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PRELIIMINARY ASSESSMENT

QUIC FREZ SITE

City of Fond du Lac, Fond du Lac County, Wisconsin DNR

EPA ID #WIN 000508296

November 10, 2003

WISCONSIN DEPARTMENT OF NATURAL RESOURCES NORTHEAST REGION

Prepared by

Reviewed by

Approved by

Mike Netzer, & te Assess.

Coordinator (Report repared for Jenny Pelczar,

Project Manager)

John Burnett, Waste Mgmt. Laura Ripley, EPA

Specialist

Early Action Project

Manager



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor Scott Hassett, Secretary 101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
Telephone 608-266-2621
FAX 608-267-3579
TTY 608-267-6897

November 18, 2003

Laura Ripley, Early Action Proj. Mgr, SE J4 U.S. Environmental Protection Agency 77 W. Jackson Blvd. Chicago, IL 60604

Subject: QuicFrez Preliminary Assessment Report, City of Fond du Lac, Fond du Lac County, WI., EPA ID# 000508296

Dear Ms. Ripley:

This letter serves as a transmittal letter for, a) the Transmittal Memorandum, b) the Summary Scoresheet and, 3) the Preliminary Assessment report. Two copies of the signature page has been included. Upon completion of your review and our incorporation of any comments you might have, please sign both pages and return one directly to me. As always, if you have any questions about the report, please feel free to contact me at (608) 264 - 6008.

Sincerely,

Mike Netzer, P.G., Hydrogeologist

Waste Management Specialist

Remediation & Redevelopment Program

CC: Jennifer Pelczar-NER, Oshkosh

Bruce Urben - NER, Green Bay

Mark Gordon - CO



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REFERENCES

NOTE: The reports listed in this reference section are numerous and in most instances they are large reports so they are not included herein. The cover page for each reference accompanies this report. A complete copy of the reports can be found at the Wisconsin Department of Natural Resources (WDNR) Northeast Region offices in Oshkosh and Green Bay (Lombardi Street office) or at the Central Office in Madison, Wisconsin.

- 1. "Phase I and II Environmental Site Assessment, *Quickfrez Complex*", Miller Engineers Scientists, February 4, 1997.
- 2. Census 2000 TIGER/Line files, U.S. Census Bureau, October 2001.
- 3. WDNR Notification of Contamination Letter, February 28, 1997.
- 4. "Remedial Investigation/Remedial Action Plan Report", Miller Engineers Scientists, September 30, 1999.
- 5. "A Resolution Of Necessity Relating To The Condemnation Of The Quick Freeze Property", City of Fond du Lac Resolution No.7201, September 28, 2000.
- 6. "Workplan Emergency Action/Site Investigation, *Quicfrez Complex*", Miller Engineers Scientists, December 11, 2001.
- 7. FAX Transmittal of Soil Testing Results From Miller Engineers Scientists to WDNR and Request for Meeting, December 19, 2001.
- 8. "Revised Workplan and Schedule Site Investigation/Emergency Action, *Quicfrez Complex*", Miller Engineers Scientists, February 22, 2002.
- 9. U.S. Environmental Protection Agency Pollution Report #1, March 5, 2002.
- 10. WDNR to U.S. EPA "Request for Removal Assistance" Letter, March 6, 2002
- 11. U.S. Environmental Protection Agency Pollution Report #2, March 25, 2002.
- 12. U.S. Environmental Protection Agency Pollution Report #3 (Final), May 22, 2002.
- 13. "Removal Actions Summary Report", TN & Associates, Inc., July 8 2002
- 14. "Remedial Action Options Report Former Quickfrez Site", Miller Engineers Scientists, December 13, 2002.
- 15. "Exploration for Tank Southwest Petroleum Area, Former Quickfrez Complex", Miller Engineers Scientists, January 31, 2003.
- 16. "Site Investigation Report Former Quicfrez Site, Miller Engineers Scientists, July 23, 2003.

FIGURES

Figure 1 - Regional Site Location Map

Figure 2 - Specific Site Location Map

Figure 3 - Darlings Subdivision Map

Figure 4 - Building Location Map

Figure 5 - Boring and Monitoring Well Location Map

Figure 6 - Municipal Water Supply Location Map

Figure 7 - Geologic Cross Section

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Appendix A: Site Photos 1 through 8

Appendix B: Boring Logs and Well Construction Reports

Appendix C: 4 - Mile Radius Map

1.0 INTRODUCTION

Note: The formal spelling of the site that is the subject of this report is Quic Frez which is as it is listed in CERCLIS. The way the site name is spelled in different reports or documents through time could be Quick Freeze or Quicfrez or other minor variations. The titles of reports referenced herein are as they were prepared-they were not altered to reflect the CERCLIS name for the site (Quic Frez).

Under authority of the Comprehensive Environmental Response Compensation Liability Act of 1980 (CERCLA), and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Wisconsin Department of Natural Resources (WDNR) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a Preliminary Assessment (PA) at the Quic Frez Site (Quic Frez) as part of the FY '03 Cooperative Agreement. The purpose of this assessment was to collect information concerning the conditions at Quick Frez sufficient to assess the threat posed to human health and the environment and to determine the need for additional CERCLA/SARA or other appropriate action. The scope of the assessment included a review of available file information including a comprehensive target survey and the results of on and of - site reconnaissance efforts.

2.0 SITE DESCRIPTION AND SITE CHARACTERISTICS

2.1 Site Location

Quic Frez is part of a 4.1 acre parcel of land located in part of section 15, T15N, R17E, City of Fond du Lac in Fond du Lac County, Wisconsin. The regional location of the site is shown on Figure 1. A more specific site location is shown on Figure 2. The site address 105 Oak Place in the City of Fond du Lac and includes lots 6 through 18, Darlings Subdivision Block R, Original Plat of the City of Fond du Lac (Reference 1, Figure 3). The site is physically bounded on the north, west and southwest by the East Branch of the Fond du Lac River and on the east and southeast sides by Oak Street and South Street respectively.

A report entitled "Remedial Investigation/Remedial Action Plan Report, Former Quicfrez Complex" also prepared by Miller and dated September 30, 1999 further describes the site as "...part of the SE 1/4 of the NW 1/4 of Section 15, T 15 N, R 17 E in Fond du Lac County" (Reference 3). As described in a "Removal Action Summary Report, Quck Frez Site" document prepared by TN & Associates, Inc., for the U.S. Environmental Protection Agency (EPA) and dated July 8, 2002, the Coordinates for the site are 43° 46' 18.0" North latitude and 88° 27' 08.0" West longitude (Reference 14).

To reach the site from the southwest side of Fond du Lac at the intersection of U.S. Hwy 151 and U.S. Hwy 41, proceed in a northeasterly direction on U.S. Hwy 151 (also called Military Avenue) for about 1 3/4 miles. At the intersection of Military Avenue and Western Avenue, Turn right (east) and proceed about 250 feet to Oak Street. Turn right (south) on Oak Street and turn right again on Oak Place.

Private residences are located on the east and south sides of the site. Based on the latest population estimates, approximately 49,879 individuals live within a four-mile radius of the site. Up to 12,896 individuals live within one mile of the site and up to 5,232 individuals live within 1/2 mile of the site (Reference 2).

2.2 Site Description

As of February 4, 1997 Miller Engineers Scientists described the site as "...lots 6 through 18, Darling's Subdivision Block R, Original Plat of the City of Fond du Lac, with the following exclusion: the railroad right of way of CM and STP & P Railroad Company that crosses lots 6 through 12/ the southern 24 feet of lot 18; and the southern 84 feet of lot 20. Included in the subject property are the following parcels: the vacated portion of Oak Place that is adjacent to the north side of lot 16 and the northwest sides of lots 12 through 15; that portion of vacated Oak Place adjacent to the south of lot 10; a parcel extending southwest of lot 12 to the river; and a parcel of land extending from lots 9, 10 and 11 to the river..." (Reference 1).

The site was zoned commercial and is located in the City of Fond du Lac on the very south end of Lake Winnebago. The east Branch of the Fond du Lac River flows along the north and west sides of the property. Residential and commercial properties are located to the north, a sewerage pump house and residential properties are located to the south and commercial properties are located to the east (with residential properties located beyond).

In 1997, the site consisted of a three story main production building on the north side of the property, a two level metal sided warehouse on the southwest side of the property and a two-story concrete block building on the southeast side of the property (Reference 1, Figure 4). As of the date of the author's reconnaissance of the site on October 9, 2003 the entire property has been cleared of all buildings (Photos 1 through 8, App. A).

2.3 Operational History

Note: the following history of the site is contained in Reference 1.

1884 through 1892: During this time residential dwellings existed on the property.

1809 through 1908: During this time properties south of Oak Place were occupied by residential dwellings and property north of Oak Place was operated by Bowen Manufacturing Company (furniture manufacturer). An outside lumber storage area, dry kilns, woodworking shops, power house, furniture set room machine shop, tin shop and glue room were located on the north side of the river. The warehouse was located on the south side of the river. The company was non-operational in 1908.

1915: A Sanborn Map for this timeframe indicates the site was operated by the Fond du Lac Furniture Company which was located on the north side of the railroad and Oak Place. The plant was similar in layout to the Bowen Company except there were no buildings across the river.

1927 through 1950: Sanborn Maps indicate the property was operated by the Sanitary Refrigerator Company. At this time an additional finished product warehouse was constructed south of the railroad, along the river. Surrounding properties as of 1921 were residential. Two paint booths were added in 1950.

1955: Sanitary Refrigerator became Quicfrez Incorporated which made refrigeration units. Operations included painting and use of solvents.

1965: The property is listed as vacant in City directories.

1969: The property was operated by Kiekhaefer Mercury Sign as a factory and warehouse.

1971: A portion of the warehouse was used as a paint booth.

1976: The buildings were occupied by Mercury Marine Corporation, Hayward Tires, and a paint and body shop.

1997: The buildings were used for storage by First & Portland Corporation.

2.4 Regulatory History

February 4, 1997: Miller Engineers Scientists prepares a "Phase I and II-Environmental Assessment *Quicfrez Complex*" report for the City of Fond du Lac which was considering taking the property through condemnation procedures. Five areas of concern were noted in the report:

- pipes in the building are likely to contain asbestos so testing and proper removal was recommended,
- a railroad crossing on the property was a concern because of the likely potential for spills and leaks,

- ash in the chimney of the north production building was likely hazardous material,
- soil and groundwater samples from the northeast corner of the production building indicated that contamination exists in that area and,
- contamination might exist in the northwest area of the production building as well.

(Reference 1)

February 28, 1997: The Wisconsin Department of Natural Resources (WDNR) sent the responsible party (RP), First & Portland Corporation, a notification letter indicating that the WDNR had been notified about contamination on the property. The letter identified the RP's legal responsibilities and what steps to take to investigate and clean up the site (Reference 4).

September 30, 1999: Miller Engineers Scientists prepared a report for the City of Fond du Lac entitled "Remedial Investigation/Remedial Action Plan Report Former Quickfrez Complex". The report notes that eight soil borings were performed and four of the borings were turned into water table observation wells. Sampling activities noted the presence of petroleum compounds, chlorinated solvents and metals. There was a low risk to potential receptors so shallow excavation of contaminated areas then backfilling with clay was proposed. Two more wells were proposed (upgradient and down gradient) and natural attenuation was proposed as a cleanup remedy (Reference 3).

September 28, 2000: The City of Fond du Lac acquires the property by condemnation during a City Council meeting (Reference 4)

October, 2000: Fire breaks out at the main facility. Massive amounts of water used in fighting the fire was suspected of causing a river retaining wall to collapse (Reference 9).

December 11, 2001: Miller Engineer Scientists prepares "Emergency Action/Site Investigation" report and proposes (to WDNR) to install eight soil borings along the river and install temporary well in each boring and to collect samples from monitoring wells MW-1, MW-1A and MW-2. Also proposed is to excavate shallow (contaminated) soils and backfill with two feet of clean clay fill (Reference 6).

December 12, 2001: Miller Engineers Scientists meets with WDNR to Discuss sampling results (see December 11, 2001 Reference), riverbank stabilization approaches, plus additional site investigations (Reference 7).

February 22, 2002: Miller Engineers Scientists proposes (to WDNR) to Install 18 additional borings (15 well nests [six water table wells, five

piezometers to 30 feet below ground surface, four piezometers to 45 feet below ground surface, plus three water table wells to be located on the east side of the facility (Reference 8).

March 5, 2002: EPA Pollution Report. WDNR notified EPA about a petroleum spill on the East Branch of the Fond du Lac River. EPA and a Superfund Technical Assessment and Response Team (START) mobilized to the site on February 28, 2002. On March 1, 2002 EPA obligated funds for removal work (Reference 9).

March 6, 2002: WDNR formally requested EPA removal assistance for the Site (Reference 10).

March 25, 2002: EPA Pollution Report. Site soils were removed and replaced on March 14th and 15th, 2002 (Reference 11).

May 22, 2002: Final EPA Pollution Report. Seven hundred fifty tons of contaminated soil removed from the riverbank area and disposed of at the Hickory Meadows Landfill in Hillbert, WI. Two hundred twenty tons of contaminated soils were removed from the northeast side of the property and disposed of at the Hickory Meadows Landfill (Reference 12).

July 8, 2002: TN & Associates submits "Removal Actions Summary Report" to EPA. Reiterates and formally presents what was indicated in the May 22, 2002 Pollution Report (Reference 13).

December 13, 2002: Miller Engineers Scientists submits (to WDNR) a "Remedial Action Options Report". Evaluated; a) Source Area Excavations,

- b) Groundwater Recovery Trenching, c) Dual Phase High Vacuum Extraction,
- d) Electro-Thermal Dynamic Stripping Process (ET-DSPTM), and
- e) Electroosmosis with Permeable Reactive Barriers (LASAGNATM) techniques. Final recommendation was to implement the LASAGNATM technique. This remedial action has not yet been implemented by the WDNR (Reference 14).

January 31, 2003: Miller Engineers Scientists presents (to WDNR)
"Exploration for Tank - Southwest Petroleum Area" report. Test pits were performed around borings B-27, B-33 and B-37 to look for a buried tank. None was found. One hundred ninety four tons of contaminated soil was removed and taken to Hickory Meadows Landfill for disposal (Reference 15).

July 23, 2003: Miller Engineers Scientists presents (to WDNR) "Site Investigation Report, Former Quicfrez Complex" report. This report summarizes all previous investigative activities at the site and notes that there are three general areas of soil contamination (from west to east) on the Quic Frez property adjacent to the river on the side of the site; a) mixed generally shallow

petroleum (fuel oil) and moderate levels of TCE contamination, b) very high levels of TCE at depth and, c) high levels of TCE within four feet of the surface and decreasing with depth (Reference 16).

2.5 Waste Characteristics

Based on the results of an investigation performed in December 2001 by Miller Engineers & Scientists, borings indicated that some or all of the former owners and/or operators of the various operations that existed through the years used and discarded solvents including trichloroethene (TCE), petroleum products, Polynuclear Aromatic Hydrocarbons (PAHs), other semi-volatile organic compounds and heavy metals. Various breakdown products of TCE have been found at elevated levels throughout the site area. TCE was found in soil and groundwater beneath the site for 0 to 4 feet below ground surface (BGS) and as deep as 18 feet BGS in some areas. EPA contractors have removed 1,164 tons of contaminated soils from the site which were taken to a secure landfill (References 6, 12 and 15). Bedrock was suspected to be impacted as well (Reference 6).

2.6 Analytical Results

Groundwater

The site is currently being monitored by sampling eighteen on-site groundwater monitoring wells (MW-1R, MW-1A, MW-2, MW-4, MW-4A, MW-5, MW-5A, MW-6A, MW-6A, MW-6B, MW-7, MW-7A, MW-7B, MW-8, MW-8B, MW-9 and MW-10B) and one sump. The location of the monitoring wells and sump are shown on Figure 5 (Reference 16). The boring logs and well construction logs are contained in Appendix B.

Historical groundwater analytical data from March and June 2002, the most recent sampling events, analytical data indicate the presence of volatile organic compounds, semi-volatile organic compounds and metals at levels that are above the DNR Ch. NR 140 Wis. Adm. Code Enforcement Standards (ES). These standards are similar, if not exactly equivalent to the Federal Drinking Water Standards for most compounds. The following is a summary of contaminants that have exceeded the ES in one or more monitoring wells at the site during the March and/or June 2002 sampling periods (Reference 16):

VOCs

Benzene
Carbon Tetrachloride
cis-1,2-Dichloroethene
Tetrachloroethene
Trichloroethene
Methylene Chloride

Chloroform
1,1-Dichloroethene
trans-1,2-Dichloroethene
1,1,2-Trichloroethane
Vinyl Chloride
Trichloroethane

SVOCs

Benzo(a)Pyrene Benzo(b)Flouranthene Chrysene Naphthalene

Metals

Lead Mercury Arsenic Chromium

A groundwater analytical sample profile for the site during the March and June sampling period is shown in Tables 1 and 2 (Reference 16). An historical summary of groundwater monitoring results is shown in Table 3 (Reference 16).

Soils

Trichloroethene concentrations at the site ranged from 280,000 to 850,000 µg/kg at depths between 10 and 20 feet BGS - primarily at B11, B12, B15, B16 and MW-4A. The breakdown products cis, 1,2-dichloroethene and vinyl chloride were highest in these borings as well. Reports by Miller indicate that these levels are indicative of residual trichlorethene free product.

Petroleum contamination is commingled with the TCE near B11 and the petroleum contamination increases to the west of B11. The highest petroleum contamination (benzene at 870 μ g/kg) was found in the area of a former underground storage tank. Metals (arsenic, cadmium, chromium and lead) were detected in shallow samples at B11, B14 and B17 through B20 at levels that exceed Wisconsin's non-industrial Residual Contaminant Level (RCL) as defined in s. NR 720.07, Wis. Admin. Code.

Samples tested for PAH's include samples B18-2, B19-1, B20-2, S1-tank and S3-tank. Naphthalene was found at 10,000 μ g/kg, 1 and 2-methylnaphthalene at 54,000 and 68,000 μ g/kg and phenanthrene was found at 22,000 μ g/kg. Each of these compounds were at levels that are above the RCL for the groundwater pathway and phenanthrene was also above the guidance RCL for direct contact.

The following is a summary of contaminants that have exceeded the RCL's in one or more borings at the site from January 1997 through March 2002 (Reference 16):

VOCs

Benzene

Ethylbenzene

Toluene

Xylene

Naphthalene

SVOCs

Benzo(a)pyrene

Metals

Arsenic Cadmium Chromium Lead

A soil sample analytical profile for the site from January 1997 through March 2002 is shown in Tables 4 and 5 (Reference 16).

3.0 GROUNDWATER PATHWAY AND ENVIRONMENTAL HAZARD ASSESSMENT

3.1 Geology and Groundwater Conditions

The site is located near the south end of Lake Winnebago (within two miles) and adjacent to the East Branch of the Fond du Lac River. Glacial drift as much as 100 feet thick or more exists in the area. The Quic Frez site lies near the western margin of the pre-glacial Fox River Valley. Bedrock likely lies between 50 and 100 feet deep at the site. Bedrock in the area typically is overlain by 40 to 60 feet of brown to blue-grey clay and silt with much gravel and cobbles (Horicon Formation). A red-brown clay and silt of the Kewaunee Formation (Kirby Lake Member) overlies the Horicon Formation and varies from 20 to 50 feet thick. Groundwater in the area is generally obtained from the Cambrian-Ordovician sandstone and dolomite units that are hydraulically connected and are called the sandstone aquifer found below the glacial undifferentiated soils above.

Shallow groundwater within the glacial drift is found between 4 to 6 feet below groundsurface and probably flows to the north towards the East Branch of the Fond du Lac River. Shallow groundwater in the entire area is locally influenced by natural and man-made structures (rivers and sewers). Horizontal groundwater gradients are flat. Vertical groundwater gradients are large measuring from 60 to 120% in a negative direction (downward) (Reference 14).

3.2 Hazardous Substance Releases

Significant levels of chlorinated solvents were detected in all borings performed at the site – as high as $850,000 \,\mu\text{g/kg}$ TCE in soil. Solvent and petroleum contamination were detected in soil and groundwater samples throughout the site area. Polynuclear Aromatic Hydrocarbons (PAHs) plus other semi-volatiles and metals were detected in shallow fill materials such as cinders that covered much

of the site. Groundwater samples indicated high levels of dissolved TCE, cis-1,2-dichloroethene (cis-DCE), and vinyl chloride in several monitoring wells.

Contamination of private or municipal wells is not expected since the city and local residents rely on deeper sandstone aquifers for water supplies. Figure 6 shows the location of all local municipal water supplies.

Based on the latest population estimates, approximately 49,879 individuals live within a four-mile radius of the site (Appendix C). Up to 12, 896 individuals live within one mile of the site and up to 5, 232 individuals live within 1/2 mile of the site (Reference 2). The municipal wells are sampled under a state required monitoring program. While some municipal well test results indicate that minor amounts of VOCs have been detected in the water, none of the detections can be directly attributed to the Quic Frez site.

4.3 Groundwater Conclusions

Analytical results from samples collected from groundwater monitoring wells indicate hazardous substances appear to have leaked from the site. No other sources for the identified hazardous substances have been identified. Public wells located in the area have not been adversely affected by any of the contaminants associated with the site and therefore are not believed to be at risk.

4.0 SURFACE WATER PATHWAY AND ENVIRONMENTAL HAZARD ASSESSMENT

4.1 Hydrologic Setting

Based on a visual inspection of the site on October 9, 2003 (post-building removal) the overall site topography is relatively flat. However, a geologic cross section prepared for a "Remedial Action Options Report" by Miller Engineers & Scientists indicates that the property has a slight slope toward the East Branch of the Fond du Lac River as shown on Figure 7(Reference 14). The north, northwest, west and southwest edges of the property slopes steeply toward the East Branch of the Fond du Lac River.

In February 2002 an oil discharge on the Fond du Lac River was reported by the City of Fond du Lac (to the DNR). An on-site UST was determined to be the source of the discharge. The U.S. EPA and START assembled at the site for the purpose of containing the petroleum discharge and removing the source (Reference 9).

4.2 Surface Water Conclusions.

Although none of the surface water bodies have been sampled, there is little or no indication of a continuing release to them so they are not considered to be at risk. An observed release from the site to surface water was contained so surface water targets or sensitive environments are not believed to be at risk.

5.0 SOIL EXPOSURE AND AIR PATHWAY ASSESSMENT

5.1 Soil Exposure

Most of the soils found in this area consist of sand, silty sand and gravel derived from glacial end moraines and unpitted outwash deposits. The majority of highly contaminated surface soils have been removed from the site and properly disposed so there is no longer a direct threat to human health or the environment from surface soils. Deeper soils are still contaminated by VOCs, SVOCs, and metals. Methods to remediate the remaining contamination and a monitoring program are being discussed at the moment and will be funded by the WDNR.

The site is accessible to vehicular traffic from the end of Oak Place and there are no fences around the property. Foot traffic along a former railway spur/now bike or walking path is discouraged by the posting of placards at both ends of the walking path stating, "WARNING Possible Chemical Hazard". Since severely contaminated soils have been removed, direct contact problems are not a concern at this time.

5.2 Air Pathway

Ambient air sampling has not been conducted at the site. Air sampling during excavation of soils by START was performed during the excavation of soils for safety purposes. START used a flame ionization detector (FID) to conduct air monitoring around while test pits were dug and to monitoring head spaces during soil sampling. Air monitoring readings only ranged from 13 to 17 parts per million above background.

5.3 Soil Exposure and Air Pathway Conclusions

Severely contaminated soils have been removed and replaced by low permeability clay soils. Contaminated soils were taken to an approved landfill for disposal. Ambient air samples taken during numerous excavations at the site and during soil sampling exceeded background by 13 to 17 parts per million. No post remediation air sampling has been performed at the site but given the fact that excavated soils have been replaced by clean clay soils, direct soil exposure and air pathways are not consider to be at risk.

6.0 SUMMARY AND CONCLUSIONS

The Quick Frez site has been remediated according to federal guidelines for contaminated surface soils by excavation and replacement. On-site soils at depth and groundwater still exceed WDNR Administrative Code levels. Remediation of the remaining contamination and long term monitoring are being addressed through WDNR Remediation & Redevelopment funding programs.

APPENDIX A

Site Photographs 1 Through 8



Photo #1 - Facing Approximately West

Shows area of former retaining wall and newly placed riprap.



Photo #2 - Facing Approximately Southwest

Shows cleared area after all buildings were razed.



Photo #3 - Facing Approximately Northeast

Shows former rail spur, Western Avenue Bridge north of the property, north end of (closed) bike path/walking path and monitoring well nest MW-6.



Photo #4 - Facing Approximately Southeast

Shows approximately 18 - 55 gallon barrels of drill cuttings from underground storage tank investigation and park bench that was removed when bike path/walking path was closed.



Photo #5 - Facing Approximately Southeast

Looking southeast from the north side of the East Branch of the Fond du Lac River where former collapsed retaining wall was replace by riprap.

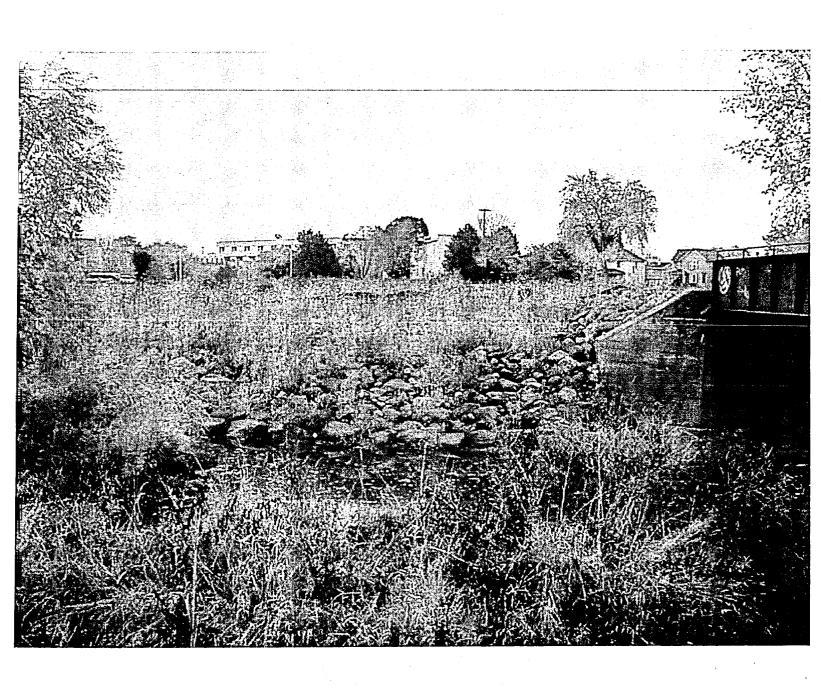


Photo #6 - Facing Approximately East

Looking east at the former rail spur bridge (now part of the closed bike/walking path) on the southwest side of the property. Also shows entire cleared property area in background.

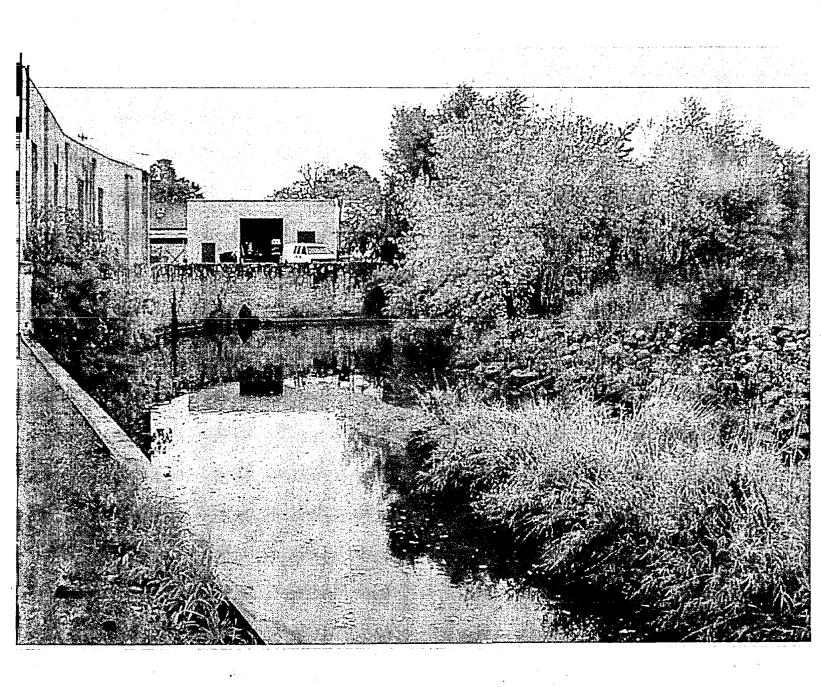


Photo #7 - Facing Approximately Northwest

Looking northwest from the southwest side of the East Branch of the Fond du Lac River showing existing retaining wall on one side and start of riprapped area on the west side of the property.



Photo #8 - Facing Approximately East

Looking from the west side of the East Branch of the Fond du Lac River showing the entire cleared area of the property and riprap area.

APPENDIX B

Boring Logs and Well Construction Logs

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(B1-4) B-1	10 day 12" wef	(B2-3) 6-8	> day 2'	X Note	: these are the onl
	sandy grava	(B2-4) 8-10	cloth 4		ing boring logs for through B-6.
181 bauli	water i		yful yful	Odor B-1	•
· ·	· · · · · · · · · · · · · · · · · · ·	•			MJN 1/15/03
(R31) 2	2-1 boyclay 16'		ala rati di		4 - 1
		(B4-1) 2	2-4 (1)	ils'	:
	1-6 clay 12" ode	ov ,	المراكب		
B3-3)	o-8 day/grand 10" od	for wet of in	+cosal +	. 70"	• • • • • • • • • • • • • • • • • • •
\$3-4) Q	rio day 10"	wd: (23-1/2	- Clay 16.	20	•
b = 0	All I -	Wu.	-		· •
or house	VIILLER				
\$6\$-	T-827 P. 02/02 F	KIMBERLY 9205548720	staifneid & Scienis	,	•
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SOIL BORING LOG INFORMATION Form 4400-122 Rev. 7-98

			R	toute To:	Watershed/ Remediatio				ste Mana er 🏻	agement	t 🗆			•				
															Pa	age 1	of	1
	ty/Proje mer (Licen	se/Perm	it/Moni	toring N	Vumber		Borin	g Num	ber B7	7	
				of crew ch	ief (first, last)	and Firm		Date	Drilling	Started		D	ate Dril	ling Co	mplete			lling Method
	ke Mo			•					7.5	7/1999	,			7/7/	1000			ollow stem
	kK En				Vell ID No.	Commo	n Well Name	Final	Static W			Surfa	ce Eleva		1999	В		uger Diameter
T			<u> </u>						Feet	MSL		<u></u>		et MS			8.0) inches
	Grid O Plane	ngm	(e	estimated:	□) or Bo	oring Locat E S	ion 🗌 /C/N		Lat	<u> </u>	<u>.</u>		Local	Gna Le	ocation 1			ΠE
SE		of N	IW_	1/4 of Sect		т 15	n, r 17 e		ong	0	<u> </u>	<u>"</u>	17:21		t 🗆 S			Feet W
Facilit	уш				County Fond du La	ic		County 20	Code	1 '	Town/C d du L	· .	vшаge			•		
Sar	nple		T	1		-				1	1			Soi	Prop	erties		
	% (ii)	ts	eet			Rock Descr	_						9					
er ype	h Att	Cour	In F			eologic Ori ch Major U	_		S	ig.	l ma	В	ressi	a ti	-	city	_	nents
Number and Type	Length Att. Recovered	Blow Counts	Depth In Feet		, =				USC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			F															
			-1.5	,	•						ļ.							
•			E															
1 SS	24 15	13	-3.0 -		I CLAY - r	noist, stif	ff, reddish					0						
33	13		-4.5	brown			•											
			E						CL									
2 SS	24	22	-6.0	very	stiff.		•					0			·			
22	20		7.5															
Ц					S: 1) End				1									-
				Boring compl	g backfilled	l with bea	ntonite upo	on										
^				Compi		·												
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		that t	he info	mation on	this form is t	ue and con					<u>.</u>					:		·
Signatu	re /	Vis	1.; 1	(Ha	Unglin			ler Eng South T										300-969-7013 320-458-0369
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SOIL BORING LOG INFORMATION

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Facili	y/Proje	ct Nar	ne		L	icense	/Permi	it/Monit	toring N	lumber		Borin	g Numl	ber	of ·	1
	mer C			of crew chief (first, last) and Firm	D	ata Dr	illing	Started		ID	ate Dril	ling Co	mpleter	-B8		lling Metho
	ke Mc			of crew ciner (111st, last) and 1 min		ale Di	mmg .	Starteu			ale Dill	ing Co	mpicici	u	- 1	ollow ste
	K En		rilling	DNR Well ID No. Common Well Na	me Ei	nal Sta		7/1999 ater Lev		Curfa	ce Eleva		1999	Ip.		uger e Diameter
101	nque v	V CII I V).	DIVIC WEIT ID IVO.	inc 11			MSL	VC1	Suria		et MS	SL .) inches
	Grid Oi Plane	rigin	(es	stimated:) or Boring Location N, E S/C/N		La	at	0	,	н	Local	Grid Lo				· .
E		of N	IW 1	1/4 of Section 15, T 15 N, R 17	E	Lon		0	,	н		Fee	t 🗆 S			Feet V
cilit	y ID			County	Cou	nty Co			Fown/C	-	Village					
Sar	nple		T	Fond du Lac	20			Fond	du L	ac	T	Soil	Prop	erties		T
744	_	,,	t	Soil/Rock Description												1
9	Att. e	ounts	n Fee	And Geologic Origin For			S		g		ssive	ο		7		nts
and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each Major Unit			SCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
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			-1.5				٠									
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1	12	U	E	brown.	JISI, SU	11,				2						
Ц			-4.5													
	24	7	6.0	stiff.			CL									
N	7	,	E	SIIII.												
Ц			7.5	NOTES: 1) End of sometime at 9	foot (2)											
				NOTES: 1) End of sampling at 8 Boring backfilled with bentonite completion.	upon)										
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SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			<u> </u>		Watershed/\ Remediation			Wast	te Mana r 🔲	igement	: 🗆								
Facili	tu/Droi	ect Na						II icens	a/Derm	it/Moni	toring N	lumber		IDomin	P g Num	age I	of	1	
	-	QuicF						Liceis	er cini	DIVIOIII	ornig iv	unner		Боги	ig ivuin	. B)		
	_			of crew chief	(first, last)	and Firm	·	Date D	Drilling	Started		D	ate Dril	ling Co	mplete	d		ling Method	
		Ardi	e rilling						7/7	7/1999)			7/7/	1999			ollow stem uger	
		Well No		DNR We	ll ID No.	Common	Well Name	Final S	tatic W			Surfa	ce Eleva		1777	JB		Diameter	
	~ 11.		,						Feet	MSL	·			et MS			8.0	inches	
	Grid C Plane)rıgın		estimated:	」) or Boi N,	ring Location	n □ C/N	1	_at	<u> </u>	<u>'</u>		Local	Grid L	ocation		-		
SE		of N	1M .	1/4 of Section		T 15 N		Lo	ng	<u> </u>		, 11	1		: 🗀 :		Feet W		
Facilit	y ID			í	unty			County C	Code		Town/C	-	Village						
Car	nple	1	T	FC	ond du Lac	·	· · · · · · · · · · · · · · · · · · ·	20		Fone	d du L	ac		Soi	Dror	erties		<u> </u>	
Sai	T	1			Soil/R	ock Descrip	tion						<u> </u>			T	· ·		
4)	Length Att. & Recovered (in)	Blow Counts	Depth In Feet			ologic Origi						'	sive					ts	
Type	Length Att. Recovered	ပိ	th In		Eac	h Major Uni	it		CS	Graphic Log	I I	PID/FID	pres	Moisture Content	E. E.	Plasticity Index	۰)/	
Number and Type	Rec	Blov	Dep						O S	Grap	Well Diagram	PID	Compressive Strength	S S	Liquid Limit	Plastic Index	P 200	RQD/ Comments	
1 SS 2 SS 3 SS	24 8 24 15	9 7 31	-1.5 -3.0 -4.5 -6.0 -7.5 -9.0	wet, b	ed on rock : 1) End o	c, solvent	odor.	eet. 2)	CL			5 30 500							
		y that t	he infor	rmation on th	is form is tru														
ignatu	ге	Vi	iti	Hall	og hi	F		er Engi South Tw										00-969-7013 20-458-0369	

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Remediation/Redevelopment	⊠	Other			•		,		P	age 1	of	. 1
	ty/Proje					License	/Регті	t/Moni	oring N	umber		Borin	g Num	ber		
	mer (g Drille			of crew chief (first, last) and Firm		Date D	rilling S	Started	- : -	ID	ate Dril	ling Co	mplete	B)		illing Meth
Mi	ke Mo	Ardle	•		İ							Ξ.	-			nollow ste
	&K En			DNR Well ID No. Common Well N	ame	Final St		/1999 ater Le		Surfa	ce Eleva		1999	İB		uger le Diameter
								MSL		Jul 10		et MS	SL	ľ		0 inches
	Grid O Plane	rigin	(e:	stimated:) or Boring Location N, E S/C/N		L	at	0	,		Local	Grid Lo	ocation			
SE		of N	W 1	1/4 of Section 15, T 15 N, R 17	E	Lor		•		H		Fee	1 🔲 :			Feet 🔲
Facili				County	Co	ounty C		1	Fown/C		Village					
	1-	1	T	Fond du Lac	2	0		Fond	du L	ac		Call	l Deser			
Sai	nple			Soil/Rock Description							 	1	Prop	ernes	 	╣.
	d (in	unts	Depth In Feet	And Geologic Origin For							sive					\$
Type	gth A	Blow Counts	H	Each Major Unit			CS.	hic	_ fa	PID/FID	pres ngth	sture	ي. <u>و</u>	Plasticity Index)/ men
Number and Type	Length Att. & Recovered (in)	Blov	Dep				s n	Graj Log	Well Diagram	PID,	Compressive Strength	Moisture Content	Liquid Limit	Plastic Index	P 200	RQD/ Comments
			E									- " -				
			1.5					l								
1 1	24	12	Ė	EIL I FANCIAV moist coft	dork			/////		. 0						
SS	14	12	-3.0 -	FILL:LEAN CLAY - moist, soft, brown.	, uaix		CL			U			ļ			
Ľ			4.5	FILL:SILTY GRAVEL WITH S.	AND	-	GM									
2	24	6		\moist, dark brown. FILL:LEAN CLAY - wet, soft, d	lark	/				120						
SS	15		6.0	brown.	iai K		CL									
Ľ			F		. <u>. </u>					,						
3 SS	. 24 20	7	7.5 -	LEAN CLAY - wet, stiff, reddish	n brow	m.	CL		1	2						· .
		i	E-9.0				CL								ť	
<u> </u>				NOTES: 1) End of sampling at 9	.5 feet	. 2)										
,				Boring backfilled with bentonite completion.	upon											
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hereby	certify	that th	ne infor	mation on this form is true and correct to the	e best of	my kn	owledg	ge,					٠,			

SOIL BORING LOG INFORMATION

rm 4400-122 Rev 7-98

Depa	riment o	of Nat	ural Res	sources								Form	4400-12	22		1	Rev. 7-9	98
			R	oute To:	Watershed/	Wastewater	\Box	Wast	e Mana	igemen	t 🗆						•	
			<u></u>	04.0		n/Redevelopr	•	Other		Болиси	٠							
					Romodiatio	iii Rodo velopi	nont 24	Offici	·									
																age]	of	1
	ty/Proje	ct Na	me					License	e/Perm	it/Moni	toring l	Vumber	•	Borin	g Num			
	icfrez	• • •	37		676 - 1 - 1	1 80			.,,,	n		150	- 5				11	
	~	-		of crew chie	ef (first, last)	and Firm		Date D	nling	Started		ال	ate Dril	ling Co	mplete	d	j	lling Method
	ke Mc			1 D.:II:					10/	10/000	11			10/10	/2001		1	ollow stem
	nique W			1 Drilling	ell ID No.	Common	Well Name	Final S		12/200		Cuefa	ce Eleva		/2001			uger e Diameter
WIU	mque v	en in	.	DIVIC	cii IID No.	Common	Well Ivallie	Linai 9		MSL		Suria	755.9		TOL	-		3 inches
Local	Grid O	rigin	☐ (e	stimated:) or Bo	oring Location	<u>, </u>		TCCI	MISL		L	Local (o menes
	Plane.		L (-		N,	_	C/N	I	at	<u> </u>	<u> </u>			J.1.4 23				□Е
SE		of N	JW	1/4 of Section		T 15 N		Lo	nø	•	•	"		Fee	;t □			Feet W
Facili					ounty			County C		Civil	Town/C	ity/ or	Village					744.
	•			F	ond du La	c		20			đ du L	-						
Sai	mple			T					Π	1	1	1		Soi	l Pror	erties		
	1			1	Soil/F	Rock Descript	tion		i i			1			T	T		1
	Length Att. & Recovered (in)	Blow Counts	Depth In Feet			cologic Origi						ľ	Compressive Strength		ľ			ν
er Vpe	h Ai	G C	<u>H</u>			ch Major Uni			23	.2	. g		ress th	at to		ity		lent
Number and Type	Length Att. Recovered	№	bth			on wagor on	16		SC	Graphic Log	Well Diagram	PID/FID	omp	Moisture Content	Liquid Limit	Plasticity Index	700	RQD/ Comments
			ļĞ						□	Grap	BÖ		2 2	≱ ວັ	13 3	교표	À	≥ 3
1 SS	24 18	19	F	POOR	LY GRAD	ED GRAV	VEL - dan	np.	GP.	XX	3	5		19.1				
			F_2		BLACK A black, petro			s -	 	XXX	3						l	
2 SS	24	8	- 2	TOPSO	OIL - sandy	damn da	irk brown			\bowtie	}	- 5		26.1				
22 /	12		ļ:	FILL:	SANDY L	EAN CLA	Y - moist	<u>. </u>	İ	\bowtie	1							
3	24	8	-4	reddish	brown.				CL		4	5		26.8				
SŞ	12		-	LEAN	CLAY - n	noist, red.			GP		3							
4	24	9	<u>-</u> 6		LY GRAD		/EL - mo	ıst.			1	700		32.5				
SS	8		E	brow	CLAY - n	ioisi, rea.						/00		32.3		_		
١ ،		_	-8															
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]		F ₁₀	modera	with roots a te odor.	ind gray su	n med m	ssures,										
6	24	28	£ 10	modera	itti Odol.							2,000	-	24.1				
SS	24	20	F						CL			2,000		27.1				
	}		F-12			_												
7	24	29	E	brow	n, slight od	lor.						1,500		20.3	45	26.3		,
SS	24		-14	,	,													
L			F															
8	24	27	-16					l				1,500		25.5				
8 SS	24	21	E									1,500		23.3				
П	.		L ₁₈			<u></u>			- 									
				NOTES	s: 1) End o	f sampling	at 18 feet	t. 2)										
			-		cary well in ed with be									-				
				Odekilli	car with the	nome an	a sampin	15.										
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I hereb	y certify	that t	he infor	mation on	this form is tr	rue and corre	ct to the bes	st of my k	nowle	lge.								
Signatu								LER EN			& SC	IENT	ISTS				Tel· 0	20-954-9100
								W. KENN						36				20-954-8720

SOIL BORING LOG INFORMATION

Form 4400-122

Rev. 7-98

			Re	oute To:	Watershed/V	Wastewater		Waste	Mana	gement								
					Remediation	/Redevelopment	\boxtimes	Other										
															Pa	ige 1	of	1
Facil	ity/Proje	ct Nar	ne					License	/Perm	t/Monit	oring l	lumbe	г	Borin	g Numl			
	icfrez						_	l						<u> </u>		B 1		
		-		of crew c	chief (first, last) a	ınd Firm		Date D	rilling	Started		E	ate Dril	ling Co	mpletee	i .	j j	lling Method
	ke Mc &K En			Drilli	ng				12/	12/200	1			12/12	/2001		1	ollow stem uger
WIU	nique V	Vell No	Э,	DNR	. Well ID No.	Common Well 1	Vame	Final S			vel	Surfa	ce Eleva			В		e Diameter
·	0.110			<u></u>				<u> </u>	Feet	MSL		<u> </u>	756.3				5.3	3 inches
	Grid O Plane	rigin	∐ (e	stimated	i: 🗌) or Bor N,	ring Location E S/C/N	J	L	at	0	1		Local	Grid L	_	_		
SE		of N	TXX/ 1	./4 of Se	•	T 15 N, R 1	7 E	Lo).T	٥	1			Гос	1 🗌 1 2 🔲 1			Feet W
Facili		OL IV	1 7 7	1/4 01 36	County	1 13 N, K 1		County C		Civil 7	own/C	ity/ or	Village	FCC		·		ræi 🗀 w
	,				Fond du Lac	;		20		1	l du L	-		,				
Sa	mple		T							1				Soi	Prop	erties		
	Т	1			Soil/R	ock Description						ĺ		<u> </u>	<u> </u>	Γ		1
	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	ł		ologic Origin For					ļ		Compressive Strength					22
Number and Type	Length Att. Recovered	. లే	ä			h Major Unit			S	.e	Well Diagram	B	ores:	Moisture Content	-0	Plasticity Index		RQD/ Comments
um Id T	eco	No.	epti	·			•		sc	Graphic Log	rell iagr	PID/FID	omi	Sonte	Liquid Limit	asti dex	P 200	C III
7 8	24	 16	<u> </u>	BOC	DI V CD ADI	ED GRAVEL	dam		2	07	×Ω	0	ည်အ	20.5	1111	四日	<u>a</u>	2 0
1 SS	18	10	Ę			- damp, black.	- dan	ıp				"		20.5				
	1		-1.5	- 10-	. 01112210	ump, oace	•			$\otimes \otimes$,				
2 SS	- 24	7	-	FILI	: SANDY LE	EAN CLAY - o	damp.			XXX		10		23				
SS	12		-3.0	,			1			\bowtie							į	
L] . [E							\bowtie								}
3 SS	24 0	10	-4.5	NO	RECOVERY									33.9				
33	Ŭ		- 1															
4	24	5	-6.0	ETT T	· I OOGE ED	NE GRAVEL -	t			XXX		10		25.5			,	
SS	6	,	E		ong odor.	NE GRAVEL -	- WEL			\bowtie		10		د.ري				ļ
.			-7.5		og o					\bowtie								
5 SS	24	12	F	TEAT	NI CT AN		1		<u> </u>			800	-	,				}
SS	21		E-9.0	LEA	N CLAY - mo	oist, red, slight	codor.	•							j			
1			-															
6	24	23	<u>-</u> 10.5			•		ľ				4,100	1 1	26.5			1	
SS	24	23	 						CT			4,100		20,5				
.			12.0						CL									
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7 SS	24 24	25	<u>-</u> 13.5)				2,500		25.3			1	
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L			-15.0	NOT	FS. 1) End of	sampling at 1	5 feet	-25						1	1		ł	
				Temr	porary well in	stalled. 3) Bori	ing	. 2)		j						٠	İ	
				backt	filled with ben	tonite after sar	mplin	g.						[1		1	
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Signatu		tnat t	ne intor	mation o	on this form is fri	ie and correct to t												
ວາຊິແສແ	110							LER EN W. KENN						36				20-954-9100 20-954-8720

