		Comments	
City SCHOFIELD	State WI	ZIP Code 54476	Signature of Person Doing Work 	Date Signed 6-8-09	

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

(L-86)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GPN-12

PROJECT NO.: 3978

DATE COMPLETED: DECEMBER 10, 1993

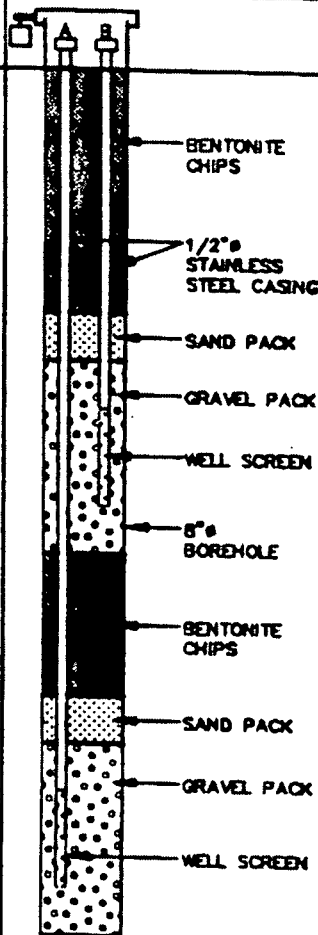
CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
	TOPSOIL, sand, vegetation	-0.2					
1.0	SM-SAND, little silt, trace coarse gravel, fine grained, brown, moist						
2.0							
3.0							
4.0							
5.0							
6.0							
7.0							
8.0							
9.0	END OF HOLE • 9.0 FT. BGS	-9.0					
10.0							
11.0							
12.0							
13.0							



SCREEN A DETAILS:

Screened Interval:
7.5 to 8.5' BGS
Length -1.0'
Diameter -1/2"
Slot # Drilled 3/32"
Holes-1/2" on Center
Material -Stainless Steel
Sand pack interval:
7.0 to 9.0' BGS
Material -Pea Gravel

SCREEN B DETAILS:

Screened Interval:
3.5 to 4.5' BGS
Length -1.0'
Diameter -1/2"
Slot # Drilled 3/32"
Holes-1/2" on Center
Material -Stainless Steel
Sand pack interval:
3.0 to 5.0' BGS
Material -Pea Gravel

NOTES:

MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County

MARATHON

WI Unique Well # of
Removed Well

Hicap #

Latitude / Longitude (Degrees and Minutes)

Method Code (see instructions)

____° ____' ____" N
____° ____' ____" W

1/4 1/4 NW

1/4 NW

Section

25

Township

29 N

Range

1 E

☒ E
☐ W

or Gov't Lot #

Well Street Address

2001 N. RIVER DRIVE

Well City, Village or Town

WAUSAU

Well ZIP Code

54402-0953

Subdivision Name

Lot #

Reason For Removal From Service
NOT IN SERVICE

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well

☐ Water Well

☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)
12/09/1993

If a Well Construction Report is available,
please attach.

Construction Type:

☒ Drilled

☐ Driven (Sandpoint)

☐ Dug

☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation

☐ Bedrock

Total Well Depth From Ground Surface (ft.)
4.5 & 8.5 (NESTED)

Casing Diameter (in.)
0.5

Lower Drillhole Diameter (in.)

Casing Depth (ft.)
3.5 & 7.5

Was well annular space grouted?

☒ Yes

☐ No

☐ Unknown

If yes, to what depth (feet)?

