11-10-2005

FINAL REPORT

SITE INVESTIGATION REPORT

DB OAK FACILITY
700 – 710 OAK STREET
FORT ATKINSON,
JEFFERSON COUNTY
WISCONSIN

Prepared for

Thomas Industries
P.O. Box 29
Sheboygan, Wisconsin

November 2005

NewFields
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Project No. 0451-002-800

NEWFIELDS

November 10, 2005

Mr. Hank Kuehling
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Madison, Wisconsin 53711

RE: NewFields Project No. 0451-002-800
WDNR BRRTs No. 03-28-176509
Site Investigation Report
D.B. Oak Facility
700-710 Oak Street
Ft. Atkinson, Wisconsin
NewFields Project No. 0451-002-800

Dear Mr. Kuehling:

Attached is the above report of our investigation at the DB Oak facility, submitted on behalf of Thomas Industries. This report includes the results of studies performed at the facility between December 2004 and August 2005. An earlier status report that included information obtained during December 2004 was submitted to the Department in February 2005. Data from that investigation have also been included in this report.

After you have had a chance to review this document, representatives from Thomas Industries would appreciate the opportunity to meet with you at your office to discuss these findings and recommendations. I will contact you within the next two weeks to discuss your availability and possible dates and times for this meeting.

Sincerely,

NEWFIELDS

David P. Trainor, P.E., P.G.
Associate

cc: Mark Chiado, Gardner Denver
John Novak, Thomas Industries
Randall Knox, D.B Oak
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Executive Summary

The D. B. Oak property is located at 700 -710 Oak Street in Fort Atkinson, Wisconsin. As shown on Figure 1, the site is located on the north side of Fort Atkinson in the west ½ of the southwest ¼ of Section 34, Township 6 north, Range 14 east. The property is relatively flat and lies at an approximate elevation of 790 feet above mean sea level (MSL). In the vicinity of the site, regional topography slopes to the east and south towards the Rock River. The property is currently owned by D.B. Oak, and the building is occupied by 5 Alarm Fire and Safety Equipment Inc., and W & A Distribution.

Residential lighting fixtures were first manufactured at the facility by Moe Brothers Manufacturing beginning in 1939; Moe Brothers Manufacturing changed its name to Moe Lighting in 1939 and was acquired by Thomas Industries in 1948. Lighting fixtures continued to be manufactured at the facility until 1985 when Thomas sold the facility. The Wand Corporation (Wand) subsequently utilized the facility to manufacture storm doors and windows in 1985, but vacated the building by 1992. Two other businesses (Gross EMO and Wisconsin Packaging Corporation) occupied portions of the property between 1986 and 1994. Miller Machining began operating at a portion of the property in 1994.

In an August 28, 1985 letter to Wand, RMT, Inc. identified a 10,000 gallon above ground storage tank (AST) that was used to store tetrachloroethene (PCE), and an 18,000 gallon underground storage tank (UST) that held No. 2 fuel oil (see Figure 2). The Wisconsin Department of Natural Resources (WDNR) subsequently performed a generator inspection on March 27, 1986, completed at the time Wand occupied the property. The inspection was completed by Wendell Wojner of the WDNR and described in an April 1986 memo. As described in that memo, no hazardous waste was observed during the inspection. The inspection report indicated that the site had been decontaminated prior to remodeling the building based on information provided by a Wand employee. Decontamination included the removal of all hazardous waste stored on site, and the decontamination and removal of wastewater treatment tanks and degreasers. An electroplating line had been dismantled, and a new concrete floor installed; the old concrete floor had also been removed and transported off-site for disposal.[1] A foundation for a large AST remained on site at the rear of the building, but the tank had been removed.

[1] A June 1985 report prepared by Dames & Moore prior to dismantling the electroplating line described an investigation of the plating line area. Samples of concrete and subsoil were collected and analyzed for metals and cyanides. Although the concrete yielded extractable levels of chromium and cyanide, the report concluded that there was little potential for contaminant releases to groundwater or soil beyond the plating area.

A Phase I ESA completed at the site in early 1994 identified former underground petroleum storage tanks and the former PCE AST. A subsequent Phase II ESA was completed in March 1994. The Phase II ESA identified soil and groundwater contaminated with PCE and other chlorinated VOCs. The WDNR was subsequently notified of the release. The Agency then issued letters to Thomas Industries in March and again in May 2004 demanding that it complete a site investigation to identify the lateral and vertical extent of subsurface contamination associated with the PCE release.

A work plan was submitted to the WDNR in November 2004, and a preliminary hydrogeologic investigation was completed in December 2004. Results of that investigation and recommendations for additional investigation were presented in a February 2005 status report. Additional investigation was subsequently completed between April and August 2005, and results are presented in this report.

Results of this 2005 investigation indicate that groundwater quality has been impacted by chlorinated VOCs. PCE is the primary constituent of concern that exceeded groundwater quality standards, but degradation products of PCE (TCE, cis-DCE, 1,1-DCE, and vinyl chloride), and trans-DCE also exceed groundwater quality standards. The highest concentrations of chlorinated VOCs were detected in samples collected from MW-3 located adjacent to facility loading docks, and from MW-4 located adjacent to the former PCE tank. Elevated concentrations of chlorinated VOCs were also detected in samples collected from the down gradient well nest at MW-2, which is located along the southeastern property boundary. These levels indicate that contaminants have the potential to have migrated off-site. However, chlorinated VOCs were not detected in samples collected from down gradient wells MW-6 and MW-6A located approximately 600 feet south of the property, or in samples collected from down gradient well MW-1, located about 250 feet southwest of the MW-2 well nest. Hydraulic characterization data indicates that groundwater velocity is high (about 200 feet/year); seasonal water level data also indicate that the horizontal configuration of the contaminant plume is properly defined. The approximate lateral extent of the chlorinated VOC plume is shown on Figure 6.

Samples collected from piezometer MW-4A indicate that contaminants have not migrated vertically into the underlying sand near the former PCE tank. Elevated chlorinated VOC concentrations at MW-3A indicate that contaminants have migrated vertically with groundwater in the loading dock area. Lower concentrations of chlorinated VOCs detected in samples collected from piezometer MW-2A indicate that contaminants are migrating laterally with groundwater from the source area at depth. Elevated PCE degradation products at MW-2A and

MW-3A indicate that reductive dechlorination of PCE is occurring as contaminants migrate vertically and laterally. These conditions, along with the lack of contaminants at the MW-6 well nest, indicate that the aquifer shows high natural attenuation capacity.

Elevated concentrations of chlorinated VOCs detected in soil samples collected from Geoprobe borings advanced near the former PCE tank and loading dock areas indicate that source areas are located on the east side of the D.B. Oak facility building. Chlorinated VOCs were detected in soil samples collected from the saturated and unsaturated zones. Site investigation results indicate that contaminants have been absorbed into the fine-grained soil matrix encountered at shallow depths in this area. Three primary source areas have been identified: these include the former PCE tank area, the area immediately east of the primary loading dock, and a separate area about 50 feet southeast of the primary loading dock source zone. Mobile laboratory results of soils collected from these areas yielded total VOC concentrations in excess of 10,000 µg/kg within the first 10 feet from the ground surface. Based on this spatial arrangement of sample data, more than 5,000 cubic yards of material is estimated to be affected at these levels. Adjacent to these primary source zones, mobile lab results show soils contaminated with total VOCs between 1,000 and 10,000 µg/kg. An additional 6,500 cubic yards of materials within the first 10 feet is estimated at these levels at these adjacent areas. Because groundwater is encountered at shallow depths, (between three and six feet from the ground surface at the primary source areas) these contaminated soils are a source for groundwater contamination. However, the rapid flow of groundwater away from the source areas and the high concentration of degradation compounds show that the plume is not extensive and is dissipating beyond the down gradient property boundary. The results of these 2004 - 2005 investigations confirm that the contaminant sources in soil are well-defined. Similarly, seasonal monitoring of groundwater indicate that both the vertical and horizontal extent of the contaminant plume have also been well-defined

Additional soil samples should be collected and analyzed for VOCs by TCLP to determine if contaminated soil would be hazardous by characteristic (toxicity). Soil samples should also be collected and submitted for bench scale treatability studies to design a pilot test for in-situ treatment. TCLP and bench scale test results should then be submitted to the WDNR along with a completed Remediation Site Hazardous Waste Determination Form and supporting historic site data as a formal request for a hazardous waste determination. The WDNR determination will then be used as part of a remedial action options analyses. This analyses will evaluate a complete range of remedial options, including both ex-situ and full-scale in-situ alternatives.

1.1 SITE DESCRIPTION

The D. B. Oak property is located at 700 -710 Oak Street in Fort Atkinson, Wisconsin. As shown on Figure 1, the site is located on the north side of Fort Atkinson in the west ½ of the southwest ¼ of Section 34, Township 6 north, Range 14 east. The property is relatively flat and lies at an approximate elevation of 790 feet above mean sea level (MSL). In the vicinity of the site, regional topography slopes to the east and south towards the Rock River. The nearest approach of the river to the site is approximately 0.6 miles directly south of the property.

The D.B. Oak property is a triangular shaped parcel bordered by East Cramer Street to the north, Oak Street to the west-southwest, and the Union Pacific (formerly Chicago and Northwest) rail line to the east-southeast. A large building over 180,000 square feet in size and driveways and parking lots are located on the property. A parking lot and driveway accessible from North Main Street to the west is located on the west side of the facility building. A gravel driveway and loading dock area are also located on the east side of the facility building. This loading dock area is accessible from an asphalt driveway and small parking lot area located on the south side of the property and from a gravel driveway located on the north side of the facility building. A wooded undeveloped area is located between the driveway on the north side of the building and East Cramer Street. A large lawn area is located between the facility building and Oak Street. A site map for the facility is shown on Figure 2.

The D.B. Oak facility is currently leased to several tenants. W & A Distribution utilizes the northern portion of the facility building as warehouse space, and 5 Alarm Fire & Safety Inc. (5 Alarm) occupies the southern portion of the facility building. The 5 Alarm portion of the building consists of offices, shop areas for outfitting emergency vehicles, and warehouse space. Residential homes are located on the west side of Oak Street and west of the D.B. Oaks property fronting the east and west sides of North Main Street. The Lorman Iron and Metals Company (Lorman) is located on the east side of the DB Oaks property and the Union Pacific rail line. The DB Oaks property is accessible from the Lorman property via Lorman Drive. Properties south of the DB Oaks property include a parcel located at 600 Oak Street owned by Mr. Dale Maquert used for storage of equipment for a construction company, and property owned by 2L Lobe LLC and utilized for the storage of roll off boxes and dumpsters associated with the Lorman facility.

1.2 SITE HISTORY

Residential lighting fixtures were manufactured at the facility by Moe Brothers Manufacturing beginning in 1939; Moe Brothers Manufacturing changed its name to Moe Lighting in 1939 and was acquired by Thomas Industries in 1948. Lighting fixtures continued to be manufactured at the facility until 1985 when Thomas sold the facility. The actual date of the acquisition was December 1985. The Wand Corporation (Wand) subsequently utilized the facility to manufacture storm doors and windows in 1985, but vacated the building by 1992. Two other businesses (Gross EMO and Wisconsin Packaging Corporation) occupied portions of the property between 1986 and 1994. Miller Machining began operating at a portion of the property in 1994. The property is currently owned by D.B. Oak, and the building is occupied by 5 Alarm Fire and Safety Equipment Inc., and W & A Distribution.

In an August 28, 1985 letter to Wand, RMT, Inc. identified a 10,000 gallon above ground storage tank (AST) that was used to store tetrachloroethene (PCE), and an 18,000 gallon underground storage tank (UST) that held No. 2 fuel oil (see Figure 2). The Wisconsin Department of Natural Resources (WDNR) subsequently performed a generator inspection on March 27, 1986, completed at the time Wand had occupied the property. The inspection was completed by Wendell Wojner of the WDNR and described in an April 1986 memo. As described in that memo, no hazardous waste was observed during the inspection. The inspection report indicated that the site had been decontaminated prior to remodeling the building based on information provided by a Wand employee. Decontamination included the removal of all hazardous waste stored on site, and the decontamination and removal of wastewater treatment tanks and degreasers. An electroplating line had been dismantled, and a new concrete floor installed; the old concrete floor had also been removed and transported off-site for disposal.[2] A foundation for a large AST remained on site at the rear of the building, but the tank had been removed.

During a March 16, 1994 Phase I Environmental Site Assessment (ESA), Gabriel Midwest could not find evidence of the fuel oil UST. It also observed that the AST that held PCE was absent, but confirmed that the concrete AST cradle remained on-site. In March 1995 ATEC Associates Inc. (ATEC) completed a Phase II ESA of the D.B. Oaks facility to identify potential releases

[2] A June 1985 report prepared by Dames & Moore prior to dismantling the electroplating line described an investigation of the plating line area. Samples of concrete and subsoil were collected and analyzed for metals and cyanides. Although the concrete yielded extractable levels of chromium and cyanide, the report concluded that there was little potential for contaminant releases to groundwater or soil beyond the plating area.

from the former fuel oil UST, PCE AST, and a former 500 gallon gasoline UST; the latter was not identified in previous reports. The Phase II ESA consisted of the collection of soil and groundwater samples from Geoprobe borings. Trace levels of petroleum constituents (ethylbenzene, toluene, and xylenes) along with low concentrations of metals (arsenic, barium, chromium, and lead) were detected in soil and groundwater samples at various locations on the facility property. PCE and associated degradation products were also detected in soil and groundwater samples along the east and south sides of the facility building. ATEC described the results of this investigation in a Phase II ESA report dated April 1995.

The WDNR was notified of the release. The Agency then issued a March 2004 letter to Thomas Industries demanding an immediate site investigation. The Agency issued a subsequent letter in May 2004 to Thomas Industries demanding it identify the lateral and vertical extent of subsurface contamination associated with the PCE release. Thomas then submitted a work plan to the WDNR in November 2004, and completed a hydrogeologic investigation in December 2004. Results of that investigation and recommendations for additional investigation were presented in a February 2005 status report. Additional investigation was subsequently completed between April and August 2005, and results are presented in this report.

1.3 PURPOSE AND SCOPE

The purpose of this report is to present the results of two phases of site investigation recently completed on the subject property. The first phase of investigation was completed in December 2004 and included the installation of water table observation wells and piezometers, the collection of groundwater samples from these wells, and an evaluation of groundwater flow conditions. A second phase of investigation was completed between April and August 2005 and included the installation of two additional piezometers and a water table observation well. This phase also included the collection of a second round of groundwater samples to further characterize the lateral and vertical extent of groundwater contamination. Additionally, soil samples were collected from Geoprobe borings advanced in the loading dock area on the east side of the facility building, which were analyzed by a mobile laboratory to further characterize potential contaminant source areas. Results of both phases of investigation indicate that soil and groundwater characterization is adequate. This report presents this information, along with recommendations to perform additional supplementary sampling to allow focused remedial action analyses.

2.1 REGIONAL GEOLOGY

Geology in the vicinity of Fort Atkinson consists of alluvial deposits along the Rock River underlain by Pleistocene aged glacial sediments overlying Paleozoic aged sedimentary bedrock units. Glacial deposits include ground moraine, outwash deposits, and loess deposits. Bedrock units include Ordovician aged shales, dolomites, and sandstone units overlying Cambrian aged sandstone.

Depth to bedrock beneath the DB Oak property is unknown. However, bedrock was encountered at a depth of 325 feet below the ground surface at the City of Fort Atkinson Cloute Hill No. 6 well located approximately ¾ mile west of the D.B. Oak facility.

2.2 REGIONAL HYDROGEOLOGY

The upper most water bearing units in the vicinity of Fort Atkinson are the unconsolidated deposits. Groundwater is typically encountered within 20 feet of the ground surface, and the direction of groundwater flow is likely towards the nearby Rock River, the nearest approach to the site is about 0.6 miles south.

The City of Fort Atkinson obtains utilizes five wells to obtain water from the deep bedrock aquifer for the municipal water supply.[3] Water supply wells are between 985 and 1,066 feet deep, and are cased to bedrock encountered at depths between 250 and 325 feet below the ground surface. The regional direction of groundwater flow in the underlying bedrock aquifers is unknown. However, groundwater flow in the vicinity of the high capacity municipal water supply wells is likely influenced by localized cones of depression surrounding each well.

The DB Oak facility and surrounding properties obtain their potable water from the municipal system. No private wells have been identified at nearby properties.

[3] The nearest city wells to the DB Oak property are Well Nos. 3 and 4, located southwest and south of the site, respectively. Both wells are within a few hundred feet of the Rock River, approximately ½-mile from the property. The wells are routinely sampled and tested for contaminants.

2.3 SITE GEOLOGY

Soil samples collected from water table observation well borings identified interbedded subsurface soil units consisting of clayey silt, silty clay, silt, clayey sand, silty sand, and sand. A fine to medium grained sand unit within interbedded silt and silty clay lenses was encountered beneath these interbedded units. Soil boring logs for monitoring well borings are included in Appendix A. Soil units are shown on the Geologic Cross-Section included as Figure 3.

As shown on Figure 3, interbedded silty clay, silt, clay sand, and sand unit were encountered at the MW-2A, MW-3A, and MW-4A borings at depths of 13, 16, and 10 feet below the ground surface (bgs), respectively. In general, fine grained soil units (silty clay and silt) were encountered in the upper portion of each monitoring well boring, but soils become sandier with depth. A fine to medium grained sand was encountered beneath these interbedded fine grained soils. The sand unit underlies interbedded silty clays at the MW-1 and MW-5 locations; MW-1 was terminated at a depth of 18 feet bgs, and MW-5 was terminated at 15 feet bgs. At the MW-2A location, interbedded silt and silty clay lenses were encountered between 17 and 28 feet bgs; the boring was terminated at 40 feet bgs. At the MW-3A location, a silty clay unit was encountered between 35 and 41 feet bgs, and a silt unit was encountered at 48 feet; the boring was terminated at 50 feet bgs. At the MW-6A location, a dense fine-grained silty sand was encountered within its depth of exploration except for a silt unit between seven and 11 feet; this boring was terminated at 38 feet bgs. This sand likely represents a glacial till deposit, while the sand encountered at depth in the remaining piezometers likely represents glacial outwash deposits.

2.4 SITE HYDROGEOLOGY

Data obtained from site monitoring wells were used to evaluate site hydrogeologic conditions. As described in Section 3.2 below, the recently completed hydrogeologic investigation consisted of the installation of water table observation wells and in-situ permeability testing. The top of well casing elevation for each well and the ground surface elevation at each well location was surveyed relative to mean sea level datum. Prior to collecting groundwater samples in December 2004 and June 2005, static water levels were measured in all site monitoring wells; a third round of water levels was also obtained in August 2005. Groundwater was encountered in site wells at depths between 4 and 6 feet on the east side of the D.B. Oak building between well locations MW-3, MW-4, and MW-5. Groundwater was encountered at depths between 7 and 10 feet bgs

at MW-2, and at 10 feet bgs at MW-1, and at 12 feet bgs at MW-6. Reference elevations, ground surface elevations, depth to water measurements, and groundwater elevations are summarized in Table 1. Groundwater elevations measured in June 2005 are shown on Figure 4A, and groundwater elevations measured in August 2005 are shown on Figure 4B.

June and August 2005 groundwater elevations indicate that the direction of groundwater flow is to the south-southwest between MW-4A and MW-3A. Horizontal gradients were calculated using June and August 2005 groundwater elevations. The horizontal hydraulic gradient in the shallow aquifer between MW-4A and MW-3A is 0.015 ft/ft for June 2005 and 0.013 ft/ft for August 2005. Based on June 2005 groundwater elevations, the direction of groundwater flow in the shallow aquifer is west-southwest away from a drainage swale south of the D.B. Oaks property. (The head of this swale is located at the discharge of a storm water culvert near well nest MW-2. It parallels the rail road south of the DB Oak property.) These results indicate that seepage from the adjacent drainage swale is resulting in localized recharge of the shallow aquifer near MW-2. (June groundwater elevations were measured following heavy precipitation, and flowing water was observed in the drainage swale at that time.) August 2005 groundwater elevations (measured following several days with no rain) indicate that groundwater flow is towards the drainage swale south of the D.B. Oak property.

June and August 2005 Groundwater elevations for piezometers indicate that flow in the underlying sand aquifer is also to the south-southwest. The horizontal gradient for the underlying aquifer was calculated to be 0.0167 ft/ft between MW-4A and MW-3A, and 0.002 ft/ft between MW-3A and MW-6A for both June and August 2005.

Estimated vertical gradients were also calculated between well nests. At the MW-4/MW-4A well nest a very slight upward gradient was observed in December 2004 (+0.0003 ft/ft), and a very slight downward vertical gradient was observed in June 2005 (-0.0003 ft/ft). August 2005 groundwater elevations in MW-4 and MW-4A were identical indicating no vertical gradient. A slight downward vertical gradient was observed at the MW-2/MW-2A (-0.004 ft/ft) well nest in December 2004, and moderately strong downward vertical gradients were observed at the MW-2/MW-2A (-0.10 ft/ft), MW-3/MW-3A (-0.17 ft/ft), and MW-6/MW-6A (-0.22 ft/ft) well nests in June 2005. Moderately strong downward vertical gradients were observed at the MW-3/MW-3A (-0.16 ft/ft) and MW-6/MW-6A (-0.24 ft/ft) well nests, but a slight downward vertical gradient was observed at the MW-2/MW-2A (-0.0007 ft/ft) during August 2005.

Slight vertical gradients at well nests MW-2/MW-2A and MW-4/MW-4A indicate that flow is essentially horizontal in the underlying sand unit at these locations. The well screens of both nested wells are screened in the same hydrogeologic unit. The moderately strong downward vertical gradient observed at MW-2/MW-2A in June 2005 indicates that the shallow aquifer is influenced by localized recharge from the adjacent drainage swale. The MW-2/MW-2A well nest is located adjacent to this drainage swale that receives water from a storm sewer. This storm sewer receives water from roof drains and from inlets on the west side of the D.B Oak building. Water in the drainage swale seeps into the shallow aquifer resulting in localized recharge in this area. (The head difference between MW-2 and MW-2A was 2.76 feet in June 2004. The head difference between MW-2 and MW-2A was 0.11 feet in December 2004, and 0.02 feet in August 2005.) Moderate downward vertical gradients observed at the MW-3/MW-3A well locations indicate that the shallow fine grained soils restrict the vertical movement of groundwater between hydrogeologic units. (The screen for well MW-3 does not intersect the underlying sand unit.) The moderate down ward vertical gradients observed at the MW-6/MW-6A well locations also indicate a restriction of groundwater between the upper and lower portions this unit. (The silt and clay content increases below 24 feet at the MW-6/MW-6A.)

As described in Section 3.4.3 below, the hydraulic conductivities in the vicinity of on-site monitoring well screens were determined from in-situ permeability tests performed on all on-site wells. As shown in Table 3, the average hydraulic conductivity derived from water table observation wells is 3.32×10^{-3} cm/sec, and the average hydraulic conductivity derived from piezometers is 2.28×10^{-2} cm/sec. The average linear velocity of groundwater was calculated from the following equation:

$$v = \frac{ki}{n}$$

where: v = average linear velocity of groundwater
k = hydraulic conductivity
i = horizontal gradient
n = porosity

Assuming a porosity of 25%, a horizontal gradient of 0.0167 ft/ft, the average linear velocity of groundwater in the interbedded units is 0.63 feet per day, or approximately 230 feet per year. Assuming a porosity of 25%, and a horizontal gradient of 0.002 ft/ft, the average linear velocity of groundwater in the underlying sand unit is 0.52 feet per day or 189 feet per year.

3.1 INITIAL SITE INVESTIGATION RESULTS

Phase I Environmental Site Assessments at the DB Oak property were performed in 1985 by RMT and 1994 by Gabriel Midwest. The first subsurface investigation was a Phase II Site Assessment completed in March 1995 by ATEC Associates Inc. (ATEC). This Phase II assessment included the collection of soil and groundwater samples from 31 Geoprobe borings. Results were presented in an April 1995 report prepared by ATEC. Results of soil samples collected during the preliminary site investigation are summarized on Figure 5A, and groundwater sample results are shown on Figure 5B.

ATEC stated that the purpose of the assessment was "... to determine the presence or absence of contamination that may be associated with former underground storage tanks (USTs), specifically one 19,000-gallon fuel oil and one 500-gallon gasoline UST, former above ground storage tanks (ASTs), one 10,000 gallon tetrachloroethene AST, past on-site activities or operations, and adjacent leaking UST facilities." ATEC reported that petroleum constituents were detected at low concentrations below clean up standards in soil and groundwater samples. However, chlorinated hydrocarbons including tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene, total (cis and trans) 1,2-dichloroethene, and vinyl chloride were detected in soil and groundwater samples collected along the east side of the facility building. These results indicated that releases from petroleum storage tanks had not impacted soil or groundwater quality at the site, but chlorinated hydrocarbons identified in soil samples implied a release from the area of the former PCE tank.

A site investigation was also completed at the adjacent Lorman Iron & Metals Company in 1995 the vicinity of a former waste oil tank located on the south end of the Lorman property. That investigation included the collection of soil samples, the installation of monitoring wells, and the collection of groundwater samples. Results of the site investigation indicated that the direction of groundwater flow is to the south-southwest, and that petroleum constituents from the former waste oil tank resulted in an impact to soil and groundwater quality at the site. Site remediation consisted of the removal of contaminated soil by excavation and groundwater monitoring. Chlorinated VOCs were detected in groundwater samples collected from site monitoring wells. The site was closed in 1997 for the petroleum contamination. However, ongoing monitoring was performed for chlorinated compounds. The results of this monitoring showed continuous declines in contaminant levels. As a result, the Agency closed this incident with a groundwater use restriction in 2001. As shown on Figure 2, the Lorman property is located on the east side of

the railway adjacent to the D.B. Oak property, and former wells MW-1, MW-2, and MW-3 are side gradient from the D.B. Oak property.

3.2 HYDROGEOLOGIC INVESTIGATION

NewFields completed an initial hydrogeologic investigation at the D.B. Oak facility in accordance with the Work Plan dated November 8, 2004. That hydrogeologic investigation consisted of the installation of five water table observation wells, two piezometers, well development, the collection of one round of groundwater samples for volatile organic compound (VOC) analysis, groundwater elevation measurements, and in-situ permeability tests. The site work was completed in December 2004, and results were presented in a February 2005 status report along with recommendations for the installation of a down gradient well nest and an additional peizometer to further characterize the lateral and vertical extent of groundwater contamination. Additionally, the collection of soil samples to further characterize potential source areas was also recommended in this status report. Monitoring wells were subsequently installed in April 2005, soil samples were collected and analyzed by a mobile lab in May 2005, and a second round of groundwater samples were collected. A description of these completed activities follows.

3.2.1 Monitoring Well Installation and Well Development

NewFields supervised the installation of five water table observation wells and two piezometers at the D.B. Oaks facility in December 2004. Water table observation wells MW-1 and MW-2 were installed on the south side of the facility building as down gradient monitoring wells. Well MW-3 and MW-4 were installed on the east side of the facility building; well MW-3 was installed down gradient (south) from the former PCE tank adjacent to the facility building, and well MW-4 was installed in the vicinity of the former PCE tank. Well MW-5 was installed on the north side of the facility building up gradient from the former PCE tank. Piezometers MW-2A and MW-4A were installed adjacent to wells MW-2 and MW-4, respectively. In April 2005, down gradient well next MW-6/MW-6A was installed, and piezometer MW-3A was installed adjacent to MW-3 to further characterize the lateral and vertical extent of groundwater. Well locations are shown on Figures 4A through 6.

All monitoring wells were installed in boreholes advanced with hollow stem augers utilizing a truck mounted rotary drill rig. Soil samples were collected with a split-barrel sampler (split

spoon), visually classified in accordance with the Unified Soil Classification System, and recorded on soil boring logs. Soil samples collected from the unsaturated zone at on-site well locations MW-1, MW-2, MW-3, MW-4, and MW-5 were also field screened with a hand held photo-ionization device (PID) equipped with an 11.7 eV lamp. PID field measurements were recorded on soil boring logs. Soil boring logs are included in Appendix A.

Water table observation wells were constructed with two-inch diameter schedule 40 PVC well casings and screens. The water table was encountered between four and 12 feet below ground surface, and water table observation wells were installed at depths between 13 and 18 feet below ground surface with well screens 10 feet in length placed between six and eight feet below the water table. Piezometers were constructed with well screens five-feet in length at depths 25 feet below the water table observation wells (approximately 40 feet below ground surface). Top of screen and bottom of screen elevations are summarized in Table 1, and well construction forms are also included in Appendix A.

Following well installation, monitoring wells were developed by NewFields. Well development was completed by surging and purging ten well casing volumes. Well development forms are included in Appendix A.

Purge water was placed in 55-gallon drums, and temporarily stored on-site. Soil cuttings were also placed in 55-gallon drums and temporarily stored on-site. These drummed materials were subsequently transported off-site for disposal by Onyx. Drilling services were provided by Badger State Drilling Company, Inc. of Stoughton, Wisconsin.

3.2.2 In-Situ Hydraulic Conductivity Testing

NewFields performed in-situ hydraulic conductivity tests on each monitoring well to determine the hydraulic conductivity of the soil unit near each monitoring well screen. In-situ hydraulic conductivity tests were performed on December 16, 2004 following groundwater sample collection. These tests were performed by rapidly removing a bailer, or "slug" of water from the well. A pressure transducer in the well and data logger were then used to measure the draw down and subsequent recovery of water elevations in the well. Because the recovery was rapid, two tests were performed at each well. The hydraulic conductivity around each well screen was then calculated using the Bouwer and Rice Method with USGS provided spread sheet tables.

Hydraulic conductivity estimates are summarized in Table 2, and in-situ hydraulic conductivity test results are included in Appendix B.

Layered fine grained low permeability soils (i.e. silty clay and silt) were encountered at all well locations interbedded with permeable soil units (silty sand and sand). In the upper few feet of the soil profile, the fine-grained materials predominate, while in the deeper zones, the coarse-grained materials predominate. Water table observation wells were constructed with 10 feet-long well screens that intersected these layered units. Consequently, the in-situ hydraulic conductivity well test results represent the permeability of the more permeable coarse-grained soils intersecting the well screens. The permeability of the silt and silty clay soils encountered in the upper portion of each well boring are likely several orders of magnitude lower than the permeability of the underlying sand units.

3.2.3 Groundwater Sample Collection

Two rounds of groundwater samples were collected. The first round of samples were collected on December 16, 2004, and the second round of samples on June 1, 2005. Prior to sample collection, four well casing volumes were purged from each well. The purge water was placed in 55 gallon drums along with the well development purge water described above, and later transported off-site for disposal by Onyx. Samples were collected with bailers equipped with bottom emptying devices; a bailer was dedicated to each well. Laboratory provided containers were filled, held in a cooler on ice, and shipped to a Wisconsin-certified environmental laboratory for analyses. All samples were analyzed for volatile organic compounds (VOCs) by USEPA method 8260. In accordance with WDNR guidance, one duplicate sample and a trip blank were also analyzed for VOCs. Laboratory services were provided by Northern Lakes Service, Inc. of Crandon, Wisconsin. Groundwater monitoring results for December 2004 samples are summarized in Table 3, and laboratory reports are included in Appendix C. Additionally, field measurements for pH, conductivity, temperature, oxidation-reduction potential, and dissolved oxygen were made at the time of sample collection in December 2004; field measurements are also summarized in Table 3. Groundwater monitoring results for June 2005 samples are summarized in Table 4, and laboratory reports are included in Appendix D.

3.3 SOIL INVESTIGATION

3.3.1 Geoprobe Soil Sample Collection

Data collected prior to 2005 indicate that potential source areas are present on the east side of the facility building near the former PCE tank and adjacent to the building loading dock. Additional investigation was recommended in the February 2005 status report to further characterize the lateral and vertical extent of soil contamination. Over 60 soil borings were subsequently advanced in these potential source areas. Soil borings were advanced in a regular grid pattern; borings were advanced in columns 1 through 19 on 20 foot centers in rows A through D on 30 foot centers (see Figure 7). At each location, soil samples were collected from the borings at intervals from 0 to 2.5 feet, from 2.5 to 5 feet, and from 5 to 7.5 feet below ground surface. Soil samples were also collected from boring A4, A6, A8, and A10 advanced inside the building at 7.5 to 10 feet because the floor of the building is approximately 3 feet higher than the exterior loading dock / driveway area. Soil boring locations are shown on Figure 7.

Soil samples were analyzed by a mobile laboratory, and mobile laboratory results were used to guide the investigation. Following soil sample collection, all borings were backfilled with bentonite. Geoprobe services were provided by Soil Essentials of New Glarus, Wisconsin. Mobile laboratory analyses are described in detail Section 3.3.2 below.

3.3.2 Mobile Laboratory Analyses

Mobile laboratory services were provided by Environmental Chemistry Consulting Services Inc. (ECCS) of Madison, Wisconsin. All soil samples were analyzed for benzene, toluene, PCE, trans-1,2-dichloroethene (transDCE), and degradation products of PCE including vinyl chloride, 1,1-dichloroethene (DCE), cis-1,2-dichloroethene (cisDCE), trichloroethene (TCE). VOCs were analyzed with a high-resolution gas chromatography (GC) with a mass selective detector (MSD). Following sample collection, soil samples were submitted to the mobile laboratory analyst. The analyst then mixed ten grams of soil with ten milliliters of methanol. Methanol extractions were then directly injected into a Hewlett-Packard 5971 GC/MS system. All samples were analyzed by a "high" level analysis to determine constituent concentrations above 1 mg/kg (part per million - ppm; equal to 1,000 µg/kg)), targeting constituents with concentrations between 1 and 200 mg/kg. Samples with non-detectable concentrations or with constituent concentrations below 5 mg/kg were re-analyzed for "low" level analysis by direct injection SIM analysis, which

provided detection between 0.05 and 10 mg/kg. Mobile laboratory results are included in Appendix E. High level analysis results are summarized in Table 1 and low level analysis results are summarized in Table 2 in Appendix E. Soil boring locations and laboratory results are described in detail in Section 3.4.2 below.

3.4 SITE INVESTIGATION RESULTS

3.4.1 Groundwater Sample Results

Groundwater sample results for samples collected in December 2004 and June 2005 indicate that chlorinated volatile organic compounds (VOCs) have impacted groundwater quality on the D.B. Oaks property. The primary constituents of concern detected in groundwater samples are PCE and related products of PCE[4]. December 2004 groundwater monitoring results are summarized in Table 3, and June 2005 groundwater monitoring results are summarized in Table 4. Historic groundwater sample results are summarized on Figure 5B, and the lateral extent of the total VOCs in groundwater are shown on Figure 6.

Other constituents, including benzene toluene, and dichlorofluoromethane, were also detected at low concentrations. Dichlorofluoromethane was detected in the December 2004 and June 2005 MW-4A samples at low concentrations slightly above the detection limit and below groundwater quality standards. Benzene (6.0 µg/L) and toluene (0.25 µg/L) were detected in the December 2004 MW-4A sample, but neither compound was detected in the June 2005 MW-4A samples. Although benzene exceeded the Enforcement Standard (ES), the low concentration plus its lack of detection in other samples indicates that benzene should not be considered a constituent of concern at this site. None of these other compounds have a chemical relationship with the aliphatic chlorinated compounds that are the focus of this investigation.

As shown on Figure 6, the highest concentrations of total VOCs were detected in MW-3 samples. Total VOCs were detected in the December 2004 and June 2005 MW-3 samples at concentrations of 57,800 µg/L and 35,100 µg/L, respectively. Elevated total VOC concentrations were also detected in samples collected from well MW-4 located adjacent to the

[4] Degradation products, or daughter products of PCE include trichloroethene (TCE), 1,1-dichloroethene (1,1 DCE), cis-1,2-dichloroethene (cis-DCE), and vinyl chloride. Trans-1,2-dichloroethene (trans-DCE) is not a degradation product of PCE, but is inherently found with PCE.

former PCE tank. Total VOCs were detected in the December 2004 and June 2005 MW-4 samples at concentrations of 12,500 µg/L and 7,200 µg/L, respectively.

Samples collected from down gradient well MW-2 indicate that contaminants are migrating laterally with groundwater. Total VOCs were detected in the December 2004 and June 2005 MW-2 samples at concentrations of 6,243 µg/L and 4,120 µg/L, respectively. Samples collected from piezometer MW-3A also indicate that contaminants have migrated vertically at that location. Total VOCs were detected at a concentration of 19,460 µg/L in the June 2005 MW-3A sample. However, samples collected from down gradient piezometer MW-2A indicate that the lateral migration of contaminants from the source area at depth is limited. Total VOCs were detected in the December 2004 and June 2005 MW-2A samples at concentrations of 522 µg/L and 579 µg/L, respectively.

3.4.2 Groundwater Contaminant Distribution

Although elevated concentrations of chlorinated VOCs were detected in samples collected from wells MW-2, MW-2A, MW-3, MW-3A, and MW-4 adjacent to and down gradient from the primary soil contaminant source areas, low concentrations of chlorinated VOCs were detected in samples collected from down gradient well MW-1, and up gradient well MW-5.[5] As shown on Figure 6, this indicates that the chlorinated VOC plume is located between the facility building and the railway corridor and is elongated in the direction of groundwater flow. Although VOCs were not detected in samples collected from off-site down gradient wells MW-6 and MW-6A, contaminants have the potential to have migrated off-site. Down gradient wells MW-2 and MW-2A are located adjacent to the southeastern property line, and constituents of concern exceed groundwater quality standards at this location.

Concentrations of PCE in groundwater samples above one-percent of the solubility of PCE[6], (1,500 µg/L) indicate that the source for PCE is localized. PCE exceeded one-percent of solubility in samples collected from MW-3, MW-3A, and MW-4. Concentrations of PCE above ten-percent of the solubility indicate that PCE may be present in a non-aqueous phase. PCE exceeded ten-percent of the solubility (15,000 µg/L) in the December 2004 (34,000 µg/L) and

[5] Detections of chlorinated compounds were limited to the December 2005 sampling event, approaching or below the method detection limits; no detections were measured in the June 2006 samples from both wells.

[6] Published solubility for PCE ranges from 150 to 200 mg/L, or from 150,000 to 200,000 µg/L.

June 2003 (27,000 µg/L) MW-3 samples. However, non-aqueous phase PCE was not observed in MW-3 samples at the time of collection. PCE has likely adsorbed onto the soil matrix near the MW-3 well screen.

PCE is the predominant constituent of the total VOC concentration in MW-3 samples. PCE was detected in the December 2004 and June 2005 MW-3 samples at concentrations of 34,000 µg/L and 27,000 µg/L, respectively, yielding 59-percent of the total VOC concentration for the December sample and 77-percent for the June 2005 MW-3 sample. Degradation products of PCE (TCE and cis-DCE) comprise the remaining VOCs detected in MW-3 samples. These results indicate that MW-3 is located near a source area for PCE.

PCE was detected at elevated concentrations in MW-3A and MW-4 samples, but it is not the predominant constituent of total VOC concentrations in these samples. PCE was detected in both the December 2004 and June 2005 MW-4 samples at a concentration of 2,500 µg/L, yielding 20-percent of the total VOC concentration for the December sample and 35-percent for the June 2005 MW-4 sample. TCE comprised the remaining total VOC concentration in the December 2004 (10,000 µg/L) and June 2005 (4,700 µg/L) MW-4 samples. PCE detected in the June 2005 (3,000 µg/L) MW-3A sample comprises only 15-percent of the total VOC concentration in this sample. Degradation products of PCE (TCE, cis-DCE, and vinyl chloride) and trans-DCE comprise the remaining total VOC concentration in this sample. PCE concentrations in MW-3A and MW-4 samples indicate that these wells are also located near a source for PCE. However, the high levels of daughter products in these samples indicate that natural attenuation processes are active.

Active degradation conditions are also observed with distance from the source areas. Groundwater samples collected from down gradient well MW-2 indicate that PCE is degrading to TCE and cisDCE. In December 2004 samples PCE concentrations declined from 34,000 µg/L to 120 µg/L. Between MW-3 and MW-2; in the June 2005 sample PCE declined from 27,000 µg/L at MW-3 to non-detect at MW-2. December 2004 TCE concentrations declined from 17,000 µg/L at MW-3 to 140 µg/L at MW-2; June 2005 TCE concentrations declined from 5,500 µg/L at MW-3 to 170 µg/L at MW-2. However, elevated concentrations of cis-DCE were detected in MW-2 samples in December 2004 (5,900 µg/L) and June 2005 (3,600 µg/L), and in MW-3 samples in December 2004 (6,800 µg/L) and June 2005 (2,600 µg/L). Low concentrations of other degradation products including 1,1 DCE (18 µg/L), transDCE (32 µg/L), and vinyl chloride (33 µg/L) were also detected in the MW-2 sample.

Although elevated concentrations of PCE were detected in June 2005 MW-3A samples, the presence of elevated concentrations of degradation products also indicate that PCE is degrading vertically. The formation of degradation products in MW-2, MW-2A, MW-3, MW-3A, and MW-4 samples indicates that reductive dechlorination of PCE is occurring in the subsurface. PCE degrades to TCE, which degrades to cis-DCE, and then to vinyl chloride.

3.4.3 Soil Sample Results

Chlorinated VOCs were detected in soil samples collected from Geoprobe borings advanced in the loading dock and driveway area on the east side of the D.B. Oak facility building. As with groundwater samples, PCE is the primary constituent of concern detected in soil samples, but degradation products for PCE (TCE, cis-DCE, 1,1-DCE, and vinyl chloride) were also detected in soil samples. Soil sample results are summarized in Table 5, and boring locations are shown on Figure 7. Isoconcentration contours showing PCE concentrations in soil at 0-2.5, 2.5-5.0, and 5.0-7.5 foot intervals are shown on Figures 8A, 8B, and 8C, respectively. Isoconcentration contours showing total VOC concentrations in soil at 0-2.5, 2.5-5.0, and 5.0-7.5 foot intervals are shown on Figures 9A, 9B, and 9C, respectively.

Elevated concentrations of benzene were detected in soil samples collected from borings A4, A8, and A10 at depths between 2.5 and 10 feet below the building floor. Toluene was detected at an elevated concentration in the A8 boring between 2.5 and 5 feet below the building floor. Borings A4, A8, and A10 were advanced beneath the building floor west of the MW-3/MW-3A well nest. Benzene and toluene were also detected at low concentrations in soil samples collected from borings C9 and D7 at depths between 0 and 2.5 feet from borings advanced in the loading dock area north-northeast of the MW-3/MW-3A well nest. A summary of benzene and toluene detected in these soil samples is as follows:

Boring Location	Depth (ft)	Benzene (µg/kg)	Toluene (µg/kg)
A4	5.0-7.5	16,000	<1,000
A8	2.5-5.0	1,200	75,000
A10	2.5-5.0	<50	89
A10	7.5-10.0	420	<50
C9	0.0-2.5	<50	140
D7	0.0-2.5	65	<50

As described earlier, these aromatic compounds have no association with the PCE and related chlorinated compounds found at the DB Oak property.

3.4.4 Soil Contaminant Distribution

Mobile laboratory soil sample results indicate that PCE and PCE degradation constituents are present at elevated concentrations on the east side of the D.B. Oak property between the facility building and the railway line. As shown on Figure 10, total VOC concentrations exceeds 10,000 µg/kg (10 mg/kg) at a source area located near the former PCE tank near wells MW-4/MW-4A, and at source areas located near the loading dock area near wells MW-3/MW-3A. The lateral extent of total VOCs exceeding 1,000 µg/kg (1 mg/kg) is also shown on Figure 10.

Groundwater is encountered at depths between three and four feet below ground surface near MW-3 and between 5 and 6 feet near well MW-4. Soil samples collected at the 0 - 2.5 and 2.5 - 5 foot intervals were collected from the unsaturated zone, and soil samples collected from the 5 to 7.5 interval were collected from the saturated zone. Results for soil samples collected from Geoprobe borings indicate that contamination is present in the saturated and unsaturated zones in the vicinity of the former PCE tank and in the loading dock area on the east side of the facility.

Soil samples were collected from the saturated zone, but the vertical extent of soil contamination in the saturated zone was not identified during the investigation. Site investigation results indicate that VOCs have adsorbed onto the fine grained interbedded soils. The vertical extent of soil contamination likely corresponds to the vertical extent of the fine grained soil unit. These fine grained soils were encountered at a depths of 14, 17, and 11 feet at the MW-2/MW-2A, MW-3/MW-3A, and MW-4/MW-4A well locations, respectively.

Results of this 2005 investigation indicate that groundwater quality has been impacted by chlorinated VOCs. PCE is the primary constituent of concern that exceeded groundwater quality standards, but degradation products of PCE (TCE, cis-DCE, 1,1-DCE, and vinyl chloride), and trans-DCE also exceed groundwater quality standards. The highest concentrations of chlorinated VOCs were detected in samples collected from MW-3 located adjacent to facility loading docks, and from MW-4 located adjacent to the former PCE tank. Elevated concentrations of chlorinated VOCs were also detected in samples collected from the down gradient well nest at MW-2, which is located along the southeastern property boundary. These levels indicate that contaminants have the potential to have migrated off-site. However, chlorinated VOCs were not detected in samples collected from down gradient wells MW-6 and MW-6A located approximately 600 feet south of the property, or in samples collected from down gradient well MW-1 located about 250 feet southwest of the MW-2 well nest. Hydraulic characterization data indicates that groundwater velocity is high (about 200 feet/year), and seasonal data indicates that the horizontal configuration of the contaminant plume is properly defined. The approximate lateral extent of the chlorinated VOC plume is shown on Figure 6.

Samples collected from piezometer MW-4A indicate that contaminants have not migrated vertically into the underlying sand near the former PCE tank. Elevated chlorinated VOC concentrations at MW-3A indicate that contaminants have migrated vertically with groundwater in the loading dock area. Lower concentrations of chlorinated VOCs detected in samples collected from piezometer MW-2A indicate that contaminants are migrating laterally with groundwater from the source area at depth. Elevated PCE degradation products at MW-2A and MW-3A indicate that reductive dechlorination of PCE is occurring as contaminants migrate vertically and laterally. These conditions, along with the lack of contaminants at the MW-6 well nest, indicate that the aquifer shows high natural attenuation capacity.

Elevated concentrations of chlorinated VOCs detected in soil samples collected from Geoprobe borings advanced near the former PCE tank and loading dock areas indicate that source areas are located on the east side of the D.B. Oak facility building. Chlorinated VOCs were detected in soil samples collected from the saturated and unsaturated zones. Site investigation results indicate that contaminants have been absorbed into the fine-grained soil matrix encountered at shallow depths in this area. Three primary source areas have been identified: these include the former PCE tank area, the area immediately east of the primary loading dock, and a separate area about 50 feet southeast of the primary loading dock source zone. Mobile laboratory results of soils collected from these areas yielded total VOC concentrations in excess of 10,000 µg/kg

within the first 10 feet from the ground surface. Based on this spatial arrangement of sample data, more than 5,000 cubic yards of material is estimated to be affected at these levels. Adjacent to these primary source zones, mobile lab results show soils contaminated with total VOCs between 1,000 and 10,000 µg/kg. An additional 6,500 cubic yards of materials within the first 10 feet is estimated at these levels at these adjacent areas. Because groundwater is encountered at shallow depths, (between three and six feet at the primary source areas) these contaminated soils are a source for groundwater contamination. However, the rapid flow of groundwater away from the source areas and the high concentration of degradation compounds show that the plume is not extensive and is dissipating beyond the down gradient property boundary.

NewFields recommends that additional soil samples should be collected from a minimum of the three primary source areas. Soil samples should be analyzed for VOCs by TCLP to determine if contaminated soil would be hazardous by characteristic (toxicity). Soil samples should also be collected and submitted for bench scale treatability studies to design a pilot test for in-situ treatment. TCLP and bench scale test results should then be submitted to the WDNR along with a completed Remediation Site Hazardous Waste Determination Form and supporting historic site data as a formal request for a hazardous waste determination. The WDNR determination will then be used as part of a remedial action options analyses. This analyses will evaluate a complete range of remedial options, including both ex-situ and full-scale in-situ alternatives.

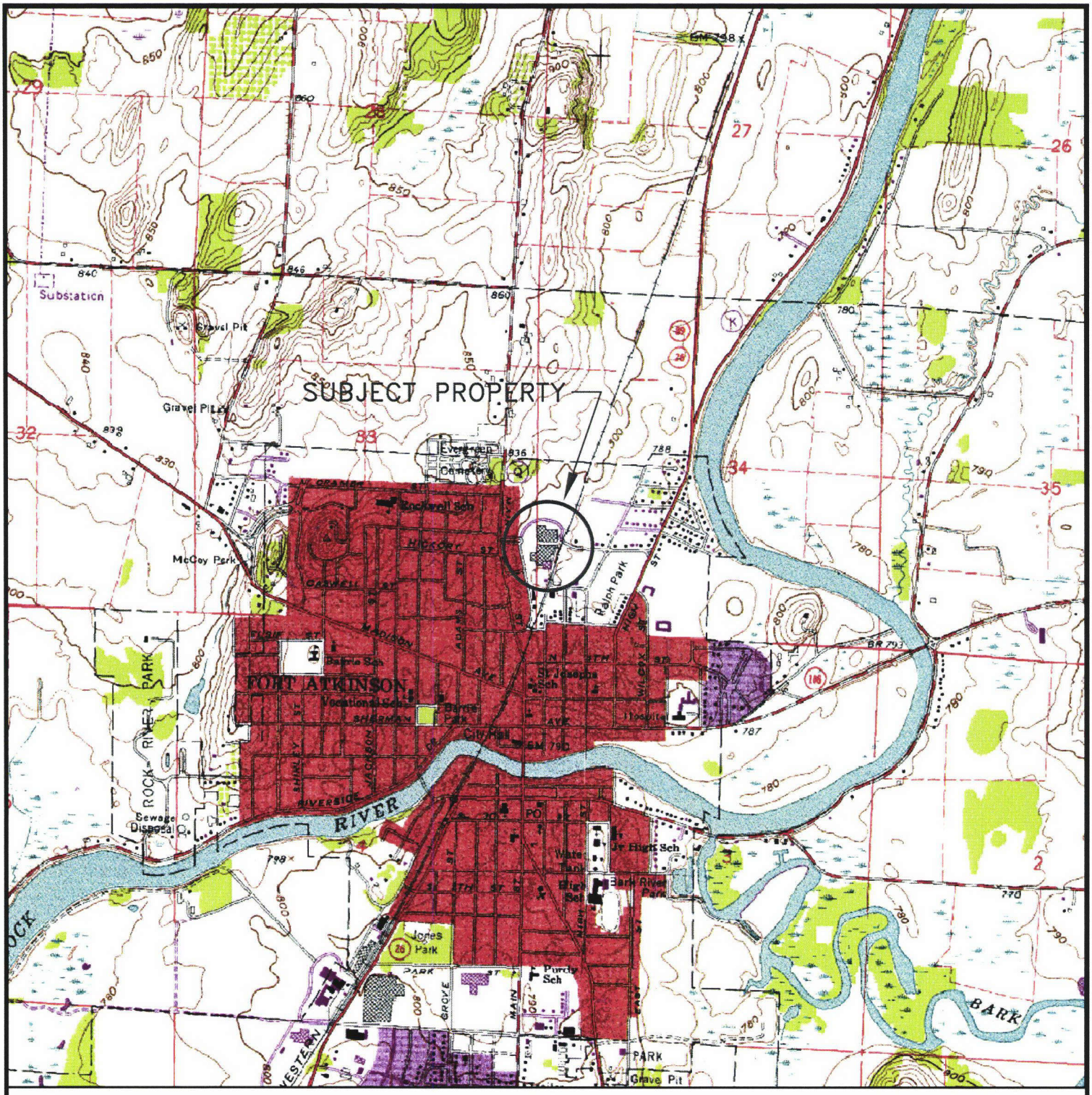
Phase II Environmental Site Assessment, D.B. Oak Property, 700-710 Oak Street, Fort Atkinson, Wisconsin, ATEC Project No. 74-07-95-00018. Prepared by ATEC Associates, Inc. April 26, 1995.