SOIL BORING LOG INFORMATION

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			. <u>R</u>	oute To:	Watershe	d/Waste	water 🗌		Wast	e Man	agemen	t 🗆							
					Remediat	ion/Rede	evelopment	\boxtimes	Other										
																Pa	ige 1	of	1
Facili	ty/Proje	ct Na	me						License	e/Perm	it/Moni	toring N	lumber		Borin	g Numl			
Qu	icfrez																B1	13	
Borin	g Drille	d By:	Name o	of crew ch	nief (first, las	t) and Fi	rm	-	Date D	rilling	Started		D	ate Dril	ing Co	mplete	i	j.	lling Method
	ke Mo &K En			l Drillin	g				-	12/	12/200	01			12/12	/2001			ollow sten uger
WI U	nique V	Vell No	о.	DNR V	Well ID No.	Con	nmon Well N	Vame	Final S		later Le MSL		Surfa	e Eleva 755.6		MSL	В		Diameter 3 inches
	Grid C	rigin	(e	stimated:		Boring L]	1 -	· ·	•	,	n .	Local	Grid Lo	cation			
	Plane	_		•	N	•	S/C/N		} .	at									E
SE		of N	W :	1/4 of Sec		T I	5 N, R 17		Lor County C			Town/C		17:11	Fee	t 🗆 :	<u> </u>		Feet W
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Ц			- 15.0	NOTE	70. 11 F 1			=======================================	-3					1	l	l		1	
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SOIL BORING LOG INFORMATION

4400-122 Rev. 7-98

Route To: Watershed/Wastewater Waste Management Other Remediation/Redevelopment 1 of 1 Page Facility/Project Name License/Permit/Monitoring Number Boring Number Ouicfrez. B14 Boring Drilled By: Name of crew chief (first, last) and Firm Date Drilling Started Date Drilling Completed Drilling Method Mike Mc Ardle hollow stem M&K Environmental Drilling 12/12/2001 12/12/2001 auger WI Unique Well No. Final Static Water Level Surface Elevation Borehole Diameter DNR Well ID No. Common Well Name Feet MSL N/A Feet MSL 5.3 inches Local Grid Origin (estimated:) or Boring Location Local Grid Location Lat . N, E S/C/N State Plane Πи SE 1/4 of NW 1/4 of Section 15. T 15 N, R 17 E Long Feet S Feet W Civil Town/City/ or Village Facility ID County County Code 20 Fond du Lac Fond du Lac Soil Properties Sample Length Att. & Recovered (in) Soil/Rock Description In Feet Compressive Strength Blow Counts And Geologic Origin For Plasticity Index PID/FID Moisture Content Each Major Unit Graphic Depth I Liquid Limit Well 80 24 FILL: CINDERS - black 19.2 -1.5 LEAN CLAY 2 SS 13 5 22.8 24 ...dark reddish brown clay with roots. 12 CL -3.0 3 35/2" FILL: CINDERS, SAND. 5 21.9 24 4.5 SS .:encountered metal object. 6.0 NOTES: 1) Auger refusal and end of sampling at 6 feet. 2) Boring backfilled with bentonite upon completion. 3) Second boring attempted 5' to the east; refusal again encountered at 6 feet; boring backfilled with bentonite. I hereby certify that the information on this form is true and correct to the best of my knowledge. Signature Firm MILLER ENGINEERS & SCIENTISTS Tel: 920-954-910(1119 W. KENNEDY AVE. KIMBERLY, WI 54136 Fax: 920-954-8720

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

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																P	age .	l of	1				
•	Facilit			ne					Licens	e/Perm	it/Moni	toring l	Number		Borin	g Num	ber			_			
		cfrez Drille		Name	of crew o	chief (first, last) a	ınd Firm		Date I	Drilling	Started		ID:	ate Dril	ling Co	molete		15 Dri	lling Methox	<u>-</u>			
	Tim	1						•								-		- 1	ollow sten				
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	WI OII	ndae A	A CH TAC).	DNK	. Well ID No.	Commion	Well Name	rmarc		MSL		Suria	N/A		MSL			3 inches				
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_		·				Fond du Lac	;		20		Fon	d du I	ac	,				.		_			
	San		1	'		Soil/P	ock Descri	ntion		1					Soi	l Prop	erties	i	· .				
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	ber	Length Att. Recovered (Blow Counts	Depth In Feet			h Major Ur			CS	igi	ram	E	Compressive Strength	ture	t ië	icity)/ meni				
	Number and Type	Leng	Blov	Dept						US	Graphic	Well Diagram	PID/FID	Compres Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments				
_				E		ace composed	of 8" co	ncrete foll	owed		1			-									
	1	24	10	2.5	FILI	4" of gravel. L: POORLY (RADEL	SAND -	dry,	<u> </u>	XX	4	2,000					1					
	SS 2	12 24	23	Ė.,	\tan.					┼			600					ŀ					
	2 SS	18		-5.0 -		.: CINDERS N CLAY - re		CK.					400										
	3 SS	24 24	38	- 7.5				•		CL			400					} .					
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			26	12.5	E A TE	CT AST 1				 			5 000										
;	SS	24 24	36	E	rai	CLAY - red.				СН			5,000										
	7	24	25	-15.0						СН	////		10,000			51.7	31						
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	: 🖯	24		- -22.5	SILT	Y CLAY - br	own.			П-МІ		. :			'								
5	10 SS	24	50/0"	E	NO F	RECOVERY]			ł									
	7			-25.0	NOT	ES: 1) Auger	refusal a	nd end of		 													
					samp	ling at 25 feet at 25 feet, 3) (. 2) Set 1	" tempora	ry														
					appro	eximately 3 fe	et below	surrace ne grade.	S	·				ľ									
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اد	guatur	Ç						17111					Firm MILLER ENGINEERS & SCIENTISTS Tel: 920-954-910 1119 W. KENNEDY AVE. KIMBERLY, WI 54136 Fax: 920-954-872										

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			<u>R</u>	oute To: Watershed/Wastew	ater 🗌			gemen	t 🗆							
•				Remediation/Redev	elopment 🛛	Other										
													Pa	age 1	of	1
Facil	ity/Proj	ect Na	mė			License	Perm	it/Moni	toring l	lumbe		Borin	g Num			
	ricfrez							·			-			B		
	_	ed By:	Name o	of crew chief (first, last) and First	n ·	Date D	rilling	Started		D	ate Drill	ling Co	mplete	d		lling Method
Ti		T	211i				10/	27/200	١1			12/27	/2001			ollow stem
	nique \		illing	DNR Well ID No. Comr	non Well Name	Final S		Z11Z00 Tater Le		Surfa	ce Eleva		/2001			uger Diameter
	mq		. .					MSL			N/A		MSL			3 inches
Loca	Grid C	Origin	☐ (e	estimated:) or Boring Lo	cation	1		•	·			Grid Lo				· · · · · · · · · · · · · · · · · · ·
	Plane	_		N, E	S/C/N		at		<u> </u>							□ E
SE		4 of 1	W j		N, R 17 E	Lor					1777		t 🗍 :	<u>S</u>		Feet W
Facili	ty ID	. *		County Fond du Lac	F	County C 20	ode		d du L	•	Village					
- Sa	mple	T	1	Polid du Lac		20	1	FOII	u du L	ac	1	Soil	Dron	erties		1
	T	1		Soil/Rock De	scription							I		CILICS	<u> </u>	-
	Length Att. & Recovered (in)	nts	Depth In Feet	And Geologic	-		1				Compressive Strength					, s
Vpe	h At	Sol	I I	Each Majo	-		Ø	. <u>e</u>	l E	自	ress	ure nt		ity.		nent
Number and Type	Length Att.	Blow Counts	epth				SC	Graphic Log	Well Diagram	PID/FID	omp	Moisture Content	Liquid Limit	Plasticity Index	200	RQD/ Comments
Za	그곡	m	 ^	Surface composed of 8"	concrete follo	d	D	107	≽ □	<u> </u>	2 2	≥ 0	111	모표	<u>a</u>	X O
1 SS	24'	20	E	by 4" coarse fill.	concrete fono	wed f		XXX		10						
	15		-2.5	FILL: POORLY GRAD	ED SAND		CL CL		4 .	20				· [
2 SS	24 15	24	F.	LEAN CLAY - red.		f	CL	77777	3	20						
3	24	31	一5.0 二	SANDY LEAN CLAY		F	SP GP	11111		100						}
ss [24		7.5	POORLY GRADED SA			CL		1						!	
4 SS	24 20	27	£ '	POORLY GRADED GI LEAN CLAY - red.	RAVEL		CL			600					!	
_	}	00	10.0		t.odor.					600					i	
5 SS	24 24	30	E				CH			600					, !	
6	24	39	-12.5	FAT CLAY - red, mode	rate odor.		·	1111		100						
ss [24		E				CH			100						
7	24	34	15.0	LEAN CLAY - wet, red			CĹ	111111		15				•		
SS	24	l	F , ,				CL									
8 SS	24	38	17.5	FAT CLAY - wet, brow	n,		CH			12	'	.	50.5	29.6		
	24		E-20.0													
9 SS	24 24	31	E				CH			10	İ					
	}	44	-22.5				CH.	5555		5		.				
10 SS	24 24	44	F }	SANDY LEAN CLAY POORLY GRADED SA	wet, gray.		CL_SP			3						
11 🕅	24	31	-25.0	GRAVEL - wet, tan.	MIIM ON	/		XXX		15				-		
SS	24		E	SILTY CLAY WITH G	RAVEL - wet,		CL-ML		·	,						
			27.5			/						}	ĺ			
_		ļ	30.0	NO RECOVERY	•					-					•	
12 SS	2 2	50/2"	30.0	NOTES: 1) Auger refusa								.				
55	-			sampling at 30.2 feet. 2)	1" temporary v	well						İ				
				set at 30 feet. 3) Concret approximately 3 feet belo								ŀ	.		1	
					6					-						
I hereb	I hereby certify that the information on this form is true and correct to the best of my knowledge.															
Signati	gnature Firm MILLER ENGINEERS & SCIENTISTS Tel: 920-954-9100															
									WI 541	36			Fax 9	20-954-8720		

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SOIL BORING LOG INFORMATION

Department of Natural Resources Form 4400-122 Route To: Watershed/Wastewater Waste Management Other [Remediation/Redevelopment Page 1 of Facility/Project Name License/Permit/Monitoring Number Boring Number **B17** Quicfrez Boring Drilled By: Name of crew chief (first, last) and Firm Date Drilling Completed Date Drilling Started Drilling Method hollow stem M&K Env. Drilling 12/27/2001 12/27/2001 auger WI Unique Well No. DNR Well ID No. Common Well Name Final Static Water Level Surface Elevation Borehole Diameter Feet MSL Feet MSL 5.3 inches Local Grid Origin (estimated:) or Boring Location Local Grid Location Lat Ε State Plane N. S/C/N SE 15. Long Feet \square W 1/4 of NW 1/4 of Section T 15 N, R 17 E Feet \square S Facility ID County Code Civil Town/City/ or Village County Fond du Lac 20 Fond du Lac Sample Soil Properties Soil/Rock Description ચ 🗐 Depth In Feet Compressive Strength Blow Counts And Geologic Origin For cngth Att. Recovered Number and Type Moisture Well. Diagram Graphic PID/FID Plasticit Content Each Major Unit Liquid Limit Log Surface composed of grass. FILL: LEAN CLAY - red, slight odor. FILL: CINDERS - black, slight odor. SS 28 12 2 SS. 24 21 10 15 3 SS 24 50 FILL: GRAVEL AND SAND - slight odor. 15 12 24 21 LEAN CLAY WITH SAND - red, slight 10 SS 12 5 SS 37 24 LEAN CLAY - moist, red. 10 CL 24 35 24 FAT CLAY - wet, red. 5 CH SS 18 15.0 31 24 5 SS 24 17.5 24 29 15 SS 24 20.0 27 24 15 ...brown. SS 12 22 10 24 29 30 53.3 32.4 24 SS 24 21 50 CH SS ...dark brown. 24 31 12 NO RECOVERY SS NOTES: 1) End of sampling at 29.5 feet. 2) 1" temporary well set at 29 feet.

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

Signature MILLER ENGINEERS & SCIENTISTS Tel: 920-954-9100 1119 W. KENNEDY AVE. KIMBERLY, WI 54136 Fax: 920-954-8720

Department of Natural Res	sources					·	Form 4	400-12	2		R	ev. 7-9	98
<u>R</u>	oute To: Watershed/W	Vastewater	Wast	e Mana	gement								
	Remediation/	Redevelopment 🛭	Other	- 🗆	•								
										Pa	ge 1	of	1
Facility/Project Name			License	e/Permi	t/Monit	oring N	umber		Borin	g Numb			
Quicfrez Boring Drilled By: Name	of crew chief (first last) a	nd Firm	Date D	rilling 9	Storted		ID.	te Deil	ing Co	mpletec	<u>B1</u>		lling Metho
Brian	or orew effect (msi, last) a		Dato	1111115	Julion			ic Din	mg co	mpictor	•	i	ollow ste
Environmental Drilli					1/2002				2/21/	2002		a	uger
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final S			vel		e Eleva 758.6		ACT.	Во		Diameter
Local Grid Origin (e	estimated: () or Bor	ing Location	<u> </u>	reet	MSL					viol		<u>ی.:</u>	3 inches
State Plane		E s/c/n	I	at	<u> </u>	-					1		· 🗆 I
	1/4 of Section 15,	T 15 N, R 17 E	Lo		0 Id: 17		<u> </u>	<i>T</i> 11	Fee	t 🗆 S	<u> </u>		Feet 🔲 🛚
Facility ID	County Fond du Lac	1	County C 20	ode		Town/Ci du La	•	Viшage					
Sample	T cha da Edo	<u> </u>		T	Tone				Soil	Prop	erties		
	Soil/Ro	ock Description	•							T			1
Att. ed () ount	And Geo	ologic Origin For					_	ssive	6		λ .		nts
Number and Type Length Att. & Recovered (in) Blow Counts Depth In Feet	Eacl	n Major Unit		CS	Graphic Log	Well Diagram	PID/FID	npre	istur	Liquid Limit	Plasticity Index	00	RQD/ Comments
				U S	2 3	We	_H	S tr	Moisture Content	pi ii	Pla. Ind	P 200	88
1 24 11 - SS 6 =	TOPSOIL				12 3 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		40		31.12	·	.		1
2 24 6 - 3					37 3	ľ	25		25.29				Ì
3 3 24 7 E	FILL: WOOD		f	CL			30		30.93				
SS 12 7 6	TOPSOIL LEAN CLAY - dat	mn red		CL			15		25.3				
SS 18 5 24 7 5 9	SANDY LEAN CI	* '		CL			10		23.99				<u> </u>
SS 12 = 9 6 24 6 =	wet, with gravel.		 -				15		23.05				
SS 18	L			CL	7777		12		23.57				
SS 18 E	FAT CLAY- wet, 1	rea.		CH		: 1		[f				
8 24 18 15 SS 24 18 15		-		CH			8]	20.02		1		
9 24 20 5				СН			12		21.45				
18 18 15 = 18 15 E 18 15 E 18				СН		. [12	- 1	22.1	1	1		
24 12 = 21				СН			12	ł	25.37	1			
2 24 15 E				СН			12		25.13)			
3 24 17 24	brown, with grave	el. — — — —		CH			30		28.03				
S 15 E 27	, 						20		22.27		}		
S 3 -2'	OH TY CLAY MAT	TI CD ANGI		CH			25	1	27.93		Į		
s	SILTY CLAY WIT gray.	.H GRAVEL - WEL	•	CL-MI		1		1	1				
6 24 10 = 30 S 21 E				CL-ML			20		24.81	.			
	NOTES: 1) End of Boring backfilled w		. 2)]	1			1		1		ļ	
	completion.	and ochomic upon								.			
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ereby certify that the infor	mation on this form is tru												
gnature			ER EN			& SCI							20-954-910 20-954-872

DISTIC OF AA IPOONIPHI	
Department of Natural	Resources

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Form 4400-122		Rev. 7-98

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	ity/Proj		me			Licens	e/Perr	nit/Mon	iton	ng N	umber		Borin	g Num		10	
•	icfrez		Nan	16.0	of crew chief (first, last) and Firm	Date	rilling	Startex	1		ID:	ate Dril	ling Co	mplete		19	illing Metho
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				illi	ng Service			25/200					2/25/	2002		1 2	nuger
WIU	nique V	Well N	lo.		DNR Well ID No.   Common Well Name	e Final S		Water L		-	ĺ	æ Eleva			E		le Diameter
Local	Grid C	rigin	$\overline{\Box}$	(e:	stimated: ) or Boring Location		ree	t MSI	<i>1.</i>			757.4	Grid Lo				3 inches
	Plane	,		ζ.	N, E S/C/N	I	.at	°_	1				0110 15				
SE		4 of 1	W	_1	1/4 of Section 15, T 15 N, R 17 E			<u> </u>	1		<u> </u>		Fee	t 🗆			Feet 🗌 V
Facili	ty ID	_			County	County (	Code					Village					
	1-	T	<del>-</del>		Fond du Lac	20	7	For	ad d	u La	1C	Γ	C-:	l Dage			·
	nple	-			Soil/Rock Description							<del> </del>		Prop	erties	1	-
	d (ii)	ints	1 00	5	And Geologic Origin For							ive		]			50
ype	th A	Sol	2		Each Major Unit		S	.i.		E	Ð	oress gth	ure	-	city		nent
Number and Type	Length Att. & Recovered (in)	Blow Counts	Don'th In Boot	nd			USC	Graphic	8 S	Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24	12	+-	-	FILL: CLAY - damp, brown.	·	1=	- XX	7	- 11	0	OS	40.36	1-1-	<u>                                    </u>	<u>                                   </u>	<u> </u>
SS	15		E	ے	FILL: CINDERS - damp.		-	$\longrightarrow$	X								
2 SS	24 12	9	F-2	ا د.	FILL: CLAY - damp, brown.		<u> </u>	+	X	1	0		32.99			İ	
_ 1_	}		E_5	.0	FILL: CINDERS - damp.	/		T.					01.05				
SS S	24 8	6	E		FILL: SAND, GRAVEL, AND CIN moist.	DEKS		$\boxtimes$	8		3		21.85				
4 SS	24 6	12	[-7.	.5	FILL: CINDERS - moist.			$\longrightarrow$	8		1		23.62				
_	24	15	-10	o.d	LEAN CLAY - moist, red.		CL		4		o		25.45				
5 SS	6		Ė		SANDY LEAN CLAY - wet, brown	L .	CL	F	-				ر4.دے		}	}	
6 SS	24 14	16	F-12	2.5	LEAN CLAY - moist.		CL				0		22.01				
7 SS	24 5	14	F-1:	5.0			CL				0		22.42				
8	24	13	-17	7.5			CL				10		23.49				
SS \	18	10	F_20	d	TATOLAN 1	· · · · ·					50		24.00				
9 SS	24 24	10	E 🔩		FAT CLAY - moist, brown.		CH				50		24.99			-	
10 SS	24 24	12	-22 -				СН				100		27.8				
11 SS	24 24	14	-25	5.0			СН				70		27.27				
12 SS	24 22	17	27	.5	LEAN CLAY - moist, red.		CL CL	11/1/			90		9.7				
33 [	.22		F	+	with gravel, gray. NOTES: 1) End of sampling at 29.5												
					Boring backfilled with bentonite upor completion.	n i											[
												.					
Thereb	r certifi	, that	the in	<u></u>	nation on this form is true and correct to the b	ect of my 1	n 0323-	dae	<u></u>					1			
Signatu		, wai	are III.	.011		LER EN			ی و	CCT	יייואם	CTC				T-1.	20 054 010
				•	I TATLE	LLEK EK W. KENI							36				920-954-910 920-954-872
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Depa	rtment	of Nati	ural Res	sources .						Form -	4400-12	2	~~~	R	ev. 7-9	98
			R	oute To: Watershed/Wastewat	er 🗌	Waste	e Mana	gemen	t 🗆			•				
				Remediation/Redevel		Other										
													Pa	ge 1	of	1
	ity/Proje		ne	<del> </del>		License	/Permi	t/Moni	toring N	umbe	r	Borin	g Numb	er		
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Bri		a By:	Name	of crew chief (first, last) and Firm		Date D	nimg	Started		ا	ate Dril	ung Co	mpietec	l	i i	lling Method ollow sterr
		ental	Drilli	ing Service			3/3	1/2002	?	1		3/1/2	2002		1	uger
	Inique V				on Well Name	Final S	tatic W	ater Le	vel	Surfa	ce Eleva			Во	rehole	Diameter
Tool	Grid O			atimated (7) as Daise I as		<u> </u>	Feet	MSL			758.4	Feet l			5.3	inches
	Plane	пдш	☐ (e	estimated:   ) or Boring Loca  N, E	S/C/N	L	at	<u> </u>	<u> </u>		Local	Olia IX		Ŧ		□ Е
SE		of N	w.	-	n, r 17 e	Lor	ng	<u> </u>	<u>'</u>	. !!		Fee	t 🗆 S			Feet W
Facili			ounty C	ode	ı		-	Village								
				Fond du Lac		20	,	Fon	d du L	ac _			-			· · · · ·
Sa	mple			9-100 - 1-D	•							Son	Propo	rues		-
	F. & (ii)	ati	eet	Soil/Rock Desc And Geologic O	=	•					Š	į				
ype	h At	So	In	Each Major			52	.9	l g	£	ress	n de		city		nent
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	2		•	SC	raph og	Well Diagram	PID/FID	omp	foist onte	Liquid Limit	Plasticity Index	200	RQD/ Comments
1	24	12	F C	FILL: TOPSOIL	<del></del>		) D	<u> </u>		2	0 8	20	11 11		Д.	<u> </u>
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}			F		,			1, 37								
2 SS	24 12	N/A	E-2.0	FILL: CINDERS						3						
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			3.5					$\bowtie$					ł	1		
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.			F-5.0					XX						-		
			5.5					XXX				1		1		
L			-6.0	NOTES: 1) End of sampli	ng at 6 feet 2	2		XXX						•		
				Boring backfilled with ber	ntonite upon	1	į					į				
				completion.					ļ			1				
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I hereb	hereby certify that the information on this form is true and correct to the best of my knowledge.															
Signatu	Firm MILLER ENGINEERS & SCIENTISTS Tel: 920-954-910															
<del></del>	1119 W. KENNEDY AVE. KIMBERLY, WI 54136 Fax: 920-954-8724															

	on wisc		ural Re	sources							Form 4	1400-12	22		:- R	ev. <b>7</b> -9	8
			R	Loute To:		Vastewater ☐ /Redevelopment ☒	Wast Other	e Mana	gement	t 🗆							
Facilit	y/Proje	ct Nar	ne				Licens	e/Permi	t/Moni	toring N	lumber		Borin	Pa g Numb	ge 1	of	1
Qui	cfrez										,				B2	1	
		d By:	Name	of crew ch	nief (first, last) a	nd Firm	Date D	rilling	Started		D	ate Dril	ling Co	mpletec	1	Dril	lling Method
Bria		4 - 1	D-211	· 0	•			21	1/2000	١.			2/3/	2002			ollow stem
	ique V			ing Serv	Well ID No.	Common Well Name	Final S		1/2002 ater Le		Surfa	ce Eleva	3/1/2	2002	IBe		uger Diameter
	1								MSL				et MS	L			3 inches
	Grid O	rigin	☐ (¢	estimated:		ing Location	1 7			1	н	Local	Grid Lo	cation			
State		<u> </u>	777 7		•	E s/c/N	1	.at		<del></del>			_	1			DE
SE Facilit		of N	i W	1/4 of Sec	tion 15, County	T 15 N, R 17 E	County C		Civil	Fown/C	ity/ or	Village		t 🗆 S	<u> </u>		Feet W
1 domi	, 12				Fond du Lac		20	,020	1	d du L	•	· mage					
San	nple				<del></del>								Soil	Prop	erties		T
	સ્ર 🗊		#		Soil/Re	ock Description											
o		Blow Counts	Depth In Feet		And Ge	ologic Origin For				_		ssiv	0		y		nts
Number and Type	Length Att. Recovered	Ŭ ≩	th Ir		Eacl	h Major Unit		CS	phic	1 gram	PID/FID	apre ngth	stur	를 #	ticit	<u> </u>	June O
Nun	Len Rec	Blo	Dep					US	Graphic Log	Well Diagram	PID	Con	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 12	15	1.0	FILL:	TOPSOIL				7, 1. 7,		1						· ·
55	12		E-0.5						13.5.7								İ
			1.0						7.30		 						
			-1.5	j				ļ	<u> </u>								
			E_2.0	FILL:	GRAVEL				XXX								
2 SS	24 8	13	F		CLAY - rec	i.					2			ļ			
	1		E-2.5	`										{	.		
			=3.0					CL.									
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3	24	13	=4.0								2			-			
3 SS	9	13	4.5	j							2			ļ		j	
100	.							CT					l	l			
1			<u>-</u> 5.0			•		CL						ĺ		j	
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닉			-6.0	NOTE	S: 1) End of	sampling at 6 feet.	2)						{	1		1	
Ì				Boring	g backfilled v	with bentonite upon	2)						ľ			ł	
	}			comple	etion.	· · · · · · · · · · · · · · · · · · ·				Ì	İ	}	l	l		ĺ	
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				<del></del>	1. 6	4											
		that th	ne unfor	mation on	this form is tru	e and correct to the bes								·			
Signatur	G						LER EN W. KENI						36				20-954-9100 20-954-8720

DINIE OI WISCOHSHI	
Department of Natural Resource	:s

# SOIL BURLING LUG HIT UNIVERSITORS Form 4400-122 Rev. 7-98

		P	toute To: Watershed/V	Wastewater 🔲 '	Wast	e Mana	agement								
			Remediation	/Redevelopment 🛭	Other										
						•						Pa	ge l	of	1
Facility/Pro	-	me			License	e/Perm	it/Monit	oring N	lumber		Boring	y Numb	er	-	
Quicfre		None	of crew chief (first, last) a	1 5.	D.A. D	-31:	Started		10.	ate Drill	- C-	1-4- 6	B2		11:> 7-411
Brian	led By:	Name	of crew chief (first, last) a	ind rim	Date	THING	Started			iie Dun	mg Co	mpietec	1		lling Method ollow stem
	menta	l Drill	ing Service			3/-	4/2002				3/4/2	2002		- 1	iger
WI Unique	Well N	o.	DNR Well ID No.	Common Well Nam	e Final S		later Le	vel		e Eleva			В	orehole	Diameter
Local Grid	Origin	<del>``</del>	estimated: ) or Bo	ring Location		Feet	MSL			757.5	Feet N			5.3	inches
State Plane	_	L) (		E s/c/n	I	at		<u>'</u>	<del>11</del>	Local	Jilu Lo		J		ΠE
	/4 of ]	W	1/4 of Section 15,	Lo	ng		<u> </u>	. "		Fee	t 🗆 s			Feet W	
Facility ID			County		County C	ode	l l	Town/C	-	Village					,
		<del>- ,</del>	Fond du Lac	; 	20	Τ	Fond	du L	ac		<u> </u>	D.			·
Sample	_		g-am	- d- Denoistica						ļ	2011	Prope	erues		-
Number and Type Length Att. &	il ti	eet	1	ock Description ologic Origin For						8					
ype h At		Im	1	h Major Unit		52	.ej	H	P	oress 3th	ure int	73	city	ı	nent
Number and Type Length Att.	Blow Counts	Depth In Feet		···		SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	200	RQD/ Comments
	13	<u>  A</u>	FILL: GRAVEL	<del></del>		P		D A	2	OS	20	니니	H H	凸	<u> </u>
1 SS 8		F _a	122.0141.22				$\bowtie$								
2 24 SS 4	12	-2.5		<u> </u>		<del>                                     </del>	$\bowtie$		0						į
_ 🗒		E-5.0	FILL: LEAN CLA	Y - red	<del></del>		$\sim$		_						
3 24 SS 10	19	Ę	FILL: GRAVEL	OPSOIL.	— — <del>,</del>	CL			0						<u> </u>
4 24	18	7.5	LEAN CLAY - re				11111		0						
SS 2		Ė				CL		. ]					ĺ		
5 24	23	10.0				CL.			0		-	-	Ī		
SS 2		E 12.5										j			
6 24 SS 24	16	E	FAT CLAY - red.			СН			0			1			-
7 24	19	15.0	d .			_	1111		0			]			
SS 15		E		,	!	CH					l	Ì			
8 24	17	F 17.5					1111		0		į		1		
SS 18		E _{20.0}				CH		.			l	1			
9 24 SS 18	16	E	brown.			CH		ĺ	0	ĺ	ļ	Í			
10 24	23	-22.5					1111	. ]	0			- 1	[		
10 24 SS 4		<u> </u>				CH		1	1			}			
11 24 SS 18	16	<del>-25.0</del>				СН		}	0			1	ļ	ļ	
		E-27.5							.		. }				
12 24 SS 18	13	E	SILT - gray.			CH ML		l	0			1	Ì	[	-
		<b> </b>	NOTES: 1) End of			- 2:22		ĺ	1	l	- 1		.		
			Set 1" temporary w	vell at 30 feet. 3)	Boring			1							
			backfilled with ben	monne aner sampl	mg.	-		İ			1				
										-		1			
I hereby certi	fy that	the info	mation on this form is tru	ne and correct to the b	est of my k	nowle	ige.							L	<del></del>
Signature				Firm MI				& SC	IENT	STS			<del> </del>	Tel: 9	20-954-9100

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

1119 W. KENNEDY AVE. KIMBERLY, WI 54136

•			Ī	Route To: Watershed/Wa				te Man	agemen	t 🗆							
				, conformation is	codo volopi		040	<i>-</i> _						Pa	ge 1	of	1
	ity/Proj		ıme	<del> </del>	<del></del>		Licens	e/Perm	it/Moni	toring]	Numbe	r	Borin	g Numb	er		
	iicfrez ng Drille		Name	of crew chief (first, last) and	d Firm	·	Date I	Drilling	Started		D	ate Dril	ling Co	mpletec	<u>B2</u>		illing Method
	ian		1 70 -11					0.1	41000				_	-		h	ollow stem
	Viront Inique V			ing Service  DNR Well ID No.  0	Common	Well Nam	e Final:		4/2002 Vater Le		Surfa	ce Eleva		2002	lВе		uger e Diameter
	-							•	t MSL			756.6	Feet 1				3 inches
	Grid C	rigin		estimated: []) or Borin N, E	_	n 🗌 C/N		Lat	<u> </u>		**	Local	Grid Lo	cation	Υ	1	
SE	1/4	of l	W	1/4 of Section 15,		, r 17 e		ng	<u> </u>	<u> </u>	11		Fee	t 🗆 S			☐ E Feet ☐ W
Facility ID County Code Civil Town/City/ or Village Fond du Lac 20 Fond du Lac																	
Sa	mple					,	<del>. L</del>						Soil	Prop	erties		Ţ
	શ્રું (દ્	its	eet		k Descrip							e V					
er ype	th Att	Com	In F	And Geole Each	ogic Ongi Major Un			S	.g	ua	P	oressi gth	ure	-5	city		, nents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	·	J		•	USC	Graphic	Well	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 10	6	-	FILL: GRAVEL, To damp.	OPSOII	L, SAND	) -				2					<del></del>	
2 SS	24	5	-2  -4	LEAN CLAY - moi	st, red.	····		CL			1				-		
3 SS	24 15	4	-6	wet.				CL			5						
4 SS	24 18	9	-8	moist, mottled.				CL			3						
5 SS	24 14	10	-10					CL			3						
6 SS	24 15	13	-12 -14	sand pocket at 13'.				CL			3						
7 SS	24 18	17	16				•	CL			3						
8 SS	24 24	10	—18 —					CL			3						
			-20	NOTES: 1) End of sa Set 1" temporary wel backfilled with bento	ll at 20 i	feet. 3) E	Boring										
	`							·									·
I hereby	y certify	that t	the info	rmation on this form is true	and corre	et to the b	est of my l	cnowie	ige.						<del></del>		
Signatu						irm MII	LER E	VGIN	EERS				36				20-954-9100
	1119 W. KENNEDY AVE. KIMBERLY, WI 54136 Fax: 920-954-8720																

DINIC OI	AA 12001121	ш	
Departn	ent of N	atural Re	sources

Form 4400-122

Rev. 7-98

			<u>R</u>	oute To: Watershed Remediation			Wast Other		gement								
				Kemediane	MI/ Nedevelo	pment 🖂	Other	. ப						Da	~~ 1	of	1
Facility/P	roject	Nam	ne	<del></del>			Licens	e/Perm	t/Monit	oring N	lumber		Borin	g Numb		OI	1
Quicfr		n	XT	1.66.	1.77		15 + 5	*111	<del></del>			+ D ''		1.2	B2		<del> </del>
Brian	ппеа	ву:	Name c	of crew chief (first, last)	and rum		Date D	niling	Started				ung Co	mpletec	1		ling Method ollow stem
Enviro				ng Service					1/2002					2002		1	iger
WI Uniqu	e Wel	l No.		DNR Well ID No.	Commo	n Well Name	Final S		ater Le	vel	1	e Eleva		COT	B		Diameter
Local Gri	d Orig	zin	☐ (e	stimated: ( ) or B	oring Locat	ion 🗆		reet	MSL		<u> </u>		Feet I	VIDL eation		3.3	inches
State Plan		,	_ `	N,		/C/N	I	Lat						□ 1	1		□Е
SE	1/4 of	f N	<u>W</u> 1	1/4 of Section 15,	т 15	N, R 17 E		ng	0 12			711		t 🗆 S	}		Feet W
Facility II	,			County   County Code   Civil Town/City/ or Village   Fond du Lac   20   Fond du Lac										•			
Sampl	e l		Ī	Soil Properties										<del></del>			
ચ	<u> </u>	22	15	Soil/	Rock Descr	iption							T				1
A# o	pa (	ount	ı Fec	1	<del>le</del> ologic Ori	_						ssive	6				nts
Number and Type Length Att.	Recovered (in)	Blow Counts	Depth In Feet	Ea	ach Major U	Init		SCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	8	RQD/ Comments
		<u> </u>	Ď		<del>20 TOTO</del>			j j	5 3	N I	H	8 8	≥ 3	Liquid Limit	Pla	P 200	88
1 SS 9	4	3	Ė	FILL: BROWN damp.	CLAY W	ITH SAND	) -		$\bowtie$		0						
			-1.5	Canrip.					$\bowtie$	{				(			
2 2	4	9	-	EIT I · SANID AN	ID CDAT	/EI wat			***								
2 SS 1	5	•	一3.0 こ	FILL. SAND A	FILL: SAND AND GRAVEL - wet.				$\bowtie$							ļ	
			-4.5						$\bowtie$								
3 2 SS 6	4	10	=	L FILL: CLAY - w	et.				$\bowtie$		0						
SS 6	•		 6.0	FILL: CLAY - w FILL: GRAVEL	- wet.			-	$\bowtie$							1	ļ
Ц			-			<del></del> _	<del></del>		$\bowtie$								
4 24 SS 12		14	-7.5 -	LEAN CLAY - v	vet, red.						0				1		
SS 12	2	İ	-9.0					CL									
14		ŀ	- /."				<del></del>					}					
5 22 SS 12	1 ]	11	-10.5	FAT CLAY - we	t, layered	red and bro	own.	СН		}	1				1	1	
		Ė	-					CH.		. [							
닉		Ė	-12.0	•								- 1		İ		.	•
6 24 SS 12	1	12	-13.5							j	0		į		1		
SS   12	2	ţ		•			·	CH		1		[					
Ц		F	-15.0	NOTES: 1) End o	f camplin	or at 15 feet	+ 2)			j			-			1	
				Set 1" temporary	well at 15	feet, 3) Bo	oring	: :		Ì	Ì		l	l	1		
			1	backfilled with be	ntonite at	fter samplin	ıg.			1	.	l		Į	1		
	}	.							[		}		İ			.	
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I hereby co-	tife th	at th	e infor	mation on this form is t	Tile and over	rect to the he	st of my b	- Iwon	loe				L				
Signature	ury u	iat til		maden on this total is t	and and Wi	<del>,</del>	LER EN			& የር	IENT	272	·			Tel· 0	20-954-9100
						17212	W. KENI						36				20-954-9100

PISTIC OT	Metwoelak	
Departm	nent of Natural	Resources

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Rev. 7-98

			Re	oute To: Watershed/Wastewate		Wast	e Mana	agement	: 🗆								
				Remediation/Redevelo	pment 🛭	Other	- 🗆										
													Pa	ge 1	. of	1	
Facility		ct Nar	ne	····	· · · · · · · · · · · · · · · · · · ·	Licens	e/Perm	it/Moni	toring l	lumbe	r	Borin	g Numi				
	cfrez			·				<del></del> ,						B2			
_		d By:	Name o	of crew chief (first, last) and Firm		Date D	rilling	Started			ate Drill	ing Co	mplete	i	i i	lling Method	
Bria Envi		ental	Deilli	ng Service		ł	3/	4/2002	•			3/4/2	2002		hollow stem auger		
WIUn					n Well Name	Final S		ater Le		Surfa	ce Eleva			B		e Diameter	
			Feet MSL 754.3 Fe											5.3 inches			
Local (		rigin	(c	stimated: ( ) or Boring Locat		- T	at	0	1		Local	Grid Lo	cation				
State I SE			7777	•	· · · · · · · · · · · · · · · · · · ·							ו 🗀 .			D E		
Facility		of N		1/4 of Section 15, T 15 N, R 17 E   Long ' ' '   Feet [   County   County Code   Civil Town/City/ or Village							ŧ Ц 3			Feet W			
				Fond du Lac		20		i	d du L	•							
Sam	ple											Soi	Prop	erties		T	
	સ (દો		#	Soil/Rock Descr	ription					Ì						1	
		Blow Counts	Depth In Feet	And Geologic Ori	igin For		1		_	_	Compressive Strength	0		>		ıts	
Typ	Length Att. Recovered	ີ່ວັ	th	Each Major U	Jnit		CS	Graphic	l gram	PID/FID	ngth	stur	멸ᆵ	ticit	2	) mine	
Number and Type	Len Rec	Blo	Dep			÷	US	Gra	Well Diagram	E E	Com	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments	
1 SS	24 18	7	F	LEAN CLAY - damp, red			CL			0							
				3" layer of buried topsoi	l at 1'.				1								
2 SS	24 6	8		moist.			CL			0				-			
3	24	7	<del>-</del> 5.0	mottlad	mottled.					0					ĺ		
SS	18	•	E	momed.			CL			٠.					Í		
4	24	13	7.5	with gravel.		CL	11/1/		0								
SS [	4		E				CL										
5 SS	24	17	10.0	brown.			CL.			0		!					
5			-12.5		·			/////		_						1	
6 SS	24 18	10	E	FAT CLAY WITH GRAV	EL - wet, b	rown.	СН			0							
7	24	12	E-15.0	layered red and brown fa	t olar			1111		0							
7 SS	15	12	E 1	layered fed and brown fa	u Clay.		CH			v		ļ			i		
8	24	15	17.5	brown.			CH	1111		0			Ì				
SS \	- 1		$E_{aad}$				CII		-		] ]	. ]					
9 SS	24 18	14	20.0 -	with gravel.			СН			. 0		1					
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10 SS	24	12	E		•		CH			0				1	- }		
11	24	7	25.0	red.			CH	1111		0		ĺ					
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	- 1			gray. NOTES: 1) End of samplin	ig at 27 feet	2)'			1			Į		}			
· }				Set 1" temporary well at 27	7 feet. 3) Bo	oring			İ			1		.		[	
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			<u> </u>		Vastewater □ /Redevelopment ⊠	Wast Other		agement	: 🗆								
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		nenta	l Drill	ing Service			3/	5/2002	2			3/5/2	2002	•	,	ollow ster uger	
WIL	mique V	Vell N	0.	DNR Well ID No.	Common Well Name	Final S	tatic V	Vater Le		Surfa	ce Eleva	tion		В	Borehole Diameter		
Local	Grid C	منمنہ		estimated: ( ) or Bor	ing Location		Fee	t MSL			758.7				5.3 inches		
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1 SS	24	12	+	FILL: GRAVEL,	ORGANICS, CINI	DERS.	1 -	$\overline{XX}$	121	5	0 8	Z 0		<u> </u>	д		
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2 🕅	24	10	-2	NO RECOVERY										ļ ·			
2 SS	ÑR	10	F,	NORECOVERI									}				
L	}		<del>-4</del>				,	<b> </b>								}	
3 SS	24 NR	6	F ₆								-						
	1		<b>F</b> .								.						
4 SS	24	10	E-8	SANDY LEAN CI	LAY					10							
SS	8		E		•		CL										
5 🗖	24	10	-10	3" poorly graded	cand and orayal ca	am at				10				}			
SS S	8	10	F	11 feet.	Sand and graver sea	aiii ai	CL	E		10							
L'			-12										Ì				
6 SS	24 21	18	Ė	FAT CLAY - red.			CH		1	10							
П			-14	•			0.11						1	1	i		
7 SS	24 15	16	E	brown.						10		1					
22	12		-16 -				CH					1	1	1			
			-18							.		ļ					
8 SS	24 24	26	- 10	·	•		СН			10							
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		•		NOTES: 1) End of Set 1" temporary w	sampling at 20 feet ell at 20 feet 3) Bo	: 2)			{			}	}	. 1			
	ĺ			backfilled with bent	tonite after samplin	ig.					-	- {					
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		that t	he info	mation on this form is tru							·			·			
Signatu	re					LER EN						26 .				20-954-910	
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Departn	ent of Natural	Resources

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Rev. 7-98

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	ty/Proje icfrez		me					License	e/Perm	it/Moni	toring N	lumber		Borin	g Num	ber B2	7		
			Name	of crew ch	ief (first, las	t) and Firm		Date D	rilling	Started		D	ate Dril	ling Co	mplete			lling Method	
Bri	an			ing Servi						5/2002				3/5/	2002		h	ollow stem uger	
	nique V				Well ID No.	Common	Well Name	Final S		Vater Le		Surfa	ce Eleva		2002	В	Borehole Diameter		
Feet MSL											758.9				5.3	3 inches			
Local Grid Origin (estimated: ) or Boring Location State Plane N, E S/C/N								· I	.at	۰	<u> </u>	n	Local	Grid L					
SE		of N	1W	1/4 of Sec	'		J, R 17 E	Lo	ng		,	. 11		Fee	: [] : [] <del>:</del>			Feet W	
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	t. & [ii)	nts	eet			/Rock Descrip Geologic Orig	-					}	8		1			100	
oer ype	th At	Con	l H		•	ach Major Ur			S	i.g	#	P	ress	a ta	-	city	İ	nent	
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		•	j		•	USC	Graphic Log	Well Diagram	PID/FID	Somp tren	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments	
1 SS	24	19	E	FILL:	GRAVEI	AND CIN	IDERS - r	noist.			12 11	0	08	20	111	АЛ	<u> </u>	<u> </u>	
2 SS	24 6	6	2.5	FILL:	SAND A	ND CINDE	st.		$\bigotimes$		5								
3 SS	24 3	50/4"	5.0	1	GRAVEI	NKS -		$\overset{\infty}{\otimes}$		5									
4 SS	24 NR	15	7.5	MO R	ECOVER											·			
ss L			-10.0	ļ				-					}						
SS	24 4	6	E	FILL: moder	SAND All ate odor.	ND GRAV	EL - wet, 			$\bowtie$		20							
6 SS	24 18	11	12.5 E	FILL:		TH GRAV	ÆL - wet,	, =		$\bigotimes$		250						  - 	
7 SS	24 12	15	<u></u> 15.0	odor.		OF WOOL	,	<u> </u>	CH			150						ı	
8 SS	24 20	16	<u></u> 17.5	FATC	LAY - we	et, red, mod	lerate odoi	r.	СН			20							
9 SS	24 24	11	-20.0 -	layered	d red and b	rown fat cl	ay.		CH			70						-	
10 SS	24 24	13	—22.5 E						СН			70							
11 SS	24 24	8	-25.0						СН			40					·		
12 SS	24	12	27.5 						СН			40			_				
SS [	24		30.0	Set 1" 1	temporary	of sampling well at 30 contonite after	feet. 3)Bo	ring											
hereby	certify	that t	he infor	mation on	this form is	true and corre	ect to the he	st of mv k	nowle	1ge.				!	1				
ignatu					- III IOIII IS		irm MIL	LER EN	IGIN.	EERS					•			20-954-9100	
					<del></del>		1119	W. KENI	NEDY	AVE. I	CIMBE	KLY, V	VI 541	36		·	Fax: 92	20-954-8720	