0-2.5 & 5-6.5

Depth to Water (feet)

NOT APPLICABLE

5. Material Used To Fill Well / Drillhole

HOLE PLUG

HOLE PLUG

From (ft.)	To (ft.)	No. Yards (Sacks Sealant or Volume (Circle one))	Mix Ratio or Mud Weight
Surface	4.5		
Surface	8.5	0.5	

6. Comments

SOIL GAS PROBE (GPN-13) TWO PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing

BOART LONGYEAR

License #

6189

Date of Filling & Sealing (mm/dd/yyyy)

09/04/2008

Street or Route

101 ALDERSON ST.

Telephone Number

(715) 359-7090

City

SCHOFIELD

State

WI

ZIP Code

54476

Signature of Person Doing Work

Date Signed

6-8-09

DNR Use Only

Date Received

Noted By

Comments

(L-87)

HOLE DESIGNATION: GPN-13

DATE COMPLETED: DECEMBER 9, 1993

DRILLING METHOD: 4 1/4" ID HSA

CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
	ASPHALT						
	SP-SAND, trace silt, trace coarse gravel, fine grained, light brown, moist	-0.3					
1.0							
2.0							
3.0							
4.0							
5.0							
6.0							
7.0							
8.0							
9.0	END OF HOLE ● 9.0 FT. BGS	-9.0					
10.0			<u>SCREEN A DETAILS:</u> Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel				
11.0			<u>SCREEN B DETAILS:</u> Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
12.0							
13.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ○ WATER FOUND ∇ STATIC WATER LEVEL ▼

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County **MARATHON** WI Unique Well # of Removed Well _____ Hicap # _____

Latitude / Longitude (Degrees and Minutes) _____ Method Code (see instructions) _____

_____' N
_____' W

1/4 1/4 NW 1/4 NW Section **25** Township **29** Range ☒ E ☐ W
or Gov't Lot # _____

Well Street Address
2001 N. RIVER DRIVE

Well City, Village or Town **WAUSAU** Well ZIP Code **54402-0953**

Subdivision Name _____ Lot # _____

Reason For Removal From Service **NOT IN SERVICE** WI Unique Well # of Replacement Well _____

3. Well / Drillhole / Borehole Information

- ☐ Monitoring Well
☐ Water Well
☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)
12/10/1993

If a Well Construction Report is available, please attach.

Construction Type:

- ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:

- ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.) **4.5 & 8.5 (NESTED)** Casing Diameter (in.) **0.5**

Lower Drillhole Diameter (in.) _____ Casing Depth (ft.) **3.5 & 7.5**

Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)? **0-2.5 & 5-6.5** Depth to Water (feet) **NOT APPLICABLE**

5. Material Used To Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks, Sealant or Volume (circle one)	Mix Ratio or Mud Weight
HOLE PLUG	Surface	4.5		
HOLE PLUG	Surface	8.5	3	

6. Comments

SOIL GAS PROBE (GPN-14) TWO PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing BOART LONGYEAR		License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 09/04/2008	DNR Use Only	
Street or Route 101 ALDERSON ST.		Telephone Number (715) 359-7090		Date Received	Noted By
City SCHOFIELD	State WI	ZIP Code 54476	Signature of Person Doing Work <i>James M. Longyear</i>		Date Signed 6-8-09

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN)

(L-88)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

HOLE DESIGNATION: GPN-14

PROJECT NO.: 3978

DATE COMPLETED: DECEMBER 10, 1993

CLIENT: WAUSAU PRP GROUP

DRILLING METHOD: 4 1/4" ID HSA

LOCATION: WAUSAU CHEMICAL

CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
	TOPSOIL, sand, vegetation						
	SM-SAND, some silt, fine grained, brown, moist	-0.3					
-1.0							
-2.0	SP-SAND, trace silt, very fine grained, light brown, moist	-2.0					
-3.0							
-4.0							
-5.0							0
-6.0							
-7.0							
-8.0							
-9.0	END OF HOLE ● 9.0 FT. BGS	-9.0					0
-10.0			SCREEN A DETAILS: Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel				
-11.0			SCREEN B DETAILS: Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
-12.0							
-13.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County

MARATHON

WI Unique Well # of
Removed Well

Hicap #

Latitude / Longitude (Degrees and Minutes)

Method Code (see instructions)

_____' N
_____' W

1/4 NW
or Gov't Lot #

1/4 NW

Section

25

Township

29

Range

N

☒ E
☐ W

Well Street Address

2001 N. RIVER DRIVE

Well City, Village or Town

WAUSAU

Well ZIP Code

54402-0953

Subdivision Name

Lot #

Reason For Removal From Service
NOT IN SERVICE

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well

☐ Water Well

☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)
12/13/1993

If a Well Construction Report is available,
please attach.