Work Plan for Hydrogeologic Site Investigation and Evaluation of Potential Remedial Responses. Prepared by NewFields, November 8, 2004.

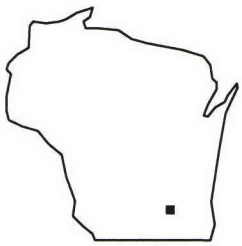
Hydrogeologic Site Investigation Status Report, D.B. Oaks Facility, 700-710 Oak Street, Ft. Atkinson, Wisconsin. Prepared by NewFields, February 11, 2005.

Draft Guidance for Hazardous Waste Remediation, Publication RR-705-WA, Wisconsin Department of Natural Resources, Bureau for Remediation and Redevelopment, Bureau for Waste Management.

Figures



BASE MAP SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE, FORT ATKINSON, WISCONSIN, DATED 1987.



QUADRANGLE LOCATION

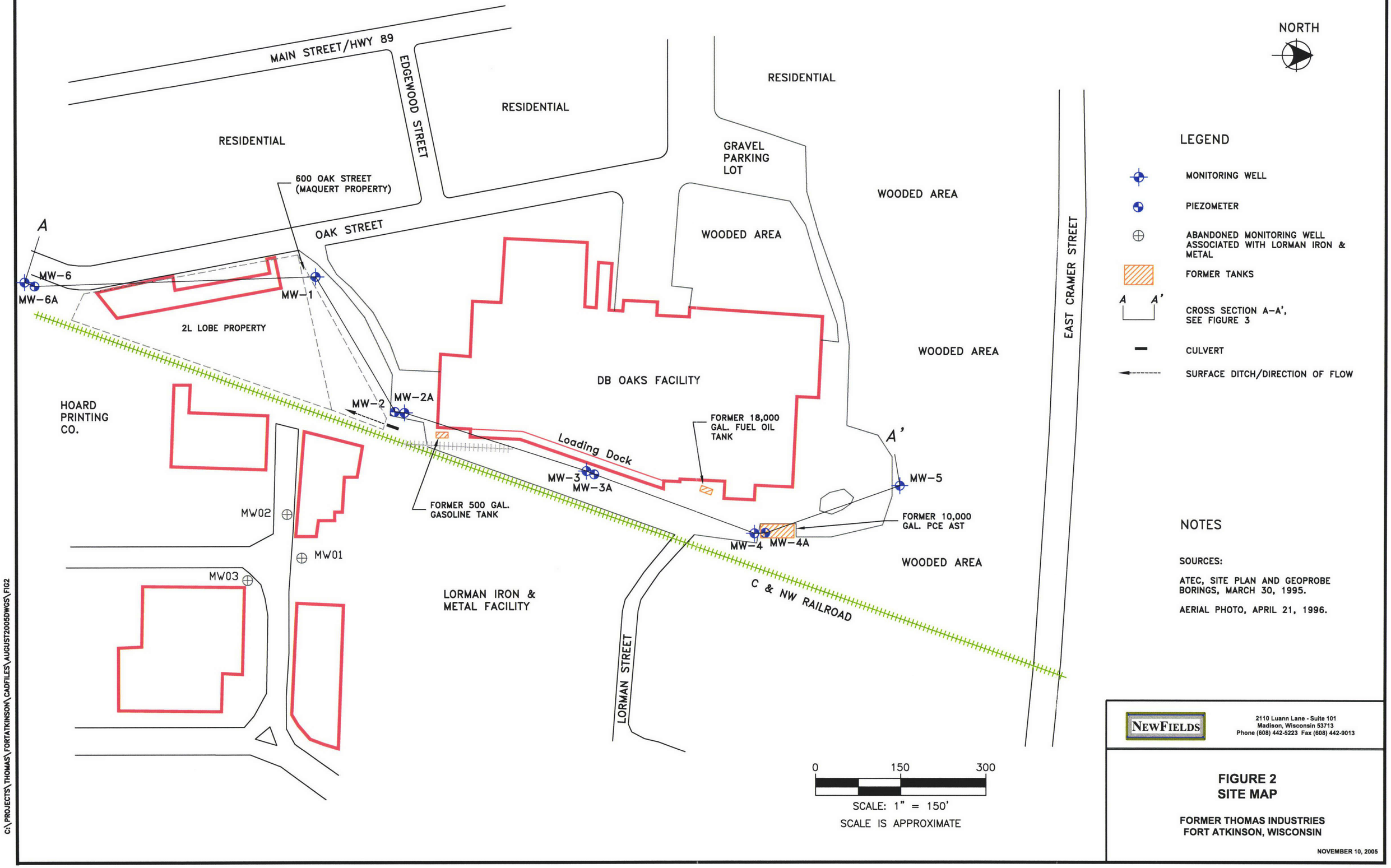
NORTH
SCALE: 1"=2400'

FORMER THOMAS FACILITY
FORT ATKINSON, WISCONSIN

FIGURE 1
SITE LOCATION

DRN. BY DDZ	PROJECT NO. 0451-002-800
DATE 10.NOV.2005	NEWFIELDS

C:\PROJECTS\THOMAS_FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG1



NOTES

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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Madison, Wisconsin 53713
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FIGURE 2
SITE MAP

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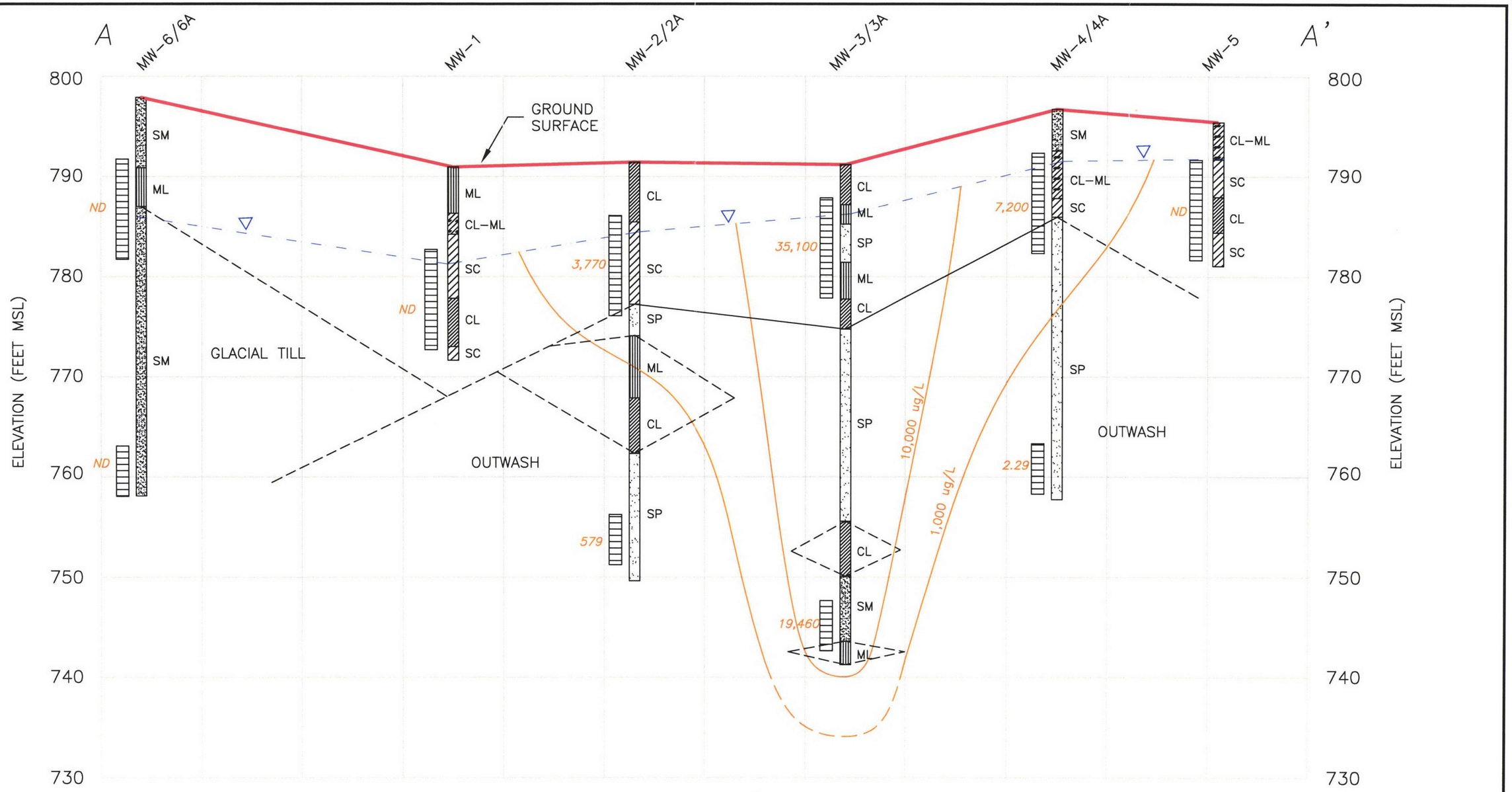
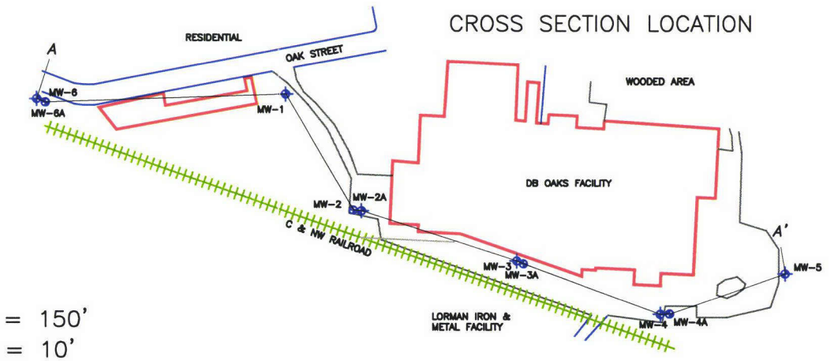
NOVEMBER 10, 2005

C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG2



CROSS SECTION LOCATION



LEGEND:

- CLAY (CL)
- CLAY/SILT (CL-ML)
- SILT (ML)
- CLAYEY SAND (SC)
- SILTY SAND (SM)
- SAND (SP)

MONITORING WELL/ PIEZOMETER SCREENED INTERVAL

WATER LEVELS MEASURED JUNE 1, 2005

579 TOTAL VOC CONCENTRATION (COLLECTED JUNE 1, 2005)

TOTAL VOC ISOCONCENTRATION CONTOUR

SCALE:

HORIZ. 1" = 150'
VERT. 1" = 10'

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FIGURE 3
CROSS SECTION A - A'

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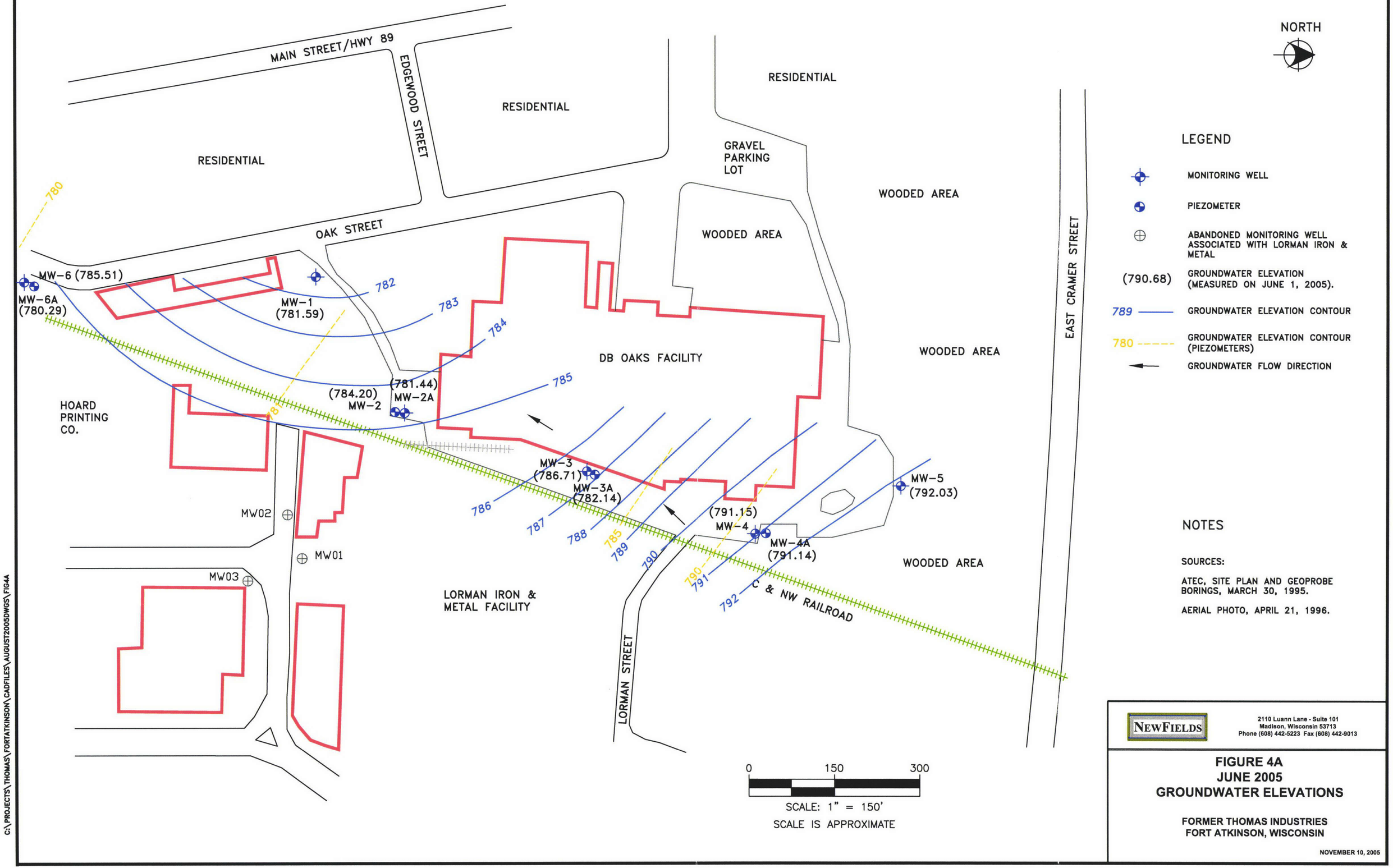
C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG3



NOTES

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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FIGURE 4A
JUNE 2005
GROUNDWATER ELEVATIONS

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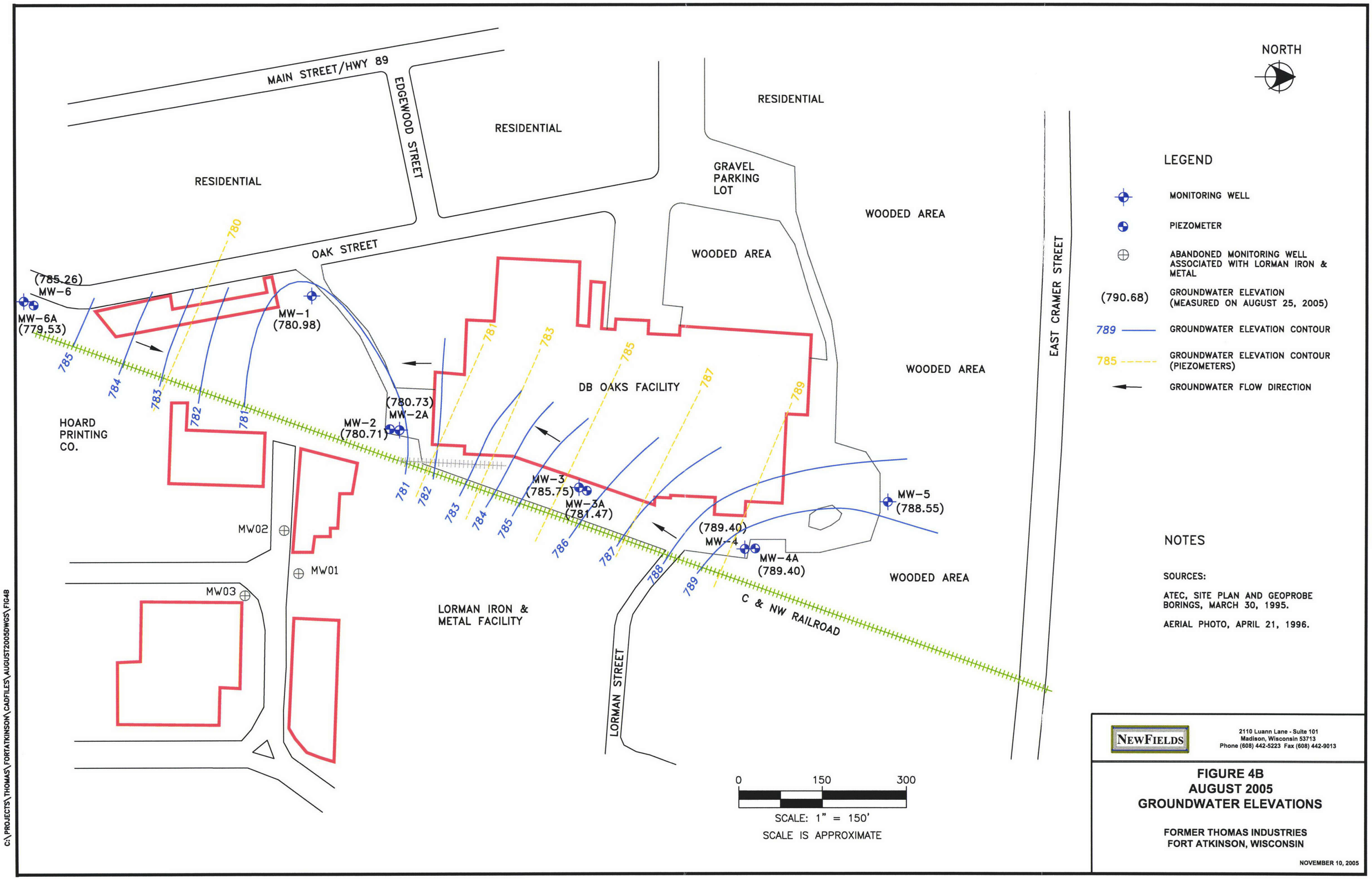
NOVEMBER 10, 2005

C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG4A



NOTES

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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FIGURE 4B
AUGUST 2005
GROUNDWATER ELEVATIONS

FORMER THOMAS INDUSTRIES
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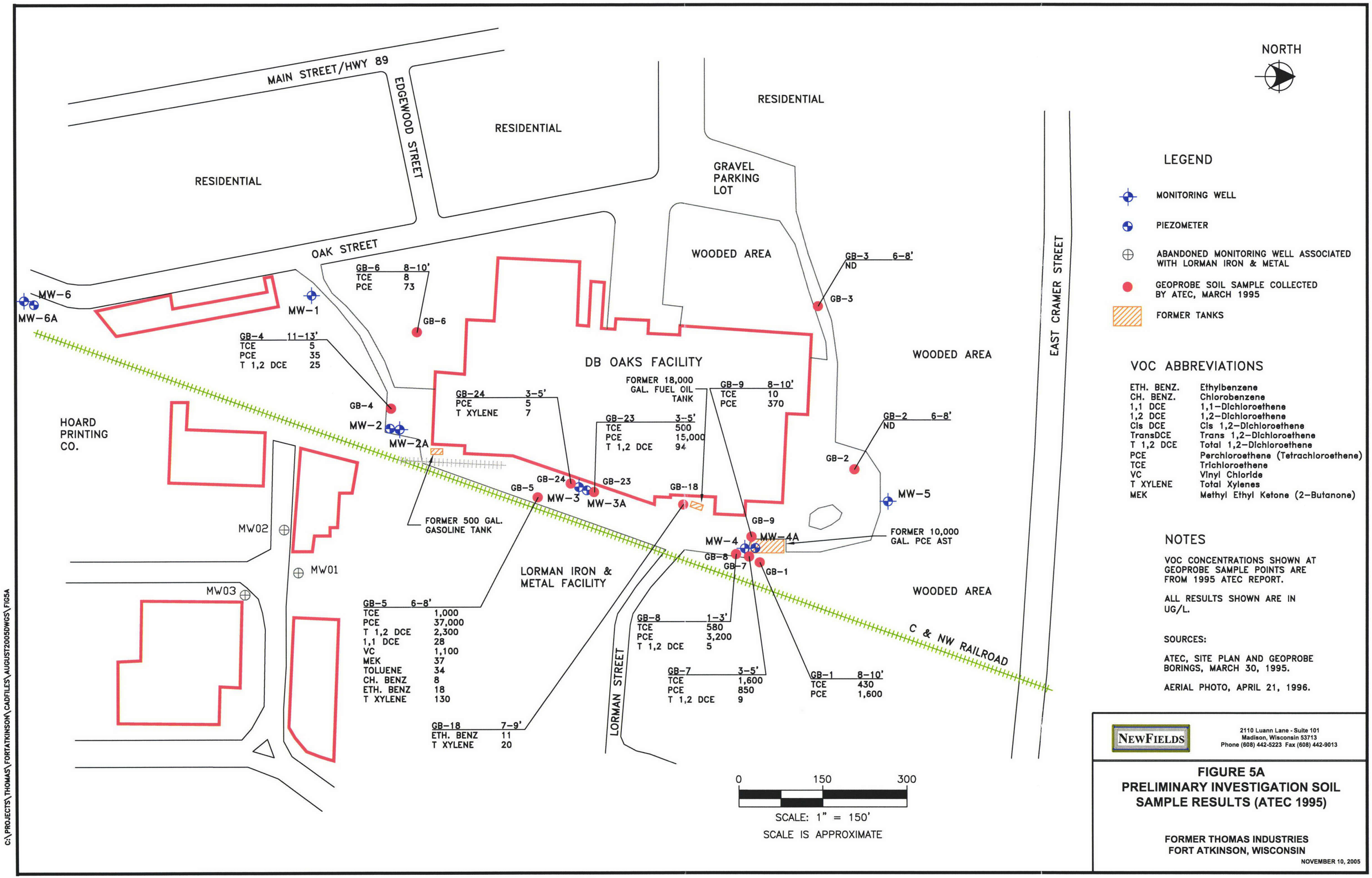
NOVEMBER 10, 2005

C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG4B



LEGEND

- MONITORING WELL
- PIEZOMETER
- ABANDONED MONITORING WELL ASSOCIATED WITH LORMAN IRON & METAL
- GEOPROBE SOIL SAMPLE COLLECTED BY ATEC, MARCH 1995
- FORMER TANKS

VOC ABBREVIATIONS

ETH. BENZ.	Ethylbenzene
CH. BENZ.	Chlorobenzene
1,1 DCE	1,1–Dichloroethene
1,2 DCE	1,2–Dichloroethene
Cis DCE	Cis 1,2–Dichloroethene
TransDCE	Trans 1,2–Dichloroethene
T 1,2 DCE	Total 1,2–Dichloroethene
PCE	Perchloroethene (Tetrachloroethene)
TCE	Trichloroethene
VC	Vinyl Chloride
T XYLENE	Total Xylenes
MEK	Methyl Ethyl Ketone (2–Butanone)

NOTES

VOC CONCENTRATIONS SHOWN AT GEOPROBE SAMPLE POINTS ARE FROM 1995 ATEC REPORT.

ALL RESULTS SHOWN ARE IN UG/L.

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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FIGURE 5A
PRELIMINARY INVESTIGATION SOIL SAMPLE RESULTS (ATEC 1995)

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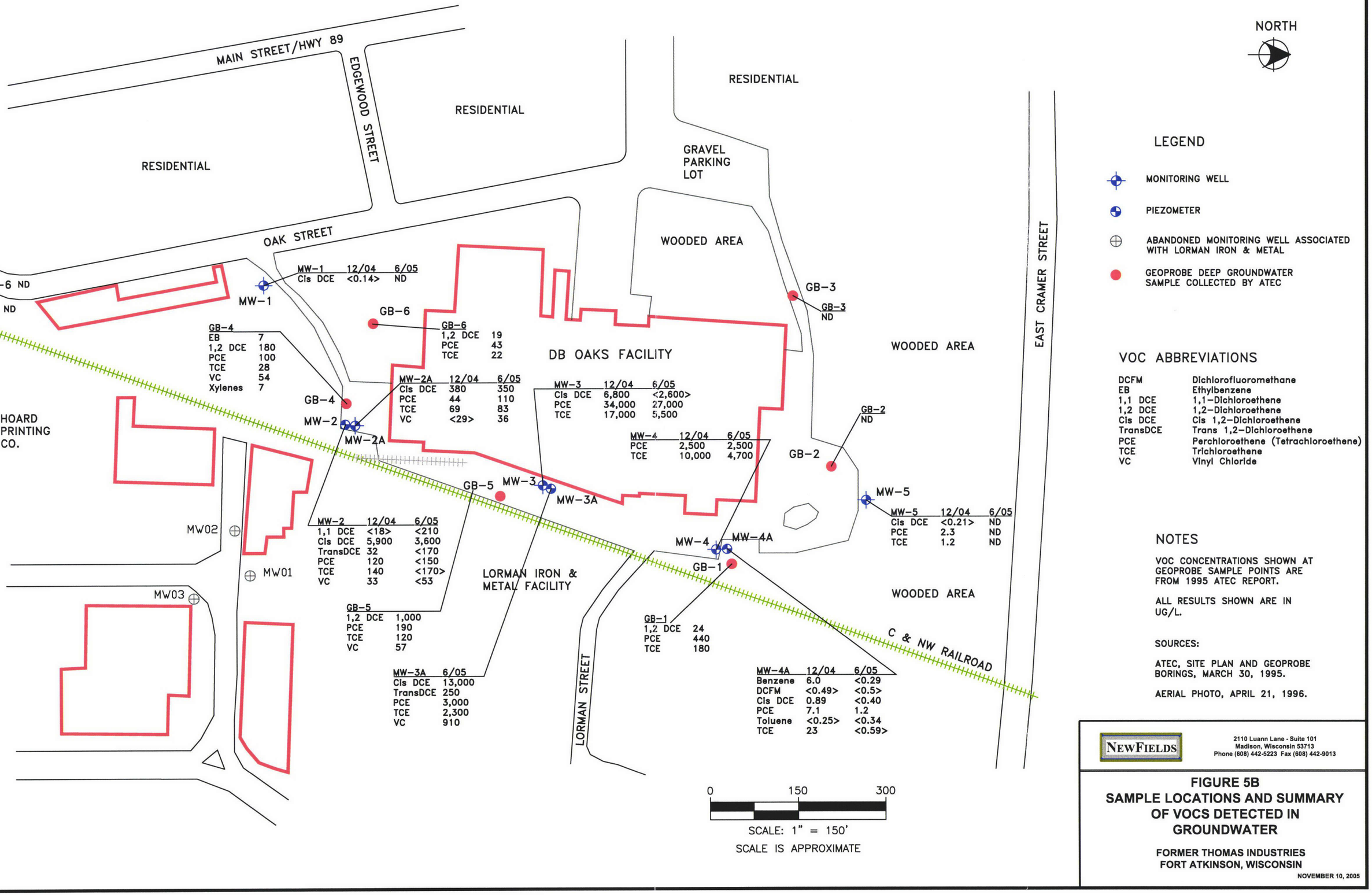
NOVEMBER 10, 2005

C:\ PROJECTS\ THOMAS\ FORTATKINSON\ CADFILES\ AUGUST2005DWGS\ FIG5A



LEGEND

- MONITORING WELL
- PIEZOMETER
- ABANDONED MONITORING WELL ASSOCIATED WITH LORMAN IRON & METAL
- GEOPROBE DEEP GROUNDWATER SAMPLE COLLECTED BY ATEC

VOC ABBREVIATIONS

DCFM	Dichlorofluoromethane
EB	Ethylbenzene
1,1 DCE	1,1–Dichloroethene
1,2 DCE	1,2–Dichloroethene
Cis DCE	Cis 1,2–Dichloroethene
TransDCE	Trans 1,2–Dichloroethene
PCE	Perchloroethene (Tetrachloroethene)
TCE	Trichloroethene
VC	Vinyl Chloride

NOTES

VOC CONCENTRATIONS SHOWN AT GEOPROBE SAMPLE POINTS ARE FROM 1995 ATEC REPORT.

ALL RESULTS SHOWN ARE IN UG/L.

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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FIGURE 5B
SAMPLE LOCATIONS AND SUMMARY OF VOCS DETECTED IN GROUNDWATER

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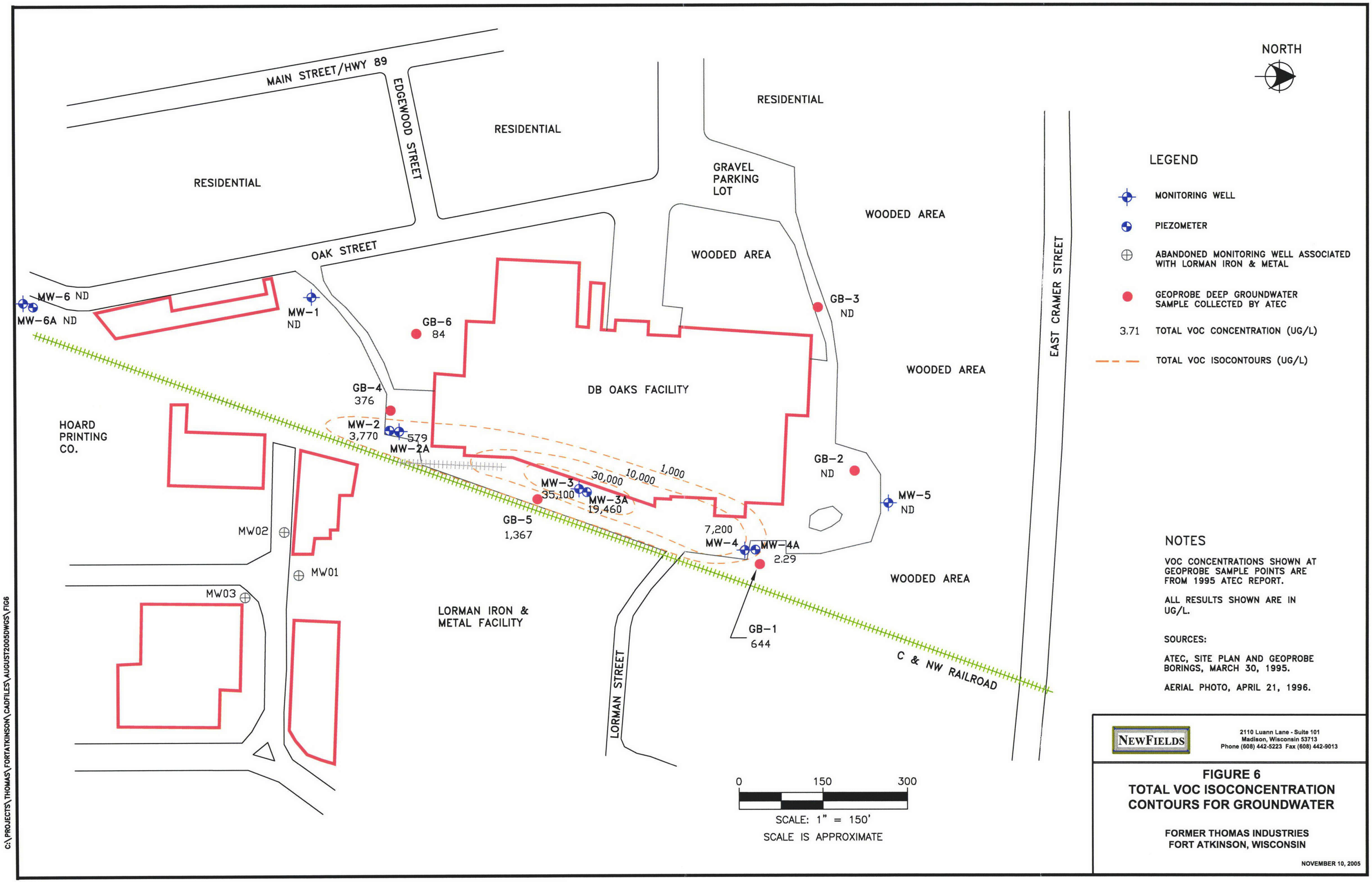
NOVEMBER 10, 2005

C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG5B



NOTES

VOC CONCENTRATIONS SHOWN AT GEOPROBE SAMPLE POINTS ARE FROM 1995 ATEC REPORT.

ALL RESULTS SHOWN ARE IN UG/L.

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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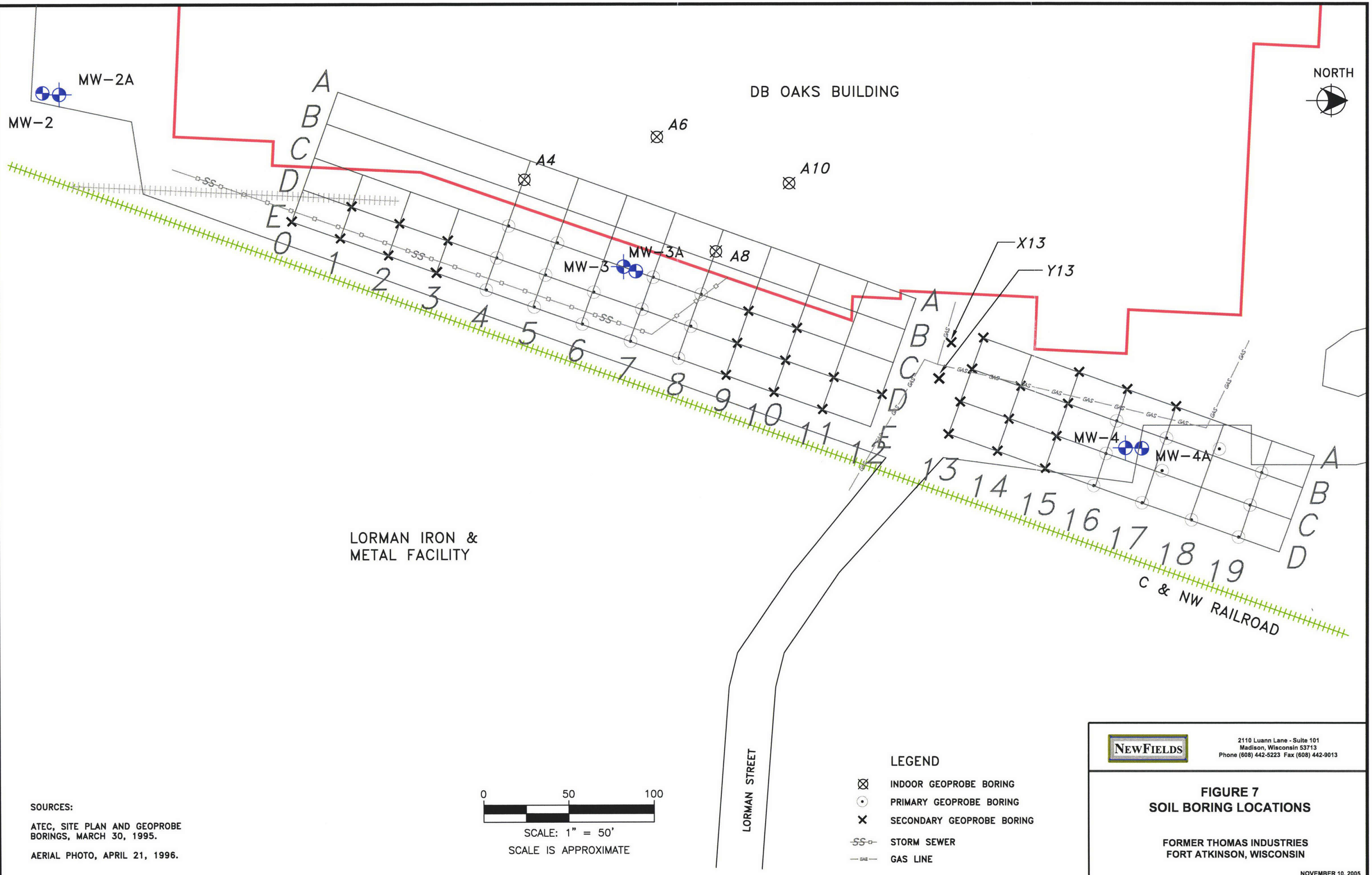
FIGURE 6
TOTAL VOC ISOCONCENTRATION CONTOURS FOR GROUNDWATER

FORMER THOMAS INDUSTRIES
FORT ATKINSON, WISCONSIN

NOVEMBER 10, 2005

C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG6



SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

0 50 100

SCALE: 1" = 50'

SCALE IS APPROXIMATE

LEGEND

- INDOOR GEOPROBE BORING
- PRIMARY GEOPROBE BORING
- SECONDARY GEOPROBE BORING
- STORM SEWER
- GAS LINE

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FIGURE 7
SOIL BORING LOCATIONS

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C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG7

DB OAKS BUILDING

NORTH

MW-2A

MW-2

A6

2.5

A4

ND

A10

4.3

MW-3A

MW-3

A8

0.45

X13

Y13

SS

1.8

0.49

ND

3.0

94

15

2.2

0.24

5.9

4.9

3.3

5.1

0.068

0.86

ND

0.051

ND

3.1

1.6

3.2

1.3

3.2

27

0.062

5.3

1.5

1.5

0.072

ND

ND

GAS

ND

0.05

ND

ND

3.5

3.3

1.7

1.8

0.18

1.4

11

0.17

1.3

3.0

MW-4

MW-4A

ND

4.7

ND

0.078

0.28

ND

0.17

ND

ND

ND

ND

C & NW RAILROAD

LORMAN IRON &
METAL FACILITY

LORMAN STREET

0 50 100

SCALE: 1" = 50'

SCALE IS APPROXIMATE

LEGEND

- INDOOR GEOPROBE BORING
- PRIMARY GEOPROBE BORING
- SECONDARY GEOPROBE BORING
- 0.49 PCE CONCENTRATION (PPM)
- PCE CONCENTRATION (10 PPM)
- PCE CONCENTRATION (1 PPM)
- SS STORM SEWER
- GAS GAS LINE

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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FIGURE 8A
LATERAL EXTENT OF PCE IN SOIL, 0-2.5 FOOT INTERVAL

FORMER THOMAS INDUSTRIES
FORT ATKINSON, WISCONSIN

NOVEMBER 10, 2005

C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG8A

DB OAKS BUILDING

NORTH

MW-2A

MW-2

A6

0.056

A4

ND

A10

1.7

MW-3A

MW-3

A8

ND

X13

Y13

SS

GAS

0.093

4.4

1.4

1.3

3.8

2.5

1.1

ND

1.8

20

4.3

9.8

930

1.5

ND

0.59

4.2

22

2100

35

6.6

76

26

1.4

4.7

0.072

4.5

5.4

5.0

1.1

ND

ND

3.2

ND

0.40

0.058

2.2

1.0

5.9

1.3

3.6

1.6

1.9

0.165

4.3

MW-4

14

MW-4A

0.080

0.15

ND

0.69

ND

0.35

1.1

0.25

ND

ND

C & NW RAILROAD

LORMAN IRON &
METAL FACILITY

LORMAN STREET

LEGEND

- INDOOR GEOPROBE BORING
- PRIMARY GEOPROBE BORING
- SECONDARY GEOPROBE BORING
- 0.49 PCE CONCENTRATION (PPM)
- PCE CONCENTRATION (10 PPM)
- PCE CONCENTRATION (1 PPM)
- STORM SEWER
- GAS LINE

0 50 100

SCALE: 1" = 50'

SCALE IS APPROXIMATE

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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FIGURE 8B
LATERAL EXTENT OF PCE IN SOIL, 2.5-5 FOOT INTERVAL

FORMER THOMAS INDUSTRIES
FORT ATKINSON, WISCONSIN

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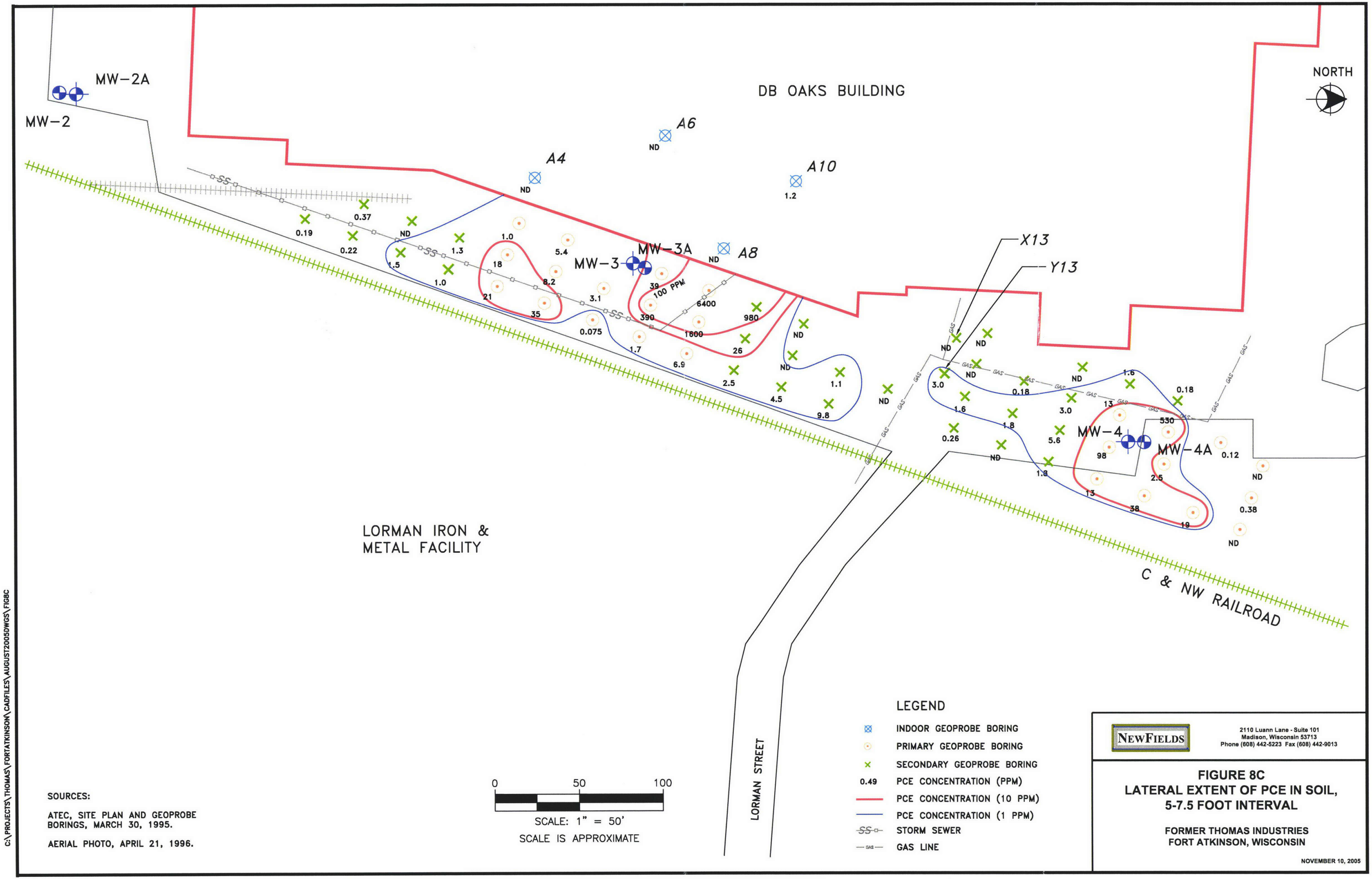
C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG8B



SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

0 50 100

SCALE: 1" = 50'

SCALE IS APPROXIMATE

LEGEND

- INDOOR GEOPROBE BORING
- PRIMARY GEOPROBE BORING
- SECONDARY GEOPROBE BORING
- 0.49 PCE CONCENTRATION (PPM)
- PCE CONCENTRATION (10 PPM)
- PCE CONCENTRATION (1 PPM)
- STORM SEWER
- GAS LINE

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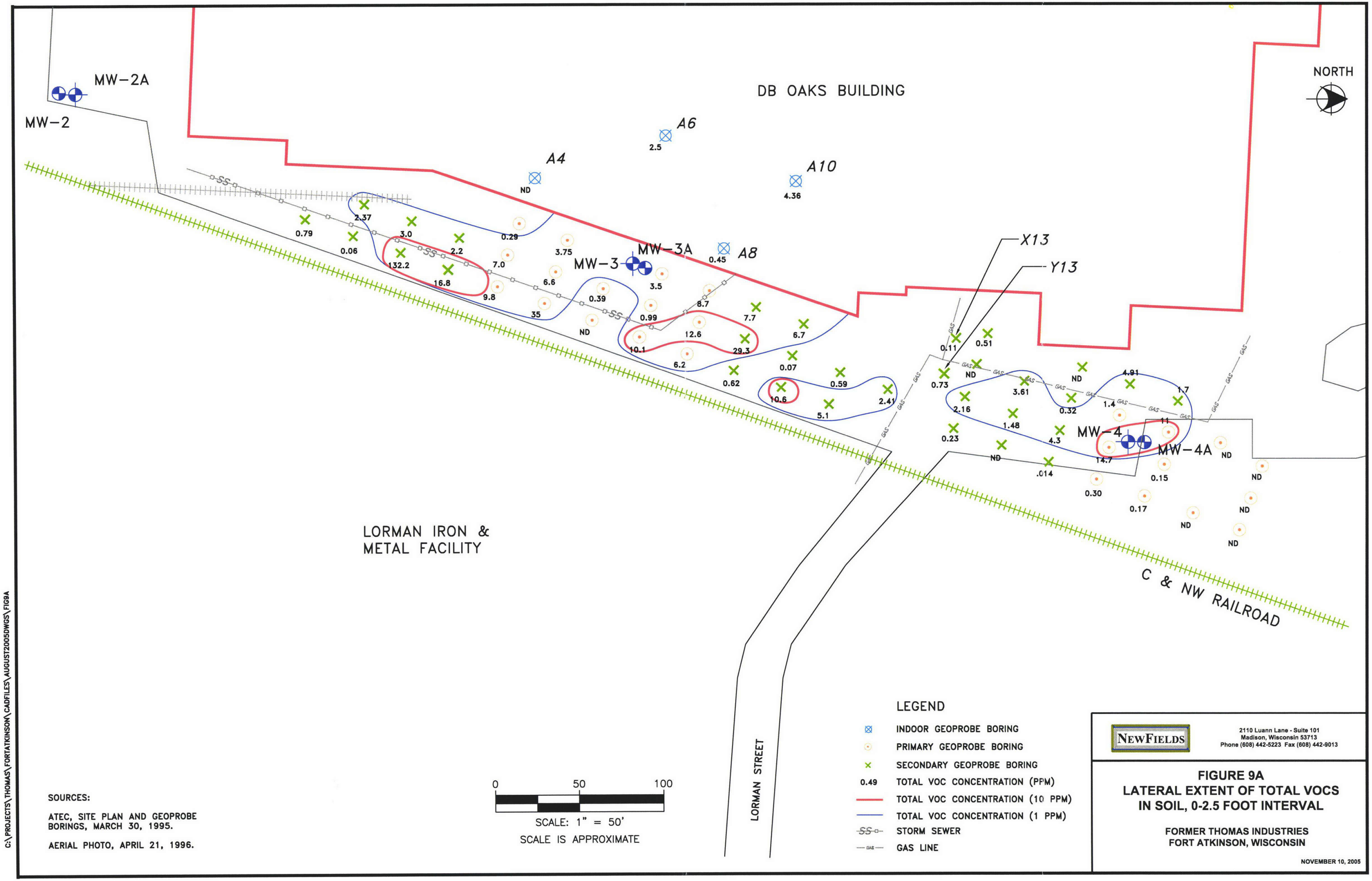
FIGURE 8C
LATERAL EXTENT OF PCE IN SOIL, 5-7.5 FOOT INTERVAL