STATE OI	AA I SCOM 2 III	
Departm	ent of Natural	Resources

Form 4400-122

Rev. 7-98

			F	Loute To:	Watershed/V					agemen	t 🗆							
	•				Remediation	/Kedevelo	opment 🖾	Otne	я 🗌						Pa	1	of	1
Facili	ty/Proje	ect Na	me		·	·- · · - ·	<del></del> .	Licen	se/Perm	it/Moni	toring 1	Number		Borin	y Numb		- 01	
	cfrez															B2		
		d By:	Name	of crew chi	ief (first, last) a	nd Firm		Date I	Orilling	Started		D	ate Drill	ing Co	mpletec	l	ì	lling Method
Bri. Env		nenta	1 Drill	ing Servi	ice			1	3/	5/2002	)			3/5/2	2002		ı	ollow sten uger
	nique V				Vell ID No.	Commo	n Well Name	Final		Vater Le		Surfa	ce Eleva			B		Diameter
								Feet MSL			<u> </u>	754.4				5.3 inches		
	Grid O Plane	rigin	Ц (	estimated:		ing Locat E S	tion. []				н	Local (	Grid Lo		-			
SE 1/4 of NW 1/4 of Section 15, T 15 N, R 17 E							L	ong	•	'			Fee	1 🗆 t			☐ E Feet ☐ W	
Facilit	y ID			C	County		[	County		- I		•	Village					
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_San	nple	1			g-37D	1- T)				}			ļ	5011	Prop	erties		+
	1. & [ii]	nts	eet			ock Descr ologic Ori	-						ive					
er ype	th At	Sol	1 1			h Major U	_		52	ji.	l ma	<u>a</u>	oress gth	ure at	-B	city		nent
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	ŀ		, <b>,</b>	•		USC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RÖD/ Comments
1	24	16	E	FILL:	GRAVEL,	CLAY.	BLACK SA	ND	+=	$\overline{\otimes}$		0	0 83	20	<del>H</del> H	<u> </u>		F 0
SS	15		-2.5	AND	CINDERS_				<del></del>	$\bowtie$	1							
2 SS	24 15	14	E		FILL: SANDY CLAY AND BURIE TOPSOIL					$\bigotimes$	}	1						
3 SS	24 5	7	5.0	FILL:	SANDY CI	NDY CLAY						15						
4 SS	24 10	17	7.5		ILL: BLACK SAND, LEAN CLAY, RAVEL - wet			· ,				10						
5 SS	24 15	11	F 10.0	/ <del></del>	CLAY - red	i.			CL			80				1		
6 SS	24 12	12	12.5	FATC	LAY - grav	elly, we	t, red		СН			60						
7 SS	24 18	12	15.0	brow	n.				СН			30				.		 
8 SS	24 24	8	17.5						СН			20			ļ			•
9 SS	24 24	10	E-20.0					_	СН			15						
10 SS	24	10	E-22.5	LEAN	CLAY - gra	ry.	,		CL			20						
33 [4			= -25.0	NOTE	S: 1) End of	samplin	ng at 24.5 fe	et. 2)	<del> </del>					ĺ				
			E -27.5	n	Set 1" temporary well at 24.5 feet. 3) Boring backfilled with bentonite after										1			•
	1		E 27.3		sampling.						.	.		. [				
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												}						•
		-								}			Ì		•			
hereby	certify	that t	he info	mation on	this form is tru	e and cor	rect to the bes	t of my l	knowie	ige.					L			<del></del>
ignatur					·····			LER E			& SC	IENT:	ISTS				Tel: 9:	20-954-910
1119 W. K														36			Fax: 9	20-954-872

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Department of Natural Resource	S

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Form 4400-122	Rev. 7-98

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	ty/Proje icfrez		me			License	/Perm	it/Monit	toring N	umber		Borin	g Numb	B2	9	
			Name	of crew chief (first, last) and Firm		Date D	rilling	Started		D:	te Drill	ing Co	mpletec			ling Method
Bri		nenta	1 Deilli	ing Service	,		3/	6/2002)			3/6/2	2002		ŀ	ollow stem 1ger
	nique V				Well Name	Final S				Surfac	e Eleva		.002	В		Diameter
T1	C=10						Feet	MSL			757.3 Local (5.3	inches
	Grid C Plane	изш	☐ (e	estimated:) or Boring Locate N, E S	/C/N	L	at	<u> </u>			Local	או מות		J		□ Е
SE		of N	۱W		n, r 17 e	Lor		. •	<u> </u>	<u>.</u> "		Fee				Feet 🗌 W
Facilit	y ID	1		County Fond du Lac		County C 20	ode	1	Fown/Ci	-	Village			•		
Sar	nple	Т	T .	Fond du Lac		20	П	POIR	I du L	ac	Г	Soil	Propx	erties		}
	T*	1	٠,	Soil/Rock Descri									1			
. 9	Att. 2 ed (i	ounts	1.Fee	And Geologic Ori	gin For						ssive	0		, l		nts
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each Major U	Init		SCS	Graphic	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			<u>l å</u>	THE CDAYER MODGO	T OP TO	D.C.	5	2 3	ă ă	- FIII	ე ჯ	≱్రి	בֿי בֿי	Ple Inc	P	≥ %
SS	24 12	6	E	FILL: GRAVEL, TOPSOI SAND AND GRAVEL - r	L, CINDE	RS, 		\bigotimes								
2 SS	24 1	10	-2.5	FILL: GRAVEL - damp.						10						
3 SS	24 1	6	-5.0 -	FILL: CLAY - damp, brow	vn.	•				15						
4 SS	24 8	9	7.5	FILL: SANDY CLAY AN SAND AND GRAVEL PO						15						
5 SS	24 12	5	- 10.0 - -	cinders.						15						
6 SS	24 8	13	12.5	LEAN CLAY - moist, red.			CL			5						
7 SS	24 15	12	-15.0	FAT CLAY - moist, red.			СН			5						
8 SS	24 15	10	-17.5				СН			15						
9 SS	24 18	10	-20.0 -	damp.			СН			15						
10 SS	24 18	12	-22.5	POORLY GRADED SAN	D - gray.		CH SP	III		15	ļ					
11 SS	24 15	15	25.0	POORLY GRADED GRASILT - gray. SILTY CLAY - gray.	VEL - gray		GP ML CL-MI			15						
[-	NOTES: 1) End of samplin Set temporary well at 24.5 backfilled with bentonite af	feet, 3) Bor	et. 2)										·
I hereby	certify	that t	he infor	mation on this form is true and cor	rect to the bes	st of my k	nowled	ige.					باحضيصي			
Signatu	·					LER EN			& SC	ENT	ISTS			- 1	Tel: 9:	20-954-9100
						W. KENN						36			Fax: 9	20-954-8720

State of Wisconsin	
Department of Natural Resources	

Signature

Form 4400-122 Rev. 7-98

			R	oute To:	Watershed/W	astewater	Wast	e Mana	igement								
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	icfrez									Ū]	-	B3	30	
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Bri																h	ollow stem
En	vironn	nenta	l Drilli	ng Servi		177.1137	1		6/2002		18 8		3/6/2	2002	· ·		uger
MI O	nique V	V CII IN	0.	DINK	Vell ID No.	Common Well Name	rmais		ater Le MSL		Suria	ce Eleva 757.1		TON	В		Diameter 3 inches
Local	Grid O	rigin	(e	stimated:	O or Bor	ing Location		TCC			<u> </u>	Local					menes
	Plane		L (-			E s/c/n	I	.at		<u> </u>	n 			□ 1	1		ΠE
SE	1/4	of N	W :	1/4 of Secti	ion 15,	T 15 N, R 17 E	Lo	ng	<u> </u>	·	, 11		Fee	t 🗆 S			Feet W
Facili	ty ID			- 1	County		County (-	Village					
				<u> </u>	Fond du Lac		20		Fond	du L	ac	,					·
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_ e	Aff.	Blow Counts	Depth In Feet			ologic Origin For				_		SSiv	ø .		2	l	nts
Typ.	gth over	Š	th I		Each	ı Major Unit		CS	phio	1 gran	PID/FID	npre	stur	nid it	iti X	2	in Eq.
Number and Type	Rec Len	Blo	Dep					US	Gra	Well Diagram	E E	Con	Moisture Content	Liq	Plasticity Index	P 200	RQD/ Comments
1 SS	24	9	E	FILL:	GRAVEL, 7	TOPSOIL AND					0						
SS	12		E	CIND	ERS - moist	<u> </u>		L.	\bowtie					٠			
2 SS	24	5	-2.5	FILL:	GRAVEL, O	CLAY AND SAN	D -		\bowtie		0						ļ
SS	8		Ē	moist.				<u>L</u> .	$\otimes\!$							-	}
3	24	3	5.0	FII.	SANDY CI	AY AND TOPSO	П		∞		2					İ	
3 SS	6		F	wet.	D. L				\bowtie							ļ	
4 8	24	3	-7.5	CAND	Y LEAN CI	AV wet					150					i	ļ
4 SS	15	3	-	מאזאט	I LEMIN CI	LAI - WCL		CL			150		}	1			
e 15	24	4	<u></u> 10.0	7 77 4 3 7	CLASE	1			11111		50					ļ	
5 SS	24 15	4	E	LEAN	CLAY - we	t, rea.		CL			30	} }					
			12.5											}			
6 SS	24 6	15	-					CL		}	15	1 1	1				
			-15.0										1				
7 SS	24 15	14	F 13.9	FAI C	LAY - wet,	brown.		СН			15		.				
ээ <u>Ц</u>	13		F	grave	:lly.									l	- 1		
8 SS	24	13	-17.5	brow	n.			CH			15		1	- [- 1		
22	24		 					CII		1			1				
9 3\$	24	14	-20.0					CTT		.	25			1			
sş 📗	12		E					CH		1					. [
10	24	16	-22.5						1111	- 1	30						
10 3S	21		Fl					CH		Ĺ		ŀ	1	- 1			
1 /5	24	25	25.0	\LEAN	CLAY - gra	у		- 61, -	esses		15			1			
SS V	12	دے	E 1	SILTY	LEAN CLA	Y - gray.		CL-MI		. [ادا					}	
4	}		†	NOTES	3: 1) End of	sampling at 27 fee	t 2)				·	-	- 1			}	
				Set tem	porary well	at 27 feet. 3) Borin	ıg			}		}	1	}	1	.	
				backfill	ed with bent	onite after sampling	ıg.					.	.				
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This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

MILLER ENGINEERS & SCIENTISTS

1119 W. KENNEDY AVE. KIMBERLY, WI 54136

Tel: 920-954-910

Fax: 920-954-872

Department			sources			. ,			Form 4	1400-12	22	<i></i>	R	ev. 7-9	18
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			Remediation	Redevelopment 🖂	Om	a 🗀						Pa	ige 1	of	1
Facility/Proje		me			Licen	se/Permi	t/Monit	toring N	umber		Borin	g Numl	er		
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Mike Mc			of crew chief (first, fast) a	na rum	Date	Drilling 2	otar teu			ate Din	ımg Co	шрісіс.	1	ì	lling Metho
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WI Unique V	Vell N	0.	DNR Well ID No.	Common Well Name	Final	Static W			Surfac	e Eleva			Bo	orehole	Diameter
Cool Grid O	rinin		JZ752 estimated: or Bo	MW1		Feet	MSL				et MS Grid Lo			8.0) inches
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	of 1	۷W	1/4 of Section 15,		L	ong	<u> </u>		. "		Fee	t 🗆 :			Feet 🔲
acility ID			County		County	Code	1	Fown/C	-	Village					****************
		-τ	Fond du Lac		20		Fone	d du L	ac	, 				· · · · ·	
Sample	-		0.75	1.50			1	ŀ			Soil	Prop	erties		-
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Department of Na	tural Resources

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Form 4400-122 Rev. 7-98

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Departm	ent of Natural Resources

Form 4400-122 Pay 7 08

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

Signature Firm MILLER ENGINEERS & SCIENTISTS
1119 W. KENNEDY AVE. KIMBERLY, WI 54136

Tel: 920-954-910 Fax: 920-954-872

THUMOTON AN ION OFFICE NOTE WIND THE DOOR OF WARD GROVE Department of Natural Resources Form 4400-122 Rev. 7-98 Route To: Watershed/Wastewater Waste Management Other 🗌 Remediation/Redevelopment Page 1 of Facility/Project Name License/Permit/Monitoring Number Boring Number Ouicfrez MW3 Boring Drilled By: Name of crew chief (first, last) and Firm Date Drilling Started Date Drilling Completed Drilling Method Mike McArdle hollow stem M&K Env. Drilling 7/7/1999 7/7/1999 auger WI Unique Well No. DNR Well ID No. Common Well Name Final Static Water Level Surface Elevation Borehole Diameter JZ753 MW3 Feet MSL Feet MSL 8.0 inches (estimated:) or Boring Location Local Grid Origin Local Grid Location Lat N, Ε State Plane S/C/N Πи

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

Signature Firm MILLER ENGINEERS & SCIENTISTS
1119 W. KENNEDY AVE. KIMBERLY, WI 54136

Tel: 920-954-9100 Fax: 920-954-8720

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Department of Natural Resources	

Department of Natural Resources																400-12		LOG		lev. 7-9	8
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Signature MILLER ENGINEERS & SCIENTISTS 1119 W. KENNEDY AVE. KIMBERLY, WI 54136

Tel: 920-954-9100 Fax: 920-954-8720

DUIL DUMING LOG HYPOMYMALIUM Department of Natural Resources Form 4400-122 Rev. 7-98 Watershed/Wastewater Waste Management Route To: Remediation/Redevelopment Other Page 1 of 1 Facility/Project Name License/Permit/Monitoring Number Boring Number Ouicfrez MW4A Boring Drilled By: Name of crew chief (first, last) and Firm Date Drilling Completed Date Drilling Started Drilling Method hollow stem Environmental Drilling Service 2/21/2002 2/21/2002 auger WI Unique Well No. DNR Well ID No. Common Well Name Final Static Water Level Surface Elevation Borehole Diameter PD825 MW4A 756.3 Feet MSL 8.0 inches Feet MSL Local Grid Origin Local Grid Location (estimated:) or Boring Location ٥ Lat State Plane N. Ε S/C/N ΠE SE 1/4 of NW 1/4 of Section 15, T 15 N, R 17 E Long Feet 🗌 S Feet D W Facility ID County County Code Civil Town/City/ or Village 20 Fond du Lac Fond du Lac Sample Soil Properties Soil/Rock Description Recovered (in) Depth In Feet Compressive Strength Blow Counts Length Att. RQD/ Comments And Geologic Origin For Number and Type Moisture PID/FID Plasticity Graphic Log Content Each Major Unit SCS Liquid P 200 Well 180 Blind drilled to 15 feet. SS 2.5 -5.0 **-7.5** 10.0 -12.5 24 24 12 FAT CLAY - red. 2000 23.89 2 SS 17.5 24 25 1200 26.6 SS 20.0 24 10 900 23.29 SS 18 26.38 24 14 LEAN CLAY -red. 1200 CL 15 SS -25.0 CI 6 24 13 850 10.97 SS SILT WITH CLAY - gray. ML 27 7 SS 24 28 17.12 1000 LEAN CLAY - red. 12 CL 30.0 NOTES: 1) End of boring at 30 feet. 2) Monitoring Well MW4A constructed upon

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

completion.

Signature Firm MILLER ENGINEERS & SCIENTISTS
1119 W. KENNEDY AVE. KIMBERLY, WI 54136

Tel: 920-954-9100 Fax: 920-954-8720

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Signatu	re					Firm N	MILLE	REN	GINE	EERS	& SC	TEN	TISTS	3				Tel: 9	20-954-9100

1119 W. KENNEDY AVE. KIMBERLY, WI 54136

Fax: 920-954-8720

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					Monit	oring Well M	W5 constructed	upoi	ı				[- 1		1	İ		
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ŀ					compl	etion.	4		1	. }	İ		ļ					ļ	
					compi	etion.													

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

Signature Firm MILLER ENGINEERS & SCIENTISTS
1119 W. KENNEDY AVE. KIMBERLY, WI 54136

Tel: 920-954-9100 Fax: 920-954-8720

DIRIC OF AMIRCONIZITI	
Department of Natural Resources	

Form 4400-122 Rev. 7-98

			<u>R</u>		ed/Wastewate			te Mana	gemen	t 🗆							
				Remedia	tion/Redevelo	opment 🛚	Othe	T 🗆									
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	ity/Proje nicfrez		ne				Licens	e/Permi	it/Moni	itoring N	Number	r	Borin	g Num		W5A	
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	aig vironn	nental	Drilli	ng Service				2/2	2/200	2			2/22	/2002			ollow stem uger
	Jnique V			DNR Well ID No.		n Well Name	Final S	Static W	ater Le	evel	Surfa	ce Eleva	ation		Bo	orehole	e Diameter
Loca	l Grid O	rigin		stimated: or	Boring Loca	MW5A		Feet	MSL	'		756.6		MSL ocation		8.0) inches
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SE		of N	W :	1/4 of Section 15	, т 15	n, r 17 e		ng	<u> </u>		. "			et 🗌			Feet W
Facil	ity ID			County Fond du			County 0	Code	1	Town/C d du L	-	Village					
Sa	mple		1 -	Fond du	Lac		20	T	FOII	d du L	ac	1	Soi	1 Prop	erties		
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0	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	1	l Geologic Or							Compressive Strength					ıts
nber Tvp	gth /	× Co	th In		Each Major I	Jnit		SCS	phic	1 gram	PID/FID	Compress Strength	sture	pi ti	Plasticity Index	00)/
Number and Type	Len	Blor	Dep					U S	Graphic Log	Well Diagram	PID	Con	Moisture Content	Liquid	Plastic Index	P 200	RQD/ Comments
			=	Blind drilled M	IW5A to a	depth of 30) feet.										
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				completion.	1 1/11/1 5/1 (OIBU UCICU	фон									· ·	
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Signata		mat m	C HIIOH	nation on this form !	a nue and col		LER E			& SC	IENT	272				Tel. 0	20-954-9100
						1,111	W. KEN						36				20-954-9100 20-954-8720

State of Wisconsin	
Department of Natural Resources	

SUIL BUKING LUG INFORMATION

Form 4400-122 Rev. 7-98

			1	Route To: Watershed/Wastewat		Wast		agemen	t 🗆							
				Remediation/Redevel	opment 🖂	Other	Г <u>Г</u> .									
Facil	ity/Proj	ect Na	ame			License	e/Perm	it/Moni	toring]	Number		Borin	Pa Numl		of	1
Qı	iicfrez													M	W6A	
		ed By	: Name	of crew chief (first, last) and Firm		Date D	rilling	Started		D	ate Drill	ing Co	mpleted	i		lling Method
En	ian vironr	nenta	al Drill	ling Service				26/200				2/26/	2002		au	ollow stem uger
WIU	Inique V	Well N D830			on Well Name MW6A	Final S		Vater Le		Surfa	ce Eleva 757.9		/CT	Bo		Diameter
Loca	l Grid C			estimated:) or Boring Loca			reel		<u> </u>				cation		8.0) inches
	Plane			,	S/C/N	I	at									□Е
SE		4 of]	NW		N, R 17 E	Lo		0	<u> </u>	3.4 /	7.711	Fee	t 🗆 S	3		Feet W
Facili	ty ID			Fond du Lac	1	County C	ode	1	Town/C d du I		Village					
Sa	mple	T	T	Tond du Dao		20		1011	T	T	1	Soil	Prop	erties		I
	T		1 4	Soil/Rock Desc	ription								•			
. 0	Att.	ount	Fee	And Geologic Or	rigin For						ssive	6)		>		ıts
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each Major	Unit		SCS	Graphic	Well	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	200	RQD/ Comments
7 8	24	<u>m</u>	LA	FILL: TOPSOIL AND C	INDERS		P	WXX		8 0	SS	Σŏ	II II	Pl	Д	2 2
SS	24		E	LEAN CLAY - damp, red			CL			ĺ						
2 SS	24 15	12	-3				CL			0						
3 SS	24 14	7	<u>-</u> 6	SANDY LEAN CLAY -	moist, red.		CL	===		1						
4 SS	24 15	12	F_9	LEAN CLAY - moist, red sand seam at 8.5 feet.	1 .		CL			2						
5 SS	24 14	13	E -12				CL-			1						
6 SS	24 24	23	E	FAT CLAY - wet, red.			СН			3					,	
7 SS	24	18	15	*			СН			30						
8 SS	24 18	18	18	,			СН			35						
9 SS	24 18	16	21	brown.			СН			70						
10 SS	24 24	13	E 24				СН			40						
11 SS	24 24	7	27.	gray seam at 26.5 feet.			СН			30						
12 SS	24	18	E	LEAN CLAY - brown			CL	/////		20						
SS 13	24 24	10	_30	SILTY LEAN CLAY - da	rk gray.		CL-MI			3					1	
13 SS	24		F	SILT WITH GRAVEL - g			ML		····:							
				NOTES: 1) End of boring Monitoring Well MW6A completion.												
		.1		41.6												
Signatu		that 1	ine into	rmation on this form is true and co	7-2				0, 00	יייו אידד	rerre					
					IVILLE	LER EN V. KENN						36				20-954-9100 20-954-8720

	oi wis		ı tural Re	sources							1400-12				ev. 7-9	98
			<u>F</u>		ned/Wastewater ation/Redevelopment		ste Mana er 🗌	agement	t 🗆							
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	ty/Proj icfrez		me			Licen	se/Perm	it/Moni	toring l	Number		Borin	g Numi		W6E)
			Name	of crew chief (first, l	ast) and Firm	Date	Drilling	Started		ID:	ate Dril	ling Co	mplete			lling Method
Bri	an														1	ollow sten
	vironr			ing Service DNR Well ID No	. Common Well Name	Ein-1	2/2 Static W	28/200		IS. C.	ce Eleva	2/28/	2002	ID.		iger Diameter
WIO	-	D866		DIAK WEII ID NO	MW6B	rmai		MSL			758.0		MST.	B) inches
Local	Grid (Boring Location			0	,	,	and the same of the same of	Grid Lo				- Invited
	Plane		75.7		N, E s/c/N		Lat									□Е
SE Facilit		4 of 1	NW	1/4 of Section 15	5, T 15 N, R 17 E	County	ong		Town/C	ity/ or	Village		t 🗆 S	3		Feet W
	<i>y</i>			Fond du	Lac	20		1	d du L		· m-B-					
Sar	nple	I							T			Soil	Prop	erties		
	& (ii	ls s	et	1	oil/Rock Description						9					
r pe	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	An	d Geologic Origin For		2	0	В		Compressive Strength	e t		ty		ents
Number and Type	ngth	ow C	pth]		Each Major Unit		SC	Graphic	Well Diagram	PID/FID	Compress Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
Zæ	360	B	- å	DI: 1 1 11 13	MV(D) (1 41 C20	C 1	D	Grap	Well Mell	II.	Str	žő	근근	Ple In	<u>H</u>	20 %
SS	NR		E	near MW6A.	MW6B to a depth of 30	teet				ĺ						
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Clarifornia (Control of Control o			E													
dit on a gift			-12													
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2	24	59	E	LEAN CLAY	damn oray		CL	/////		40				1		
SS S	6		-32	ELIN CLAI	- damp, gray.		CL									
			E								l	1				
3 SS	24 4	50/5"	36	*			CL			40						
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			H40						:目:							
4	24	24	E				CL	11111		5		-				
4 SS	6		- 44	NOTES: 1) End Monitoring We completion.	d of boring at 45 feet. 2 Il MW6B constructed	2) upon	CL		::H:							
I hereby	certify	that t	he infor	mation on this form	is true and correct to the be	st of my	knowled	ige.								
Signatur					ir:			_								

Firm MILLER ENGINEERS & SCIENTISTS
Tel: 920-954-9100
1119 W. KENNEDY AVE. KIMBERLY, WI 54136
Tax: 920-954-8720
This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year depending on the program and conduct involved. Personally identifiable

result in forfeiture of between \$10 and \$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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin	
Department of Natural Reson	irces

Form 4400-122 Rev. 7-98

			<u>R</u>	oute To:	Watershed	I/Wastewat	ter 🔲				gement	: 🗆							
					Remediation	on/Redevel	opment 🛛		Other										
																Pa	ige 1	of	1
	ty/Proje	ct Nar	ne					I	icense	/Permi	t/Monit	oring N	Numbe	r	Borin	g Numl		***	
	cfrez	d Byr	Name	of crew of	hief (first, last	and Firm			Pate D	rillin a	Started		IL	ate Dril	ling Co	molete		₩7	lling Method
Bri	_	ц <i>р</i> у.	11444	J. 01011 0	mor (miss, ms.) and I mm			Juic 13		Jun Iou			ato Bin	ms oo	mpioto	•	- 1	ollow stem
Env	vironn			ng Serv							5/2002					2002		a	uger
WIU	nique V).	DNR	Well ID No.	1	on Well Nam	e F	inal St		ater Le	vel	Surfa	ce Eleva		A COT	В		e Diameter
Local	Grid O	0828	☐ (e	stimated:	() or E	Soring Loca	MW7			reet	MSL		<u></u>	759.8		MSL ocation	!_	8.0	0 inches
	Plane			SIM MARIOU.	N,		S/C/N		L	at	<u> </u>	<u> </u>	. #		Ond D		1		□ Е
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Facilit	y ID				County				unty C	ode	,		-	Village					
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_ Sai	nple	}		1	r.s	Rock Desc	wintion							-	T	l Prop	erues		-
	Length Att, & Recovered (in)	ınts	Depth In Feet	1		Geologic Or	-		•				}	Compressive Strength					, v
er ype	th A	S	l lil			ach Major	-			22	ii	Ha Ha	P	oress gth	are and	-5	city	_	nent
Number and Type	Length Att. Recovered	Blow Counts	eptl		•	J			•	usc	Graphic Log	Well Diagram	PID/FID	fren	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
		щ	<u>' ' '</u>	Blind	drilled MV	V7 to a d	epth of 15	feet			101		Д.	108	20		H I	Δ.	<u> </u>
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				Monit	oring Well	MW7 co	nstructed a	at			j				.	Ì		.]	
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I hereby Signatur		mat th	e infor	nation of	this form is t	rue and co						0 00	77 12 TIV	TOTO					
<u></u>							1 1411				EERS AVE. K			ISTS WI 541:	36				20-954-9100 20-954-8720

SOIL BURING LOG INFURMATION

Form 4400-122 Rev. 7-98

			Remediation/	Redevelopment 🛭	Othe	er 🗌						p.	age 1	of	1
Facility/Project	ct Name				Licen	se/Perm	it/Moni	toring l	Number	r	Borin	g Num	ber		
Quicfrez Boring Driller	d By: N	ame o	f crew chief (first, last) ar	d Firm	Date	Drilling	Started		ID	ate Dri	ling Co	molete		W7A	Illing Method
Brian				ld I IIII	Date					ate Din		-	u .	1	ollow sten
Environm WI Unique W	ental I	rillir		Common Well Name	Final		25/200: Vater Le		Surfa	ce Elev		2002	IB		uger e Diameter
_	0827			MW7A	, indi		t MSL		Duria		Feet]	MSL			0 inches
Local Grid Or State Plane	rigin [] (es	stimated:) or Bori N,	ng Location 🗍 E S/C/N		Lat	o	r	11	Local	Grid Lo				
	of NW	7 1.		T 15 N, R 17 E	1	ong	0	1	٠, ۱۱		Fee	t 🗌 :			☐ E Feet ☐ W
Facility ID			County		County		1			Village					
Sample			Fond du Lac		20		Fon	d du L	ac	T	Soi	l Prop	ortion		T
			Soil/Ro	ck Description								Пор	Ciucs	<u> </u>	1
o Att. & ed (in	ounts	Feel		logic Origin For						ssive	0				ıts
Number and Type Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each	Major Unit		USCS	Graphic	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS 24 12	15		FILL: CLAY, SAN moist.	ID, AND GRAV	EL -				5		19.5				
2 SS 24 8	4	2.5							1		27.01				
3 SS 24 8	2	5.0							15		28.97				
4 SS 24 4	2	7.5							- 1		25.21				
5 SS 24 12	4 =	10.0	FILL: SAND AND	GRAVEL - mois	 st.				1		30.72				
6 SS 24 24	29 E	12.5	LEAN CLAY - moi		/	CL			1		23.63				
7 SS 24 24	10 E	15.0	FAT CLAY - dampred.	, brown.		СН			0		27.1				
8 SS 24 24	21 E	17.5	brown.			СН			2		21.09				
9 SS 24 24	E	20.0				СН			3	×	22.29				
10 24 SS 24	E	22.5				СН			3		25.18				
11 24 SS 24	E	25.0				CH			1		29.85				
12 30 SS 22	E ²	27.5	SILTY CLAY - gray	J.		CH CL-MI			10		24.88	1			
	-3	80.0	NOTES: 1) End of b Monitoring Well My completion.	oring at 30 feet.	2) upon	CE-IVII		:日:							
hereby certify t	that the	nform	nation on this form is true	and correct to the he	est of my 1	movile	lae								
gnature	mai ine i	1110111	adon on this form is true		LER E			8- CC	TENT	TOTO				T. 1. 0	20-954-9100

SUIL BUKING LUG INFUKIVIATION

Form 4400-122 Rev. 7-98

			R	oute To	v: Watershed/V	Vastewate	er 🗌			agement	t 🗆							
					Remediation	/Redevelo	opment 🛚	Othe	r 🗌									3.
											×						of	1
	ity/Proj		me					Licens	e/Perm	it/Monit	toring N	umbe	T	Borin	g Num		W7E)
			Name	of crew	chief (first, last) a	nd Firm		Date I	Drilling	Started		I	Date Dril	ling Co	mplete			illing Method
Br	ian																	ollow stem
	vironn Inique V			ing Ser	rvice R Well ID No.	Commo	n Well Name	Final S		1/2002 Vater Le		Surfa	ace Eleva		2002	Ip	arahal	uger e Diameter
W1 C	_	PD	0.	DIVI	Well ID No.	1	MW7B	Tillal		MSL		Sulla	759.8		MSL	B		0 inches
	Grid C	rigin		estimate		ing Loca	tion 🗌			0	1	,	Local	Grid L	ocation			
State SE	Plane	of l	TIM	1/4 of S			N, R 17 E		 ng	0	- -	٠, ,	,	г.	t 🗌 :	N .		☐ E Feet ☐ W
Facili		101 1	X VV	1/4 01 30	County	1 13	N, R 17 E	County (Civil	Town/Ci	ty/ or	Village		2 .	3		reet 🗆 w
					Fond du Lac			20		Fond	d du La	ac						,
Sa	mple													Soi	Prop	erties		4
	Length Att. & Recovered (in)	nts	eet			ock Descr ologic Or	-						Ve Ve			-		
ype	h At /ered	Coul	In F			h Major U	_		S	ic	am	Ð	ressi	ure	_	oity		nents
Number and Type	Length Att. & Recovered (in	Blow Counts	Depth In Feet						USC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid	Plasticity Index	200	RQD/ Comments
			+-	Blin	nd drilled MW7	7B to a	depth of 45	feet	1	101			1001	20		HI	4	1 0
			F,	near	r MW7A.													
			-4															
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				NOT	ES: 1) End of	boring a	at 45 feet. 2	2)								.		
				comp	itoring Well Moletion.	W/D C	onstructed	upon										
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Signatu		that t	ne infor	mation o	on this form is tru	e and cor		LER EN			& CCT	EVI	TCTC				T-1-0	20.054.0100
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SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

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	ty/Proje		ne								Lice	nse/	Permi	t/Monit	toring N	lumb	ег		Borin	g Num		[W8	
	g Drille		Name o	of crew	chief (first, la	st) an	d Firm			Date	e Dr	illing S	Started	·	1	Date	Dril	ling Co	mplete			illing Method
Bri Em	an vironn	nental	Drilli	ng Se	rvice								2/2	8/2002	2				2/28/	/2002			ollow stem uger
WIU	nique V	Vell No).			ID No.	.	Commo	on Well		Fina		atic W	ater Le	vel	Sur		Eleva	tion		F	Borehol	e Diameter
Local	Grid O	D863 rigin	[] (e	stimate	d: 🗍) or	Bori	ng Loca	MW8		1,			MSL	·	<u></u>			Feet I	ocation		8.1	0 inches
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Facilit	1/4 y ID	of IV	VV .	1/4 of S	Cour		,	1 13	N, R 1		Count	Lon y Co		Civil 1	Town/C	ity/ o	r Vi	llage	ree	t 🗌	5		Feet W
		,	T		For	nd du	Lac				20			Fond	du L	ac			<u> </u>	1 D			1
Sar	mple					Sc	oil/Ro	ck Desc	ription								-			Prop	erties	T	4
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Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet				Each	Major	Unit				SCS	Graphic	Well Diagram	PID/FID		Compressive	oistur	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
Z m	2 %	m	A	Blir	nd dri	lled M	/WX	to a d	epth of	15 fe	et		D	93	≱ Ä ×	H		<u> </u>	≱ ઇ	13 3	교교	à	<u> % ő </u>
			-1.5 -4.5 -6.0 -7.5 -10.5 -13.5	NOT Mon	ES: itorin	l) End	i of t	oring W8 co	at 15 f	eet. 2 ed up	on.												
I hereby Signatur	-	that th	e infor	nation	on this	form i	s true	and co	Firm						8, CC	TENT	יזיני	TC		· 		T-1: 0	20.054.0300
	. •								1					EERS AVE. K					36				920-954-9100 920-954-8720

SOIL BORING LOG INFORMATION

Form 4400-122

Rev. 7-98

			<u>R</u>	oute To: Watershed/V			Wast		gement								
														Pa	nge 1	of	1
	ty/Proje	ct Nan	ne				Licens	e/Perm	t/Monit	toring N	lumber	•	Borin	g Numb	per		
	o Drille	d Bv	Name	of crew chief (first, last) a	and Firm		Date D	rilling	Started		- ID	ate Drill	ling Co	mpletex		W8A	lling Metho
Bri		u Dy.	T valie v	or even enter (mist, rust)	ard I min		Date D	imme	Juriod				mig oc	приска		1	ollow ster
				ng Service	10	*** ** **	F: 10		8/2002		10.0	771		2002		a	uger
WIU	nique W	ieli No 1862).	DNR Well ID No.	1	Well Name	Final S		MSL	vel	Surfac	ce Eleva 755.6		MSI.	B		Diameter O inches
	Grid O		☐ (e		ring Locat	ion 🗌	1 -		0	,	1			ocation			J Mones
	Plane		777	N,		/C/N	1	at			· II						_ D E
SE Facilit		of N	W	1/4 of Section 15,	T 15	N, R 17 E	County C		Civil	Fown/C	ity/ or	Village	Fee	et 🗌 S	<u> </u>		Feet U
				Fond du Lac	;	1	20		ł	d du L							
Sar	nple				,								Soi	Prop	erties		
	(ii)	ts	set	1	ock Descr	~						9					
er /pe	Att	Coun	In F	1	ologic Ori h Major U			20	.0	П	a	ressir	it e		ity		ents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	n Major C	mit		SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	200	RQD/ Comments
Za	J M	B	-	Blind drilled MW	8A to a c	lepth of 30	feet	Þ	2 7	M O	P	SC	20	17.7	F H	Д.	20
			Fas	near MW8B.	021 10 4 1	acpui or so	1001										
			-2.5														
			E-5.0									ν.			-		
			E														
			-7 <i>.</i> 5														
			- -10.0	W													
			12.5														
			_ 15.0)						
			= 13.9														
			17.5														
.			- 20 0												1		
			-20.0														
1		=	-22.5									į					
											i.						
			-25.0														
		Ė	-27.5							:目:							
		F								:目:							
			-30.0	NOTES: 1) End of Monitoring Well M completion.	boring a IW8A co	nt 30 feet. 2) onstructed u	pon										
hereby ignatur		that th	e infor	mation on this form is tru			e of my k			& SC	ENT	ISTS				Tel· 0	20-954-910
							W. KENN						36				20-954-872

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

															Pa	ige I	of	1	
	Facility/Project Name Ouicfrez						License/Permit/Monitoring Number Boring Number MW8B								>				
	Boring Drilled By: Name of crew chief (first, last) and Firm							Date D	D	ate Dril	rilling Completed Drilling Metho								
	Brian														hollow stem				
	Environmental Drilling Service WI Unique Well No. DNR Well ID No. Common Well Name						Final S		7/2002	Surfa	ce Eleva	2/27/	2002	İÞ	Borehole Diameter				
, in the same of t	PD861 PD861 PNR Well ID No. Common Well Na							I mai 5		MSL	VCI	Suna	755.6 Feet MSL				8.0 inches		
Local (_		es (es		ing Locati				0		"	Local	Grid Lo	ocation				
State I SE		4 of]	NT\$\$7	. ,	- ,		/C/N		at	0		, n			1 1 s		□ E		
Facility		4 01	IN VV	1,	/4 of Section 15,	1 13	N, R 17 E	Lon County C		Civil 7	Town/C	city/ or	Village	ree	т <u> </u>	-		Feet W	
					Fond du Lac			20		Fond	l du L	ac							
Sam	ple													Soil	Prop	erties			
	3 (1	its (iii)		eet		ck Descri							, ve						
er /pe	Att ered	Cour		In F		ologic Orig Major U			SZ.	.0	E		ressir	ire it		ity		ents	
Number and Type	Length Att. & Recovered (in)	Blow Counts		Depth In Feet	Eaci	i Major O	ш		SC	Graphic	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments	
	24	4	+		NO RECOVERY				D	107	× □	五	ON	Σō	33	E H	<u> </u>	ಜ ರ	
1 SS	NR 24	19	E		THO ILLEO VEICE														
2 SS 3	NR	50/4		4						-									
ss 🖳	24 NR		F	.															
SS	24 12	2	E	8	FILL: SANDY CL	AY				\bowtie		10							
5 SS	24 8	4	E	12						\bowtie		10							
6 SS	24 15	16	E		FAT CLAY - mois	t, red.			CH.			5							
7	24	14	F	16					CH	1111		10		1					
SS 4	18 24	22	E						СН	////		5							
SS 4	15 24	17	-2	20	SILT - wet, gray.				ML			3							
SS 10	18 24	14	E	L		**			ML			1				1			
$ss \sqsubseteq$	15	16	F-2	24	SILTY LEAN CLA	Y - wet	t, gray.		CL-MI			-							
SS	24 NR		E-2		NO RECOVERY1" gravel layer at	approxi	mataly 27 f	aat		//////		_				1	ŀ		
12 SS	24 12	22	F		LEAN CLAY - gra	<i>а</i> ррголі У.	matchy 27 fo		CL			5		1					
			F-3	32															
13 SS	24 NR	50/5"	E		NO RECOVERY	¥													
35 4	NK		_3	6															
14 SS	24	50/4"	Ė.		LEAN CLAY WIT	H GRA	VEL - prav		CL	/////				į		1			
SS	10		-4	0										-					
15	24		F.		NO RECOVERY						:目:1								
15 SS	NR		F ⁴	L _	NOTES: 1) End of 1	oring a	t 45 feet 2)			:	<u>H.</u>								
					Monitoring Well M completion.														
I hereby	certifi	v that t	the in	nform	ation on this form is true	e and corr	rect to the best	of my k	nowled	ge.									
Signature		,						ER EN			& SC	ENT	ISTS				Tel· 0	20-954-910	
						1		V. KENN						36				20-954-872	

SOIL BORING LOG INFORMATION

Form 4400-122

Rev. 7-98

			Ē	Route To: Watershed/Waster Remediation/Rede		Waste Other		gement										
				Remariance/Reac	volophicht 24	Olifor							מ	ige 1	of			
· · ·								t/Monit	oring N	umber		Borin	g Numl	ber				
Quicfrez							Date Drilling Started Date Drilling Completed									11: 3.6.4		
Boring Drilled By: Name of crew chief (first, last) and Firm Brian							Date Drilling Started Date Drilling Comple								Drilling Metho			
E	nvironi Unique	nenta	l Drill	ing Service IDNR Well ID No.	mon Well Name	Final St		5/2002		Su-fa	- Flam	2/28/	2002	2 auger Borehole Diameter				
44.1	-	wен го D826		DAR Weil ID No. Com	MW9	Linar	Final Static Water Level Surface Elev Feet MSL 759,2							Feet MSL				
	al Grid (Origin		estimated: 🗌) or Boring L N. E		1 1	Lat o ' "Loca						cation					
State Plane N, E S/C/N SE 1/4 of NW 1/4 of Section 15, T 15 N, R 17 E					Lor		•	1	` "		Fee	1 1 2 1	☐ E Feet ☐ V					
	ility ID			County]	County C	ode		own/Ci	-	Village							
Fond du Lac 20					20	Γ	Fonc	l du La	ic	 	Soil	Prop	erties					
	7			Soil/Rock D	escription			ļ			-	[1100			4		
	Att. 2	ounts	1 Fee	And Geologic	Origin For					_	ssive	0		P		nts		
Number	and Type Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each Maj	or Unit		uscs	Graphic Log	Well . Diagram	PID/FID	Compressive Strength	Moistur Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments		
1 SS	24	16	F	FILL: CLAY						10								
-4			1.5	FILL: BRICK AND W	TOOD													
2 SS	24 15	27	3.0	FILL: CLAY - piece of	pine wood.					4					-			
			4.5	FILL: SAND AND GR	AVEL													
3 SS	24 8	9	6.0	FILL: CLAY FILL: SAND, GRAVE	L, AND WOO					6								
4 SS	24 5	11	-7.5 -9.0	LEAN CLAY WITH G	RAVEL - red.		CL			4								
5	24	12	10.5	2" gravel seam at 10.2	? feet.		CL			15								
SS	12		-12.0				CL					·						
٤ ۽	24	12					CL			30								
SS S	24 24	13	-13.5 -	sandy. FAT CLAY - wet, red.		/	СН			30						• !		
į			-15.0	NOTES: 1) End of borin Monitoring Well MW9 completion.	ng at 15 feet, 2 constructed up	on												
		. !					·											
I here Signa		that t	he infor	mation on this form is true and					0.00		romo							
			<u>-</u>		1411171	LER EN W. KENN						36	·	-,		20-954-91(20-954-872		

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			<u>R</u>		Vastewater Redevelopmen		Waste Other		gement									
																of	1	
	ty/Proje	ct Nan	ne				License/Permit/Monitoring Number Boring Number MW10B									B		
	Boring Drilled By: Name of crew chief (first, last) and Firm							Date Drilling Started Date Drilling Con										
	Brian							0.10	7/2000								hollow stem	
Environmental Drilling Service WI Unique Well No. DNR Well ID No. Common Well Name						Final St		7/2002 ater Lev		Surfa	2/27/2002 ce Elevation Bo					rehole Diameter		
PD791 MW10												755.8	755.8 Feet MSL				8.0 inches	
Local Grid Origin (estimated:) or Boring Location State Plane N, E S/							T	at	0	1	"	Local	Grid L	rid Location				
SE		of N	W	1/4 of Section 15,	E s/c/n t 15 n, r		Lor		0	1	· "		Fee	t 🗌 1			☐ E Feet ☐ W	
Facilit		-		County	1 10 11,10	C	ounty C		ŧ			Village					1001 - 11	
				Fond du Lac		2	20		Fond	du La	ac		a . •					
Sample				G_:1/D	ock Description							Soil Properties					1	
	tt. & d (in)	ints	Feet	1	ologic Origin Fo							ive					89	
ber ſype	th A	Cor	h In		Major Unit			S.	hic	ram	FID	press	ture	- E	icity		/ ment	
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet					USC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments	
			E	Blind drilled MW1	0B to a dept	th of 45	feet.			X								
hereby	certify	that th	-4 -12 -16 -20 -24 -32 -36 -44 -44 -44 -44	NOTES: 1) End of Monitoring Well M completion.	W10B const	ructed u		nowled										
hereby		that th	e infor	mation on this form is tru	e and correct to		of my ki ER EN			& SCI	ENT	ISTS				Tel· 0	20-954-9100	
						141111	KENN						36				20-954-9700	

A C Warmen I B	id Waste [] Har Waste & Repair [] Underg			MONITORIN	G WELL CONSTRUCTION Rev. 4.90
Facility/Project Name ?	Local Grid Location of			Well Name	
~ () · · · · · · ·	ft.		E DE	MW	/ JZ752
School Location Permit or Manitoring Number		5			
	Grid Origin Location			100 com	umber DNR Wall Hanber
	Luc	_ Long			
ype of Well Water Table Observation Well 21	St. Plene	fl. N.	fl E	Dete Well Installed	17,07,66
	C . Y				97107199
Distance Well Is From Waste/Source Boundary	CENT ON NO.	15:- 15	17 DE.	Well Installed By:	(Person's Name and From)
unknown th	SE 1/4 of 3 1/4 of 3	ec. 13 T. 13 P	v. k./_ O W.	Mike Mc	Andl-
Well A Point of Enforcement Sid. Application?	Location of Well Relat	ine to A Rick Son	rce	- MINE THE	niune
	n 🗖 Abbasquent	s 🗆 Sidegr		M+K Er	ry. Drilling
Y S □ No	d Downgradient.				
A Protective pipe top elevation _100.22 f	L MSL-	_	1. Cap and lock?		Ø la O lo
	16		2. Protective cov	er pipe:	
. Well casing, top elevation99.23 f	L.MSL		& Inside diame	ter.	12 G in
C Land surface elevation /00 2 f	Mer		b. Length:		1.6ñ
C Land surface elevation	LMSL		_		
Surface seal bottom _ 99.2 ft MSL or _ 1	10 R.	1	c. Material:	6 mount o	Scel □ 04
		T. XXXXXX			stiron One 🗵 🍱
12. USCS classification of soil near screen:	13:00	Makaza		notection?	□ Yo □ No.
GPD GMD GCD GWD SWD S	POINT	11/	If yes, descr	īb=	
SW D SC D WLD WHO CL FOR C	H I I	[] /			Benonice D 30
Bedrock D			Surface seal:		_
13. Sieve malysis attached? Yes N				*	Concrete 💆 01
g.					Other 🛚 💯
4. Drilling method used: Rotary D 5			I. Mucial between	en well casing and pr	orective bipe
Hollow Stem Auger 🛛 4					Bentonia 🛘 10
Other II -	二			, ,	Amulu space scal 🔲 💯
				NA	Ob= □ 🥌
5. Drilling fluid used: Warer 102 Air 10		B .			
Drilling Mud [] 03 None [9	國		. Amula space		amula Benonic [33
			bLbs/ga	I mud veight He	numire-sand shary 35
C Day Allian 12 Par Mar			Lbs/ga	I mud weight	Bentonite slurry 31
6. Drilling additives used? 🛛 Yz 🛱 🗙			d % Ben	onite Bau	onite-coment grout [50
				To volume added for	
Describe	B	2003	How installe		Trenie 0 01
7. Source of water (arrich analysis):			. uom aistano	11.	
					Transcounted 02
				,	Gravity 🗖 03
	(金)	5 6	. Bentonite seal:	· 1	Benionite granules [] 33
E Bentonite seal, top922 ft. MSL or	10 ()		5 1/4 in.	₩3/8 in. □ 1/2 in.	Benonite pelles 1:32
,	- fr.		G	,,	Other 🛮 🚳
Fine sand, top ft. MSL or	- " 日		Fine send water	rials V-netron-	product name & mesh size
E	"/ 人 陽		. Pure said made	Manuacura,	
(450	20 1 周		2	//	
Filter pack top 972 K MSL or	5: 1c/ /B	E9 /	b. Volume add	ದ	ft ³
		8.	Filter pack man	enal: Manufacturer.	product name and mesh size
Screen joint top 967 ft. MSL or	35 ft_ \			ger Mining	
Land of Table 1		- □ /			
W C1. 7 = 2007 - 1	25 6	*	b. Volume and		_127/2 Bags
Well bottom	に、一個	雪 記 9.	Well casing:		VC schedule 40 🛘 23
9i 12				Flush threaded P	VC schoolule 80 🔲 24
Filter pack bottom _ 867 ft MSL or _ /	35 ft 1	1			Out=
		10	Screen material	. PVC	
Borehole, bottom 867 ft MSL or _/	35 ft.	<i></i>		·	
	·- ·- \	350	e Screen type:		Factory cut 🔯 11
					Continuous slot 01
Borehole, diameter 80 in.	\ <u>P</u>				Oth= 🛚 📑
· _			b. Manufactures	/	
. O.D. well casing _234 in.		,	c. Slot size:		0,0/0in
			d Slotted lengt	h:	10.0 =.
I.D. well easing 200 in		. 11		(below filer pack):	None 🛛 14
T.			Paratus municipal	(Come man part).	Ob= □ ₩
h				1.1	OL U
hereby certify that the information on this		orrect to the b	est of my kr	lowleage.	
France Kai Hell ches	Funt Mills	& Fraince	a set		*
TA A THIN A MARA	1	F F. B. LINCE			