Construction Type:

☒ Drilled

☐ Driven (Sandpoint)

☐ Dug

☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation

☐ Bedrock

Total Well Depth From Ground Surface (ft.)

4.5, 8.5 & 11.5 (NESTED)

Casing Diameter (in.)

0.5

Lower Drillhole Diameter (in.)

Casing Depth (ft.)

3.5, 7.5 & 10.5

Was well annular space grouted?

☒ Yes

☐ No

☐ Unknown

If yes, to what depth (feet)?

0-2.5, 5-6.5, 8.5-9.5

Depth to Water (feet)

NOT APPLICABLE

5. Material Used To Fill Well / Drillhole

HOLE PLUG

HOLE PLUG

HOLE PLUG

From (ft.)

To (ft.)

No. Yards (Sacks Sealant
or Volume (circle one))

Mix Ratio or
Mud Weight

Surface

4.5

Surface

8.5

Surface

11.5

0.5

6. Comments

SOIL GAS PROBE (GPN-15) THREE PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing

BOART LONGYEAR

License #

6189

Date of Filling & Sealing (mm/dd/yyyy)

09/04/2008

DNR Use Only

Date Received

Noted By

Street or Route

101 ALDERSON ST.

Telephone Number

(715) 359-7090

Comments

City

SCHOFIELD

State

WI

ZIP Code

54476

Signature of Person Doing Work

Date Signed

6-8-09

STRATIGRAPHIC AND INSTRUMENTATION I (OVERBURDEN)

(L-89)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

PROJECT NO.: 3978

CLIENT: WAUSAU PRP GROUP

LOCATION: WAUSAU CHEMICAL

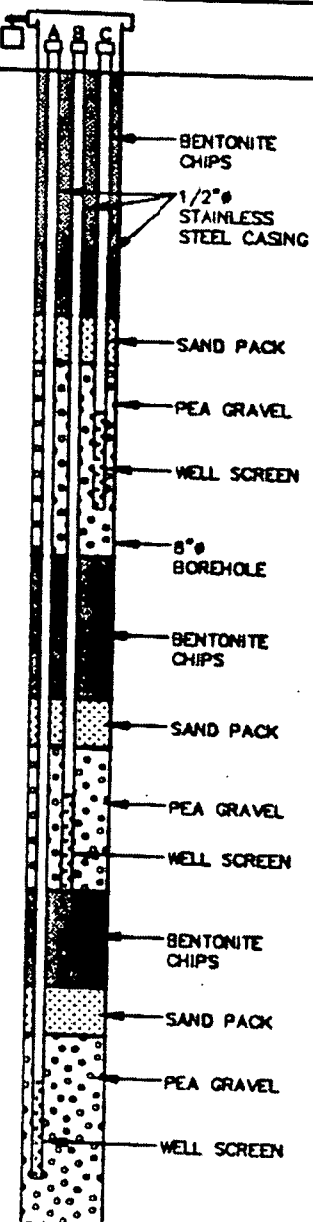
HOLE DESIGNATION: GPN-15

(Page 1 of 2)

DATE COMPLETED: DECEMBER 13, 1993

DRILLING METHOD: 4 1/4" ID HSA

CRA SUPERVISOR: M. PHILLIPS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
1.0	GRANITE, highly fractured, red	-0.3	 BENTONITE CHIPS 1/2" STAINLESS STEEL CASING SAND PACK PEA GRAVEL WELL SCREEN 8" BOREHOLE BENTONITE CHIPS SAND PACK PEA GRAVEL WELL SCREEN BENTONITE CHIPS SAND PACK PEA GRAVEL WELL SCREEN				
2.0	SP-SAND(3M FILL), very fine grained, gray, moist						
3.0							
4.0							
5.0							
6.0							
7.0							
8.0	- little fine gravel	-12.0					
9.0							
10.0							
11.0							
12.0	END OF HOLE @ 12.0 FT. BGS						
13.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS  WATER FOUND  STATIC WATER LEVEL 