FORMER THOMAS INDUSTRIES
FORT ATKINSON, WISCONSIN

NOVEMBER 10, 2005

C:_PROJECTS_THOMAS_FORTATKINSON_CADFILES_AUGUST2005DWGS_FIG8C



SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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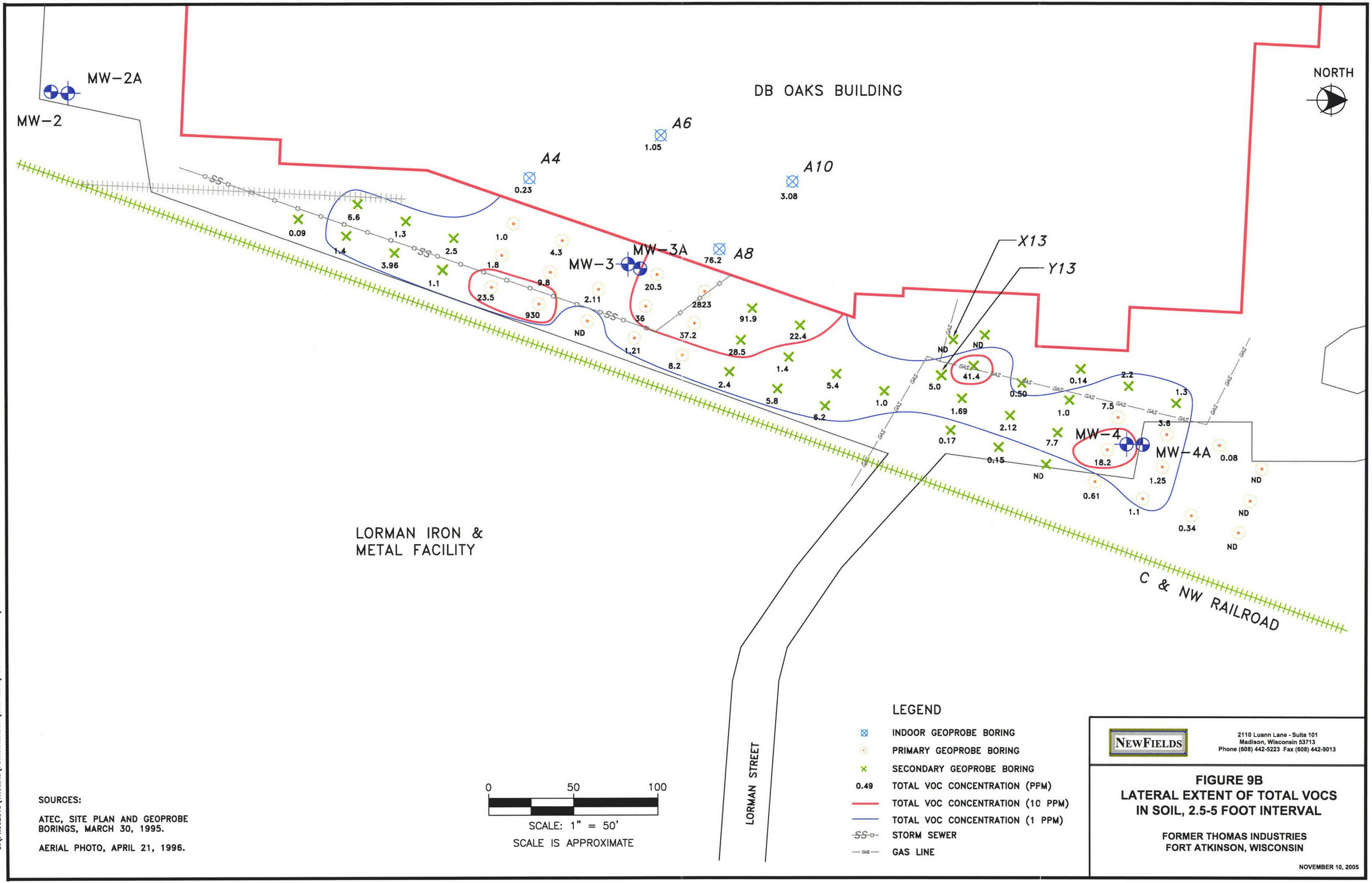
FIGURE 9A
LATERAL EXTENT OF TOTAL VOCS IN SOIL, 0-2.5 FOOT INTERVAL

FORMER THOMAS INDUSTRIES
FORT ATKINSON, WISCONSIN

NOVEMBER 10, 2005

C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG9A



SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG9B

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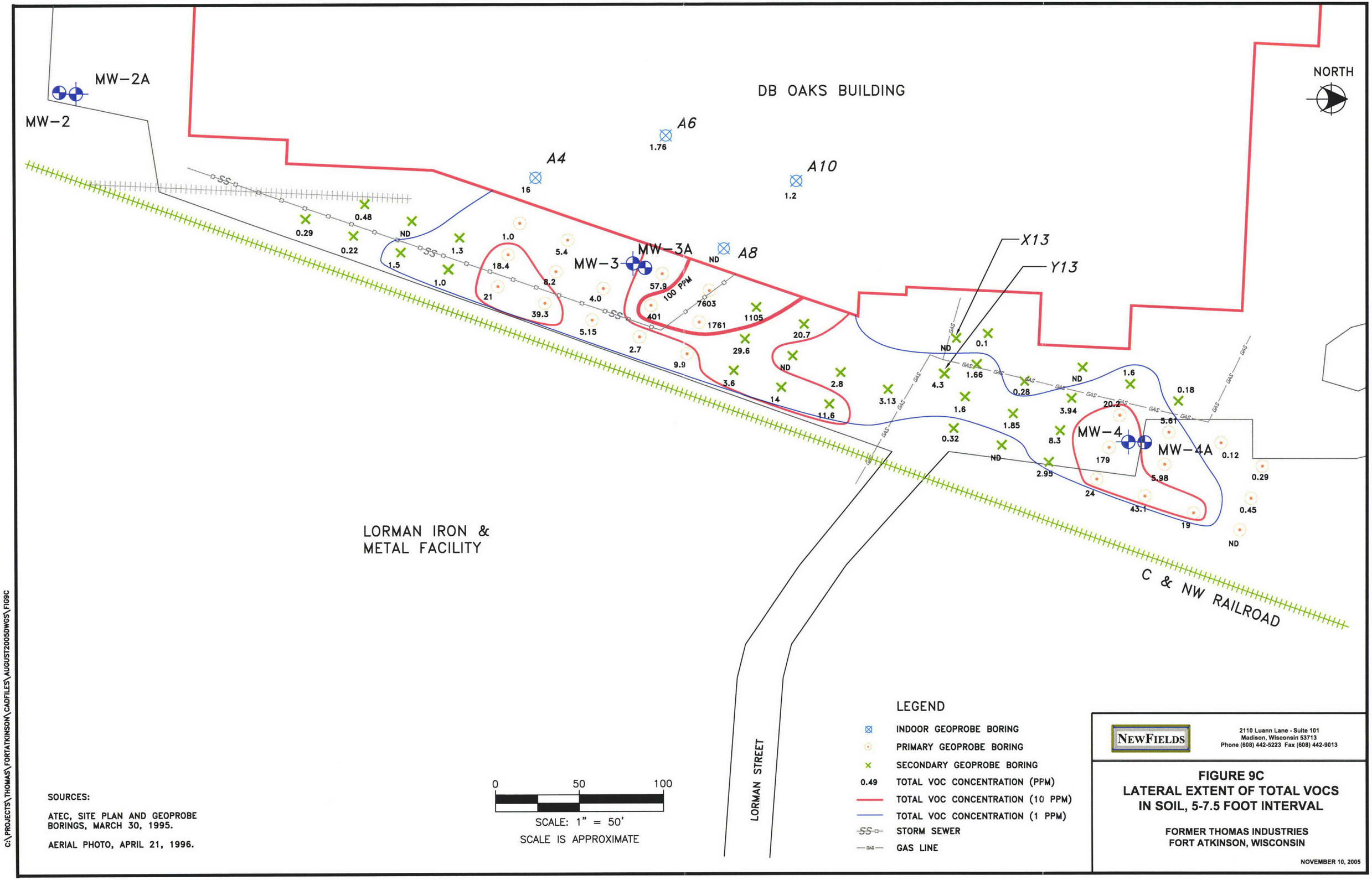
FIGURE 9B
LATERAL EXTENT OF TOTAL VOCS IN SOIL, 2.5-5 FOOT INTERVAL

FORMER THOMAS INDUSTRIES
FORT ATKINSON, WISCONSIN

NOVEMBER 10, 2005



SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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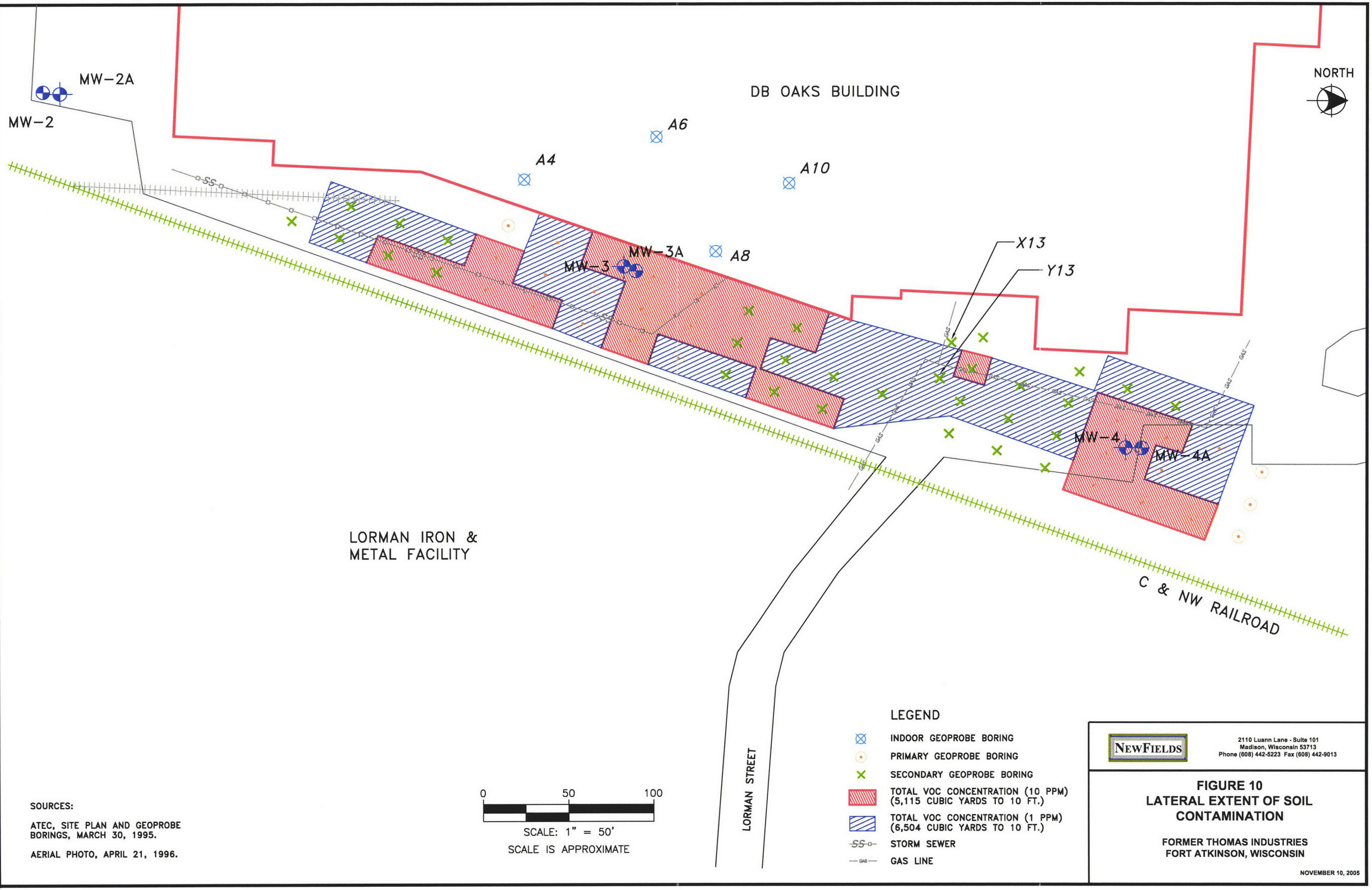
FIGURE 9C
LATERAL EXTENT OF TOTAL VOCS IN SOIL, 5-7.5 FOOT INTERVAL

FORMER THOMAS INDUSTRIES
FORT ATKINSON, WISCONSIN

NOVEMBER 10, 2005

C:\PROJECTS\THOMAS\FORTATKINSON\CADFILES\AUGUST2005DWGS\FIG9C



SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

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FIGURE 10
LATERAL EXTENT OF SOIL CONTAMINATION

FORMER THOMAS INDUSTRIES
FORT ATKINSON, WISCONSIN

NOVEMBER 10, 2005

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Tables

Table 1
Groundwater Elevations
D.B Oaks Facility, Fort Atkinson, Wisconsin

Well Location	Reference Elevation	Ground Surface Elevation	Depth to Top of Screen	Depth to Bottom of Screen	Top of Screen Elevation	Bottom of Screen Elevation	December 16, 2004		June 1, 2005		August 25, 2005	
							Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation
MW-1	793.36	791.3	8.0	18.0	783.3	773.3	12.77	780.59	11.77	781.59	12.38	780.98
MW-2	791.21	791.5	5.5	15.5	786.0	776.0	10.59	780.62	7.01	784.20	10.50	780.71
MW-2A	791.27	791.5	35.0	4.0	756.5	751.5	10.76	780.51	9.83	781.44	10.54	780.73
MW-3	793.20	790.9	3.0	13.0	787.9	777.9	7.09	786.11	6.49	786.71	7.45	785.75
MW-3A	793.51	790.9	43.0	48.0	747.9	742.9	--	--	11.37	782.14	12.04	781.47
MW-4	799.24	796.8	5.0	15.0	791.8	781.8	8.11	791.13	8.09	791.15	9.84	789.40
MW-4A	799.13	797.1	34.0	39.0	763.1	758.1	7.99	791.14	7.99	791.14	9.73	789.40
MW-5	798.51	796.2	4.0	14.0	792.2	782.2	7.83	790.68	6.48	792.03	9.96	788.55
MW-6	797.29	797.7	6.0	16.0	791.7	781.7	--	--	11.78	785.51	12.03	785.26
MW-6A	797.45	797.8	35.0	40.0	762.8	757.8	--	--	17.16	780.29	17.92	779.53

Note: Wells MW-3A, MW-6, and MW-6A were installed in April 2005. The remaining wells were installed in December 2004.
Reference elevations surveyed by Woodman & Associates on July 14, 2005.

Table 2
Summary of In-Situ Hydraulic Conductivity Test Results
D.B Oaks Facility, Fort Atkinson, Wisconsin

Well Location	Trial #1 Hydraulic Conductivity (cm/sec)	Trial #2 Hydraulic Conductivity (cm/sec)	Trial #3 Hydraulic Conductivity (cm/sec)	Water Table Observation Well Average Hydraulic Conductivity (cm/sec)	Piezometer Average Hydraulic Conductivity (cm/sec)
MW-1	3.53×10^{-3}	7.06×10^{-3}	--	5.30×10^{-3}	--
MW-2	1.06×10^{-3}	1.06×10^{-3}	--	1.06×10^{-3}	--
MW-2A	1.69×10^{-2}	1.76×10^{-2}	--	--	1.73×10^{-2}
MW-3	1.76×10^{-3}	2.82×10^{-3}	--	2.29×10^{-3}	--
MW-4	3.53×10^{-3}	7.06×10^{-3}	--	5.30×10^{-3}	--
MW-4A	2.54×10^{-2}	2.96×10^{-2}	2.96×10^{-2}	--	2.82×10^{-2}
MW-5	2.12×10^{-3}	3.18×10^{-3}	--	2.65×10^{-3}	--
			Average	**3.32×10^{-3}**	**2.28×10^{-2}**

Table 3
December 2004 Groundwater Sample Results – Volatile Organic Compounds (VOCs) and Field Measurements
D.B Oaks Facility, Fort Atkinson, Wisconsin

Well	Units	MW-1	MW-2	MW-2A	MW-3	MW-4	Dup 1 (MW-4)	MW-4A	MW-5	PAL	ES
VOCs											
Benzene	µg/L	<0.12	<5.8	<5.8	<508	<58	<58	**6.0**	<0.12	0.5	5
Dichlorofluoromethane	µg/L	<0.15	<7.7	<7.7	<770	<77	<77	<0.49>	<0.15	200	1,000
1,1-Dichloroethene	µg/L	<0.24	**<18>**	<12	<1,200	<120	<120	<0.24	<0.24	0.7	7
cis-1,2-Dichloroethene	µg/L	<0.14>	**5,900**	**380**	**6,800**	<66	<66	0.89	<0.21>	7	70
trans-1,2-Dichloroethene	µg/L	<0.11	***32***	<5.4	<540	<54	<54	<0.11	<0.11	20	100
Tetrachloroethene	µg/L	<0.13	**120**	**44**	**34,000**	**2,500**	**2,300**	**7.1**	**2.3**	0.5	5
Toluene	µg/L	<0.20	<10	<10	<1,000	<100	<100	<0.25>	<0.20	200	1,000
Trichloroethene	µg/L	<0.12	**140**	**69**	**17,000**	**10,000**	**8,900**	**23**	**1.2**	0.5	5
Vinyl Chloride	µg/L	<0.16	**33**	**<29>**	<820	<82	<82	<0.16	<0.16	0.02	0.2
Total VOCs	µg/L	**0.14**	**6,243**	**522**	**57,800**	**12,500**	**11,200**	**37.73**	**3.71**	--	--
Field Measurements											
pH	pH Units	7.09	7.5	7.31	7.54	7.49	--	7.38	6.85	--	--
Conductivity	µS	752	937	638	685	656	--	614	1,124	--	--
Temperature	C°	11.8	12.3	10.9	10.6	11.4	--	11.1	10.3	--	--
Oxidation-reduction potential	mV	119	107	90	44	48	--	52	157	--	--
Dissolved oxygen	mg/L	5.24	0.69	1.92	0.22	0.53	--	2.44	3.98	--	--

PAL - Preventive Action Limit per Wisconsin Admin. Code sec. NR 141.10.
ES - Enforcement Standard per Wisconsin Admin. Code sec. NR 141.10.
< - Detected below Limit of Detection.
< > - Detected above Limit of Detection, but below Limit of Quantification
Concentrations exceeding the PAL are in italics.
Concentrations exceeding the ES have been shaded.

Table 4
June 2005 Groundwater Sample Results – Volatile Organic Compounds (VOCs)
D.B Oaks Facility, Fort Atkinson, Wisconsin

Well	Units	MW-1	MW-2	Dup 1 (MW-2)	MW-2A	MW-3	MW-3A	MW-4	MW-4A	MW-5	MW-6	MW-6A	PAL	ES
VOCs														
Benzene	µg/L	<0.29	<150	<150	<7.3	<730	<150	<150	<0.29	<0.29	<0.29	<0.29	0.5	5
Dichlorofluoromethane	µg/L	<0.18	<89	<89	<4.5	<450	<89	<89	**<0.50>**	<0.18	<0.18	<0.18	200	1,000
1,1-Dichloroethene	µg/L	<0.41	<210	<210	<10	<1,000	<210	<210	<0.41	<0.41	<0.41	<0.41	0.7	7
cis-1,2-Dichloroethene	µg/L	<0.40	**3,600**	**3,800**	**350**	**<2,600>**	**13,000**	<200	<0.40	<0.40	<0.40	<0.40	7	70
trans-1,2-Dichloroethene	µg/L	<0.35	<170	**<160>**	<8.7	<870	**<250>**	<170	<0.35	<0.35	<0.35	<0.35	20	100
Tetrachloroethene	µg/L	<0.31	<150	<150	**110**	**27,000**	**3,000**	**2,500**	***1.2***	<0.31	<0.31	<0.31	0.5	5
Toluene	µg/L	<0.34	<170	<170	<8.4	<840	<170	<170	<0.34	<0.34	<0.34	<0.34	200	1,000
Trichloroethene	µg/L	<0.25	**<170>**	**<160>**	**83**	**5,500**	**2,300**	**4,700**	***<0.59>***	<0.25	<0.25	<0.25	0.5	5
Vinyl Chloride	µg/L	<0.11	<53	<53	**36**	<270	**910**	<53	<0.11	<0.11	<0.11	<0.11	0.02	0.2
Total VOCs	µg/L	0.0	**3,770**	**4,120**	**579**	**35,100**	**19,460**	**7,200**	**2.29**	0.0	0.0	0.0	--	--

PAL - Preventive Action Limit per Wisconsin Admin. Code sec. NR 141.10.
ES - Enforcement Standard per Wisconsin Admin. Code sec. NR 141.10.
< - Detected below Limit of Detection.
< > - Detected above Limit of Detection, but below Limit of Quantification
Concentrations exceeding the PAL are in italics.
Concentrations exceeding the ES have been shaded.

Table 5 (Page 1 of 7)
May 2005 Mobile Laboratory Soil Sample Results – Volatile Organic Compounds (VOCs)
D.B Oaks Facility, Fort Atkinson, Wisconsin

Boring Location	Detection Limit	PCE	TCE	cis DCE	trans DCE	1,1 DCE	Vinyl Chloride	Total VOCs
Depth (feet)		0 - 2.5	0 - 2.5	0 - 2.5	0 - 2.5	0 - 2.5	0 - 2.5	0 - 2.5
A4	1,000							
A4 (low)*	50							
A6	1,000	2,500						2,500
A6 (low)*	50	2,300		57				2,357
A8	1,000							
A8 (low)*	50	450						450
A10	1,000	4,000						4,000
A10 (low)*	50	4,300	62					4,362
A13	1,000							
A13 (low)*	50	51						51
A15	1,000							
A15 (low)*	50							
A16	1,000	2,500						2,500
A16 (low)*	50	3,500	1,300	110				4,910
A17	1,000	1,700						1,700
A17 (low)*	50	1,100	280	61				1,441
B13	1,000							
B-13 (low)*	50							
B14	1,000	3,300						3,300
B-14 (low)*	50	3,100	510					3,610
B15	1,000							
B-15 (low)*	50	180	140					320
B16	1,000	1,400						1,400
B-16 (low)*	50	1,100	220				81	1,401
B17	1,000	11,000						11,000
B-17 (low)*	50							
B18	1,000							
B-18 (low)*	50							
B19	1,000							
B-19 (low)*	50							
C4	1,000							
C4 (low)*	50	240					52	292
C5	1,000	2,700						2,700
C5 (low)*	50	3,300		280			170	3,750
C7	1,000		1,300	2,200				3,500
C7 (low)*	50		1,800				190	1,990
C8	1,000	3,100	3,500	2,100				8,700
C8 (low)*	50	1,900	3,500	1,700			190	7,290
C9	1,000	3,200	1,300	3,200				7,700
C9 (low)*	50	1,000		3,400			730	5,270
C10	1,000	1,500	1,100	4,100				6,700
C10 (low)*	50	750	1,100		490	580	710	3,630
C13	1,000	1,800						1,800
C13 (low)*	50	1,600	560					2,160
C14	1,000	1,300						1,300
C14 (low)*	50	930	480				68	1,478
C15	1,000	3,000	1,300					4,300
C15 (low)*	50	2,300					52	2,352
C16	1,000	4,700	10,000					14,700
C17	1,000							
C17 (low)*	50		150					150
C19	1,000							
C19 (low)*	50							

All concentrations reported in µg/kg (part per billion - ppb).
(low)* Sample re-analyzed at low detection limit.

Table 5 (Page 2 of 7)
May 2005 Mobile Laboratory Soil Sample Results – Volatile Organic Compounds (VOCs)
D.B Oaks Facility, Fort Atkinson, Wisconsin

Boring Location	Detection Limit	PCE	TCE	cis DCE	trans DCE	1,1 DCE	Vinyl Chloride	Total VOCs
Depth (feet)		0 - 2.5	0 - 2.5	0 - 2.5	0 - 2.5	0 - 2.5	0 - 2.5	0 - 2.5
D1	1,000	1,800						1,800
D1 (low)*	50	1,100	270	1,000				2,370
D2	1,000	3,000						3,000
D2 (low)*	50	2,300		320				2,620
D3	1,000	2,200						2,200
D3 (low)*	50	1,800	170					1,970
D4	1,000	5,900						7,000
D4 (low)*	50	750		55				805
D5	1,000	5,100		1,500				6,600
D5 (low)*	50							
D6	1,000							
D6 (low)*	50	68		230			94	392
D7	1,000							
D7 (low)*	50	51	280			170	330	996
D8	1,000	1,600	1,600	9,400				12,600
D9	1,000	27,000	2,300					29,300
D10	1,000							
D10(low)*	50	72						72
D11	1,000							
D11 (low)*	50			500		92		592
D12	1,000			2,200				2,200
D12 (low)*	50		110	2,300				2,410
D13	1,000							
D13 (low)*	50	170					64	234
D14	1,000							
D14 (low)*	50							<50
D15	1,000							
D15 (low)*	50	78						138
D16	1,000							
D16 (low)*	50	280	220					500
D17	1,000							
D17 (low)*	50	170						170
D18	1,000							
D18 (low)*	50							<50
D19	1,000							
D19 (low)*	50							<50
E0	1,000							
E0 (low)*	50	490	240				58	788
E1	1,000							
E1 (low)*	50						59	59
E2	1,000	94,000	31,000	7,200				132,200
E2 (low)*	50							
E3	1,000	15,000	1,800					16,800
E3 (low)*	50							
E4	1,000	4,900	3,400	1,500				9,800
E4 (low)*	50	3,300	3,300	1,400				8,000
E5	1,000			1,600				1,600
E5 (low)*	50	860	480	3,400	78			4,818
E6	1,000							
E6 (low)*	50							
E7	1,000	3,200	5,300	1,600				10,100
E7 (low)*	50				100			
E8	1,000	1,300		4,900				6,200
E8 (low)*	50	960		4,900	110			5,970
E9	1,000							
E9 (low)*	50	62		560				622
E10	1,000	5,300	3,900	2,400				11,600
E10 (low)*	50							
E11	1,000		2,100	3,000				5,100
E11 (low)*	50	1,500	1,200					2,700
X13	1,000							
X13 (low)*	50	110						110
Y13	1,000							
Y13 (low)*	50	260	270	200				730

All concentrations reported in µg/kg (part per billion - ppb).
(low)* Sample re-analyzed at low detection limit.

Table 5 (Page 3 of 7)
May 2005 Mobile Laboratory Soil Sample Results – Volatile Organic Compounds (VOCs)
D.B Oaks Facility, Fort Atkinson, Wisconsin

Boring Location	Detection Limit	PCE	TCE	cis DCE	trans DCE	1,1 DCE	Vinyl Chloride	Total VOCs
Depth (feet)		2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0
A4	1,000							
A4 (low)*	50	140					88	228
A6	1,000							
A6 (low)*	50	120	56	870				1,046
A8	1,000							76,200
A8 (low)*	50							
A10	1,000	1,700						1,700
A10 (low)*	50	1,300	490				1,200	3,079
A13	1,000							
A13 (low)*	50							
A15	1,000							
A15 (low)*	50	58					82	140
A16	1,000	2,200						2,200
A16 (low)*	50	1,300						1,300
A17	1,000	1,300						1,300
A17 (low)*	50							
B13	1,000		36,000	5,400				41,400
B-13 (low)*	50							
B14	1,000							
B-14 (low)*	50	400	180					580
B15	1,000	1,000						1,000
B-15 (low)*	50	690						870
B16	1,000	5,900	1,600					7,500
B-16 (low)*	50							
B17	1,000	3,600						3,600
B-17 (low)*	50	2,300						2,300
B18	1,000							
B-18 (low)*	50	80						80
B19	1,000							
B-19 (low)*	50							
C4	1,000							
C4 (low)*	50							
C5	1,000	4,300						4,300
C5 (low)*	50	2,700	450	110				3,260
C7	1,000	4,200	11,000	5,300				20,500
C7 (low)*	50							
C8	1,000	2,100,000	180,000	2,100				2,283,500
C8 (low)*	50							
C9	1,000	76,000	14,000	1,900				91,900
C9 (low)*	50							
C10	1,000	4,700	7,700	10,000				22,400
C10 (low)*	50							
C13	1,000	1,600						1,600
C13 (low)*	50	1,300	390					1,690
C14	1,000	1,900						1,900
C14 (low)*	50	1,600	520					2,120
C15	1,000	4,300	3,400					7,700
C15 (low)*	50	2,300	3,400					5,700
C16	1,000	4,200	14,000					18,200
C17	1,000							
C17 (low)*	50	480	690				77	1,247
C19	1,000							
C19 (low)*	50							

All concentrations reported in µg/kg (part per billion - ppb).
(low)* Sample re-analyzed at low detection limit.

Table 5 (Page 4 of 7)
May 2005 Mobile Laboratory Soil Sample Results – Volatile Organic Compounds (VOCs)
D.B Oaks Facility, Fort Atkinson, Wisconsin

Boring Location	Detection Limit	PCE	TCE	cis DCE	trans DCE	1,1 DCE	Vinyl Chloride	Total VOCs
Depth (feet)		2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0
D1	1,000	4,400	2,200					6,600
D1 (low)*	50	3,800		1,700				5,500
D2	1,000	1,300						1,300
D2 (low)*	50	1,000						1,000
D3	1,000	2,500						2,500
D3 (low)*	50	2,400	53					2,453
D4	1,000	1,800						1,800
D4 (low)*	50							
D5	1,000	9,800						9,800
D5 (low)*	50							
D6	1,000	1,500						1,500
D6 (low)*	50	1,400	500	160			54	2,114
D7	1,000	22,000	7,800	6,200				36,000
D7 (low)*	50							
D8	1,000	35,000	2,200					37,200
D9	1,000	26,000	2,500					28,500
D10	1,000			1,400				1,400
D10(low)*	50	72		1,000				1,072
D11	1,000	5,400						5,400
D11 (low)*	50							
D12	1,000	1,000						1,000
D12 (low)*	50	680	290	130				1,100
D13	1,000							
D13 (low)*	50	110					55	165
D14	1,000							
D14 (low)*	50	150						150
D15	1,000							
D15 (low)*	50							<50
D16	1,000							
D16 (low)*	50	350	200				61	611
D17	1,000	1,100						1,100
D17 (low)*	50	400						400
D18	1,000							
D18 (low)*	50	250				914		344
D19	1,000							
D19 (low)*	50							
E0	1,000							
E0 (low)*	50	93					97	93
E1	1,000	1,400						1,400
E1 (low)*	50	1,100	160				61	1,321
E2	1,000	3,800						3,800
E2 (low)*	50	3,500	460					3,960
E3	1,000	1,100						1,100
E3 (low)*	50	660						660
E4	1,000	20,000	3,100	1,400				23,500
E4 (low)*	50							
E5	1,000	930,000						930,000
E5 (low)*	50							
E6	1,000							
E6 (low)*	50							
E7	1,000							
E7 (low)*	50	590	540				84	1,214
E8	1,000	6,600	1,600					8,200
E8 (low)*	50							
E9	1,000	1,400	1,000					2,400
E9 (low)*	50	1,200	550	630				2,380
E10	1,000	4,500	1,300					5,800
E10 (low)*	50	4,400	1,300					5,700
E11	1,000	5,000	1,200					6,200
E11 (low)*	50	170	2,200	3,000				5,830
X13	1,000							
X13 (low)*	50							
Y13	1,000	3,200	1,800					5,000
Y13 (low)*	50	2,800	2,000	96				4,896

All concentrations reported in µg/kg (part per billion - ppb).
(low)* Sample re-analyzed at low detection limit.

Table 5 (Page 5 of 7)
May 2005 Mobile Laboratory Soil Sample Results – Volatile Organic Compounds (VOCs)
D.B Oaks Facility, Fort Atkinson, Wisconsin

Boring Location	Detection Limit	PCE	TCE	cis DCE	trans DCE	1,1 DCE	Vinyl Chloride	Total VOCs
Depth (feet)		5.0 – 7.5	5.0 – 7.5	5.0 – 7.5	5.0 – 7.5	5.0 – 7.5	5.0 – 7.5	5.0 – 7.5
A4	1,000							16,000
A4 (low)*	50							
A6	1,000			1,600				1,600
A6 (low)*	50			1,600			160	1,760
A8	1,000							
A8 (low)*	50							
A10	1,000	1,200		1,000				2,200
A10 (low)*	50	540		1,200		520	260	2,520
A13	1,000							
A13 (low)*	50							100
A15	1,000							
A15 (low)*	50							
A16	1,000	1,600						1,600
A16 (low)*	50	1,500						1,500
A17	1,000							
A17 (low)*	50	180						180
B13	1,000		1,400					1,400
B-13 (low)*	50		1,400	210	53			1,663
B14	1,000							
B-14 (low)*	50	180	100					280
B15	1,000	3,000						3,000
B-15 (low)*	50	3,000	890				52	3,942
B16	1,000	13,000	7,200					20,200
B-16 (low)*	50							
B17	1,000	530,000	31,000					561,000
B-17 (low)*	50							
B18	1,000							
B-18 (low)*	50	120						120
B19	1,000							
B-19 (low)*	50		290					290
C4	1,000	1,000						1,000
C4 (low)*	50	570						570
C5	1,000	5,400						5,400
C5 (low)*	50							
C7	1,000	39,000	13,000	5,900				57,900
C7 (low)*	50							
C8	1,000	6,400,000	1,200,000	3,100				7,603,100
C8 (low)*	50							
C9	1,000	980,000	120,000	2,500				1,102,500
C9 (low)*	50							
C10	1,000		12,000	8,700				20,700
C10 (low)*	50							
C13	1,000	1,600						1,600
C13 (low)*	50	750	290					1,040
C14	1,000	1,800						1,800
C14 (low)*	50	1,500	350					1,850
C15	1,000	5,600	2,700					8,300
C15 (low)*	50							
C16	1,000	98,000	81,000					179,000
C17	1,000	2,500	3,200					5,700
C17 (low)*	50	2,300	3,600				75	5,975
C19	1,000							
C19 (low)*	50	69	380					449

All concentrations reported in µg/kg (part per billion - ppb).
(low)* Sample re-analyzed at low detection limit.

Table 5 (Page 6 of 7)
May 2005 Mobile Laboratory Soil Sample Results – Volatile Organic Compounds (VOCs)
D.B Oaks Facility, Fort Atkinson, Wisconsin

Boring Location	Detection Limit	PCE	TCE	cis DCE	trans DCE	1,1 DCE	Vinyl Chloride	Total VOCs
Depth (feet)		5.0 – 7.5	5.0 – 7.5	5.0 – 7.5	5.0 – 7.5	5.0 – 7.5	5.0 – 7.5	5.0 – 7.5
D1	1,000							
D1 (low)*	50	370		56			58	484
D2	1,000							
D2 (low)*	50							
D3	1,000	1,300						1,300
D3 (low)*	50	940						940
D4	1,000	17,000						17,000
D4 (low)*	50	18,000	330	110				18,440
D5	1,000	8,200						8,200
D5 (low)*	50		440	150				590
D6	1,000	3,000						4,000
D6 (low)*	50	3,100		710		70	81	3,961
D7	1,000	390,000	11,000					401,000
D7 (low)*	50							
D8	1,000	1,600,000	160,000	1,300				1,761,300
D9	1,000	26,000	3,600					29,600
D10	1,000							
D10(low)*	50							
D11	1,000	1,100						1,100
D11 (low)*	50	430		2,300		87		2,817
D12	1,000							
D12 (low)*	50	<50		2,900	77	54	97	3,128
D13	1,000							
D13 (low)*	50	260				100	57	317
D14	1,000							
D14 (low)*	50	<50						<50
D15	1,000	1,800	1,500					2,300
D15 (low)*	50	1,400	1,500				53	2,953
D16	1,000	13,000	11,000					24,000
D16 (low)*	50							
D17	1,000	38,000	5,100					43,100
D17 (low)*	50							
D18	1,000	19,000						19,000
D18 (low)*	50							
D19	1,000							
D19 (low)*	50							
E0	1,000							
E0 (low)*	50	190						287
E1	1,000							
E1 (low)*	50	220						220
E2	1,000	1,500						1,500
E2 (low)*	50	1,400	70					1,470
E3	1,000	1,000						1,000
E3 (low)*	50	620						620
E4	1,000	21,000						21,000
E4 (low)*	50							
E5	1,000	35,000	1,200	3,100				39,300
E5 (low)*	50							
E6	1,000			2,300				2,300
E6 (low)*	50	75	430	4,200			440	5,145
E7	1,000	1,700		1,000				2,700
E7 (low)*	50	910		830	66		140	1,946
E8	1,000	6,900	1,700	1,300				9,900
E8 (low)*	50							
E9	1,000	2,500	1,100					3,600
E9 (low)*	50	1,300						2,840
E10	1,000	4,500	7,500	2,000				14,000
E10 (low)*	50							
E11	1,000	9,800	2,800					11,600
E11 (low)*	50							
X13	1,000							
X13 (low)*	50							
Y13	1,000	3,000	1,300					4,300
Y13 (low)*	50							

All concentrations reported in µg/kg (part per billion - ppb).
(low)* Sample re-analyzed at low detection limit.

Table 5 (Page 7 of 7)
May 2005 Mobile Laboratory Soil Sample Results – Volatile Organic Compounds (VOCs)
D.B Oaks Facility, Fort Atkinson, Wisconsin

Boring Location	Detection Limit	PCE	TCE	cis DCE	trans DCE	1,1 DCE	Vinyl Chloride	Total VOCs
Depth (ft.)	Limit	7.5-10 Feet	7.5-10 Feet	7.5-10 Feet	7.5-10 Feet	7.5-10 Feet	7.5-10 Feet	7.5-10 Feet
A4	1,000							<1,000
A4 (low)*	50							
A6	1,000	**8,300**		**2,000**				**10,300**
A6 (low)*	50							
A8	1,000	**2,400**		**2,200**				**4,600**
A8 (low)*	50	**1,900**		**1,700**			**500**	**4,100**
A10	1,000	**28,000**	**2,900**	**2,300**				**33,200**
A10 (low)*	50	**25,000**	**3,200**	**1,900**			**79**	**30,599**
A13	1,000							
A13 (low)*	50							
A15	1,000							
A15 (low)*	50							
A16	1,000							
A16 (low)*	50							
A17	1,000							
A17 (low)*	50							

All concentrations reported in µg/kg (part per billion - ppb).
(low)* Sample re-analyzed at low detection limit.

Appendix A

Soil Boring Logs,
Well Construction Forms,
And Well Development Forms

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

Facility / Project Name	License/Permit/Monitoring Number	Boring Number
DB Oak Facility, Fort Atkinson, Wisconsin	— — — — — — — —	MW-1

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Kevin McCumber Badger State Drilling	12 / 8 / 04 MM DD YY	12 / 8 / 04 MM DD YY	4 ¼" ID HSA Split Spoon

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	P P 4 8 9	MW-1	_____ Feet MSL	791.3 Feet MSL	8.3 inches

Boring Location
State Plane _____ N. _____ E S/C/N
SE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E / W
Lat — — —
Long — — —

Local Grid Location (If Applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town / City / or Village
Jefferson	2 8	City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	ROD/Comments
			1	SILT, moist, firm, with roots, non-plastic, dark brown	ML									
1	8	3,5 7,9	3	-as above, slightly moist, dark brown				0	12					
2	16	6,6 9,12	5					0	15					
			6	CLAY, silty, trace fine sand, slightly moist, firm, non-plastic, gray	CL-ML									
3	18	7,9 10,12	8	SAND, clayey, fine grained, trace fine subrounded gravel, moist to wet, medium dense, low plasticity, light grayish brown with rust mottles				0	19					
			9	-light brown, wet, soft										
4	20	3,9 6,8	10		SC			0	15					
			12	-rock fragment encountered at 12 feet BGS, split spoon refusal										
5	4	17, 50/2"	13					0	50+					
			14	CLAY, see next page	CL									

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

Signature	Firm
	NewFields, Madison, Wisconsin

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $4,000 for each violation. Fines not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A 7-91

Boring Number MW-1

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
6	24	8,20 23,17	15	CLAY, trace fine sand, trace fine subrounded gravel, moist, firm, medium plasticity, gray	CL			0	43					
7	24	7,23 16,27	18	SAND, clayey, trace fine subrounded gravel, moist, medium dense, medium plasticity, light yellow brown	SC			0	39					
			19	EOB at 19 feet BGS, set well MW-1										

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other

Page 1 of 1

Facility / Project Name: DB Oak Facility, Fort Atkinson, Wisconsin	License/Permit/Monitoring Number: — — — — — — — —	Boring Number: **MW-2**
Boring Drilled By (Firm name and name of crew chief): Kevin McCumber, Badger State Drilling	Date Drilling Started: 12 / 9 / 04 (MM / DD / YY)	Date Drilling Completed: 12 / 9 / 04 (MM / DD / YY)
		Drilling Method: 4 ¼" ID HSA, Split Spoon
DNR Facility Well No.: — — —	WI Unique Well No.: P_P_4_8_7_	Common Well Name: MW-2
	Final Static Water Level: _____ Feet MSL	Surface Elevation: 791.5 Feet MSL
		Borehole Diameter: 8.3 inches
Boring Location: State Plane _____ N. _____ E S/C/N; SE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E	Lat — — — Long — — —	Local Grid Location (If Applicable): _____ Feet ☐ N ☐ S; _____ Feet ☐ E ☐ W
County: Jefferson	DNR County Code: 2 8	Civil Town / City / or Village: City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Sample Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
			1–15	No soil samples collected. For soils descriptions, see boring log for MW-2A. Set well MW-2 at 16 feet BGS.										

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

Signature | Firm: NewFields, Madison, WI

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $4,000 for each violation. Fines not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

Facility / Project Name	License/Permit/Monitoring Number	Boring Number
DB Oak Facility, Fort Atkinson, Wisconsin	— — — — — — — —	MW-2A

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Kevin McCumber Badger State Drilling	12 / 9 / 04 (MM / DD / YY)	12 / 9 / 04 (MM / DD / YY)	4 ¼" ID HSA 8" mud rotary

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	P P 4 8 8	MW-2A	_____ Feet MSL	791.5 Feet MSL	8.3 inches

Boring Location
State Plane _____ N. _____ E S/C/N | Lat — — — | Long — — —

SE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E / W

Local Grid Location (If Applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town / City / or Village
Jefferson	2 8	City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
				Surface = asphalt parking lot										
1	24	4,6 6,9	1–3	CLAY, silty, moist, firm to stiff, high plasticity, light yellow brown to brown	CL			0	12					
2	24	6,6 10,12	4–6					0	16					
3	24	3,7 7,12	7–8	CLAY, with fine sand and fine subrounded gravel, wet, firm, medium plasticity, light brown	SC			0	10					
4	22	5,7 10,11	9–11	-sandy, wet, firm, medium plasticity, light brown -stiff				0	17					
5	12	10,11 23,31	12–13	SAND, clayey, trace fine subrounded gravel, wet, medium dense, non-plastic, dark orange-brown	SC				34					
			14	SAND, trace clay, see next page	SP									

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

Signature | Firm NewFields, Madison, Wisconsin

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $4,000 for each violation. Fines not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A 7-91

Boring Number MW-2A

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
6	14	42,31 23,27	15 16 17	SAND, trace clay, with fine subrounded gravel, wet, very dense, orange-brown	SP				54					
7	10	22,24 30,21	18 19	SILT, trace very fine sand, wet, hard, non-plastic, gray	ML				39					
8	22	16,17 15,20	20 21 22 23						32					
			24	CLAY, silty, trace very fine sand, wet, hard, low plasticity, gray	CL									
9	22	9,18 23,25	25	SAND, fine grained, wet, dense, gray (6")	SP				41					
			26 27 28	CLAY, silty, trace very fine sand, wet, hard, low plasticity, gray	CL									
10	16	15,20 23,25	29 30 31 32 33	SAND, trace clay, fine grained, poorly graded, wet, medium dense, brown to brownish gray	SP				43					
11	15	15,20 26,31	34 35 36	SAND, fine to medium grained, trace fine subrounded gravel, poorly graded, wet, dense, gray	SP				46					

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Department of Natural Resources

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Boring Number MW-2A

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
12	10	17,25 32,36	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	SAND, fine to medium grained, trace fine subrounded gravel, poorly graded, wet, dense, gray	SP				57					
				EOB at 42 feet BGS, set well MW-2A at 40 feet.										

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

Facility / Project Name	License/Permit/Monitoring Number	Boring Number
DB Oak Facility, Fort Atkinson, Wisconsin	— — — — — — — —	MW-3

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Kevin McCumber Badger State Drilling	12 / 9 / 04 (MM / DD / YY)	12 / 9 / 04 (MM / DD / YY)	4 ¼" ID HSA Split Spoon

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	P P 4 9 0	MW-3	_____ Feet MSL	790.9 Feet MSL	8.3 inches

Boring Location
State Plane _____ N. _____ E S/C/N
NE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E
Lat — — —
Long — — —

Local Grid Location (If Applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town / City / or Village
Jefferson	2 8	City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	ROD/Comments
			1	Surface = gravel parking lot										
1	24		2–3	CLAY, silty, gravelly, fine subrounded gravel, moist, firm, medium plasticity, grayish-green	CL			0						
			4	SILT, trace fine sand, wet, firm, non-plastic, greenish gray	SM									
2	19		5	SILT, clayey, trace fine sand/fine subrounded gravel, wet, firm, low plasticity, gray	ML			17.6						
			6–8	SAND, gravelly, fine to medium grained, wet, dense, poorly graded, gray	SP									
3	8							32.6						
			9–10											
4	14		11	SILT, trace very fine sand, wet, firm, non-plastic, gray	ML			20.4						
			12		ML									
5	12		13					57						
			14											
			15	EOB at 14 feet BGS, set well MW-3.										

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

Signature _____ Firm NewFields, Madison, WI

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

Facility / Project Name	License/Permit/Monitoring Number	Boring Number
DB Oak Facility, Fort Atkinson, Wisconsin	— — — — — — — —	MW-3A

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Alex Plummer Badger State Drilling	4 / 27 / 05 (MM / DD / YY)	4 / 27 / 05 (MM / DD / YY)	6" mud rotary 2" OD split spoon

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	P I 2 2 9	MW-3A	_____ Feet MSL	790.9 Feet MSL	6.0 inches

Boring Location
State Plane _____ N. _____ E S/C/N | Lat — — — | Long — — —

NE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E / W

Local Grid Location (If Applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town / City / or Village
Jefferson	2 8	City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	ROD/Comments
			1	Surface = gravel drive										
			2	No soil samples collected from 0-13 feet, see boring log for MW-3 for soil descriptions.										
			3	Drilled with 6 ¼" ID hollow stem auger to 10 feet BGS, switched to 6" mud rotary below 10 feet.										
			4											
			5											
			6											
			7											
			8											
			9											
			10											
			11											
			12											
1	20	2,8 8,18	13	CLAY, silty, trace fine gravel, moist, stiff, low plasticity, grayish brown	CL				16					
			14											

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

Signature	Firm
	NewFields, Madison, Wisconsin

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A 7-91

Boring Number MW-3A

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
			15		CL									
			16											
			17											
			18											
2	18	14,15 13,18	19	SAND, medium grained, trace coarse angular gravel, trace coarse subrounded sand, wet, medium dense, poorly graded, light gray	SP				28					
			20											
			21											
			22											
			23											
3	12	13,17 17,17	24	SAND, medium grained, subrounded, trace coarse subangular sand, wet, dense, poorly graded, light grayish brown					34					
			25											
			26											
			27											
			28											
4	8	6,12 13,17	29	SAND, as above, medium dense	SP				25					
			30											
			31											
			32											
			33											
5	10	13,20 23,32	34	SAND, medium grained, little gravel, trace coarse sand, wet, dense, poorly graded, light grayish brown					43					
			35											
			36		CL									

State of Wisconsin
Department of Natural Resources

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Boring Number MW-3A

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
6	10	6,9 12,24	37 38 39 40 41	CLAY, silty, moist, very stiff, low plasticity, light grayish brown	CL				21					
7	12	21,26 31,31	42 43 44 45 46 47	SAND, fine grained, little silt, wet, poorly graded, light grayish brown	SM				57					
8	12	14,12 12,29	48 49 50	SILT, trace fine sand, stiff, non-plastic, wet, light grayish brown	ML				24					
			51 52 53 54 55 56 57 58	EOB at 50 feet BGS, set well MW-3A at 48 feet.										

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

Facility / Project Name	License/Permit/Monitoring Number	Boring Number
DB Oak Facility, Fort Atkinson, Wisconsin	— — — — — — — —	MW-4

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Kevin McCumber Badger State Drilling	12 / 10 / 04 (MM / DD / YY)	12 / 10 / 04 (MM / DD / YY)	4 ¼" ID HSA Split Spoon

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	P_P_4_9_2	MW-4	_____ Feet MSL	796.8 Feet MSL	8.3 inches

Boring Location
State Plane _____ N. _____ E S/C/N
NE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E
Lat — — —
Long — — —

Local Grid Location (If Applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town / City / or Village
Jefferson	2 8	City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	ROD/Comments
			1–15	No soil samples collected. For soils descriptions, see boring log for MW-4A. Set well MW-4 at 15.5 feet BGS.										

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

Signature _____ Firm NewFields, Madison, WI

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $4,000 for each violation. Fines not less than $10 or more than $100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other

Facility / Project Name	License/Permit/Monitoring Number	Boring Number
DB Oak Facility, Fort Atkinson, Wisconsin	— — — — — — — —	MW-4A

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Kevin McCumber Badger State Drilling	12 / 8 / 04 (MM / DD / YY)	12 / 8 / 04 (MM / DD / YY)	4 ¼" ID HSA Split spoon

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	P P 4 9 3	MW-4A	_____ Feet MSL	797.1 Feet MSL	8.3 inches

Boring Location
State Plane _____ N. _____ E S/C/N | Lat — — — | Long — — —
NE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E / W

Local Grid Location (If Applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town / City / or Village
Jefferson	2 8	City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	ROD/Comments
			1	Surface = native soil										
1	16	4,7 4,6	2–3	SAND, silty, trace fine gravel, fine grained, slightly moist, dense, brown (FILL) -moist	SM			430	11					
2	20	3,6 8,9	4–6	SILT, clayey, slightly moist, firm, low plasticity, light yellowish brown with rust mottles -as above, increasing clay content, medium plasticity, moist	ML-CL			2900	14					
3	22	4,6 11,13	7–8					3180	17					
			9	CLAY, sandy, trace fine subrounded gravel, wet, firm, medium plasticity, light brown	SC									
4	16	4,7 12,10	10–11	SAND, fine to medium grained, rounded, wet, medium dense, brown -as above, slight odor	SP			28.3	1					
5	12	2,5 11,22	12–14	-Driller reports sand heaving into augers, very poor sample recovery				0	16					

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

Signature	Firm
	NewFields, Madison, Wisconsin

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A 7-91

Boring Number MW-4A

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
			15	-no recovery										
6	0	26, 50/0	16		SP				50+					
			17											
7	3	11,13 17,22	18	SAND, as above, very poor recovery					30					
			19											
			20											
			21											
			22											
			23											
			24	SAND, fine to medium grained, rounded, wet, medium dense, grayish-brown	SP									
8	10		25											
			26											
			27											
			28											
			29											
			30											
			31											
			32											
			33											
			34											
			35											
			36											

State of Wisconsin
Department of Natural Resources

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Boring Number MW-4A

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
9	12		37 38 39 40 41	SAND, medium grained, gravelly (fine subrounded gravel), poorly graded, wet, dense, brown	SP									
			42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	EOB at 40 feet BGS, set well MW-4A.										