Case 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., 14th 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 \$1000 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

State of Wisconsin Rome to: Soi	d Waste [] Haz Waste [7 W	MONITORING W	ELL CONSTRUCTION	
D		und Tentra [] Other []		ELL CONSTRUCTY Rev. 4	-90 -90
Facility/Project Name	Local Cond Location of V	(원)	Well Name	TZHE	_
Facility License, Permit or Manitoring Number	Grid Origin Location	在日本	MW/A		
Pacinty License, Permit at Manianing Number	Lie	Longor		UNE Walk	2
Type of Well Water Table Observation Well [11]	St Place		Date Well Installed	1,07,56	
Presonder 312	Section Location of Was:	e/Source	ma	107199	
Distance Well Is From WesterSource Boundary	SE14 01 NW 1/4 of Sec	: 15 T. 15 N. R.17 円表	Well invalled By: (Perso		
Is Well A Point of Enforcement Std. Application?	Location of Well Relative	e to Waste/Source s D Sidegradient	1	<u>c</u>	
	d Downgradient		M+K Env. Dri	lling	
A. Protective pipe, top elevation 190.30 f		1. Cap and lock?		Ø Ye □ X	,
B. Well easing, top elevation99.79.5		2. Protective cov	er hiber	120	
C. Land surface elevation 100 3 fi	MSL	b. Length:		_/.01	ît.
D. Surface scal bottom91_3 ft MSL or1	0 1	c. Mucrish	lush mount ast in	Steel [] 0	
12. USCS classification of soil per screen		d Additional		© Kardo <u>~°°</u> Siday Day D	
GP CM CC GW SW DS	2 🗆	114	ribe:		•
SM I SC II ML II MH II CL XX C	ж 🗆 🤻	3. Surface seal;		Bentenite D 3	9
13. Sieve mulysis anached? Yes N			•	Concrete A 0	
14. Drilling method used: Rotary 12.5	. <u>₩</u>	4 Material between	च्या well casing and protest	Ober 🛚 🚆	2
Hollow Stem Aug = 2 4				 Вದಾಜವಜ □ 3	0
Other □ =			Armul	क्रिकेस्ट रून 🛚 🖫	<u></u>
15 Delling fluid words Warre M 02 No. II o			N/A	Ob= 🗓 🖫	7
15. Drilling fluid used: War [] 02 Air [] 0 Drilling Mud [] 03 Nore [] 9		5. Armular space			:3 - 1
			il mud weight Bastanii il mud weight Bas		
16. Drilling additioned weed? I Yes X	· 📓		uniuBaronie-		
Describe			Ft ³ volume added for any (
17. Source of water (article analysis):		E How install		Trenie 🛛 0	
(ī. a	nie pumped 🛛 0	- 1
		6. Benionite seal:	. Ber	Carity 💢 0	
E Bentonite seal, top _ 993 ft. MSL or	10 配 图	图 / 5 D!/4 in.	\$(3,8 in □ 1/2 in Ben		
			· · · · · · · · · · · · · · · · · · ·	Ot= 🗖 🔄	1
F. Fine sand top 853 R. MSL or 14	56 亿/ 图	7. Fine sand mate	nisk Munufacture, produ	11 / -	
G. Filter pack, top 843 ft. MSL or 10	10 m	b. Volume add	y Mining # 40-	3 1/2 Beg	≝ 1
0, 6		8. Filter pack man	erial: Manufacturer, produ	प्रदासमार स्तर्व <u>सन्दर्भ</u> जो	, ₁₂₂
H. Screen joint top	2.2 [b. Volume and	er Mining #30	321/2 Begr	₹
I. Well bottom	3.5 fc	9. Well casing:	Flinh threaded PVC s	ichechile 40 pg 2:	3
J. Filter pack bottom 748 ft MSL or 2	3.5 ft.		Flush threaded PVC s	OJ≥ □ § OJ≥ □ §	→ Æ£
K. Borehole, bottom	25	10. Screen materia	PVK		<u>@</u>
K. Borehole, bottom 12 1_ ft. MSL or		L Seroen type		Factory cut 🗹 1 1	
L Borebole, dismerer _ 8.0 in.		X	Con.	THURCHE FIOR [] 0	
M. O.D. well casing 234 in.		b. Manufacture c. Slot size:	r	0.010	pë Era
4		d Slotted leng	the	50	
N. I.D. well exing 260 in		11. Backful materia	l (below filter pack):	None El 14 Other II	4
hereby certify that the information on this I	orm is true and con	rect to the best of my ki	nowledge.	~~ U ½	<u>-</u> _ ₩
ignature //	Form A1				

Please complete both sides of this form and recum to the appropriate DNR office listed at the top of this form as required by cits. 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 forfeinne of not less than \$10, nor more than \$50000 for each day of violation. In accordance with ch. 147, Wis. Stats. failure to file this form may result in a forfeinne of not more than \$10,000 for each and of violation. In accordance with ch. 147, Wis. Stats. failure to file this form may result in a forfeinne of not more than \$10,000 for each and of violation. In accordance with ch. 147, Wis. Stats. failure to file this form may result in a forfeinne of not more than \$10,000 for each and of violation. In accordance with ch. 147, Wis. Stats. failure to file this form may result in a forfeinne of not more than \$10,000 for each and of violation. In accordance with ch. 147, Wis. Stats. failure to file this form may result in a forfeinne of not more than \$10,000 for each and of violation. In accordance with ch. 147, Wis. Stats. failure to file this form may result in a forfeinne of not more than \$10,000 for each and of violation. In accordance with ch. 147, Wis. Stats.

State of Wisconsin Rome to: So	iid Wasie□ Hez Wasie□	Wasiewaier []	MONITORING WELL CONSTRUCTION
	& Repair 🗸 Underground		Form 4400-113A Ray, 4-90
Facility/Project Name	Local Grid Location of Well	· GUO . EE	Well Name
torner Quictrez	1037 ft. 78.		MWIR Wise Umque Well Number DNR Well Number
		ag. o	
	St Planeft. ?		D. W. 11.
Piezometer D12	Section Location of Waste/So		
Distance Well Is From Waste/Source Boundary	£1/4 of MW 1/4 of See. L	ST.15 N. R. 口層员	Weil Installed By: (Person's Name and Firm)
ft. 3. Well A Point of Enforcement Std. Application?	Location of Well Relative to	Waste/Source	Craig Phit
	u 🗌 Upgradient s d 🔲 Downstradient n	E Sidegradient □ Not Known	Environmental Drilling Sorces
A_ Protective pipe, top elevation 758.48 f	MSL	1. Cap and lock	
B. Well casing, top elevation _158.43 ft	_MSL	2. Protective cov	
Land surface elevation 7551 ft	MSL	b. Length:	J. Ofl
D. Surface seel, bottom ft. MSL or _ 1	.Of. ()	c. Material:	Steel ■ 04 Other □ ****
12. USCS classification of soil near screen:		d Additional	Ctiz [] [[[]]] protection? [] Ye [] No
		/ If yes, desc	· · · · · · · · · · · · · · · · · · ·
SM C SC C ML C MH C CL C C	HUH HE	3. Surface seal:	Bentonite 🗧 30
13. Sieve mialysis anached? D Yes N			Concrete U -01
ml4. Drilling method used: Rotary 🛛 5		4. Mareial berwe	Other [] Other []
Hollow Stem Auge 4			Bentonite 2 30
Ωh= □ _			Annular space seel 🔲 🚃
15. Drilling fluid used: War 02 Air 00		<u> </u>	Other [1] 27
Drilling Mud 🗆 03 None 🖾 9	9	5. Amular space	
			d mud weight Bentonite-send shurry 35 d mud weight Bentonite slurry 31
16. Dailling additives used? UYE 區 N			tonica Benomical energy 12 50
Describe			volume added for any of the above
17. Source of water (attach analysis):		f. How installs	
1NA			Trenie pumped □ 02 Gravity ᠍ 08
JV 14		6. Benionite seal:	Gaviy 08 ≥ Benonie grandes ☐ 33
E Bentonite seed top ft_ MSL or	.Q ft.	,	23/8 in. □ 1/2 in. Bentonite pellets 22 32
-		/ c	Other []
F. Fine send, top ft. MSL or _ MA		7. Fine send mate	rial: Manufacturer, product name & mesh size
Filter pack top ft. MSL or3	Or / [3]	b. Volume zód	fi ³
L .			misl: Manufacturer, product name and mesh size
L Screen joint, top ft_MSL or			Mines 40/60
L Well bottom ft_MSL or _ 15	or li	b. Volume zdri 9. Well casing:	Flush threaded PVC schedule 40 🖽 23
		-	Flush threaded PVC schedule 80 🔲 24
Filter pack, bottom ft. MSL or _15	٠. المجال المال ال	10. Screen material	Sich 40 PVC
C Borehole, bottom ft. MSL or _ 15	.5 fL	L Screen type:	
Borchole, diameter S () in			Continuous slot 🔲 01
		b. Manufacturer	Other []
1. O.D. well casing _2.3.4 in.		c. Slot size:	0.010in.
N. I.D. well casing _200 in.	•	d Sioued length	
=4.5 =			Oth=:: 🔲 🧱
hereby certify that the information on this for	orm is true and correct	to the best of my kn	owledge.
Scott A. Hodasan	Miller En	gireous a Su	entests
lease complete both sides of this form and remm to the and chi NR 141. Wis. Ad. Code. In accordance with ch.	announce DNP office liesely	d at the ton of this form as	required by chs. 144, 147 and 160. Wis. Stats.,
22000 a service and code in secondaries with cur		_ %	

		=	_	1(0)	'000 to 11 ma		
	d Waste 🗌 Haz. Waste & Repair 🕱 Undergr			Form 4	ORING WEI 100-113A	L CONSTRU R	UCITON ev. 4-90
racility/Project Name	Local Grid Location of	Well		Well Name	MW2		
Chic bez	<u> </u>	<u>s. </u>	E DE	ļ	•	J275	•
	Grid Origin Location	Long	~~	Wise Unique	Aeri Grimpet	DNK MOT	dember
	St. Plane		fl E.	Duc Well Inst	alled 0.7	. (7 . 6	
Pizzometer U12	Section Location of Wa		15 24			10719	<u>7</u>
istance Well Is From WasterSource Boundary	SEI/4 of NW 1/4 of Se	= 15 T. 151	N. R. 17 A.	Well Installed	By: (Person	s Name and	inu)
ft. Well A Point of Enforcement Std. Application?	Location of Well Reland	ve to Waste/Sou	rce		Mc Ar		
The state of the s	u [] Upgradient	s ☐ Sidegra		M+K	ENV. D	rilling I Yes [•
A Protective pipe, top elevation			1. Cap and lock?			D Ye [<u>=</u>
. Well casing, top elevation99.61 ft	MSL-	785	2. Protective cov	er pipe:	-		
	- 1		a. Inside diame b. Length:	ier.			20in
Land surface elevation 100 ft		-	c. Material:			Steel [
D. Surface seal, bottom	に経験ノユニ	The second second		sh Mount	Cast In	1 Other	
2. USCS classification of soil near screen:		No.	d. Additional p			☐ Yœ [1 Nb
GP GM GC GC GW G SW G S SM G SC G ML G MH G CL SC C			If yes, descr	ibe:		 -	
Bedrock 🛘			3. Surface scal:			Bentonite D	
3. Sieve analysis anached? U Yes U N						Other E	
14. Drilling method used: Rotary D 5	1 1	- (3	4. Material between	on well casing	and protective	pipe	-
Hollow Stem Auger 🛛 4						Bentonite [
O(E II =				· /	//A Amulai	المعمودة	
15. Drilling fluid used: Water 02 Air 0	1 🗒	3 .	Amular space	scal:	a. Granula	Ober C Bentonite C	
Drilling Mud 🗆 03 None 🗆 9	9	LLCI	bLbs/ga				
16. Drilling additive used? I Yes IN			cLbs/ga				
		\$	d % Beni	volume add			1 50
Describe	<u></u> ↓		How fristalle		est for any of	Tremie	1 01
17. Source of water (attach analysis):		***			Treni	e pumped	• • •
			•			Gravity 🛘	
HE Bentonite seal top 99 / ft. MSL or	/ O ft_	6	Bentonite scal:		••	ල සිනාගුප 🗆	•
E. Bentonite seal top 97 / ft. MSL or 1	(- m		b. □1/4 in.	M3/9 fur M1	/2 in. Benton	— Oq≃ □ nre bejjere □	
Fine sand, top ft MSL or	_ ft.\		. Fine sand mate	rial: Manufac	urer, product	රැස ප name & mස්i	i vize
E .		阕/ /	2 //	/A- ·			
G. Filter pack, top	30 m		b. Volume sode		ft ³		
M. Screen joint, top	30 6		. Filter pack mare			name and me	sh size
he screet burn tob 7 2 1° C to word at =			b. Volume addi	yer Minus	1 #=30 63		33
Well borrom 856 ft. MSL or 13	51	9.	. Well casing:		ided PVC sch	ectuio 40 💆	23
<u>š</u>	→ 片層					ಷ ರ್ಷ 80 🗖	
Filter pack bottom 854 ft MSL or/_	2 1					_Onb≃ □	
Borehole bottom	35 f.		. Screen material		pr		200
			2. Screen type:			ecory cut 🗵	
L Borchole, diameter 86 in.						Other 🏻	****
234			b. Manufacturer	•			/O:
M. O.D. well casing _234 in.	•		e. Slot size: d. Slotted lengt	he ·			/ <u>o</u> in. /ok
F. LD. well casing 260 in.		11.	Backfill material		ack):	None 🗷	
						_ Other []	
hereby centify that the information on this f		rrect to the b	est of my kn	owledge.	-		
gnance / -L. / dil	Fint Mille	E A Day		L. LèL	_		

Tesse complete both sides of this form and renum to the appropriate DNR office listed by the top of this form as required by this. 144, 147, and 160, Wis. Stats., and the NR 141, Wis. Ad. Code. In accordance with the 144, Wis Stats., failure to file this form may result in a forfeinere of not less than \$10,000 for each day of violation. In accordance with the 147, Wis. Stats., failure to file this form may result in a forfeinere of not more than \$10,000 for each and of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

	A Repair W Undergo	Techar I		- rount	TORING WEI 400-113A	¥.	Lev. 4
Pacifity/Project Name Out Clye Z			ft 日	Vell Name		ゴモ75	
• • • • • • • • •	Grid Origin Location	Louis				DNRWell	
Type of Well Water Table Observation Well 2011	St Plane	fl.N.		are Well be		10719	9
Fernmeter [] [2] Distance Well Is From Wisse/Source Boundary	Section Location of Wat SE1/4 of MA/1/4 of Se	ste/Source e 15 T 15 1	N. R. 19 图 5		By: (Person	i's Name and	<u>▼</u> F===)
ft. 5 Well A Point of Enforcement Sid. Application?	Location of Well Reland	c to Waste/Son	TCC		ke McAr		
N Ye D No	d Downgradient	n Not K	DOWN	M	tk Env.	Drilling	
A Protective pipe, top elevation		_	1. Cap and lock? 2. Protective cover	r pic=:		N Yes [
3. Well casing, top elevation	. 17	70	⊾ Ínside diamete			12	_
Land arriace elevation			b. Length: c. Material:			_ <u>ا</u> 	<u>, D</u>
D. Surface seal bottom 98.8 ft MSL or _1	· · · · · · · · · · · · · · · · · · ·	1.45%	Flush		est Iron	Oib= E	0
12. USCS classification of soil next screen:		Na Asia	d. Additional pro If yes, describ		•	D Ys 5	Ø %
SWI SCI MII MHO CIM C SWI SCI MII MHO CIM C	[]	間//	a yez desen. 3. Surface sest:	~- 	·	Bentonite C	_ 3
13. Sieve malysis anached? Yes N			J. 3 ((1002) 7 1 1			Concrete X	•
4. Drilling method used: Rotary D S		\	4. Mucial between	well casing	and protectiv	=== Other L	
Hollow Stem Auger 🙉 4 Other 🗓 -			,		A	Benorie C	
				N/F		Oper [_
5. Drilling Buid used: Wife [] 02 Air [] (Drilling Mud [] 03 None [] 9			S. Amular space se	<u>ul;</u>	± Grænula	ಪ್ರವಾಗಿ	3
Primite type [1 02 Haze of 3		000	bL&/gal cLbs/gal	-			
6. Drilling additives used? 🔲 Yes 🔲 N		· • • • • • • • • • • • • • • • • • • •	d % Bento	ոլեւ	. Benonie es	ment grout D	
Describe			Ft		ರದ Ior any oi		, ,
7. Source of water (aleach analysis):			E How insulled	=	Tren	Trenic [] - Deputyed	
					_	Gravity 🖺	_
Bentonite seal top 288 ft MSL or	10 ti		i. Benionite scali 5_ []1/4 in.]X	វែន កែ. 🗆	a Benedi 10 in Bene	ic grandes [3
			c,			Other []	3
Fine sand top ft_MSL or	(r_		. Fine sand materi	al: Manufa A/	enses, produc A	t name & mesl	h siz
Filter pack top _ 96 8 ft. MSL or _	30 11	M /	b. Volume adde	!	ft ³		
Screen joint top96.3 ft MSL or	1 0 1 K	1 /8	L Filter pack mater	ials Manuficer Mini		द्र क्यांट धर्म कर	ر من الأ
•			b. Volume and	3,	5- ft3		
Well borrom	1.5 ft	9	. Well casing:			hedule 40 🔀 hedule 30 🛚	•
Filter pack bottom £63 ft MSL or _ £3					<u> </u>	_ Ob= []	
Borchole, bottom963 ft. MSL or _12	35 ft.	10	. Screen material:	-	PVC		32
	··- ··		r 2ctecu type:			Fewrycut M nucus slot 🔲	
Screbole, diameter 70 in	\	-		<u> </u>		Other []	l Z
O.D. well casing _234 in.			b. Manufacturer c. Slot size:			0.0	
I.D. well casing 200 in.		•	d. Slotted length Backfill material (pack):	None 10	
ereby certify that the information on this			_===			O/= D	1

Please complete both sides of this form and redum 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 forfeigner 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 forfeigner of not more than \$10,000 for each

Quick Freeze

Distance Well Is From Waste/Source Boundary

12. USCS classification of soil near screen:

Is Well A Point of Enforcement Std. Application?

a Yes

D. Surface seal, bottom____ ft. MSL or _ L. O ft. v

OF I GMI OCH GWI SWI SP I

SM T SC T MUT MHT CL E CHT

Facility License, Permit or Monitoring Number

Type of Well Water Table Observation Well 211

Department of Natural Resources

A. Protective pipe, top elevation

B. Well casing, top elevation

C. Land surface elevation

Beingt [

13. Sieve malysis attached?

14. Drilling method used:

16. Drilling additives used?

Describe

₹. Fine sand, top

U. Filter pack, top

F. Screen joint, top

. Horehole, diameter

. O.D. well casing : 237

LD. well casing ZO4 in.

L Well bottom

15. Drilling fluid used: Water 1 02

17. Source of water (attach analysis):

. Drilling Mud 11 03

State of Wisconsin

Pacility/Project Name

□ No

759.28 n. MSL-

75915 R. MSL-

_7563 RMSL

口 You 量水

Hollow Stem Auger 41

□ Yes

E Bentonite seal, top ____ R. MSL or __ 1 O IL

Filter pack, bottom _____ It. MSL or _ 15 S R.

I. Borshole, bottom ____ A. MSL or 155 A.

Rotary 150

Other D 200

Air 🗆 01

IN.

None 超 99

_____ n. MSL or __ 3,0 ft.

.____ ft. MSL or __ # D ft.

____ ft. MSL or ____ 5 0 ft._

____ R MSL or 155 R.

St. Plane

	Other D
b. Manufacturer	
c. Slot size:	n.6/0

۲.	Slat size:	· •	u.Olon	
Ĺ	Slatted length;		10.010 n	

11. Backfill material (below filter park); Nor 214

ieleph	Caulity	that	the	Information	חס	his	form	İs	true	and	correct	10	lhe	best	of	my	knowledge.
गर्धायः	4	/	\sim	~~?	_	·		im									

State of Wisconsin Route to: So	olid Waste Ll Haz Waste	☐ Wastewater [J		WELL CONSTRUCT	TON no.s
Department of Natural Resources Env. Respons	e & Repair 🖾 Undergro	ound Tanks 🛭 🤇	Other 🛮 📖	Form 4400-113A	. Rey.	4-90
Facility/Project Name	Local Grid Location of 10 4 6 ft.	Well N. 550	L. D.W.	ell Name mw-4A		
Facility License, Permit or Monitoring Number	Grid Origin Location	S		is. Unique Well Num	ber DNR Well Nur	mber
Facility Election, I cannot be seen and a seen and a seen and a seen a s	Lat	_ Long	ar [_	20.825_		
Type of Well Water Table Observation Well [1]	St. Plane	_ ft. N,	ft. E. D	ate Well Installed	2/21/02	
Piezometer \$12	Section Location of Wa	ste/Source		Yell installed By: (Pe	im dd yy	
Distance Well Is From Waste/Source Boundary	5E 1/4 of NW) 1/4 of Se	ec. <u>15.</u> T. <u>15</u> N	, R. L U W.	Bunn R		111)
Is Well A Point of Enforcement Std. Application?	Location of Well Relati u D Upgradient	ve to Waste/Sour	rce -		· · · · · · · · · · · · · · · · · ·	_
Yes D No	d E Downgradient	•		EDS		_
A. Protective pipe, top elevation _759.40			1. Cap and lock?		Æ Yes □	No
	-11	7	2. Protective cover	• •	. 21.	- . .
,			a. Inside diamete b. Length:	π:	-7·	Qin. Dft
C. Land surface elevation _755.6	R. MSL	1	c. Material:		Steel	_
D. Surface seal, bottom ft. MSL or _	Le r.	I 文字题			Other 🛘	
12. USCS classification of soil near screen:		1	d. Additional pro			No
GP GM GC GW SW DSM SW DSM SC DMLDMHDCL			If yes, describ	be;	•	
Bedrock []	Call		3. Surface seal:		Bentonite 🗷	
13. Sieve analysis attached? Yes	No.				Concrete Ciber	0.1
14. Drilling method used: Rotary U	50		I. Material between	n well casing and prot		424
Hollow Stem Auger 🕱					Bentonite 🗷	3.0
Other D	## . W				nnular space seal 🔲	
15. Drilling fluid used: Water □ 02 Air □	0.1				Olica [
Drilling Mud 🗆 03 None 🖾				cal: a. Gr. mud weight Bent		3 3 3 5
			Lbs/gal	mud weight	Bentonite slurry	
16. Drilling additives used? ☐ Yes 📮	No 🐰	₩	d % Bento	onite Benton	ite cement grout 🔲	5.0
Describe		×		3 volume added for a		
17. Source of water (attach analysis):		· 👹 · •	f. How installed		Tremie 🔲 Tremie pumped 🔲	01
			•	,	Gmvity 🔀	02 08
		6	. Bentonite scal:	a. Bo	entonite granules 🔲	3.3
E. Bentonite seal, top ft. MSL or	<u>180 m.</u>		b. □1/4 in. Ş	Ø/8 in. □1/2 in. F	dentonite pellets 🕱	32
7.77			C			
7. Fine sand, top ft. MSL or	73.0 m		. Fine sand materi	ial: Manufacturer, pr	Octuct name & mesh s	:17e
J. Filter pack, top ft. MSL or	24 0 m	图/	h. Volume ackiec		<u></u>	~~
		.8.		rial: Manufacturer, pr		1 5170
H. Screen joint, top ft. MSL or	25.0 ft.		1 Bos	_ <u>5-55</u>		
Walthard F. Will or			 b. Volume added Well casing: 		_ft.³ 'C schedule 40 📆	7. 7
. Well bottom ft. MSL or _ 2	O.O		, Well Casing.		Cschedule 80 [
Filter pack, bottom ft. MSL or	os IL			, , , , , , , , , , , , , , , , , , , ,	Other 🏻	
		10.	. Screen material:	PVC		
L. Borehole, bottom ft. MSL or	<u>}0,5 n.</u>		n. Screen type:	,	Factory cut 💢	
I paratago de o					Continuous slot	0.1
Borehole, diameter _B_D in.	,		h Manufacturer	J021/40Z	Other 🛚	
f. O.D. well casing 237 in.		` `	e. Slot size:	<u> </u>	0.010	₫in.
		\ \ \ \ d				_ ft.
I.D. well casing 204 in.		11.	Backfill material (below filter pack):	None 🗷 1	14
bereby certify that the internation on this	form is time ====================================	wront to the L	not of my ba-	wladac	Other 🔲	==-
pereby certify that the information on this	Firm	orrect to the b	est of my kno	wisode.		
Bian Kropinski	EDS					

ease complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by clis. 144, 147 and 16th, Wis. Stats., I 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 \$10,000 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 of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

	id Wasie L. Haz, Wasie		MONITORING WELL CONSTRUCT: Form 4100-113A Rev. 4
Env. Responso	& Repair Underer	ound Tanks U Other U	
Facility/Project Name	Local Grid Location of	Well N 070 . HE	Well Name
Quick Freeza		<u> 878 n. A.</u>	1 mw-5
Facility License, Permit or Monitoring Number	Grid Origin Location		Wis Unique Well Number DNR Well Num
	Lat	Long or	
Type of Well Water Table Observation Well 211	St Plane	ń. N î. E.	Date Well Installed
Piezometer , 12 t	Section Location of Wa		<u> </u>
	Section Exemples of Wa	sid-source	Well installed By: (Person's Name and Pirm)
0 12	ZEI/4 of NWI/4 of S	ec. 15.T. 15 N, R门员员	Craig Plant
Is Well A Point of Enforcement Std. Application?	Location of Well Kelnti	ve to Waste/Source	- Citig Flant
· · · · · · · · · · · · · · · · · · ·		F 🔲 Sidegrafient	Els
	d 🛮 Downgradient		1
A. Protective pipe, top elevation	1	2. Protective en	
B. Well casing, top elevation759.70 ft	. MSL	a, Inside diam	,
C. Land surface elevation _1568 R	. MSL	h. Length:	7.0%
•		c. Material;	Steel 隨(DA
D. Surface scal, bottom ft MSL or _ i	1. [[[] [] [] [] [] [] [] [] [] [] [] [] [Cyle [
12. USCS classification of soil near screen;		d. Additional	protection? U Yes No
GPT GMT GCT GWT SWT S SMT SCT MLT MHT CL S		114 \	riber
	H D I		Benionite \$ 30
Bedeck □		3. Surface scal:	Concrete D 01
13. Sieve analysis attached?	a l		
14. Drilling method used: Rotary 1 5	n 🔯	A Malarial balan	con well easing and protective pipe:
Hollow Stem Auger E.4		4. Whithin betw	• • • • • • • • • • • • • • • • • • • •
	7772 1 1004		Bentonite Z 30
Other D !	*		Annihat space seal 📙 👱
The many of the state of the st			Cilia D
15. Drilling fluid used: Water 10 02 Air 11 to Drilling Mud 11 03 None 21 9		5. Annular space	scali a. Granular Bentonlie 2 33
Drilling Mud 🗆 03 None 🔁 9		bLbs/g	al mud weight Bemonite-sand shirry 🔲 35
16. Drilling additives used? I You MA	. 🐰		al mud weight Bentonite slurry 0 31
16. Drilling additives used? I Yes Will	' 📓		nionite Bemoulle coment grout 🛭 50
			Ft 3 volume added for any of the shove
Describe		f. How instal	
17, Source of water (attach analysis):		1. 7.0.7	Tremic pumped 🛘 02
			Gravity 🕱 n 8
		d Parameter and	
E. Bendonite seal, top It. MSL or	100 👹	6. Remonite scal	
the personne sent, top	- 22 // 💥	h. 01/4 m.	Al/8 in. 11/2 in. Bentouite pellets 32
F. Fine sand, top '. R. MSL or 3	2 3 0 \ 📓	2 5	Online U
F. Fine sand, top ' R. MSL or	; · · · / / / / / / / / / / / / / / / /	1001 2 2 [3	erial: Manus neturer, presides name & mesh size
G. Filter pack, top ft. MSL or	In I	- bonc	40-60
G. Filter pack, top ft. MSL or	:'农 :// / / / / / / / / / / / / / / / / /	h. Volume ack	
T	. 7. 1		terial: Manufacturer, prixingly name and moch size
H. Screen joint, top ft. MSL or _5	.U II.	I I DON'L	<u> 45-55 </u>
		h. Volume ach	Int
I. Well bottom ft. MSL or	.0 年/	9. Well casing:	Flush threaded PVC schedule 40 - 23
			Flush threaded PVC schedule 80 D 21
I. Filter pack, bottom fi. MSL or _/S	SIL VE		Other O
		10. Sercen materia	I PC
K. Borenole, bottom A. MSL or _15	Sn.	n. Screen type	
		an outen ying	Continuous slut [1] 01
-Borehole, diameter _B.O in.			Other D
U. D. W.		Y	
1. O.D. well easing 237 m.		h. Manufacture	0.010m
m Carrier Carrier m.		c. Slot size:	
721		el Slotted lengt	
LD. well easing 204 in.		II. Backfill material	· 上下下的。
and the state of t			(Mir D
ereby certify that the information on this fo		rect to the best of my kn	owledge.
HADITE / CC	Firm		

te complete both seles 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. State. In. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis State., failure to file this form may result in a forfeiture of not less than \$10, nor mechan.

O for each day of violation. In accordance with ch. 147, Wis. State., failure to file this form may result in a forfeiture of not less than \$10, nor mechan.

The second secon	id Waste LI Haz Waste E		TANK AND AND	ING WELL CONSTRUCTION 113A Rev. 4-90
Facility/Project Name	& Repeir 2 Underground Local Grid Location of W		_ Well Name	
	Ino7 n N	879 n.	โซ็โกพ-	.SA
Facility License, Permit or Monitoring Number	Grid Origin Location		Wist Unique Well	Number : DNR Well Number
	Lat.	Long	1020022	
Type of Well Water Table Observation Well [1]		•	227 12 1	4
Fierometer 22	St Plane		I. E. Dailo Wen manning	<u> </u>
Distance Well is From Waste/Source Boundary	Section Location of Wast		E Well Installed It.	m in d d y y /: (Person's Name and Pion)
•	EIM of NWIM of Sec	. 5.T. 5 N, R. <u>口</u>		
Is Well A Point of Enforcement Std. Application?	Location of Well Relative	to Waste/Source		Plant
		s 🛘 Sidegralient	EPS	•
	d Downgradient	n Li Not Known		bry 3/ , pro 131
A. Protective pipe, top elevation _759.87 t	L. MSL			⊠ λα □.γ ₀
B. Well casing, top elevation 159.961	L MSL	יי איזור	re tower pipe:	d n
_	11	11/	diameter;	7.0 in.
C. Land surface elevation	L.MSL	h. Lengt		7,94,
D. Surface seal, bottom ft. MSL or	lon、意题:il	C. Mater	101;	Steel 図 04.
12. USCS classification of soil near screen:				Chief []
GP-O-GMO GCO GWO SWO				日子写写外
SM G SC G MLG MHG CL S C		13/ / " " 18.2	r 06.dist	
Baircia []		3. Surface :	enal;	Rentanite 🔀 3.0
13. Sieve analysis attached? UYes 🖼	h 🐰			Concrete [7 01
14. Drilling method used: Rotary 🗓 5	1 100	W 77.551		יין דאונטיין וידע
Hollow Stem Auger		אנים יו, וינחורדותו אנים	between well ensing and	
Other D				Bentonite 54 30
Chica La L				Annular space scal 🔲
15. Drilling fluid used: Water 1 02 Air 1) 1			When D and
Drilling Mud 口 03 None 到 9				Granular Bentonite - 33
				Bentonite sand slurry [] 3.5
16. Drilling additives used7 日 Yes 爱N				Rentmite shirty 4 3.1
		7	a remointe it	entonité exment grout 🗓 . 50
Describe			Ft - volume added	
17. Source of water (attach analysis):		f. How i	uziuned:	Tremie 🔲 111 -
1			•	Gravity 🗵 02
		6. Bentonile	and: a	. Remonite groundes [] 3.3
E. Bentonite seal, top ft. MSL or _ fg	3 ለ ቤ	1731		
			in bach in Citta	n. Rentonite pellets 7 32
Fine send, top n. MSL or _ Z	3012	7. Fine sand	material Manufacture	r, puoduet name & mesh size
			c. 40-60	
Filter pack, top ft. MSL or _Z	40 m 入日 1		ल महीली	63
n.				r, product name and mesh size
+ Screen joint, top n. MSL or _ Z2	50 r \		1 <u>2 45-55</u>	1. promoct maine aim mean size
·		b. Volum	e suited	63
Well bottom ft. MSL or _ 35	10 M	9. Well carir		PVC schedule 40 - 21
				IPYC schedule 80 D 24
Filter pack, bottom ft. MSL or _ 3c	らに、「遺	*		
T. Control of the con		10. Sercen ma	certal: #3.5	Otler II
Borchale, bottom R. MSL or _ 37	.5 m.	n, Screen	_	Factory cut (\$\overline{1}\ove
		1	٠٠١٢٠	Continuous slot [] 91
Borchole, diameter _ B.O in.		3 .	•	Other 🗆
<u>_</u>	•	ly Moneston	mor bidos	
O.D. well easing 237 in.	:	e. Sint sire		n. 8/ din.
	•	d. Sinned !		
I.D. well casing 204 in.		3	orial (below filter pack);	
		<u>.</u> .	•	
areby carilly that the information on this to	rm is true and corre	at to the best of my	knowledae.	
V C	i um			· · · · · · · · · · · · · · · · · · ·
TE COMPANIE LAND	EDS	·		
the complete both sides of this form and return to the a sh. NR 141, Wis Ad. Code. In accordance with ch. l-	A Win Service List	led at the top of this form	as required by clis, 144	. 147 and 160, Wis. Stats.
th. NR 141, Will Ad. Code. In accordance with the l	er, mis dires., laiture (o (ic this form may tesuli i	rainfeilure of not less	than \$10, not more than

State of Wisconsin Route to: Solid Waste LI Haz, Waste LI	Wastewater MONITORING WELL CONSTRUCTION Form 4/00-113A Rev. 4.9
Department of Natural Resources Env. Response & Repair El Underground	I Tanks I Other I
Facility/Project Name Local Grid Location of Well QUICK FREEZE 1091 ft. 15.	Well Name
QUICK FREEZE 1091 IL 115.	1034 ft. Tw W-6 Wis: Unique Well Number: DNR Well Numbe
Facility License, Permit or Monitoring Number Grid Origin Location	
LatL	Usia Wall Installed
Type of Well Water Table Observation Well 21 St. Plane ft	N 04/25/02
Piezometer II 12 Section Location of Waste/Source Boundary Distance Well Is From Waste/Source Boundary 45:14 of Nicht A of Section Location of Waste/Source Boundary	
130 ft.	12,7. 13 N. R. 110 W. Para Departs 1
Location of Well Relative to	o Waste/Source
Yes UNb d U Downgradient n	
A. Protective pipe, top elevation 740 57 ft. MSL	1. Cap and lock? Yes 1 No
710 50 5 161	2. Protective cover pipe:
	a Inside diameter:
C. Land surface elevation _ 759.0 n. MSL	b. Length: 5.0 ft.
D. Surface seal, bottom ft. MSL or _ 1. D ft.	c. Material: Steel 5 04
	Other 🛘
12. USCS classification of soil near screen:	d. Additional protection? U Yes > No
GP CM CC CW CSW CSP CH CSW CSW CSP CH CSW CSW CSW CSW CSW CSW CSW CSW CSW CSW	
Bedrock []	3. Surface seal: Bentonite 30
13. Sieve analysis attached? UYes UN6	Concrete D 01
14. Drilling method used: Rotary ☐ 50	4. Material between well easing and protective pipe:
Hollow Stem Auger 24.1	Bentonite 🗷 3(1
Cha D	Annular space seal
	Other 🛘
15. Drilling fluid used: Water 0 02 Air 0 01	5. Annular space seal: a. Granular Bentonite 33
Drilling Mud □ 03 None 및 99	bLbs/gal mud weight Bentonite sand slurry [] 35
16. Drilling additives used?	eLbs/gal mud weight Bentonite sturry D 31
16. Drilling additives used? D Yes No	d % Bentonite Bentonite cement grout 🛘 50
Describe	eFi volume added for any of the above .
17. Source of water (attach analysis):	f. How installed: Tremin [] 0.1
	Tremie puniped [02
	Gravity 3 0.8 6. Bentonite scal: a. Bentonite granules 1 3.3
E. Bentonite seal, top ft. MSL or 1 o ft.	
E. Bentonite seal, top ft. MSL or 1 .Q ft.	b. □1/4 in. □2/8 in. □1/2 in. Bentonite pellets □ 32
F. Fine sand, top ft. MSL or 3 0 ft.	7. Fine sand material: Manufacturer, product name & mesh size
	1/ Brac 40-60
G. Filter pack, top ft. MSL or 40 ft.	h. Volume ackled — [1]
	8. Filter pack material: Manufacturer, product name and mesh size
H. Screen joint, top ft. MSL or ft	1 Boc 45.55
	b. Volume added ft
I. Well bottom ft. MSL or _150 ft.	9. Well easing: Firsh threaded PVC schedule 40, 22
	Flush threaded PVC schedule, 80 🔲 24
J. Filter pack, bottom ft. MSL or _ 15 5 ft.	10. Screen material: PVC a. Screen type: Factory cut SC 11
V D 44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	a. Screen type: Factory cut
K. Borehole, bottom ft. MSL or _15 5 ft.	a. Screen type: Factory cut A self-
I. Boseliule diameter 8.0	Other
L. Borchole, diameter <u>80</u> in.	h. Manufacturer JOHNSON
M. O.D. well casing 237 in.	n. Manufacturer 1047 0 010 in
m.	d. Slotted length:
H. I.D. well casing ZOY in.	11 Rockfill material (below filter mack):
·	Office 📙
hereby certify that the information on this form is true and correct	ct to the best of my knowledge.
gnature)) (

=ase 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 161. Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10,000 for each 200 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 of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed for should essent.