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN) 3

(L-89)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

PROJECT NO.: 3978

CLIENT: WAUSAU PRP GROUP

LOCATION: WAUSAU CHEMICAL

HOLE DESIGNATION: GPN-15
(Page 2 of 2)
DATE COMPLETED: DECEMBER 13, 1993

DRILLING METHOD: 4 1/4" ID HSA

CRA SUPERVISOR: M. PHILLIPS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
14.0			<u>SCREEN A DETAILS:</u> Screened Interval: 10.5 to 11.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 10.0 to 12.0' BGS Material -Pea Gravel <u>SCREEN B DETAILS:</u> Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 8.5' BGS Material -Pea Gravel <u>SCREEN C DETAILS:</u> Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
15.0							
16.0							
17.0							
18.0							
19.0							
20.0							
21.0							
22.0							
23.0							
24.0							
25.0							
26.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS  WATER FOUND  STATIC WATER LEVEL 

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County MARATHON	WI Unique Well # of Removed Well _____	Hicap # _____
Latitude / Longitude (Degrees and Minutes) ____ ° ____ ' N ____ ° ____ ' W		Method Code (see instructions) _____
1/4 1/4 NW or Gov't Lot #	1/4 NW Section 25	Township 29 N
Well Street Address 2001 N. RIVER DRIVE		Range ☒ E ☐ W
Well City, Village or Town WAUSAU		Well ZIP Code 54402-0953
Subdivision Name _____		Lot # _____

2. Facility / Owner Information

Facility Name _____		
Facility ID (FID or PWS) 737105820		
License/Permit/Monitoring # _____		
Original Well Owner WAUSAU CHEMICAL		
Present Well Owner WAUSAU CHEMCIAL		
Mailing Address of Present Owner 2001 N. RIVER DRIVE		
City of Present Owner WAUSAU	State WI	ZIP Code 54402-0953

Reason For Removal From Service
NOT IN SERVICE

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 12/13/1993
☐ Water Well	
☐ Borehole / Drillhole	
If a Well Construction Report is available, please attach. _____	

Construction Type:

☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.) Casing Diameter (in.)

4.5, 8.5 & 11.5 (NESTED)

0.5

Lower Drillhole Diameter (in.)

Casing Depth (ft.)

3.5, 7.5 & 10.5

Was well annular space grouted?

☒ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?

Depth to Water (feet)

0-2.5, 5-6.5, 8.5-9.5 NOT APPLICABLE

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes ☐ No ☒ N/A
Liner(s) removed?	☐ Yes ☐ No ☒ N/A
Screen removed?	☒ Yes ☐ No ☐ N/A
Casing left in place?	☐ Yes ☒ No ☐ N/A
Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials

☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards (Sacks) Sealant or Volume (Circle one)	Mix Ratio or Mud Weight
HOLE PLUG	Surface	4.5	
HOLE PLUG	Surface	8.5	
HOLE PLUG	Surface	11.5	0.5

6. Comments

SOIL GAS PROBE (GPN-16) THREE PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing BOART LONGYEAR	License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 09/04/2008	DNR Use Only	
Street or Route 101 ALDERSON ST.			Telephone Number (715) 359-7090	Date Received ____
City SCHOFIELD			State WI	Noted By ____
ZIP Code 54476			Signature of Person Doing Work <i>James M. Longyear</i>	Date Signed 6-8-09

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

(L-90)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE
 PROJECT NO.: 3978
 CLIENT: WAUSAU PRP GROUP
 LOCATION: WAUSAU CHEMICAL