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

Page 1 of 1

Facility / Project Name	License/Permit/Monitoring Number	Boring Number
DB Oak Facility, Fort Atkinson, Wisconsin	— — — — — — — —	MW-5

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Kevin McCumber Badger State Drilling	12 / 8 / 04 (MM / DD / YY)	12 / 8 / 04 (MM / DD / YY)	4 ¼" ID HSA Split Spoon

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	P_P_4_9_1_	MW-5	_____ Feet MSL	796.2 Feet MSL	8.3 inches

Boring Location
State Plane _____ N. _____ E S/C/N
NE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E
Lat — — —
Long — — —

Local Grid Location (If Applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town / City / or Village
Jefferson	2 8	City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	ROD/Comments
			1	Surface = native soil										
			2	SILT, moist, firm, with roots, non-plastic, very dark brown	ML									
1	10	5,6 8,9	3	CLAY, trace fine sand, moist, firm, medium plasticity, green with rust mottles	CL			0	14					
			4											
2	12	6,4 7,6	5	SAND, some clay, moist, medium dense, fie grained, low plasticity, light yellow brown	SC			0	11					
			6											
			7											
3	17	4,5 8,17	8	CLAY, trace fine sand, wet, soft, high plasticity, gray	CL			0	13					
			9	SAND, medium grained, some fine rounded gravel, wet, loose, brown	GP									
4	18	7,6 6,8	10	CLAY, trace fine sand, trace fine subrounded gravel, wet, soft to firm, high plasticity, gray	CL			0	13					
			11	SAND, clayey, trace fine subrounded gravel, wet, med dense, gray	SC									
5	20	4,6 6,7	12					0	12					
			13											
			14											
			15	EOB at 14 feet BGS, set well MW-5.										

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

Signature _____ Firm NewFields, Madison, WI

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

Facility / Project Name	License/Permit/Monitoring Number	Boring Number
DB Oak Facility, Fort Atkinson, Wisconsin	— — — — — — — —	MW-6

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Alex Plummer Badger State Drilling	4 / 26 / 05 (M M / D D / Y Y)	4 / 26 / 05 (M M / D D / Y Y)	4 ¼" ID HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	P_I_2_2_8_	MW-6	_____ Feet MSL	797.7 Feet MSL	8.3 inches

Boring Location
State Plane _____ N. _____ E S/C/N
SE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E
Lat — — —
Long — — —

Local Grid Location (If Applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town / City / or Village
Jefferson	2 8	City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	ROD/Comments
			1–15	No soil samples collected. For soils descriptions, see boring log for MW-6A. Set well MW-6 at 16.5 feet BGS.										

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

Signature _____ Firm NewFields, Madison, WI

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 7-91

Route To:
- ☐ Solid Waste
- ☐ Wastewater
- ☐ Emergency Response
- ☐ Haz. Waste
- ☐ Underground Tanks
- ☐ Water Resources
- ☐ Other _____

Facility / Project Name	License/Permit/Monitoring Number	Boring Number
DB Oak Facility, Fort Atkinson, Wisconsin	— — — — — — — —	MW-6A

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Alex Plummer Badger State Drilling	4 / 26 / 05 (M M / D D / Y Y)	4 / 26 / 05 (M M / D D / Y Y)	6" mud rotary 2" OD split spoon

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
— — —	P I 2 2 7	MW-6A	_____ Feet MSL	797.8 Feet MSL	6.0 inches

Boring Location
State Plane _____ N. _____ E S/C/N
SE 1/4 of SE 1/4 of Section 34 T 6 N, R 14 E / W
Lat — — —
Long — — —

Local Grid Location (If Applicable)
_____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W

County	DNR County Code	Civil Town / City / or Village
Jefferson	2 8	City of Fort Atkinson

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	ROD/Comments
			1	Surface = grass Topsoil, dark brown silty loam				Note: drilled with 6 ¼" ID hollow stem auger to 10 feet, switched to 6" mud rotary at 10 feet.						
1	20	6,10 12,15	2–5	SAND, fine grained, some silt, little gravel, moist, medium dense, dark yellow brown	SM				22					
2	20	7,12 18,24	7–10	SILT, some fine sand, little gravel, moist, very stiff, non-plastic, dark yellow brown	ML-SM				30					
3	6	12,33 43,52	11–14	SAND, fine grained, some silt, little subrounded gravel, moist, very dense, dark yellowish brown	SM				76					

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

Signature _____ Firm NewFields, Madison, Wisconsin

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A 7-91

Boring Number MW-6A

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
			15	SAND, fine grained, some silt, little subrounded gravel, moist, very dense, dark yellowish brown										
			16											
			17											
4	16	19,28 41,48	18	SAND, as above	SM				69					
			19											
			20	-decreasing silt and gravel content with depth										
			21											
			22	SAND, fine grained, some silt, trace rounded gravel, wet, very dense, poorly graded, yellowish brown										
5	22	15,23 25,26	23						48					
			24											
			25											
			26											
			27	SAND, fine grained, some silt, trace clay, little rounded gravel, wet, very dense, poorly graded, light grayish brown	SM									
6	12	11,17 33,25	28						50					
			29											
			30											
			31	SAND, as above										
7	1	50/4"	32						50+					
			33											
			34		SM									
			35											
			36											

State of Wisconsin
Department of Natural Resources

7-91

Boring Number MW-6A

Sample Number	Sample Length Recovered (N)	Blow Counts (N)	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plastic Limit	Soil Properties: P 200	ROD/Comments
8	0	37,22 18,19	37 38	No recovery					40					
9	12	16,12 30,14	39 40 41	SAND, fine grained, some silt, trace clay, wet, dense, poorly graded, light grayish brown	SM				42					
			42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	EOB at 41 feet BGS, set well MW-2A at 40 feet.										

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
____ ft. ☐ N. ____ ft. ☐ E.
☐ S. ☐ W.

Well Name
MW-1

Facility License, Permit or Monitoring Number

Grid Origin Location
Lat. ____ Long. ____

Wis. Unique Well Number: P P 4 8 9 — DNR Well Number:

Type of Well: Water Table Observation Well ■ 11
Piezometer ☐ 12

St. Plane ____ ft. N, ____ ft. E.

Date Well Installed: 1 2 / 0 8 / 0 4 (m m d d y y)

Distance Well Is From Waste/Source Boundary

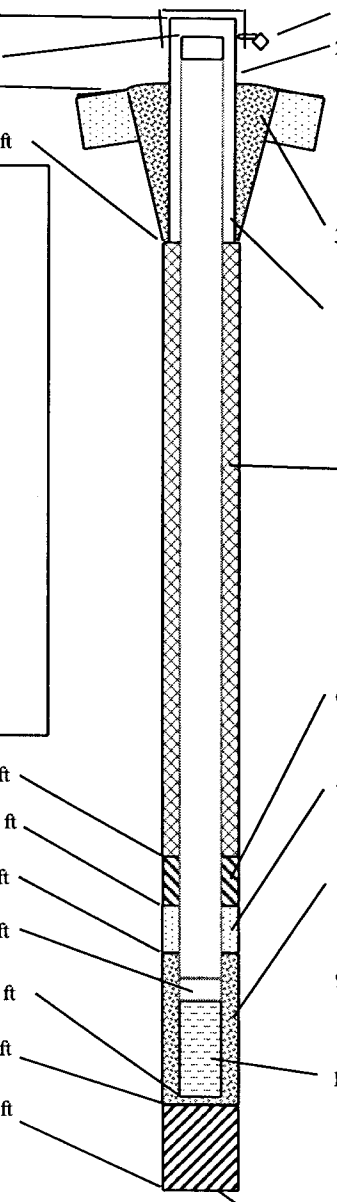
Section Location of Waste/Source ■ E
SE 1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14 ☐ W

Well Installed By: (Person's Name and Firm)
Kevin McCumber
Badger State Drilling

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known

A. Protective pipe, top elevation 793.6 ft. MSL
B. Well casing, top elevation 793.4 ft. MSL
C. Land surface elevation 791.3 ft. MSL
D. Surface seal, bottom 790.3 ft MSL or 1.0 ft



1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
   a. Inside diameter: 4.0 in.
   b. Length: 6.0 ft.
   c. Material: Stick up — Steel ■ Other ☐
   d. Additional protection? ☐ Yes ■ No
   If yes, describe:
3. Surface seal: Native Soil — Bentonite ☐ 3 0, Concrete ☐ 0 1, Other ■
4. Material between well casing and protective pipe: Ohio #5 sand — Bentonite ☐ 3 0, Annular Space Seal ☐, Other ■
5. Annular space seal: a. Granular Bentonite ☐ 3 3
   b. ____ Lbs/gal mud weight ..... Bentonite-sand slurry ☐ 3 5
   c. ____ Lbs/gal mud weight..... Bentonite slurry ☐ 3 1
   d. ____ % Bentonite ..... Bentonite-cement grout ☐ 5 0
   e. ____ Ft³ volume added for any of the above
   f. How installed: Tremie ☐ 0 1, Tremie pumped ☐ 0 2, Gravity ■ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
   b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
   c. 330 lbs — Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
   a. #40/60 Badger Mining fine silica
   b. Volume added 50 lb
8. Filter pack material: Manufacturer, product name & mesh size
   a. Ohio #5 sand
   b. Volume added 300 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3, Flush threaded PVC schedule 80 ☐ 2 4, Other ☐
10. Screen material: Sch. 40 PVC
    a. Screen type: Factory cut ■ 1 1, Continuous slot ☐ 0 1, Other ☐
    b. Manufacturer Timco
    c. Slot size 0.010 in.
    d. Slotted length: 10.0 ft.
11. Backfill material (below filler pack): None ■ 1 4, Other ☐

12. USCS classification of soil near screen:
    GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
    SM ☐ SC ■ ML ☐ MH ☐ CL ■ CH ☐ ☐
    Bedrock ☐
13. Sieve analysis attached? ☐ Yes ■ No
14. Drilling method used: Rotary ☐ 5 0, Hollow Stem Auger ■ 4 1, Other ☐
15. Drilling fluid used: Water ☐ 0 2, Air ☐ 0 1, Drilling Mud ☐ 0 3, None ■ 9 9
16. Drilling additives used? ☐ Yes ■ No
    Describe:
17. Source of water (attached analysis):

E. Bentonite seal, top 790.3 ft MSL or 1.0 ft
F. Fine sand, top 785.3 ft MSL or 6.0 ft
G. Filter pack, top 784.3 ft MSL or 7.0 ft
H. Screen joint, top 783.3 ft MSL or 8.0 ft
I. Well bottom 773.3 ft MSL or 18.0 ft
J. Filter pack, bottom 773.3 ft MSL or 18.0 ft
K. Borehole, bottom 772.3 ft MSL or 19.0 ft
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.37 in.
N. I.D. well casing 2.06 in.

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

Signature | Firm NewFields, Madison, Wisconsin

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

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
_____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.

Well Name
MW-2

Facility License, Permit or Monitoring Number
_____

Grid Origin Location
Lat. ____ ____ ____ Long. ____ ____ ____
St. Plane _____ ft. N, _____ ft. E.

Wis. Unique Well Number: P P 4 8 7 DNR Well Number: _____

Type of Well: Water Table Observation Well ■ 11; Piezometer ☐ 12

Date Well Installed: 1 2 / 0 9 / 0 4 (m m d d y y)

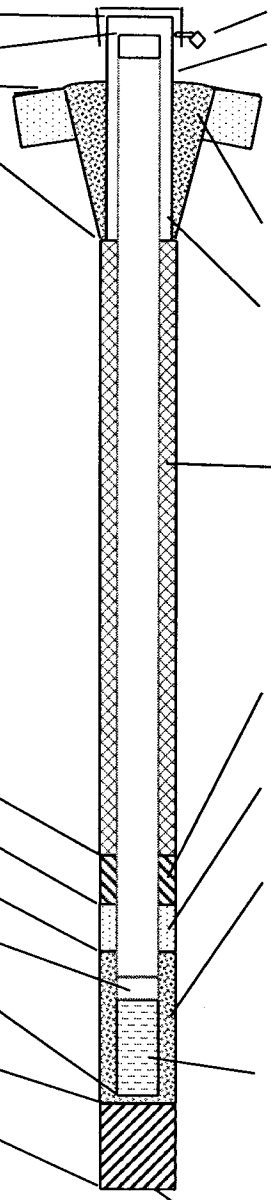
Distance Well Is From Waste/Source Boundary
_____

Section Location of Waste/Source ■ E
SE 1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14 ☐ W

Well Installed By: (Person's Name and Firm)
Kevin McCumber
Badger State Drilling

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known



A. Protective pipe, top elevation 791.5 ft. MSL
B. Well casing, top elevation 791.2 ft. MSL
C. Land surface elevation 791.5 ft. MSL
D. Surface seal, bottom 790.5 ft MSL or 1.0 ft

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ■
SM ☐ SC ☐ ML ☐ MH ☐ CL ■ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ■ No

14. Drilling method used: Rotary ☐ 5 0; Hollow Stem Auger ■ 4 1; _____ Other ☐ ____

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

16. Drilling additives used? ■ Yes ☐ No
Describe: Water

17. Source of water (attached analysis):
Water truck

E. Bentonite seal, top 790.5 ft MSL or 1.0 ft
F. Fine sand, top _____ ft MSL or _____ ft
G. Filter pack, top 787.0 ft MSL or 4.5 ft
H. Screen joint, top 786.0 ft MSL or 5.5 ft
I. Well bottom 776.0 ft MSL or 15.5 ft
J. Filter pack, bottom 775.5 ft MSL or 16.0 ft
K. Borehole, bottom 775.5 ft MSL or 16.0 ft
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.37 in.
N. I.D. well casing 2.06 in.

1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 9.0 in.
b. Length: 1.0 ft.
c. Material: Flush mount — Steel ■; Other ☐ ____
d. Additional protection? ☐ Yes ■ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 3 0; Concrete ■ 0 1; _____ Other ☐ ____
4. Material between well casing and protective pipe:
Ohio #5 sand — Bentonite ☐ 3 0; Annular Space Seal ☐ ____; Other ■ ____
5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. ____ Lbs/gal mud weight ..... Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight..... Bentonite slurry ☐ 3 1
d. ____% Bentonite ..... Bentonite-cement grout ☐ 5 0
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1; Tremie pumped ☐ 0 2; Gravity ■ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
c. 100 lbs Other ☐ ____
7. Fine sand material: Manufacturer, product name & mesh size
a. _____ ____
b. Volume added _____ lb
8. Filter pack material: Manufacturer, product name & mesh size
a. Ohio #5 sand ____
b. Volume added 300 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3; Flush threaded PVC schedule 80 ☐ 2 4; _____ Other ☐ ____
10. Screen material: Sch. 40 PVC ____
a. Screen type: Factory cut ■ 1 1; Continuous slot ☐ 0 1; _____ Other ☐ ____
b. Manufacturer Timco
c. Slot size 0.010 in.
d. Slotted length: 5.0 ft.
11. Backfill material (below filler pack): None ■ 1 4; _____ Other ☐ ____

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

Signature | Firm NewFields, Madison, Wisconsin

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State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
_____ ft. ☐ N. _____ ft. ☐ E.
☐ S. ☐ W.

Well Name
MW-2A

Facility License, Permit or Monitoring Number
_____

Grid Origin Location
Lat. ____ ____ ____ Long. ____ ____ ____
St. Plane _____ ft. N, _____ ft. E.

Wis. Unique Well Number: P P 4 8 8 DNR Well Number: _____

Type of Well: Water Table Observation Well ☐ 11
Piezometer ■ 12

Date Well Installed: 12 / 09 / 04 (m m d d y y)

Distance Well Is From Waste/Source Boundary
_____

Section Location of Waste/Source ■ E
SE 1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14 ☐ W

Well Installed By: (Person's Name and Firm)
Kevin McCumber
Badger State Drilling

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known

A. Protective pipe, top elevation 791.5 ft. MSL
B. Well casing, top elevation 791.3 ft. MSL
C. Land surface elevation 791.5 ft. MSL
D. Surface seal, bottom 790.5 ft MSL or 1.0 ft

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ■
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐ ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ■ No

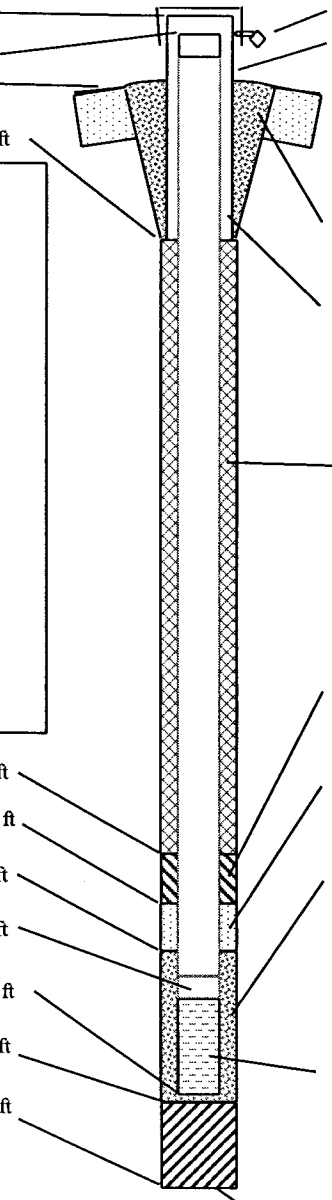
14. Drilling method used: Rotary ☐ 5 0
Hollow Stem Auger ■ 4 1
_____ Other ☐ ____

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

16. Drilling additives used? ■ Yes ☐ No
Describe: Water

17. Source of water (attached analysis):
Water truck

E. Bentonite seal, top 790.3 ft MSL or 1.0 ft
F. Fine sand, top 759.5 ft MSL or 32.0 ft
G. Filter pack, top 758.0 ft MSL or 33.5 ft
H. Screen joint, top 756.5 ft MSL or 35.0 ft
I. Well bottom 751.5 ft MSL or 40.0 ft
J. Filter pack, bottom 751.5 ft MSL or 40.0 ft
K. Borehole, bottom 749.5 ft MSL or 42.0 ft
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.37 in.
N. I.D. well casing 2.06 in.



1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 9.0 in.
b. Length: 1.0 ft.
c. Material: Flush mount Steel ■ Other ☐ ____
d. Additional protection? ☐ Yes ■ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 3 0
Concrete ■ 0 1
_____ Other ☐ ____
4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Annular Space Seal ☐ ____
Ohio #5 sand Other ■ ____
5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. ____ Lbs/gal mud weight ..... Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight..... Bentonite slurry ☐ 3 1
d. ____ % Bentonite ..... Bentonite-cement grout ☐ 5 0
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
Gravity ■ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
c. 400 lbs Other ☐ ____
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger Mining #40/60 silica ____
b. Volume added 50 lb
8. Filter pack material: Manufacturer, product name & mesh size
a. Ohio #5 sand ____
b. Volume added 150 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
_____ Other ☐ ____
10. Screen material: Sch. 40 PVC ____
a. Screen type: Factory cut ■ 1 1
Continuous slot ☐ 0 1
_____ Other ☐ ____
b. Manufacturer Timco
c. Slot size 0.010 in.
d. Slotted length: 5.0 ft.
11. Backfill material (below filler pack): None ■ 1 4
_____ Other ☐ ____

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

Signature | Firm NewFields, Madison, Wisconsin

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State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
____ ft. ☐ N. ____ ft. ☐ E.
☐ S. ☐ W.

Well Name
MW-3

Facility License, Permit or Monitoring Number

Grid Origin Location
Lat. ____ Long. ____

Wis. Unique Well Number: P P 4 9 0 — DNR Well Number:

Type of Well: Water Table Observation Well ■ 11
Piezometer ☐ 12

St. Plane ____ ft. N, ____ ft. E.

Date Well Installed: 1 2 / 0 9 / 0 4 (m m d d y y)

Distance Well Is From Waste/Source Boundary

Section Location of Waste/Source ■ E
NE 1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14 ☐ W

Well Installed By: (Person's Name and Firm)
Kevin McCumber
Badger State Drilling

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known

A. Protective pipe, top elevation 794.0 ft. MSL
B. Well casing, top elevation 793.2 ft. MSL
C. Land surface elevation 790.9 ft. MSL
D. Surface seal, bottom 789.9 ft MSL or 1.0 ft

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ■
SM ☐ SC ☐ ML ■ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ■ No

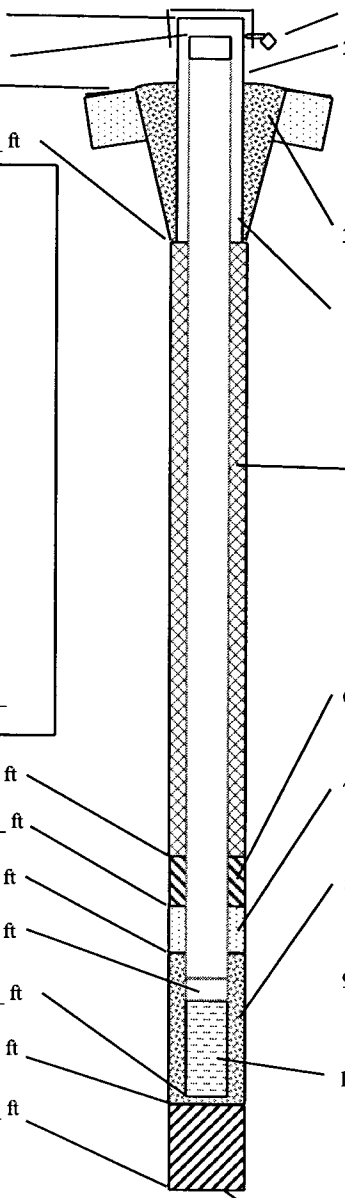
14. Drilling method used: Rotary ☐ 5 0
Hollow Stem Auger ■ 4 1
____ Other ☐

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

16. Drilling additives used? ☐ Yes ■ No
Describe: ____

17. Source of water (attached analysis):
____

E. Bentonite seal, top 789.9 ft MSL or 1.0 ft
F. Fine sand, top ____ ft MSL or ____ ft
G. Filter pack, top 788.9 ft MSL or 2.0 ft
H. Screen joint, top 787.9 ft MSL or 3.0 ft
I. Well bottom 777.9 ft MSL or 13.0 ft
J. Filter pack, bottom 777.9 ft MSL or 13.0 ft
K. Borehole, bottom 776.9 ft MSL or 14.0 ft
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.37 in.
N. I.D. well casing 2.06 in.



1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 6.0 ft.
c. Material: Steel ■
Stick up Other ☐
d. Additional protection? ☐ Yes ■ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 3 0
Concrete ☐ 0 1
Native Soil Other ■
4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Annular Space Seal ☐
Ohio #5 sand Other ■
5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. ____ Lbs/gal mud weight ..... Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight..... Bentonite slurry ☐ 3 1
d. ____% Bentonite ..... Bentonite-cement grout ☐ 5 0
e. ____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
Gravity ■ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
c. 50 lbs Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. None
b. Volume added ____ lb
8. Filter pack material: Manufacturer, product name & mesh size
a. Ohio #5 sand
b. Volume added 300 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
____ Other ☐
10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ■ 1 1
Continuous slot ☐ 0 1
____ Other ☐
b. Manufacturer Timco
c. Slot size 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filler pack): None ■ 1 4
____ Other ☐

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

Signature | Firm NewFields, Madison, Wisconsin

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State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
_____ ft. ☐ N. _____ ft. ☐ E.
☐ S. ☐ W.

Well Name
MW-3A

Facility License, Permit or Monitoring Number
_ _ _ _ _ _ _ _

Grid Origin Location
Lat. _ _ _ _ _ _ Long. _ _ _ _ _ _
St. Plane _____ ft. N, _____ ft. E.

Wis. Unique Well Number: P I 2 2 9 | DNR Well Number:

Type of Well: Water Table Observation Well ☐ 11
Piezometer ■ 12

Date Well Installed
0 4 / 2 7 / 0 5
m m d d y y

Distance Well Is From Waste/Source Boundary

Section Location of Waste/Source ■ E
NE 1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14 ☐ W

Well Installed By: (Person's Name and Firm)
Alex Plummer
Badger State Drilling

Is Well A Point of Enforcement Std. Application?
☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known

A. Protective pipe, top elevation 7 9 3 . 8 ft. MSL
B. Well casing, top elevation 7 9 3 . 5 ft. MSL
C. Land surface elevation 7 9 0 . 9 ft. MSL
D. Surface seal, bottom 7 8 9 . 9 ft MSL or 1 . 0 ft

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ■ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐ ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ■ No

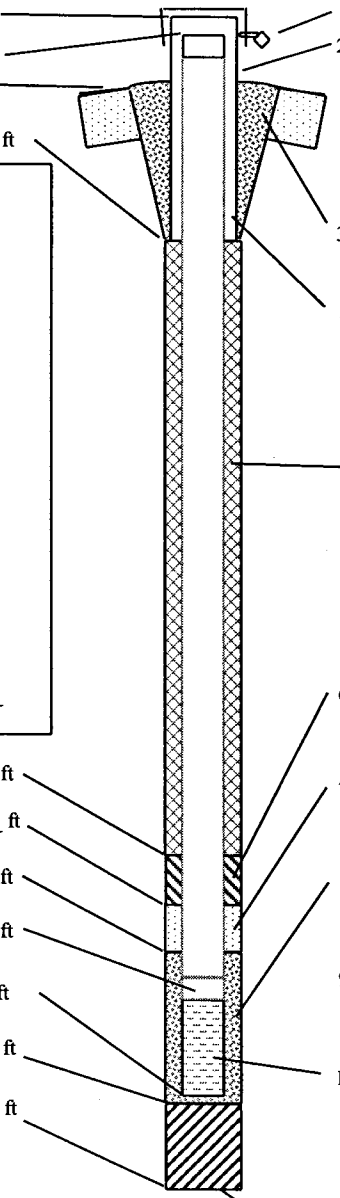
14. Drilling method used: Rotary ■ 5 0
Hollow Stem Auger ☐ 4 1
_____ Other ☐ _ _

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

16. Drilling additives used? ☐ Yes ■ No
Describe: _____

17. Source of water (attached analysis):
_____

E. Bentonite seal, top 7 8 9 . 9 ft MSL or 1 . 0 ft
F. Fine sand, top 7 5 2 . 9 ft MSL or 3 8 . 5 ft
G. Filter pack, top 7 5 0 . 9 ft MSL or 4 0 . 0 ft
H. Screen joint, top 7 4 8 . 9 ft MSL or 4 2 . 0 ft
I. Well bottom 7 4 3 . 9 ft MSL or 4 7 . 0 ft
J. Filter pack, bottom 7 4 3 . 9 ft MSL or 4 7 . 0 ft
K. Borehole, bottom 7 4 2 . 9 ft MSL or 4 8 . 0 ft
L. Borehole, diameter 6 . 0 in.
M. O.D. well casing 2 . 3 7 in.
N. I.D. well casing 2 . 0 6 in.



1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 . 0 in.
b. Length: 7 . 0 ft.
c. Material: Steel ■
Stick up Other ☐ _ _
d. Additional protection? ☐ Yes ■ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 3 0
Concrete ☐ 0 1
Native soil Other ■ _ _
4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Annular Space Seal ☐ _ _
Ohio #5 sand Other ■ _ _
5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. _____ Lbs/gal mud weight ..... Bentonite-sand slurry ☐ 3 5
c. _____ Lbs/gal mud weight..... Bentonite slurry ☐ 3 1
d. _____ % Bentonite ..... Bentonite-cement grout ☐ 5 0
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
750 lbs. Gravity ■ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
c. 50 lbs Other ☐ _ _
7. Fine sand material: Manufacturer, product name & mesh size
a. Ohio #4000 _ _
b. Volume added 50 lb
8. Filter pack material: Manufacturer, product name & mesh size
a. Ohio #5 sand _ _
b. Volume added 225 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
Other ☐ _ _
10. Screen material: Sch. 40 PVC _ _
a. Screen type: Factory cut ■ 1 1
Continuous slot ☐ 0 1
Other ☐ _ _
b. Manufacturer Monoflex
c. Slot size 0 . 0 1 0 in.
d. Slotted length: 5 . 0 ft.
11. Backfill material (below filler pack): None ■ 1 4
Other ☐ _ _

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

Signature | Firm NewFields, Madison, Wisconsin

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

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
_____ ft. ☐ N. _____ ft. ☐ E.
☐ S. ☐ W.

Well Name
MW-4

Facility License, Permit or Monitoring Number
_ _ _ _ _ _ _ _ _

Grid Origin Location
Lat. _ _ _ _ _ _ Long. _ _ _ _ _ _
St. Plane _____ ft. N, _____ ft. E.

Wis. Unique Well Number: P P 4 9 2 | DNR Well Number: _ _ _ _

Type of Well: Water Table Observation Well ■ 11
Piezometer ☐ 12

Date Well Installed: 1 2 / 1 0 / 0 4 (m m d d y y)

Distance Well Is From Waste/Source Boundary

Section Location of Waste/Source ■ E
NE 1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14 ☐ W

Well Installed By: (Person's Name and Firm)
Kevin McCumber
Badger State Drilling

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known

A. Protective pipe, top elevation 7 9 9 . 5 ft. MSL
B. Well casing, top elevation 7 9 9 . 2 ft. MSL
C. Land surface elevation 7 9 6 . 8 ft. MSL
D. Surface seal, bottom 7 9 5 . 8 ft MSL or 1 . 0 ft

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ■
SM ☐ SC ■ ML ☐ MH ☐ CL ☐ CH ☐ ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ■ No

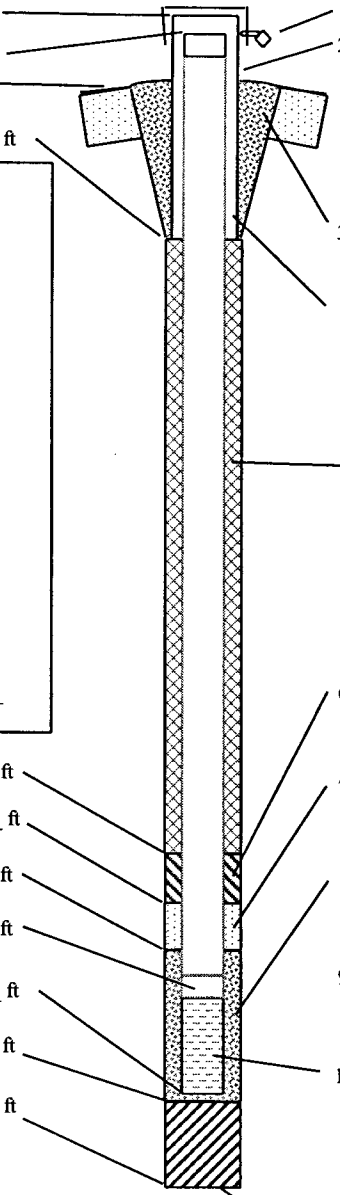
14. Drilling method used: Rotary ☐ 5 0
Hollow Stem Auger ■ 4 1
_____ Other ☐ _ _

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

16. Drilling additives used? ☐ Yes ■ No
Describe: _____

17. Source of water (attached analysis):
_____

E. Bentonite seal, top 7 9 5 . 8 ft MSL or 1 . 0 ft
F. Fine sand, top _ _ _ _ . _ ft MSL or _ _ . _ ft
G. Filter pack, top 7 9 3 . 8 ft MSL or 3 . 0 ft
H. Screen joint, top 7 9 1 . 8 ft MSL or 5 . 0 ft
I. Well bottom 7 8 1 . 8 ft MSL or 1 5 . 0 ft
J. Filter pack, bottom 7 8 1 . 8 ft MSL or 1 5 . 0 ft
K. Borehole, bottom 7 8 1 . 3 ft MSL or 1 5 . 5 ft
L. Borehole, diameter 8 . 3 in.
M. O.D. well casing 2 . 3 7 in.
N. I.D. well casing 2 . 0 6 in.



1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 . 0 in.
b. Length: 6 . 0 ft.
c. Material: Steel ■
Stick up Other ☐ _ _
d. Additional protection? ☐ Yes ■ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 3 0
Concrete ☐ 0 1
Native Soil Other ■ _ _
4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Annular Space Seal ☐ _ _
Ohio #5 sand Other ■ _ _
5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. _____ Lbs/gal mud weight . . . . . Bentonite-sand slurry ☐ 3 5
c. _____ Lbs/gal mud weight. . . . . Bentonite slurry ☐ 3 1
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 5 0
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
Gravity ■ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
c. 50 lbs Other ☐ _ _
7. Fine sand material: Manufacturer, product name & mesh size
a. None _ _
b. Volume added _____ lb
8. Filter pack material: Manufacturer, product name & mesh size
a. Ohio #5 sand _ _
b. Volume added 250 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
_____ Other ☐ _ _
10. Screen material: Sch. 40 PVC _ _
a. Screen type: Factory cut ■ 1 1
Continuous slot ☐ 0 1
_____ Other ☐ _ _
b. Manufacturer Timco
c. Slot size 0. 0 1 0 in.
d. Slotted length: 1 0 . 0 ft.
11. Backfill material (below filler pack): None ■ 1 4
_____ Other ☐ _ _

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

Signature | Firm: NewFields, Madison, Wisconsin

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State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
_____ ft. ☐ N. _____ ft. ☐ E.
☐ S. ☐ W.

Well Name
MW-4A

Facility License, Permit or Monitoring Number
_____

Grid Origin Location
Lat. _____ Long. _____
St. Plane _____ ft. N, _____ ft. E.

Wis. Unique Well Number: P P 4 9 3 | DNR Well Number: _____

Type of Well: Water Table Observation Well ☐ 11
Piezometer ■ 12

Date Well Installed: 1 2 / 0 8 / 0 4 (m m d d y y)

Distance Well Is From Waste/Source Boundary
_____

Section Location of Waste/Source ■ E ☐ W
NE 1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14

Well Installed By: (Person's Name and Firm)
Kevin McCumber
Badger State Drilling

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known

A. Protective pipe, top elevation 7 9 9 . 4 ft. MSL
B. Well casing, top elevation 7 9 9 . 1 ft. MSL
C. Land surface elevation 7 9 7 . 1 ft. MSL
D. Surface seal, bottom 7 9 6 . 1 ft MSL or 1 . 0 ft

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ■
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐ ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ■ No

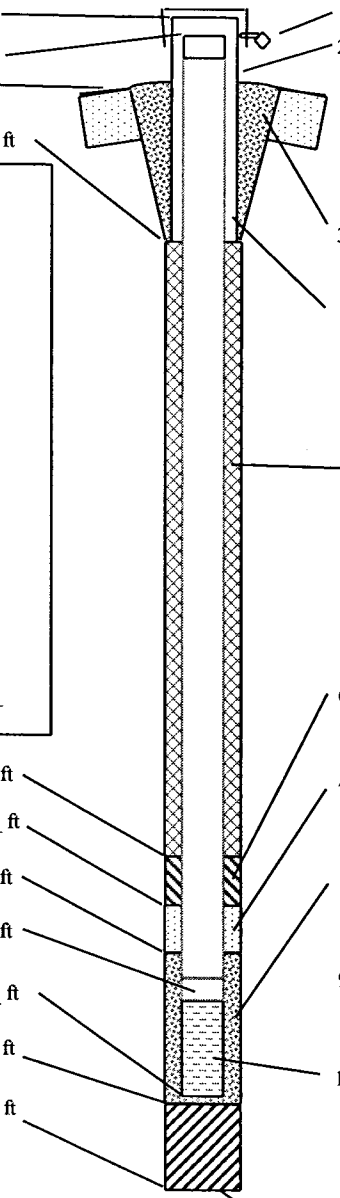
14. Drilling method used: Rotary ☐ 5 0
Hollow Stem Auger ■ 4 1
_____ Other ☐ ____

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

16. Drilling additives used? ■ Yes ☐ No
Describe: Water

17. Source of water (attached analysis):
Water truck

E. Bentonite seal, top 7 9 5 . 1 ft MSL or 2 . 0 ft
F. Fine sand, top 7 6 5 . 1 ft MSL or 3 2 . 0 ft
G. Filter pack, top 7 6 3 . 8 ft MSL or 3 3 . 3 ft
H. Screen joint, top 7 6 3 . 1 ft MSL or 3 4 . 0 ft
I. Well bottom 7 5 8 . 1 ft MSL or 3 9 . 0 ft
J. Filter pack, bottom 7 5 8 . 1 ft MSL or 3 9 . 0 ft
K. Borehole, bottom 7 5 7 . 6 ft MSL or 3 9 . 5 ft
L. Borehole, diameter 8 . 3 in.
M. O.D. well casing 2 . 3 7 in.
N. I.D. well casing 2 . 0 6 in.



1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 . 0 in.
b. Length: 6 . 0 ft.
c. Material: Steel ■
Stick up Other ☐ ____
d. Additional protection? ☐ Yes ■ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 3 0
Concrete ☐ 0 1
Native Soil Other ■ ____
4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Annular Space Seal ☐ ____
Ohio #5 sand Other ■ ____
5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. ____ Lbs/gal mud weight ..... Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight..... Bentonite slurry ☐ 3 1
d. ____ % Bentonite ..... Bentonite-cement grout ☐ 5 0
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
Gravity ■ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
c. 250 lbs Other ☐ ____
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger Mining #40/60 silica ____
b. Volume added 50 lb
8. Filter pack material: Manufacturer, product name & mesh size
a. Ohio #5 sand ____
b. Volume added 150 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
_____ Other ☐ ____
10. Screen material: Sch. 40 PVC ____
a. Screen type: Factory cut ■ 1 1
Continuous slot ☐ 0 1
_____ Other ☐ ____
b. Manufacturer Timco
c. Slot size 0. 0 1 0 in.
d. Slotted length: 5 . 0 ft.
11. Backfill material (below filler pack): None ■ 1 4
_____ Other ☐ ____

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

Signature | Firm: NewFields, Madison, Wisconsin

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State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
_____ ft. ☐ N. _____ ft. ☐ E.
☐ S. ☐ W.

Well Name
MW-5

Facility License, Permit or Monitoring Number
_ _ _ _ _ _ _ _

Grid Origin Location
Lat. _ _ _ _ _ _ Long. _ _ _ _ _ _
St. Plane _____ ft. N, _____ ft. E.

Wis. Unique Well Number: P P 4 9 1 | DNR Well Number:

Type of Well: Water Table Observation Well ■ 11
Piezometer ☐ 12

Date Well Installed
1 2 / 0 8 / 0 4
m m d d y y

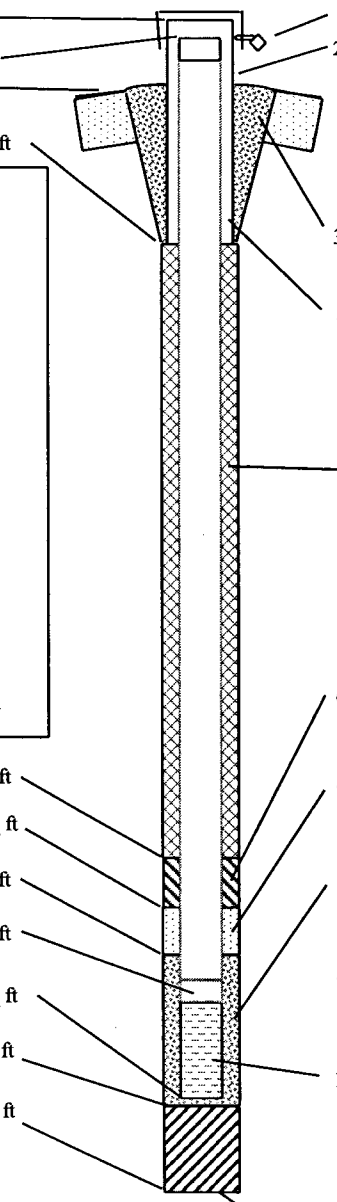
Distance Well Is From Waste/Source Boundary

Section Location of Waste/Source ■ E
NE1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14 ☐ W

Well Installed By: (Person's Name and Firm)
Kevin McCumber
Badger State Drilling

Is Well A Point of Enforcement Std. Application?
☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known



A. Protective pipe, top elevation 7 9 8 . 8 ft. MSL
B. Well casing, top elevation 7 9 8 . 5 ft. MSL
C. Land surface elevation 7 9 6 . 2 ft. MSL
D. Surface seal, bottom 7 9 0 . 3 ft MSL or 1 . 0 ft

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ■ ML ☐ MH ☐ CL ■ CH ☐ ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ■ No

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

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

16. Drilling additives used? ☐ Yes ■ No
Describe: _____

17. Source of water (attached analysis):
_____

E. Bentonite seal, top 7 9 0 . 3 ft MSL or 1 . 0 ft
F. Fine sand, top 7 8 5 . 3 ft MSL or 2 . 0 ft
G. Filter pack, top 7 8 4 . 3 ft MSL or 3 . 0 ft
H. Screen joint, top 7 8 3 . 3 ft MSL or 4 . 0 ft
I. Well bottom 7 7 3 . 3 ft MSL or 1 4 . 0 ft
J. Filter pack, bottom 7 7 3 . 3 ft MSL or 1 4 . 5 ft
K. Borehole, bottom 7 7 2 . 3 ft MSL or 1 4 . 5 ft
L. Borehole, diameter 8 . 3 in.
M. O.D. well casing 2 . 3 7 in.
N. I.D. well casing 2 . 0 6 in.

1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 . 0 in.
b. Length: 6 . 0 ft.
c. Material: Stick up Steel ■ Other ☐ ☐☐
d. Additional protection? ☐ Yes ■ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 3 0
Concrete ☐ 0 1
Native Soil Other ■ ☐☐
4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Annular Space Seal ☐ ☐☐
Ohio #5 sand Other ■ ☐☐
5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. _____ Lbs/gal mud weight ..... Bentonite-sand slurry ☐ 3 5
c. _____ Lbs/gal mud weight ..... Bentonite slurry ☐ 3 1
d. _____ % Bentonite ..... Bentonite-cement grout ☐ 5 0
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
Gravity ■ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
c. 100 lbs Other ☐ ☐☐
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger Mining #40/60 silica ☐☐
b. Volume added 50 lb
8. Filter pack material: Manufacturer, product name & mesh size
a. Ohio #5 sand ☐☐
b. Volume added 300 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
_____ Other ☐ ☐☐
10. Screen material: Sch. 40 PVC ☐☐
a. Screen type: Factory cut ■ 1 1
Continuous slot ☐ 0 1
_____ Other ☐ ☐☐
b. Manufacturer Timco
c. Slot size 0 . 0 1 0 in.
d. Slotted length: 1 0 . 0 ft.
11. Backfill material (below filler pack): None ■ 1 4
_____ Other ☐ ☐☐

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

Signature | Firm NewFields, Madison, Wisconsin

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State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
____ ft. ☐ N. ____ ft. ☐ E.
☐ S. ☐ W.

Well Name
MW-6

Facility License, Permit or Monitoring Number

Grid Origin Location
Lat. ____ Long. ____

Wis. Unique Well Number: P I 2 2 8 — DNR Well Number:

Type of Well: Water Table Observation Well ■ 11; Piezometer ☐ 12

St. Plane ____ ft. N, ____ ft. E.

Date Well Installed: 0 4 / 2 6 / 0 5 (m m d d y y)

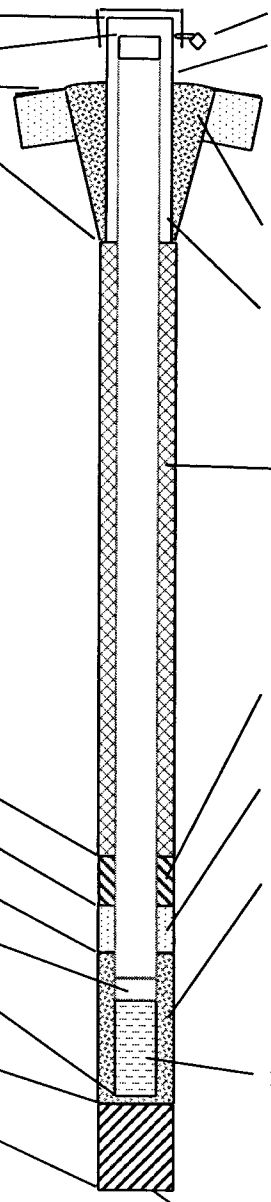
Distance Well Is From Waste/Source Boundary

Section Location of Waste/Source ■ E
SE 1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14 ☐ W

Well Installed By: (Person's Name and Firm)
Alex Plummer
Badger State Drilling

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known



A. Protective pipe, top elevation 7 9 7 . 7 ft. MSL
B. Well casing, top elevation 7 9 7 . 3 ft. MSL
C. Land surface elevation 7 9 7 . 7 ft. MSL
D. Surface seal, bottom 7 9 6 . 7 ft MSL or 1 . 0 ft

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ■ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐ ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ■ No

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

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

16. Drilling additives used? ☐ Yes ■ No
Describe: ____

17. Source of water (attached analysis):

E. Bentonite seal, top 7 9 6 . 7 ft MSL or 1 . 0 ft
F. Fine sand, top 7 9 3 . 7 ft MSL or 4 . 0 ft
G. Filter pack, top 7 9 2 . 7 ft MSL or 5 . 0 ft
H. Screen joint, top 7 9 1 . 7 ft MSL or 6 . 0 ft
I. Well bottom 7 8 1 . 7 ft MSL or 1 6 . 0 ft
J. Filter pack, bottom 7 8 1 . 7 ft MSL or 1 6 . 0 ft
K. Borehole, bottom 7 8 1 . 2 ft MSL or 1 6 . 5 ft
L. Borehole, diameter 8 . 3 in.
M. O.D. well casing 2 . 3 7 in.
N. I.D. well casing 2 . 0 6 in.

1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 9 . 0 in.
b. Length: 1 0 . 0 ft.
c. Material: Flush mount — Steel ■; Other ☐ ____
d. Additional protection? ☐ Yes ■ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 3 0; Concrete ■ 0 1; Other ☐ ____
concrete
4. Material between well casing and protective pipe: Bentonite ☐ 3 0; Annular Space Seal ☐ ____; Other ■ ____
Ohio #5 sand
5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. ____ Lbs/gal mud weight ..... Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight ..... Bentonite slurry ☐ 3 1
d. ____ % Bentonite ..... Bentonite-cement grout ☐ 5 0
e. ____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1; Tremie pumped ☐ 0 2; Gravity ■ 0 8
100 lbs.
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
c. 50 lbs Other ☐ ____
7. Fine sand material: Manufacturer, product name & mesh size
a. Ohio #4000
b. Volume added 25 lb
8. Filter pack material: Manufacturer, product name & mesh size
a. Ohio #5 sand
b. Volume added 300 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3; Flush threaded PVC schedule 80 ☐ 2 4; Other ☐ ____
10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ■ 1 1; Continuous slot ☐ 0 1; Other ☐ ____
b. Manufacturer Monoflex
c. Slot size 0 . 0 1 0 in.
d. Slotted length: 1 0 . 0 ft.
11. Backfill material (below filler pack): None ■ 1 4; Other ☐ ____

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

Signature | Firm: NewFields, Madison, Wisconsin

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State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name
DB Oak Facility
Fort Atkinson, Wisconsin

Local Grid Location of Well
_____ ft. ☐ N. _____ ft. ☐ E.
☐ S. ☐ W.

Well Name
MW-6A

Facility License, Permit or Monitoring Number

Grid Origin Location
Lat. ____ ____ ____ Long. ____ ____ ____
St. Plane _____ ft. N, _____ ft. E.

Wis. Unique Well Number: P I 2 2 7 | DNR Well Number:

Type of Well: Water Table Observation Well ☐ 11
Piezometer ■ 12

Date Well Installed: 0 4 / 2 6 / 0 5 (m m d d y y)

Distance Well Is From Waste/Source Boundary

Section Location of Waste/Source ■ E
SE 1/4 of SE 1/4 of Sec. 34, T. 6 N, R. 14 ☐ W

Well Installed By: (Person's Name and Firm)
Alex Plummer
Badger State Drilling

Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☐ Sidegradient
d ☐ Downgradient n ☐ Not Known

A. Protective pipe, top elevation 7 9 7 . 8 ft. MSL
B. Well casing, top elevation 7 9 7 . 4 ft. MSL
C. Land surface elevation 7 9 7 . 8 ft. MSL
D. Surface seal, bottom 7 9 6 . 8 ft MSL or 1 . 0 ft

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ■ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐ ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ■ No

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

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

16. Drilling additives used? ☐ Yes ■ No
Describe: _____

17. Source of water (attached analysis):
_____

E. Bentonite seal, top 7 9 6 . 8 ft MSL or 1 . 0 ft
F. Fine sand, top 7 6 6 . 8 ft MSL or 3 1 . 0 ft
G. Filter pack, top 7 6 5 . 8 ft MSL or 3 2 . 0 ft
H. Screen joint, top 7 6 2 . 8 ft MSL or 3 5 . 0 ft
I. Well bottom 7 5 7 . 8 ft MSL or 4 0 . 0 ft
J. Filter pack, bottom 7 5 6 . 8 ft MSL or 4 1 . 0 ft
K. Borehole, bottom 7 5 6 . 8 ft MSL or 4 1 . 0 ft
L. Borehole, diameter 6 . 0 in.
M. O.D. well casing 2 . 3 7 in.
N. I.D. well casing 2 . 0 6 in.