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	State of Wisconsin Route to: Sol Department of Natural Resources Env. Response	id Waste L. Haz. Waste i & Repsir E. Undergro	□ Wastewater □ ound Tanks □ Other □ _	Ecres (A(V) 113 A	FELL CONSTRUCTION Rev. 4-90
_	Facility/Project Name	Local Grid Location of 1089 ft.	Well	Well Name	· ·
	Facility License, Permit or Monitoring Number	Grid Origin Location	<u>s</u>	Wis: Unique Well Num	ber : DNR Well Number
3	1 2011.19 200020, 1 200000	Lat	_ Long	_m PDSEOL	
₽	Type of Well Water Table Observation Well 11	St. Plane		t. E. Date Well Installed	2128102
	Piezometer 3.12 Distance Well Is From Waste/Source Boundary	Section Location of Wa	ste/Source	Mell Installed By: (Pe	m d.d.y.y. rson's Name and Firm)
	DEFENCE AND RELIED ASSESSMENT BOTTOM	EIM of Well of So	ec. <u>15.</u> T. <u>15</u> N. R. [7]	JW. PRIAN RE	•
	Is Well A Point of Enforcement Std. Application?	Location of Well Relati u 🔲 Upgradient	s 🖾 Sidegradient	EDS	
ŧ,	⊠ Yes □ No	d 🛘 Downgradient	π □ Net Known		F V - F N
	A. Protective pipe, top elevation _ 760.02	Ti-	1. Cap and	re cover pipe:	互 Yes 日 No
ž	B. Well casing, top elevation _ 760.LQ	i. MSL ————		diameter:	4.0 in.
	C. Land surface elevation	n. MSL	h. Lengt		_7. On.
	D. Surface seal, bottom ft. MSL or	n. ()	c. Mater		Steel 📜 0.4 (Xiber 🛘
e N	12. USCS classification of soil near screen:		d. Addit	ional protection?	□ Yα ⋈ No
_	GP I GM I GC I GW I SW II			, describe:	
	SM D SC D ML D MH D CL B	CH D	3. Surface	scal:	Bentonite 🗷 30
	13. Sieve analysis attached? ☐ Yes	No.			Concrète □ 0.1 Other □
b	14. Drilling method used: Rotary	50	4. Material	between well casing and prot	
FQ	Hollow Stem Auger	mar i wi			Bentonite 屋 30
	Cther 🛚	⁴²			mular space seal 🔲
Ì	15. Drilling fluid used: Water [] 02 Air []	01	5 Annular	space seal: a. Gr	anular Bentonite 🔀 33
i.	Drilling Mud □ 03 None □	99		Lis/gal mud weight Bent	,
L	16. Drilling additives used? ☐ Yes ☐	√		Lbs/gal mud weight	
				% Bentonite BentonFt 3 volume added for a	
	Describe	l , ` 😹	UXX4	installed:	Tremie 🔲 01
h	17. Source of water (attach analysis).			•	Tremic pumped 0.2
			6, Bentonit	e scal: a. Be	Gravity 🔀 08
L	E. Bentonite seal, top ft. MSL or _ 1	8.0 m.	2000	¼ in. №/8 in. 🗆 1/2 in. Г	
	y en to the State of the State				
3	F. Fine sand, top ft. MSL or	3.0 "\ \		d material: Manufacturer, ju 3 PAC 40-6	
•	G. Filter pack, top ft. MSL or _ Z	10 m o.t.		ne added	
3	H. Screen joint, top ft. MSL or 2		8. Filter pa	k material: Manufacturer, pr	oduct name and mesh size
; L	H. Screen joint, top ft. MSL or _ 2	30 m	- 1 D	nc 45-86	ii7
,	I. Well bottom ft. MSL or _ 3	يا وو	9. Well cas	ing: Flush threaded PV	Cáchedule 40 🚊 23
∄ .					C schedule 80 🔲 24
)	I. Filter pack, bottom ft. MSL or _3	2.0		naterial: PVC	Other D
3)	K. Borehole, bottom ft. MSL or _3	20 n.	a. Scree	n type:	Factory cut 💢 11
				(ontinuous slot 🔲 01
Į	Borchole, diameter _8.0 in.	1822		activer 2014 MSDM	Other 🛚
3	1. O.D. well casing 237 in.		c. Slot si		0.010in.
Ī		•	. \ d Sloner	Llength:	ft.
N	LD. well casing 204 in.		11. Backfill m	aterial (below filter pack):	Nore 14
ī	hereby certify that the information on this	form is true and co	rrect to the best of m	v knowledge	Olkt 🗆
ρi	grature R. D.	Firm	are to are east of it	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
3 in -}}i	case complete both sides of this form and return to the	EDS	a listed at the time of this f	on an equipmed by the 1971	17 12# W:- C- 1
н"	" III- NK 141. Wis. Ad. Code. In accordance with the	144 Wie State Inflore	to file this form may result	in a forfeiture of not loce the	n \$10 nor more than
Г.	000 for each day of violation. In accordance with ch.	. 147. Wis. State . tariure	i lo luc lins form may resul	in a loricitize of not more if	an \$10,000 for each

State of Wisconsin Route to: Solid Waste Department of Natural Resources Env. Response & Repa	☐ Haz Waste ☐ V	Vastesvalor 🗆	MONITORING W Form 4400-113A	YELL CONSTRUCTION Rev. 4-90
(I pea) (and I ocation of Well	·	Well Name	_
QUICK FREEZE 10	156 it 88	1033 ft. 8 E.	mw-6	В .
Familian License Permit or Monitoring Number Grid Or	igin Location		Wis: Unique Well Num	ber .: DNR Well Number
i.at.	Lor	ng or	PD865	ng i di kabupatèn di Mangangkan kabupatèn di kabupatèn di kabupatèn di kabupatèn di kabupatèn di kabupatèn di kabupatèn di kabupatèn
		N ft. E.	Date Well Installed	-
			<u>Q</u>	쥬/골음/Q목
Distance Well is From Waste/Source Boundary	Location of Waste/So	irce E E	Well Installed By: (Pe	rson's Name and Firm)
Distance Well is From Wasic Sounce Doubled y	of WUI/A of Sec. 15	T.T. 15N, R. 口 冒敬.	Pan RE	,
130 1. Locatio	m of Well Relative to	Waste/Soffree	- <u> </u>	
		Sidegrafient	EDS	
	Downgradient n			
A. Protective pipe, top elevation _ 160.60 ft. MSL-	-	1. Cap and lock?		₹ Ya □ No
To make year		2. Protective cov		,
B. Well casing, top elevation _ 160.14 R. MSL.	"	a, Inside diamo	iter:	. #.D in.
C. Land surface elevation _ 158.0 ft. MSL		b. Length:		_7.0n.
		c. Material:		Steel B DA
D. Surface seal, bottom ft MSL or _ 2. Q ft				Other 🔲
12. USCS classification of soil near screen:	THE PARTY	d. Additional	protection?	□ Yes 邑 No
GP I GM I GC I GW I SW II SP II	1 / 11 15		ribe:	
SM D SC D MLD MHD CL D CH D				
Bedrock 🗆		3. Surface seal:		Bentonite 区 30
13. Sieve analysis attached?				Concrete [] 01
	1 💹 🛱			Olher 🛘
14. Drilling method used: Rotary 1 50		4. Material betwe	ren well easing and prote	• •
Hollow Stem Auger 241				Bentonite 🗷 30
Other 🗆 🕮			. A n	mular space scal 🔲 🦠
				Other 🛘
15. Drilling fluid used: Water 1 02 Air 1 01		5. Annular space	scal: a. Gra	mular Bentonite 🖼 33
Drilling Mud □ 03 None □ 99				onite sand slurry 🔲 13.5
			al mud weight J	
16. Drilling additives used? Yes No		d % Ben	itonite Bentou	ite cement grout D 50
	! ₩ ₩		Ft ³ volume added for a	
Describe	I 🟻 🖼			Tremie 🛘 01
17. Source of water (attach analysis):		f. How install		
				Gravity 🖼 0.8
	· 🔛 💥			
73 A	. 🗶 💥	•	a. Bei	•
E. Bentonite seal, top ft. MSL or _33 O f	'-\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	h. L1/4 in.	\$€0/8 in. 11.1/2 in. B	lentonite pellets 📈 32
min a same man m	. 🔪 💹 🖾	,		
F. Fine sand, top ft. MSL or 380	''' <u>\</u> \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \		erial: Manufacturer, pro	
7-	八門門		7C 40-60	_
G. Filter pack, top ft. MSL or 39 0	(/ / 月 日	. /	lai	•
		8, Filter pack man	lerial: Manufacturer, pr	educt name and mesh size
H. Screen joint, top ft. MSL or 400	n.—	1 Bonc	. 45.55	
		b. Volume ach		ft ³
I. Well bottom ft. MSL or 2/5 0	n.、 [注]图 对	9. Well ensing:		C'schedide 40 🙎 23
			Flush threaded PV0	Cschedule 80 🔲 24
J. Filter pack, bottom ft. MSL or 455			•	Other 🗆
J. The pack, bottom		10. Screen materia	5 5 C	
K. Borehole, bottom ft. MSL or 45 5	n.			Factory cut 11
A. Borenoie, bottom II. MSE of _ 20 1	"\	a. Screen type		ontinuous slot
			. '	The first of the second of the
L. Borehole, diameter <u>B.O</u> in.	recelly			Other 🗖
	-		י קספייו אסל י	
M. O.D. well casing 237 in.		c. Slot size:		0.010in
		्र त. Slotted lengt	fr:	3-7-5-1
N. I.D. well casing 204 in.		11. Backfill material	(below filter pack):	Nmr B 14
·	*	_		Other D
hereby certify that the information on this form is	true and correct	to the hest of my kn	owledge	The state of the s
ignature () If in		to the book of the Kil	5 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 	
~ K · D · \ \ _ \ \ '''	" 5D3			

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by cls. 144, 147 and 160, Wir. State, 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 \$10,000 for each sold 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 say of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

State of Wisconsin Route to:	Solid Waste LI Haz. Wast	e□ Wastewater□	MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 4-90
Department of Natural Resources Env. Respo	nse & Repair B Underg	round Tanks 🛘 Other 🗀 🔙	1 (1) (1)
Facility/Project Name	Id need Cond Location o	(Wall	Weil Name
QUICK FREEZE	<u> </u>	N. 911 ft. 18	Wis: Unique Well Number : DNR Well Number
Facility License, Permit or Monitoring Number	Grid Origin Location	Long	or Wis. Unique well roumber Divik well roumber
20 3 37 m / 20 4 31/-71/20			tiles Mall Installed
Type of Weil Water Table Observation Well [4] Piezometer	St. Plane	n. N, n. 1	E. Date With Installed OZ /Z 3/QZ mm d d d Q y y
Piezometer Distance Well is From Waste/Source Boundary		aste/Source	
SO ft	100 1/4 of NW 1/4 of	Sec. 15, T. 15 N, R. 77	BRIAN REPINSEL
Is Well A Point of Enforcement Std. Application		tive to Waste/Source s	
■ Yes □ N		n 🗆 Not Known	ED3
A. Protective pipe, top elevation _162.3		1. Cap and lo	
B. Well casing, top elevation _762.7	· · · · · · · · · · · · · · · · · · ·	2. Protective	
<u></u>		b. Length:	· سر ا
C. Land surface elevation759.\$	N 2" . 1	c. Material	
D. Surface seal, bottom ft MSL or	_1.0 元 ()	1	Cither 🗓
12 USCS classification of soil near screen:		d. Addition	nal protection? ☐ Yes 爰 No
GP GM GC GW GSW G		If yes, d	describe:
SM D SC D MLD MHD CL	CH 🗆	3. Surface sea	Bentonite 📴 30
Bedrock []		3. Variation 3. Va	Concrete LI 111
13. Sieve analysis attached?	i X	X X	Other 🗆
14. Drilling method used: Rotary		4. Material be	etween well easing and protective pipe:
Hollow Stem Auger	2000 I W		Bentonite 🗷 30
Other			Antular space scal
15. Drilling fluid used: Water 102 Air	□ 01		Other a. Granular Bentonite 3.3
Drilling Mud □ 03 None			nace seal: a. Granular Bentonite 3.3 28/gal mud weight Bentonite sand shirry 3.5
	' l		ns/gal mud weight Bentonite slurry [1] 3.1
16. Drilling additives used?	Ø No ₿	C:	Bentonite Bentonite cement grout [] 50
			_Ft 3 volume added for any of the above
Describe		[How ins	FT .1
17. Source of water (attach analysis):			Tremie pumped 🔲 02
			Gravity 💢 0.8
		6. Bentonite s	
E. Bentonite seal, top ft. MSL or	1.Du~ 🖁	h. 🗆 1/4 :	in. 四/8 in. 日1/2 in. Bentonite pellets 頁 3.2.
F. Fine sand; top ft. MSL or	300	urmuz	naterial: Mänufacturer, product name & mesh size
It. Mod of	5'ō/ /		mc 40-60
G. Filler pack, top ft. MSL or	40 11	1 1 9 /	ndded — ft 3
		4 1	material: Manufacturer, product name and mesh size
H. Screen joint, top ft. MSL or	_5.0 n.	Bo	
		b. Volume	ndtled [R.5
i. Well bottom ft. MSL or_	15.0 fg	9. Well casin	•
	100		Flush threaded PVC schedule 80 24
J. Filter pack, bottom ft. MSL or _	15 = 1 /		erial: PC
C. Borchole, bottom ft. MSL or	155 ft.	a. Screen that	ype: Factory cut \$\infty\$ 1.1
a botchole, bottom	.19.9	a. 3000001	Continuous slot 📙 01
L. Borchole, diameter _B_D in.			Other 🗆
		h. Manufac	Inter Johnson
4. O.D. well casing 231 in.		c. Slot size	0. 0.10 in.
	•	\ d Slotted le	•
. I.D. well casing 204 in.		H. Bačkfill máte	erial (below filter pack): None 🗸 14
ham.	·		Other 🗆
hereby certify that the information on the	is form is true and o	orrect to the best of my	knowledge.
Krian Rissindi	ED3		

lease 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., id 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 500 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 y of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed for should be a

Daniel and at Make at Hansey	id Waste 📙 Haz. Waste 🗀 — Wastewater 🗀 — — & Repair 🗷 — Underground Tanks 🗀 — Other 🗀 — ——	MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 4-90
	Uppel Crid Location of Wall	Well Name
QUICK FREEZE	935 n. 118. 908 n. 11 W	mw-74
	Grid Origin Location Lat Long or	Wis: Unique Well Number DNR Well Number RDRZZZ
Piezometer	St. Plane ft. N, ft. E. Section Location of Waste/Source	Date Well Installed OZ / ZZ/OZ m m d d y y
Distance Well is From Waste/Source Boundary	全1/4 of NW1/4 of Sec. 15. T. 15 N, R. 口冒蒙	Well Installed By: (Person's Name and Firm)
Is Well A Point of Enforcement Std. Application? Yes \[\subseteq \text{No} \]	Location of Well Relative to Waste/Source u 🗃 Upgradient s 🔲 Sidegradient d 🔲 Downgradient n 🔲 Not Known	EDS EDS
A. Protective pipe, top elevation _162.061	1. MSL 1. Cap and locki	~ · · · · · · · · · · · · · · · · · · ·
B. Well casing, top elevation _ 76214 1	ii II II II I	· · · · · · · · · · · · · · · · · · ·
C. Land surface elevation _ 159.8 i	h. MSL b. Length:	. 7.0m. = - -70n. =
D. Surface seal, bottom ft MSL or _1	c Malmiel	Sted 💆 NA 📳
12. USCS classification of soil near screen:	d. Additional	protection? Cther 口 屋
GP GM GC GW SW GS SM SC G ML MH GCL MC	SP If yes, desc	Bentonite 🗷 30
13. Sieve analysis attached? U Yes	3. Surface seal:	Concrete D 01
14. Drilling method used: Rotary 📙 S		een well easing and protective pipe:
Hollow Stem Anger 2 4		Bentonite 🗷 30
Other 🛚 🖫	* / W	Annular space seal []
15. Drilling fluid used: Water 102 Air 11) ₁	Oliver 🗆
Drilling Mud 🗆 0 3 None 📮 9	9. S. Annular space	scal: a. Granular Bentonite 3 3 3
16. Drilling additives used?	1 100	al mud weight Bentonite sand slurry [] 3.5 al mud weight Bentonite slurry [] 3.1
16. Drilling additives used?	d % Ben	donite Bentonite cement grout D 50
Describe		re volume added for any of the above
17. Source of water (attach analysis):	f. How install	
		Tirmic pumped 0.2 Gravity 0.8
T Date to the State of	6. Bentonite scal:	a. Bentonite granules [] 33
E. Bentonite seal, top ft. MSL or _ 18	2.O ft. 1/4 in.	风/8 in. 日1/2 in. Bentonite pellets 区 3.2.
F. Fine sand, top ft. MSL or _ Z		rial: Manufacturer, product name & mesh size
G. Filter pack, top ft. MSL or _ Zs	b. Volume add	cdn ³
H. Screen joint, top ft. MSL or _ZS	0 n. 8. Filter pack mate	erial: Manufacturer, product name and mesh size
	h Volume edit	75 CS
I. Well bottom ft. MSL or _ 3c	9. Well casing:	Flush threaded PVC'schiedule 40 2 23
1. Filter pack, bottom ft. MSL or 30	S n	Flush threaded PVC's chiedule 40 女 23 Flush threaded PVC's chiedule 80 □ 24 Other □ Factory cut 反 11 Continuous slot □ 01 Other □ Other □ Other □
K. Borehole, bottom ft. MSL or _30	5 st. a. Screen type:	Factory cut Z 11
L. Borehole, dinmeter _8.0 in.		Continuous slot 01
1. O.D. well casing 231 in.	h. Manufacturer c. Slot size:	
I.D. well casing ZOY in.	d Slotted length	
barahy cartify that the information and		(Inter []
gnature That the information on this fo	rm is true and correct to the best of my kno	wledge.
As ion Keping	EDS	
200 for each day of violation. In accordance with ch. 1	appropriate DNR office listed at the top of this form as re 44. Wis Stats., failure to file this form may result in a fo 47. Wis. Stats., failure to file this form may result in a fo	recture of not less than \$10, nor more than
of violation. NOTE: Shaded areas are for DNR use or	aly. See instructions for more information including who	Te the considered form should be sent.

	Demonstrated of Alabami Decorroson	id Waste Ll Haz. Waste D	•	MONITORING WEL	L CONSTRUCTION Rev. 4-90
ĺ	Env. Response	& Repair Undergroun			
I	Pacility/Project Name QUICK FREEZE	931 Jr. FS.	905 IL DE.	Well Name	
		Grid Origin Location		Wis: Unique Well Number	- DNR Well Number
	•	Lat1	or or	The second secon	
	23.7 %	\$		17. 17. 17. 17. 1	
4		St. Plane f Section Location of Waste,	I. IV II. E.	0.3	1911QZ
\$	Distance Well is From Waste/Source Boundary	Section Execution of waste,	15,T. 15 N, R. <u>几</u> 胃影	Well Installed By: (Person	n's Name and Firm)
	40 ft.	Location of Well Relative		BUEN REP	•
	is Well A Point of Enforcement Std. Application?		to waste/Source s 🔲 Sidegradient		<u> </u>
	B Yes □ No	d Downgradient	•	ED3	
	A. Protective pipe, top elevation _761.681		1. Cap and lock	i .	互 Yes □ No
	71. 21.	. 1	2. Protective con	ver pipe:	,
ļ	B. Well casing, top elevation		a. Inside diam	ritr:	4.0 in.
	C. Land surface elevation _159.8	n. MSL	h. Length:		_7.0n
	D. Surface seal, bottom ft. MSL or	160 300	c. Material:		Sicel 뤋 04
٦	12. USCS classification of soil near screen:				
		The state of the s	1 3 7	protection?	□ Yes 邑 No
	GP O GMO GCO GWO SWO SMO SCO MLO MHO CLEE		If yes, desc	ribe:	
٦	Bedrock □		3. Surface seal:		Bentonite 👺 30
_7	13. Sieve analysis attached? 🔲 Yes 🔞 🗓	√ 0			Concrete [] 01
	14. Drilling method used: Rotary D :	50	4 Material between	cen well easing and protective	Other 🗆
7	Hollow Stem Auger		**************************************	cor were exting and protected	Rentonite 尾 3.0
_]	Other D			Anried	nemonine 🙉) (i
L					·
4	15. Drilling fluid used: Water □ 02 Air □	. t tryn i	5 Annular enace	seal: A. Granul	ar Bentonite 😼 33.
	Drilling Mud 🗆 03 None 🛱	99	ma ·	al mud weight Bentonite	,
	16. Drilling additives used?	_		al mud weight Bent	
ı	16. Drilling additives used?	5	d% Ber	ntonite Bentonite c	ement grout \(\Bar{\pi} \) .50
ļ	Describe			Ft 3 volume added for any o	
	17. Source of water (attach analysis):	— I 🐰 🖁 I	E. How install	-	Tremie 🔲 01
ij			X	Tren	nic pumped 🔲 02
I					Gravity 🕏 0.8
7	Representation of MCI pe 2	2 5 6	6. Bentonite seal:		ite granules 🔲 33
ij	E. Bentonite seal, top ft. MSL or	2.011.	m /	1/2 in. □ 1/2 in. Bente	•
ŀ	Fine sand, top n. MSL or _3		C	a comment of the control of the cont	. Other 🛘
			Bres	rial: Manufacturer, product 10 100	I name & mesh size
	5. Filter pack, top ft. MSL or 3	To me \ \		$\frac{100000}{100000000000000000000000000000$	······································
			2 Eller med met	arials Manufactures	
1	I. Screen joint, top $ $ ft. MSL or $- \cancel{4}_{i}$	2 D M 1	Poor	ciral: prantifacturer, produc	
			b. Volume achi	led	
ŀ	Well bottom ft. MSL or _ 1/2	5.0 n	9. Well ensing:	Flush thrended PVC scl	hedule 40 👱 23
				Flush threaded PVC sel	hedule 80 📙 24
Ŗ.	Filter pack, bottom ft. MSL or _ 45	5.5 / / / / / / / / / / / / / / / / / /			Other 🗀 🚉
	Borehole, bottom ft. MSL or _ \mathcal{L}_{ϵ}	= 6 ,	10. Screen material	1: +VC	
	. Doletiole, bottom It. MSL of _ $\mathcal{L}_{\mathbb{Z}}$	2.5 II.	я. Screen type:	: · · · · · · · · · · · · · · · · · · ·	actory cut 💢 11
a.	Borchole, diameter 80 in.				mous slot 🔲 10.1
	Borchole, diameter <u>80</u> in.		\		Other 🔲
1	O.D. well casing 231 in.			しつまった。	n N/B:
	U.D. Well casing _ 2 D in:		c. Slot size; d. Slotted length	h.	0.010in.
1	I.D. well casing 204 in.		11. Backfill material	•	ft,
3	The second secon		rt. Datkilli maichal	fission inter back);	None 1
<u>h</u>	pareby certify that the information on this for	orm is true and correc	t to the hest of my trac	wiedne	Cilkt 🔲
3	nature R	· }(*11331	die best of fily kine		
 	Deran Kroninki	EDS			
ηď	ese complete both sides of this form and return to the ch. NR 141. Wis, Ad. Code. In accordance with ch.	appropriate DNR office lis	ted at the top of this form as r	equired by chs. 144, 147 and	d 160, Wis. Stats.,
1	TOT CACH day of violation. In accompany with at	1 47 377 6 6 6 6 6	to one recent thay resent the a te	are unic or not test tunu 210	, not more than
IL.	of violation. NOTE: Shaded areas are for DNR use of	ml . See instructions for m	ere information including wh	cre the completion of than \$1	ייייעעי וטד פאכונ

State of Wisconsin Route to: 3 Department of Natural Resources Frag Responses	Solid Wastell Haz. Wast	e□ Wastewater□	MONITORING W Form 4400-113A	ELL CONSTRUCTION Rev. 4-90
	U and Cold Continue	round Tanks 🔲 Other 🗀	Well Name	
Facility/Project Name	1204 6	N. 712 a.	w mw-8	
QUICK FREEZE		15	Wis Unique Well Numb	er: DNR Weil Number
Facility License, Permit or Monitoring Number	, -	•	The second secon	est in an indition
	4	Long	*** - *** TO 1	Service Services
Type of Well Water Table Observation Well	St. Plane	ft. Nft	.E. Dale Well installed	<u> 12810</u> 2
Piezometer 🔲 🗅	Section Location of W	aste/Source	m	m dd y y
Distance Well Is From Waste/Source Boundary	To Milette Milet	Sec. 15, T. 15 N. R. []	1 W 1	son's Name and Firm)
16D ft.	Location of Well Rela		Bunn RE	PINSKI
Is Well A Point of Enforcement Std. Application?	1 Deatton of Well Kela	s 🛭 Sidegrafient	. 1	
FYes UNo		n 🔲 Not Known	EDS	<u>.</u>
			lock?	Ø Yes □ No
A. Protective pipe, top elevation _ 15\$.14	₽ R. MSL		e cover pipe:	≥= 10 C 140
B. Well casing, top elevation 75\$.18	n. MSL —	2. Protectiv		4.0 in.
				7.Q In.
C. Land surface elevation	n. MSL	h. Lengil		_5.0 N.
D. Surface seal, bottom ft. MSL or	100.	c. Materi	ini:	Strel 曼 114
				Citier 🗆
12. USCS classification of soil near screen:	1 5 Com 1 1		onal protection?	
GP GM GC GC GW G SW G	SP 🔲 🗎	If yes.	, describe:	
SM I SC I ML I MH I CL B	CH T	3. Surface s	1-	Bentonite 👺 30
Bedrock []	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	. 5. 5mmes	cal.	Concrete D 01
13. Sieve analysis attached?	INo ₿			Other 🗆
14. Drilling method used: Rotary I	350 . 8	4. Material	between well easing and prote	ctive pipe:
Hollow Stem Auger				Bentonite B 30
Other I			· A m	nular space seal
Other	7 777	8 🔯 .		*****
15. Drilling fluid used: Water 1 02 Air I	7 n 1			Time Owner II
Drilling Mud 🗆 03 None §	# 00 X		space scal: a. Gra	
1 . Diming mad Li 03 . Noise §		A) 1000l	.hs/gal mud weight Bento	
16. Drilling additives used? Yes	z v		.bs/gal mud weight I	
110. Dinning according to the parties of the partie	No .	₫ %	Bentonite Bentoni	le cement grant 🛛 50
D		c,	Ft ³ volume added for at	ly of the above
Describe	I 🔉	f. How i	nstalled:	Tremie 🗍 01
17. Source of water (attach analysis):	· 🐰	3 ₩		mmic pumped 🔲 02
		3 ₩3	•	Gravity 5 08
		6 Rentonite	scal: a. Bri	ntonite granules 🔲 33.
E. Bentonite seal, top ft. MSL or _	_L.O.n_	7 200	1 in. ₩ /8 in. 11/2 in. B	The state of the s
E. Bemonne seat, top to Moo of _	-L. W	A RANA Z	•	
F. Fine and, top ft. MSL or	2		Imaterial: Manufacturer, pre	
F. Fine and, top R. MSL or R. MSL or	-5:5/ / / 🕷		BMC 40-60	
- LOI	11 - 5	1 (· V)		~
G. Filter pack, top ft. MSL or _	75 m/	+ 1	r added	11 '
	ا 💉 ا	8. Filter pac	k material: Manufacturer, pro	
H. Screen joint, top ft. MSL or _	-20 m-	1 1 1		
		b. Volum		n.,
I. Well bottom ft. MSL or _	150 m	9. Well casi	**	schedule 40 😥 23
				Schedule 80 🔲 24
J. Filter pack, bottomi ft. MSL or _	155 m_			Other 🛘
1		10. Screen m	aterial: PVC	
K. Borehole, bottom ft. MSL or _	155 n.	п. Ѕстееп		Factory cut 52 11
sc. Dotestole, potroiti = = = = := := := := := = =		". Same		ontinuous slot 🔲 . 0 i
- n · · · · · · · · · · · · · · · · · ·				Other 🛚
L. Borehole, diameter				
	•	h. Manufa	nctimer Johnson	n.OJOin.
1. O.D. well casing _2.31 in.		c. Slot siz		
• · · · · · · · · · · · · · · · · · · ·		d Slotted	·	
L.D. well casing ZOY in.		11. Backfill m	nterial (below filter pack):	Nor 2 14
<u> </u>				Other 🔲 💷
hereby certify that the information on this	s form is true and o	orrect to the best of m	y knowledge.	The same of the sa
gnature) ()	Firm _			
_ Rejon Krepuille	EDS.	:		

asse complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by clis. 144, 147 and 160 Wie. Stats. I 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 \$10,000 for each 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 of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

	Haz. Waste 🔲 Wastewater 🗀	MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 4-90
Env. Response & Repair =	Underground Tanks U Other	(Well Name
Facility/Project Name Local Grid I	coation of Well ft. S. 708 f	園E. Wen Ivame
QUICK FREEZE 1003	<u> </u>	Wis: Unique Well Number : DNR Well Number
Facility License, Permit or Monitoring Number Grid Origin	Focation,	Wis: Official Well Pulmoet DIAK Well Pulmoet
· · · · · · · · · · · · · · · · · · ·		a PD 8 6 2 2 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Type of Well Water Table Observation Well 11. St. Plane	ft. N, '	ft. E. Date Well Installed 02/28/02
Piezometer Section Loca	ation of Waste/Source	mm dd y y
Distance Well is From Waste/Source Boundary	<u>W1/4 of Sec. 15</u> , T. <u>15</u> N, R. (Well Installed By: (Person's Name and Firm)
160 ft. Handing of	Well Relative to Waste/Source	Peinn REPINSXI
Is Well A Point of Enforcement Std. Application? u Upgr		
	ngradient n 🗆 Not Known	<u> </u>
A. Protective pipe, top elevation _ 153.17 ft. MSL	1. Cap	and lock? . ∠ Yes □ No
	2. Pro	ective cover pipe:
B. Well casing, top elevation _ 138.37 ft. MSL	a Ir	side diameter: #.D in.
C. Land surface elevation	b.1	ength: $_{-}7.0$ fi.
	c. A	faterial: Steel Steel O A
D. Surface seal, bottom ft. MSL or _ 1 D ft.		Cilica D
12. USCS classification of soil near screen:	Carl Line	dditional protection?
GP GM GC GW G SW G SP G		f yes, describe:
SM I SC I ML I MH I CL I CH I	\\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Bedrock 🗆	3. Suri	ace seal: Hentonite ≥ 3.0 Concrete □ 0.1
13. Sieve analysis attached?		•
14. Drilling method used: Rotary ☐ 50	₩ ₩ \ <u>.</u>	Other 🗆
	4. Min	erial between well casing and protective pipe;
Hollow Stem Atiger 回 4.1 Other 日 ②		Bentonite 🗷 30
Cold Li min		Anntilar space seal 🛚 💆
A to the distance of 1870 by \$7.00		Other 🛘
15. Drilling fluid used: Water □ 0.2 Air □ 0.1 Drilling Mud □ 0.3 None ■ 9.9	5. Ann	ular space seal: a. Granular Bentonite 😼 3.3
Drilling Mud 🛘 03 None 🗦 99	₩ ₩	Lbs/gal mud weight Bentonite sand slurry [] 3.5
16. Drilling additives used?		I.bs/gal mud weight Bentonite slurry U 3.1
10. Uniting additives used? Li Yes 15 No		_ % Bentonite Bentonite cement grout [50
D "		Ft 3 volume added for any of the above
Describe	DYM 1993	ow installed: Tremie [] () [
17. Source of water (attach analysis):		Tremie pumped 🔲 02
		Gravity 🔀 08
	6 Rest	
E. Bentonite seal, top ft. MSL or _180 ft.		onite scal: a. Bentonite granules 3.3 3.1/4 in. 2.78 in. 1.72 in. Bentonite pellets 3.2
a sometime sent top		
F. Fine sand, top	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	=
1mo amo, top		
G. Filter pack, top ft. MSL or Z O ft.		Brac 40-60
G. Filter pack, top ft. MSL or ZFD ft.		olume ackled ft ³
H. Screen joint, top ft. MSL or _250 ft		pack material: Manufacturer, product name and mesh size
H. Screen joint, top ft. MSL or _25.0 ft.		3mc 45.55
7	b. V	plume addedft.5
I. Well bottom ft. MSL or 300 ft.	· · · · · · · · · · · · · · · · · · ·	casing: Flush thresded PVC schedule 40 1 2.3
		Flush threaded PVC schedule 80 🔲 24
J. Filter pack, bottom ft. MSL or 305 ft.		Other 🛘
	10. Scree	n material: PVC
K. Borehole, bottom ft. MSL or 305 ft.	a. So	reen type: Factory cut 🔀 11.
		Continuous slot 🗍 01
Borehole, diameter _8 O in.		Other 🗆
_=.2	h M.	nulacturer Johnson
M. O.D. well casing 237 in.	c. Sk	
	,	
I. I.D. well casing 204 in.	\	
D. well casing $\angle Q \Upsilon$ in.	t I. Backlı	Il material (below filter pack): Now 🔁 14
heraby partity that it is to a		Other 🗔
hereby certify that the information on this form is true	and correct to the best o	my knowledge.
TIME CI)S	•
case complete both sides of this (day and an and an	<i>)</i>	

deh. 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 \$10,000 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 y of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

State of Wisconsin Route to: Soil	id Waste Ll. Haz. Waste D	Wastewater [MONITORING WELL CONSTRUCTIC Form 4400-113A Rev. 4.
Department of Natural Resources Env. Response	& Repair Undergroun	d Tanks O Other O	
1 2011/7/10/0017	Local Grid Location of We	Per 17 (Well Name
QUICK FREEZE	1003 1. 75°		Mis: Unique Well Number: DNR Well Number
Tacket Divinity and a second	Grid Origin Location Lat L	ons. ato	The second of the contract of
			Date Well Installed
		i. N fi. E.	02/27/02 mm d d d y y
Distance Well is From Waste/Source Boundary	Section Location of Waste,	Source E.	Well Installed By: (Person's Name and Firm)
led ft.	5E 1/4 of NW1/4 of Sec.	15,T. 15N. R. 口胃影.	Beinn REPINSKI
Is Well A Point of Enforcement Std. Application?	Location of Well Relative u 🔲 Upgradient		
■ Yes □ No	d Downgradient		
A. Protective pipe, top elevation758.661	n. MSL	1. Cap and lock?	
	r. MSL	He /	1
		a. manie mani	<u> </u>
C. Land surface elevation _7559	n. MSL	h. Length:	_Z2_n
D. Surface seal, bottom ft MSL or	化、高额:1	c. Material:	Sted 💆 0.
12 USC3 classification of soil near screen:			Other 🗆
• • · · · · · · · · · · · · · · · · · ·	SD 11 (1)	117	protection?
GP C GM C CC CW C SW C SM C SM C SC C ML MH C CL	CH E I	113 / /	ribe:
Bedrock D		3. Surface seal:	Bentonite 🗷 3
13. Sieve analysis attached?	No.		Concrete D 0
14. Drilling method used: Rotary	1 2001	4 Material between	cen well easing and protective pipe;
		4. WHITE THE CALL OF THE CALL	
Hollow Stem Auger 脚 Other 日			Bentonite 💆 3 (Annular space scal 🗓
Out a			, , , , , , , , , , , , , , , , , , , ,
15. Drilling fluid used: Water 102 Air 1	01		Scal: a. Granular Bentonite 😼 3.
Drilling Mud 🗆 03 None 🖼	99		al mud weight Bentonite sand sturry [] 35
			al mud weight Bentonite slurry 🗀 3.
16. Drilling additives used?	No.		ntonite Bentonite cement grout \(\sigma \)
			Ft 3 volume added for any of the above
Describe	🐰	f How instal	
17. Source of water (attach analysis):		1. 1100 113131	Tremie pumped 🔲 0.7
			Gravity 🔀 0.8
		₩ 6. Bentonite seal	a. Bentonite granules 🔲 3
E. Bentonite seal, top ft. MSL or _3	30 m	XXXI	20/8 in. 11/2 in. Bentonite pellets & 32
		XXI /	Office D
F. Fine sand, top R. MSL or 3	80 11	7. Fine sand mat	erial: Manufacturer, product name & mesh size
		a Bri	3C 40-60
G. Filter pack, top ft. MSL or _ =	20 m	h. Volume no	ded — fi ³
		8. Filter pack ma	terial: Manufacturer, product name and mesh siz
H. Screen joint, top ft. MSL or _4	Ō'Ō U' ── ── ── ── ── ── ── ── ── ── ── ── ──	7 Bonc	. 45·56
		h. Volume ad	
I. Well bottom ft. MSL or 4	5.0 1/2	9. Well casing:	Flush threaded PVC-schedule 40 32 23
			Flush threaded PVC schedule 80 D 24
I. Filter pack, bottom ft. MSL or _4	5.5 11 // 水窟		(Mixer D
	e c	10. Screen materi:	1: +VC
K. Borehole, bottom ft. MSL or	5.5 U	a. Screen type	
		§	Community slot [] []
L. Borehole, diameter	\KEELG	<u></u>	Oligi U
- A			שמוסות שיישועל זי
M. O.D. well casing 237 in.		c. Slot size:	
	•	d. Slotted leng	
N. I.D. well exsing ZOY in.	•	H. Backfill materia	il (below litter pack): New 🔼 14.
Liberally and the Market Control of the Control	f-v :- :		The state of the s
hereby certify that the information on this	form is true and corre	ect to the best of my kr	lowledge.
Kinn Kinning	(""EDS		

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by clis, 144, 147 and 160, Wie 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.

	I Haz. Waste □ Wastewater □ Underground Tanks □ Other □.	MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 4 99
Env. Response & Reput	d Location of Well	Weil Name
QUICK FREEZE 9	60 n. S. 846 n.	mw-9
Facility License, Permit or Monitoring Number Grid Original Control of Contro	in Location	Wis: Unique Well Number - DNR Well Number
. Louis y Electric 1		I compared the first transfer of the contract
	Long	
Type of Well Water Table Observation Well 311 St. Plane	ft. N	fr. E. Date Well installed OZ / Z \$1 QZ mm d d d y y
Piezometer 12 Section L	ocation of Waste/Source	
Distance Well is From Waste/Source Boundary	1W1/4 of Sec. 15. T. 15 N. R. 17	Weil Installed By: (Person's Name and Firm)
60 in Harrison	of Well Relative to Waste/Source	Beinn REPINSKI
Line and the second sec	or well Relative to Waste/Source ogradient s	
_ · · · · ·	- ·	EDS
- 1022	owngradient n 🗆 Not Known	11 10
A. Protective pipe, top elevation _761.62 ft. MSL-	1. Cap an	•
B. Well casing, top elevation _761.70-ft. MSL-		tive cover pipe:
	a. Insid	le diameter: #. Ø in.
C. Land surface elevation _ 159,2 ft. MSL .	b. Len	gfh: _ _5 . Q ft.
	c. Mat	erial: Steel 🗸 0.4
D. Surface seal, bottom ft. MSL or _ L D ft.		(Alter []
12. USCS classification of soil near screen:	A Add	litional protection?
GP GM GC GW GSW GSP G		
SM C SC C ML C MH C CL CH CH		es, describe;
Bedrock []	3. Surface	e seal: Bentonite 🔀 30
13. Sieve analysis attached? Yes No		. Concrete [] [1]
		Other 🗆
14. Drilling method used: Rotary ☐ 50	4. Materia	al between well easing and protective pipe:
Hollow Stem Auger 超41	₩ ₩	Bentonite 🗷 30
Other 🗆 🕮		Annular space scal
15. Drilling fluid used: Water 102 Air 101		Other 🛘
Drilling Mud □ 03 None ■ 99	5. Annula	u space seal: a. Granular Bentonite 🔁 33
La Caracter La Car	Ы В	_Lbs/gal mud weightBentonite sand slurry 🔲 35
16. Drilling additives used? Yes No	c	Lbs/gal mud weight Bentonite slurry 🚨 3.1
16. Drilling additives used? If Yes INo		% Bentonite Bentonite cement grout D 50
Dth-		Ft 3 volume added for any of the above
Describe		vinstalled: Tremie D 01
17. Source of water (attach smalysis):		Tremie primped D 02
		Gravity 🗭 0.8
7 D-1-1-1 6 MCI / Mc	6. Benton	
E. Bentonité seal, top ft. MSL or i _O ft_	, М / 1. Ш	1/4 in. 12/8 in. 11/2 in. Bentonite pellets 12 32
	C	
F. Fine sand, top ft. MSL or 3.0 ft.		nd material: Manufacturer, product name & mesh size
		brac 40-60
G. Filter pack, top ft. MSL or 1 of t		nne ælded [1] ³
	100	ick material: Manufacturer, product name and mesh size
I. Screen joint, top ft. MSL or _ 5 0 ft.		
E J. 7 7 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		25 do 36
. Well bottom ft. MSL or 15 0 ft.	b. Voli	me addedft {
10 10 10 11 12 12 12 12 12 12 12 12 12 12 12 12	9. Well ca	
The state of the s		Flush threaded PVC schedule 80 🔲 24
1. Filter pack, bottom ft. MSL or _155 ft		Other 🛘
	10. Screen r	naterial: PVC
K. Borehole, bottom ft. MSL or 15 5 ft.	a. Serve	en type: Factory cut 💢 11
		Continuous slot D 01
L. Borehole, diameter 80 in.		
		Other 🗆
OD well mails 737		Inclurer JOHNSON
1. O.D. well easing 231 in.	c. Slot s	The second secon
k re	d Slotte	
I.D. well casing 204 in.	11. Backfill n	naterial (below filter pack): None 🔂 14
		Other 🗆
hereby certify that the information on this form is tr	we and correct to the best of o	ny knowledge
16mm	_	
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is complete both sides of this form and return to the appropria	te DNR office listed at the top of this fe	num as required by the 144 147 and 141 Wiz Cross
4 GIL INK 141 Wie Ad Cada 1	The second secon	The first of the tast the unit the all the

Ich. 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 50 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not nore than \$10,000 for each of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

State of Wisconsin Route to: Solid Waste LI Haz. Waste LI	Wastewater MONITORING WELL CONSTRUCTION 4400-113A Rev.
Department of Natural Resources Env. Response & Repair Underground' Encilly (Project Name) Local Grid Location of Well	Well Name'
tacinty/1 toject traine	864 R BW MW-10B
COUCK FRESTE THE II. IS. Facility Licenses, Permit or Monitoring Number Grid Origin Location	Wis: Unique Well Number DNR Well Nu
Facility License, Permit or Monitoring Number Grid Origin Location	ng or <u>PD791</u>
	- Date Well installed
Piezometer 212 Section Location of Waste/Source Boundary 25 to a first to a f	
17 - 174 of 1800 174 of acc. L	Walasayan REPINSKI
Is Well A Point of Enforcement Std. Application? Location of Well Relative to u Upgradient s	Waste/Source
国 Yes 日 No d 国 Downgradient n	
A. Protective pipe, top elevation 155.79 ft. MSL	1. Cap and lock?
	2. Protective cover pipe:
B. Well casing, top elevation	a, Inside diameter:
C. Land surface elevation _ 755.8 ft. MSL	b. Length: -7.0
	c. Material: Steel 💆 (
D. Surface seal, bottom ft. MSL or _ 1. D ft.	Other 🛘
12. USCS classification of soil near screen:	d. Additional protection?
GP GM GC GW SW SP G	If yes, describe:
SM O SC O MLO MHO CL S CHO	3. Surface seat: Bentonite 💆 3
13. Sieve analysis attached?	Concrete LI 0
	(Mber 🗆 , ,
14. Drilling method used: Rotary 1 50	4. Material between well easing and protective pipe:
Hollow Stem Auger 41	Bentonite 🗷 10
Other 🗆 2002	Annular space scal
15. Drilling fluid used: Water 🗆 0 2 Air 🗆 0 1	(Xher 🗆
Drilling Mud 🗆 03 None 🗷 99	5. Annular space seal: a. Granular Bentonite 3.3
	bLlm/gal mud weight Bentonite sand slurry [] 3.5
16. Drilling additives used? Yes No	c. Lbs/gal mud weight Bentonite slurry 📙 3 t
	d % Bentonite Bentonite cement grout 🛘 50
Describe	eFt 'volume added for any of the above
17. Source of water (attach analysis):	f. How installed: Tremie 🔲 0,1 Tremie pumped 📋 : 0,2
	Gravity 🛱 Ö.8
L	6. Beutonite scal: a. Bentonite granules 1 33
E. Bentonite seal, top ft. MSL or _33 Q ft_	b. □1/4 in. □1/2 in. Bentonite pellets □ 32.
E. Demonite seat, top	c Office D
F. Fine sand, top ft. MSL or 38.0 ft.	7. Fine sand material: Manufacturer, product name & mesh size
	// Brac 40-60
G. Filter pack, top ft. MSL or 39 D ft.	b. Volume ackled [1]
	8. Filter pack material: Manufacturer, product name and mech size
H. Screen joint, top ft. MSL or 400 ft.	1 Boc 15.55
	h. Volume added 1
I. Well bottom It. MSL or 450 ft.	9. Well easing: Flush thrended PVC schedule 40 💆 23
	Flush threaded PVC schedule 80 [] 24
J. Filter pack, bottom ft. MSL or 455 ft.	Other U
	10. Screen material: PVC
K. Borehole, bottom ft. MSL or _45.0 ft.	a secontality of the second se
	Continuents shit [] D. [
L. Borchole, diameter 80 in.	Onlier D
in the first	b. Manufacturer JOHNSON
M. O.D. well casing 231 in.	c. Slot size:
	d Stoffed length:
V. I.D. well casing 204 in.	11. Backfill material (below filter pack): Nor B. 14
	П тикл
hereby cartify that the information on this form is true and correct	t to the best of my knowledge.
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dense complete both sides of this form and return to the appropriate DNR office fisted at the top of this form as required by clis. 144, 147 and 169. Wis. State. pd 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 \$10,000 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 your of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

APPENDIX C

4 - Mile Radius Map

TABLE 1

Groundwater Analytical Test Results (March 2002)

TABLE | Groundwater Analytic Test Results (March 2002)

Date Sampled:	<u>MW1</u> 03/07/2002	MW1A 03/07/2002	<u>MW2</u> 03/07/2002	<u>MW4</u> 03/07/2002	MW4A 03/07/2002	<u>MW5</u> 03/07/2002	MW5A 03/07/2002	<u>MW6</u> 03/07/2002	MW6A 03/07/2002	MW6B 03/07/2002	NR140 ES	NR140 PAL
Analyte (ug/L)					-							
Benzene	37	<4	6.3	18†	<40	52 †	9†	<0.08	0.09†	0.16†	5	0.5
sec-Butylebenzene	14†	8.5†	8.1	<20	<50	<20	<Ś	<0.1	<0.1	<0.1	_	_
n-Butylbenzene	6†	<5.5	4.9	<22	<55	<22	<5.5	<0.11	<0.11	<0.11	_	_
Carbon Tetrachloride	<10	<10	<1	<40	<100	<40	<10	23	<u>0.63†</u>	<0.2	5	<u>0.5</u>
Chloroform	< 5	<5	<0.5	<20	<50	<20	<5	7.7	0.52	<0.1	6	0.6
1,1-Dichloroethene	<5.5	<5.5	<0.55	<22	<55	<22	<5.5	<0.11	<0.11	<0.11	7	0.7
cis-1,2-Dichloroethene	450	<u>25</u>	<u>12</u>	1,900	670	1,400	120	<0.11	<0.11	2	70	I
Ethylbenzene	40	<4	43 .	<u>170</u>	<40	<16	<4	<0.08	<0.08	<0.08	700	<u>140</u>
Isopropylbenzene	14	4.5†	14	<14	<35	<14	<3.5	<0.07	<0.07	<0.07		-
p-Isopropyltoluene	6.5†	<6	5.1	<24	<60	<24	<6	<0.12	<0.12	<0.12	-	-
Methylene Chloride	<12	<12	<1.2	<48	<120	<48	<12	<0.24	<0.24	<0.24	5	<u>0.5</u>
Naphthalene	190	78	190	<20	<50	<20	<5	<0.1	<0.1	<0.1	40	<u>8</u>
n-Propylbenzene .	18†	<7.5	18	<30	<75	<30	<7.5	<0.15	<0.15	<0.15	-	_
Toluene	150	7.5†	. 100	<16	<40	<16	<4	<0.08	<0.08	0.19†	1,000	<u>200</u>
1,1,2-Trichloroethane	<10	<10	<1	240	<100	<38	<10	<0.19	<0.19	<0.19	5	0.5
Trichloroethene	890	2,300	<0.65	34,000	140,000	22,000	100	<u>4.3</u>	1	0.22†	5	<u>0.5</u>
Trimethylbenzenes	<u>201</u>	87	<u>171</u>	<38	-00	<38	<9.5	<0.19	<0.19	<0.19	480	<u>96</u>
Vinyl Chloride	170	<8	16	770	<80	<32	<8	<0.16	<0.16	<0.16	0.2	0.02
Xylenes	292	<17.5	249	<68	<175	<68	<17.5	<0.34	<0.34	<0.34	10,000	1,000
Total VOC	2,478.5	2,510.5	837.4	37,098	140,670	23,452	229	35	2.24	2.57		
Analyte (ug/L)												
Acenaphthalene	<0.053	-	<0.053	<0.053	_	<0.053		<0.053	-	-		-
Acenaphthylene	<0.16	-	<0.16	<0.16		<0.16	-	<0.16			_	
Anthracene	<0.024	, 	<0.024	2.4	· 🛶	<0.024	-	<0.024		-	3000	600
Benzo(a)Anthracene	<0.03	_	<0.03	2.8	-	<0.03	-	<0.03		_	_	-
Benzo(a)Pyrene	<0.022		<0.022	4.1		<0.022	-	<0.022		-	0.2	0.02
Benzo(b)Fluoranthene	<0.036	-	<0.036	3.6	-	< 0.036	-	<0.036	_		0.2	0.02
Benzo(g,h,i)perylene	<0.087	_	<0.087	2.6		<0.087		<0.087	-		<u>-</u>	-
Benzo(k)Fluoranthene	<0.067	-	<0.067	1.7	-	<0.067	-	<0.067	-	-		-
Chrysene	<0.022	-	<0.022	3.9		<0.022		<0.022	-		0.2	<u>0.02</u>
Fluoranthene	<0.053	. ••	<0.053	. 16	-	<0.053		<0.053		-	400	<u>80</u>
Fluorene	34	-	8.3	2.2	-	<0.025	-	<0.025	- '		400	<u>80</u>
Indeno(1,2,3-cd)Pyrene	<0.03		<0.03	2.7		<0.03		<0.03			-	-
1-Methyl-Naphthalene	340		200.	2.1	-	5.4	 .	<0.095	-		-	
2-Methyl-Naphthalene	530		300	3.2	-	9,3		<0.096		· -	 .	
Naphthalene	120		130	3.5	-	1.8	-	<0.067		-	40	<u>8</u>
Phenanthrene	93	-	8.1	11	-	2.5		<0.036	-		÷ .	-
Pyrene	<0.13		<0.13	13	-	<0.013	-	<0.13		-	250	<u>50</u>
Total PAH	1,117	-	646	75	-	19	-	ND	-	- '		
Analyte (µq/L)												
Arsenic	<1.3	-	<1.3	8.8	-	<1.3		<1.3		-	50	<u>5</u>
Barium (mg/L)	0.081	-	0.12	0.039		0.011+		0.081	-	-	2	<u>0.4</u>
Cadmium	<0.08	-	<0.08	<0.08		<0.08	-	<0.08		-	5 .	- <u>0.5</u>
Chromium (total)	<0.7		<0.7	1.6†		1.5†	-	5.7		-	100	10
Lead	<1.1	-	<1	<1.0		<1.0	-	<1	-	`-	15	<u>1.5</u>
Mercury	<u>0.96</u>	. –	<u>0.43†</u>	<u>0.69</u>	-	2.9	-	<u>1.7</u>		-	2	0.2
Selenium	<1.0	-	<1.0	<1.0		<1.0	- .	3.6	-	-	50	<u>10</u>
Silver	1.0		0.74†	1.1	-	1.0	-	0.85		-	50	<u>10</u>