HOLE DESIGNATION: GPN-16
 (Page 1 of 2)
 DATE COMPLETED: DECEMBER 13, 1993
 DRILLING METHOD: 4 1/4" ID HSA
 140lb HAMMER
 CRA SUPERVISOR: P. KLICK/M. PHILLIPS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
1.0	SP-SAND(FILL), little fine gravel, fine grained, brown	-0.5		1SS		7	
2.0	SP-SAND(3M FILL), very fine grained, gray			2SS		7	
3.0	- trace fine gravel, fine grained, brown and gray						
4.0							
5.0							
6.0	- brown			3SS		77	
7.0							
8.0				4SS		>100	
9.0	ML-SILT, little clay, trace fine gravel, black, roots	-8.3					
10.0				5SS		20	
11.0							
12.0	END OF HOLE • 12.0 FT. BGS	-12.0					
13.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
 CHEMICAL ANALYSIS WATER FOUND STATIC WATER LEVEL

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN)

(L-90)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

PROJECT NO.: 3978

CLIENT: WAUSAU PRP GROUP

LOCATION: WAUSAU CHEMICAL

HOLE DESIGNATION: GPN-16
(Page 2 of 2)

DATE COMPLETED: DECEMBER 13, 1993

DRILLING METHOD: 4 1/4" ID HSA

CRA SUPERVISOR: P. KLICK/M. PHILLIPS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
14.0			<u>SCREEN A DETAILS:</u> Screened Interval: 10.5 to 11.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 10.5 to 12.0' BGS Material -Pea Gravel <u>SCREEN B DETAILS:</u> Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel <u>SCREEN C DETAILS:</u> Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
15.0							
16.0							
17.0							
18.0							
19.0							
20.0							
21.0							
22.0							
23.0							
24.0							
25.0							
26.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal

Route to:

☐ Drinking Water

☐ Watershed/Wastewater

☒ Remediation/Redevelopment

☐ Waste Management

☐ Other: _____

1. Well Location Information

County

MARATHON

WI Unique Well # of
Removed Well

Hicap #

Latitude / Longitude (Degrees and Minutes)

Method Code (see instructions)

____ ° ____ ' N
____ ° ____ ' W

1/4 NW

1/4 NW

Section

25

Township

29 N

Range

☒ E

☐ W

Well Street Address

2001 N. RIVER DRIVE

Well City, Village or Town

WAUSAU

Well ZIP Code

54402-0953

Subdivision Name

Lot #

2. Facility / Owner Information

Facility Name

Facility ID (FID or PWS)

737105820

License/Permit/Monitoring #

Original Well Owner

WAUSAU CHEMICAL

Present Well Owner

WAUSAU CHEMICAL

Mailing Address of Present Owner

2001 N. RIVER DRIVE

City of Present Owner

WAUSAU

State

WI

ZIP Code

54402-0953

Reason For Removal From Service

NOT IN SERVICE

WI Unique Well # of Replacement Well

3. Well / Drillhole / Borehole Information

☐ Monitoring Well

☐ Water Well

☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy)

12/10/1993

If a Well Construction Report is available;
please attach.

Construction Type:

☒ Drilled

☐ Driven (Sandpoint)

☐ Dug

☐ Other (specify): _____

Formation Type:

☒ Unconsolidated Formation

☐ Bedrock

Total Well Depth From Ground Surface (ft.)

4.5 & 8.5 (NESTED)

Casing Diameter (in.)

0.5

Lower Drillhole Diameter (in.)

Casing Depth (ft.)

3.5 & 7.5

Was well annular space grouted?

☒ Yes

☐ No

☐ Unknown

If yes, to what depth (feet)?

0-2.5 & 5-6.5

Depth to Water (feet)

NOT APPLICABLE

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?

☐ Yes

☐ No

☒ N/A

Liner(s) removed?

☐ Yes

☐ No

☒ N/A

Screen removed?

☒ Yes

☐ No

☐ N/A

Casing left in place?

☐ Yes

☒ No

☐ N/A

Was casing cut off below surface?

☐ Yes

☐ No

☒ N/A

Did sealing material rise to surface?

☒ Yes

☐ No

☐ N/A

Did material settle after 24 hours?

☐ Yes

☒ No

☐ N/A

If yes, was hole retopped?