1. Cap and lock? ■ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 9 . 0 in.
b. Length: 1 0 . 0 ft.
c. Material: Steel ■
Flush mount Other ☐ ☐☐
d. Additional protection? ☐ Yes ■ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 3 0
Concrete ■ 0 1
concrete Other ☐ ☐☐
4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Annular Space Seal ☐ ☐☐
Ohio #5 sand Other ■ ☐☐
5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. ____ Lbs/gal mud weight ..... Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight..... Bentonite slurry ☐ 3 1
d. ____ % Bentonite ..... Bentonite-cement grout ☐ 5 0
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
600 lbs. Gravity ■ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ■ 3/8 in. ☐ 1/2 in. Bentonite chips ■ 3 2
c. 50 lbs Other ☐ ☐☐
7. Fine sand material: Manufacturer, product name & mesh size
a. Ohio #4000 ☐☐
b. Volume added 25 lb
8. Filter pack material: Manufacturer, product name & mesh size
a. Ohio #5 sand ☐☐
b. Volume added 250 lb
9. Well casing: Flush threaded PVC schedule 40 ■ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
_____ Other ☐ ☐☐
10. Screen material: Sch. 40 PVC ☐☐
a. Screen type: Factory cut ■ 1 1
Continuous slot ☐ 0 1
_____ Other ☐ ☐☐
b. Manufacturer Monoflex
c. Slot size 0 . 0 1 0 in.
d. Slotted length: 5 . 0 ft.
11. Backfill material (below filler pack): None ■ 1 4
_____ Other ☐ ☐☐

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

Signature | Firm: NewFields, Madison, Wisconsin

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

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name
DB Oak Facility, Fort Atkinson, WI	Jefferson	MW-1

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_ _ _ _ _ _ _	2 8	P P 4 8 9 _ _	_ _ _ _ _ _

1. Can this well be purged dry? ☐ Yes ■ No

2. Well development method

surged with bailer and bailed	☐ 4 1
surged with bailer and pumped	■ 6 1
surged with block and bailed	☐ 4 2
surged with block and pumped	☐ 6 2
surged with block, bailed and pumped	☐ 7 0
compressed air	☐ 2 0
bailer only	☐ 1 0
pumped only	☐ 5 1
pumped slowly	☐ 5 0
Other_____	☐ _ _

3. Time spent developing well 1 2 0 min.

4. Depth of well (from top of well casing) 2 1 . 3 ft.

5. Inside diameter of well 2 . 0 6 in.

6. Volume of waters in filter pack and well casing 1 . 4 gal.

7. Volume of water removed from well 5 5 . 0 gal.

8. Volume of water added (if any) _ _ _ . _ gal.

9. Source of water added_____

10. Analysis performed on water added? ☐ Yes ■ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 1 2 . 8 3 ft.	_ _ _ . _ _ ft.
Date	b. 1 2 / 0 9 / 0 4 (m m d d y y)	1 2 / 1 0 / 0 4 (m m d d y y)
Time	c. 1 5 : 0 0 ■ p.m. ☐ a.m.	1 2 : 0 0 ■ p.m. ☐ a.m.
12. Sediment in well bottom	_ _ . _ inches	_ _ . _ inches
13. Water clarity	Clear ☐ 1 0 Turbid ■ 1 5 (Describe) Brown High turbidity	Clear ☐ 2 0 Turbid ■ 2 5 (Describe) Light gray Low turbidity

Fill in if drilling fluids were used and well is at solid waste facility.

14. Total suspended solids	_ _ _ _ . _ mg/l	_ _ _ _ . _ mg/l
15. COD	_ _ _ _ . _ mg/l	_ _ _ _ . _ mg/l

16. Additional comments on development:

Surged, then bailed 20 gallons
Pumped 25 gallons

Total removed = 55 gallons

Well developed by: Person's Name and Firm

Name: Derek Zoellner

Firm: NewFields, Madison, WI

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

Signature: _____

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name
DB Oak Facility, Fort Atkinson, WI	Jefferson	MW-2

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	2 8	P P 4 8 7	

1. Can this well be purged dry? ☐ Yes ■ No

2. Well development method
- surged with bailer and bailed ☐ 4 1
- surged with bailer and pumped ■ 6 1
- surged with block and bailed ☐ 4 2
- surged with block and pumped ☐ 6 2
- surged with block, bailed and pumped ☐ 7 0
- compressed air ☐ 2 0
- bailer only ☐ 1 0
- pumped only ☐ 5 1
- pumped slowly ☐ 5 0
- Other _____ ☐ ____

3. Time spent developing well 1 2 0 min.

4. Depth of well (from top of well casing) 1 5 . 2 ft.

5. Inside diameter of well 2 . 0 6 in.

6. Volume of waters in filter pack and well casing 1 . 1 gal.

7. Volume of water removed from well 5 0 . 0 gal.

8. Volume of water added (if any) ____ . __ gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ■ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 1 0 . 5 4 ft.	____ . __ ft.
Date	b. 1 2 / 1 0 / 0 4 (m m d d y y)	1 2 / 1 0 / 0 4 (m m d d y y)
Time	c. 0 9 : 0 0 ■ a.m. ☐ p.m.	1 1 : 0 0 ■ a.m. ☐ p.m.
12. Sediment in well bottom	__ . __ inches	__ . __ inches
13. Water clarity	Clear ☐ 1 0 Turbid ■ 1 5 (Describe) Brown-orange High turbidity	Clear ☐ 2 0 Turbid ■ 2 5 (Describe) Light orange Low turbidity

Fill in if drilling fluids were used and well is at solid waste facility.

14. Total suspended solids	____ . __ mg/l	____ . __ mg/l
15. COD	____ . __ mg/l	____ . __ mg/l

16. Additional comments on development:

Surged, then bailed 20 gallons
Pumped 30 gallons

Total removed = 50 gallons

Well developed by: Person's Name and Firm

Name: Derek Zoellner

Firm: NewFields, Madison, WI

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

Signature: _____

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name
DB Oak Facility, Fort Atkinson, WI	Jefferson	**MW-2A**

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	2 8	P P 4 8 8	

	Before Development	After Development
1. Can this well be purged dry?	☐ Yes ■ No	
11. Depth to Water (from top of well casing)	a. 1 0 . 7 1 ft.	. ft.
Date	b. 1 2 / 1 0 / 0 4 (m m d d y y)	1 2 / 1 0 / 0 4 (m m d d y y)
Time	c. 0 9 : 1 5 ■ a.m. ☐ p.m.	1 1 : 1 5 ■ a.m. ☐ p.m.
12. Sediment in well bottom	. inches	. inches
13. Water clarity	Clear ☐ 1 0 Turbid ■ 1 5 (Describe) Grayish-brown High turbidity	Clear ☐ 2 0 Turbid ■ 2 5 (Describe) Light gray Low turbidity
14. Total suspended solids	. mg/l	. mg/l
15. COD	. mg/l	. mg/l

2. Well development method

surged with bailer and bailed	☐ 4 1
surged with bailer and pumped	■ 6 1
surged with block and bailed	☐ 4 2
surged with block and pumped	☐ 6 2
surged with block, bailed and pumped	☐ 7 0
compressed air	☐ 2 0
bailer only	☐ 1 0
pumped only	☐ 5 1
pumped slowly	☐ 5 0
Other	☐

3. Time spent developing well: 1 2 0 min.

4. Depth of well (from top of well casing): 3 9 . 9 ft.

5. Inside diameter of well: 2 . 0 6 in.

6. Volume of waters in filter pack and well casing: 4 . 7 gal.

7. Volume of water removed from well: 7 5 . 0 gal.

8. Volume of water added (if any): . gal.

9. Source of water added:

10. Analysis performed on water added? ☐ Yes ■ No
(If yes, attach results)

Fill in if drilling fluids were used and well is at solid waste facility.

16. Additional comments on development:

Surged, then bailed 2 gallons
Pumped 72 gallons
Bailed 3 gallons

Total removed = 75 gallons

Well developed by: Person's Name and Firm

Name: Derek Zoellner

Firm: NewFields, Madison, WI

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

Signature:

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name
DB Oak Facility, Fort Atkinson, WI	Jefferson	MW-3

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	28	PP490	

1. Can this well be purged dry? ☐ Yes ■ No

2. Well development method
- surged with bailer and bailed ☐ 41
- surged with bailer and pumped ■ 61
- surged with block and bailed ☐ 42
- surged with block and pumped ☐ 62
- surged with block, bailed and pumped ☐ 70
- compressed air ☐ 20
- bailer only ☐ 10
- pumped only ☐ 51
- pumped slowly ☐ 50
- Other _____ ☐ ___

3. Time spent developing well 120 min.

4. Depth of well (from top of well casing) 153. ft.

5. Inside diameter of well 2.06 in.

6. Volume of waters in filter pack and well casing 1.3 gal.

7. Volume of water removed from well 60.0 gal.

8. Volume of water added (if any) ____. gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ■ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 6.94 ft.	____. ft.
Date	b. 12/10/04 mm dd yy	12/10/04 mm dd yy
Time	c. 09:00 ■ a.m. ☐ p.m.	11:00 ■ a.m. ☐ p.m.
12. Sediment in well bottom	___. inches	___. inches
13. Water clarity	Clear ☐ 10 Turbid ■ 15 (Describe) Grayish-brown High turbidity	Clear ☐ 20 Turbid ■ 25 (Describe) Light gray Low turbidity

Fill in if drilling fluids were used and well is at solid waste facility.

14. Total suspended solids	____. mg/l	____. mg/l
15. COD	____. mg/l	____. mg/l

16. Additional comments on development:

Surged, then bailed 10 gallons
Pumped 50 gallons

Total removed = 60 gallons

Well developed by: Person's Name and Firm

Name: Bjorn Halvorsen

Firm: Badger State Drilling

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

Signature: _____

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name
DB Oak Facility, Fort Atkinson, WI	Jefferson	MW-3A

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	28	PI229	

1. Can this well be purged dry? ☐ Yes ■ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	■ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailer only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other_____	☐

3. Time spent developing well 90 min.

4. Depth of well (from top of well casing) 506 ft.

5. Inside diameter of well 2.06 in.

6. Volume of waters in filter pack and well casing 6.5 gal.

7. Volume of water removed from well 105.0 gal.

8. Volume of water added (if any) ____.__ gal.

9. Source of water added_____

10. Analysis performed on water added? ☐ Yes ■ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 11.05 ft.	____.__ ft.
Date	b. 5/18/05 mm dd yy	5/18/05 mm dd yy
Time	c. 14:00 ☐ a.m. ■ p.m.	15:30 ☐ a.m. ■ p.m.
12. Sediment in well bottom	__.__ inches	__.__ inches
13. Water clarity	Clear ☐ 10 Turbid ■ 15 (Describe) Grayish-brown High turbidity	Clear ☐ 20 Turbid ■ 25 (Describe) Gray High turbidity

Fill in if drilling fluids were used and well is at solid waste facility.

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Additional comments on development:

Surged for 20 minutes, bailed 5 gallons
Pumped 100 gallons with whale pump

Total removed = 105 gallons

Well developed by: Person's Name and Firm

Name: Derek Zoellner

Firm: NewFields

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

Signature: _____

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name
DB Oak Facility, Fort Atkinson, WI	Jefferson	**MW-4**

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_ _ _ _ _ _ _	2 8	P P 4 9 2 _ _	_ _ _ _ _ _

1. Can this well be purged dry? ☐ Yes ■ No

2. Well development method

surged with bailer and bailed	☐ 4 1
surged with bailer and pumped	■ 6 1
surged with block and bailed	☐ 4 2
surged with block and pumped	☐ 6 2
surged with block, bailed and pumped	☐ 7 0
compressed air	☐ 2 0
bailer only	☐ 1 0
pumped only	☐ 5 1
pumped slowly	☐ 5 0
Other_____	☐ _ _

3. Time spent developing well 1 2 0 min.

4. Depth of well (from top of well casing) 1 7 . 1 ft.

5. Inside diameter of well 2 . 0 6 in.

6. Volume of waters in filter pack and well casing 1 . 4 gal.

7. Volume of water removed from well 5 0 . 0 gal.

8. Volume of water added (if any) _ _ _ . _ gal.

9. Source of water added_____

10. Analysis performed on water added? ☐ Yes ■ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 7 . 9 3 ft.	_ _ _ . _ _ ft.
Date	b. 1 2 / 1 0 / 0 4 (m m d d y y)	1 2 / 1 0 / 0 4 (m m d d y y)
Time	c. 0 8 : 3 0 ☐ a.m. ☐ p.m.	1 0 : 3 0 ■ a.m. ☐ p.m.
12. Sediment in well bottom	_ _ . _ inches	_ _ . _ inches
13. Water clarity	Clear ☐ 1 0 Turbid ■ 1 5 (Describe) Brownish-gray High turbidity	Clear ☐ 2 0 Turbid ■ 2 5 (Describe) Light gray Low turbidity

Fill in if drilling fluids were used and well is at solid waste facility.

14. Total suspended solids	_ _ _ _ . _ mg/l	_ _ _ _ . _ mg/l
15. COD	_ _ _ _ . _ mg/l	_ _ _ _ . _ mg/l

16. Additional comments on development:

Surged, then bailed 10 gallons
Pumped 40 gallons

Total removed = 50 gallons

Well developed by: Person's Name and Firm

Name: Kevin McCumber

Firm: Badger State Drilling

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

Signature: _____

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name
DB Oak Facility, Fort Atkinson, WI	Jefferson	**MW-4A**

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_ _ _ _ _ _ _	2 8	P P 4 9 3	_ _ _ _ _

1. Can this well be purged dry? ☐ Yes ■ No

2. Well development method

surged with bailer and bailed	☐ 4 1
surged with bailer and pumped	■ 6 1
surged with block and bailed	☐ 4 2
surged with block and pumped	☐ 6 2
surged with block, bailed and pumped	☐ 7 0
compressed air	☐ 2 0
bailer only	☐ 1 0
pumped only	☐ 5 1
pumped slowly	☐ 5 0
Other_____	☐ _ _

3. Time spent developing well: 1 2 0 min.

4. Depth of well (from top of well casing): 4 1 . 0 ft.

5. Inside diameter of well: 2 . 0 6 in.

6. Volume of waters in filter pack and well casing: 1 . 4 gal.

7. Volume of water removed from well: 5 0 . 0 gal.

8. Volume of water added (if any): _ _ _ . _ gal.

9. Source of water added_____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ■ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 7 . 7 8 ft.	_ _ _ . _ _ ft.
Date	b. 1 2 / 1 0 / 0 4 (m m d d y y)	1 2 / 1 0 / 0 4 (m m d d y y)
Time	c. 0 8 : 4 0 ■ a.m. ☐ p.m.	1 0 : 4 0 ■ a.m. ☐ p.m.
12. Sediment in well bottom	_ _ . _ inches	_ _ . _ inches
13. Water clarity	Clear ☐ 1 0 Turbid ■ 1 5 (Describe) Brownish-gray High turbidity	Clear ■ 2 0 Turbid ☐ 2 5 (Describe) Clear Very low turbidity
Fill in if drilling fluids were used and well is at solid waste facility.		
14. Total suspended solids	_ _ _ _ . _ mg/l	_ _ _ _ . _ mg/l
15. COD	_ _ _ _ . _ mg/l	_ _ _ _ . _ mg/l

16. Additional comments on development:

Surged, then bailed 10 gallons
Pumped 40 gallons

Total removed = 50 gallons

Well developed by: Person's Name and Firm

Name: Kevin McCumber

Firm: Badger State Drilling

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

Signature: _____

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name
DB Oak Facility, Fort Atkinson, WI	Jefferson	**MW-5**

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
_ _ _ _ _ _ _	2 8	P P 4 9 1	_ _ _ _

1. Can this well be purged dry? ■ Yes ☐ No

2. Well development method
- surged with bailer and bailed ☐ 4 1
- surged with bailer and pumped ■ 6 1
- surged with block and bailed ☐ 4 2
- surged with block and pumped ☐ 6 2
- surged with block, bailed and pumped ☐ 7 0
- compressed air ☐ 2 0
- bailer only ☐ 1 0
- pumped only ☐ 5 1
- pumped slowly ☐ 5 0
- Other _____ ☐ _ _

3. Time spent developing well 1 5 0 min.

4. Depth of well (from top of well casing) 1 4 . 6 ft.

5. Inside diameter of well 2 . 0 6 in.

6. Volume of waters in filter pack and well casing 1 . 1 gal.

7. Volume of water removed from well 5 0 . 0 gal.

8. Volume of water added (if any) _ _ _ . _ gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ■ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 8 . 0 9 ft.	_ _ _ . _ _ ft.
Date	b. 12/09/04 (m m d d y y)	12/10/04 (m m d d y y)
Time	c. 15:30 ☐ a.m. ■ p.m.	12:30 ☐ a.m. ■ p.m.
12. Sediment in well bottom	_ _ . _ inches	_ _ . _ inches
13. Water clarity	Clear ☐ 1 0 Turbid ■ 1 5 (Describe) Dark brown High turbidity	Clear ☐ 2 0 Turbid ■ 2 5 (Describe) Grayish-brown Moderate turbidity
Fill in if drilling fluids were used and well is at solid waste facility.		
14. Total suspended solids	_ _ _ _ . _ mg/l	_ _ _ _ . _ mg/l
15. COD	_ _ _ _ . _ mg/l	_ _ _ _ . _ mg/l

16. Additional comments on development:

Surged, then bailed 15 gallons
Pumped 30 gallons, dry
Bailed 5 gallons, dry

Total removed = 50 gallons

Well developed by: Person's Name and Firm

Name: Bjorn Halvorsen

Firm: Badger State Drilling

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

Signature: _____

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name	
DB Oak Facility, Fort Atkinson, WI	Jefferson	MW-6	
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well Number**
	2 8	P I 2 2 8 ___	

	Before Development	After Development
1. Can this well be purged dry?	■ Yes ☐ No	
11. Depth to Water (from top of well casing)	a. 1 1 . 7 4 ft.	___ . __ ft.
Date	b. 5 / 1 9 / 0 5 (m m d d y y)	5 / 1 9 / 0 5 (m m d d y y)
Time	c. 0 7 : 0 0 ☐ a.m. ■ p.m.	1 4 : 0 0 ■ a.m. ☐ p.m.
12. Sediment in well bottom	___ . __ inches	___ . __ inches
13. Water clarity	Clear ☐ 1 0 Turbid ■ 1 5 (Describe) Brown High turbidity	Clear ☐ 2 0 Turbid ■ 2 5 (Describe) Brown High turbidity

2. Well development method

surged with bailer and bailed	■ 4 1
surged with bailer and pumped	☐ 6 1
surged with block and bailed	☐ 4 2
surged with block and pumped	☐ 6 2
surged with block, bailed and pumped	☐ 7 0
compressed air	☐ 2 0
bailer only	☐ 1 0
pumped only	☐ 5 1
pumped slowly	☐ 5 0
Other_____	☐ ___

3. Time spent developing well: 1 2 0 min.

4. Depth of well (from top of well casing): 1 5 . 5 ft.

5. Inside diameter of well: 2 . 0 6 in.

6. Volume of waters in filter pack and well casing: 0 . 6 gal.

7. Volume of water removed from well: 6 . 0 gal.

8. Volume of water added (if any): ___ . __ gal.

9. Source of water added_____

10. Analysis performed on water added? ☐ Yes ■ No (If yes, attach results)

Fill in if drilling fluids were used and well is at solid waste facility.

14. Total suspended solids	____ . __ mg/l	____ . __ mg/l
15. COD	____ . __ mg/l	____ . __ mg/l

16. Additional comments on development:

Surged for 30 minutes, bailed 2.5 gallons (dry)
Bailed 1.5 gallons (dry)
Bailed 1 gallon (dry)
Bailed 1 gallon (dry)

Total removed = 6.0 gallons

Well developed by: Person's Name and Firm

Name: Derek Zoellner

Firm: NewFields

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

Signature: _____

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113B Rev. 4-90

Facility/Project Name	County Name	Well Name
DB Oak Facility, Fort Atkinson, WI	Jefferson	**MW-6A**

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	2 8	P I 2 2 7	

1. Can this well be purged dry? ■ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 4 1
surged with bailer and pumped	■ 6 1
surged with block and bailed	☐ 4 2
surged with block and pumped	☐ 6 2
surged with block, bailed and pumped	☐ 7 0
compressed air	☐ 2 0
bailer only	☐ 1 0
pumped only	☐ 5 1
pumped slowly	☐ 5 0
Other _____	☐

3. Time spent developing well 1 6 0 min.

4. Depth of well (from top of well casing) 3 9 . 7 ft.

5. Inside diameter of well 2 . 0 6 in.

6. Volume of waters in filter pack and well casing 3 . 7 gal.

7. Volume of water removed from well 2 4 . 0 gal.

8. Volume of water added (if any) _____ . _ gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ■ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 1 6 . 9 8 ft.	_____ . _ ft.
Date	b. 5 / 1 9 / 0 5 (m m d d y y)	5 / 1 9 / 0 5 (m m d d y y)
Time	c. 0 7 : 0 0 ☐ a.m. ■ p.m.	1 4 : 0 0 ■ a.m. ☐ p.m.
12. Sediment in well bottom	_____ . _ inches	_____ . _ inches
13. Water clarity	Clear ☐ 1 0 Turbid ■ 1 5 (Describe) Gray High turbidity	Clear ☐ 2 0 Turbid ■ 2 5 (Describe) Gray High turbidity

Fill in if drilling fluids were used and well is at solid waste facility.

14. Total suspended solids	_____ . _ mg/l	_____ . _ mg/l
15. COD	_____ . _ mg/l	_____ . _ mg/l

16. Additional comments on development:

Surged for 30 minutes, bailed 5 gallons
Pumped dry at 12 gallons, pumped dry at 3 gallons, pumped dry at 2 gallons, pumped dry at 2 gallons,

Total removed = 24 gallons

Well developed by: Person's Name and Firm

Name: Derek Zoellner

Firm: NewFields

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

Signature: _____

Print Initials: D D Z

Firm: NewFields, Madison, Wisconsin

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

Appendix B

In-Situ Hydraulic Conductivity Test Results

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-1 (trial #1)
Date: 12/16/2004
Time: 0:00

INPUT

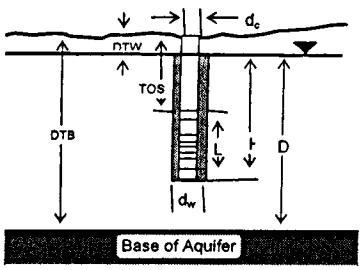
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	8.58 Feet
Depths to:	
water level (DTW)	12.77 Feet
top of screen (TOS)	12.77 Feet
Base of Aquifer (DTB)	22 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

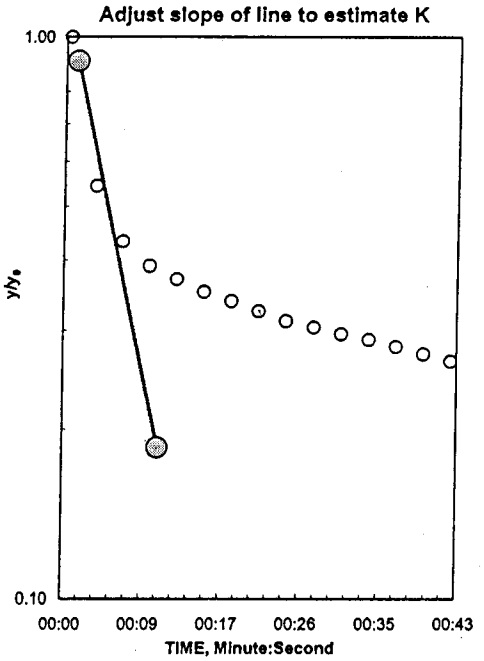
COMPUTED

L_{wetted}	8.58 Feet
D =	9.23 Feet
H =	8.58 Feet
L/r_w =	24.96
$y_{0\text{-DISPLACEMENT}}$ =	0.86 Feet
$y_{0\text{-SLUG}}$ =	0.84 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.363
B =	0.383
ln(Re/rw) =	2.240
Re =	3.23 Feet
Slope =	0.074636552 $\log_{10}$/sec
$t_{90\%}$ recovery =	13 sec

Input is consistent.

K =	10.00 Feet/Day
K =	1.16E-04 Feet/sec
K =	3.53E-03 cm/sec





Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:26.6	6.55
2	0:00:32.6	7.04
3	0:00:38.6	7.09
4	0:00:44.6	7.12
5	0:00:50.6	7.14
6	0:00:56.6	7.16
7	0:01:02.6	7.17
8	0:01:08.6	7.18
9	0:01:14.6	7.20
10	0:01:20.6	7.20
11	0:01:26.6	7.21
12	0:01:32.7	7.22
13	0:01:38.7	7.23
14	0:01:44.7	7.24
15	0:01:50.7	7.25
16	0:01:56.7	7.25
17	0:02:02.7	7.26
18	0:02:08.7	7.26
19	0:02:14.7	7.27
20	0:02:20.7	7.28
21	0:02:26.7	7.28
22	0:02:32.7	7.29
23	0:02:38.7	7.29
24	0:02:44.7	7.30
25	0:02:50.7	7.30
26	0:02:56.7	7.30
27	0:03:02.7	7.31
28	0:03:08.7	7.31
29	0:03:14.7	7.32
30	0:03:20.7	7.32
31	0:03:26.7	7.32
32	0:03:32.7	7.32
33	0:03:38.7	7.33
34	0:03:44.7	7.33
35	0:03:50.7	7.33
36	0:03:56.8	7.34
37	0:04:02.8	7.34
38	0:04:08.8	7.34
39	0:04:14.8	7.34
40	0:04:20.8	7.34
41	0:04:26.8	7.35
42	0:04:32.8	7.35
43	0:04:38.8	7.35
44	0:04:44.8	7.35
45	0:04:50.8	7.35

Bouwer and Rice analysis of slug test, WRR 1976

REMARKS:

DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-1 (trial #1)
Completed by NewFields on 12/16/2004

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-1 (trial #2)
Date: 12/16/2004
Time: 0:00

INPUT

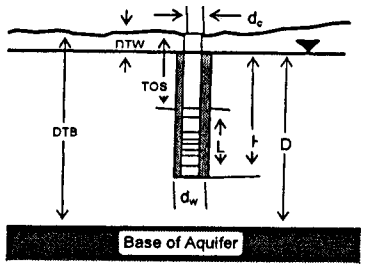
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	8.58 Feet
Depths to:	
water level (DTW)	12.77 Feet
top of screen (TOS)	12.77 Feet
Base of Aquifer (DTB)	22 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

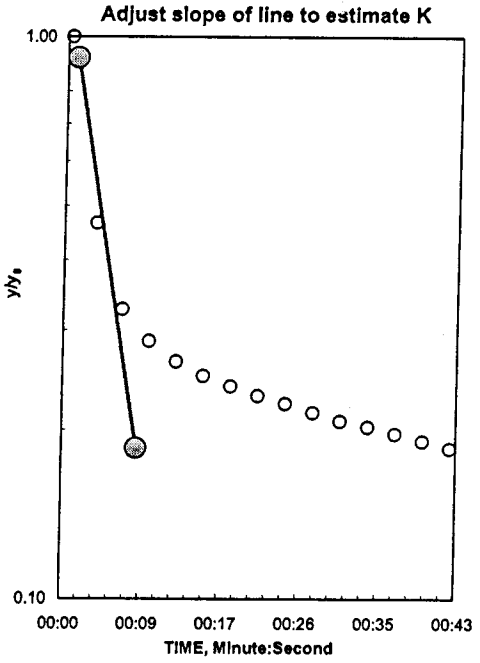
COMPUTED

L_{wetted}	8.58 Feet
D =	9.23 Feet
H =	8.58 Feet
L/r_w =	24.96
$y_{0\text{-DISPLACEMENT}}$ =	1.23 Feet
$y_{0\text{-SLUG}}$ =	1.13 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.363
B =	0.383
ln(Re/rw) =	2.240
Re =	3.23 Feet
Slope =	0.098097335 $\log_{10}$/sec
$t_{90\%}$ recovery =	10 sec

Input is consistent.

K =	20.00 Feet/Day
K =	2.31E-04 Feet/sec
K =	7.06E-03 cm/sec





REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-1 (trial #2)
Completed by NewFields on 12/16/2004

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:27.0	6.18
2	0:00:33.1	7.01
3	0:00:39.1	7.08
4	0:00:45.1	7.11
5	0:00:51.1	7.13
6	0:00:57.1	7.15
7	0:01:03.1	7.17
8	0:01:09.1	7.18
9	0:01:15.1	7.19
10	0:01:21.1	7.20
11	0:01:27.1	7.21
12	0:01:33.1	7.22
13	0:01:39.1	7.23
14	0:01:45.1	7.24
15	0:01:51.1	7.24
16	0:01:57.1	7.25
17	0:02:03.1	7.26
18	0:02:09.1	7.26
19	0:02:15.1	7.27
20	0:02:21.1	7.27
21	0:02:27.1	7.28
22	0:02:33.1	7.28
23	0:02:39.1	7.29
24	0:02:45.1	7.29
25	0:02:51.1	7.30
26	0:02:57.2	7.30
27	0:03:03.2	7.31
28	0:03:09.2	7.31
29	0:03:15.2	7.31
30	0:03:21.2	7.32
31	0:03:27.2	7.32
32	0:03:33.2	7.32
33	0:03:39.2	7.33
34	0:03:45.2	7.33
35	0:03:51.2	7.33
36	0:03:57.2	7.33
37	0:04:03.2	7.34
38	0:04:09.2	7.34
39	0:04:15.2	7.34
40	0:04:21.2	7.35
41	0:04:27.2	7.35
42	0:04:33.2	7.35
43	0:04:39.2	7.35
44	0:04:45.2	7.35
45	0:04:51.2	7.36

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-2 (trial #1)
Date: 12/16/2004
Time: 0:00

INPUT

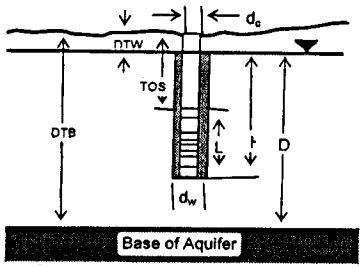
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	4.59 Feet
Depths to:	
water level (DTW)	10.59 Feet
top of screen (TOS)	10.59 Feet
Base of Aquifer (DTB)	16 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

COMPUTED

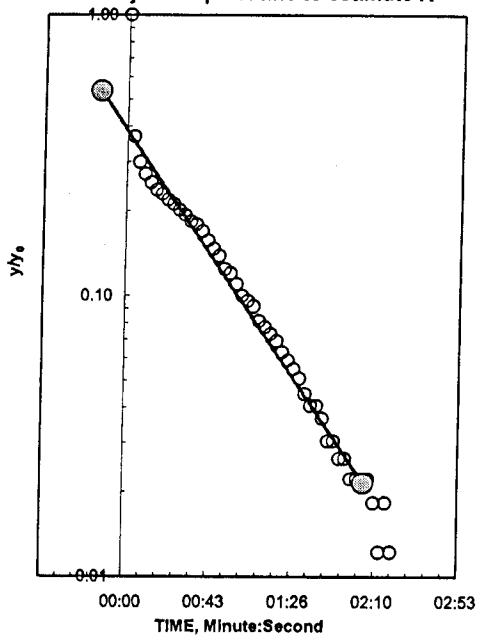
L_{wetted}	4.59 Feet
D =	5.41 Feet
H =	4.59 Feet
L/r_w =	13.35
$y_{0\text{-DISPLACEMENT}}$ =	0.49 Feet
$y_{0\text{-SLUG}}$ =	0.56 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.011
B =	0.299
ln(Re/rw) =	1.682
Re =	1.85 Feet
Slope =	0.010077614 $\log_{10}$/sec
$t_{90\%}$ recovery =	99 sec

Input is consistent.

K =	3.00 Feet/Day
K =	3.47E-05 Feet/sec
K =	1.06E-03 cm/sec



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-2 (trial #1)
Completed by NewFields on 12/16/2004

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:23.8	3.98
2	0:00:26.8	4.29
3	0:00:29.8	4.32
4	0:00:32.8	4.34
5	0:00:35.8	4.35
6	0:00:38.8	4.35
7	0:00:41.8	4.36
8	0:00:44.8	4.36
9	0:00:47.8	4.37
10	0:00:50.8	4.37
11	0:00:53.8	4.37
12	0:00:56.8	4.38
13	0:00:59.8	4.38
14	0:01:02.8	4.39
15	0:01:05.8	4.39
16	0:01:08.8	4.40
17	0:01:11.8	4.40
18	0:01:14.8	4.41
19	0:01:17.8	4.41
20	0:01:20.8	4.42
21	0:01:23.8	4.42
22	0:01:26.8	4.42
23	0:01:29.8	4.42
24	0:01:32.8	4.43
25	0:01:35.8	4.43
26	0:01:38.8	4.43
27	0:01:41.8	4.44
28	0:01:44.8	4.44
29	0:01:47.8	4.44
30	0:01:50.8	4.44
31	0:01:53.8	4.44
32	0:01:56.8	4.45
33	0:01:59.8	4.45
34	0:02:02.8	4.45
35	0:02:05.8	4.45
36	0:02:08.8	4.45
37	0:02:11.8	4.45
38	0:02:14.8	4.46
39	0:02:17.9	4.46
40	0:02:20.9	4.46
41	0:02:23.9	4.46
42	0:02:26.9	4.46
43	0:02:29.9	4.46
44	0:02:32.9	4.46
45	0:02:35.9	4.46

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-2 (trial #2)
Date: 12/16/2004
Time: 0:00

INPUT

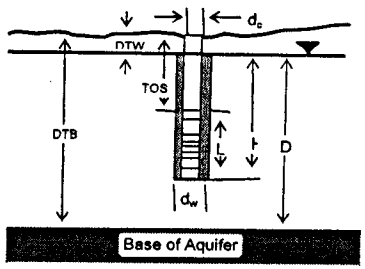
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	4.59 Feet
Depths to:	
water level (DTW)	10.59 Feet
top of screen (TOS)	10.59 Feet
Base of Aquifer (DTB)	16 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

COMPUTED

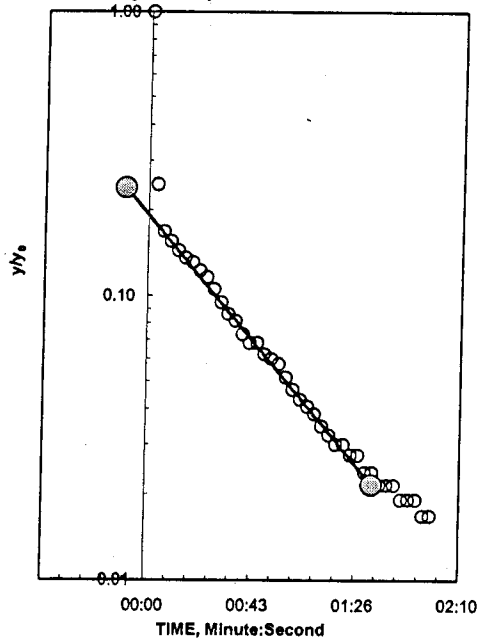
L_{wetted}	4.59 Feet
D =	5.41 Feet
H =	4.59 Feet
L/r_w =	13.35
$y_{0\text{-DISPLACEMENT}}$ =	0.83 Feet
$y_{0\text{-SLUG}}$ =	0.84 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.011
B =	0.299
ln(Re/rw) =	1.682
Re =	1.85 Feet
Slope =	0.010129738 $\log_{10}$/sec
$t_{90\%}$ recovery =	99 sec

Input is consistent.

K =	3.00 Feet/Day
K =	3.47E-05 Feet/sec
K =	1.06E-03 cm/sec



Adjust slope of line to estimate K



Bouwer and Rice analysis of slug test, WRR 1976

REMARKS:

DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-2 (trial #2)
Completed by NewFields on 12/16/2004

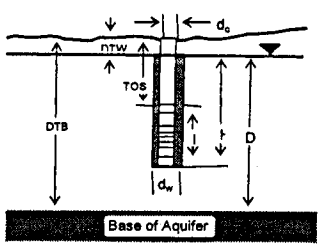
Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:24.2	3.65
2	0:00:27.2	4.28
3	0:00:30.2	4.34
4	0:00:33.2	4.36
5	0:00:36.2	4.36
6	0:00:39.2	4.37
7	0:00:42.2	4.38
8	0:00:45.2	4.38
9	0:00:48.2	4.39
10	0:00:51.2	4.40
11	0:00:54.2	4.41
12	0:00:57.2	4.41
13	0:01:00.2	4.42
14	0:01:03.2	4.42
15	0:01:06.2	4.43
16	0:01:09.2	4.43
17	0:01:12.2	4.43
18	0:01:15.2	4.43
19	0:01:18.2	4.44
20	0:01:21.2	4.44
21	0:01:24.2	4.45
22	0:01:27.2	4.45
23	0:01:30.2	4.45
24	0:01:33.2	4.45
25	0:01:36.2	4.46
26	0:01:39.2	4.46
27	0:01:42.2	4.46
28	0:01:45.2	4.46
29	0:01:48.2	4.46
30	0:01:51.2	4.46
31	0:01:54.2	4.46
32	0:01:57.2	4.46
33	0:02:00.2	4.47
34	0:02:03.2	4.47
35	0:02:06.2	4.47
36	0:02:09.2	4.47
37	0:02:12.2	4.47
38	0:02:15.2	4.47
39	0:02:18.2	4.47
40	0:02:21.2	4.47

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-2A (Trial #1)
Date: 12/16/2004
Time: 0:00

INPUT

Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	8 Feet
Depths to:	
water level (DTW)	10.76 Feet
top of screen (TOS)	31.95 Feet
Base of Aquifer (DTB)	45 Feet
Annular Fill:	
across screen -- Coarse Sand	
above screen -- Bentonite	
Aquifer Material -- Medium Sand	



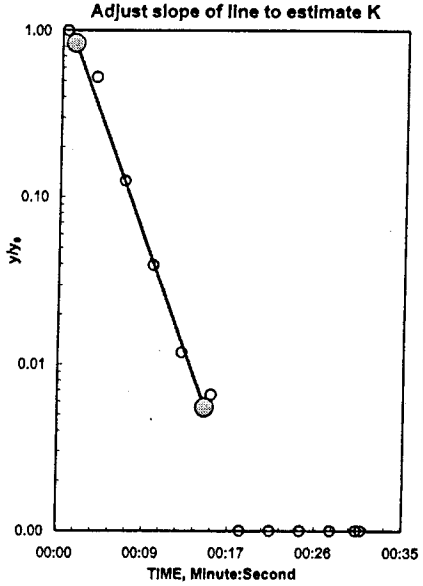
COMPUTED

L_{wetted}	8 Feet
D =	34.24 Feet
H =	29.19 Feet
L/r_w =	23.27
$y_{0\text{-DISPLACEMENT}}$ =	0.76 Feet
$y_{0\text{-SLUG}}$ =	0.70 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.312
B =	0.371
ln(Re/rw) =	2.565
Re =	4.47 Feet
Slope =	0.16071 $\log_{10}$/sec
$t_{90\%}$ recovery =	6 sec

Input is consistent.

K =	40 Feet/Day
K =	5.56E-04 Feet/sec
K =	1.69E-02 cm/sec

Adjust slope of line to estimate K



Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:23.5	21.88
2	0:00:26.5	22.24
3	0:00:29.5	22.55
4	0:00:32.5	22.61
5	0:00:35.5	22.63
6	0:00:38.5	22.64
7	0:00:41.5	22.64
8	0:00:44.5	22.64
9	0:00:47.5	22.64
10	0:00:50.5	22.64
11	0:00:53.5	22.64

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

IDB Oaks Facility, Fort Atkinson, Wisconsin.
MW-2A (trial #1)
Completed by NewFields on 12/16/2004

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-2A (Trial #2)
Date: 12/16/2004
Time: 0:00

INPUT

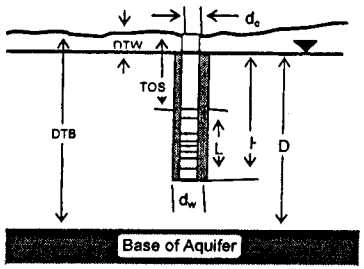
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	8 Feet
Depths to:	
water level (DTW)	10.76 Feet
top of screen (TOS)	31.95 Feet
Base of Aquifer (DTB)	45 Feet
Annular Fill:	
across screen -- Coarse Sand	
above screen -- Bentonite	
Aquifer Material -- Medium Sand	

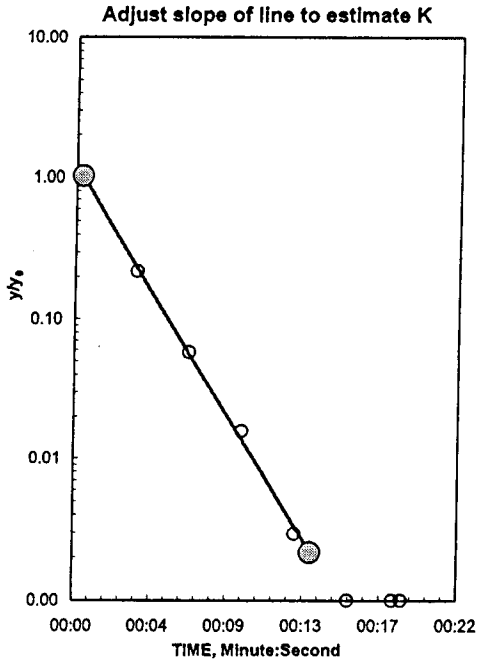
COMPUTED

L_{wetted}	8 Feet
D =	34.24 Feet
H =	29.19 Feet
L/r_w =	23.27
$y_{0\text{-DISPLACEMENT}}$ =	1.02 Feet
$y_{0\text{-SLUG}}$ =	0.84 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.312
B =	0.371
ln(Re/rw) =	2.565
Re =	4.47 Feet
Slope =	0.204807 $\log_{10}$/sec
$t_{90\%}$ recovery =	5 sec

Input is consistent.

K =	50 Feet/Day
K =	5.79E-04 Feet/sec
K =	1.76E-02 cm/sec





Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:23.6	21.62
2	0:00:26.6	22.42
3	0:00:29.6	22.58
4	0:00:32.6	22.62
5	0:00:35.6	22.64
6	0:00:38.6	22.64
7	0:00:41.6	22.64

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

IDB Oaks Facility, Fort Atkinson, Wisconsin.
MW-2A (trial #2)
Completed by NewFields on 12/16/2004

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-3 (trial #1)
Date: 12/16/2004
Time: 0:00

INPUT

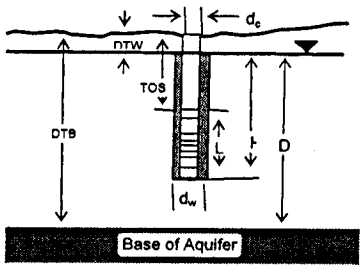
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	8.3 Feet
Depths to:	
water level (DTW)	7.09 Feet
top of screen (TOS)	7.09 Feet
Base of Aquifer (DTB)	16 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

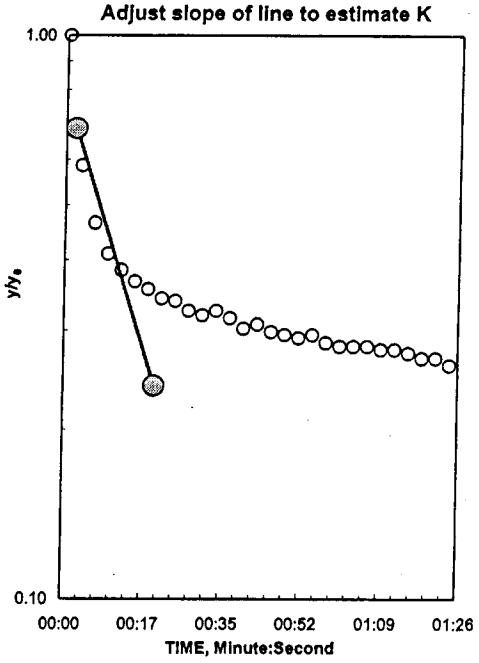
COMPUTED

L_{wetted}	8.3 Feet
D =	8.91 Feet
H =	8.3 Feet
L/r_w =	24.15
$y_{0\text{-DISPLACEMENT}}$ =	0.53 Feet
$y_{0\text{-SLUG}}$ =	0.56 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.339
B =	0.378
ln(Re/rw) =	2.216
Re =	3.15 Feet
Slope =	0.025440598 $\log_{10}$/sec
$t_{90\%}$ recovery =	39 sec

Input is consistent.

K =	5.00 Feet/Day
K =	5.79E-05 Feet/sec
K =	1.76E-03 cm/sec





REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-3 (trial #1)
Completed by NewFields on 12/16/2004

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:32.1	6.94
2	0:00:38.1	7.22
3	0:00:44.1	7.26
4	0:00:50.1	7.28
5	0:00:56.1	7.29
6	0:01:02.1	7.30
7	0:01:08.1	7.30
8	0:01:14.1	7.30
9	0:01:20.2	7.31
10	0:01:26.2	7.31
11	0:01:32.2	7.32
12	0:01:38.2	7.32
13	0:01:44.2	7.32
14	0:01:50.2	7.33
15	0:01:56.2	7.33
16	0:02:02.2	7.33
17	0:02:08.2	7.33
18	0:02:14.2	7.33
19	0:02:20.2	7.34
20	0:02:26.2	7.34
21	0:02:32.2	7.34
22	0:02:38.2	7.34
23	0:02:44.2	7.35
24	0:02:50.2	7.35
25	0:02:56.2	7.35
26	0:03:02.2	7.35
27	0:03:08.2	7.35
28	0:03:14.2	7.35
29	0:03:20.2	7.35
30	0:03:26.2	7.35
31	0:03:32.2	7.36
32	0:03:38.2	7.36
33	0:03:44.3	7.36
34	0:03:50.3	7.37
35	0:03:56.3	7.37
36	0:04:02.3	7.37
37	0:04:08.3	7.37
38	0:04:14.3	7.37
39	0:04:20.3	7.37
40	0:04:26.3	7.37
41	0:04:32.3	7.37
42	0:04:38.3	7.37
43	0:04:44.3	7.37
44	0:04:50.3	7.37
45	0:04:56.3	7.37

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-3 (trial #2)
Date: 12/16/2004
Time: 0:00

INPUT

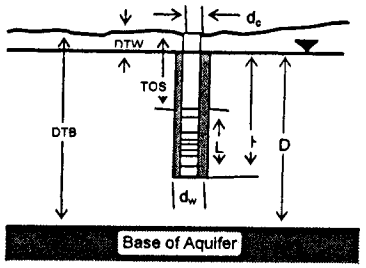
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	8.3 Feet
Depths to:	
water level (DTW)	7.09 Feet
top of screen (TOS)	7.09 Feet
Base of Aquifer (DTB)	16 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

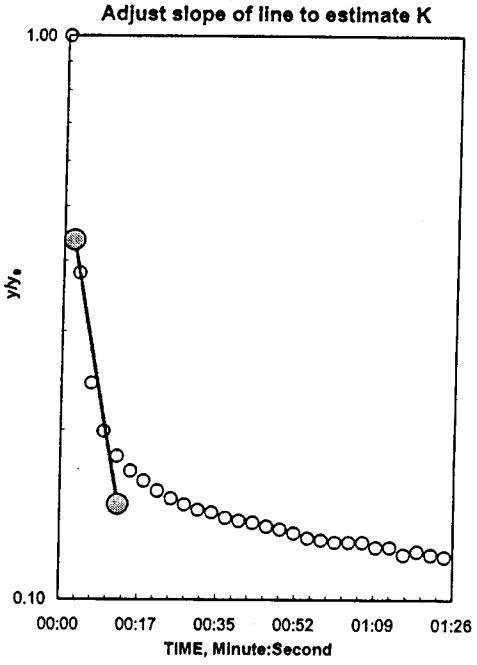
COMPUTED

L_{wetted}	8.3 Feet
D =	8.91 Feet
H =	8.3 Feet
L/r_w =	24.15
$y_{0\text{-DISPLACEMENT}}$ =	1.90 Feet
$y_{0\text{-SLUG}}$ =	1.69 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.339
B =	0.378
ln(Re/rw) =	2.216
Re =	3.15 Feet
Slope =	0.044320235 $\log_{10}$/sec
$t_{90\%}$ recovery =	23 sec

Input is consistent.

K =	8.00 Feet/Day
K =	9.26E-05 Feet/sec
K =	2.82E-03 cm/sec





REMARKS:

DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-3 (trial #2)
Completed by NewFields on 12/16/2004

Bouwer and Rice analysis of slug test, WRR 1976

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:32.9	5.59
2	0:00:38.9	7.03
3	0:00:44.9	7.15
4	0:00:50.9	7.18
5	0:00:56.9	7.20
6	0:01:02.9	7.22
7	0:01:08.9	7.23
8	0:01:14.9	7.23
9	0:01:20.9	7.24
10	0:01:27.0	7.25
11	0:01:33.0	7.25
12	0:01:39.0	7.25
13	0:01:45.0	7.26
14	0:01:51.0	7.26
15	0:01:57.0	7.27
16	0:02:03.0	7.27
17	0:02:09.0	7.27
18	0:02:15.0	7.28
19	0:02:21.0	7.28
20	0:02:27.0	7.29
21	0:02:33.0	7.29
22	0:02:39.0	7.29
23	0:02:45.0	7.29
24	0:02:51.0	7.29
25	0:02:57.0	7.30
26	0:03:03.0	7.30
27	0:03:09.0	7.30
28	0:03:15.0	7.30
29	0:03:21.0	7.31
30	0:03:27.0	7.31
31	0:03:33.0	7.31
32	0:03:39.0	7.31
33	0:03:45.0	7.32
34	0:03:51.1	7.32
35	0:03:57.1	7.32
36	0:04:03.1	7.32
37	0:04:09.1	7.32
38	0:04:15.1	7.32
39	0:04:21.1	7.32
40	0:04:27.1	7.33
41	0:04:33.1	7.33
42	0:04:39.1	7.33
43	0:04:45.1	7.33
44	0:04:51.1	7.33
45	0:04:57.1	7.34

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-4 (trial #1)
Date: 12/16/2004
Time: 0:00

INPUT

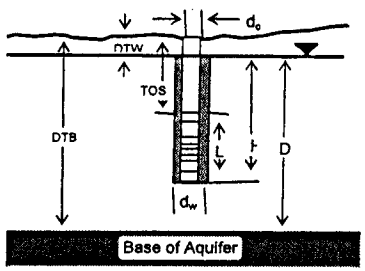
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	9.04 Feet
Depths to:	
water level (DTW)	8.11 Feet
top of screen (TOS)	8.11 Feet
Base of Aquifer (DTB)	18 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

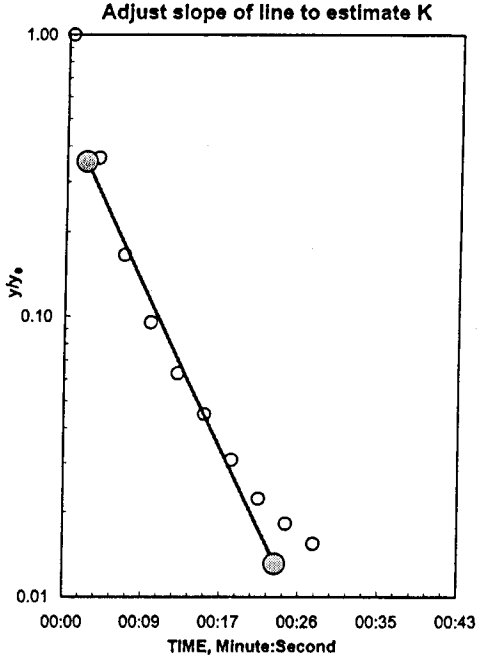
COMPUTED

L_{wetted}	9.04 Feet
D =	9.89 Feet
H =	9.04 Feet
L/r_w =	26.30
$y_{0\text{-DISPLACEMENT}}$ =	0.72 Feet
$y_{0\text{-SLUG}}$ =	0.84 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.401
B =	0.392
ln(Re/rw) =	2.266
Re =	3.32 Feet
Slope =	0.067602041 $\log_{10}$/sec
$t_{90\%}$ recovery =	15 sec

Input is consistent.