VOC = Volatile Organic Compounds (EPA Method 8260)
Bold Type = Exceeds NR140 Groundwater Quality Enforcement Standard (ES)
Underline Type = Exceeds NR140 Groundwater Quality Preventive Action Limit (PAL)

Notes

⁻ No Standards Established for this Contaminant

^{† =} Detected above the Limit of Detection, but below the Limit of Quantitation

⁻ Only compounds detected or previously detected in the VOC scan are listed

TABLE 1 (continued) Groundwater Analytic Test Results (March 2002)

Former Quicfrez Site Fond du Lac, Wisconsin Project Number: 02-2-15818

											-
		MW7	MW7A	MW7B	MW8	MW8A	MW8B	MW9	MW10B	NR140	NR140
	Date Sampled:	03/07/2002		03/07/2002	03/07/2002	03/07/2002	03/07/2002	03/07/2002	03/07/2002	ES	PAL
				. ,							
	<u>Analyte (μο/L)</u>								0.041	_	
	Benzene	0.21†	<0.08	<u>0.56</u>	<0.08	<0.08	0.34	<u>1.4</u>	0.21†	5	<u>0.5</u>
	tert-Butylebenzene	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	0.2†	<0.08	-	~
	sec-Butylebenzene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.76	<0.1		-
	n-Butylbenzene	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	0.64	<0.11	-	
	Carbon Tetrachloride	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	5	<u>0.5</u>
	Chloroform	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	6	<u>0.6</u>
	1.1-Dichloroethene	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	-	=
	cis-1,2-Dichloroethene	0.28†	<0.11	<0.11	6.5	0.24†	1	1.2	<0.11	70	Z.
	Ethylbenzene	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	700	<u>140</u>
	Isopropylbenzene	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.81	<0.07	-	-
	p-Isopropyltoluene	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	_	
	Methylene Chloride	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	5	<u>0.5</u>
	Naphthalene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.6	<0.1	40	<u>8</u>
	n-Propylbenzene	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15		-
	Toluene	0.37	0.23†	0.54	<0.08	<0.08	0.19†	0.4	0.17†	1,000	200
	1,1,2-Trichloroethane	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	5	0.5
	Trichlomethene	11	<u>2.6</u>	8.7	<u>0.6</u>	<u>3.1</u>	0.84	1	10	5	<u>0.5</u>
	Trimethylbenzenes	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	480	<u>96</u>
	Vinyl Chloride	<0.16	<0.16	<0.16	0.51†	<0.16	<0.16	1	<0.16	0.2	0.02
	Xylenes	<0.34	<0.34	<0.34	<0.34	<0.34	< 0.34	< 0.34	<0.34	10,000	<u>1,000</u>
	Total VOC	11.86	2.83	9.80	7.61	3.34	2.37	10.01	10.38		
	Analyte (ug/L)					1				•	
	Acenaphthalene	<0.053		_	<0.053			3.4		-	_
	Acenaphthylene	<0.16		-	<0.16			<0.16			_
	Anthracene	<0.024	_	_	<0.024		_	<0.024	_	3000	600
		<0.024		_	<0.024	_	_	<0.024	_	-	000
	Benzo(a)Anthracene Benzo(a)Pyrene	<0.022		-	<0.03	_	-	<0.022	_	0.2	0.02
	Benzo(b)Fluoranthene	< 0.022		-	<0.022	_	_	<0.022		0.2	0.02
	, , ,						_	<0.036	_		
	Benzo(g,h,i)perylene	<0.087	-	-	<0.087	-	-	<0.067	-	Ξ	-
	Benzo(k)Fluoranthene	<0.067		-	<0.067 <0.022			<0.007		0.2	0.02
	Chrysene - Fluoranthene	<0.022	-					<0.022		400	_
		<0.053	-	-	<0.053	-	-			400	<u>80</u>
	Fluorene	<0.025			<0.025 <0.03	-	-	<0.025 <0.03	-		<u>80</u> -
	Indeno(1,2,3-cd)Pyrene	<0.03				-		2		, -	
	1-Methyl-Naphthalene	<0.095	-		<0.095	-		<0.096	-	-	-
	2-Methyl-Naphthalene	<0.096	· ÷	-	<0.096	-		<0.096		40	-
	Naphthalene	<0.067	- `		<0.067	-		<0.036			<u>8</u>
	Phenanthrene .	<0.036	-	-	<0.036	-	-				-
	Pyrene	<0.13		-	<0.13	-		<0.13	-	250	<u>50</u>
	Total PAH	ND	-	- ,	ND			5.4			
	Analyte (µg/L)		14								
	Arsenic	<1.3	-		<2.6		_	<2.6	_	50 .	<u>5</u>
	Barium (mg/L)	0.18		_	0.11			0.28	_	2	0.4
	Cadmium	<0.08	_	_	<0.08	· <u>-</u>	_	<0.08		5	0:5
	**Chromium (total)	1.3†	=	-	<0.7		_	3.1		100	<u>10</u>
	Lead	<1	-	_	<1	-		<1		15	1.5
	Mercury	0.71	_	_	1.4			2.3	_	. 2	0.2
	Selenium	5.8	_	_	<1.0	_		<1.0		50	10
-	Silver	0.99			0.54†	_	•	1.1	`	50	10
					1						

VOC = Volatile Organic Compounds (EPA Method 8260)
Bold Type = Exceeds NR140 Groundwater Quality Enforcement Standard (ES)
Underline Type = Exceeds NR140 Groundwater Quality Preventive Action Limit (PAL)

No Standards Established for this Contaminant

† = Detected above the Limit of Detection, but below the Limit of Quantitation

- Only compounds detected or previously detected in the VOC scan are listed

TABLE 1 (continued) Groundwater Analytic Test Results (March 2002)

Former Quicfrez Site Fond du Lac, Wisconsin Project Number: 02-2-15818

Date Sampled:	<u>B22</u> 03/06/2002	<u>B24</u> 03/06/2002	<u>B25</u> 03/06/2002	<u>B26</u> 03/06/2002	<u>B27</u> 03/06/2002	<u>B28</u> 03/06/2002	<u>B29</u> 03/07/2002	<u>B30</u> 03/07/2002	NR140 <u>ES</u>	NR140 PAL
Analyte (ug/L)										
Benzene	<0.08	<0.08	<0.08	0.18†	<0.08	0.12†	<0.08	<0.08	5	0.5
tert-Butylebenzene	<0.08	<0.08	<0.08	<0.08	1.3†	<0.08	<0.08	<0.08.		=
sec-Butylebenzene	<0.1	<0.1	<0.1	<0.1	7.1	< 0.1	<0.1	<0.1	-	_ `
n-Butylbenzene	<0.11	<0.11	<0.11	<0.11	2.8†	< 0.11	<0.11	<0.11	_	_
Carbon Tetrachloride	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	5	<u>0.5</u>
Chloroform	<0.1	<0.1	<0.1	<0.1	<1	< 0.1	<0.1	< 0.1	6	0.6 200 85
Dichlorodifluoromethane	<0.22	0.44†	< 0.22	0.49†	<2.2	< 0.22	<0.22	< 0.22	1,000	200
1,1-Dichloroethane	< 0.15	<0.15	0.19†	0.32	<1.5	<0.15	<0.15	<0.15	850	85
1,1-Dichloroethene	<0.11	<0.11	<0.11	<0.11	<1.1	<0.11	< 0.11	<0.11		· _
cis-1,2-Dichloroethene	< 0.11	< 0.11	0.21†	0.61	<1.1	<0.11	<0.11	<0.11	70	. 7
Ethylbenzene	<0.08	<0.08	<0.08	<0.08	2.7†	<0.08	<0.08	<0.08	700	140
Isopropylbenzene	<0.07	<0.07	<0.07	<0.07	19	<0.07	<0.07	<0.07	_	_
p-Isopropyltoluene	<0.12	<0.12	< 0.12	<0.12	10	<0.12	< 0.12	< 0.12		
Methylene Chloride	<0.24	< 0.24	<0.24	<0.24	<2.4	<0.24	< 0.24	< 0.24	5	0.5
Naphthalene	<0.1	<0.1	<0.1	<0.1	43	< 0.1	<0.1	<0.1	40	<u>0.5</u> <u>8</u>
n-Propylbenzene	<0.15	< 0.15	< 0.15	< 0.15	16	<0.15	<0.15	<0.15	-	_
Toluene	<0.08	<0.08	<0.08	<0.08	<0.8	<0.08	<0.08	<0.08	1,000	200
1,1,1-Trichloroethane	< 0.14	<0.14	0.24†	<0.14	<1.4	<0.14	< 0.14	<0.14	200	40 0.5 0.5
1,1,2-Trichloroethane	< 0.19	<0.19	<0.19	<0.19	<1.9	<0.19	<0.19	<0.19	5	0.5
Trichloroethene	<0.13	0.47	0.16†	<0.13	<1.3	< 0.13	<0.13	<0.13	5	0.5
Trimethylbenzenes	<0.19	<0.19	<0.19	<0.19	<u>248</u> .	.41†	<0.19	<0.19	480	96
Vinyl Chloride	<0.16	<0.16	<0.16	< 0.16	<1.6	< 0.16	<0.16	<0.16	0.2	0.02
Xyleries	< 0.34	< 0.34	< 0.34	< 0.34	370	< 0.34	<0.34	< 0.34	10,000	1,000
Total VOC	ND	0.91	0.80	1.60	720	0.53	ND	ND	•	

VOC = Volatile Organic Compounds (EPA Method 8260)
Bold Type = Exceeds NR140 Groundwater Quality Enforcement Standard (ES)
Underline Type = Exceeds NR140 Groundwater Quality Preventive Action Limit (PAL)

— No Standards Established for this Contaminant

† = Detected above the Limit of Detection, but below the Limit of Quantitation

Notes:

- Only compounds detected or previously detected in the VOC scan are listed

I:/data/excel/env/15000/15818/GWRESU.xls:Gwresults

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TABLE 2

Groundwater Analytical Test Results (June 2002)

TABLE 2 Groundwater Analytic Test Results (June 2002)

Date Sampled:	MW1R 06/11/2002	MW1A 06/11/2002	MW2 05/11/2002	MW4 06/11/2002	MW4A 06/11/2002	MW5 06/11/2002	MW5A 06/11/2002	<u>MW6</u> 06/11/2002	MW6A 06/11/2002	MW6B 06/11/2002	NR140 <u>ES</u>	NR140 PAL
Analyte (ug/L)			•									
Benzene	100	<0.08	0.7±	32†	<40	60	1.5 <u>†</u>	<0.08	<0.08	<0.08	5	0.5
sec-Butylebenzene	· <5	<0.1	2.3	<20	<50	<20	<1	<0.1	<0.1	<0.1		<u>0.0</u>
n-Butylbenzene	<5.5	<0.11	1.3†	<22	<55	<22	<1.1	<0.11	<0.11	<0.11		_
Carbon Tetrachloride	<10	<0.2	<1	<40	<100	<40	<2	16	<0.2	<0.2	5	0.5
Chloroform	<5	<0.1	<0.5	240	<50	<20	<1	4.3	.25†	<0.1	6	0.6
1.1-Dichloroethene	<5.5	<0.11	<0.55	460	<55	<22	<1.1	<0.11	<0.11	<0.11	7	0.7
cis-1,2-Dichloroethene	3,300	0.87	29	1,400	1,100	3,500	<u>57</u>	<0.11	<0.11	0.76	70	7
trans-1,2-Dichloroethene	51	<0.11	<0:55	100	<55	28†	< <u>1.1</u>	<0.11	<0.11	<0.11	100	<u>7</u> 20
Ethylbenzene	8.5†	<0.08	2.8	110	<40	<16	2.3†	<0.08	<0.08	<0.08	700	140
Isopropylbenzene	<3.5	<0.07	1.8	<14	<35	<14	<0.7	< 0.07	< 0.07	<0.07	_	
p-Isopropyttoluene	<6	<0.12	1.7†	<24	<60	<24	<1.2	< 0.12	< 0.12	<0.12		
Methylene Chloride	<3.5	< 0.24	<1.2	<48	<120	<48	<2.4	<0.24	< 0.24	< 0.24	5	0.5
Naphthalene	<5	<0.1	<u>13</u>	<30	<50	<20	<1	<0.1	<0.1	<0.1	40	8
n-Propylbenzene	<7.5	<0.15	2.8	<30	<75	<30	<1.5	<0.15	< 0.15	<0.15	-	
Tetrachloroethene	<7.5	<0.15	< 0.075	140	<75	<30	<1.5	<0.15	< 0.15	<0.15	· 5	<u>0.5</u>
Toluene	7.5 †	1	3.8	50t	<40	<16	<0.8	<0.08	<0.08	<0.08	1,000	200
1,1,2-Trichloroethane	<10	< 0.19	<1	3,200	<100	70	<1.9	<0.19	<0.19	<0.19	5	0.5
Trichloroethene	510	17	13	370,000	140,000	49,000	3,100	3. <u>6</u>	0.54	<0.13	5	0.5
Trimethylbenzenes	23†	<0.19	22.8	<38	<95	<38	1.2†	<0.19	<0.19	<0.19	480	96
Vinyl Chloride	1,100	< 0.16	8.6	1,200	100†	170	7.6	<0.16	<0.16	<0.16	0.2	0.02
Xylenes	47	< 0.34	11.1	46†	<175	<68	3†	<0.34	< 0.34	<0.34	10,000	1,000
Total VOC	5,147	19	115	376,838	141,200	52,828	3,173	24	1	1		
Analyte (µg/L)	,											
Acenaphthalene	< 0.053	<0.053	2.1	2.5	<0.053	<0.053	•	<0.053	-	-		-
Acenaphthylene	<0.16 ,	<0.16	<0.16	1.5	<0.16	< 0.16	-	<0.16	-	-	-	-
Anthracene	<0.024	<0.024	<0.024	<0.02	<0.024	<0.024	-	<0.024	-	-	3000	<u>600</u>
Benzo(a)Anthracene	<0.03	<0.03	<0.03	5.5	< 0.03	<0.03	-	<0.03	-	-	-	-
Benzo(a)Pyrene	<0.022	< 0.022	<0.022	3.7	<0.022	<0.022	-	<0.022	-	-	0.2	0.02
Benzo(b)Fluoranthene	<0.036	<0.036	<0.036	3.3	<0.036	< 0.036	-	<0.036	-	- '	0.2	0.02
Benzo(g,h,l)perylene	<0.087	<0.087	<0.087	3	<0.087	< 0.087	-	<0.087	-	•		-
Benzo(k)Fluoranthene	<0.067	< 0.067	<0.067	3.4	<0.067	<0.067	-	<0.067	-	•	-	-
Chrysene	<0.022	<0.022	<0.022	3.8	<0.022	<0.022	-	<0.022	-	-	0.2	0.02
Fluoranthene	<0.053	<0.053	<0.053	22	<0.053	<0.053	-	<0.053	-	-	400	80
Fluorene	<0.025	<0.025	3.1	9.1	<0.025	<0.025	-	<0.025	-	-	400	<u>80</u>
Indeno(1,2,3-cd)Pyrene	<0.03	<0.03	<0.03	3.9	<0.03	<0.03	-	<0.03	-	-	-	-
1-Methyl-Naphthalene	5.8	<0.095	30	3.9	<0.095	<0.095	- .	<0.095	-	-	-	-
2-Methyl-Naphthalene	3.4	<0.096	2.4	5.8	<0.096	<0.096		<0.096	-	-	-	-
Naphthalene	1.7	<0.067	0.71	<u>13</u>	<0.067	<0.067	•	<0.067	-	-	40	<u>8</u>
Phenanthrene	<0.036	<0.036	<0.036	47	<0.036	<0.036	•	<0.036	-	• ,	_	
Pyrene	<0.13	<0.13	<0.13	21	<0.13	<0.13	-	<0.13	-	-	250	<u>50</u>
Total PAH	11	ND	38	152	ND	ND		ND				
Analyte (µg/L)												
Arsenic	2.6†	_	<1.3	<u>8.3</u>	<1.3	2.11	13	<1.3	_		50	5
Barium (mg/L)	0.03	-	0.138	0.221	0.004†	0.044	0.232	0.082			2	<u>5</u> 0.4
Cadmium	<0.03	-	0.130	0.221	<0.08	<0.08	0.252	<0.002	-		5	<u>0.5</u> 0.5
**Chromium (total)	1†	_	1.61	88	0.64†	1.9†	44	5.6			100	<u>10</u>
Lead	<0.66	-	<0.66	10	<0.66	<0.66	20	<0.66	-	<u>.</u> ·	15	<u>1.5</u>
Mercury .	<0.11		<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	•	-	2	0.2
Selenium	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	2.3†	•		50	10
Silver	0.9	-	0.78	2.7	0.54†	0.8	0.78	.58†	•	-	50	10

VOC = Volatile Organic Compounds (EPA Method 8260)
Bold Type = Exceeds NR140 Groundwater Quality Enforcement Standard (ES)
Underline Type = Exceeds NR140 Groundwater Quality Preventive Action Limit (PAL)
-- No Standards Established for this Contaminant

⁻ Not Sampled

^{† =} Detected above the Limit of Detection, but below the Limit of Quantitation

⁻ Only compounds detected or previously detected in the VOC scan are listed

TABLE **2** (continued) Groundwater Analytic Test Results—June 11, 2002

Former Quicfrez Site Fond du Lac, Wisconsin Project No.: 02-2-15818

	Date Sampled:	<u>MW7</u> 06/11/2002	MW7A 06/11/2002	<u>MW7B</u> 06/11/2002	MW8 06/11/2002	MW8A 06/11/2002	MW8B 06/11/2002	<u>MW9</u> 06/11/2002	MW10B 06/11/2002	Sump 06/11/2002	NR140 <u>ES</u>	NR140 PAL
	Analyte (µg/L)		•			Ē						
	Benzene	<0.08	0,18 1	0.28	<0.08	<0.08	<0.08	1.5	0.09†	0.24†	5	0.5
	tert-Butylebenzene	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	0.15†	<0.08	<0.08	_	<u>0.0</u>
	sec-Butylebenzene	<0.00	<0.1	<0.1	<0.1	<0.1	<0.1	0.7	<0.1	0.72		
		<0.11	<0.11		<0.11						· **	
	n-Butylbenzene			<0.11		<0.11	<0.11	0.51	<0.11	0.54	-	
1	Carbon Tetrachloride	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	5	<u>0.5</u>
	Chloroform	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	6	0.6
	1,1-Dichloroethane	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.23†	<0.15	<0.15	850	85 7 20
	cis-1,2-Dichloroethene	1.1†	<0.11	< 0.11	4.6	<0.11	0.12†	√2.1	<0.11	0.74	70	<u>7</u>
	trans-1,2-Dichloroethene	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	100	<u>20</u>
Ì	Ethylbenzene	<0.08	<0.08	<0.08	<0	<0.08	<0.08	<0.08	<0.08	0.37	700	140
j.	Isopropylbenzene	<0.07	<0.07	<0.07	80.0	<0.07	<0.07	0.55	<0.07	0.37	· -	_
1	p-Isopropyltoluene	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	< 0.12	0.87		
	Methylene Chloride	< 0.24	<0.24	< 0.24	< 0.24	< 0.24	<0.24	< 0.24	< 0.24	<0.24	5	<u>0.5</u>
	Naphthalene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.5	<0.1	2	40	<u>8</u>
	n-Propylbenzene	<0,15	<0.15	<0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	0.47†		=
	Tetrachloroethene	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	5	<u>0.5</u>
	Toluene	0.13†	2.21	0.23†	<0.08	0.13†	0.16†	0.28†	<0.08	0.6	1.000	200
i.	1,1,2-Trichloroethane	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	5	0.5
	Trichloroethene	1.4	0.31†	0.33†	0.4†	0.28†	<0.13	1.2	3.4	7.8	5	0.5
	Trimethylbenzenes	< <u>0.1</u> 9	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	7.1	480	96
	Vinyl Chloride	<0.16	<0.16	<0.16	<0.16	<0.15	<0.15	1.3	<0.16	<0.16	0.2	0.02
Ż	Xylenes	<0.10	<0.34	<0.10	. <0.34	<0.34	<0.34	<0.34	<0.10	2.4	10,000	
	Total VOC	2.6	2.7	0.8	5.1	0.4	0.34	11.0	3.5	24.2	10,000	1,000
	Total VOC	2.0	2.1	0.8	5.1	0.4	0.3	11.0	3.5	24.2		
	Applied a front 1											
	Analyte (µg/L)	-0.000			-0.053			2.5				
	Acenaphthalene	<0.053	•	-	<0.053	-	•	2.5		3.3	_	-
	Acenaphthylene	<0.16	-	-	<0.16	-	-	<0.16	-	<0.16		-
jń.	Anthracene	<0.024	-	•	<0.024	•	•	<0.024	-	<0.024	3000	<u>600</u>
	Benzo(a)Anthracene	<0.03	-	-	<0.03	-	-	<0.03	-	<0.03	-	-
	Benzo(a)Pyrene	<0.022	•	-	<0.022	•	-	<0.022	-	2.0	0.2	0.02
組	Benzo(b)Fluoranthene	<0.036	•	•	<0.036	•	-	<0.036	-	<0.036	0.2	0.02
	Benzo(g, h, i)perylene	<0.087	-	-	<0.087	-	-	<0.087	-	1.3		-
,	Benzo(k)Fluoranthene	<0.067	-	-	<0.067	-	-	<0.067	-	<0.067	 ,	
्	Chrysene	<0.022	-	•	<0.022	-	-	<0.022	-	<0.022	0.2	0.02
	Dibenzo(a,h)anthracene	<0.036			<0.036			<0.036		0.22		
	Fluoranthene	<0.053	-	-	<0.053	-	-	<0.053	-	<0.053	400	80
Ų.	Fluorene	<0.025	-	•	<0.025	•		< 0.025	-	4.1	400	80
	Indeno(1,2,3-cd)Pyrene	< 0.03	•	•	<0.03 -	-	-	<0.03	-	1.4	-	_
	1-Methyl-Naphthalene	<0.095	. •		<0.095	-	. -	1.9		7.5	_	
	2-Methyl-Naphthalene	<0.096		•	<0.096		•	<0.096		3.6		_
	Naphthalene	<0.067	•		< 0.067		•	< 0.067		0.93	40	<u>8</u>
	Phenanthrene	<0.036		-	< 0.036	_	•	< 0.036	_	6.6	_	-
	Pyrene -	<0.13		-	<0.13	-	-	< 0.13		< 0.13	250	50
	Total PAH	ND			ND			4.4		30.95		<u>5-5</u>
	Analyte (µg/L)		٠.									
	Arsenic	1.5†	-	,	4.1	•	•	<1.3	-		50 ·	<u>5</u>
	Barium (mg/L)	0.217		·	0.156	• .		0.119	- '		2	<u>0.4</u>
	Cadmium	<0.08			<0.08		-	<0.08	-		5	0.5
	**Chromium (total)	2.7	_	-	0.86†			7.4	. · <u>-</u>		100	10
	Lead	<0.66	_	•	<0.66	-		0.77†		_	15	10 1.5
	Mercury	<0.11	_		<0.11			<0.11			2	0.2
3	Selenium	<1.0			<1.0			<1	_	-	50	<u>0.2</u> 10
Ų	Silver	0.84	-		0.47†	-		1.3	_	•	50	10
1.5	SACH DESCRIPTION CONTRACTOR	J. U-7	-	-	y. 77	-	-	1.0	-	-	50	10

VOC = Volatile Organic Compounds (EPA Method 8260)
Bold Type = Exceeds NR140 Groundwater Quality Enforcement Standard (ES)
Underline Type = Exceeds NR140 Groundwater Quality Preventive Action Limit (PAL)
- No Standards Established for this Contaminant
1 = Detected above the Limit of Detection, but below the Limit of Quantitation

Notes:

Only compounds detected or previously detected in the VOC scan are listed

thdatalexcellen/1500015518ISI Report (phase 160)/Groundwater Results-SI Report xis:Gwresults-June2002

TABLE 3

Historical Groundwater Analytic Test Results

Chlorinated VOCs

TABLE 3
Historical Groundwater Analytic Test Results--Chlorinated VOC's

<u>MW1/MW1R</u> <u>Date</u> 07/22/99 12/12/01 03/07/02 06/10/02	Trichloro- ethene (115/L) 2,120 19,000 890 510	Tetrachloro- ethene (µg/L) <15 <250 <7.5 <7.5	ois-1,2 Dichloro- ethene (µg/L) 756 8,400 450 3,300	trans-1,2 Dichloro- ethene (µg/L) <15 <230 <5.5 51	Vinyl Chloride (<u>µg/L)</u> 42.4 400† 170 1,100	Carbon Tetra- Chloride (ug/L) <15 <330 <10 <10	Chloroform (145/L) <14 <320 <5 <5	1,2- Dichloro- ethane (ug/L) <15 <390 <6 <6	1,1- Dichloro- ethene (µw/L) <15 <360 <5.5 <5.5	Methylene Chloride (ug/L) <39 <350 <12 <3.5	1,1,2- Trichloro- ethane (ug/L) <14 <560 <10 <10
		•						•			
MW1A	Trichloro- ethene	Tetrachloro- ethene	cis-1,2 Dichloro- ethene	trans-1,2 Dichloro- ethene	Vinyl Chloride	Carbon Tetra- Chloride	Chloroform	1,2- Dichloro- ethane	1,1- Dichloro- ethene	Methylene Chloride	1,1,2- Trichloro- ethane
Date	(µg/L)	(µg/L)	(ug/L)	(µg/L)	(µg/L)	(ug/L)	(μ'ε/L)	(ug/L)	(µg/L)	(µg/L)	(pg/L)
07/22/99	1,36	< 0.15	4.33	< 0.15	3.4	<0.15	0.181	< 0.15	<15	< 0.39	< 0.14
12/12/01	120	<2.5	<u>15†</u>	<2.3	<2.3	<3,3	<3.2	<3.9	<3.6	<3.5	<5.6
03/07/02	2,300	<7.5	<u>25.0</u>	<5.5	<8	<10	<5	<6	<5.5 ·	<12	<10
06/10/02	17	< 0.15	0.87	< 0.11	< 0.16	< 0.2	< 0.1	< 0.12	< 0.11	< 0.24	< 0.19
	•										
	٠		•		•						
	•										
			cis-1,2	trans-1,2							1,1,2-
NR140 Ground Water	Trichloro-	Tetrachloro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		1,2-Dichloro-	1,1-Dichloro-	Methylene	Trichloro-
Standard	ethene	ethene	ethene	ethene	Chloride	chloride	Chloroform	ethane	ethene	Chloride	ethane
Enforcement Standard	5 .	5	70	100	0.2	· 5	6	. 5	7	5	5
Preventive Action Limit	0.5	<u>0.5</u>	1	20	0.02	<u>0.5</u>	0.6	0.5	0.7	<u>0.5</u>	0,5
			-	· 		-			_	,	

^{† =} Detected above the Limit of Detection but below the Limit of Quantitation

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TABLE 3
Historical Groundwater Analytic Test Results—Chlorinated VOC's

<u>MW2</u>	Trichloro-	Tetrachloro-	cis-1,2 Dichloro-	trans-1,2 Dichloro-	Vinyl	Carbon Tetra-		1,2- Dichloro-	1,1- Dichloro-	Methylene	1,1,2- Trichloro-
	ethene	ethene	ethene	ethen e	Chloride	Chloride	Chloroform	ethane	ethene	Chloride	ethane
<u>Date</u>	(hs/L)	(ng/L)	(ug/L)	(pg/L)	(µg/L)	(hg/L)	(ha/L)	$(\mu g/L)$	(na/F)	(pe/L)	(hg/L)
07/22/99	<u>4.5</u>	< 0.15	<u> 19.7</u>	< 0.15	7.28	< 0.15	< 0.14	<0.15	0.352	19.7	<u>4.5</u>
12/12/01	< 0.36	< 0.25	<u>13</u>	< 0.23	21	< 0.33	< 0.32	< 0.39	< 0.36	<0.35 '	<0.56
03/07/02	< 0.65	< 0.75	<u>12</u>	<0.55	16	<1	<0.5	<0.6	< 0.55	<1.2	<1
06/10/02	13	<0.75	<u>29</u>	< 0.55	8.6	<1	<0.5	<0.6	<0.55	<1.2	<1
•											
MW3			cis-1,2	trans-1.2				1,2-	1,1-	•	1,1,2-
III II D	Trichloro-	Tetrachloro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		Dichloro-	Dichloro-	Methylene	Trichloro-
	ethene	ethene	ethene	ethene	Chloride	Chloride	Chloroform	ethane	ethene	Chloride	ethane
Date	(he/L)	(µg/L)	(µg/L)	(µg/L)	Cmorrae (μg/L)	(ha/f)	(µg/L)	(µg/L)	(ht/l)	(µg/L)	(µg/L)
		<u>(шел.)</u> <0.15	1.9	<0.15	0.376	< 0.15	<0.14	< 0.15	< 0.15		2,48
07/22/99	<u>2,48</u>	<0.13	1.9	0.13	V.370	~0.13	~0.14	<0.13	~0.13	1.2	2,40
12/12/01 03/07/02					Well Des	troyed During Build	ing Demolition				
06/10/02											
				• •							
	•										
	•										
			cis-1,2	trans-1,2							1,1,2-
NR140 Ground Water	Trichloro-	Tetrachloro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		1,2-Dichloro-	1,1-Dichloro-	Methylene	Trichloro-
Standard	ethene	ethene	ethene	ethene	Chloride	chloride	Chloroform	eiliane	ethene	Chloride	ethane
Enforcement Standard	. 5	. 5	70	100	0.2	5	6	5	7	5	5
Preventive Action Limit	<u>0.5</u>	<u>0.5</u>	1	20	0.02	0.5	<u>0.6</u>	0.5	<u>0.7</u>	0.5	<u>0.5</u>

^{† =} Detected above the Limit of Detection but below the Limit of Quantitation

TABLE 3
Historical Groundwater Analytic Test Results--Chlorinated VOC's

<u>MW4</u>			cis-1,2	trans-1,2		•		1,2-	1,1-		1,1,2-
	Trichloro-	Tetrachloro-	Dichloro-	Dichloro- ethene	Vinyl	Carbon Tetra- Chloride	Chloroform	Dichloro- ethane	Dichloro- ethene	Methylene Chloride	Trichloro- ethane
Dete	ethene	ethene	ethene		Chloride					(µg/L)	emane (μg/L)
<u>Date</u> 07/22/99	(he/L)	(mg/L)	(µg/L)	(ns/L)	(ug/L)	(µg/L) Prior to Constructi	(ha/T)	(ug/L)	(µg/L)	(hAr)	TERFI
12/12/01						The to Constituen	<u>on</u>			•	
03/07/02	34,000	<30	1,900	<22	770	<40	<20	<24	<22	<48	240
06/10/02	370,000	- 140	1,400	. 100	1,200	<40	240	<24	460	<48	3,200
B 277/4 1				4				1.0			112
MW4A	Trichloro-	Tetrachloro-	cis-1,2 Dichloro-	trans-1,2 Dichloro-	Vinyl	Carbon Tetra-		1,2- Dichloro-	1,1- Dichloro-	Methylene	1,1,2- Trichloro-
	ethene	ethene	ethene	ethene	Chloride	Chloride	Chloroform	cthane	ethene	Chloride	ethane
Date	(ng/L)	(pg/L)	(µg/L)	(µg/L)	(με/ L)	(µg/L)	(με/L)	(rig/L)	(ng/L)	(µg/L)	(µg/L)
07/22/99	2.48	/	1.9	APPR.MA	0.376	MERCHA!) <u> </u>	TE TE TE	< 0.15	1.9	2.48
12/12/01					•	Prior to Construct	lon			•	
03/07/02											
06/10/02	140,000	<75	1,100	<55	100†	<100	<50	<60	<55	<155	<100
	•										
	•										
•			cis-1,2	trans-1,2							1,1,2-
NR140 Ground Water	Trichloro-	Tetrachloro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		1,2-Dichloro-	1,1-Dichloro-	Methylene	Trickloro-
Standard	ethene	elliene	ethene	ethene	Chloride	chloride	Chleroform .	ethane	ethene	Chloride	elliane
Enforcement Standard	5	· 5	70	100	0.2	~ 5	6	5	7	5	5
Preventive Action Limit	<u>0,5</u>	0.5	1	<u>20</u>	0.02	<u>0.5</u>	<u>0.6</u>	<u>0,5</u>	<u>0.7</u>	<u>0.5</u>	<u>0.5</u>

^{† =} Detected above the Limit of Detection but below the Limit of Quantitation

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TABLE 3
Historical Groundwater Analytic Test Results—Chlorinated VOC's

<u>MW5</u> <u>Date</u> 07/22/99	Trichloro- ethene (µg/L)	Tetraohloro- ethene (µg/L)	cis-1,2 Dichloro- ethene (ug/L)	trans-1,2 Dichloro- ethene (µg/L)	Vinyl Chloride (pg/L)	Carbon Tetra- Chloride (ug/L) Prior to Constructi	Chloroform (ug/L) on	1,2- Dichloro- ethane (µg/L)	1,1- Dichloro- ethene (µg/L)	Methylene Chloride (µg/L)	1,1,2- Trichloro- ethane (ug/L)
12/12/01 03/07/02	22,000	<30	1,400	<22	<32	<40	<20	<24	<22	<48	<38
06/10/02	49,000	<30 .	3,500	<u>28†</u>	<68	<40	<20	<24	<22	<48	70†
•	•										
		•									
MW5A			cis-1,2	trans-1,2				1,2-	1,1-		1,1,2-
•	Trichloro-	Tetrachloro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		Dichloro-	Dichloro-	Methylene	Trichloro-
T	ethene	ethene	ethene	ethene	Chloride	Chloride	Chloroform	ethane	ethene	Chloride	ethane
<u>Date</u> 07/22/99	(ng/L) 2.48	(ns/L)	(րթ/L) 1.9	(ng/L)	(<u>ug/L)</u> 0.376	(µg/L)	(ng/L)	(hg/L)	(<u>µg/L)</u> <0.15	(µg/L) 1.9	(µg/L) 2,48
12/12/01	2.40	-	1.9		0.570	Prior to Constructi	lon		<0.13	1.5	2,40
03/07/02	•										
06/10/02	3,100	<1.5	<u>57</u>	<1.1	7.6	<2	<1	<60	<1.1	<2.4	<1.9
•	•										
			•								
	•										
				4							
•	•		•								
			cis-1,2	trans-1,2							1,1,2-
NR140 Ground Water	Trichloro-	Tetrachloro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		1,2-Dichloro-	1,1-Dichloro-	Methylene	Trichloro-
Standard	ethene	ethene	ethene	ethene	Cluloride	chloride	Chloroform	ethane	ethene	Chloride	ethane
Enforcement Standard	5	. 5 .	70	100	0.2	5	6.	5	7	5	5
Preyentive Action Limit	0.5	<u>0.5</u>	7	20	<u>0.02</u>	<u>0.5</u>	<u>0.6</u>	<u>0.5</u>	<u>0.7</u>	<u>0.5</u>	<u>0.5</u>

^{† =} Detected above the Limit of Detection but below the Limit of Quantitation

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TABLE 3
Historical Groundwater Analytic Test Results--Chlorinated VOC's

<u>MW6</u> <u>Date</u> 07/22/99 12/12/01	Trichloro- ethene (ug/L)	Tetrachloro- ethene (ug/L)	cis-1,2 Dichloro- ethene (ug/L)	trens-1,2 Dichloro- ethene (ug/L)	Vinyl Chloride (ug/L)	. Carbon Tetra- Chloride (µg/L) Prior to Constructi	Chloroform (ng/L)	1,2- Dichloro- ethane (µg/L)	1,1- Dichloro- ethene (µg/L)	Methylene Chloride (ug/L)	1,1,2- Trichloro- ethane (µg/L)
03/07/02	4.3	< 0.15	<0.11	<0.11	< 0.16	23	7.7	< 0.16	< 0.11	<0.24	< 0.19
06/10/02	<u>3.6</u>	< 0.15	<0.11	<0.11	< 0.16	16	<u>4.3</u>	< 0.12	< 0.11	<0.24	< 0.19
<u>MW6A</u> <u>Date</u> 07/22/99 12/12/01 03/07/02	Trichloro- ethene (ng/L) 2.48	Tetrachloro- ethene (ug/L)	cis-1,2 Dichloro- ethene (ug/L) 1.9	trans-1,2 Dichloro- ethene (ug/L)	Vinyl Chloride (ug/L) 0.376	Carbon Tetra- Chloride (ug/L) Prior to Construct	Chloroform (ug/L)	1,2- Dichloro- ethane (ug/L)	1,1- Dichloro- ethene (µg/L) <0.15	Methylene Chloride (ug/L) 1.9	1,1,2- Trichloro- ethane (ug/L) 2.48
06/10/02	0.54	< 0.15	< 0.11	< 0.11	<0.16	<0.2	.25†	<0.12	<0.11	<0.24	<0.19
	•										
:			cis-1,2	trans-1,2							1,1,2-
NR140 Ground Water	Trichloro-	Tetrachloro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		1,2-Dichloro-	1,1-Dichloro-	Methylene	Trichloro-
Standard	ethene	ethene	ethene	ethene	Chloride	cluloride	Chloreform	ethane	ethene	Chloride	ethane
Enforcement Standard Preventive Action Limit	5 <u>0.5</u>	· 5 0.5	70 1	100 <u>20</u>	0.2 <u>0.02</u>	5 <u>0.5</u>	6 <u>0.6</u>	5 <u>0.5</u>	7 <u>0.7</u>	5 0.5	5 <u>0.5</u>
	III.	LIL	-	==	3·7·	712	F17	715	A11	215	<u> </u>

^{† =} Detected above the Limit of Detection but below the Limit of Quantitation

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TABLE 3
Historical Groundwater Analytic Test Results-Chlorinated VOC's

<u>MW6B</u> <u>Date</u> 07/22/99	Trichloro- ethene (µg/L)	Tetrachloro- ethene (ug/L)	cis-1,2 Dichloro- ethene (ug/L)	trans-1,2 Dichloro- ethene (ug/L)	Vinyl Chloride (ug/L)	Carbon Tetra- Chloride (uc/L) Prior to Constructi	Chloroform	1,2- Dichloro- ethane (vg/L)	1,1- Dichloro- ethene (µg/L)	Methylene Chloride (ug/L)	1,1,2- Trichloro- ethane (ug/L)
12/12/01										•	
03/07/02 06/10/02	0.22† <0.13	<0.15 <0.15	<u>2</u> 0.76	<0.11 <0.11	<0.16 <0.16	<0.2 <0.2	<0.1 <0.1	<0.12 <0.12	<0.11 <0.11	<0.24 <0.24	<0.24 <0.19
00/10/02	~0.13	~0.13	0.70	\$0.11	<0.10	<u>,0.2</u>	~0.1	V.12	V0.11	\0.24	\0.19
							:				
						,					
						,					
<u>MW7</u>	Trichloro- ethene	Tetrachloro- ethene	cis-1,2 Dichloro- ethene	trans-1,2 Dichloro- ethene	Vinyl Chloride	Carbon Tetra- Chloride	Chloroform	1,2- Dichloro- ethane	1,1- Dichloro- ethene	Methylene Chloride	1,1,2- Trichloro- ethane
<u>Date</u> 07/22/99	(µg/L) 2.48	(µg/L)	(µg/L) 1.9	(pg/L)	(µg/L) 0.376	(µg/L)	(µg/L)	(ht/ []	(<u>µg/L)</u> <0.15	(<u>ur/L)</u> 1.9	(ug/ L) 2.48
12/12/01 03/07/02						Prior to Construct	lon				
06/10/02	1.4	<0.15	1.1†	<0.11	<0.16	<0.2	<0.1	< 0.12	<0.11	<0.24	<0.19
	•										
	•										
			cis-1,2	trans-1,2							1,1,2-
NR140 Ground Water	Trichloro-	Tetrachloro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		1,2-Dichloro-	1,1-Dichloro-	Methylene	Trichloro-
Standard	ethene	elliene	ethene	ethene	Chloride	cluloride	Chleroform	ethane	ethene	Chloride	ethane
Enforcement Standard	5	5	70	100	0.2	5	6	5	7	5	5 .
Preventive Action Limit	<u>0.5</u>	<u>0.5</u>	1	<u>20</u>	0.02	<u>0.5</u>	0.6	<u>0.5</u>	<u>0,7</u>	<u>0.5</u>	<u>0.5</u>

^{† =} Detected above the Limit of Detection but below the Limit of Quantitation

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TABLE 3 ::
Historical Groundwater Analytic Test Results--Chlorinated VOC's

MW7A Date 07/22/99 12/12/01 03/07/02 06/10/02	Trichloro- ethene (ng/L)	Tetrachloro- ethene (uv/L) <0.15 <0.15	cis-1,2 Dichloro- ethene (µg/L) <0.11 <0.11	trans-1,2 Dichloro- ethene (ug/L) <0.11	Vinyl Chloride (ug/L) <0.11	Carbon Tetra- Chloride (ug/L) Prior to Constructi <0.11 <0.2	Chloroform (ue/L) on <0.1 <0.1	1,2- Dichloro- ethane (ng/L) <0.12 <0.15	1,1- Dichloro- ethene (ug/L) <0.11 <0.11	Methylene Chloride (ug/L) <0.24 <0.24	1,1,2- Trichloro- ethane (ug/L) <0.19 <0.19
00/10/02	0.51		-0.11	-0.11				10.12			,
·				•							
<u>MW7B</u> <u>Date</u> 07/22/99	Trichloro- ethene (112/L) 2.48	Tetrachloro- ethene (ug/L)	cis-1,2 Dichloro- ethene (pg/L) 1.9	trans-1,2 Dichloro- ethene (ug/L)	Vinyl Chloride (µg/L) 0.376	Carbon Tetra- Chloride (us/L)	Chloroform (us/L)	1,2- Dichloro- ethane (ug/L)	1,1- Dichloro- ethene (ug/L) <0.15	Methylene Chloride (pg/L) 1.9	1,1,2- Trichloro- ethane (ug/L) 2.48
12/12/01 03/07/02						Prior to Construct					
06/10/02	0.33†	<0.15	<0.11	<0.11	<0.16	<0.2	<0.1	<0.15	<0.11	<0.24	<0.19
	• .	<u>-</u> -		,	,						
	•	•									
NR140 Ground Water Standard Enforcement Standard	Trichloro- ethene 5	Tetrachiloro- ethene 5	cis-1,2 Dioldoro- ethene 70	trans-1,2 Dichloro- ethene 100	Vinyl Chloride 0.2	Carbon Tetra- cldoride 5	Chloroform 6	1,2-Dichloro- ethane 5	I,I-Dichloro- ethene 7	Methylene Chloride 5	1,1,2- Trichloro- ethane 5
Preventive Action Limit	<u>0.5</u>	<u>0.5</u>	1	<u>20</u>	0.02	<u>0.5</u>	0.6	0 <u>.5</u>	<u>0.7</u>	<u>0.5</u>	<u>0.5</u>

^{† =} Detected above the Limit of Detection but below the Limit of Quantitation

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TABLE **3**Historical Groundwater Analytic Test Results--Chlorinated VOC's

MW8 Date 07/22/99 12/12/01	Trichloro- ethene (µg/L)	Tetrachloro- ethene (ug/L)	cis-1,2 Dichloro- ethene (ug/L)	trans-1,2 Dichloro- ethene (ug/L)	Vinyl Chloride (ng/L)	Carbon Tetra- Chloride (ug/L) Prior to Constructi	Chloroform (ug/L) on	1,2- Dichloro- ethane (ng/L)	1,1- Dichloro- ethene (ug/L)	Methylene Chloride (ug/L)	1,1,2- Trichloro- ethane (µg/L)
03/07/02 06/10/02	<u>0.6</u> 0.4†	<0.15 <0.15	<u>6.5</u> 4.6	<0.11 <0.11	0.51† <0.16	<0.2 <0.2	<0.1 <0.1	<0.12 <0.12	<0.11 <0.11	<0.24 <0.24	<0.19 <0.19
					•				: · · · · · · · · · · · · · · · · · · ·		
MW8A	Trichloro- ethene	Tetrachloro- ethene (ug/L)	cis-1,2 Dichloro- ethene	trans-1,2 Dickloro- ethene (µg/L)	Vinyl Chloride (µg/L)	Carbon Tetra- Chloride (ug/L)	Chloroform	1,2- Dichloro- ethane (ug/L)	1,1- Dichloro- ethene	Methylene Chloride (ug/L)	1,1,2- Trichloro- ethane
07/22/99 12/12/01 03/07/02	2.48		1.9		0.376	Prior to Constructi	lon .		<0.15	1.9	2.48
06/10/02	0.28†	<0.15	<0.11	<0.11	<0.16	<0.2	<0.1	<0.12	< 0.11	<0.24	<0.19
	•										
	•.										
NR140 Ground Water Standard	Trichloro- ethene	Tetracidoro- ethene	cis-1,2 Dichloro- ethene	trans-1,2 Dichloro- ethene	Vinyl Chloride	Carbon Tetra- chloride	Chloroform	1,2-Dichloro- ethane	1,1-Dichloro- ethene	Methylene Chloride	1,1,2- Trichloro- ethane
Enforcement Standard Preventive Action Limit	5 0,5	. 5 <u>0.5</u>	70 · 1	100 <u>20</u>	0.2 0.02	5 <u>0.5</u>	6 0.6	5 0.5	7 <u>0.7</u>	5 0.5	5 0,5
A	215		*	===	212.5	712	***	212	2.1		xxx

^{† =} Detected above the Limit of Detection but below the Limit of Quantitation

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TABLE 3
Historical Groundwater Analytic Test Results--Chlorinated VOC's