☐ Yes

☐ No

☒ N/A

If bentonite chips were used, were they hydrated
with water from a known safe source?

☒ Yes

☐ No

☐ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity

☐ Conductor Pipe-Pumped

☒ Screened & Poured
(Bentonite Chips)

☐ Other (Explain): _____

Sealing Materials

☐ Neat Cement Grout

☐ Clay-Sand Slurry (11 lb./gal. wt.)

☐ Sand-Cement (Concrete) Grout

☐ Bentonite-Sand Slurry "

☐ Concrete

☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☐ Bentonite Chips

☐ Bentonite - Cement Grout

☐ Granular Bentonite

☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

HOLE PLUG

From (ft.)

Surface

To (ft.)

4.5

No. Yards (Sacks) Sealant
or Volume (circle one)

0.25

Mix Ratio or
Mud Weight

HOLE PLUG

Surface

8.5

6. Comments

SOIL GAS PROBE (GPN-17) TWO PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing

BOART LONGYEAR

License #

6189

Date of Filling & Sealing (mm/dd/yyyy)

09/03/2008

DNR Use Only

Date Received

Noted By

Street or Route

101 ALDERSON ST.

Telephone Number

(715) 359-7090

Comments

City

SCHOFIELD

State

WI

ZIP Code

54476

Signature of Person Doing Work

[Signature]

Date Signed

6-8-09

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN)

(L-91)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE
 PROJECT NO.: 3978
 CLIENT: WAUSAU PRP GROUP
 LOCATION: WAUSAU CHEMICAL

HOLE DESIGNATION: GPN-17
 DATE COMPLETED: DECEMBER 10, 1993
 DRILLING METHOD: 4 1/4" ID HSA
 CRA SUPERVISOR: P. KLICK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID
1.0	TOPSOIL, sand, vegetation	-0.2	Labels in diagram: BENTONITE CHIPS 1/2" STAINLESS STEEL CASING SAND PACK GRAVEL PACK WELL SCREEN 6" BOREHOLE BENTONITE CHIPS SAND PACK GRAVEL PACK WELL SCREEN				
2.0	SP-SAND, trace silt, little fine gravel, fine grained, brown, moist						
3.0							
4.0							
5.0							0
6.0							0
7.0							
8.0							
9.0	END OF HOLE ● 9.0 FT. BGS	-9.0					0
10.0			SCREEN A DETAILS: Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel				
11.0			SCREEN B DETAILS: Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
12.0							
13.0							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
 CHEMICAL ANALYSIS ○ WATER FOUND ∇ STATIC WATER LEVEL ▼

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:		
	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
	☐ Waste Management	☐ Other: _____	

1. Well Location Information				2. Facility / Owner Information			
County MARATHON		WI Unique Well # of Removed Well _____		Hicap # _____		Facility Name _____	
Latitude / Longitude (Degrees and Minutes) ____° ____' ____" N ____° ____' ____" W				Facility ID (FID or PWS) 737105820			
Method Code (see instructions) _____				License/Permit/Monitoring # _____			
1/4 NW 1/4 NW or Gov't Lot #		Section 25	Township 29 N	Range ☒ E ☐ W	Original Well Owner WAUSAU CHEMICAL		
Well Street Address 2001 N. RIVER DRIVE					Present Well Owner WAUSAU CHEMCIAL		
Well City, Village or Town WAUSAU					Mailing Address of Present Owner 2001 N. RIVER DRIVE		
Subdivision Name _____					City of Present Owner WAUSAU	State WI	ZIP Code 54402-0953

Reason For Removal From Service NOT IN SERVICE	WI Unique Well # of Replacement Well _____
--	---

3. Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material	
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 12/09/1993	Pump and piping removed?	☐ Yes ☐ No ☒ N/A
☐ Water Well	If a Well Construction Report is available, please attach. _____	Liner(s) removed?	☐ Yes ☐ No ☒ N/A
☐ Borehole / Drillhole		Screen removed?	☒ Yes ☐ No ☐ N/A
Construction Type:		Casing left in place?	☐ Yes ☒ No ☐ N/A
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug		Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
☐ Other (specify): _____		Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Formation Type:		Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
☒ Unconsolidated Formation ☐ Bedrock		If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
Total Well Depth From Ground Surface (ft.) 4.5 & 8.5 (NESTED)		If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A
Casing Diameter (in.) 0.5		Required Method of Placing Sealing Material	
Lower Drillhole Diameter (in.) _____		☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped	
Casing Depth (ft.) 3.5 & 7.5		☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____	
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown		Sealing Materials	
If yes, to what depth (feet)? 0-2.5 & 5-6.5		☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)	
Depth to Water (feet) NOT APPLICABLE		☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "	
		☐ Concrete ☒ Bentonite Chips	

5. Material Used To Fill Well / Drillhole			
HOLE PLUG	From (ft.)	To (ft.)	No. Yards (Sacks) Sealant or Volume (Circle one)
HOLE PLUG	Surface	4.5	
	Surface	8.5	0.5

6. Comments			
SOIL GAS PROBE (GPN-18) TWO PROBES NESTED IN SAME BOREHOLE			

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing BOART LONGYEAR		License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 09/04/2008	Date Received	Noted By
Street or Route 101 ALDERSON ST.		Telephone Number (715) 359-7090		Comments	
City SCHOFIELD	State WI	ZIP Code 54476	Signature of Person Doing Work <i>James M. Longyear</i>	Date Signed 6-8-09	

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN)

(L-92)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

PROJECT NO.: 3978

CLIENT: WAUSAU PRP GROUP

LOCATION: WAUSAU CHEMICAL

HOLE DESIGNATION: GPN-18

DATE COMPLETED: DECEMBER 9, 1993

DRILLING METHOD: 4 1/4" ID HSA

CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
1.0	ASPHALT SP-SAND, trace silt, trace fine and coarse gravel, fine grained, brown, moist	-0.3					
2.0							
3.0							
4.0							
5.0							0
6.0							
7.0							
8.0							
9.0	END OF HOLE • 9.0 FT. BGS	-9.0					0
10.0			SCREEN A DETAILS: Screened Interval: 7.5 to 8.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 7.0 to 9.0' BGS Material -Pea Gravel				
11.0			SCREEN B DETAILS: Screened Interval: 3.5 to 4.5' BGS Length -1.0' Diameter -1/2" Slot # Drilled 3/32" Holes-1/2" on Center Material -Stainless Steel Sand pack interval: 3.0 to 5.0' BGS Material -Pea Gravel				
12.0							
13.0							

NOTES:

MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL



Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ Verification Only of Fill and Seal	Route to:		
	☐ Drinking Water	☐ Watershed/Wastewater	☒ Remediation/Redevelopment
	☐ Waste Management	☐ Other: _____	

1. Well Location Information				2. Facility / Owner Information			
County MARATHON		WI Unique Well # of Removed Well _____		Hicap # _____		Facility Name _____	
Latitude / Longitude (Degrees and Minutes) ____° ____' ____" N ____° ____' ____" W		Method Code (see instructions) _____		Facility ID (FID or PWS) 737105820		License/Permit/Monitoring # _____	
1/4 NW 1/4 NW or Gov't Lot #		Section 25	Township 29 N	Range ☒ E ☐ W	Original Well Owner WAUSAU CHEMICAL		
Well Street Address 2001 N. RIVER DRIVE				Present Well Owner WAUSAU CHEMCIAL			
Well City, Village or Town WAUSAU				Mailing Address of Present Owner 2001 N. RIVER DRIVE			
Subdivision Name _____				City of Present Owner WAUSAU	State WI	ZIP Code 54402-0953	

Reason For Removal From Service NOT IN SERVICE	WI Unique Well # of Replacement Well _____
--	---

3. Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material	
☐ Monitoring Well	Original Construction Date (mm/dd/yyyy) 12/09/1993	Pump and piping removed?	☐ Yes ☐ No ☒ N/A
☐ Water Well	If a Well Construction Report is available, please attach.	Liner(s) removed?	☐ Yes ☐ No ☒ N/A
☐ Borehole / Drillhole		Screen removed?	☒ Yes ☐ No ☐ N/A
Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____		Casing left in place?	☐ Yes ☒ No ☐ N/A
Formation Type: ☒ Unconsolidated Formation ☐ Bedrock		Was casing cut off below surface?	☐ Yes ☐ No ☒ N/A
Total Well Depth From Ground Surface (ft.) 4.5 & 8.5 (NESTED)		Did sealing material rise to surface?	☒ Yes ☐ No ☐ N/A
Lower Drillhole Diameter (in.) _____		Did material settle after 24 hours?	☐ Yes ☒ No ☐ N/A
Casing Depth (ft.) 3.5 & 7.5		If yes, was hole retopped?	☐ Yes ☐ No ☒ N/A
Was well annular space grouted? ☒ Yes ☐ No ☐ Unknown		If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes ☐ No ☐ N/A
If yes, to what depth (feet)? 0-2.5 & 5-6.5		Required Method of Placing Sealing Material	
Depth to Water (feet) NOT APPLICABLE		☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____	

Sealing Materials	
☐ Neat Cement Grout	☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout	☐ Bentonite-Sand Slurry " "
☐ Concrete	☒ Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	
☐ Bentonite Chips	☐ Bentonite - Cement Grout
☐ Granular Bentonite	☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole		From (ft.)	To (ft.)	No. Yards (Sacks Sealant or Volume (circle one))	Mix Ratio or Mud Weight
HOLE PLUG		Surface	4.5		
HOLE PLUG		Surface	8.5	1	

6. Comments
SOIL GAS PROBE (GPN-19) TWO PROBES NESTED IN SAME BOREHOLE

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing BOART LONGYEAR		License # 6189	Date of Filling & Sealing (mm/dd/yyyy) 09/04/2008	Date Received	Noted By
Street or Route 101 ALDERSON ST.		Telephone Number (715) 359-7090		Comments	
City SCHOFIELD	State WI	ZIP Code 54476	Signature of Person Doing Work <i>[Signature]</i>	Date Signed 6-8-09	

STRATIGRAPHIC AND INSTRUMENTATION (OVERBURDEN)

(L-93)

PROJECT NAME: WAUSAU WATER SUPPLY NPL SITE

PROJECT NO.: 3978

CLIENT: WAUSAU PRP GROUP

LOCATION: WAUSAU CHEMICAL

HOLE DESIGNATION: GPN-19

DATE COMPLETED: DECEMBER 9, 1993

DRILLING METHOD: 4 1/4" ID HSA

CRA SUPERVISOR: P. KLINK

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEVATION ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	STATE	VALUE	PID (ppm)
1.0	SP-SAND, some fine gravel, trace silt, fine grained, brown, moist		BENTONITE CHIPS 1/2" STAINLESS STEEL CASING SAND PACK GRAVEL PACK WELL SCREEN 8" BOREHOLE BENTONITE CHIPS SAND PACK GRAVEL PACK WELL SCREEN				
2.0							
3.0							
4.0							
5.0							
6.0							
7.0							
8.0							
9.0	END OF HOLE ● 9.0 FT. BGS	-9.0					
10.0							
11.0							
12.0							
13.0							

SCREEN A DETAILS:

Screens Interval:
7.5 to 8.5' BGS
Length -1.0'
Diameter -1/2"
Slot # Drilled 3/32"
Holes-1/2" on Center
Material -Stainless Steel
Sand pack interval:
7.0 to 9.0' BGS
Material -Pea Gravel

SCREEN B DETAILS:

Screens Interval:
3.5 to 4.5' BGS
Length -1.0'
Diameter -1/2"
Slot # Drilled 3/32"
Holes-1/2" on Center
Material -Stainless Steel
Sand pack interval:
3.0 to 5.0' BGS
Material -Pea Gravel

NOTES:

MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



WATER FOUND



STATIC WATER LEVEL