K =	10.00 Feet/Day
K =	1.16E-04 Feet/sec
K =	3.53E-03 cm/sec





Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:34.3	7.66
2	0:00:37.4	8.11
3	0:00:40.4	8.25
4	0:00:43.4	8.30
5	0:00:46.4	8.33
6	0:00:49.4	8.34
7	0:00:52.4	8.35
8	0:00:55.4	8.36
9	0:00:58.4	8.36
10	0:01:01.4	8.36
11	0:01:04.4	8.37
12	0:01:07.4	8.37
13	0:01:10.4	8.37
14	0:01:13.4	8.37
15	0:01:16.4	8.37
16	0:01:19.4	8.37
17	0:01:22.4	8.37
18	0:01:25.4	8.37
19	0:01:28.4	8.37
20	0:01:31.4	8.37
21	0:01:34.4	8.37
22	0:01:37.4	8.37
23	0:01:40.4	8.37
24	0:01:43.4	8.37
25	0:01:46.4	8.37
26	0:01:49.4	8.37
27	0:01:52.4	8.37
28	0:01:55.4	8.37
29	0:01:58.4	8.37
30	0:02:01.4	8.37
31	0:02:04.4	8.37
32	0:02:07.4	8.37
33	0:02:10.4	8.37
34	0:02:13.4	8.37
35	0:02:16.4	8.37

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-4 (trial #1)
Completed by NewFields on 12/16/2004

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-4 (trial #2)
Date: 12/16/2004
Time: 0:00

INPUT

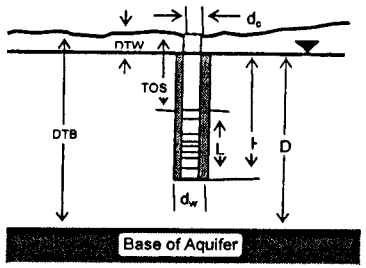
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	9.04 Feet
Depths to:	
water level (DTW)	8.11 Feet
top of screen (TOS)	8.11 Feet
Base of Aquifer (DTB)	18 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

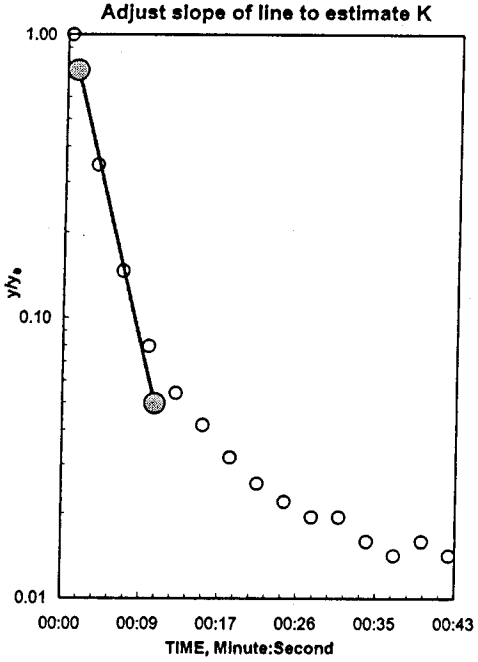
COMPUTED

L_{wetted}	9.04 Feet
D =	9.89 Feet
H =	9.04 Feet
L/r_w =	26.30
$y_{0\text{-DISPLACEMENT}}$ =	1.13 Feet
$y_{0\text{-SLUG}}$ =	0.98 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.401
B =	0.392
ln(Re/rw) =	2.266
Re =	3.32 Feet
Slope =	0.129960317 $\log_{10}$/sec
$t_{90\%}$ recovery =	8 sec

Input is consistent.

K =	20.00 Feet/Day
K =	2.31E-04 Feet/sec
K =	7.06E-03 cm/sec





Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:34.6	7.25
2	0:00:37.6	8.00
3	0:00:40.6	8.22
4	0:00:43.6	8.30
5	0:00:46.6	8.32
6	0:00:49.6	8.34
7	0:00:52.6	8.35
8	0:00:55.6	8.36
9	0:00:58.6	8.36
10	0:01:01.6	8.36
11	0:01:04.6	8.36
12	0:01:07.6	8.37
13	0:01:10.6	8.37
14	0:01:13.6	8.37
15	0:01:16.6	8.37
16	0:01:19.6	8.37
17	0:01:22.6	8.37
18	0:01:25.6	8.37
19	0:01:28.6	8.37
20	0:01:31.6	8.37
21	0:01:34.6	8.37
22	0:01:37.6	8.37
23	0:01:40.6	8.37
24	0:01:43.6	8.37
25	0:01:46.6	8.37
26	0:01:49.6	8.37
27	0:01:52.6	8.37
28	0:01:55.6	8.38
29	0:01:58.6	8.37
30	0:02:01.6	8.37
31	0:02:04.6	8.37
32	0:02:07.6	8.37
33	0:02:10.6	8.37
34	0:02:13.6	8.37
35	0:02:16.6	8.37

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

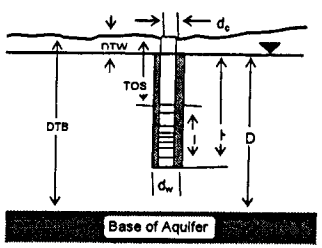
DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-4 (trial #2)
Completed by NewFields on 12/16/2004

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-4A (Trial #1)
Date: 12/16/2004
Time: 0:00

INPUT

Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	8 Feet
Depths to:	
water level (DTW)	7.99 Feet
top of screen (TOS)	33.05 Feet
Base of Aquifer (DTB)	45 Feet
Annular Fill:	
across screen -- Coarse Sand	
above screen -- Bentonite	
Aquifer Material -- Medium Sand	

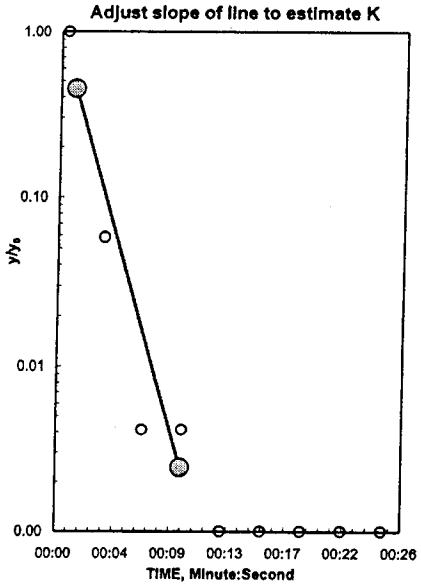


COMPUTED

L_{wetted}	8 Feet
D =	37.01 Feet
H =	33.06 Feet
L/r_w =	23.27
$y_{0\text{-DISPLACEMENT}}$ =	1.21 Feet
$y_{0\text{-SLUG}}$ =	1.13 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.312
B =	0.371
ln(Re/rw) =	2.637
Re =	4.80 Feet
Slope =	0.273196 $\log_{10}$/sec
$t_{90\%}$ recovery =	4 sec

Input is consistent.

K =	60 Feet/Day
K =	8.33E-04 Feet/sec
K =	2.54E-02 cm/sec



Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:35.3	27.43
2	0:00:38.3	28.57
3	0:00:41.3	28.63
4	0:00:44.3	28.63
5	0:00:47.3	28.64
6	0:00:50.3	28.64
7	0:00:53.3	28.64
8	0:00:56.3	28.64
9	0:00:59.3	28.64
10	0:01:02.3	28.64
11	0:01:05.3	28.64
12	0:01:08.3	28.64
13	0:01:11.3	28.64
14	0:01:14.3	28.64
15	0:01:17.3	28.65

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

IDB Oaks Facility, Fort Atkinson, Wisconsin.
MW-4A (trial #1)
Completed by NewFields on 12/16/2004

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-4A (Trial #2)
Date: 12/16/2004
Time: 0:00

INPUT

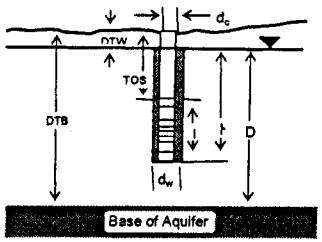
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	8 Feet
Depths to:	
water level (DTW)	7.99 Feet
top of screen (TOS)	33.05 Feet
Base of Aquifer (DTB)	45 Feet
Annular Fill:	
across screen -- Coarse Sand	
above screen -- Bentonite	
Aquifer Material -- Medium Sand	

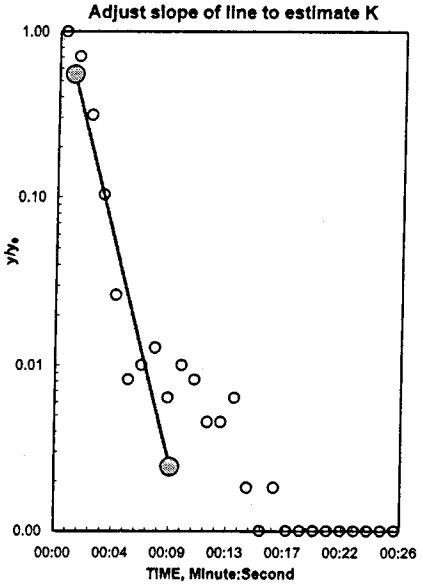
COMPUTED

L_{wetted}	8 Feet
D =	37.01 Feet
H =	33.06 Feet
L/r_w =	23.27
$y_{0\text{-DISPLACEMENT}}$ =	1.10 Feet
$y_{0\text{-SLUG}}$ =	1.13 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.312
B =	0.371
ln(Re/rw) =	2.637
Re =	4.80 Feet
Slope =	0.309343 $\log_{10}$/sec
$t_{90\%}$ recovery =	3 sec

Input is consistent.

K =	70 Feet/Day
K =	9.72E-04 Feet/sec
K =	2.96E-02 cm/sec





Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:35.4	27.58
2	0:00:36.4	27.89
3	0:00:37.4	28.33
4	0:00:38.4	28.56
5	0:00:39.4	28.64
6	0:00:40.4	28.66
7	0:00:41.4	28.66
8	0:00:42.4	28.66
9	0:00:43.4	28.66
10	0:00:44.4	28.66
11	0:00:45.4	28.66
12	0:00:46.4	28.67
13	0:00:47.4	28.67
14	0:00:48.4	28.66
15	0:00:49.4	28.67
16	0:00:50.4	28.67
17	0:00:51.4	28.67
18	0:00:52.4	28.67
19	0:00:53.4	28.67
20	0:00:54.4	28.67
21	0:00:55.4	28.67
22	0:00:56.4	28.67
23	0:00:57.4	28.67
24	0:00:58.4	28.67
25	0:00:59.4	28.67
26	0:01:00.4	28.67
27	0:01:01.4	28.67

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

IDB Oaks Facility, Fort Atkinson, Wisconsin.
MW-4A (trial #2)
Completed by NewFields on 12/16/2004

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-4A (Trial #3)
Date: 12/16/2004
Time: 0:00

INPUT

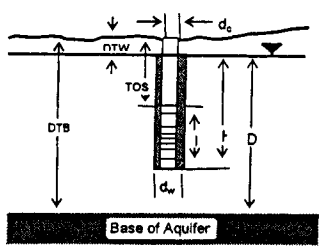
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	8 Feet
Depths to:	
water level (DTW)	7.99 Feet
top of screen (TOS)	33.05 Feet
Base of Aquifer (DTB)	45 Feet
Annular Fill:	
across screen -- Coarse Sand	
above screen -- Bentonite	
Aquifer Material -- Medium Sand	

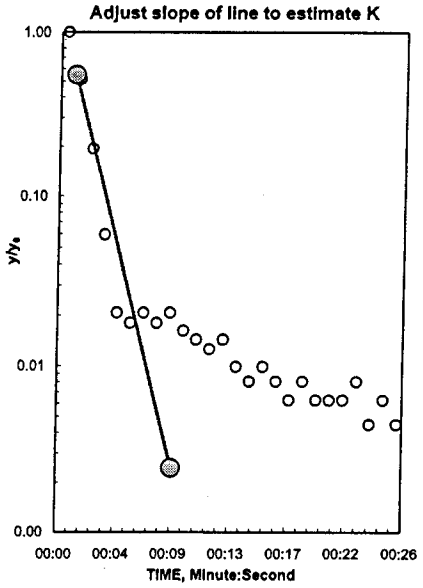
COMPUTED

L_{wetted}	8 Feet
D =	37.01 Feet
H =	33.06 Feet
L/r_w =	23.27
$y_{0\text{-DISPLACEMENT}}$ =	1.11 Feet
$y_{0\text{-SLUG}}$ =	1.13 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.312
B =	0.371
ln(Re/rw) =	2.637
Re =	4.80 Feet
Slope =	0.309343 $\log_{10}$/sec
$t_{90\%}$ recovery =	3 sec

Input is consistent.

K =	70 Feet/Day
K =	9.72E-04 Feet/sec
K =	2.96E-02 cm/sec





Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:35.5	27.57
2	0:00:36.5	28.11
3	0:00:37.5	28.46
4	0:00:38.5	28.61
5	0:00:39.5	28.66
6	0:00:40.5	28.66
7	0:00:41.5	28.66
8	0:00:42.5	28.66
9	0:00:43.5	28.66
10	0:00:44.5	28.66
11	0:00:45.5	28.66
12	0:00:46.5	28.67
13	0:00:47.5	28.66
14	0:00:48.5	28.67
15	0:00:49.5	28.67
16	0:00:50.5	28.67
17	0:00:51.5	28.67
18	0:00:52.5	28.67
19	0:00:53.5	28.67
20	0:00:54.5	28.67
21	0:00:55.5	28.67
22	0:00:56.5	28.67
23	0:00:57.5	28.67
24	0:00:58.5	28.67
25	0:00:59.5	28.67
26	0:01:00.5	28.67
27	0:01:01.5	28.68
28	0:01:02.5	28.67
29	0:01:03.5	28.67
30	0:01:04.5	28.68

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

IDB Oaks Facility, Fort Atkinson, Wisconsin.
MW-4A (trial #3)
Completed by NewFields on 12/16/2004

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-5 (trial #1)
Date: 12/16/2004
Time: 0:00

INPUT

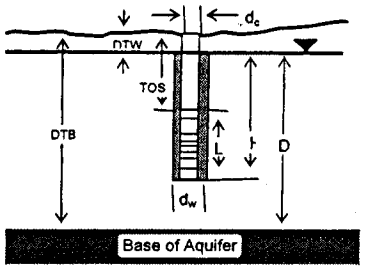
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	6.77 Feet
Depths to:	
water level (DTW)	7.83 Feet
top of screen (TOS)	7.83 Feet
Base of Aquifer (DTB)	16 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

COMPUTED

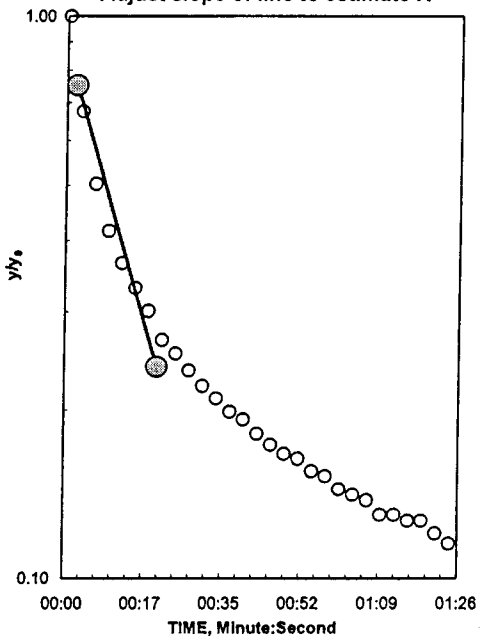
L_{wetted}	6.77 Feet
D =	8.17 Feet
H =	6.77 Feet
L/r_w =	19.69
$y_{0\text{-DISPLACEMENT}}$ =	0.62 Feet
$y_{0\text{-SLUG}}$ =	0.56 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.191
B =	0.343
ln(Re/rw) =	1.981
Re =	2.49 Feet
Slope =	0.027262156 $\log_{10}$/sec
$t_{90\%}$ recovery =	37 sec

Input is consistent.

K =	6.00 Feet/Day
K =	6.94E-05 Feet/sec
K =	2.12E-03 cm/sec



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-5 (trial #1)
Completed by NewFields on 12/16/2004

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:28.1	7.58
2	0:00:31.1	7.79
3	0:00:34.1	7.89
4	0:00:37.1	7.95
5	0:00:40.1	7.98
6	0:00:43.1	8.00
7	0:00:46.1	8.02
8	0:00:49.2	8.04
9	0:00:52.2	8.05
10	0:00:55.2	8.06
11	0:00:58.2	8.07
12	0:01:01.2	8.08
13	0:01:04.2	8.08
14	0:01:07.2	8.09
15	0:01:10.2	8.09
16	0:01:13.2	8.10
17	0:01:16.2	8.10
18	0:01:19.2	8.10
19	0:01:22.2	8.11
20	0:01:25.2	8.11
21	0:01:28.2	8.12
22	0:01:31.2	8.12
23	0:01:34.2	8.12
24	0:01:37.2	8.13
25	0:01:40.2	8.13
26	0:01:43.2	8.13
27	0:01:46.2	8.13
28	0:01:49.2	8.13
29	0:01:52.2	8.13
30	0:01:55.2	8.14
31	0:01:58.2	8.14
32	0:02:01.2	8.14
33	0:02:04.2	8.14
34	0:02:07.2	8.14
35	0:02:10.2	8.14
36	0:02:13.2	8.15
37	0:02:16.2	8.15
38	0:02:19.2	8.15
39	0:02:22.2	8.15
40	0:02:25.2	8.15
41	0:02:28.2	8.15
42	0:02:31.2	8.15
43	0:02:34.2	8.15
44	0:02:37.2	8.16
45	0:02:40.2	8.15

WELL ID: DB OAKS, FORT ATKINSON

Local ID: MW-5 (trial #2)
Date: 12/16/2004
Time: 0:00

INPUT

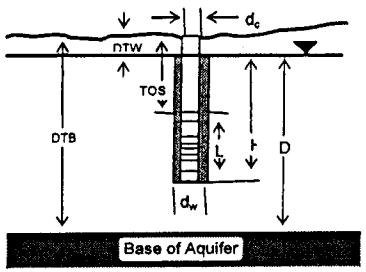
Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	6.77 Feet
Depths to:	
water level (DTW)	7.83 Feet
top of screen (TOS)	7.83 Feet
Base of Aquifer (DTB)	16 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand

COMPUTED

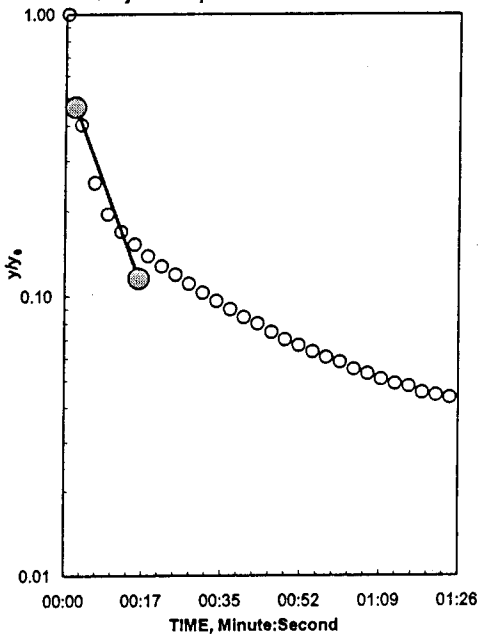
L_{wetted}	6.77 Feet
D =	8.17 Feet
H =	6.77 Feet
L/r_w =	19.69
$y_{0\text{-DISPLACEMENT}}$ =	2.09 Feet
$y_{0\text{-SLUG}}$ =	1.83 Feet
From look-up table using L/r_w	
Partial penetrate A =	2.191
B =	0.343
ln(Re/rw) =	1.981
Re =	2.49 Feet
Slope =	0.042438272 $\log_{10}$/sec
$t_{90\%}$ recovery =	24 sec

Input is consistent.

K =	9.00 Feet/Day
K =	1.04E-04 Feet/sec
K =	3.18E-03 cm/sec



Adjust slope of line to estimate K



Bouwer and Rice analysis of slug test, WRR 1976

REMARKS:

DB Oaks Facility, Fort Atkinson, Wisconsin.
MW-5 (trial #2)
Completed by NewFields on 12/16/2004

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:28.5	6.12
2	0:00:31.5	7.37
3	0:00:34.5	7.68
4	0:00:37.5	7.80
5	0:00:40.5	7.85
6	0:00:43.5	7.89
7	0:00:46.5	7.92
8	0:00:49.5	7.94
9	0:00:52.5	7.96
10	0:00:55.5	7.98
11	0:00:58.5	7.99
12	0:01:01.5	8.01
13	0:01:04.5	8.02
14	0:01:07.5	8.03
15	0:01:10.5	8.04
16	0:01:13.5	8.05
17	0:01:16.5	8.06
18	0:01:19.5	8.07
19	0:01:22.5	8.07
20	0:01:25.5	8.08
21	0:01:28.5	8.08
22	0:01:31.5	8.09
23	0:01:34.5	8.10
24	0:01:37.5	8.10
25	0:01:40.5	8.10
26	0:01:43.5	8.11
27	0:01:46.5	8.11
28	0:01:49.5	8.11
29	0:01:52.5	8.12
30	0:01:55.5	8.12
31	0:01:58.5	8.12
32	0:02:01.5	8.13
33	0:02:04.5	8.13
34	0:02:07.5	8.13
35	0:02:10.5	8.13
36	0:02:13.5	8.13
37	0:02:16.5	8.14
38	0:02:19.5	8.14
39	0:02:22.5	8.14
40	0:02:25.5	8.14
41	0:02:28.5	8.15
42	0:02:31.5	8.15
43	0:02:34.5	8.15
44	0:02:37.5	8.15
45	0:02:40.5	8.15

Appendix C

Laboratory Reports
December 2004 Groundwater Samples

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Client: NewFields Companies LLC
Attn: Mark S McColloch PG

2110 Luann Lane #101
Madison,WI 53713 3098

NLS Project: 86494
NLS Customer: 93437

Fax: 608 442 9013 Phone: 608 442 5223

Project: Thomas Ft. Atkinson 0451-002

MW-1 NLS ID: 358934
Ref. Line 1 COC 73938 MW-1 Matrix: GW
Collected: 12/16/04 10:00 Received: 12/17/04

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					12/28/04	SW846 8260	721026460

MW-2 NLS ID: 358935
Ref. Line 2 COC 73938 MW-2 Matrix: GW
Collected: 12/16/04 09:00 Received: 12/17/04

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					12/24/04	SW846 8260	721026460

MW-2A NLS ID: 358936
Ref. Line 3 COC 73938 MW-2A Matrix: GW
Collected: 12/16/04 09:15 Received: 12/17/04

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					12/24/04	SW846 8260	721026460

MW-3 NLS ID: 358937
Ref. Line 4 COC 73938 MW-3 Matrix: GW
Collected: 12/16/04 10:15 Received: 12/17/04

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					12/28/04	SW846 8260	721026460

MW-4 NLS ID: 358938
Ref. Line 5 COC 73938 MW-4 Matrix: GW
Collected: 12/16/04 11:00 Received: 12/17/04

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					12/28/04	SW846 8260	721026460

MW-4A NLS ID: 358939
Ref. Line 6 COC 73938 MW-4A Matrix: GW
Collected: 12/16/04 10:45 Received: 12/17/04

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					12/28/04	SW846 8260	721026460

MW-5 NLS ID: 358940
Ref. Line 7 COC 73938 MW-5 Matrix: GW
Collected: 12/16/04 08:00 Received: 12/17/04

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					12/28/04	SW846 8260	721026460

Dup-1 NLS ID: 358941
Ref. Line 8 COC 73938 Dup-1 Matrix: GW
Collected: 12/16/04 11:30 Received: 12/17/04

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					12/29/04	SW846 8260	721026460

Trip Blank NLS ID: 358942
Ref. Line 9 COC 73938 Trip Blank Matrix: TB
Collected: 12/16/04 00:00 Received: 12/17/04

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					12/24/04	SW846 8260	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Client: NewFields Companies LLC
Attn: Mark S McColloch PG

2110 Luann Lane #101
Madison,WI 53713 3098

NLS Project: 86494
NLS Customer: 93437

Fax: 608 442 9013 Phone: 608 442 5223

Project: Thomas Ft. Atkinson 0451-002

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution.

LOD = Limit of Detection LOQ = Limit of Quantitation ND = Not Detected 1000 ug/L = 1 mg/L
DWB = Dry Weight Basis NA = Not Applicable %DWB = (mg/kg DWB) / 10000
MCL = Maximum Contaminant Levels for Drinking Water Samples

Reviewed by: _____

Authorized by:
R. T. Krueger
President

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358934 **MW-1** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	1	0.12	0.38
Bromobenzene	ND	ug/L	1	0.13	0.42
Bromochloromethane	ND	ug/L	1	0.11	0.37
Bromodichloromethane	ND	ug/L	1	0.19	0.70
Bromoform	ND	ug/L	1	0.10	0.34
Bromomethane	ND	ug/L	1	0.32	1.0
n-Butylbenzene	ND	ug/L	1	0.19	0.70
sec-Butylbenzene	ND	ug/L	1	0.16	0.52
tert-Butylbenzene	ND	ug/L	1	0.14	0.47
Carbon Tetrachloride	ND	ug/L	1	0.15	0.51
Chlorobenzene	ND	ug/L	1	0.19	0.68
Chloroethane	ND	ug/L	1	0.68	2.5
Chloroform	ND	ug/L	1	0.12	0.41
Chloromethane	ND	ug/L	1	0.12	0.41
2-Chlorotoluene	ND	ug/L	1	0.13	0.42
4-Chlorotoluene	ND	ug/L	1	0.13	0.44
Dibromochloromethane	ND	ug/L	1	0.16	0.55
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.25	0.83
1,2-Dibromoethane	ND	ug/L	1	0.16	0.54
Dibromomethane	ND	ug/L	1	0.16	0.57
1,2-Dichlorobenzene	ND	ug/L	1	0.13	0.46
1,3-Dichlorobenzene	ND	ug/L	1	0.10	0.34
1,4-Dichlorobenzene	ND	ug/L	1	0.19	0.64
Dichlorodifluoromethane	ND	ug/L	1	0.15	0.51
1,1-Dichloroethane	ND	ug/L	1	0.13	0.44
1,2-Dichloroethane	ND	ug/L	1	0.13	0.44
1,1-Dichloroethene	ND	ug/L	1	0.24	0.88
cis-1,2-Dichloroethene	[0.14]	ug/L	1	0.13	0.44
trans-1,2-Dichloroethene	ND	ug/L	1	0.11	0.36
1,2-Dichloropropane	ND	ug/L	1	0.13	0.42
1,3-Dichloropropane	ND	ug/L	1	0.15	0.49
2,2-Dichloropropane	ND	ug/L	1	0.16	0.55
1,1-Dichloropropene	ND	ug/L	1	0.17	0.57
cis-1,3-Dichloropropene	ND	ug/L	1	0.21	0.78
trans-1,3-Dichloropropene	ND	ug/L	1	0.15	0.49
Ethylbenzene	ND	ug/L	1	0.14	0.47
Hexachlorobutadiene	ND	ug/L	1	0.23	0.88
Isopropylbenzene	ND	ug/L	1	0.12	0.41
p-Isopropyltoluene	ND	ug/L	1	0.12	0.39
Methylene chloride	ND	ug/L	1	0.10	0.34
Naphthalene	ND	ug/L	1	0.16	0.60
n-Propylbenzene	ND	ug/L	1	0.17	0.56
ortho-Xylene	ND	ug/L	1	0.13	0.44
Styrene	ND	ug/L	1	0.14	0.47
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.16	0.55
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.20	0.67
Tetrachloroethene	ND	ug/L	1	0.13	0.45
Toluene	ND	ug/L	1	0.20	0.77

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358934 **MW-1** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.17	0.64
1,2,4-Trichlorobenzene	ND	ug/L	1	0.11	0.37
1,1,1-Trichloroethane	ND	ug/L	1	0.14	0.48
1,1,2-Trichloroethane	ND	ug/L	1	0.14	0.46
Trichloroethene	ND	ug/L	1	0.12	0.39
Trichlorofluoromethane	ND	ug/L	1	0.15	0.49
1,2,3-Trichloropropane	ND	ug/L	1	0.23	0.76
1,2,4-Trimethylbenzene	ND	ug/L	1	0.14	0.48
1,3,5-Trimethylbenzene	ND	ug/L	1	0.12	0.41
Vinyl chloride	ND	ug/L	1	0.16	0.61
meta,para-Xylene	ND	ug/L	1	0.26	0.88
MTBE	ND	ug/L	1	0.14	0.48
Isopropyl ether	ND	ug/L	1	0.13	0.45
Dibromofluoromethane (SURR**)	98%				
Toluene-d8 (SURR**)	105%				
1-Bromo-4-Fluorobenzene (SURR**)	96%				

Check standard recovery was outside QC limits for Bromomethane at 72%.

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358935 **MW-2** **Collected: 12/16/04** **Analyzed: 12/24/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	50	5.8	19
Bromobenzene	ND	ug/L	50	6.4	21
Bromochloromethane	ND	ug/L	50	5.5	18
Bromodichloromethane	ND	ug/L	50	9.5	35
Bromoform	ND	ug/L	50	5.1	17
Bromomethane	ND	ug/L	50	16	50
n-Butylbenzene	ND	ug/L	50	9.3	35
sec-Butylbenzene	ND	ug/L	50	7.9	26
tert-Butylbenzene	ND	ug/L	50	7.0	23
Carbon Tetrachloride	ND	ug/L	50	7.7	26
Chlorobenzene	ND	ug/L	50	9.5	34
Chloroethane	ND	ug/L	50	34	120
Chloroform	ND	ug/L	50	6.1	20
Chloromethane	ND	ug/L	50	6.1	20
2-Chlorotoluene	ND	ug/L	50	6.3	21
4-Chlorotoluene	ND	ug/L	50	6.6	22
Dibromochloromethane	ND	ug/L	50	8.2	27
1,2-Dibromo-3-Chloropropane	ND	ug/L	50	12	42
1,2-Dibromoethane	ND	ug/L	50	8.1	27
Dibromomethane	ND	ug/L	50	7.8	29
1,2-Dichlorobenzene	ND	ug/L	50	6.3	23
1,3-Dichlorobenzene	ND	ug/L	50	5.2	17
1,4-Dichlorobenzene	ND	ug/L	50	9.7	32
Dichlorodifluoromethane	ND	ug/L	50	7.7	26
1,1-Dichloroethane	ND	ug/L	50	6.6	22
1,2-Dichloroethane	ND	ug/L	50	6.6	22
1,1-Dichloroethene	[18]	ug/L	50	12	44
cis-1,2-Dichloroethene	5900	ug/L	500	66	220
trans-1,2-Dichloroethene	32	ug/L	50	5.4	18
1,2-Dichloropropane	ND	ug/L	50	6.3	21
1,3-Dichloropropane	ND	ug/L	50	7.4	25
2,2-Dichloropropane	ND	ug/L	50	8.2	27
1,1-Dichloropropene	ND	ug/L	50	8.6	29
cis-1,3-Dichloropropene	ND	ug/L	50	10	39
trans-1,3-Dichloropropene	ND	ug/L	50	7.3	24
Ethylbenzene	ND	ug/L	50	7.1	23
Hexachlorobutadiene	ND	ug/L	50	12	44
Isopropylbenzene	ND	ug/L	50	6.1	20
p-Isopropyltoluene	ND	ug/L	50	5.8	19
Methylene chloride	ND	ug/L	50	5.2	17
Naphthalene	ND	ug/L	50	8.2	30
n-Propylbenzene	ND	ug/L	50	8.5	28
ortho-Xylene	ND	ug/L	50	6.7	22
Styrene	ND	ug/L	50	7.0	23
1,1,1,2-Tetrachloroethane	ND	ug/L	50	8.2	27
1,1,2,2-Tetrachloroethane	ND	ug/L	50	10	33
Tetrachloroethene	120	ug/L	50	6.7	22
Toluene	ND	ug/L	50	10	39

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**

Project Description: Thomas Ft. Atkinson

Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358935 **MW-2** **Collected: 12/16/04** **Analyzed: 12/24/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	50	8.7	32
1,2,4-Trichlorobenzene	ND	ug/L	50	5.3	19
1,1,1-Trichloroethane	ND	ug/L	50	7.2	24
1,1,2-Trichloroethane	ND	ug/L	50	6.9	23
Trichloroethene	140	ug/L	50	5.9	19
Trichlorofluoromethane	ND	ug/L	50	7.3	24
1,2,3-Trichloropropane	ND	ug/L	50	11	38
1,2,4-Trimethylbenzene	ND	ug/L	50	7.2	24
1,3,5-Trimethylbenzene	ND	ug/L	50	6.1	20
Vinyl chloride	33	ug/L	50	8.2	30
meta,para-Xylene	ND	ug/L	50	13	44
MTBE	ND	ug/L	50	7.2	24
Isopropyl ether	ND	ug/L	50	6.7	22
Dibromofluoromethane (SURR**)	105%				
Toluene-d8 (SURR**)	108%				
1-Bromo-4-Fluorobenzene (SURR**)	98%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358936 **MW-2A** **Collected: 12/16/04** **Analyzed: 12/24/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	50	5.8	19
Bromobenzene	ND	ug/L	50	6.4	21
Bromochloromethane	ND	ug/L	50	5.5	18
Bromodichloromethane	ND	ug/L	50	9.5	35
Bromoform	ND	ug/L	50	5.1	17
Bromomethane	ND	ug/L	50	16	50
n-Butylbenzene	ND	ug/L	50	9.3	35
sec-Butylbenzene	ND	ug/L	50	7.9	26
tert-Butylbenzene	ND	ug/L	50	7.0	23
Carbon Tetrachloride	ND	ug/L	50	7.7	26
Chlorobenzene	ND	ug/L	50	9.5	34
Chloroethane	ND	ug/L	50	34	120
Chloroform	ND	ug/L	50	6.1	20
Chloromethane	ND	ug/L	50	6.1	20
2-Chlorotoluene	ND	ug/L	50	6.3	21
4-Chlorotoluene	ND	ug/L	50	6.6	22
Dibromochloromethane	ND	ug/L	50	8.2	27
1,2-Dibromo-3-Chloropropane	ND	ug/L	50	12	42
1,2-Dibromoethane	ND	ug/L	50	8.1	27
Dibromomethane	ND	ug/L	50	7.8	29
1,2-Dichlorobenzene	ND	ug/L	50	6.3	23
1,3-Dichlorobenzene	ND	ug/L	50	5.2	17
1,4-Dichlorobenzene	ND	ug/L	50	9.7	32
Dichlorodifluoromethane	ND	ug/L	50	7.7	26
1,1-Dichloroethane	ND	ug/L	50	6.6	22
1,2-Dichloroethane	ND	ug/L	50	6.6	22
1,1-Dichloroethene	ND	ug/L	50	12	44
cis-1,2-Dichloroethene	380	ug/L	50	6.6	22
trans-1,2-Dichloroethene	ND	ug/L	50	5.4	18
1,2-Dichloropropane	ND	ug/L	50	6.3	21
1,3-Dichloropropane	ND	ug/L	50	7.4	25
2,2-Dichloropropane	ND	ug/L	50	8.2	27
1,1-Dichloropropene	ND	ug/L	50	8.6	29
cis-1,3-Dichloropropene	ND	ug/L	50	10	39
trans-1,3-Dichloropropene	ND	ug/L	50	7.3	24
Ethylbenzene	ND	ug/L	50	7.1	23
Hexachlorobutadiene	ND	ug/L	50	12	44
Isopropylbenzene	ND	ug/L	50	6.1	20
p-Isopropyltoluene	ND	ug/L	50	5.8	19
Methylene chloride	ND	ug/L	50	5.2	17
Naphthalene	ND	ug/L	50	8.2	30
n-Propylbenzene	ND	ug/L	50	8.5	28
ortho-Xylene	ND	ug/L	50	6.7	22
Styrene	ND	ug/L	50	7.0	23
1,1,1,2-Tetrachloroethane	ND	ug/L	50	8.2	27
1,1,2,2-Tetrachloroethane	ND	ug/L	50	10	33
Tetrachloroethene	44	ug/L	50	6.7	22
Toluene	ND	ug/L	50	10	39

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358936 **MW-2A** **Collected: 12/16/04** **Analyzed: 12/24/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	50	8.7	32
1,2,4-Trichlorobenzene	ND	ug/L	50	5.3	19
1,1,1-Trichloroethane	ND	ug/L	50	7.2	24
1,1,2-Trichloroethane	ND	ug/L	50	6.9	23
Trichloroethene	69	ug/L	50	5.9	19
Trichlorofluoromethane	ND	ug/L	50	7.3	24
1,2,3-Trichloropropane	ND	ug/L	50	11	38
1,2,4-Trimethylbenzene	ND	ug/L	50	7.2	24
1,3,5-Trimethylbenzene	ND	ug/L	50	6.1	20
Vinyl chloride	[29]	ug/L	50	8.2	30
meta,para-Xylene	ND	ug/L	50	13	44
MTBE	ND	ug/L	50	7.2	24
Isopropyl ether	ND	ug/L	50	6.7	22
Dibromofluoromethane (SURR**)	102%				
Toluene-d8 (SURR**)	108%				
1-Bromo-4-Fluorobenzene (SURR**)	100%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358937 **MW-3** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	5000	580	1900
Bromobenzene	ND	ug/L	5000	640	2100
Bromochloromethane	ND	ug/L	5000	550	1800
Bromodichloromethane	ND	ug/L	5000	950	3500
Bromoform	ND	ug/L	5000	510	1700
Bromomethane	ND	ug/L	5000	1600	5000
n-Butylbenzene	ND	ug/L	5000	930	3500
sec-Butylbenzene	ND	ug/L	5000	790	2600
tert-Butylbenzene	ND	ug/L	5000	700	2300
Carbon Tetrachloride	ND	ug/L	5000	770	2600
Chlorobenzene	ND	ug/L	5000	950	3400
Chloroethane	ND	ug/L	5000	3400	12000
Chloroform	ND	ug/L	5000	610	2000
Chloromethane	ND	ug/L	5000	610	2000
2-Chlorotoluene	ND	ug/L	5000	630	2100
4-Chlorotoluene	ND	ug/L	5000	660	2200
Dibromochloromethane	ND	ug/L	5000	820	2700
1,2-Dibromo-3-Chloropropane	ND	ug/L	5000	1200	4200
1,2-Dibromoethane	ND	ug/L	5000	810	2700
Dibromomethane	ND	ug/L	5000	780	2900
1,2-Dichlorobenzene	ND	ug/L	5000	630	2300
1,3-Dichlorobenzene	ND	ug/L	5000	520	1700
1,4-Dichlorobenzene	ND	ug/L	5000	970	3200
Dichlorodifluoromethane	ND	ug/L	5000	770	2600
1,1-Dichloroethane	ND	ug/L	5000	660	2200
1,2-Dichloroethane	ND	ug/L	5000	660	2200
1,1-Dichloroethene	ND	ug/L	5000	1200	4400
cis-1,2-Dichloroethene	6800	ug/L	5000	660	2200
trans-1,2-Dichloroethene	ND	ug/L	5000	540	1800
1,2-Dichloropropane	ND	ug/L	5000	630	2100
1,3-Dichloropropane	ND	ug/L	5000	740	2500
2,2-Dichloropropane	ND	ug/L	5000	820	2700
1,1-Dichloropropene	ND	ug/L	5000	860	2900
cis-1,3-Dichloropropene	ND	ug/L	5000	1000	3900
trans-1,3-Dichloropropene	ND	ug/L	5000	730	2400
Ethylbenzene	ND	ug/L	5000	710	2300
Hexachlorobutadiene	ND	ug/L	5000	1200	4400
Isopropylbenzene	ND	ug/L	5000	610	2000
p-Isopropyltoluene	ND	ug/L	5000	580	1900
Methylene chloride	ND	ug/L	5000	520	1700
Naphthalene	ND	ug/L	5000	820	3000
n-Propylbenzene	ND	ug/L	5000	850	2800
ortho-Xylene	ND	ug/L	5000	670	2200
Styrene	ND	ug/L	5000	700	2300
1,1,1,2-Tetrachloroethane	ND	ug/L	5000	820	2700
1,1,2,2-Tetrachloroethane	ND	ug/L	5000	1000	3300
Tetrachloroethene	34000	ug/L	5000	670	2200
Toluene	ND	ug/L	5000	1000	3900

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358937 **MW-3** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	5000	870	3200
1,2,4-Trichlorobenzene	ND	ug/L	5000	530	1900
1,1,1-Trichloroethane	ND	ug/L	5000	720	2400
1,1,2-Trichloroethane	ND	ug/L	5000	690	2300
Trichloroethene	17000	ug/L	5000	590	1900
Trichlorofluoromethane	ND	ug/L	5000	730	2400
1,2,3-Trichloropropane	ND	ug/L	5000	1100	3800
1,2,4-Trimethylbenzene	ND	ug/L	5000	720	2400
1,3,5-Trimethylbenzene	ND	ug/L	5000	610	2000
Vinyl chloride	ND	ug/L	5000	820	3000
meta,para-Xylene	ND	ug/L	5000	1300	4400
MTBE	ND	ug/L	5000	720	2400
Isopropyl ether	ND	ug/L	5000	670	2200
Dibromofluoromethane (SURR**)	102%				
Toluene-d8 (SURR**)	105%				
1-Bromo-4-Fluorobenzene (SURR**)	100%				

Check standard recovery was outside QC limits for Bromomethane at 72%.

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358938 **MW-4** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	500	58	190
Bromobenzene	ND	ug/L	500	64	210
Bromochloromethane	ND	ug/L	500	55	180
Bromodichloromethane	ND	ug/L	500	95	350
Bromoform	ND	ug/L	500	51	170
Bromomethane	ND	ug/L	500	160	500
n-Butylbenzene	ND	ug/L	500	93	350
sec-Butylbenzene	ND	ug/L	500	79	260
tert-Butylbenzene	ND	ug/L	500	70	230
Carbon Tetrachloride	ND	ug/L	500	77	260
Chlorobenzene	ND	ug/L	500	95	340
Chloroethane	ND	ug/L	500	340	1200
Chloroform	ND	ug/L	500	61	200
Chloromethane	ND	ug/L	500	61	200
2-Chlorotoluene	ND	ug/L	500	63	210
4-Chlorotoluene	ND	ug/L	500	66	220
Dibromochloromethane	ND	ug/L	500	82	270
1,2-Dibromo-3-Chloropropane	ND	ug/L	500	120	420
1,2-Dibromoethane	ND	ug/L	500	81	270
Dibromomethane	ND	ug/L	500	78	290
1,2-Dichlorobenzene	ND	ug/L	500	63	230
1,3-Dichlorobenzene	ND	ug/L	500	52	170
1,4-Dichlorobenzene	ND	ug/L	500	97	320
Dichlorodifluoromethane	ND	ug/L	500	77	260
1,1-Dichloroethane	ND	ug/L	500	66	220
1,2-Dichloroethane	ND	ug/L	500	66	220
1,1-Dichloroethene	ND	ug/L	500	120	440
cis-1,2-Dichloroethene	ND	ug/L	500	66	220
trans-1,2-Dichloroethene	ND	ug/L	500	54	180
1,2-Dichloropropane	ND	ug/L	500	63	210
1,3-Dichloropropane	ND	ug/L	500	74	250
2,2-Dichloropropane	ND	ug/L	500	82	270
1,1-Dichloropropene	ND	ug/L	500	86	290
cis-1,3-Dichloropropene	ND	ug/L	500	100	390
trans-1,3-Dichloropropene	ND	ug/L	500	73	240
Ethylbenzene	ND	ug/L	500	71	230
Hexachlorobutadiene	ND	ug/L	500	120	440
Isopropylbenzene	ND	ug/L	500	61	200
p-Isopropyltoluene	ND	ug/L	500	58	190
Methylene chloride	ND	ug/L	500	52	170
Naphthalene	ND	ug/L	500	82	300
n-Propylbenzene	ND	ug/L	500	85	280
ortho-Xylene	ND	ug/L	500	67	220
Styrene	ND	ug/L	500	70	230
1,1,1,2-Tetrachloroethane	ND	ug/L	500	82	270
1,1,2,2-Tetrachloroethane	ND	ug/L	500	100	330
Tetrachloroethene	2500	ug/L	500	67	220
Toluene	ND	ug/L	500	100	390

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358938 **MW-4** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	500	87	320
1,2,4-Trichlorobenzene	ND	ug/L	500	53	190
1,1,1-Trichloroethane	ND	ug/L	500	72	240
1,1,2-Trichloroethane	ND	ug/L	500	69	230
Trichloroethene	10000	ug/L	500	59	190
Trichlorofluoromethane	ND	ug/L	500	73	240
1,2,3-Trichloropropane	ND	ug/L	500	110	380
1,2,4-Trimethylbenzene	ND	ug/L	500	72	240
1,3,5-Trimethylbenzene	ND	ug/L	500	61	200
Vinyl chloride	ND	ug/L	500	82	300
meta,para-Xylene	ND	ug/L	500	130	440
MTBE	ND	ug/L	500	72	240
Isopropyl ether	ND	ug/L	500	67	220
Dibromofluoromethane (SURR**)	100%				
Toluene-d8 (SURR**)	96%				
1-Bromo-4-Fluorobenzene (SURR**)	92%				

Check standard recovery was outside QC limits for Bromomethane at 72%.

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358939 **MW-4A** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	6.0	ug/L	1	0.12	0.38
Bromobenzene	ND	ug/L	1	0.13	0.42
Bromochloromethane	ND	ug/L	1	0.11	0.37
Bromodichloromethane	ND	ug/L	1	0.19	0.70
Bromoform	ND	ug/L	1	0.10	0.34
Bromomethane	ND	ug/L	1	0.32	1.0
n-Butylbenzene	ND	ug/L	1	0.19	0.70
sec-Butylbenzene	ND	ug/L	1	0.16	0.52
tert-Butylbenzene	ND	ug/L	1	0.14	0.47
Carbon Tetrachloride	ND	ug/L	1	0.15	0.51
Chlorobenzene	ND	ug/L	1	0.19	0.68
Chloroethane	ND	ug/L	1	0.68	2.5
Chloroform	ND	ug/L	1	0.12	0.41
Chloromethane	ND	ug/L	1	0.12	0.41
2-Chlorotoluene	ND	ug/L	1	0.13	0.42
4-Chlorotoluene	ND	ug/L	1	0.13	0.44
Dibromochloromethane	ND	ug/L	1	0.16	0.55
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.25	0.83
1,2-Dibromoethane	ND	ug/L	1	0.16	0.54
Dibromomethane	ND	ug/L	1	0.16	0.57
1,2-Dichlorobenzene	ND	ug/L	1	0.13	0.46
1,3-Dichlorobenzene	ND	ug/L	1	0.10	0.34
1,4-Dichlorobenzene	ND	ug/L	1	0.19	0.64
Dichlorodifluoromethane	[0.49]	ug/L	1	0.15	0.51
1,1-Dichloroethane	ND	ug/L	1	0.13	0.44
1,2-Dichloroethane	ND	ug/L	1	0.13	0.44
1,1-Dichloroethene	ND	ug/L	1	0.24	0.88
cis-1,2-Dichloroethene	0.89	ug/L	1	0.13	0.44
trans-1,2-Dichloroethene	ND	ug/L	1	0.11	0.36
1,2-Dichloropropane	ND	ug/L	1	0.13	0.42
1,3-Dichloropropane	ND	ug/L	1	0.15	0.49
2,2-Dichloropropane	ND	ug/L	1	0.16	0.55
1,1-Dichloropropene	ND	ug/L	1	0.17	0.57
cis-1,3-Dichloropropene	ND	ug/L	1	0.21	0.78
trans-1,3-Dichloropropene	ND	ug/L	1	0.15	0.49
Ethylbenzene	ND	ug/L	1	0.14	0.47
Hexachlorobutadiene	ND	ug/L	1	0.23	0.88
Isopropylbenzene	ND	ug/L	1	0.12	0.41
p-Isopropyltoluene	ND	ug/L	1	0.12	0.39
Methylene chloride	ND	ug/L	1	0.10	0.34
Naphthalene	ND	ug/L	1	0.16	0.60
n-Propylbenzene	ND	ug/L	1	0.17	0.56
ortho-Xylene	ND	ug/L	1	0.13	0.44
Styrene	ND	ug/L	1	0.14	0.47
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.16	0.55
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.20	0.67
Tetrachloroethene	7.1	ug/L	1	0.13	0.45
Toluene	[0.25]	ug/L	1	0.20	0.77

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358939 **MW-4A** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.17	0.64
1,2,4-Trichlorobenzene	ND	ug/L	1	0.11	0.37
1,1,1-Trichloroethane	ND	ug/L	1	0.14	0.48
1,1,2-Trichloroethane	ND	ug/L	1	0.14	0.46
Trichloroethene	23	ug/L	2	0.23	0.78
Trichlorofluoromethane	ND	ug/L	1	0.15	0.49
1,2,3-Trichloropropane	ND	ug/L	1	0.23	0.76
1,2,4-Trimethylbenzene	ND	ug/L	1	0.14	0.48
1,3,5-Trimethylbenzene	ND	ug/L	1	0.12	0.41
Vinyl chloride	ND	ug/L	1	0.16	0.61
meta,para-Xylene	ND	ug/L	1	0.26	0.88
MTBE	ND	ug/L	1	0.14	0.48
Isopropyl ether	ND	ug/L	1	0.13	0.45
Dibromofluoromethane (SURR**)	98%				
Toluene-d8 (SURR**)	101%				
1-Bromo-4-Fluorobenzene (SURR**)	96%				

Check standard recovery was outside QC limits for Bromomethane at 72%.