Former Quikfrez Site--Fond du Lac, Wisconsin Project Number: 02-2-15818

<u>MW8B</u> <u>Date</u> 07/22/99 12/12/01	Trichloro- ethene (ug/L)	Tetrachloro- ethene (ug/L)	ois-1,2 Dichloro- ethene (µg/L)	trans-1,2 Dichloro- ethene (ug/L)	Vinyl Chloride (ug/L)	Carbon Tetra- Chloride (ur/L) Prior to Constructi	Chloroform (us/L)	1,2- Dichloro- ethane (ug/L)	1,1- Dichloro- ethene (µg/L)	Methylene Chloride (பத/L)	1,1,2- Trichloro- ethane (ug/L)
03/07/02	0.84	< 0.15	1	<0.11	<0.16	<0.2	< 0.1	< 0.12	<0.11	<0.24	< 0.19
.06/10/02	< 0.13	< 0.15	0.12†	< 0.11	< 0.16	<0.2	<0.1	< 0.15	<0.11	<0.24	< 0.19
						*					
								1			
<u>MW9</u>	Trichloro- ethene	Tetrachloro- ethene	cis-1,2 Dichloro- ethene	trans-1,2 Dichloro- ethene	Vinyl Chloride	Carbon Tetra- Chloride	Chloroform	1,2- Dichloro- ethane	1,1- Dichloro- ethene	Methylene Chloride	1,1,2- Trichloro- ethane
<u>Date</u> 07/22/99	(µg/L)	(ng/L)	(<u>ug/L)</u> 1,9	(ne/l)	(µg/L) 0.376	(ng/L)	(µg/L)	(µg/L)	(pg/L)	(µg/L)	(µg/L)
12/12/01	<u>2.48</u>		1,9		V.3 / 0	Prior to Construct	lon		<0.15	1.9	2,48
03/07/02	•						7 1			•	
06/10/02	1.2	< 0.15	2.1	< 0.11	1.3	<0.2	<0.1	<0.12	< 0.11	< 0.24	<0.19
	•										
					*						
									•		
			cis-1,2	trans-1,2							1,1,2-
NR140 Ground Water	Trichloro-	Tetrachioro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		1,2-Dichloro-	1,1-Dichloro-	Methylene	Trichloro-
Standard	efficie	ethene	ethene	ethene	Chloride	chloride	Chloroform	ethane	cthene	Chloride	ethane
Enforcement Standard	5	5 .	70 7	100	0.2	5	6	5	7	5	5
Preventive Action Limit	<u>0.5</u>	0.5	1	20	<u>0.02</u>	<u>0.5</u>	0.6	<u>0.5</u>	<u>0.7</u>	<u>0.5</u>	<u>0.5</u>

† = Detected above the Limit of Detection but below the Limit of Quantitation

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TABLE 3
Historical Groundwater Analytic Test Results-Chlorinated VOC's

Former Quikfrez Site-Fond du Lac, Wisconsin Project Number: 02-2-15818

<u>MW10B</u>	Trichloro- ethene	Tetrachloro- ethene	cis-1,2 Dichloro- ethene	trans-1,2 Dichloro- ethene	Vinyl Chloride	Carbon Tetra- Chloride	Chloroform	1,2- Dichloro- ethane	1,1- Dichloro- ethene	Methylene Chloride	1,1,2- Trichloro- ethane
<u>Date</u> 07/22/99	(h8/ <u>r</u>)	(ng/L)	(µg/L)	(µg/L)	(ne/l)	(µg/L) Prior to Constructi	(µg/L)	(h&[?)	(µg/L)	(ug/L)	(ng/L)
12/12/01 03/07/02 06/10/02	10 <u>3.4</u>	<0.15 <0.15	<0.11 <0.11	<0.11 <0.11	<0.16 <0.16	<0.2 <0.2	<0.1 <0.1	<0.15 <0.15	<0.11 <0.11	<0.24 <0.24	<0.19 <0.19

			cis-1,2	trans-1,2						•	1,1,2-
NR140 Ground Water	Trichloro-	Tetracidoro-	Dichloro-	Dichloro-	Vinyl	Carbon Tetra-		1,2-Dichloro-	1,1-Dichloro-	Methylene	Trichloro-
Standard	ethene	ethene	ethene	ethene	Chloride	cluoride	Chleroform	ethane	ethene	Chloride	ethane
Enforcement Standard	5	5	70	100	0.2	5	6	5	7	5	5
Preventive Action Limit	<u>0.5</u>	<u>0,5</u>	1	20	0.02	0.5	0.6	<u>0,5</u>	<u>0.7</u>	0,5	<u>0.5</u>

^{† =} Detected above the Limit of Detection but below the Limit of Quantitation

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TABLE 4

Soil Analytical Test Results, VOCs

TABLE # Soil Analytic Test Results-VOC

Former Quicfrez Complex Fond du Lac, Wisconsin

Depth (feet) 6-8 8-10 6-8 6-8 3-5 6-8 7.5-9.5 5-7 7.5-9.5 12.5-14.5 7.5-9.5 5-7 RCL's	Die 1 Table 2 Values (µg/kg) (µg/kg)
	<u>(µg/kg)</u>
Sample Date <u>Jan-97 Jan-97 Jan-97 Jan-97 Jul-99 Jul-99 Jul-99 Jul-99 Jul-99 Jul-99 Jul-99 Jul-99 Jul-99 (ug/kg)</u>	
	500 1,100
	500 1,100
Analyte (µg/kg)	500 1,100
, 	
tert-Butylbenzene <32 <39 <33 <30 <33 <12,706 <33 <1,339 <31 <31 <500	
n-Butytbenzene <32 <39 <33 <30 <33 <12,706 <33 <1,339 <31 80 <500	
sec-Butylbenzene <32 171 <33 <30 <33 <12,706 <33 '<1,339 <31 41 2,265	
Carbon Tetrachloride <32 <39 <33 <30 <33 <12,706 <33 <1,339 <31 <31 <500	
Chloroform <32 <39 <33 <30 <33 <12,706 <33 <1,339 <31 <31 <500 -	
1,2-Dichloroethane <32 <39 <33 <30 <33 <12,706 <33 <1,339 <31 <31 <500 4.9	- 00
1,1-Dichloroethene <32 <39 <33 · <30 <33 <12,706 <33 <1,339 <31 <31 <500	
cis-1,2-Dichloroethene <32 <39 <33 · <30 <33 56,290 96 <1,339 2,156 <31 <500	
trans-1,2-Dichloroethene <32 <39 <33 · <30 <33 <12,706 <33 <1,339 <31 <31 <500	
2,2-Dichloropropane <32 <39 <33 · <30 <33 56,290 96 <1,339 2,156 <31 <500	
	600
sopropy benzene	
p-Isopropyltoluene <32 623 <33 <30 <33 <12,706 <33 <1,339 <31 119 <500	
Methylene Chloride <64 <78 <66 · <30 <33 <12,706 <33 <1,339 <31 <31 <500	
MTBE <32 <39 <33 <32 <30 <33 <12,706 <33 <1,339 <31 <31 <500	
Naphthalene <32 1,870 342 · <1.4 2.36 · · <1,339 <31 38 <500	700
n-Propylbenzene <32 92 <33 · <30 <33 <12,706 <33 <1,339 <31 <31 <500 -	<u> </u>
Tetrachlorethene <32 <39 <33 <30 <33 <12,706 <33 <1,339 <31 <31 <500	
Toluene <32 44 <33 32 <30 <33 <12,706 <33 1,797 <31 <31 <500 1,500	,000
1,1,2-Trichloroethane <32 <39 <33 <30 <33 <12,706 <33 <1,339 <31 <31 <500	
Trichloroethene <32 <39 <33 <30 <33 309,916 <33 <1,339 34 <31 <500	- - '
1,2,4-Trimethylbenzene <32 1,560 70 <32 <30 <33 <12,706 <33 2,659 <31 47 1,476	,000
	,000
Vinyl Chloride <32 <32 <39 <30 <33 <12,706 <33 <1,339 607 <31 <500	
	,000
Total VOC ND 6,439 675 32 ND 2.36 422,496 192 41,022 4,953 375 3,741	

VOC= Volatile Organic Compounds (EPA Method 8260 for samples from 12/01) RCL = Residual Contaminant Level

-- = No Standards Established

- = Not Sampled

† = Detected above the Limit of Detection but below the Limit of Quantitation Bold = Exceeds NR 720 Soil RCL
Underline = Exceeds NR746 Table 1 or Table 2 Values

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TABLE 4(CONTINUED) Soil Analytic Test Results--VOC

Former Quicfrez Complex Fond du Lac, Wisconsin

	Current Investigation Data	<u>a</u> ` `													NR 746	NR 746
	Sample Interval	B11-1	B11-6	B11-8	B12-1	B12-6	B12-7	B13-1	B13-6	B13-7	B14-1	B15-1	B15-7	NR 720	Table 1	Table 2
	Depth (feet)	0-2	10.5-12.5	16-18	0-2	10.5-12.5	13-15	0-2	10.5-12.5	13-15	0-2	*2-4	*15-17	RCL's	Values	Values
	Sample Date	12/12/01	12/12/01	12/12/01	12/12/01	12/12/01	12/12/01	12/12/01	12/12/01	12/12/01	12/12/01	12/27/01	12/27/01	_(µg/kg)	_(µg/kg)	(µg/kg)
	•															
	Analyte (µg/kg)															
	Benzene	770	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	100	<25	<13,000	5.5	8,500	1,100
	tert-Butylbenzene	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	29	<13,000	,		
	n-Butylbenzene	860	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	340	<13,000			
	sec-Butylbenzene	770	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	600	<13,000			
	Carbon Tetrachloride	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
	Chloroform	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
,	1,2-Dichloroethane	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000	4.9	600	
	1,1-Dichloroethene	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
	cis-1,2-Dichloroethene	420	69,000	100,000	1,000	<5,000	<5,000	1,400	760	260	<25	89	<13,000			
	trans-1,2-Dichloroethene	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
	2,2-Dichloropropane	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
	Ethylbenzene	2,900	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	42	2,300	<13,000	2,900	4,600	
	Isopropylbenzene	710	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	42	450	<13,000	-		
	p-Isopropyltoluene	500	<5,000	<2,500	<250	<5,000	<5,000	<250	/<250	<25	<25	180	<13,000	-		
	Methylene Chloride	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
	MTBE	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
	Naphthalene	690	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	150	150	<13,000		2,700	
	n-Propylbenzene	1,300	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	920	<13,000			
	Tetrachlorethene	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
	Toluene	15,000	6,300	<2,500	<250	<5,000	<5,000	370	<250	<25	110	61	<13,000	1,500	38,000	
	1,1,2-Trichloroethane	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
	Trichloroethene	5,200	340,000	85,000	27,000	690,000	570,000	38,000	13,000	3,000	1,300	4,200	850,000			
	1,2,4-Trimethylbenzene	23,000	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	100	3,300	<13,000		83,000	
	1,3,5-Trimethylbenzene	13,000	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	41	720	<13,000		11,000	
	Vinyl Chloride	<250	<5,000	<2,500	<250	<5,000	<5,000	<250	<250	<25	<25	<25	<13,000			
	Xylenes	45,000	<15,000	<7,500	<750	<15,000	<5,000	<750	<750	<75	310	3,730	<38,000	4,100	42,000	
	Total VOC	109,350	415,300	185,000	28,000	690,000	570,000	39,770	13,760	3,260	2,095	17,069	850,000			

VOC= Volatile Organic Compounds (EPA Method 8260 for samples from 12/01)
RCL = Residual Contaminant Level

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Bold = Exceeds NR 720 Soil RCL

<u>Underline</u> = Exceeds NR746 Table 1 or Table 2 Values

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^{*}Borings B15 and B16 were performed in the basement area of the former building. The basement floor was approximately 3 feet below grade. Depths shown are below the basement floor elevation.

TABLE 4(CONTINUED) Soil Analytic Test Results--VOC

Former Quicfrez Complex Fond du Lac, Wisconsin

									•					NR 746	NR 746
Sample Interval	B15-9	B16-5	B16-10	B17-(1/2)	B17-6	B17-11	B18-2	B18-13	B18-16	B19-1	B19-10	B19-12	NR 720	Table 1	Table 2
Depth (feet)	*20-22	*10-12	*22.5-24.5	1-5	12.5-14.5	25-27	2-4	2'4-26	30-32	0-2	22.5-24.5	27.5-29.5	RCL's	Values	Values
Sample Date	12/27/01	12/27/01	<u>12/27/01</u>	12/27/01	12/12/01	12/12/01	2/21/02	2/21/02	2/21/02	2/25/02	2/25/02	2/25/02	(µg/kg)	<u>(µg/kg)</u>	(µg/kg)
•															
Analyte (µg/kg)						• .									
Benzene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25	5.5	8,500	1,100
tert-Butylbenzene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25			•
n-Butylbenzene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25			
sec-Butylbenzene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25	-		
Carbon Tetrachloride	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25			
Chloroform	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25			
1,2-Dichloroethane	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25	4.9	600	
1,1-Dichloroethene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25	-	_ '	
cis-1,2-Dichloroethene	83	4,200	<25	<1,300	80	<25	<25	<25	<25	<25	<25	<25 .			
trans-1,2-Dichloroethene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25	_		
2,2-Dichloropropane	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25			
Ethylbenzene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25	2,900	4,600	,
isopropylbenzene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25			
p-Isopropyltoluene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25`	<25	<25	<25			 .
Methylene Chloride	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25			
MTBE	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25		-	
Naphthalene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	28	<25	<25	-	2,700	
n-Propylbenzene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25			
Tetrachlorethene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25	·		
Toluene ·	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	46	<25	<25	1,500	38,000	
1,1,2-Trichloroethane	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25	***	-	·
Trichloroethene	12,000	280,000	330	71,000	2,200	<25	310	150	120	180	<25	<25	-	-	
1,2,4-Trimethylbenzene	<50	<2,500	<25	<1,300	<25	<25	<25,	<25	<25	<25	<25	<25		83,000	
1,3,5-Trimethylbenzene	<50	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25		11,000	
Vinyl Chloride	82	<2,500	<25	<1,300	<25	<25	<25	<25	<25	<25	<25	<25			•
Xylenes	<150	<7,500	<75	<3,800	<75	<75	<75	<75	<75	73	<75	<75	4,100	42,000	· - (
Total VOC	12,165	284,200	330	71,000	2,280	ND	310	150	120	327	ИD	ND	_	_	-

VOC= Volatile Organic Compounds (EPA Method 8260 for samples from 12/01) RCL = Residual Contaminant Level

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Underline = Exceeds NR746 Tablé 1 or Table 2 Values

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^{-- =} No Standards Established

^{- =} Not Sampled *Borings B15 and B16 were performed in the basement area of the former building. The basement floor was approximately 3 feet below grade. Depths shown are below the basement floor elevation.

TABLE 4 (CONTINUED) Soil Analytic Test Results--VOC

Former Quicfrez Complex Fond du Lac, Wisconsin

(-2	Sample Interval	B20-2	B21-2	MW2	MW4A-1	MW4A-6	MW6A-1		MW6A-12	MW6B-3	MW7A-9	MW7A-12	NR 720	NR 746 Table 1	NR 746 Table 2
	Depth (feet)	2-4	2-4	Surface	15-17	27,5-29,5	0-2	12.5-14.5	28-30	43-45	20-22	27.5-29.5	RCL's	Values	Values
	Sample Date	3/1/02	3/1/02	<u>12/12/01</u>	<u>2/21/02</u> ·	2/21/02	2/28/02	<u>2/28/02</u>	<u>2/28/02</u>	<u>2/28/02</u>	2/25/02	2/25/02	<u>(µg/kg)</u>	<u>(µg/kg)</u>	<u>(µg/kg)</u>
	Analyte (µg/kg)		~/ ,												
	Benzene	<25	<25	870	<25	<25	83	<25	<25	<25	<25	<25	5,5	8,500	1,100
	tert-Butylbenzene	<25	<25	<500	<25	<25	<25 ·	<25	<25	<25	<25	<25	 	-,	.,
	n-Butylbenzene	<25	<25	7,300	<25	<25	39	<25	<25	<25	<25	<25	<u>-</u>		
	sec-Butylbenzene	<25	<25	730	<25	<25	25	<25	<25	<25	<25	<25			
	Carbon Tetrachloride	<25	<25	<500	<25	<25	<25	<25	<25	<25	<25	<25			
	Chloroform	<25	<25	<500	<25	<25	<25	<25	<25°	<25	<25	<25	-		
	1.2-Dichloroethane	<25	<25	<500	29	<25	<25	<25	<25	<25	<25	<25	4.9	600	
	1.1-Dichloroethene	<25	<25	<500	220	81	<25	<25	<25	<25	<25	<25		_	
	cis-1,2-Dichloroethene	<25	<25	<500	130	1,500	<25	<25	<25	<25	· <25	<25			_
	trans-1,2-Dichloroethene	<25	<25	<500	<25	34	<25	<25	<25	<25	<25	<25			
	2,2-Dichloropropane	<25	<25	<500	<25	<25	<25	<25	<25	· <25	<25	<25			
	Ethylbenzene	<25	<25	10,000	30	1.000	290	<25	<25	<25	<25	<25	2,900	4,600	
	Isopropylbenzene	<25	<25	920	<25	53	75	<25	<25	<25	<25	<25			
	p-Isopropyltoluene	<25	<25	<500	<25	<25	<25	<25	<25	<25	<25	<25			
	Methylene Chloride	<25	<25	<500	37	<25	<25	<25	<25	<25	<25	<25			
	MTBE	<25	<25	<500	<25	<25	<25	<25	<25.	<25	<25	<25			
	Naphthalene	<25	<25	12,000	<25	<25	280	<25	<25	<25	<25	<25		2,700	
	n-Propylbenzene	<25	<25	6,500	<25	100	110	<25	<25	<25	<25	<25			
	Tetrachlorethene	<25	<25	<500	260	100	<25	<25	<25	<25	<25	<25			
	Toluene	44	<25	15,000	40	40	<25	<25	<25	<25	<25	<25	1,500	38,000	_
	1.1.2-Trichloroethane	<25	<25	<500	<25	78	<25	<25	<25	<25	<25	<25			
	Trichloroethene	94	<25	<500	500,000	140,000	<25	<25	<25	<25	<25	<25			
	1,2,4-Trimethylbenzene	<25	<25	71,000	<25	480	56	<25	<25	<25	<25	<25		83,000	_
	1.3.5-Trimethylbenzene	<25	, <25	18,000	<25	70	57	<25	<25	<25	<25	<25		11,000	m-12
	Vinyl Chloride	<25	<25	<500	160	170	<25	<25	.<25	<25	<25	<25		, ,,,,,,,,	
	Xylenes	<75	<75	81,000	107	593	36	<75	<75	<75	<75	<75	4,100	42,000	·
	Total VOC	138	ND	223,320	501,013	144,299	1,051	ND	ND	ND	ND	ND			_

VOC= Volatile Organic Compounds (EPA Method 8260 for samples from 12/01) RCL = Residual Contaminant Level — = No Standards Established

- = Not Sampled

† = Detected above the Limit of Detection but below the Limit of Quantitation Bold = Exceeds NR 720 Soil RCL <u>Underline</u> = Exceeds NR746 Table 1 or Table 2 Values

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TABLE 4 (CONTINUED) Soll Analytic Test Results-VOC

Former Quicfrez Complex Fond du Lac, Wisconsin

Sample Interval	MW8B-5	MW8B-12	MW9-2	MW9-6	
Depth (feet)	10-12	27.5-29.5	2.5-4.5	13-15	
Sample Date	2/28/02	<u>2/28/02</u>	<u>2/25/02</u>	2/25/02	
Analyte (µg/kg)				\	
Benzene	<25	<25	<25	<25	
tert-Butylbenzene	<25	<25	<25	<25	
n-Butylbenzene	<25	<25	<25	<25	
sec-Butylbenzene	<25	<25	<25	<25	
Carbon Tetrachloride	<25	<25	<25	<25	
Chloroform	<25 .	<25	<25	<25	
1,2-Dichloroethane	<25	<25	<25	<25	2.
1,1-Dichloroethene	<25	<25	<25	<25	
cis-1,2-Dichloroethene	<25	<25	<25	38	
trans-1,2-Dichloroethene	<25	<25	<25	<25	
2,2-Dichloropropane	<25	<25,	<25	<25	
Ethylbenzene	<25	<25	<25	<25	
Isopropylbenzene	<25	<25	<25	<25	
p-Isopropyltoluene	<25	<25	<25	<25	
Methylene Chloride	<25	<25	<25	<25	
MTBE	<25	<25	<25	<25	
Naphthalene	<25	<25	<25	<25	
n-Propylbenzene	<25	<25	<25	<25	
Tetrachlorethene	<25	<25	<25	<25	
Toluene	<25	<25	<25	<25	
1,1,2-Trichloroethane	<25	<25	<25	<25	
Trichloroethene	<25	<25	<25	<25	
1,2,4-Trimethylbenzene	<25	<25	<25	<25	
1,3,5-Trimethylbenzene	<25	. <25	<25	<25	
Vinyl Chloride	<25	<25	<25	<25	
Xylenes	<75	≤75	. <75	<75	
Total VOC	ND	ND	ND	38	

VOC= Volatile Organic Compounds (EPA Method 8260 for samples from 12/01)
RCL = Residual Contaminant Level

† = Detected above the Limit of Detection but below the Limit of Quantitation Bold = Exceeds NR 720 Soll RCL Underline = Exceeds NR746 Table 1 or Table 2 Values

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38,000

83,000 11,000 --42,000

NR 746

Table 1

Valdes

<u>(µg/kg)</u>

8,500

NR 720

RCL's

(µg/kg)

2,900

NR 746

Table 2

Values

<u>(µg/kg)</u>

1,100

^{-- =} No Standards Established

^{- =} Not Sampled

TABLE 5

Soil Analytical Test Results, PAH/Metals

TABLE 5 Soil Analytic Test Results-PAH/Metals

Former Quicfrez Site Fond du Lac. Wisconsin Project Number: 02-2-15818

•														PAH
Sample Interval;	MW3-2	B7-1	B8-2	· B10-2	B11-1	B12-1	B13-1	B14-1	B17-(1/2)	B18-2	B19-1	B20-2	PAH	Guidançe
Depth (feet):	5-7	3-5	6-8	5-7	0-2	0-2	0-2	0-2	1-5	2-4	0-2	2-4	Guidance	Non-Industrial
Sample Date:	Jul-99	<u>Jul-99</u>	Jul-99	Jul-99	12/12/01	12/12/01	12/12/01	12/12/01	12/27/01	2/21/02	2/25/02	3/1/02	Groundwater Path	Direct Contact
•					-								(µg/kg)	(µg/kg)
Acenaphthalene	536	<3.5	<3.8		•		. •	•		<13	<13	<41 .	38,000	900,000
Acenaphthylene	•	•	•	•		•	•	•	•	<42	18†	<42	700	18,000
Anthracene	125	<3.8	<4.2	• -	•	-	•	•	•	12†	17†	<34	3,000,000	5,000,000
Benzo(a)Anthracene	<1.8	3,09	2.53	•."	•	•	•	•		64	47	<54	17,000	<u>88</u> .
Benzo(a)Pyrene	7.93	<4.9	<5.4	•	•	•	• .		•.	<u>65</u>	<u>51†</u>	<59	48,000	<u>8,8</u>
Benzo(b)Fluoranthene	<3.0	6.83	5,18	•	•	•	•	•	•	62†	62†	<42	360,000	<u>88</u>
Benzo(g,h,i)perylene	•	•	•	•	•	•	•	•	•	58	56	<82	6,800,000	<u>1,800</u>
Benzo(k)Fluoranthene	<3.0	4.16	3.43	•	• .	•	•	-	•	68†	56†	<79	870,000	880
Chrysene	•	•	•	•	•	•	•	•	•	62	54	<38	37,000	<u>8,800</u>
Dibenzo(a,h)anthrancene	•	•	•	•	•	•	•	•	•	<76	<76	<76	38,000	<u>8.8</u>
Fluoranthene	<3.3	15.2	15.9	•	•	•	•	•	•	110	110	61†	500,000	<u>600,000</u>
Fluorene	750	<3.2	<3.6	•	•	•	•	•	•	<11	<11	<41	100,000	600,000
Indeno(1,2,3-cd)Pyrene	5.16	4.53	4.11	•	• •	•	•	•	•	37†	32†	<69	680,000	<u>88</u>
1-Methyl-Naphthalene	4,550	<4.4	<4.9	. •	•	•	•	•	•	14†	110	71†	23,000	1,100,000
2-Methyl-Naphthalene	266	<5.2	<5.7	•	•	•	. •	•	•	20†	120	79†	20,000	600,000
Naphthalene	<1,5	<1.4	2.36	•	•	•	•	•	•	11†	73	45†	400	20,000
Phenanthrene	1,100	7.58	8.33	. •	• ,	•	•	•	•	62 .	130	100	1,800	<u>18,000</u>
Pyrene	<4.6	9.4	13.0	•	•	•	•	•	•	81	62	<58	8,700,000	500,000
Total PAH	7,340	50.79	54.84	•	•	•	•	•	•	726	998	356	-	
•	,													ND 700
•													NR 720	NR 720
					•								Non-Industrial	Industrial
Analyte (mg/kg)											,		<u>(mg/kg)</u>	<u>(ma/ka)</u>
Arsenic	•		. •	•	<u>22</u> 765	4.5	7.8	14	<u>57</u>	4	′ <u>3.3</u> 225	9.7	0.039	1.6
Barlum .	•	• .	•	•		1,290	4,510	373	87	98		260		-
Cadmium	•	••	•	•	4.2	<1.2	<1.2	<1.2	21	<1.4	<1.6	1.9†	8	<u>510</u>
**Chromium	•	•	•		61	37	142	16	50	34	40	12	14	200
Lead	9.79		•	4.34	246	340	300	303	68	21	276	27	50	500
Mercury	•	•	•	•	0.056†	0.147	0.14	0.062†		0.201	0.108	0.02†		
Selenlum	•		•	•	<25	<2.5	<2.5	<2.5	<12.5	< 0.063	0.16†	<0.36		-
Silver	•	•	•	•	54	<3	15	<3	<3	<3.7	<3.7	18	·	
DRO (mg/kg)	3,340	•	•	•	•		• .	• • •			•	•	250	

DRO=Diesel Range Organics (Wisconsin Modified)

PAH= Polynuclear Aromatic Hydrocarbons (EPA Method 8310)

· = Not tested

Bold = Exceeds NR 720 Soil Standards

<u>Underline</u> = Exceeds NR746 Table 1 or Table 2 Values

† = Detected above the Limit of Detection but below the Limit of Quantitation

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Page 1 of 2

RCL = Residual Contaminant Level

^{-- =} No Standards Established **NR 720 Soil Standards for Chromlum listed is for hexavalent species. Standards for trivalent species are less restrictive. Additional testing would be necessary to identify species detected.

TABLE 5 (continued) Soil Analytic Test Results--PAH/Metals

Former Quicfrez Site Fond du Lac, Wisconsin Project Number: 02-2-15818

							,		•	PAH
Sample Interval:	B29-1	B30-1	B30-4						PAH	Guidance
Depth (feet):	0-2	0-2	7.5-9.5						. Guldance	Non-Industrial
Sample Date:	3/6/02	3/6/02	3/6/02					•	Groundwater Path	Direct Contact
	***************************************								(µg/kg)	(µg/kg)
Acenaphthalene	<41	<41	<41			•			38,000	900,000
Acenaphthylene	<42	48†	<42						700	18,000
Anthracene .	<34	47†	<34						3,000,000	5,000,000
Benzo(a)Anthracene	56†	180	<54						17,000	88
Benzo(a)Pyrene	78†	230	<59						48,000	8.8
Benzo(b)Fluoranthene	86†	250	<42						360,000	<u>88</u>
Benzo(g.h.i)perylene	<82	240†	<82			•			6,800,000	1,800
Benzo(k)Fluoranthene	<79	160†	<79		•				870,000	880
Chrysene	74t	250	<38						37,000	8,800
Dibenzo(a,h)anthrancene	<76	<76	<76						38,000	8.8
Fluoranthene	100†	570	<42			•			500,000	600,000
Fluorene	<41	<41	<41						100,000	600,000
Indeno(1,2,3-cd)Pyrene	<69	150†	<69						680,000	88
1-Methyl-Naphthalene	120	140	<37		<u> </u>				23,000	1,100,000
2-Methyl-Naphthalene	180†	170†	<72						20,000	600,000
Naphthalene	95†	110†	<40	•					400	20,000
Phenanthrene	94	340	<20		,				1,800	18,000
Pyrene	<58	300	<58						8,700,000	500,000
TOTAL PAH	883	3,185	ND						••	_
TOTALL ATT	000	0,100	,,,,							
•									NR 720	NR 720
									Non-Industrial	Industrial
Analyte (mg/kg)					•				(mg/ka)	(mg/kg)
Arsenic	7	10	•						0.039	1.6
Barium	624	409	•							
Cadmium	<1.2	5.2							8	510
**Chromlum	15	,208	•						14	200
Lead	285	5,280							50	<u>510</u> 200 500
Mercury	0.092	0,235							-	
Selenium	0.21	0.14†								
Silver	3.6†	<3						•		
	,									
DRO (mg/kg)		, ,	•						250	
וסיייטייין -יי-										

DRO=Diesel Range Organics (Wisconsin Modified)
PAH= Polynuclear Aromatic Hydrocarbons (EPA Method 8310) RCL = Residual Contaminant Level

-- = No Standards Established

† = Detected above the Limit of Detection but below the Limit of Quantitation Bold = Exceeds NR 720 Soli Standards

<u>Underline</u> = Exceeds NR746 Table 1 or Table 2 Values

·= Not tested

I:\data\excel\em\15000\15818E\SI Report (phase 160)\Soil Results-North Parcel SI.xls:PAH-Metalssoil

^{**}NR 720 Soil Standards for Chromium listed is for hexavalent species. Standards for trivalent species are less restrictive. Additional testing would be necessary to identify species detected.

REFERENCES



5308 South Twelfth Street Sheboygan, WI 53081 Telephone: (414) 458-6164 Fax: (414) 458-0369

February 4, 1997

13635E100/200

Mr. John Angeli, Director of Redevelopment City of Fond du Lac 150 South Macy Street P.O. Box 150 Fond du Lac, WI 54936

Subject:

Phase I and II-Environmental Site Assessment

Quicfrez Complex 105 Oak Place

Fond du Lac, Wisconsin

Dear Mr. Angeli:

The *Phase I and II–Environmental Site Assessment* report for the subject site is enclosed. This report was prepared in accordance with our Phase I proposal, dated September 20, 1996, authorized on September 27, 1996 and our Phase II amendment dated December 19, 1996, authorized on December 20, 1996.

We appreciate this opportunity to provide engineering services to you. If you have any questions concerning this report, please call us at 1-800-969-7013.

Sincerely,

MILLER ENGINEERS & SCIENTISTS

Tammy L Kuehlmann, P.E.

Civil Engineer

Peter G. Pittner, M.S.

Senior Environmental Scientist

TLK/bjj

Enclosures

Distance	Source Id	Name	Status	Well#	Availability	Туре	Source	Depth (ft.)
0.60		12 WELL #12	Active	BF798	Permanent	Source	GROUND WATER SOURCE	745
1.00		11 WELL #11	Active	BF797	Permanent	Source	GROUND WATER SOURCE	760
1.22		22 WELL #22	Active	AC339	Permanent	Entry Point and Source	GROUND WATER SOURCE	658
1.27		15 WELL #15	Active	BF801	Permanent	Source	GROUND WATER SOURCE	775
1.30		14 WELL #14	Active	BF800	Permanent	Entry Point and Source	GROUND WATER SOURCE	835
1.40		10 WELL #10	Active	BF796	Permanent	Source	GROUND WATER SOURCE	855
1.60		16 WELL #16	Active	BF802	Permanent	Entry Point and Source	GROUND WATER SOURCE	970
1.62	•	13 WELL #13	Active	BF799	Permanent	Source	GROUND WATER SOURCE	790
2.25		18 WELL #18	Active	BF804	Permanent	Source .	GROUND WATER SOURCE	789
2.25		21 WELL #21	Active	BF807	Permanent	Entry Point and Source	GROUND WATER SOURCE	783
2.44		19 WELL #19	Active	BF805	Permanent	Source	GROUND WATER SOURCE	870
3.18		20 WELL #20	Active	BF806	Permanent	Source	GROUND WATER SOURCE	910
3.25	ı	17 WELL #17	Active	BF803	Permanent	Source	GROUND WATER SOURCE	1025
3.68	l	23 WELL #23	Active	AY377	Permanent	Source	GROUND WATER SOURCE	965
4.40		24 WELL #24	Active	AY378	Permanent	Source	GROUND WATER SOURCE	1055
5.28	•	25 WELL #25	Active	AY379	Permanent	Source	GROUND WATER SOURCE	1150
		200	Active		Permanent	Entry Point	PERMANENT GROUND WATI	ER ENTRY POINT
		300	Active		Permanent	Entry Point	PERMANENT GROUND WAT	ER ENTRY POINT
	Source Id	Name	Status	Well#	Location	Availability	Type	Source Depth (ft.)
2.85	i	2 WELL #2	Active	BF810		Permanent	Entry Point and Source	GROUND WATER SOUR 665
2.90		3 WELL #3	Active			Permanent	Entry Point and Source	GROUND WATER SOUR 368
3.50		4 WELL #4	Active		VAN DYNE ROAD	Permanent	Entry Point and Source	GROUND WATER SOUR 750

552627	75 Fond du Lac city Fond du Lac	42,203	TOTAL
Miles	apportioned pop.	3-12	
025	0	0.0	(

ivilles	арроглопеа рор.	3-12	
025	0	0.0	0
.255	2638	1013.0	2637.69
.5-1	0	0.0	0
1-2	18464	2939.0	18463.8
2-3	7913	2122.0	10920.7
3-4	7913	417.0	9504.9
		6491.0	
		649.1	

5558000 North Fond du Lac village Fond du Lac Mary Hill Park

4,557 88

3007.62 1503.81



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor George E. Meyer, Secretary William R. Selbig, Regional Director Northeast Regional Headquarters Solid Waste Office PO Box 10448, 1125 N. Military Ave. Green Bay, Wisconsin 54307-0448 TELEPHONE 414-492-5916 FAX 414-492-5859 TDD 414-492-5812

February 28, 1997

First & Portland

ATTN: Leonard Hughes

PO Box 1423

Fond du Lac, WI 54936-1423

SUBJECT:

Reported Contamination at QUICFREZ Complex, 105 Oak Place, Fond du Lac,

Wisconsin

BRRTS CASE #02-20-118383

Dear Mr. Hughes:

The Wisconsin Department of Natural Resources has been notified of contamination at the above referenced location.

Based on the information received by the Department of Natural Resources, we believe you are responsible for restoring the environment at this site under Section 292.11, Wisconsin Stats., known as the hazardous substances spills law. Your responsibilities include investigating the extent of the contamination and then selecting and implementing the most appropriate remedial action. Enclosed is information to help you understand what you need to do to ensure your compliance with the spills law.

The purpose of this letter is threefold: 1) to describe your legal responsibilities, 2) to explain what you need to do to investigate and clean up the contamination, and 3) to provide you with information about cleanups, environmental consultants, possible financial assistance, and working cooperatively with the Department of Natural Resources.

Legal Responsibilities:

Your legal responsibilities are defined both in statute and in administrative codes. The hazardous substances spill law, Section 292.11 (3) Wisconsin Statutes, states:

* RESPONSIBILITY. A person who possesses or controls a hazardous substance which is discharged or who causes the discharge of a hazardous substance shall take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands, or waters of the state.

Wisconsin Administrative Codes chapters NR 700 through NR 728 establish requirements for emergency and interim actions, public information, site investigations, design and operation of remedial action systems, and case closure. Chapter NR 708 includes provisions for immediate actions in response to limited contamination. Wisconsin Administrative Code chapter NR 140 establishes groundwater standards for contaminants that reach groundwater.

Steps to Take:

The longer contamination is left in the environment the farther it can spread and the more it may cost to clean up. Quick action may lessen damage to your property and to neighboring properties and reduce your costs in investigating and cleaning up the contamination. To ensure that your cleanup complies with Wisconsin's laws and



administrative codes, you should hire a professional environmental consultant who understands what needs to be done. These are the first four steps to take:

- 1. By April 1, 1997, please submit <u>written</u> verification (such as a letter from the consultant) that you have hired an environmental consultant. You will need to work quickly to meet this timeline.
- 2. By May 1, 1997, your consultant must submit a workplan and a schedule for conducting the investigation. The consultant must follow the Department's administrative codes and our technical guidance documents. Please include with your workplan a copy of any previous information that has been completed (such as an underground tank removal report or a preliminary soil excavation report).
- 3. Please keep us informed of what is being done at your site. You or your consultant must provide us with a <u>brief</u> report at least every 90 days, starting after your workplan is submitted. These quarterly reports should summarize the work completed since the last report. Quarterly reports need only include one or two pages of text, plus any relevant maps and tables. However, please note that should conditions at your site warrant, you may receive a letter requiring more or less frequent contacts with the Department.
- 4. When the site investigation is complete, your consultant must submit a full report on the extent and degree of soil and groundwater contamination and a proposal for cleaning up the contamination.

Due to the number of contaminated sites and our staffing levels, we will be unable to respond to each report. To maintain your compliance with the spills law and chs. NR 700 through NR 728, do not delay the investigation and cleanup of your site by waiting for DNR responses. We have provided detailed technical guidance to environmental consultants. Your consultant is expected to be familiar with our technical procedures and administrative codes and should be able to answer your questions on meeting Wisconsin's cleanup requirements.

Your correspondence and reports regarding this site should be sent to the Department at the following address:

Wisconsin Department of Natural Resources Roxanne Nelezen Chronert 1125 North Military Avenue P.O. Box 10448 Green Bay, WI 54307-0448

If the contamination does not include groundwater contamination, the responsibility for governmental oversight of this site will be transferred to the Department of Commerce in accordance with Wisconsin Act 27.

Unless otherwise requested, please send only one duplexed copy of all plans and reports. Correspondence should be identified with the assigned DNR identification number BRRTS CASE #02-20-118383.

Information for Site Owners:

Enclosed is a list of environmental consultants and some important tips on selecting a consultant. Also enclosed are materials on controlling costs, understanding the cleanup process, and choosing a site cleanup method. This information has been prepared to help you understand your responsibilities and what your environmental consultant needs to do. Please read this information carefully.

If you have any questions about this letter or your responsibilities, please call me at (414) 492-5592.

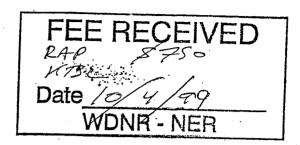
Thank you for your cooperation.

Sincerely,

Roxanne Nefezen Chronert Spills Coordinator - Hydrogeologist

Enclosure

City of Fond du Lac, John Angeli; PO Box 150; Fond du Lac, WI 54936-0150 cc:



Remedial Investigation/ Remedial Action Plan Report

FORMER QUICFREZ COMPLEX

105 Oak Place Fond du Lac, Wisconsin

OCT 0 4 1999 LMD SOLID WASTE

PREPARED FOR:

City of Fond du Lac 160 South Macy P.O. Box 150 Fond du Lac, WI 54936 Telephone (920) 929-3316 Fax (920) 929-3291

PREPARED BY:

Miller Engineers & Scientists 5308 S. 12th Street Sheboygan, WI 53081 Telephone (920) 458-6164 Fax (920) 458-0369 Project No. 13635E300

September 30, 1999

CITY OF FOND DU LAC - Memorandum

City Clerk's Office

Date:

September 28, 2000

To:

John Angeli, Redevelopment Director

From:

Tess Hochrein, City Clerk

Re:

Resolution No. 7201, A Resolution Of Necessity Relating To The

Condemnation Of The Quick Freeze Property

The subject document was adopted at the September 28, 2000 City Council Meeting.

A copy is attached for your records.



SEP 29 2000

DEPARTMENT OF COMMUNITY DEVELOPMENT

JURISDICTIONAL OFFER

To: Owner:

1ST & PORTLAND CORP. 131 S. MAIN STREET FOND DU LAC WI 54935

Mortgagee:

NATIONAL EXCHANGE BANK AND TRUST

346 N. MAIN STREET FOND DU LAC WI 54935

TELMARK, LLC P O BOX 4943

SYRACUSE NY 13221 ATTN JOHN DAVIAU

PLEASE TAKE NOTICE that this document is the Jurisdictional Offer of the City of Fond du Lac, Wisconsin, in accordance with subsections 32.06(3) and 32.05(3), Wisconsin Statutes, as follows:

- 1. That on September 27, 2000, the City Council of the City of Fond du Lac adopted a resolution of necessity thereby deeming it necessary to acquire fee title to the property described in paragraph 2 herein to demolish the structures, remediate the environmental contamination, and redevelop the site for the purpose of eliminating the blight and creating additional open space, and the City of Fond du Lac in good faith intends to use the property sought to be condemned, as referred to in paragraph 2 below, for such a public purpose;
- 2. That the City of Fond du Lac intends to acquire a fee simple interest in the following described real estate:

See Exhibit A attached hereto

- 3. That the City of Fond du Lac's proposed date of occupancy of the property described in paragraph 2 above is June 1, 2001;
- 4. That the City of Fond du Lac hereby offers compensation for the real estate described in paragraph 2 above of \$67,900.00.
- 5. That compensation for additional items of damage as set forth in section 32.19, Wisconsin Statutes, may be claimed under section 32.20, Wisconsin Statutes, and will be paid if shown to exist;
- 6. That the appraisal of the property on which the City's offer is based is available for inspection and copying by persons having an interest in the lands sought to be acquired, from 7:45 a.m. to 4:30 p.m. weekdays at:

Community Development City/County Government Center 160 South Macy Street Fond du Lac WI 54935

- 7. That the owner has twenty (20) days from February 20, 2001 in which to accept or reject this offer.
- 8. That if the owner has not accepted this offer within said 20-day period, the owner has forty (40) days from February 20, 2001 to commence a court action to contest the right of condemnation, as provided in subsection 32.06(5) of the Wisconsin Statutes, provided that the acceptance and retention of any compensation resulting from an award made prior to the commencement of such action shall be an actual bar to such action;

9. That, if this offer is not accepted within 20 days, the City of Fond du Lac may petition for a determination of just compensation by the County Condemnation Commissioners of Fond du Lac County and that either party may appeal from the award of said County Condemnation Commissioners to the Fond du Lac County Circuit Court within 60 days as provided in subsection 32.06(10), of the Wisconsin Statutes.

Dated this 20th day of Echa	2001
Dated this 20th day of Febr	uary, 2001.
	CITY OF FOND DU LAC, WISCONSIN
	Marin 1 1 1 many
·	Stephen T. Nemonen, City Manager
	Theresa C. Hochrein, City Clerk
	· · · · · ·
This Jurisdictional Offer is	s accepted/rejected
chis day of	, 2001.
	· · · · · · · · · · · · · · · · · · ·
	1ST & PORTLAND CORP.
en en en en en en en en en en en en en e	
<u></u>	
	·

Return to:

John Angeli Community Development City County Government Center P.O. Box 150 Fond du Lac WI 54935

RESOLUTION NO. 7201

A RESOLUTION OF NECESSITY RELATING TO THE CONDEMNATION OF THE QUICK FREEZE PROPERTY

WHEREAS, the former Quick Freeze site ("Property"), as described in Exhibit A, contains structures that because of deterioration, age, dilapidation, are in unsafe, unsanitary, and dangerous condition; and

WHEREAS, portions of the property are environmentally contaminated and in need of environmental remediation; and

WHEREAS, these and other factors cause the Property to be blighted and impair the sound growth of the area and create an economic liability to the community; and

WHEREAS, the area of the City where the Property is located is densely developed and in need of open space; and

WHEREAS, the Redevelopment Authority of the City of Fond du Lac has held a public hearing concerning the potential acquisition, remediation and redevelopment of the Property, and received testimony supporting the findings stated above; and

WHEREAS, the Redevelopment Authority has recommended that the Property be acquired, structures demolished and the site remediated and redeveloped in a manner consistent with the City's Comprehensive Plan; and

WHEREAS, the City Council has determined that, because of the foregoing reasons, there is a necessity to acquire the Property pursuant to Section 32.06 of the Wisconsin Statutes.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Fond du Lac, Wisconsin, that:

- 1. This Resolution is a resolution of necessity, in accordance with subsections 32.06(1) and 32.07(2), of the Wisconsin Statutes, relating to the within-described remediation and redevelopment project; and
- 2. It is hereby determined that it is necessary for the City of Fond du Lac to demolish the structures, remediate the environmental contamination, and redevelop the site for the purpose of eliminating the blight and creating additional open space and,

further, that such actions are in the best interests of the citizens of Fond du Lac; and

- 3. It is hereby additionally determined that it is necessary, in furtherance of the above-stated public purpose, for the City to acquire the fee-simple title to the real estate described in Exhibit A, attached hereto and made a part of this Resolution, to complete said public improvement project.
- 4. The City of Fond du Lac will hereby acquire by condemnation, in accordance with Chapter 32 of the Wisconsin Statutes, the above-mentioned interest in the above-described real estate from the record owners thereof, said owners being the 1st & Portland Corporation, Inc., and from any and all other persons or entities who may have an interest in said real estate.

BE IT FURTHER RESOLVED that the City Council hereby authorizes and directs the proper City officials to take all necessary steps to effectuate the terms of this Resolution and complete said project.

BE IT FURTHER RESOLVED that the City Council hereby authorizes and directs the Redevelopment Authority to administer the disposition of the real estate, including evaluation of the reuse proposals.

ADOPTED: SEP 2 7 2000

Martin S. Ryan President Fond du Lac City Council

Attest:

City Attorney:

Theresa Hochrein, City Clerk

Reviewed VH



An Employee-Owned Company

December 11, 2001

Ms. Roxanne Chronert Wisconsin Department of Natural Resources 1125 North Military Avenue P.O. Box 10448 Green Bay WI 54307-0448

Subject:

Workplan

Emergency Action/Site Investigation

Quicfrez Complex-Fond du Lac, Wisconsin

BRRTS No.: 02-20-118383

Dear Roxanne:

This workplan describes the engineering services that Miller Engineers & Scientists recommends for performing emergency action services and coordination, quickturn investigation of contamination along the riverbank, contaminated soil excavation, and additional soil borings and well construction in the future. The purpose of the proposed work is to comply with WDNR requirements for stabilizing the riverbank and removing hotspot soil contamination as stated in correspondence from WDNR dated December 4, 2001 and October 8, 1999, respectively. The additional monitoring wells proposed in Miller's September 1999 Remedial Investigation/Remedial Action Plan Report have not yet been constructed.

At this time we understand that the City of Fond du Lac prefers to permanently stabilize the riverbank immediately rather than apply a temporary solution to comply with WDNR requirements. The preferred stabilization option is to cut the bank back and place geotextile fabric overlain by rip-rap. This option would require some excavation in potentially contaminated areas, which necessitates defining the horizontal and vertical extent of contamination prior to construction so that contaminated soil can be properly handled and disposed. Excavation of hotspot soil contamination to depths greater than the proposed bank cut would also have to be performed prior to stabilization.

Scope of Services

To complete the work specified above, we will perform the services outlined in *Attachment 1: Scope of Services*, which provides details of the specific scope of services that we recommend. In general, we propose to advance up to eight soil bonngs along the river and in the former basement of the North Production building for the purpose of collecting soil samples. Temporary wells will also be installed in each of the borings and groundwater samples collected if the formation yields enough water. Groundwater samples will also be collected from wells MW1, MW1A, and MW2 if they can be found.

The results of the geoprobe soil borings will be used to develop plans for bank stabilization and contaminated soil excavation/disposal in consultation with the City and WDNR. Upon approval of the plan, excavation of contaminated soil will proceed. Miller personnel will be present to observe and document the contaminated soil hotspot excavation and to collect soil samples. A mobile laboratory

FAX TRANSMITTAL

MILLER ENGINEERS SCIENTISTS

Sheboygan 5308 S 12th Street Sheboygan, WI 53081-8099 Telephone (920) 458-6164 Fax (920) 458-0369

☐ Sent from Sheboygan office

Fox Vailey 1119 W Kennedy Avenue Suite A Kimberly, WI 54136-2207 Telephone (920) 954-9100 Fax (920) 954-8720

Sent from Fox Valley office



February 22, 2002

13635E150

Ms. Roxanne Chronert Wisconsin Department of Natural Resources 1298 Lombardi Avenue Green Bay WI 54307-0448

Subject:

Revised Workplan and Schedule Site Investigation/Emergency Action

Quicfrez Complex

105 Oak Place, Fond du Lac, Wisconsin

BRRTS No.: 02-20-118383



Dear Roxanne:

Based on the results of the preliminary investigation conducted in December 2001, it became clear that additional investigation was warranted prior to developing a comprehensive remedial action plan (a summary of the preliminary investigation results is provided below). As such, this workplan describes the scope of services that Miller Engineers & Scientists recommends for performing a comprehensive site investigation prior to stabilizing the riverbank and implementing remedial action measures at the former Quicfrez Complex in Fond du Lac (refer to Figure 1: *Site Location Map*). The purpose of the proposed work is to obtain the data necessary to comply in the most economical way with WDNR requirements for stabilizing the riverbank and removing/remediating soil contamination as stated in correspondence from WDNR dated December 4, 2001 and October 8, 1999, respectively. The proposed investigation will begin Thursday, February 21, 2002.

PRELIMINARY INVESTIGATION RESULTS SUMMARY

The December 2001 preliminary investigation consisted of advancing eight borings, collecting soil samples, installing temporary wells in the borings, and collecting groundwater samples from the temporary wells and the existing monitoring wells. Boring locations are shown on Figure 2: *Proposed Boring and Monitoring Well Location Plan.* A *Soil Boring Log* for each of the borings is also attached.

In general, the results indicated that very high levels of trichloroethene (TCE) and its breakdown products were present in the soil and groundwater under the former building (now razed) and between the former building and the river. The results of soil and groundwater testing are provided in Table 1: Soil Analytic Test Results and Table 2: Groundwater Analytic Test Results (December 2001). Historical groundwater results for the existing monitoring wells are also provided for comparison in Table 3: Historical Groundwater Analytic Test Results.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

ĭ. HEADING

DATE:

March 5, 2002

SUBJECT:

Quic Frez

FROM:

Verneta Simon, OSC, U.S. EPA, Region 5, ERB, RS2, Chicago, IL

TO:

K. Mould, U.S. EPA, OSWER, Washington, DC	(703)	503-9133
R. Karl, Chief, U.S. EPA, ERB, Chicago, IL	(312)	353-9176
V. Narsete, U.S. EPA, ERB, Chicago, IL	(312)	353-9176
L. Nachowicz, Section Chief, U.S. EPA, RS3, Chicago, IL	(312)	353-9176
W. Messenger, Section Chief, U.S. EPA, ESS, Chicago, IL.	(312)	353-9176
A. Marouf, U.S. EPA, H&S, Chicago, IL	(312)	886-4071
R. Paulson/C. Allen, U.S. EPA, Public Affairs, Chicago, IL	(312)	353-1155
A. Walden, Wisconsin DNR, Madison, WI	(608)	267-7646
R. Chironert, Wisconsin DNR, Green Bay, WI	(920)	492-5913
J. Angeli, Director of Redevelopment, City of Fond du Lac, WI	(920)	929-3291
W. Rollin, Community Development Director, City of Fond du Lac, WI	(920)	929-3291
USCG, NRC, Washington, DC	(202)	267-2165

POLREP #1 (Initial)

П. BACKGROUND

Site: Quic Frez Site ID: B52T

Task Order Number: NA

Response Authority: CERCLA

CERLCIS ID: NA

NPL Status: Non-NPL

State Notification: WDNR

Latitude/Longitude: 43°46'27" N / 88°27'08" W

Start Date: March 1, 2002 Completion Date: Pending

m. SITE INFORMATION

A. Incident Category

CERCLA Emergency Response

В. Site Description

Site Location

The Quic Frez site is located at 105 Oak Place in Fond du Lac, Fond du Lac County, Wisconsin. The property is currently in redevelopment by the city for future use as a public, recreational area. Prior to the city's acquisition of the property, the site was used as a storage facility. From the 1920s to the 1960s, a refrigerator manufacturing facility operated at this location. The topography is mostly flat and open. The adjacent Fond du Lac River is approximately 10 feet downgrade of the site to the north. The Fond du Lac River flows north,

approximately 2 miles to Lake Winnebago. The area surrounding the site is residential and commercial.

Prior to October 2001, two buildings were located on the site. Demolition of the two buildings began in October. A fire in late-October occurred at the northernmost building, the production building, which was situated near the river's edge. Demolition of the remaining structure of the production building, as well as the southern storage building, was completed shortly thereafter. A 20-foot section of the retaining wall collapsed in November 2001. The large quantity of water used to douse the fire, in addition to several days of constant rains, were factors in the collapse of the retaining wall which separated the river from the site.

2. Description of Threat

An oil discharge to the Fond du Lac River was reported to the City of Fond du Lac on February 19, 2002. The Wisconsin Department of Natural Resources (WDNR) was notified of the release. On February 20, 2002, an underground storage tank (UST) was identified as the potential source of the discharge. The 1,250 gallon UST and its contents were removed. The contents of the UST were sampled and identified as fuel oil. The UST showed signs of deterioration and was compromised at several points. In addition, current and historical investigations by the city's contractor, Miller Engineers and Scientists (Miller), have shown trichloroethylene (TCE) and vinyl chloride contamination in the site soil and groundwater.

The Quic Frez site is a potential threat to the Fond du Lac River. Oil discharging into a waterway poses a threat to wildlife that live in or near the waterway; poses a threat to surrounding ecosystems; and impacts the overall downstream water quality. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP), located in *Code of Federal Regulations* Title 40 Part 300, outlines the federal authority in dealing with oil discharging into any navigable waterway.

IV. RESPONSE INFORMATION

A. Situation

1. Current Situation

The leaking UST has been sampled and removed. Absorbent boom has been placed along the river banks in the vicinity of the discharge points. The absorbent boom was put in place by WDNR and is being monitored.

A site assessment was conducted, including waste characterization sampling for disposal. Analytical results are pending.

2. Site Activities to Date

On February 28, 2002, WDNR contacted U.S. EPA regarding an oil discharge to the Fond du Lac River at the Quic Frez site. U.S. EPA then activated the Superfund Technical Assessment and Response Team (START) and both U.S. EPA and START mobilized to site.

On March 1, 2002, U.S. EPA and START met with officials from the City of Fond du Lac and WDNR to review current and historical information concerning the site. The City of Fond du Lac, the city's consultant (Miller), U.S. EPA, and START conducted a site walk-through. Miller, who has been conducting an environmental investigation at the site, identified three zones of contamination. From west to east the zones are petroleum contamination from the UST breach, a mix of petroleum and TCE contamination, and TCE contamination from historical activities at the site. The past discharge points were identified as well as the area from which the UST was removed. At the time of the site visit, the river was frozen which impaired a direct view of the current discharge. Approximately 200 feet of absorbent boom was in the river. After the site walk-through \$30,000 was obligated by U.S. EPA to allow mobilization of ERRS while estimated costs could be prepared.

At 1515, U.S. EPA and START met with the ERRS contractor on site. ERRS excavated two test pits. The first test pit was located immediately west of monitoring well MW-2, approximately 8 feet from the retaining wall. A waste characterization sample was collected from the test pit at approximately 8 to 10 feet below ground surface (bgs). A second test pit was located between monitoring wells MW-1 and MW-4, approximately 18 feet from the retaining wall. A waste characterization sample was collected from this test pit at approximately 6 to 8 feet bgs. START conducted air monitoring around the test pits and took sample headspace readings. Test pits and sample headspace readings were higher at the first test pit than the second. Readings from the first test pit were 17 parts per million (ppm) above background on the flame ionization detector and 13 ppm in the second test pit. Sample headspace readings were approximately half the levels found in the respective test pits. Test pits were backfilled after sample collection. Samples were delivered to the laboratory for Protocol B analysis.

3. Enforcement N/A

B. Next Steps

After reviewing analytical data, U.S. EPA will arrange for a removal action to excavate and dispose of the contaminated soil found on site under CERCLA. U.S. EPA will excavate soil contaminated with petroleum product and/or TCE along the river, a 20-foot wide section, 170 feet in length, to a depth of 10 feet. U.S. EPA will also excavate the surface soils which pose a direct contact threat due to TCE-contaminated soil in the northeast portion of site, covering approximately 4,800 square feet (ft²). Approximately 2,200 cubic yards of contaminated soil will be addressed by U.S. EPA. See attached map for areas to be excavated. The area of excavation adjacent to the river will be backfilled with clay by U.S. EPA, and the City of Fond du Lac will install a geotextile liner and rip-rap along the river bank. The 4,800 ft² area of excavation in the northeastern portion of site, will be backfilled to grade by U.S. EPA. U.S. EPA will mobilize to the site on March 11, 2002 to begin excavation activities in order to allow the City to begin installation of the geotextile liner and rip-rap during the week of March 17, 2002.

WDNR will dispose of the petroleum-contaminated soil which is currently stockpiled at the Quie Frez site. The stockpile contains soil excavated during the UST removal.

C. <u>Key Issues/Other Information</u>

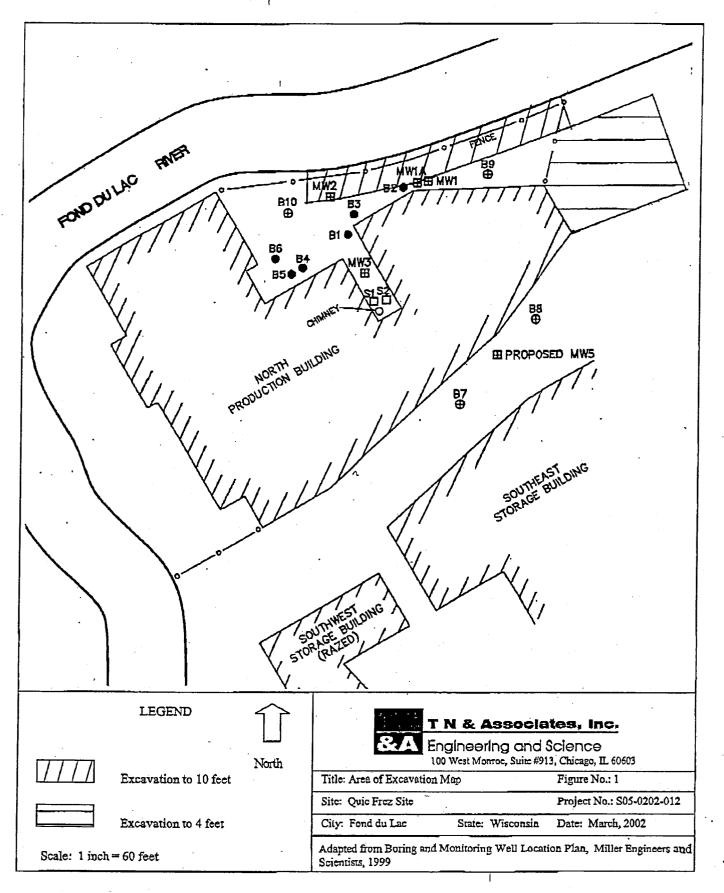
Current and oncoming weather conditions have significantly affected the activities at the site. The forecasted snow storm which deposited 12 inches of snow on March 1 - 2, 2002 in Fond du Lac delayed mobilization for removal activities. The low temperatures caused the river to freeze over and prevented sample collection from the river.

Miller concludes site work (well installation and soil borings) on March 6, 2002.

V. COST INFORMATION

U.S. EPA	\$ NA	
START	\$ 2,890	
ERRS	\$ <u>NA</u>	
Total	\$	(Estimated as of March 4, 2002)

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.





State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor Darrell Bazzell, Secretary

101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
Telephone 608-266-2621
FAX 608-267-3579
TTY 608-267-6897

March 6, 2002

Tom Geishecker US EPA Region 5 77 West Jackson Blvd. Chicago, IL 60604

Subject: Request for Removal Assistance

Dear Mr. Geishecker:

The Wisconsin Department of Natural Resources (WDNR) requests U.S. EPA Region 5 Emergency Response Branch assistance to help evaluate the threat posed by the release of liquid chemicals from the soils along the Fond du Lac River and contaminated soils in the river and along the shoreline at the former **Quic Frez Property**, **Fond du Lac**, **Fond du Lac County** in Wisconsin. The site is located adjacent to the Fond du Lac River. I have included a RISE form with this letter.

Representatives from WDNR and the City of Fond du Lac spoke with OSC Charlie Gebien and OSC Vernita Simon on 02/28/02 to assess the need for removal action at this site. As a result of the conversation, Vernita Simon mobilized to the site with START contractors on 03/01/02 to determine whether an emergency or time critical was warranted. As a result of further discussions the following response actions were agreed to by EPA, WDNR and the City of Fond du Lac.

- DNR will continue to provide booms and pads to contain the release from the tank to the river.
 - DNR will handle the stock piled soil on site (soils from the tank search).
- EPA will be removing soils to a depth not a clean-up standard.
- EPA is planning on removing the direct contact soils on the East end of the property and refilling the excavation.
- EPA will be removing the soils from the Fond du Lac River.
- EPA will be removing the wall and 170 feet of the shore line, 10 feet down, back ~ 20 feet
- EPA will be putting in a 2 foot clay cap over the cut back. With the 2X1 cut back they will be able to obtain a greater compaction rate then originally thought with the 1X1 cut back.
- EPA collected soil samples for waste characterization 03/01/02.

The City is responsible for putting in a geomembrane and rip/rap on the river cut back, in order to maintain the clay cap to be installed by EPA. After the removal is completed. WDNR will be evaluating the site for long-term remediation of the groundwater. Please contact me (608) 267-5063 if you have any questions or concerns regarding this site. Thank you for your prompt attention to this site.

Sincerely,

Amy S. Walden Federal Removals Coordinator Bureau for Remediation and Redevelopment

cc: Roxanne Chronert/ Jennifer Pelczar/ Bruce Urben - NER



Q 002/005

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

DATE:

March 25, 2002

SUBJECT:

Quic Frez

FROM:

Verneta Simon, OSC, U.S. EPA, Region 5, ERB, RS2, Chicago, IL

TO:

K. Mould, U.S. EPA, OSWER, Washington, DC	(703)	603-9133
R. Karl, Chief, U.S. EPA, ERB, Chicago, IL		
V. Narsete, U.S. EPA, ERB, Chicago, IL		
L. Nachowicz, Section Chief, U.S. EPA, RS3, Chicago, IL		
W. Messenger/A. Lilly, U.S. EPA, ESS, Chicago, IL.		
A. Marouf, U.S. EPA, H&S, Chicago, IL		
M. Geall, U.S. EPA, Office of Regional Counsel, Chicago, IL		
R. Paulson/C. Allen, U.S. EPA, Public Affairs, Chicago, IL	(312)	353-1155
A. Walden, Wisconsin DNR, Madison, WI	(608)	267-7646
R. Chironert, Wisconsin DNR, Green Bay, WI		
J. Angeli, Director of Redevelopment, City of Fond du Lac, WI	(920)	929-3291
W. Rollin, Community Development Director, City of Fond du Lac, WI	(920)	929-3291
USCG, NRC, Washington, DC.	(202)	267-2165

POLREP #2

II. BACKGROUND

Site: Quic Frez Site ID: B52T

Task Order Number: 73

Response Authority: CERCLA

CERLCIS ID: NA

NPL Status: Non-NPL State Notification: WDNR

Latitude/Longitude: 43°46'27" N / 88°27'08" W

Start Date: March 1, 2002 Completion Date: Pending

HI. SITE INFORMATION

A. Incident Category

CERCLA Emergency Response

B. Site Description

1. Site Location

The Quic Frez site is located at 105 Oak Place in Fond du Lac, Fond du Lac County, Wisconsin. See POLREP #1 (initial) for further details.

2. Description of Threat

An oil discharge to the Fond du Lac River was reported to the City of Fond du Lac on February 19, 2002. The Wisconsin Department of Natural Resources

(WDNR) identified an underground storage tank (UST) as the potential source of the discharge, and the UST and its contents of fuel oil were removed. In addition to petroleum contamination, current and historical investigations have shown trichloroethylene (TCE) and vinyl chloride contamination in the site soil and groundwater. See POLREP #1 (initial) for further details.

IV. RESPONSE INFORMATION

A. Simution

I. Current Situation

U.S. EPA has excavated and stockpiled soil contaminated with petroleum product and/or TCB adjacent to the river from a 20-foot wide section, 220 feet in length, to a depth of 10 feet. The City of Fond du Lac is working on the installation of a geotextile liner and rip-rap along the river bank.

A site assessment was conducted of the direct contact area on the northeastern portion of the site to further define the extent of contamination in that area. Analytical results are pending.

2. Site Activities to Date

On March 11, 2002, U.S. EPA, the Superfund Technical Assessment and Response Team (START)contractor, and Emergency and Rapid Response Services (ERRS) contractor mobilized to site. ERRS prepared the site for excavation by relocating drums from the City of Fond du Lac's contractor Miller Engineering & Scientists (Miller) work on site, removing the fence on the northeastern portion of the site, and leveling the area for the stockpile. ERRS started excavation at the east end of the concrete retaining wall along the river. START collected five soil samples S-1 through S-5 in the northeast portion of the site. Soil samples were collected to define the extent of contamination in the area which poses a direct contact threat due to TCE-contamination. Samples were delivered to Great Lakes Analytical Laboratory in Milwaukee, Wisconsin for VOC analysis.

On March 12, 2002, ERRS continued excavation and removal of the retaining wall. START conducted air monitoring in the excavation area and along the perimeter of the site. Readings were within background levels on the photo ionization detector (PID) and dust monitor. ERRS prepared the staging area and placed more absorbent boom on the river because of a visible oily sheen. WDNR visited the site to document site activities. ERRS encountered and removed a drain during excavation along the collapsed part of the wall. The drain did not appear to be connected to any pipes. Monitoring well MW-1, previously installed by Miller, was located within the area of excavation. During excavation, the integrity of MW-1 was compromised.

On March 13, 2002, clay backfill arrived on site. START continued air monitoring in the area of excavation and readings were within the background levels on the PID and dust monitor. Oily sheen continued to be visible on the river beyond the boom. Excavation continued west along the river bank. U.S. EPA and Miller assessed the viability of monitoring well MW-1 and decided to replace the well on March 15, 2002.

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On March 14, 2002, ERRS removed the remaining concrete footings at the west end of the excavation and completed excavation along the river bank. START collected four soil samples at the bottom of the excavation area before the clay backfill was placed along the river. Soil samples E-1 through E-4 were collected to identify organic chemical constituents within the soil remaining below the excavation. Samples were shipped to Great Lakes Analytical Laboratory for VOC and SVOC analyses. ERRS added clay to the river bank starting at the east end of the excavation. The clay was then compacted before the second layer of clay was backfilled. Monitoring well MW-2 was damaged during excavation work but not compromised. The silt curtain placed along the river by WDNR was removed because of its absorption of oil and lack of effectiveness and was replaced by ERRS on March 15, 2002.

On March 15, 2002, a second layer of clay was placed on the river bank and clay was further compacted. START performed air monitoring around the perimeter of the excavation and readings were within the background levels. A silt curtain was placed in the river along with new absorbent boom. ERRS began clean up of site and prepared for demobilization of personnel and equipment on March 16, 2002.

3. Enforcement N/A

B. Next Steps

The City of Fond du Lac is expected to complete the installation of the geotextile liner and rip-rap along the river during the week of March 18, 2002. U.S. EPA will mobilize to the site on March 25, 2002 to begin transportation and disposal of the stockpile of soil excavated from the area adjacent to the river. After reviewing analytical data, U.S. EPA will also determine the extent of contamination of the surface soils in the northeast portion of site and proceed with excavation and disposal of that area. The area of excavation in the northeastern portion of site, will be backfilled to grade by U.S. EPA.

WDNR will dispose of the petroleum-contaminated soil which is currently stockpiled at the Quic Frez site. The stockpile contains soil excavated during the UST removal.

C. Key Issues/Other Information

On March 15, 2002, Miller and Environmental Drilling Services, Inc. (EDS) were on site to replace monitoring well MW-1 and repair monitoring well MW-2. The new monitoring well was drilled 5 feet south of the original location and the original MW-1 was abandoned.

2005/005

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V. COST INFORMATION

The amount obligated for this site has been increased to \$100,000.

START

\$10,000

ERRS

\$37,000

(Estimated as of March 15, 2002)

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

DATE: May 22, 2002 SUBJECT: Quic Frez Site, Fond du Lac, Wisconsin Verneta Simon, OSC, U.S. EPA, Region 5, ERB, RS2, Chicago, IL FROM: TO: K. Mould, U.S. EPA, OSWER, Washington, DC (703) 603-9133 L. Nachowicz, Section Chief, U.S. EPA, RS3, Chicago, IL (312) 353-9176 A. Marouf, U.S. EPA, H&S, Chicago, IL (312) 886-4071 M. Geall, U.S. EPA, Office of Regional Counsel, Chicago, IL. (312) 886-7160 R. Paulson/C. Allen, U.S. EPA, Public Affairs, Chicago, IL (312) 353-1155 A. Walden, Wisconsin DNR, Madison, WI (608) 267-7646 R. Chironert, Wisconsin DNR, Green Bay, WI.....(920) 492-5913 J. Pelczar, Wisconsin DNR, Osh Kosh, WI......(920) 424-4404 J. Angeli, Director of Redevelopment, City of Fond du Lac, WI (920) 929-3291 W. Rollin, Community Development Director, City of Fond du Lac, WI (920) 929-3291

POLREP #3 and Final

II. BACKGROUND

Site: Quic Frez Site ID: B52T

Task Order Number: 73

Response Authority: CERCLA CERLCIS ID: WIN000508296

NPL Status: Non-NPL State Notification: WDNR

USCG, NRC, Washington, DC. (202) 267-2165

Latitude/Longitude: 43°46'27" N / 88°27'08" W

Start Date: March 1, 2002

Completion Date: April 25, 2002

III. SITE INFORMATION

Site Description

A. Incident Category

CERCLA Emergency Response

B. <u>Site Description</u>

1. Site Location

The Quic Frez site is a 4.1 acre site located at 105 Oak Place in Fond du Lac, Fond du Lac County, Wisconsin. Refer to POLREP #1 for more detailed site information.

2. Description of Threat

An oil discharge to the Fond du Lac River was reported to the City of Fond du Lac on February 19, 2002. The Wisconsin Department of Natural Resources (WDNR) identified an underground storage tank (UST) as the potential source of the discharge, and the UST and its contents of fuel oil were removed by the City of Fond du Lac. In addition to petroleum contamination, current and historical investigations have shown trichloroethylene (TCE) and vinyl chloride contamination in the site soil and groundwater. Refer to POLREP #1 for more detailed site information.

IV. RESPONSE INFORMATION

A. <u>Situation</u>

1. Current Situation

U.S. EPA has removed and disposed of soil contaminated with petroleum product and/or TCE adjacent to the river along with soil contaminated with TCE, at the northeast portion of the site, which posed a direct contact threat.

2. Site Activities to Date

On March 25, 2002, U.S. EPA, the Superfund Technical Assessment and Response Team (START), and Emergency and Rapid Response Services (ERRS) contractors mobilized to site. ERRS loaded soil excavated from along the river bank into trucks for disposal at Hickory Meadows Landfill in Hilbert, Wisconsin. START performed air monitoring and collected samples of the stockpile for diesel range organic (DRO) and benzene analyses needed for disposal. Air monitoring readings were within background levels on the photo ionization detector (PID) and dust monitor.

On March 26, 2002, ERRS completed disposal of the stockpile of soil and debris excavated from the river bank. Approximately 750 tons of soil and concrete was removed from site and disposed at Hickory Meadows Landfill. START conducted air monitoring and collected a composite soil sample D-1 COMP for waste characterization from the area which posed a direct contact threat due to TCE contamination. START had previously collected five soil samples S-1 through S-5 from this portion of the site to delineate the area that would need to be excavated and needed an additional sample for waste characterization. The composite soil sample was analyzed for toxicity characteristic leaching procedure (TCLP) volatile organic compounds (VOC) and TCLP metals analyses. The sample was sent to Great Lakes Analytical Laboratory in Buffalo Grove, Illinois.

On March 29, 2002, START received laboratory results on the composite soil sample taken for TCLP VOC and TCLP metal analyses. All results were below the TCLP waste characterization limits specified in Title 40 of the *Code of Federal Regulations* Part 261.24, Paragraph (b) and were determined to be non-hazardous.

On April 25, 2002, U.S. EPA, START, and ERRS mobilized to site for excavation of the direct contact threat area in the northeast portion of the site.

U.S. EPA and START delineated an area of approximately 1,400 square feet (ft²) to be excavated to a depth of 4 feet below ground surface (bgs). The excavation area was based on results of soil samples S-1 through S-5 and historical data. TCE ranged from 0.094 parts per million (ppm) to 71 ppm at the surface of the direct contact threat area. The data was evaluated against an applicable or relevant and appropriate requirement (ARAR) provided by WDNR. This ARAR was 8.5 ppm for TCE in soils. Approximately 222 tons of soil was removed from the northeast portion of the site and taken to Hickory Meadows Landfill for disposal.

START collected soil samples D-1 through D-3 from the bottom of the excavated area for VOC and semivolatile organic compounds analyses to assist WDNR and the City of Fond du Lac in evaluating the need for future remediation activities at the site. Sample D-1 was taken closest to the river and sample D-2 and sample D-3 were taken further south, respectively. Samples were sent to Great Lakes Analytical Laboratory for analyses (See Table 1 and Table 2 for a summary of the soil analytical results at the bottom of the excavation along the river bank and at the bottom of the area which posed a direct contact threat, respectively). Air monitoring was also conducted during sampling and readings were within background levels on the PID. After samples were collected, the ERRS contractor backfilled and compacted the excavation area in the northeastern portion of the site with clay. ERRS marked off the area of excavation, decontaminated the equipment, and secured the gate on site at the end of site activities on April 25, 2002.

3. Enforcement N/A

B. Next Steps

Completion of the removal summary report is pending.

C. Key Issues/Other Information

WDNR has been granted State Funded Response money for this site for possible groundwater remediation. WDNR is currently evaluating different options for long-term remediation at the site for future redevelopment of the property.

V. COST INFORMATION

The amount obligated for the ERRS contractor on this site has been increased to \$100,000.

U.S. EPA NA

START \$ 28,000

ERRS \$ 37,000 (Estimated as of March 15, 2002)

The amount for the cleanup contracting costs has not been determined as of this date because of an accounting error. Costs from the Carlson Residence Mercury site have been erroneously charged to the Quic Frez site and are pending correction. The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI. DISPOSITION OF WASTES

Wastestream	Medium	Quantity	Treatment	Disposal
Fuel oil/TCE	Soil/Concrete	750 tons	Landfill	Hickory Meadows Hilbert, WI
TCE	Soil	222 tons	Landfill	Hickory Meadows Hilbert, WI

Δ

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS AT BOTTOM OF RIVERBANK EXCAVATION
QUIC FREZ SITE
FOND DU LAC, FOND DU LAC COUNTY, WISCONSIN

Field Sample ID	E-1	E-2	E-3	E-4		
Sampth Depth (inches)	60	72	72	72		
Volatile Organic Compounds (μg/kg)						
Acetone	226 J	162 J	94.2 J	57.2 J		
Benzene	127	17.6	8.03	ND		
2-Butanone	25.5 J	23.5 J	ND UJ	ND UJ		
cis-1,2-Dichloroethene	23.7	238	21.9	ND		
Ethylbenzene	ND	38.7	ND	ND		
4-Methyl-2-pentanone	80.5 J	ND UJ	ND UJ	נט מא		
Toluene	144	47.9	9.38	6.66		
Trichloroethene	12,500	4,810	87.5	21.1		
Vinyl chloride	ND	25.1	ND	ND .		
Total Xylenes	34.3	307	19.1	13.3		
Semivolatile Organic Compounds (µg/kg)						
Benzo(a)anthracene	807 J	10,100	2,070	559		
Benzo(a)pyrene	776 J	9,640	2,180	523		
Benzo(b)fluoranthene	1,030 Ј	14,500 Ј	3,270 J	782 J		
Benzo(ghi)perylene	ND	6,840	1,560	384		
Benzo(k)fluoranthene	757 J	. 7,530	1,420	270		
Chrysene	1,040 J	13,700	3,020	669		
Fluoranthene	2,230 J	- 33,600	6,370	1,590		
Indeno(1,2,3-cd)pyrene	ND	6,730	1,490	373		
Phenanthrene	2,160 J	39,70 0	7,320	1,460		
Ругеле	2,650 J	39,300	9,190	2,060_		

Notes:

μg/kg - Micrograms per kilogram.

ND - Analyte not detected at or above the reporting limit.

UI - The analyte was not detected in the sample. The reported quantitation limit is considered estimated for QC reasons.

J - The analyte was detected. The reported numerical value is considered estimated for QC reasons.

TABLE 2 SUMMARY OF SOIL ANALYTICAL RESULTS AT BOTTOM OF DIRECT CONTACT THREAT EXCAVATION QUIC FREZ SITE

FOND DU LAC, FOND DU LAC COUNTY, WISCONSIN

Field Sample ID	D-1	D-2	D-3			
Sampth Depth (inches)	48	48	48 .			
Volatile Organic Compounds (μg/kg)						
Acetone	ND	ND	65.1			
Methylene chloride	5.74 AB	ND	5.97 AB			
Trichloroethene	10.3	MD	31.6			
Semivolatile Organic Compounds (µg/kg)						
Anthracene	ND	ND	217			
Benzo(a)anthracene	253	ND	490			
Benzo(a)pyrene	279	ND	430 .			
Benzo(b)fluoranthene	447	ND	544			
Benzo(ghi)perylene	323	ND	456			
Benzo(k)fluoranthene	153	ND	167			
Chrysene	369	ND	514			
Fluoranthene	788	ND	1,190			
Indeno(1,2,3-cd)pyrene	202	ND	295			
2-Methylnapthalene	ND	ND	119			
Phenanthrene	842	ND	1,230			
Phenol	ND	ND	3,730			
Pyrene	1,100	ND	1,900			

Notes:

μg/kg - Micrograms per kilogram.

- A The concentration of the analyte detected in the sample is characteristic of a laboratory artifact.
- B The method blank associated with the sample contains 6.23 $\mu\text{g/kg}$ of this analyte.
- ND Analyte not detected at or above the reporting limit.

Analytical results from this table have been finalized by Great Lakes Analytical Laboratory but are pending complete analytical data validation.

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JUL 25 2002

TRACKED A

REMOVAL ACTION SUMMARY REPORT
QUIC FREZ SITE
FOND DU LAC, FOND DU LAC COUNTY, WISCONSIN

Prepared for

U.S. Environmental Protection Agency Region 5 Emergency Response Branch 77 West Jackson Boulevard Chicago, IL 60604

TDD No.: S05-0202-012 July 8, 2002 Date Prepared: Contract No.: 68-W-00-129 Prepared by: TN & Associates, Inc. START Project Manager: Christianne Ottinger TN&A Telephone No.: (312) 220-7000 U.S. EPA On-Scene Coordinator: Verneta Simon Telephone No.: (312) 886-3601



MILLER ENGINEERS SCIENTISTS

An Employee-Owned Company

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DEC 16 2002

TRACKED C

39

R + R - OSH RECEIVED

DFC 16 2002

TRACKED TREVIEWED

Remedial Action Options Report

Former Quicfrez Site 105 Oak Place Fond du Lac, Wisconsin 54952



January 31, 2003

02-2-15818

Ms. Jennifer Pelczar WDNR Project Manager 625 E. County Y, Suite 700 Oshkosh, WI 54901

Subject:

Exploration for Tank—Southwest Petroleum Area

Former Quicfrez Complex

105 Oak Place

Fond du Lac, Wisconsin

BRRTS ID No. 02-20-118383

R + R - OSH RECEIVED

FEB 04 2003

TRACKED PREVIEWED

Dear Ms.Pelczar:

At the direction of WDNR, Miller Engineers & Scientists proceeded with exploration for a possible unknown underground petroleum storage tank on October 30, 2002. The area targeted for exploration was an area of apparent fuel-oil contamination encountered in the area of borings B27-B33-B37 in the southwest part of the property (refer to the attached Figure 1: October 2002 Excavation—Southwest Petroleum Area).

Exploration began by excavating a test pit near the location of boring B33 and then extending it southwest towards B27 and to the northeast towards B37. Petroleum odors were noted in soils beginning at about 6 feet depth. The strongest odors were noted at depths of 6 to 15 feet in the area between B33 and B27. Samples were collected during the excavation activity and field-screened for organic vapors with a Flame-Ionization Detector (FID). Sample locations, depths and FID readings are shown on the attached *Soil Sample Summary* field data sheet. Eight truckloads of petroleum contaminated soil (193.83 tons), excavated from depths of 6 to 15 feet in the area of B33, were hauled to the Hickory Meadows Landfill in Hilbert for biopile treatment (refer to the attached load tickets).

One soil sample, SWT-7, taken from a depth of 14 feet near B27, was submitted for laboratory analysis of Gasoline Range Organics (GRO), Diesel Range Organics (DRO), Volatile Organic Compounds (VOC), and 8 RCRA metals plus copper, nickel, and zinc. The results are summarized in Table 1: Soil Analytic Test Results—Tank Exploration. The laboratory test reports are also attached.

Although strong petroleum odors were noted during excavation, a tank was not found near B33 and B27. Therefore, the test pit was extended toward B37 and then cuts were made every 5 feet extending to the north perpendicular to the main excavation. However, a tank was not found. Soil not hauled to the landfill for treatment was returned to the excavation. It appeared that the most highly contaminated soil was removed during the exploration.

MILLER ENGINEERS SCIENTISTS

An Employee-Owned Company

Site Investigation Report

Former Quicfrez Complex

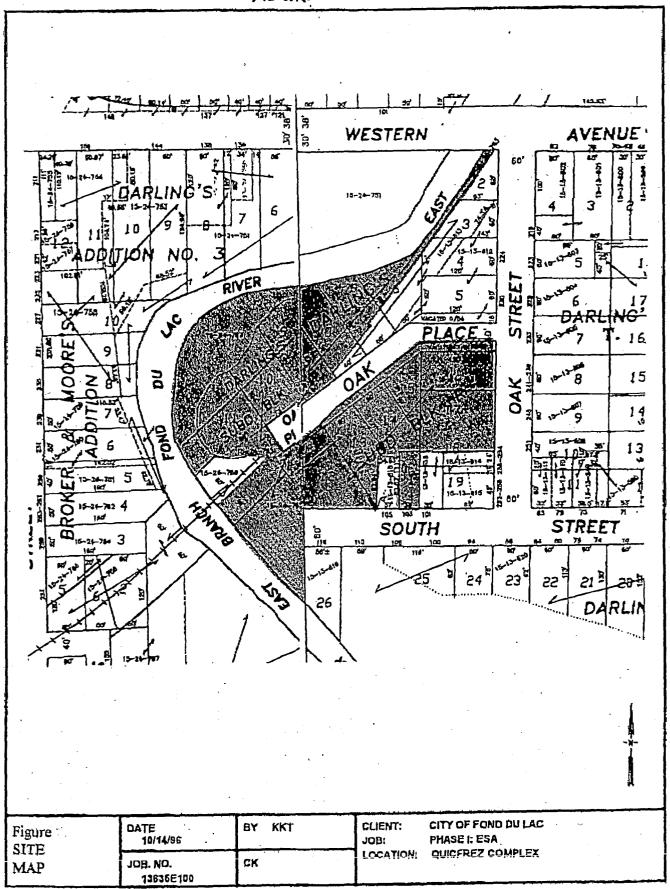
105 Oak Street Fond du Lac, Wisconsin

Job No. 02-2-15818 10-160 BRRTS ID No. 02-20-118383

Regional Site Location Map

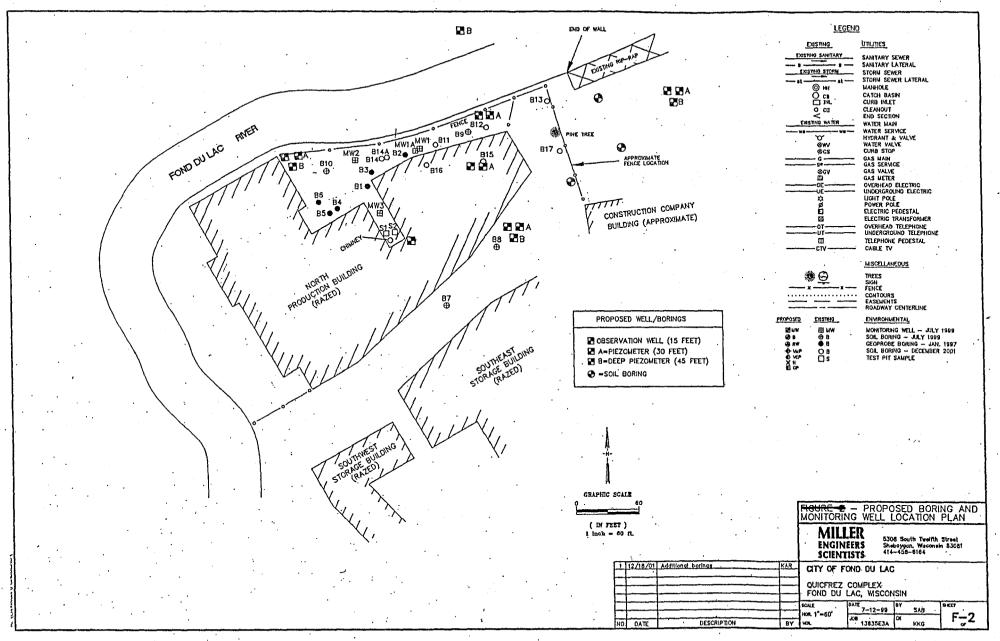
Specific Site Location Map

Darlings Subdivision Map

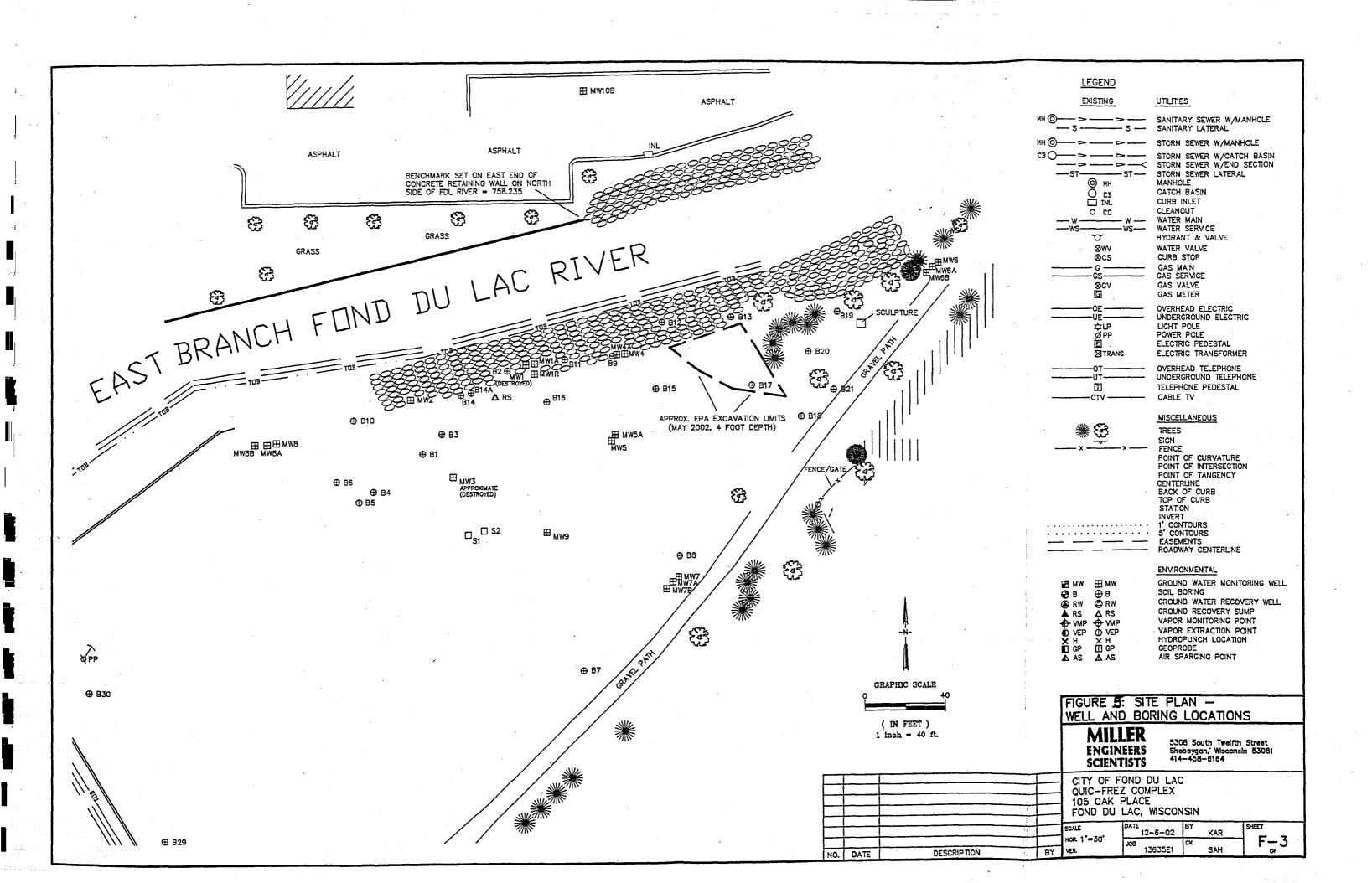


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Building Location Map

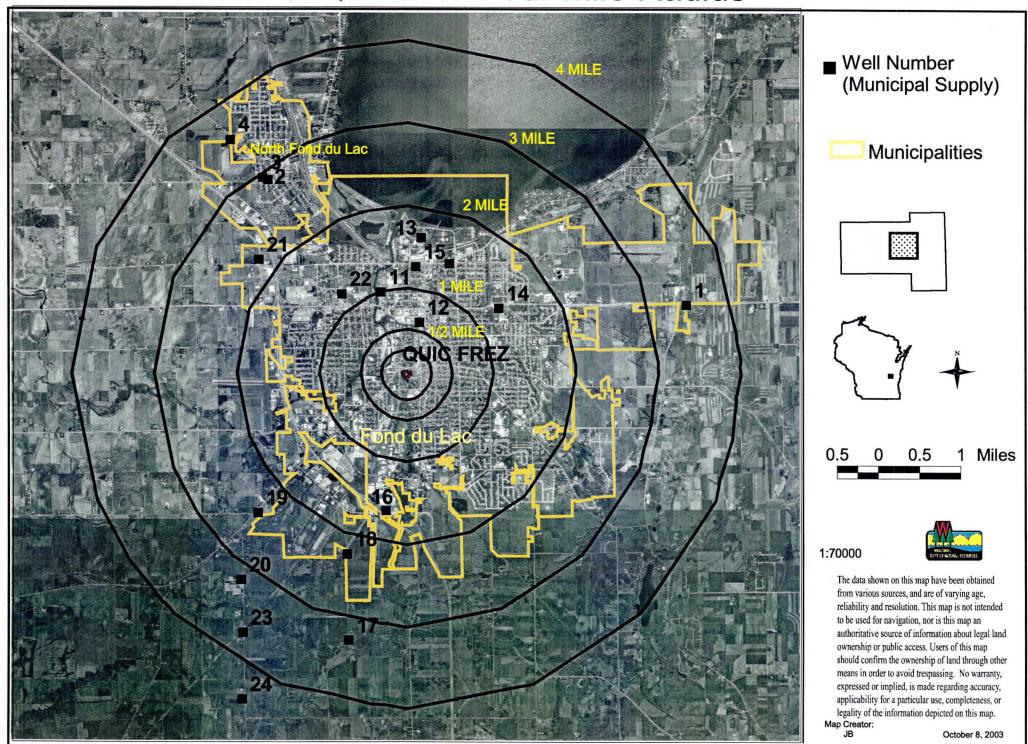


Boring and Monitoring Well Location Map



Municipal Water Supply Location Map

Quic Frez Four Mile Radius



Geologic Cross Section