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358940 **MW-5** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	1	0.12	0.38
Bromobenzene	ND	ug/L	1	0.13	0.42
Bromochloromethane	ND	ug/L	1	0.11	0.37
Bromodichloromethane	ND	ug/L	1	0.19	0.70
Bromoform	ND	ug/L	1	0.10	0.34
Bromomethane	ND	ug/L	1	0.32	1.0
n-Butylbenzene	ND	ug/L	1	0.19	0.70
sec-Butylbenzene	ND	ug/L	1	0.16	0.52
tert-Butylbenzene	ND	ug/L	1	0.14	0.47
Carbon Tetrachloride	ND	ug/L	1	0.15	0.51
Chlorobenzene	ND	ug/L	1	0.19	0.68
Chloroethane	ND	ug/L	1	0.68	2.5
Chloroform	ND	ug/L	1	0.12	0.41
Chloromethane	ND	ug/L	1	0.12	0.41
2-Chlorotoluene	ND	ug/L	1	0.13	0.42
4-Chlorotoluene	ND	ug/L	1	0.13	0.44
Dibromochloromethane	ND	ug/L	1	0.16	0.55
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.25	0.83
1,2-Dibromoethane	ND	ug/L	1	0.16	0.54
Dibromomethane	ND	ug/L	1	0.16	0.57
1,2-Dichlorobenzene	ND	ug/L	1	0.13	0.46
1,3-Dichlorobenzene	ND	ug/L	1	0.10	0.34
1,4-Dichlorobenzene	ND	ug/L	1	0.19	0.64
Dichlorodifluoromethane	ND	ug/L	1	0.15	0.51
1,1-Dichloroethane	ND	ug/L	1	0.13	0.44
1,2-Dichloroethane	ND	ug/L	1	0.13	0.44
1,1-Dichloroethene	ND	ug/L	1	0.24	0.88
cis-1,2-Dichloroethene	[0.21]	ug/L	1	0.13	0.44
trans-1,2-Dichloroethene	ND	ug/L	1	0.11	0.36
1,2-Dichloropropane	ND	ug/L	1	0.13	0.42
1,3-Dichloropropane	ND	ug/L	1	0.15	0.49
2,2-Dichloropropane	ND	ug/L	1	0.16	0.55
1,1-Dichloropropene	ND	ug/L	1	0.17	0.57
cis-1,3-Dichloropropene	ND	ug/L	1	0.21	0.78
trans-1,3-Dichloropropene	ND	ug/L	1	0.15	0.49
Ethylbenzene	ND	ug/L	1	0.14	0.47
Hexachlorobutadiene	ND	ug/L	1	0.23	0.88
Isopropylbenzene	ND	ug/L	1	0.12	0.41
p-Isopropyltoluene	ND	ug/L	1	0.12	0.39
Methylene chloride	ND	ug/L	1	0.10	0.34
Naphthalene	ND	ug/L	1	0.16	0.60
n-Propylbenzene	ND	ug/L	1	0.17	0.56
ortho-Xylene	ND	ug/L	1	0.13	0.44
Styrene	ND	ug/L	1	0.14	0.47
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.16	0.55
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.20	0.67
Tetrachloroethene	2.3	ug/L	1	0.13	0.45
Toluene	ND	ug/L	1	0.20	0.77

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358940 **MW-5** **Collected: 12/16/04** **Analyzed: 12/28/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.17	0.64
1,2,4-Trichlorobenzene	ND	ug/L	1	0.11	0.37
1,1,1-Trichloroethane	ND	ug/L	1	0.14	0.48
1,1,2-Trichloroethane	ND	ug/L	1	0.14	0.46
Trichloroethene	1.2	ug/L	1	0.12	0.39
Trichlorofluoromethane	ND	ug/L	1	0.15	0.49
1,2,3-Trichloropropane	ND	ug/L	1	0.23	0.76
1,2,4-Trimethylbenzene	ND	ug/L	1	0.14	0.48
1,3,5-Trimethylbenzene	ND	ug/L	1	0.12	0.41
Vinyl chloride	ND	ug/L	1	0.16	0.61
meta,para-Xylene	ND	ug/L	1	0.26	0.88
MTBE	ND	ug/L	1	0.14	0.48
Isopropyl ether	ND	ug/L	1	0.13	0.45
Dibromofluoromethane (SURR**)	102%				
Toluene-d8 (SURR**)	107%				
1-Bromo-4-Fluorobenzene (SURR**)	99%				

Check standard recovery was outside QC limits for Bromomethane at 72%.

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358941 **Dup-1** **Collected: 12/16/04** **Analyzed: 12/29/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	500	58	190
Bromobenzene	ND	ug/L	500	64	210
Bromochloromethane	ND	ug/L	500	55	180
Bromodichloromethane	ND	ug/L	500	95	350
Bromoform	ND	ug/L	500	51	170
Bromomethane	ND	ug/L	500	160	500
n-Butylbenzene	ND	ug/L	500	93	350
sec-Butylbenzene	ND	ug/L	500	79	260
tert-Butylbenzene	ND	ug/L	500	70	230
Carbon Tetrachloride	ND	ug/L	500	77	260
Chlorobenzene	ND	ug/L	500	95	340
Chloroethane	ND	ug/L	500	340	1200
Chloroform	ND	ug/L	500	61	200
Chloromethane	ND	ug/L	500	61	200
2-Chlorotoluene	ND	ug/L	500	63	210
4-Chlorotoluene	ND	ug/L	500	66	220
Dibromochloromethane	ND	ug/L	500	82	270
1,2-Dibromo-3-Chloropropane	ND	ug/L	500	120	420
1,2-Dibromoethane	ND	ug/L	500	81	270
Dibromomethane	ND	ug/L	500	78	290
1,2-Dichlorobenzene	ND	ug/L	500	63	230
1,3-Dichlorobenzene	ND	ug/L	500	52	170
1,4-Dichlorobenzene	ND	ug/L	500	97	320
Dichlorodifluoromethane	ND	ug/L	500	77	260
1,1-Dichloroethane	ND	ug/L	500	66	220
1,2-Dichloroethane	ND	ug/L	500	66	220
1,1-Dichloroethene	ND	ug/L	500	120	440
cis-1,2-Dichloroethene	ND	ug/L	500	66	220
trans-1,2-Dichloroethene	ND	ug/L	500	54	180
1,2-Dichloropropane	ND	ug/L	500	63	210
1,3-Dichloropropane	ND	ug/L	500	74	250
2,2-Dichloropropane	ND	ug/L	500	82	270
1,1-Dichloropropene	ND	ug/L	500	86	290
cis-1,3-Dichloropropene	ND	ug/L	500	100	390
trans-1,3-Dichloropropene	ND	ug/L	500	73	240
Ethylbenzene	ND	ug/L	500	71	230
Hexachlorobutadiene	ND	ug/L	500	120	440
Isopropylbenzene	ND	ug/L	500	61	200
p-Isopropyltoluene	ND	ug/L	500	58	190
Methylene chloride	ND	ug/L	500	52	170
Naphthalene	ND	ug/L	500	82	300
n-Propylbenzene	ND	ug/L	500	85	280
ortho-Xylene	ND	ug/L	500	67	220
Styrene	ND	ug/L	500	70	230
1,1,1,2-Tetrachloroethane	ND	ug/L	500	82	270
1,1,2,2-Tetrachloroethane	ND	ug/L	500	100	330
Tetrachloroethene	2300	ug/L	500	67	220
Toluene	ND	ug/L	500	100	390

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358941 **Dup-1** **Collected: 12/16/04** **Analyzed: 12/29/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	500	87	320
1,2,4-Trichlorobenzene	ND	ug/L	500	53	190
1,1,1-Trichloroethane	ND	ug/L	500	72	240
1,1,2-Trichloroethane	ND	ug/L	500	69	230
Trichloroethene	8900	ug/L	500	59	190
Trichlorofluoromethane	ND	ug/L	500	73	240
1,2,3-Trichloropropane	ND	ug/L	500	110	380
1,2,4-Trimethylbenzene	ND	ug/L	500	72	240
1,3,5-Trimethylbenzene	ND	ug/L	500	61	200
Vinyl chloride	ND	ug/L	500	82	300
meta,para-Xylene	ND	ug/L	500	130	440
MTBE	ND	ug/L	500	72	240
Isopropyl ether	ND	ug/L	500	67	220
Dibromofluoromethane (SURR**)	100%				
Toluene-d8 (SURR**)	101%				
1-Bromo-4-Fluorobenzene (SURR**)	94%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358942 **Trip Blank** **Collected: 12/16/04** **Analyzed: 12/24/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	1	0.12	0.38
Bromobenzene	ND	ug/L	1	0.13	0.42
Bromochloromethane	ND	ug/L	1	0.11	0.37
Bromodichloromethane	ND	ug/L	1	0.19	0.70
Bromoform	ND	ug/L	1	0.10	0.34
Bromomethane	ND	ug/L	1	0.32	1.0
n-Butylbenzene	ND	ug/L	1	0.19	0.70
sec-Butylbenzene	ND	ug/L	1	0.16	0.52
tert-Butylbenzene	ND	ug/L	1	0.14	0.47
Carbon Tetrachloride	ND	ug/L	1	0.15	0.51
Chlorobenzene	ND	ug/L	1	0.19	0.68
Chloroethane	ND	ug/L	1	0.68	2.5
Chloroform	ND	ug/L	1	0.12	0.41
Chloromethane	ND	ug/L	1	0.12	0.41
2-Chlorotoluene	ND	ug/L	1	0.13	0.42
4-Chlorotoluene	ND	ug/L	1	0.13	0.44
Dibromochloromethane	ND	ug/L	1	0.16	0.55
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.25	0.83
1,2-Dibromoethane	ND	ug/L	1	0.16	0.54
Dibromomethane	ND	ug/L	1	0.16	0.57
1,2-Dichlorobenzene	ND	ug/L	1	0.13	0.46
1,3-Dichlorobenzene	ND	ug/L	1	0.10	0.34
1,4-Dichlorobenzene	ND	ug/L	1	0.19	0.64
Dichlorodifluoromethane	ND	ug/L	1	0.15	0.51
1,1-Dichloroethane	ND	ug/L	1	0.13	0.44
1,2-Dichloroethane	ND	ug/L	1	0.13	0.44
1,1-Dichloroethene	ND	ug/L	1	0.24	0.88
cis-1,2-Dichloroethene	ND	ug/L	1	0.13	0.44
trans-1,2-Dichloroethene	ND	ug/L	1	0.11	0.36
1,2-Dichloropropane	ND	ug/L	1	0.13	0.42
1,3-Dichloropropane	ND	ug/L	1	0.15	0.49
2,2-Dichloropropane	ND	ug/L	1	0.16	0.55
1,1-Dichloropropene	ND	ug/L	1	0.17	0.57
cis-1,3-Dichloropropene	ND	ug/L	1	0.21	0.78
trans-1,3-Dichloropropene	ND	ug/L	1	0.15	0.49
Ethylbenzene	ND	ug/L	1	0.14	0.47
Hexachlorobutadiene	ND	ug/L	1	0.23	0.88
Isopropylbenzene	ND	ug/L	1	0.12	0.41
p-Isopropyltoluene	ND	ug/L	1	0.12	0.39
Methylene chloride	ND	ug/L	1	0.10	0.34
Naphthalene	ND	ug/L	1	0.16	0.60
n-Propylbenzene	ND	ug/L	1	0.17	0.56
ortho-Xylene	ND	ug/L	1	0.13	0.44
Styrene	ND	ug/L	1	0.14	0.47
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.16	0.55
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.20	0.67
Tetrachloroethene	ND	ug/L	1	0.13	0.45
Toluene	ND	ug/L	1	0.20	0.77

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2)

Customer: NewFields Companies LLC **NLS Project: 86494**
Project Description: Thomas Ft. Atkinson
Project Title: 0451-002 **Template: SAT2W** **Printed: 12/30/2004 09:14**

Sample: 358942 **Trip Blank** **Collected: 12/16/04** **Analyzed: 12/24/04 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.17	0.64
1,2,4-Trichlorobenzene	ND	ug/L	1	0.11	0.37
1,1,1-Trichloroethane	ND	ug/L	1	0.14	0.48
1,1,2-Trichloroethane	ND	ug/L	1	0.14	0.46
Trichloroethene	ND	ug/L	1	0.12	0.39
Trichlorofluoromethane	ND	ug/L	1	0.15	0.49
1,2,3-Trichloropropane	ND	ug/L	1	0.23	0.76
1,2,4-Trimethylbenzene	ND	ug/L	1	0.14	0.48
1,3,5-Trimethylbenzene	ND	ug/L	1	0.12	0.41
Vinyl chloride	ND	ug/L	1	0.16	0.61
meta,para-Xylene	ND	ug/L	1	0.26	0.88
MTBE	ND	ug/L	1	0.14	0.48
Isopropyl ether	ND	ug/L	1	0.13	0.45
Dibromofluoromethane (SURR**)	98%				
Toluene-d8 (SURR**)	104%				
1-Bromo-4-Fluorobenzene (SURR**)	97%				

** Surrogates are used to evaluate a method's Quality Control.

SAMPLE COLLECTION AND CHAIN OF CUSTODY RECORD

NORTHERN LAKE SERVICE, INC.

Analytical Laboratory and Environmental Services

400 North Lake Avenue • Crandon, WI 54520-1298

Tel: (715) 478-2777 • Fax: (715) 478-3060

Wisconsin Lab Cert. No. 721026460

WI DATCP 105-000330

NO. 73938

CLIENT	Now Fields
ADDRESS	2110 Luann Ln Ste 101
CITY / STATE / ZIP	Madison / WI / 53713
PROJECT DESCRIPTION / NO.	Thomas-Ft. Atkinson 0451-002
QUOTATION NO.	
DNR FID #	
DNR LICENSE #	
CONTACT	Mark McCulloch
PHONE	608-442-5223
PURCHASE ORDER NO.	
FAX	608-442-9013

MATRIX:
SW = surface water
WW = waste water
GW = groundwater
DW = drinking water
TIS = tissue
AIR = air
SOIL = soil
SED = sediment
PROD = product
SL = sludge
OTHER

USE BOXES BELOW: Indicate Y or N if GW Sample is field filtered.
Indicate G or C if WW Sample is Grab or Composite.

ANALYZE PER ORDER OF ANALYSIS

PARAMETER: VOCs (8260) 72G

ITEM NO.	NLS LAB. NO.	SAMPLE ID	COLLECTION DATE	COLLECTION TIME	MATRIX (See above)	VOCs	COLLECTION REMARKS (i.e. DNR Well ID #)
1.	358934	MW-1	12/16/04	1030	GW	X	
2.	358935	MW-2		0900			
3.	358936	MW-2A		0915			
4.	358937	MW-3		1015			
5.	358938	MW-4		1100			
6.	358939	MW-4A		1045			
7.	358940	MW-5		0800			
8.	358941	Dup-1		1130			
9.	358942	Trip Blank					
10.							

ONE SAMPLE PER LINE

COLLECTED BY (signature)	CUSTODY SEAL NO. (IF ANY)	DATE/TIME
RELINQUISHED BY (signature)	RECEIVED BY (signature) Dunham Express	DATE/TIME
DISPATCHED BY (signature)	METHOD OF TRANSPORT	DATE/TIME

RECEIVED AT NLS BY (signature)	DATE/TIME 12/17/04 10:15	CONDITION on ice	TEMP.
COOLER # 70-74	REMARKS & OTHER INFORMATION		
	WDNR FACILITY NUMBER	E-MAIL ADDRESS	

REPORT TO: Mark McCulloch

INVOICE TO: Same

PRESERVATIVE:
N = nitric acid
NP = no preservative
S = sulfuric acid
Z = zinc acetate
M = methanol
OH = sodium hydroxide
HA = hydrochloric & ascorbic acid
H = hydrochloric acid

IMPORTANT:

1. TO MEET REGULATORY REQUIREMENTS, THIS FORM **MUST** BE COMPLETED IN DETAIL AND INCLUDED IN THE COOLER CONTAINING THE SAMPLES DESCRIBED.
2. PLEASE USE ONE LINE PER SAMPLE, **NOT** PER BOTTLE.
3. RETURN THIS FORM WITH SAMPLES - CLIENT MAY KEEP PINK COPY.
4. PARTIES COLLECTING SAMPLE, LISTED AS **REPORT TO** AND LISTED AS **INVOICE TO** AGREE TO STANDARD TERMS & CONDITIONS ON REVERSE.

DUPLICATE COPY

Appendix D

Laboratory Reports
June 2005 Groundwater Samples

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Client: NewFields Companies LLC
Attn: Mark S McColloch PG

2110 Luann Lane #101
Madison,WI 53713 3098

NLS Project: 89941
NLS Customer: 93437

Fax: 608 442 9013 Phone: 608 442 5223
PO # 0451-002-800

Project: DB Oak-Thomas Ind

MW-1 NLS ID: 372646
Ref. Line 1 COC 79956 MW-1 Matrix: GW
Collected: 06/01/05 09:00 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/05/05	SW846 8260	721026460

MW-2 NLS ID: 372647
Ref. Line 2 COC 79956 MW-2 Matrix: GW
Collected: 06/01/05 09:55 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/05/05	SW846 8260	721026460

MW-2A NLS ID: 372648
Ref. Line 3 COC 79956 MW-2A Matrix: GW
Collected: 06/01/05 10:15 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/06/05	SW846 8260	721026460

MW-3 NLS ID: 372649
Ref. Line 4 COC 79956 MW-3 Matrix: GW
Collected: 06/01/05 11:10 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/06/05	SW846 8260	721026460

MW-3A NLS ID: 372650
Ref. Line 5 COC 79956 MW-3A Matrix: GW
Collected: 06/01/05 11:30 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/06/05	SW846 8260	721026460

MW-4 NLS ID: 372651
Ref. Line 6 COC 79956 MW-4 Matrix: GW
Collected: 06/01/05 10:35 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/05/05	SW846 8260	721026460

MW-4A NLS ID: 372652
Ref. Line 7 COC 79956 MW-4A Matrix: GW
Collected: 06/01/05 10:40 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/06/05	SW846 8260	721026460

MW-5 NLS ID: 372653
Ref. Line 8 COC 79956 MW-5 Matrix: GW
Collected: 06/01/05 09:25 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/05/05	SW846 8260	721026460

MW-6 NLS ID: 372654
Ref. Line 9 COC 79956 MW-6 Matrix: GW
Collected: 06/01/05 08:25 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/06/05	SW846 8260	721026460

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Client: NewFields Companies LLC
Attn: Mark S McColloch PG

2110 Luann Lane #101
Madison,WI 53713 3098

NLS Project: 89941
NLS Customer: 93437

Fax: 608 442 9013 Phone: 608 442 5223
PO # 0451-002-800

Project: DB Oak-Thomas Ind

MW-6A NLS ID: 372655
Ref. Line 10 COC 79956 MW-6A Matrix: GW
Collected: 06/01/05 08:30 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/06/05	SW846 8260	721026460

Dup-1 NLS ID: 372656
Ref. Line 1 COC 79957 Dup-1 Matrix: GW
Collected: 06/01/05 09:55 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/06/05	SW846 8260	721026460

Trip blank NLS ID: 372657
Ref. Line COC 79957 Trip blank Matrix: TB
Collected: 06/01/05 00:00 Received: 06/02/05

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA 8260	see attached					06/06/05	SW846 8260	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution.

LOD = Limit of Detection LOQ = Limit of Quantitation ND = Not Detected 1000 ug/L = 1 mg/L
DWB = Dry Weight Basis NA = Not Applicable %DWB = (mg/kg DWB) / 10000
MCL = Maximum Contaminant Levels for Drinking Water Samples

Reviewed by:

Authorized by:
R. T. Krueger
President

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW Printed: 06/07/2005 08:55**

Sample: 372646 MW-1 **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	1	0.29	0.97
Bromobenzene	ND	ug/L	1	0.10	0.37
Bromochloromethane	ND	ug/L	1	0.27	0.89
Bromodichloromethane	ND	ug/L	1	0.32	1.1
Bromoform	ND	ug/L	1	0.28	0.92
Bromomethane	ND	ug/L	1	0.39	1.3
n-Butylbenzene	ND	ug/L	1	0.31	1.0
sec-Butylbenzene	ND	ug/L	1	0.33	1.1
tert-Butylbenzene	ND	ug/L	1	0.31	1.0
Carbon Tetrachloride	ND	ug/L	1	0.30	0.98
Chlorobenzene	ND	ug/L	1	0.21	0.70
Chloroethane	ND	ug/L	1	1.7	5.7
Chloroform	ND	ug/L	1	0.30	0.99
Chloromethane	ND	ug/L	1	0.24	0.75
2-Chlorotoluene	ND	ug/L	1	0.39	1.3
4-Chlorotoluene	ND	ug/L	1	0.37	1.2
Dibromochloromethane	ND	ug/L	1	0.29	0.97
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.33	1.1
1,2-Dibromoethane	ND	ug/L	1	0.30	1.0
Dibromomethane	ND	ug/L	1	0.32	1.1
1,2-Dichlorobenzene	ND	ug/L	1	0.28	0.93
1,3-Dichlorobenzene	ND	ug/L	1	0.24	0.79
1,4-Dichlorobenzene	ND	ug/L	1	0.23	0.78
Dichlorodifluoromethane	ND	ug/L	1	0.18	0.63
1,1-Dichloroethane	ND	ug/L	1	0.30	0.99
1,2-Dichloroethane	ND	ug/L	1	0.34	1.1
1,1-Dichloroethene	ND	ug/L	1	0.41	1.4
cis-1,2-Dichloroethene	ND	ug/L	1	0.40	1.3
trans-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2
1,2-Dichloropropane	ND	ug/L	1	0.35	1.2
1,3-Dichloropropane	ND	ug/L	1	0.34	1.1
2,2-Dichloropropane	ND	ug/L	1	0.44	1.5
1,1-Dichloropropene	ND	ug/L	1	0.32	1.1
cis-1,3-Dichloropropene	ND	ug/L	1	0.27	0.89
trans-1,3-Dichloropropene	ND	ug/L	1	0.32	1.1
Ethylbenzene	ND	ug/L	1	0.26	0.87
Hexachlorobutadiene	ND	ug/L	1	0.41	1.4
Isopropylbenzene	ND	ug/L	1	0.36	1.2
p-Isopropyltoluene	ND	ug/L	1	0.30	1.0
Methylene chloride	ND	ug/L	1	0.43	1.4
Naphthalene	ND	ug/L	1	0.39	1.3
n-Propylbenzene	ND	ug/L	1	0.34	1.1
ortho-Xylene	ND	ug/L	1	0.27	0.89
Styrene	ND	ug/L	1	0.32	1.1
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.28	0.94
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.33	1.1
Tetrachloroethene	ND	ug/L	1	0.31	1.0
Toluene	ND	ug/L	1	0.34	1.1

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372646 **MW-1** **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.36	1.2
1,2,4-Trichlorobenzene	ND	ug/L	1	0.37	1.2
1,1,1-Trichloroethane	ND	ug/L	1	0.27	0.88
1,1,2-Trichloroethane	ND	ug/L	1	0.42	1.4
Trichloroethene	ND	ug/L	1	0.25	0.82
Trichlorofluoromethane	ND	ug/L	1	0.38	1.3
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5
1,2,4-Trimethylbenzene	ND	ug/L	1	0.31	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1	0.39	1.3
Vinyl chloride	ND	ug/L	1	0.11	0.38
meta,para-Xylene	ND	ug/L	1	0.62	2.1
MTBE	ND	ug/L	1	0.31	1.0
Isopropyl Ether	ND	ug/L	1	0.35	1.2
Dibromofluoromethane (SURR**)	105%				
Toluene-d8 (SURR**)	116%				
1-Bromo-4-Fluorobenzene (SURR**)	112%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372647 **MW-2** **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	500	150	480
Bromobenzene	ND	ug/L	500	52	180
Bromochloromethane	ND	ug/L	500	130	440
Bromodichloromethane	ND	ug/L	500	160	530
Bromoform	ND	ug/L	500	140	460
Bromomethane	ND	ug/L	500	190	650
n-Butylbenzene	ND	ug/L	500	160	520
sec-Butylbenzene	ND	ug/L	500	160	550
tert-Butylbenzene	ND	ug/L	500	150	520
Carbon Tetrachloride	ND	ug/L	500	150	490
Chlorobenzene	ND	ug/L	500	100	350
Chloroethane	ND	ug/L	500	850	2800
Chloroform	ND	ug/L	500	150	490
Chloromethane	ND	ug/L	500	120	380
2-Chlorotoluene	ND	ug/L	500	200	660
4-Chlorotoluene	ND	ug/L	500	180	610
Dibromochloromethane	ND	ug/L	500	150	490
1,2-Dibromo-3-Chloropropane	ND	ug/L	500	170	550
1,2-Dibromoethane	ND	ug/L	500	150	500
Dibromomethane	ND	ug/L	500	160	530
1,2-Dichlorobenzene	ND	ug/L	500	140	460
1,3-Dichlorobenzene	ND	ug/L	500	120	390
1,4-Dichlorobenzene	ND	ug/L	500	120	390
Dichlorodifluoromethane	ND	ug/L	500	89	320
1,1-Dichloroethane	ND	ug/L	500	150	500
1,2-Dichloroethane	ND	ug/L	500	170	570
1,1-Dichloroethene	ND	ug/L	500	210	680
cis-1,2-Dichloroethene	3600	ug/L	500	200	670
trans-1,2-Dichloroethene	ND	ug/L	500	170	580
1,2-Dichloropropane	ND	ug/L	500	170	580
1,3-Dichloropropane	ND	ug/L	500	170	560
2,2-Dichloropropane	ND	ug/L	500	220	730
1,1-Dichloropropene	ND	ug/L	500	160	540
cis-1,3-Dichloropropene	ND	ug/L	500	130	450
trans-1,3-Dichloropropene	ND	ug/L	500	160	540
Ethylbenzene	ND	ug/L	500	130	430
Hexachlorobutadiene	ND	ug/L	500	210	690
Isopropylbenzene	ND	ug/L	500	180	610
p-Isopropyltoluene	ND	ug/L	500	150	510
Methylene chloride	ND	ug/L	500	210	710
Naphthalene	ND	ug/L	500	200	650
n-Propylbenzene	ND	ug/L	500	170	560
ortho-Xylene	ND	ug/L	500	130	440
Styrene	ND	ug/L	500	160	530
1,1,1,2-Tetrachloroethane	ND	ug/L	500	140	470
1,1,2,2-Tetrachloroethane	ND	ug/L	500	160	550
Tetrachloroethene	ND	ug/L	500	150	510
Toluene	ND	ug/L	500	170	560

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372647 **MW-2** **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	500	180	610
1,2,4-Trichlorobenzene	ND	ug/L	500	180	610
1,1,1-Trichloroethane	ND	ug/L	500	130	440
1,1,2-Trichloroethane	ND	ug/L	500	210	700
Trichloroethene	[170]	ug/L	500	120	410
Trichlorofluoromethane	ND	ug/L	500	190	640
1,2,3-Trichloropropane	ND	ug/L	500	220	730
1,2,4-Trimethylbenzene	ND	ug/L	500	150	510
1,3,5-Trimethylbenzene	ND	ug/L	500	200	650
Vinyl chloride	ND	ug/L	500	53	190
meta,para-Xylene	ND	ug/L	500	310	1000
MTBE	ND	ug/L	500	150	510
Isopropyl Ether	ND	ug/L	500	180	590
Dibromofluoromethane (SURR**)	107%				
Toluene-d8 (SURR**)	113%				
1-Bromo-4-Fluorobenzene (SURR**)	102%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372648 **MW-2A** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	25	7.3	24
Bromobenzene	ND	ug/L	25	2.6	9.2
Bromochloromethane	ND	ug/L	25	6.7	22
Bromodichloromethane	ND	ug/L	25	8.0	27
Bromoform	ND	ug/L	25	6.9	23
Bromomethane	ND	ug/L	25	9.7	32
n-Butylbenzene	ND	ug/L	25	7.8	26
sec-Butylbenzene	ND	ug/L	25	8.2	27
tert-Butylbenzene	ND	ug/L	25	7.7	26
Carbon Tetrachloride	ND	ug/L	25	7.4	25
Chlorobenzene	ND	ug/L	25	5.2	17
Chloroethane	ND	ug/L	25	43	140
Chloroform	ND	ug/L	25	7.4	25
Chloromethane	ND	ug/L	25	5.9	19
2-Chlorotoluene	ND	ug/L	25	9.8	33
4-Chlorotoluene	ND	ug/L	25	9.2	31
Dibromochloromethane	ND	ug/L	25	7.3	24
1,2-Dibromo-3-Chloropropane	ND	ug/L	25	8.3	28
1,2-Dibromoethane	ND	ug/L	25	7.5	25
Dibromomethane	ND	ug/L	25	8.0	27
1,2-Dichlorobenzene	ND	ug/L	25	6.9	23
1,3-Dichlorobenzene	ND	ug/L	25	5.9	20
1,4-Dichlorobenzene	ND	ug/L	25	5.8	19
Dichlorodifluoromethane	ND	ug/L	25	4.5	16
1,1-Dichloroethane	ND	ug/L	25	7.5	25
1,2-Dichloroethane	ND	ug/L	25	8.5	28
1,1-Dichloroethene	ND	ug/L	25	10	34
cis-1,2-Dichloroethene	350	ug/L	25	10	33
trans-1,2-Dichloroethene	ND	ug/L	25	8.7	29
1,2-Dichloropropane	ND	ug/L	25	8.7	29
1,3-Dichloropropane	ND	ug/L	25	8.4	28
2,2-Dichloropropane	ND	ug/L	25	11	37
1,1-Dichloropropene	ND	ug/L	25	8.0	27
cis-1,3-Dichloropropene	ND	ug/L	25	6.7	22
trans-1,3-Dichloropropene	ND	ug/L	25	8.1	27
Ethylbenzene	ND	ug/L	25	6.5	22
Hexachlorobutadiene	ND	ug/L	25	10	35
Isopropylbenzene	ND	ug/L	25	9.1	30
p-Isopropyltoluene	ND	ug/L	25	7.6	25
Methylene chloride	ND	ug/L	25	11	35
Naphthalene	ND	ug/L	25	9.8	33
n-Propylbenzene	ND	ug/L	25	8.4	28
ortho-Xylene	ND	ug/L	25	6.7	22
Styrene	ND	ug/L	25	8.0	27
1,1,1,2-Tetrachloroethane	ND	ug/L	25	7.0	23
1,1,2,2-Tetrachloroethane	ND	ug/L	25	8.2	27
Tetrachloroethene	110	ug/L	25	7.7	26
Toluene	ND	ug/L	25	8.4	28

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372648 **MW-2A** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	25	9.1	30
1,2,4-Trichlorobenzene	ND	ug/L	25	9.1	30
1,1,1-Trichloroethane	ND	ug/L	25	6.6	22
1,1,2-Trichloroethane	ND	ug/L	25	10	35
Trichloroethene	83	ug/L	25	6.2	21
Trichlorofluoromethane	ND	ug/L	25	9.6	32
1,2,3-Trichloropropane	ND	ug/L	25	11	36
1,2,4-Trimethylbenzene	ND	ug/L	25	7.6	25
1,3,5-Trimethylbenzene	ND	ug/L	25	9.8	33
Vinyl chloride	36	ug/L	25	2.7	9.4
meta,para-Xylene	ND	ug/L	25	15	52
MTBE	ND	ug/L	25	7.6	25
Isopropyl Ether	ND	ug/L	25	8.8	29
Dibromofluoromethane (SURR**)	104%				
Toluene-d8 (SURR**)	120%				
1-Bromo-4-Fluorobenzene (SURR**)	102%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372649 **MW-3** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	2500	730	2400
Bromobenzene	ND	ug/L	2500	260	920
Bromochloromethane	ND	ug/L	2500	670	2200
Bromodichloromethane	ND	ug/L	2500	800	2700
Bromoform	ND	ug/L	2500	690	2300
Bromomethane	ND	ug/L	2500	970	3200
n-Butylbenzene	ND	ug/L	2500	780	2600
sec-Butylbenzene	ND	ug/L	2500	820	2700
tert-Butylbenzene	ND	ug/L	2500	770	2600
Carbon Tetrachloride	ND	ug/L	2500	740	2500
Chlorobenzene	ND	ug/L	2500	520	1700
Chloroethane	ND	ug/L	2500	4300	14000
Chloroform	ND	ug/L	2500	740	2500
Chloromethane	ND	ug/L	2500	590	1900
2-Chlorotoluene	ND	ug/L	2500	980	3300
4-Chlorotoluene	ND	ug/L	2500	920	3100
Dibromochloromethane	ND	ug/L	2500	730	2400
1,2-Dibromo-3-Chloropropane	ND	ug/L	2500	830	2800
1,2-Dibromoethane	ND	ug/L	2500	750	2500
Dibromomethane	ND	ug/L	2500	800	2700
1,2-Dichlorobenzene	ND	ug/L	2500	690	2300
1,3-Dichlorobenzene	ND	ug/L	2500	590	2000
1,4-Dichlorobenzene	ND	ug/L	2500	580	1900
Dichlorodifluoromethane	ND	ug/L	2500	450	1600
1,1-Dichloroethane	ND	ug/L	2500	750	2500
1,2-Dichloroethane	ND	ug/L	2500	850	2800
1,1-Dichloroethene	ND	ug/L	2500	1000	3400
cis-1,2-Dichloroethene	[2600]	ug/L	2500	1000	3300
trans-1,2-Dichloroethene	ND	ug/L	2500	870	2900
1,2-Dichloropropane	ND	ug/L	2500	870	2900
1,3-Dichloropropane	ND	ug/L	2500	840	2800
2,2-Dichloropropane	ND	ug/L	2500	1100	3700
1,1-Dichloropropene	ND	ug/L	2500	800	2700
cis-1,3-Dichloropropene	ND	ug/L	2500	670	2200
trans-1,3-Dichloropropene	ND	ug/L	2500	810	2700
Ethylbenzene	ND	ug/L	2500	650	2200
Hexachlorobutadiene	ND	ug/L	2500	1000	3500
Isopropylbenzene	ND	ug/L	2500	910	3000
p-Isopropyltoluene	ND	ug/L	2500	760	2500
Methylene chloride	ND	ug/L	2500	1100	3500
Naphthalene	ND	ug/L	2500	980	3300
n-Propylbenzene	ND	ug/L	2500	840	2800
ortho-Xylene	ND	ug/L	2500	670	2200
Styrene	ND	ug/L	2500	800	2700
1,1,1,2-Tetrachloroethane	ND	ug/L	2500	700	2300
1,1,2,2-Tetrachloroethane	ND	ug/L	2500	820	2700
Tetrachloroethene	27000	ug/L	2500	770	2600
Toluene	ND	ug/L	2500	840	2800

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372649 **MW-3** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	2500	910	3000
1,2,4-Trichlorobenzene	ND	ug/L	2500	910	3000
1,1,1-Trichloroethane	ND	ug/L	2500	660	2200
1,1,2-Trichloroethane	ND	ug/L	2500	1000	3500
Trichloroethene	5500	ug/L	2500	620	2100
Trichlorofluoromethane	ND	ug/L	2500	960	3200
1,2,3-Trichloropropane	ND	ug/L	2500	1100	3600
1,2,4-Trimethylbenzene	ND	ug/L	2500	760	2500
1,3,5-Trimethylbenzene	ND	ug/L	2500	980	3300
Vinyl chloride	ND	ug/L	2500	270	940
meta,para-Xylene	ND	ug/L	2500	1500	5200
MTBE	ND	ug/L	2500	760	2500
Isopropyl Ether	ND	ug/L	2500	880	2900
Dibromofluoromethane (SURR**)	102%				
Toluene-d8 (SURR**)	115%				
1-Bromo-4-Fluorobenzene (SURR**)	105%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW Printed: 06/07/2005 08:55**

Sample: 372650 MW-3A **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	500	150	480
Bromobenzene	ND	ug/L	500	52	180
Bromochloromethane	ND	ug/L	500	130	440
Bromodichloromethane	ND	ug/L	500	160	530
Bromoform	ND	ug/L	500	140	460
Bromomethane	ND	ug/L	500	190	650
n-Butylbenzene	ND	ug/L	500	160	520
sec-Butylbenzene	ND	ug/L	500	160	550
tert-Butylbenzene	ND	ug/L	500	150	520
Carbon Tetrachloride	ND	ug/L	500	150	490
Chlorobenzene	ND	ug/L	500	100	350
Chloroethane	ND	ug/L	500	850	2800
Chloroform	ND	ug/L	500	150	490
Chloromethane	ND	ug/L	500	120	380
2-Chlorotoluene	ND	ug/L	500	200	660
4-Chlorotoluene	ND	ug/L	500	180	610
Dibromochloromethane	ND	ug/L	500	150	490
1,2-Dibromo-3-Chloropropane	ND	ug/L	500	170	550
1,2-Dibromoethane	ND	ug/L	500	150	500
Dibromomethane	ND	ug/L	500	160	530
1,2-Dichlorobenzene	ND	ug/L	500	140	460
1,3-Dichlorobenzene	ND	ug/L	500	120	390
1,4-Dichlorobenzene	ND	ug/L	500	120	390
Dichlorodifluoromethane	ND	ug/L	500	89	320
1,1-Dichloroethane	ND	ug/L	500	150	500
1,2-Dichloroethane	ND	ug/L	500	170	570
1,1-Dichloroethene	ND	ug/L	500	210	680
cis-1,2-Dichloroethene	13000	ug/L	1250	500	1700
trans-1,2-Dichloroethene	[250]	ug/L	500	170	580
1,2-Dichloropropane	ND	ug/L	500	170	580
1,3-Dichloropropane	ND	ug/L	500	170	560
2,2-Dichloropropane	ND	ug/L	500	220	730
1,1-Dichloropropene	ND	ug/L	500	160	540
cis-1,3-Dichloropropene	ND	ug/L	500	130	450
trans-1,3-Dichloropropene	ND	ug/L	500	160	540
Ethylbenzene	ND	ug/L	500	130	430
Hexachlorobutadiene	ND	ug/L	500	210	690
Isopropylbenzene	ND	ug/L	500	180	610
p-Isopropyltoluene	ND	ug/L	500	150	510
Methylene chloride	ND	ug/L	500	210	710
Naphthalene	ND	ug/L	500	200	650
n-Propylbenzene	ND	ug/L	500	170	560
ortho-Xylene	ND	ug/L	500	130	440
Styrene	ND	ug/L	500	160	530
1,1,1,2-Tetrachloroethane	ND	ug/L	500	140	470
1,1,2,2-Tetrachloroethane	ND	ug/L	500	160	550
Tetrachloroethene	3000	ug/L	500	150	510
Toluene	ND	ug/L	500	170	560

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372650 **MW-3A** **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	500	180	610
1,2,4-Trichlorobenzene	ND	ug/L	500	180	610
1,1,1-Trichloroethane	ND	ug/L	500	130	440
1,1,2-Trichloroethane	ND	ug/L	500	210	700
Trichloroethene	2300	ug/L	500	120	410
Trichlorofluoromethane	ND	ug/L	500	190	640
1,2,3-Trichloropropane	ND	ug/L	500	220	730
1,2,4-Trimethylbenzene	ND	ug/L	500	150	510
1,3,5-Trimethylbenzene	ND	ug/L	500	200	650
Vinyl chloride	910	ug/L	500	53	190
meta,para-Xylene	ND	ug/L	500	310	1000
MTBE	ND	ug/L	500	150	510
Isopropyl Ether	ND	ug/L	500	180	590
Dibromofluoromethane (SURR**)	106%				
Toluene-d8 (SURR**)	113%				
1-Bromo-4-Fluorobenzene (SURR**)	104%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372651 **MW-4** **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	500	150	480
Bromobenzene	ND	ug/L	500	52	180
Bromochloromethane	ND	ug/L	500	130	440
Bromodichloromethane	ND	ug/L	500	160	530
Bromoform	ND	ug/L	500	140	460
Bromomethane	ND	ug/L	500	190	650
n-Butylbenzene	ND	ug/L	500	160	520
sec-Butylbenzene	ND	ug/L	500	160	550
tert-Butylbenzene	ND	ug/L	500	150	520
Carbon Tetrachloride	ND	ug/L	500	150	490
Chlorobenzene	ND	ug/L	500	100	350
Chloroethane	ND	ug/L	500	850	2800
Chloroform	ND	ug/L	500	150	490
Chloromethane	ND	ug/L	500	120	380
2-Chlorotoluene	ND	ug/L	500	200	660
4-Chlorotoluene	ND	ug/L	500	180	610
Dibromochloromethane	ND	ug/L	500	150	490
1,2-Dibromo-3-Chloropropane	ND	ug/L	500	170	550
1,2-Dibromoethane	ND	ug/L	500	150	500
Dibromomethane	ND	ug/L	500	160	530
1,2-Dichlorobenzene	ND	ug/L	500	140	460
1,3-Dichlorobenzene	ND	ug/L	500	120	390
1,4-Dichlorobenzene	ND	ug/L	500	120	390
Dichlorodifluoromethane	ND	ug/L	500	89	320
1,1-Dichloroethane	ND	ug/L	500	150	500
1,2-Dichloroethane	ND	ug/L	500	170	570
1,1-Dichloroethene	ND	ug/L	500	210	680
cis-1,2-Dichloroethene	ND	ug/L	500	200	670
trans-1,2-Dichloroethene	ND	ug/L	500	170	580
1,2-Dichloropropane	ND	ug/L	500	170	580
1,3-Dichloropropane	ND	ug/L	500	170	560
2,2-Dichloropropane	ND	ug/L	500	220	730
1,1-Dichloropropene	ND	ug/L	500	160	540
cis-1,3-Dichloropropene	ND	ug/L	500	130	450
trans-1,3-Dichloropropene	ND	ug/L	500	160	540
Ethylbenzene	ND	ug/L	500	130	430
Hexachlorobutadiene	ND	ug/L	500	210	690
Isopropylbenzene	ND	ug/L	500	180	610
p-Isopropyltoluene	ND	ug/L	500	150	510
Methylene chloride	ND	ug/L	500	210	710
Naphthalene	ND	ug/L	500	200	650
n-Propylbenzene	ND	ug/L	500	170	560
ortho-Xylene	ND	ug/L	500	130	440
Styrene	ND	ug/L	500	160	530
1,1,1,2-Tetrachloroethane	ND	ug/L	500	140	470
1,1,2,2-Tetrachloroethane	ND	ug/L	500	160	550
Tetrachloroethene	2500	ug/L	500	150	510
Toluene	ND	ug/L	500	170	560

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372651 **MW-4** **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	500	180	610
1,2,4-Trichlorobenzene	ND	ug/L	500	180	610
1,1,1-Trichloroethane	ND	ug/L	500	130	440
1,1,2-Trichloroethane	ND	ug/L	500	210	700
Trichloroethene	4700	ug/L	500	120	410
Trichlorofluoromethane	ND	ug/L	500	190	640
1,2,3-Trichloropropane	ND	ug/L	500	220	730
1,2,4-Trimethylbenzene	ND	ug/L	500	150	510
1,3,5-Trimethylbenzene	ND	ug/L	500	200	650
Vinyl chloride	ND	ug/L	500	53	190
meta,para-Xylene	ND	ug/L	500	310	1000
MTBE	ND	ug/L	500	150	510
Isopropyl Ether	ND	ug/L	500	180	590
Dibromofluoromethane (SURR**)	105%				
Toluene-d8 (SURR**)	118%				
1-Bromo-4-Fluorobenzene (SURR**)	110%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372652 **MW-4A** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	1	0.29	0.97
Bromobenzene	ND	ug/L	1	0.10	0.37
Bromochloromethane	ND	ug/L	1	0.27	0.89
Bromodichloromethane	ND	ug/L	1	0.32	1.1
Bromoform	ND	ug/L	1	0.28	0.92
Bromomethane	ND	ug/L	1	0.39	1.3
n-Butylbenzene	ND	ug/L	1	0.31	1.0
sec-Butylbenzene	ND	ug/L	1	0.33	1.1
tert-Butylbenzene	ND	ug/L	1	0.31	1.0
Carbon Tetrachloride	ND	ug/L	1	0.30	0.98
Chlorobenzene	ND	ug/L	1	0.21	0.70
Chloroethane	ND	ug/L	1	1.7	5.7
Chloroform	ND	ug/L	1	0.30	0.99
Chloromethane	ND	ug/L	1	0.24	0.75
2-Chlorotoluene	ND	ug/L	1	0.39	1.3
4-Chlorotoluene	ND	ug/L	1	0.37	1.2
Dibromochloromethane	ND	ug/L	1	0.29	0.97
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.33	1.1
1,2-Dibromoethane	ND	ug/L	1	0.30	1.0
Dibromomethane	ND	ug/L	1	0.32	1.1
1,2-Dichlorobenzene	ND	ug/L	1	0.28	0.93
1,3-Dichlorobenzene	ND	ug/L	1	0.24	0.79
1,4-Dichlorobenzene	ND	ug/L	1	0.23	0.78
Dichlorodifluoromethane	[0.50]	ug/L	1	0.18	0.63
1,1-Dichloroethane	ND	ug/L	1	0.30	0.99
1,2-Dichloroethane	ND	ug/L	1	0.34	1.1
1,1-Dichloroethene	ND	ug/L	1	0.41	1.4
cis-1,2-Dichloroethene	ND	ug/L	1	0.40	1.3
trans-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2
1,2-Dichloropropane	ND	ug/L	1	0.35	1.2
1,3-Dichloropropane	ND	ug/L	1	0.34	1.1
2,2-Dichloropropane	ND	ug/L	1	0.44	1.5
1,1-Dichloropropene	ND	ug/L	1	0.32	1.1
cis-1,3-Dichloropropene	ND	ug/L	1	0.27	0.89
trans-1,3-Dichloropropene	ND	ug/L	1	0.32	1.1
Ethylbenzene	ND	ug/L	1	0.26	0.87
Hexachlorobutadiene	ND	ug/L	1	0.41	1.4
Isopropylbenzene	ND	ug/L	1	0.36	1.2
p-Isopropyltoluene	ND	ug/L	1	0.30	1.0
Methylene chloride	ND	ug/L	1	0.43	1.4
Naphthalene	ND	ug/L	1	0.39	1.3
n-Propylbenzene	ND	ug/L	1	0.34	1.1
ortho-Xylene	ND	ug/L	1	0.27	0.89
Styrene	ND	ug/L	1	0.32	1.1
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.28	0.94
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.33	1.1
Tetrachloroethene	1.2	ug/L	1	0.31	1.0
Toluene	ND	ug/L	1	0.34	1.1

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372652 **MW-4A** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.36	1.2
1,2,4-Trichlorobenzene	ND	ug/L	1	0.37	1.2
1,1,1-Trichloroethane	ND	ug/L	1	0.27	0.88
1,1,2-Trichloroethane	ND	ug/L	1	0.42	1.4
Trichloroethene	[0.59]	ug/L	1	0.25	0.82
Trichlorofluoromethane	ND	ug/L	1	0.38	1.3
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5
1,2,4-Trimethylbenzene	ND	ug/L	1	0.31	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1	0.39	1.3
Vinyl chloride	ND	ug/L	1	0.11	0.38
meta,para-Xylene	ND	ug/L	1	0.62	2.1
MTBE	ND	ug/L	1	0.31	1.0
Isopropyl Ether	ND	ug/L	1	0.35	1.2
Dibromofluoromethane (SURR**)	104%				
Toluene-d8 (SURR**)	110%				
1-Bromo-4-Fluorobenzene (SURR**)	105%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372653 **MW-5** **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	1	0.29	0.97
Bromobenzene	ND	ug/L	1	0.10	0.37
Bromochloromethane	ND	ug/L	1	0.27	0.89
Bromodichloromethane	ND	ug/L	1	0.32	1.1
Bromoform	ND	ug/L	1	0.28	0.92
Bromomethane	ND	ug/L	1	0.39	1.3
n-Butylbenzene	ND	ug/L	1	0.31	1.0
sec-Butylbenzene	ND	ug/L	1	0.33	1.1
tert-Butylbenzene	ND	ug/L	1	0.31	1.0
Carbon Tetrachloride	ND	ug/L	1	0.30	0.98
Chlorobenzene	ND	ug/L	1	0.21	0.70
Chloroethane	ND	ug/L	1	1.7	5.7
Chloroform	ND	ug/L	1	0.30	0.99
Chloromethane	ND	ug/L	1	0.24	0.75
2-Chlorotoluene	ND	ug/L	1	0.39	1.3
4-Chlorotoluene	ND	ug/L	1	0.37	1.2
Dibromochloromethane	ND	ug/L	1	0.29	0.97
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.33	1.1
1,2-Dibromoethane	ND	ug/L	1	0.30	1.0
Dibromomethane	ND	ug/L	1	0.32	1.1
1,2-Dichlorobenzene	ND	ug/L	1	0.28	0.93
1,3-Dichlorobenzene	ND	ug/L	1	0.24	0.79
1,4-Dichlorobenzene	ND	ug/L	1	0.23	0.78
Dichlorodifluoromethane	ND	ug/L	1	0.18	0.63
1,1-Dichloroethane	ND	ug/L	1	0.30	0.99
1,2-Dichloroethane	ND	ug/L	1	0.34	1.1
1,1-Dichloroethene	ND	ug/L	1	0.41	1.4
cis-1,2-Dichloroethene	ND	ug/L	1	0.40	1.3
trans-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2
1,2-Dichloropropane	ND	ug/L	1	0.35	1.2
1,3-Dichloropropane	ND	ug/L	1	0.34	1.1
2,2-Dichloropropane	ND	ug/L	1	0.44	1.5
1,1-Dichloropropene	ND	ug/L	1	0.32	1.1
cis-1,3-Dichloropropene	ND	ug/L	1	0.27	0.89
trans-1,3-Dichloropropene	ND	ug/L	1	0.32	1.1
Ethylbenzene	ND	ug/L	1	0.26	0.87
Hexachlorobutadiene	ND	ug/L	1	0.41	1.4
Isopropylbenzene	ND	ug/L	1	0.36	1.2
p-Isopropyltoluene	ND	ug/L	1	0.30	1.0
Methylene chloride	ND	ug/L	1	0.43	1.4
Naphthalene	ND	ug/L	1	0.39	1.3
n-Propylbenzene	ND	ug/L	1	0.34	1.1
ortho-Xylene	ND	ug/L	1	0.27	0.89
Styrene	ND	ug/L	1	0.32	1.1
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.28	0.94
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.33	1.1
Tetrachloroethene	ND	ug/L	1	0.31	1.0
Toluene	ND	ug/L	1	0.34	1.1

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372653 **MW-5** **Collected: 06/01/05** **Analyzed: 06/04/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.36	1.2
1,2,4-Trichlorobenzene	ND	ug/L	1	0.37	1.2
1,1,1-Trichloroethane	ND	ug/L	1	0.27	0.88
1,1,2-Trichloroethane	ND	ug/L	1	0.42	1.4
Trichloroethene	ND	ug/L	1	0.25	0.82
Trichlorofluoromethane	ND	ug/L	1	0.38	1.3
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5
1,2,4-Trimethylbenzene	ND	ug/L	1	0.31	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1	0.39	1.3
Vinyl chloride	ND	ug/L	1	0.11	0.38
meta,para-Xylene	ND	ug/L	1	0.62	2.1
MTBE	ND	ug/L	1	0.31	1.0
Isopropyl Ether	ND	ug/L	1	0.35	1.2
Dibromofluoromethane (SURR**)	88%				
Toluene-d8 (SURR**)	107%				
1-Bromo-4-Fluorobenzene (SURR**)	100%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372654 **MW-6** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	1	0.29	0.97
Bromobenzene	ND	ug/L	1	0.10	0.37
Bromochloromethane	ND	ug/L	1	0.27	0.89
Bromodichloromethane	ND	ug/L	1	0.32	1.1
Bromoform	ND	ug/L	1	0.28	0.92
Bromomethane	ND	ug/L	1	0.39	1.3
n-Butylbenzene	ND	ug/L	1	0.31	1.0
sec-Butylbenzene	ND	ug/L	1	0.33	1.1
tert-Butylbenzene	ND	ug/L	1	0.31	1.0
Carbon Tetrachloride	ND	ug/L	1	0.30	0.98
Chlorobenzene	ND	ug/L	1	0.21	0.70
Chloroethane	ND	ug/L	1	1.7	5.7
Chloroform	ND	ug/L	1	0.30	0.99
Chloromethane	ND	ug/L	1	0.24	0.75
2-Chlorotoluene	ND	ug/L	1	0.39	1.3
4-Chlorotoluene	ND	ug/L	1	0.37	1.2
Dibromochloromethane	ND	ug/L	1	0.29	0.97
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.33	1.1
1,2-Dibromoethane	ND	ug/L	1	0.30	1.0
Dibromomethane	ND	ug/L	1	0.32	1.1
1,2-Dichlorobenzene	ND	ug/L	1	0.28	0.93
1,3-Dichlorobenzene	ND	ug/L	1	0.24	0.79
1,4-Dichlorobenzene	ND	ug/L	1	0.23	0.78
Dichlorodifluoromethane	ND	ug/L	1	0.18	0.63
1,1-Dichloroethane	ND	ug/L	1	0.30	0.99
1,2-Dichloroethane	ND	ug/L	1	0.34	1.1
1,1-Dichloroethene	ND	ug/L	1	0.41	1.4
cis-1,2-Dichloroethene	ND	ug/L	1	0.40	1.3
trans-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2
1,2-Dichloropropane	ND	ug/L	1	0.35	1.2
1,3-Dichloropropane	ND	ug/L	1	0.34	1.1
2,2-Dichloropropane	ND	ug/L	1	0.44	1.5
1,1-Dichloropropene	ND	ug/L	1	0.32	1.1
cis-1,3-Dichloropropene	ND	ug/L	1	0.27	0.89
trans-1,3-Dichloropropene	ND	ug/L	1	0.32	1.1
Ethylbenzene	ND	ug/L	1	0.26	0.87
Hexachlorobutadiene	ND	ug/L	1	0.41	1.4
Isopropylbenzene	ND	ug/L	1	0.36	1.2
p-Isopropyltoluene	ND	ug/L	1	0.30	1.0
Methylene chloride	ND	ug/L	1	0.43	1.4
Naphthalene	ND	ug/L	1	0.39	1.3
n-Propylbenzene	ND	ug/L	1	0.34	1.1
ortho-Xylene	ND	ug/L	1	0.27	0.89
Styrene	ND	ug/L	1	0.32	1.1
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.28	0.94
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.33	1.1
Tetrachloroethene	ND	ug/L	1	0.31	1.0
Toluene	ND	ug/L	1	0.34	1.1

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372654 **MW-6** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.36	1.2
1,2,4-Trichlorobenzene	ND	ug/L	1	0.37	1.2
1,1,1-Trichloroethane	ND	ug/L	1	0.27	0.88
1,1,2-Trichloroethane	ND	ug/L	1	0.42	1.4
Trichloroethene	ND	ug/L	1	0.25	0.82
Trichlorofluoromethane	ND	ug/L	1	0.38	1.3
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5
1,2,4-Trimethylbenzene	ND	ug/L	1	0.31	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1	0.39	1.3
Vinyl chloride	ND	ug/L	1	0.11	0.38
meta,para-Xylene	ND	ug/L	1	0.62	2.1
MTBE	ND	ug/L	1	0.31	1.0
Isopropyl Ether	ND	ug/L	1	0.35	1.2
Dibromofluoromethane (SURR**)	103%				
Toluene-d8 (SURR**)	118%				
1-Bromo-4-Fluorobenzene (SURR**)	113%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372655 **MW-6A** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	1	0.29	0.97
Bromobenzene	ND	ug/L	1	0.10	0.37
Bromochloromethane	ND	ug/L	1	0.27	0.89
Bromodichloromethane	ND	ug/L	1	0.32	1.1
Bromoform	ND	ug/L	1	0.28	0.92
Bromomethane	ND	ug/L	1	0.39	1.3
n-Butylbenzene	ND	ug/L	1	0.31	1.0
sec-Butylbenzene	ND	ug/L	1	0.33	1.1
tert-Butylbenzene	ND	ug/L	1	0.31	1.0
Carbon Tetrachloride	ND	ug/L	1	0.30	0.98
Chlorobenzene	ND	ug/L	1	0.21	0.70
Chloroethane	ND	ug/L	1	1.7	5.7
Chloroform	ND	ug/L	1	0.30	0.99
Chloromethane	ND	ug/L	1	0.24	0.75
2-Chlorotoluene	ND	ug/L	1	0.39	1.3
4-Chlorotoluene	ND	ug/L	1	0.37	1.2
Dibromochloromethane	ND	ug/L	1	0.29	0.97
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.33	1.1
1,2-Dibromoethane	ND	ug/L	1	0.30	1.0
Dibromomethane	ND	ug/L	1	0.32	1.1
1,2-Dichlorobenzene	ND	ug/L	1	0.28	0.93
1,3-Dichlorobenzene	ND	ug/L	1	0.24	0.79
1,4-Dichlorobenzene	ND	ug/L	1	0.23	0.78
Dichlorodifluoromethane	ND	ug/L	1	0.18	0.63
1,1-Dichloroethane	ND	ug/L	1	0.30	0.99
1,2-Dichloroethane	ND	ug/L	1	0.34	1.1
1,1-Dichloroethene	ND	ug/L	1	0.41	1.4
cis-1,2-Dichloroethene	ND	ug/L	1	0.40	1.3
trans-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2
1,2-Dichloropropane	ND	ug/L	1	0.35	1.2
1,3-Dichloropropane	ND	ug/L	1	0.34	1.1
2,2-Dichloropropane	ND	ug/L	1	0.44	1.5
1,1-Dichloropropene	ND	ug/L	1	0.32	1.1
cis-1,3-Dichloropropene	ND	ug/L	1	0.27	0.89
trans-1,3-Dichloropropene	ND	ug/L	1	0.32	1.1
Ethylbenzene	ND	ug/L	1	0.26	0.87
Hexachlorobutadiene	ND	ug/L	1	0.41	1.4
Isopropylbenzene	ND	ug/L	1	0.36	1.2
p-Isopropyltoluene	ND	ug/L	1	0.30	1.0
Methylene chloride	ND	ug/L	1	0.43	1.4
Naphthalene	ND	ug/L	1	0.39	1.3
n-Propylbenzene	ND	ug/L	1	0.34	1.1
ortho-Xylene	ND	ug/L	1	0.27	0.89
Styrene	ND	ug/L	1	0.32	1.1
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.28	0.94
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.33	1.1
Tetrachloroethene	ND	ug/L	1	0.31	1.0
Toluene	ND	ug/L	1	0.34	1.1

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372655 **MW-6A** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.36	1.2
1,2,4-Trichlorobenzene	ND	ug/L	1	0.37	1.2
1,1,1-Trichloroethane	ND	ug/L	1	0.27	0.88
1,1,2-Trichloroethane	ND	ug/L	1	0.42	1.4
Trichloroethene	ND	ug/L	1	0.25	0.82
Trichlorofluoromethane	ND	ug/L	1	0.38	1.3
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5
1,2,4-Trimethylbenzene	ND	ug/L	1	0.31	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1	0.39	1.3
Vinyl chloride	ND	ug/L	1	0.11	0.38
meta,para-Xylene	ND	ug/L	1	0.62	2.1
MTBE	ND	ug/L	1	0.31	1.0
Isopropyl Ether	ND	ug/L	1	0.35	1.2
Dibromofluoromethane (SURR**)	103%				
Toluene-d8 (SURR**)	112%				
1-Bromo-4-Fluorobenzene (SURR**)	107%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**

Project Description: DB Oak-Thomas Ind

Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372656 **Dup-1** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	500	150	480
Bromobenzene	ND	ug/L	500	52	180
Bromochloromethane	ND	ug/L	500	130	440
Bromodichloromethane	ND	ug/L	500	160	530
Bromoform	ND	ug/L	500	140	460
Bromomethane	ND	ug/L	500	190	650
n-Butylbenzene	ND	ug/L	500	160	520
sec-Butylbenzene	ND	ug/L	500	160	550
tert-Butylbenzene	ND	ug/L	500	150	520
Carbon Tetrachloride	ND	ug/L	500	150	490
Chlorobenzene	ND	ug/L	500	100	350
Chloroethane	ND	ug/L	500	850	2800
Chloroform	ND	ug/L	500	150	490
Chloromethane	ND	ug/L	500	120	380
2-Chlorotoluene	ND	ug/L	500	200	660
4-Chlorotoluene	ND	ug/L	500	180	610
Dibromochloromethane	ND	ug/L	500	150	490
1,2-Dibromo-3-Chloropropane	ND	ug/L	500	170	550
1,2-Dibromoethane	ND	ug/L	500	150	500
Dibromomethane	ND	ug/L	500	160	530
1,2-Dichlorobenzene	ND	ug/L	500	140	460
1,3-Dichlorobenzene	ND	ug/L	500	120	390
1,4-Dichlorobenzene	ND	ug/L	500	120	390
Dichlorodifluoromethane	ND	ug/L	500	89	320
1,1-Dichloroethane	ND	ug/L	500	150	500
1,2-Dichloroethane	ND	ug/L	500	170	570
1,1-Dichloroethene	ND	ug/L	500	210	680
cis-1,2-Dichloroethene	3800	ug/L	500	200	670
trans-1,2-Dichloroethene	ND	ug/L	500	170	580
1,2-Dichloropropane	ND	ug/L	500	170	580
1,3-Dichloropropane	ND	ug/L	500	170	560
2,2-Dichloropropane	ND	ug/L	500	220	730
1,1-Dichloropropene	ND	ug/L	500	160	540
cis-1,3-Dichloropropene	ND	ug/L	500	130	450
trans-1,3-Dichloropropene	ND	ug/L	500	160	540
Ethylbenzene	ND	ug/L	500	130	430
Hexachlorobutadiene	ND	ug/L	500	210	690
Isopropylbenzene	ND	ug/L	500	180	610
p-Isopropyltoluene	ND	ug/L	500	150	510
Methylene chloride	ND	ug/L	500	210	710
Naphthalene	ND	ug/L	500	200	650
n-Propylbenzene	ND	ug/L	500	170	560
ortho-Xylene	ND	ug/L	500	130	440
Styrene	ND	ug/L	500	160	530
1,1,1,2-Tetrachloroethane	ND	ug/L	500	140	470
1,1,2,2-Tetrachloroethane	ND	ug/L	500	160	550
Tetrachloroethene	[160]	ug/L	500	150	510
Toluene	ND	ug/L	500	170	560

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372656 **Dup-1** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	500	180	610
1,2,4-Trichlorobenzene	ND	ug/L	500	180	610
1,1,1-Trichloroethane	ND	ug/L	500	130	440
1,1,2-Trichloroethane	ND	ug/L	500	210	700
Trichloroethene	[160]	ug/L	500	120	410
Trichlorofluoromethane	ND	ug/L	500	190	640
1,2,3-Trichloropropane	ND	ug/L	500	220	730
1,2,4-Trimethylbenzene	ND	ug/L	500	150	510
1,3,5-Trimethylbenzene	ND	ug/L	500	200	650
Vinyl chloride	ND	ug/L	500	53	190
meta,para-Xylene	ND	ug/L	500	310	1000
MTBE	ND	ug/L	500	150	510
Isopropyl Ether	ND	ug/L	500	180	590
Dibromofluoromethane (SURR**)	103%				
Toluene-d8 (SURR**)	111%				
1-Bromo-4-Fluorobenzene (SURR**)	103%				

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372657 **Trip blank** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Benzene	ND	ug/L	1	0.29	0.97
Bromobenzene	ND	ug/L	1	0.10	0.37
Bromochloromethane	ND	ug/L	1	0.27	0.89
Bromodichloromethane	ND	ug/L	1	0.32	1.1
Bromoform	ND	ug/L	1	0.28	0.92
Bromomethane	ND	ug/L	1	0.39	1.3
n-Butylbenzene	ND	ug/L	1	0.31	1.0
sec-Butylbenzene	ND	ug/L	1	0.33	1.1
tert-Butylbenzene	ND	ug/L	1	0.31	1.0
Carbon Tetrachloride	ND	ug/L	1	0.30	0.98
Chlorobenzene	ND	ug/L	1	0.21	0.70
Chloroethane	ND	ug/L	1	1.7	5.7
Chloroform	ND	ug/L	1	0.30	0.99
Chloromethane	ND	ug/L	1	0.24	0.75
2-Chlorotoluene	ND	ug/L	1	0.39	1.3
4-Chlorotoluene	ND	ug/L	1	0.37	1.2
Dibromochloromethane	ND	ug/L	1	0.29	0.97
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.33	1.1
1,2-Dibromoethane	ND	ug/L	1	0.30	1.0
Dibromomethane	ND	ug/L	1	0.32	1.1
1,2-Dichlorobenzene	ND	ug/L	1	0.28	0.93
1,3-Dichlorobenzene	ND	ug/L	1	0.24	0.79
1,4-Dichlorobenzene	ND	ug/L	1	0.23	0.78
Dichlorodifluoromethane	ND	ug/L	1	0.18	0.63
1,1-Dichloroethane	ND	ug/L	1	0.30	0.99
1,2-Dichloroethane	ND	ug/L	1	0.34	1.1
1,1-Dichloroethene	ND	ug/L	1	0.41	1.4
cis-1,2-Dichloroethene	ND	ug/L	1	0.40	1.3
trans-1,2-Dichloroethene	ND	ug/L	1	0.35	1.2
1,2-Dichloropropane	ND	ug/L	1	0.35	1.2
1,3-Dichloropropane	ND	ug/L	1	0.34	1.1
2,2-Dichloropropane	ND	ug/L	1	0.44	1.5
1,1-Dichloropropene	ND	ug/L	1	0.32	1.1
cis-1,3-Dichloropropene	ND	ug/L	1	0.27	0.89
trans-1,3-Dichloropropene	ND	ug/L	1	0.32	1.1
Ethylbenzene	ND	ug/L	1	0.26	0.87
Hexachlorobutadiene	ND	ug/L	1	0.41	1.4
Isopropylbenzene	ND	ug/L	1	0.36	1.2
p-Isopropyltoluene	ND	ug/L	1	0.30	1.0
Methylene chloride	ND	ug/L	1	0.43	1.4
Naphthalene	ND	ug/L	1	0.39	1.3
n-Propylbenzene	ND	ug/L	1	0.34	1.1
ortho-Xylene	ND	ug/L	1	0.27	0.89
Styrene	ND	ug/L	1	0.32	1.1
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.28	0.94
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.33	1.1
Tetrachloroethene	ND	ug/L	1	0.31	1.0
Toluene	ND	ug/L	1	0.34	1.1

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: NewFields Companies LLC **NLS Project: 89941 PO # 0451-002-800**
Project Description: DB Oak-Thomas Ind
Project Title: **Template: SATW** **Printed: 06/07/2005 08:55**

Sample: 372657 **Trip blank** **Collected: 06/01/05** **Analyzed: 06/06/05 -**

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
1,2,3-Trichlorobenzene	ND	ug/L	1	0.36	1.2
1,2,4-Trichlorobenzene	ND	ug/L	1	0.37	1.2
1,1,1-Trichloroethane	ND	ug/L	1	0.27	0.88
1,1,2-Trichloroethane	ND	ug/L	1	0.42	1.4
Trichloroethene	ND	ug/L	1	0.25	0.82
Trichlorofluoromethane	ND	ug/L	1	0.38	1.3
1,2,3-Trichloropropane	ND	ug/L	1	0.44	1.5
1,2,4-Trimethylbenzene	ND	ug/L	1	0.31	1.0
1,3,5-Trimethylbenzene	ND	ug/L	1	0.39	1.3
Vinyl chloride	ND	ug/L	1	0.11	0.38
meta,para-Xylene	ND	ug/L	1	0.62	2.1
MTBE	ND	ug/L	1	0.31	1.0
Isopropyl Ether	ND	ug/L	1	0.35	1.2
Dibromofluoromethane (SURR**)	95%				
Toluene-d8 (SURR**)	98%				
1-Bromo-4-Fluorobenzene (SURR**)	92%				

** Surrogates are used to evaluate a method's Quality Control.

SAMPLE COLLECTION AND CHAIN OF CUSTODY RECORD

NORTHERN LAKE SERVICE, INC.

Analytical Laboratory and Environmental Services

400 North Lake Avenue • Crandon, WI 54520-1298

Tel: (715) 478-2777 • Fax: (715) 478-3060

Wisconsin Lab Cert. No. 721026460

WI DATCP 105-000330

NO. 79957

CLIENT	NEWFIELDS
ADDRESS	2110 LAURIE LANE
CITY / STATE / ZIP	MADISON / WI / 53714
PROJECT DESCRIPTION / NO.	DB OAK - THOMAS-TWD
QUOTATION NO.	
DNR FID #	
DNR LICENSE #	
CONTACT	MARK McCOLLOM
PHONE	608/441-5223
PURCHASE ORDER NO.	0457-002-800
FAX	608/442-7943

MATRIX:
SW = surface water
WW = waste water
GW = groundwater
DW = drinking water
TIS = tissue
AIR = air
SOIL = soil
SED = sediment
PROD = product
SL = sludge
OTHER

ANALYZE PER ORDER OF ANALYSIS

USE BOXES BELOW: Indicate Y or N if GW Sample is field filtered.
Indicate G or C if WW Sample is Grab or Composite.

VOC vials

PARAMETER

ITEM NO.	NLS LAB. NO.	SAMPLE ID	COLLECTION DATE	COLLECTION TIME	MATRIX (See above)	VOC vials	COLLECTION REMARKS (i.e. DNR Well ID #)
1.	372656	DUP-1	6/1/05	955	GW	2	
2.	372657	TRIP BLANK				1	
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

ONE SAMPLE PER LINE

COLLECTED BY (signature)	CUSTODY SEAL NO. (IF ANY)	DATE/TIME
RELINQUISHED BY (signature)	RECEIVED BY (signature)	DATE/TIME
DISPATCHED BY (signature)	METHOD OF TRANSPORT	DATE/TIME

REPORT TO: same

INVOICE TO: same

RECEIVED AT NLS BY (signature)	DATE/TIME 6/2/05 1030	CONDITION On ice	TEMP.
COOLER # 10-52	REMARKS & OTHER INFORMATION		
	WDNR FACILITY NUMBER	E-MAIL ADDRESS	

PRESERVATIVE:
NP = no preservative
S = sulfuric acid
N = nitric acid
Z = zinc acetate
M = methanol
OH = sodium hydroxide
HA = hydrochloric & ascorbic acid
H = hydrochloric acid

IMPORTANT:

1. TO MEET REGULATORY REQUIREMENTS, THIS FORM **MUST** BE COMPLETED IN DETAIL AND INCLUDED IN THE COOLER CONTAINING THE SAMPLES DESCRIBED.
2. PLEASE USE ONE LINE PER SAMPLE, **NOT** PER BOTTLE.
3. RETURN THIS FORM WITH SAMPLES - CLIENT MAY KEEP PINK COPY.
4. PARTIES COLLECTING SAMPLE, LISTED AS **REPORT TO** AND LISTED AS **INVOICE TO** AGREE TO STANDARD TERMS & CONDITIONS ON REVERSE.

DUPLICATE COPY

SAMPLE COLLECTION AND CHAIN OF CUSTODY RECORD

NORTHERN LAKE SERVICE, INC.

Analytical Laboratory and Environmental Services

400 North Lake Avenue • Crandon, WI 54520-1298

Tel: (715) 478-2777 • Fax: (715) 478-3060

Wisconsin Lab Cert. No. 721026460

WI DATCP 105-000330

NO. 79956

CLIENT	NEWFIELDS
ADDRESS	2110 LUANN LANE
CITY / STATE / ZIP	MADISON / WI / 53714
PROJECT DESCRIPTION / NO.	DB OAK - THOMAS IND
QUOTATION NO.	
DNR FID #	
DNR LICENSE #	
CONTACT	MARK McCULLOCH
PHONE	608/ 442-5223
PURCHASE ORDER NO.	0451-002-800
FAX	608/ 442-7013

MATRIX:
SW = surface water
WW = waste water
GW = groundwater
DW = drinking water
TIS = tissue
AIR = air
SOIL = soil
SED = sediment
PROD = product
SL = sludge
OTHER

USE BOXES BELOW: Indicate Y or N if GW Sample is field filtered.
Indicate G or C if WW Sample is Grab or Composite.

ANALYZE PER ORDER OF ANALYSIS

ITEM NO.	NLS LAB. NO.	SAMPLE ID	COLLECTION DATE	COLLECTION TIME	MATRIX (See above)		VOCs 40mL VOA=3	PARAMETER										COLLECTION REMARKS (i.e. DNR Well ID #)
							V-HA											
1.	372646	MW-1	6/1/05	900	GW		2											
2.	372647	MW-2		955			2											* elevated VOCs
3.	372648	MW-2A		1015			2											
4.	372649	MW-3		1110			2											* elevated VOCs last sample
5.	372650	MW-3A		1130			2											
6.	372651	MW-4		1035			2											* elevated VOCs
7.	372652	MW-4A		1040			2											
8.	372653	MW-5		925			2											
9.	372654	MW-6		825			2											
10.	372655	MW-6A		830			2											

ONE SAMPLE PER LINE

COLLECTED BY (signature) Mark McCulloch	CUSTODY SEAL NO. (IF ANY)	DATE/TIME 6/1/05 1040PM
RELINQUISHED BY (signature) Mark McCulloch	RECEIVED BY (signature) Dunham Express	DATE/TIME 6/1/05 300PM
DISPATCHED BY (signature)	METHOD OF TRANSPORT	DATE/TIME

REPORT TO
MARK McCULLOCH
@ NEWFIELDS

INVOICE TO
SAME

RECEIVED AT NLS BY (Signature)	DATE/TIME 6/2/05 @ 1030	CONDITION OK, ICE	TEMP.
COOLER # 10-50	REMARKS & OTHER INFORMATION Dunk		
	WDNR FACILITY NUMBER	E-MAIL ADDRESS	

PRESERVATIVE:
NP = no preservative
S = sulfuric acid
N = nitric acid
Z = zinc acetate
M = methanol
OH = sodium hydroxide
HA = hydrochloric & ascorbic acid
H = hydrochloric acid

IMPORTANT:

1. TO MEET REGULATORY REQUIREMENTS, THIS FORM **MUST** BE COMPLETED IN DETAIL AND INCLUDED IN THE COOLER CONTAINING THE SAMPLES DESCRIBED.
2. PLEASE USE ONE LINE PER SAMPLE, **NOT** PER BOTTLE.
3. RETURN THIS FORM WITH SAMPLES - CLIENT MAY KEEP PINK COPY.
4. PARTIES COLLECTING SAMPLE, LISTED AS **REPORT TO** AND LISTED AS **INVOICE TO** AGREE TO STANDARD TERMS & CONDITIONS ON REVERSE.

DUPLICATE COPY

Appendix E

Mobile Laboratory Reports
Soil Sample Results

May 31, 2005

Mark McColloch
NewFields
2110 Luann Lane Suite 101
Madison, WI. 53713

Dear Mr. McColloch,

Enclosed are the Technical Memorandum for work recently performed at the former D.B. Oaks Site in Ft. Atkinson, Wisconsin. If you have any questions concerning this information, give me a call.

Sincerely,

Bruce Gallant

Enclosure

Environmental Chemistry Consulting Services, Inc.
2525 Advance Road • Madison, WI 53718 • Phone (608) 221-8700 • FAX (608) 221-4889

TECHNICAL MEMORANDUM

May 31, 2005

To: Mark McColloch
NewFields

From: Bruce Gallant
ECCS

Re: Volatile Organic Compound (VOC) Field Analytical Methods
Former D.B. Oaks Facility
Ft. Atkinson, WI

Introduction

This Technical Memorandum provides documentation of the field analytical test methods used to analyze soil samples collected on 5/16/05 thru 5/19/05 during the investigation at the former D.B. Oaks facility in Ft. Atkinson WI. The soil samples were analyzed for the VOCs – Vinyl chloride,1,1-Dichloroethene,trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, Benzene, Trichloroethene, Toluene and Tetrachloroethene. These VOCs were measured with high-resolution gas chromatography (GC) using a mass selective detector (MSD). The MSD provides for selective detection of the VOCs by extracting specific target ions for quantitation from the total ion chromatogram. All soil samples received were analyzed by methanol extraction and direct injection into a Hewlett-Packard 5971 GC/MS system. All samples were analyzed by a High level analysis to determine sample constituents above 1.0 ppm in the soil. The calibration range for the High level analysis was 1 – 200 ppm of target analytes.

Samples which had target compounds present at less than 5.0 ppm or were non detected for the analytes were analyzed by direct injection SIM analysis providing a calibration range of 50 – 10,000 ug/Kg (ppb).

Narrative

Ten grams (10 g) of the soil sample was weighed into a glass scintillation vial and ten milliliters of methanol added. The sample extracts shaken for 5 minutes, or sufficient time to break up the soil clumps to facilitate extraction, and centrifuged. One milliliter of each extract was then placed into each of two auto sampler vials and spiked with surrogate and internal standard solutions depending on the method to be run, either high level VOC or low level VOC.

All extracts were analyzed by the high level VOC method and spiked with 20 ul of a 1250 ug/ml IS/SS mix. Sample extracts that required low level VOC analysis were spiked with 20 ul of a 62.5 ug/ml IS/SS solution. Only high level samples were analyzed as MS/MSD and ere spiked with 20 ul of a 500 ug/ml spike solution. LCS samples were spiked with 10 ul of this spike solution.

The test results for High Level samples are listed in Table 1 and the test results for Low Level sample analysis are listed in Table 2.

VOC Method Summary

The soil samples were provided by the client to the field lab. The soil samples were collected in 4 oz. glass jars. 2 ul of soil extract was injected into the GC/MS system operated in the split mode.

GC/MSD Procedure:

Identification of target compounds was done by matching retention times and mass spectra of peaks found in samples to those found in a VOC calibration standard. The calibration standards were prepared from a certified solution of VOCs in methanol. For the high level method an eight point calibration curve was analyzed to calibrate for the target compounds. The levels used for this calibration were 1.0, 2.5,5.0 10,25,50 100 and 200 ppm. The low level method was calibrated using eight calibration standards at levels of 10 ppm, 5.0 ppm, 2.5 ppm, 1.25 ppm, 0.5 ppm, 0.25 ppm , 0.125 ppm and 0.05 ppm.

A Hewlett-Packard 5890 gas chromatograph with a 30m x 0.32mm, Rtx-624 capillary column interfaced to a Hewlett-Packard 5972 MSD was used. The GC/MSD was operated in the split mode. The split ratio was 10:1. The data system included a Hewlett-Packard Enviroquant chromatography workstation for data handling.

Quality control consisted of the following items:

- Initial calibration of GC/MSD with eight levels of calibration standard with a minimum resulting linearity of 0.98 (r^2).
- Continuing Calibration Verification standards analyzed at a frequency of every ten samples
- Blank sample analysis at a minimum, frequency of one in every 20 samples
- Matrix spike and Matrix Spike Duplicate sample analysis for High Level Analysis
- Laboratory Control Spikes
- Information documented in Field Logbook 16 pages 154-156.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-001 C5-2.5'		2203-002 C5-5'		2203-003 C5-7.5'		2203-004 D5-2.5'		2203-005 D5-5'		2203-006 D5-7.5'		2203-007 E5-2.5'		2203-008 E5-5'	
Vinyl chloride	1	**1**	U	**1**	U	1	U	1	U	1	U	1	U	1	U	50	U
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	50	U
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	50	U
cis-1,2-Dichloroethene	1	1	U	1	U	1	U	**1.5**		1	U	1	U	**1.6**		50	U
Benzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	50	U
Trichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	50	U
Toluene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	50	U
Tetrachloroethene	1	**2.7**		**4.3**		**5.4**		**5.1**		**9.8**		**8.2**		1	U	**930**	
Dibromofluoromethane	%	85.1		87.7		84.4		85.6		85.0		83.6		84.0		86.8	
Toluene-d8	%	88.9		90.6		89.1		88.8		89.7		90.8		90.3		90.4	
4-Bromofluorobenzene	%	88.6		90.8		87.0		88.7		86.2		89.2		85.6		90.5	

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-009 E5-7.5'		2203-010 E6-2.5'		2203-011 E6-5'		2203-012 E6-7.5'		2203-013 D6-2.5'		2203-014 D6-5'		2203-015 D6-7.5'		2203-016 C7-2.5'	
Vinyl chloride	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	1	**3.1**		1	U	1	U	**2.3**		1	U	1	U	1	U	**2.2**	
Benzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	**1.2**		1	U	1	U	1	U	1	U	1	U	**1.0**		**1.3**	
Toluene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	1	**35**		1	U	1	U	1	U	1	U	**1.5**		**3.0**		1	U
Dibromofluoromethane	%	83.1		84.8		84.7		91.1		81.0		84.1		85.2		87.6	
Toluene-d8	%	90.7		90.5		91.1		91.6		89.6		90.9		90.2		90.7	
4-Bromofluorobenzene	%	87.4		85.9		86.9		91.2		85.2		87.4		87.9		87.2	

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-017 C7-5'		2203-018 C7-7.5'		2203-019 D7-2.5'		2203-020 D7-5'		2203-021 D7-7.5'		2203-022 E7-2.5'		2203-023 E7-5'		2203-024 E7-7.5'	
Vinyl chloride	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	1	**5.3**		**5.9**		1	U	**6.2**		1	U	**1.6**		1	U	**1.0**	
Benzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	**11**		**13**		1	U	**7.8**		**11**		**5.3**		1	U	1	U
Toluene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	1	**4.2**		**39**		1	U	**22**		**390**	D	**3.2**		1	U	**1.7**	
Dibromofluoromethane	%	84.0		80.9		84.8		85.0		84.8		92.8		86.2		85.6	
Toluene-d8	%	89.2		88.8		89.2		88.2		90.7		92.4		92.0		91.5	
4-Bromofluorobenzene	%	85.2		84.3		86.9		84.9		85.0		91.8		88.2		86.3	

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-025 C4-2.5'	2203-026 C4-5'	2203-027 C4-7.5'	2203-028 D4-2.5'	2203-029 D4-4'	2203-030 D4-8'	2203-031 E4-2.5'	2203-032 E4-5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	**1.5**	**1.4**
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	1 U	**1.1**	1 U	1 U	**3.4**	**3.1**
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	1 U	1 U	**1.0**	**5.9**	**1.8**	**17**	**4.9**	**20**
Dibromofluoromethane	%	82.4	91.3	82.8	83.8	83.7	81.9	81.2	80.1
Toluene-d8	%	88.7	93.2	89.6	89.1	90.5	89.4	89.1	87.1
4-Bromofluorobenzene	%	84.4	93.0	86.2	82.1	85.4	86.1	83.1	82.7

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-033 E4-7.5'	2203-034 C16-2.5'	2203-035 C16-5'	2203-036 C16-7.5'	2203-037 D16-2.5'	2203-038 D16-5'	2203-039 D16-7.5'	2203-040 C15-2.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	**10**	**14**	**81**	1 U	1 U	**11**	**1.3**
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	**21**	**4.7**	**4.2**	**98**	1 U	1 U	**13**	**3.0**
Dibromofluoromethane	%	81.1	83.0	88.8	88.7	77.8	87.9	82.0	79.7
Toluene-d8	%	88.2	90.1	91.6	91.4	87.8	91.8	90.1	89.5
4-Bromofluorobenzene	%	84.0	86.0	90.2	91.3	82.6	91.4	86.0	86.3

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-041 C15-5'		2203-042 C15-7.5'		2203-043 A8-2.5'		2203-044 A8-5'		2203-045 A8-7.5'		2203-046 A8-10'		2203-047 A4-2.5'		2203-048 A4-5'	
Vinyl chloride	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	**2.2**		1	U	1	U
Benzene	1	1	U	1	U	1	U	**1.2**		1	U	1	U	1	U	1	U
Trichloroethene	1	**3.4**		**2.7**		1	U	1	U	1	U	1	U	1	U	1	U
Toluene	1	1	U	1	U	1	U	**75**		1	U	1	U	1	U	1	U
Tetrachloroethene	1	**4.3**		**5.6**		1	U	1	U	1	U	**2.4**		1	U	1	U
Dibromofluoromethane	%	92.7		83.3		83.6		82.0		92.2		83.7		79.5		90.2	
Toluene-d8	%	92.3		90.2		88.4		89.6		93.5		90.4		88.4		92.7	
4-Bromofluorobenzene	%	94.0		86.1		84.5		87.2		93.5		86.7		80.9		92.8	

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-049 A4-7.5'		2203-050 A4-10'		2203-051 C8-2.5'		2203-052 C8-5'		2203-053 C8-7.5'		2203-054 D8-2.5'		2203-055 D8-5'		2203-056 D8-7.5'	
Vinyl chloride	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	1	1	U	1	U	**2.1**		**3.5**		**3.1**		**9.4**		1	U	**1.3**	
Benzene	1	**16**		1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	1	U	1	U	**3.5**		**180**		**1200**	D	**1.6**		**2.2**		**160**	
Toluene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	1	1	U	1	U	**3.1**		**2100**	D	**6400**	D	**1.6**		**35**		**1600**	D
Dibromofluoromethane	%	235		81.0		90.2		82.6		80.5		81.4		81.3		80.7	
Toluene-d8	%	41.4		88.2		92.4		89.8		88.8		91.8		89.6		90.2	
4-Bromofluorobenzene	%	83.2		83.6		92.9		81.3		82.7		85.0		84.8		86.2	

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-057 E8-2.5'		2203-058 E8-5'		2203-059 E8-7.5'		2203-060 C9-2.5'		2203-061 C9-5'		2203-062 C9-7.5'		2203-063 D9-2.5'		2203-064 D9-5'	
Vinyl chloride	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	1	**4.9**		1	U	**1.3**		**3.2**		**1.9**		**2.5**		1	U	1	U
Benzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	1	U	**1.6**		**1.7**		**1.3**		**14**		**120**		**2.3**		**2.5**	
Toluene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	1	**1.3**		**6.6**		**6.9**		**3.2**		**76**		**980**	D	**27**		**26**	
Dibromofluoromethane	%	78.6		79.8		79.8		80.2		79.8		80.8		80.1		79.2	
Toluene-d8	%	89.2		88.9		88.4		89.2		89.5		89.0		89.2		89.9	
4-Bromofluorobenzene	%	84.4		84.0		82.4		83.6		83.9		83.1		85.0		83.5	

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-065 D9-7.5'	2203-066 E9-2.5'	2203-067 E9-5'	2203-068 E9-7.5'	2203-069 D10-2.5'	2203-070 D10-5'	2203-071 D10-7.5'	2203-072 C10-2.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	**1.0**	1 U	1	**1.4**	1 U	**4.1**
Benzene	1	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U
Trichloroethene	1	**3.6**	1 U	1 U	**1.1**	1	1 U	1 U	**1.1**
Toluene	1	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U
Tetrachloroethene	1	**26**	1 U	**1.4**	**2.5**	1	1 U	1 U	**1.5**
Dibromofluoromethane	%	80.4	81.6	82.4	89.2	80.6	81.8	83.1	79.6
Toluene-d8	%	89.8	90.9	92.6	92.9	91.7	90.5	91.3	91.2
4-Bromofluorobenzene	%	93.5	92.5	84.7	91.9	84.5	86.3	87.8	83.7

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-073 C10-5'	2203-074 C10-7.5'	2203-075 B16-2.5'	2203-076 B16-5'	2203-077 B16-7.5'	2203-078 B17-2.5'	2203-079 B17-5'	2203-080 B17-7.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	**10**	**8.7**	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	**7.7**	**12**	1 U	**1.6**	**7.2**	1 U	1 U	**31**
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	**4.7**	1 U	**1.4**	**5.9**	**13**	**11**	**3.6**	**530** D
Dibromofluoromethane	%	81.3	82.7	81.1	82.2	79.8	80.0	80.2	81.3
Toluene-d8	%	91.4	90.4	91.8	91.1	91.7	90.2	89.6	91.8
4-Bromofluorobenzene	%	83.5	84.8	84.2	85.4	86.6	84.8	82.0	85.4

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-081 D17-2.5'	2203-082 D17-5'	2203-083 D17-7.5'	2203-084 D18-2.5'	2203-085 D18-5'	2203-086 D18-7.5'	2203-087 D19-2.5'	2203-088 D19-7.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	**5.1**	1 U	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	1 U	**1.1**	**38**	1 U	1 U	**19**	1 U	1 U
Dibromofluoromethane	%	80.4	81.8	89.4	79.0	89.2	78.3	80.7	78.0
Toluene-d8	%	90.9	90.6	91.2	89.6	91.3	89.5	89.0	91.3
4-Bromofluorobenzene	%	81.6	85.1	90.8	81.9	92.4	80.9	84.0	83.9

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-089 B19-2.5'	2203-090 B19-5'	2203-091 B19-7.5'	2203-092 C19-2.5'	2203-093 C19-5'	2203-094 C19-7.5'	2203-095 B18-2.5'	2203-096 B18-5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromofluoromethane	%	80.6	82.0	79.2	90.5	77.9	88.4	77.9	79.7
Toluene-d8	%	91.1	90.6	88.0	92.1	88.7	92.0	89.6	89.5
4-Bromofluorobenzene	%	82.8	85.6	83.0	92.6	83.4	89.8	83.5	84.8

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-097 B18-7.5'	2203-098 C17-2.5'	2203-099 C17-5'	2203-100 C17-7.5'	2203-101 B15-2.5'	2203-102 B15-5'	2203-103 B15-7.5'	2203-104 D15-2.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	1 U	**3.2**	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	1 U	1 U	1 U	**2.5**	1 U	**1.0**	**3.0**	1 U
Dibromofluoromethane	%	79.2	79.8	82.3	78.4	81.2	79.2	80.9	80.2
Toluene-d8	%	88.1	88.1	91.4	90.2	90.7	89.6	90.1	90.1
4-Bromofluorobenzene	%	84.8	83.5	90.6	82.4	83.4	80.4	83.9	83.1

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-105 D15-5'	2203-106 D15-7.5'	2203-107 D14-2.5'	2203-108 D14-5'	2203-109 D14-7.5'	2203-110 C14-2.5'	2203-111 C14-5'	2203-112 C14-7.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	**1.5**	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	1 U	**1.8**	1 U	1 U	1 U	**1.3**	**1.9**	**1.8**
Dibromofluoromethane	%	81.6	78.1	81.8	80.8	80.9	81.2	79.8	81.5
Toluene-d8	%	90.6	90.4	89.5	90.4	89.6	91.0	89.5	89.4
4-Bromofluorobenzene	%	85.6	84.7	83.2	85.7	89.4	86.7	84.7	88.4

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-113 B14-2.5'	2203-114 B14-5'	2203-115 B14-7.5'	2203-116 D3-2.5'	2203-117 D3-5'	2203-118 D3-7.5'	2203-119 D2-2.5'	2203-120 D2-5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	**3.3**	1 U	1 U	**2.2**	**2.5**	**1.3**	**3.0**	**1.3**
Dibromofluoromethane	%	82.2	81.1	82.1	81.3	81.6	83.6	86.6	83.3
Toluene-d8	%	89.7	89.8	90.4	92.3	90.4	91.5	91.5	91.3
4-Bromofluorobenzene	%	87.4	84.7	88.1	84.9	84.8	86.1	89.2	85.6

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-121 D2-7.5'	2203-122 E2-2.5'	2203-123 E2-5'	2203-124 E2-7.5'	2203-125 E3-2.5'	2203-126 E3-5'	2203-127 E3-7.5'	2203-128 E10-2.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	**7.2**	1 U	1 U	1 U	1 U	1 U	**2.4**
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	**31**	1 U	1 U	**1.8**	1 U	1 U	**3.9**
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	1 U	**94**	**3.8**	**1.5**	**15**	**1.1**	**1.0**	**5.3**
Dibromofluoromethane	%	82.9	86.2	81.7	82.3	86.6	79.0	81.0	78.6
Toluene-d8	%	91.1	91.8	92.0	89.2	92.2	89.9	90.6	89.3
4-Bromofluorobenzene	%	86.0	89.2	85.0	82.4	90.5	79.8	84.8	81.8

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-129 E10-5'	2203-130 E10-7.5'	2203-131 D11-2.5'	2203-132 D11-5'	2203-133 D11-7.5'	2203-134 D12-2.5'	2203-135 D12-5'	2203-136 D12-7.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	**2.0**	1 U	1 U	1 U	**2.2**	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	**1.3**	**7.5**	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	**4.5**	**4.5**	1 U	**5.4**	**1.1**	1 U	**1.0**	1 U
Dibromofluoromethane	%	78.4	82.2	80.2	81.8	82.6	82.0	81.6	82.5
Toluene-d8	%	89.9	91.6	89.9	90.8	90.0	88.7	88.9	89.2
4-Bromofluorobenzene	%	83.4	86.2	84.2	83.9	85.2	84.9	86.0	85.4

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-137 C13-2.5'	2203-138 C13-5'	2203-139 C13-7.5'	2203-140 B13-2.5'	2203-141 B13-7.5'	2203-142 B13-5'	2203-143 A13-2.5'	2203-144 A13-5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	**5.4**	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	1 U	1 U	**1.4**	**36**	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	**1.8**	**1.6**	**1.6**	1 U	1 U	1 U	1 U	1 U
Dibromofluoromethane	%	80.6	78.1	323	81.8	87.5	88.5	79.0	82.6
Toluene-d8	%	89.9	89.4	91.6	88.9	91.3	91.8	89.4	91.8
4-Bromofluorobenzene	%	81.3	81.2	90.4	84.0	89.4	91.3	82.4	85.6

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-145 A13-7'	2203-146 X13-2.5'	2203-147 X13-5'	2203-148 X13-7.5'	2203-149 A6-2.5'	2203-150 A6-5'	2203-151 A6-7.5'	2203-152 A6-10'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	**1.6**	**2.0**
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	1 U	1 U	1 U	1 U	**2.5**	1 U	1 U	**8.3**
Dibromofluoromethane	%	80.8	79.0	83.4	87.3	82.3	81.3	78.5	85.4
Toluene-d8	%	89.9	89.2	90.0	93.1	89.7	88.8	88.4	91.2
4-Bromofluorobenzene	%	84.6	81.9	85.3	91.6	87.4	82.2	86.6	89.3

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-153 A10-2.5'	2203-154 A10-5'	2203-155 A10-7.5'	2203-156 A10-10'	2203-157 D1-2.5'	2203-158 D1-5'	2203-159 D1-7.5'	2203-160 E1-2.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	**1.0**	**2.3**	1 U	**2.2**	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	1 U	**2.9**	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	**4.0**	**1.7**	**1.2**	**28**	**1.8**	**4.4**	1 U	1 U
Dibromofluoromethane	%	77.8	89.3	89.8	78.1	79.2	89.0	78.5	79.3
Toluene-d8	%	88.8	92.9	92.8	89.4	89.5	93.9	89.6	90.0
4-Bromofluorobenzene	%	83.3	91.5	93	84.2	85.6	93.0	82.8	84.7

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-161 E1-5'	2203-162 E1-7.5'	2203-163 E0-2.5'	2203-164 E0-5'	2203-165 E0-7.5'	2203-166 D13-2.5'	2203-167 D13-5'	2203-168 D13-7.5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	**1.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromofluoromethane	%	78.2	78.6	87.0	78.5	80.0	84.0	79.1	87.6
Toluene-d8	%	90.0	90.3	92.2	90.6	89.4	92.5	89.4	92.1
4-Bromofluorobenzene	%	81.5	83.5	88.7	82.3	83.0	89.8	83.2	91.8

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-169 Y13-2.5'	2203-170 Y13-5'	2203-171 Y13-7.5'	2203-172 E11-2.5'	2203-173 E11-5'	2203-174 E11-7.5'	2203-175 A15-2.5'	2203-176 A15-5'
Vinyl chloride	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	**3.0**	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	**1.8**	**1.3**	**2.1**	**1.2**	**2.8**	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1	1 U	**3.2**	**3.0**	1 U	**5.0**	**9.8**	1 U	1 U
Dibromofluoromethane	%	75.7	85.4	130	82.7	89.0	78.2	88.7	79.2
Toluene-d8	%	88.0	91.7	92.4	91.8	92.4	89.9	92.9	90.2
4-Bromofluorobenzene	%	80.9	91.2	90.8	86.6	92.1	85.6	91.4	82.3

U = Non detect.
D = Result from dilution.

TABLE 1
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
High Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit mg/kg	2203-177 A15-7.5'		2203-178 A16-2.5'		2203-179 A16-5'		2203-180 A16-7.5'		2203-181 A17-2.5'		2203-182 A17-5'		2203-183 A17-7.5'		
Vinyl chloride	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	
1,1-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	
trans-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	
cis-1,2-Dichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	
Benzene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	
Trichloroethene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	
Toluene	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	
Tetrachloroethene	1	1	U	**2.5**		**2.2**		**1.6**		**1.7**		**1.3**		1	U	
Dibromofluoromethane	%	80.8		77.3		78.6		76.2		79.0		79.8		88.6		
Toluene-d8	%	89.4		89.5		89.9		89.4		88.8		89.5		92.7		
4-Bromofluorobenzene	%	83.0		83.6		83.4		82.4		81.7		83.8		90.8		

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-001 C5-2.5'	2203-002 C5-5'	2203-006 D5-7.5'	2203-007 E5-2.5'	2203-010 E6-2.5'	2203-011 E6-5'	2203-012 E6-7.5'	2203-013 D6-2.5'
Vinyl chloride	50	**170**	50 U	50 U	50 U	50 U	50 U	**440**	**94**
1,1-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
trans-1,2-Dichloroethene	50	50 U	50 U	50 U	**78**	50 U	50 U	50 U	50 U
cis-1,2-Dichloroethene	50	**280**	**110**	**150**	**3400**	50 U	50 U	**4200**	**230**
Benzene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Trichloroethene	50	50 U	**450**	**440**	**480**	50 U	50 U	**430**	50 U
Toluene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Tetrachloroethene	50	**3300**	**2700**	50 U	**860**	50 U	50 U	**75**	**68**
Dibromofluoromethane	%	78.8	118	75.4	78.3	123	89.3	96.0	118
Toluene-d8	%	94.7	97.7	91.9	92.9	97.4	96.9	98.3	93.1
4-Bromofluorobenzene	%	96.1	105	95.1	91.9	106	102	107	91.3

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-014 D6-5'	2203-015 D6-7.5'	2203-016 C7-2.5'	2203-019 D7-2.5'	2203-023 E7-5'	2203-024 E7-7.5'	2203-025 C4-2.5'	2203-026 C4-5'
Vinyl chloride	50	**54**	**81**	**190**	**330**	**84**	**140**	**52**	50 U
1,1-Dichloroethene	50	50 U	**70**	50 U	**100**	50 U	50 U	50 U	50 U
trans-1,2-Dichloroethene	50	50 U	50 U	50 U	**170**	50 U	**66**	50 U	50 U
cis-1,2-Dichloroethene	50	**160**	**710**	50 U	50 U	50 U	**830**	50 U	50 U
Benzene	50	50 U	50 U	50 U	**65**	50 U	50 U	50 U	50 U
Trichloroethene	50	**500**	50 U	**1800**	50 U	**540**	50 U	50 U	50 U
Toluene	50	50 U	50 U	50 U	**280**	50 U	50 U	50 U	50 U
Tetrachloroethene	50	**1400**	**3100**	50 U	**51**	**590**	**910**	**240**	50 U
Dibromofluoromethane	%	81.8	92.0	94.3	97.3	116	116	80.1	81.6
Toluene-d8	%	93.3	98.0	98.3	98.1	102	116	92.6	92.8
4-Bromofluorobenzene	%	96.8	106	105	106	97.0	103	95.5	94.7

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-027 C4-7.5'		2203-029 D4-4'		2203-030 D4-8'		2203-031 E4-2.5'		2203-037 D16-2.5'		2203-038 D16-5'		2203-040 C15-2.5'		2203-041 C15-5'	
Vinyl chloride	50	50	U	50	U	50	U	50	U	50	U	**61**		**52**		50	U
1,1-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
trans-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
cis-1,2-Dichloroethene	50	50	U	**55**		**110**		**1400**		50	U	50	U	50	U	50	U
Benzene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Trichloroethene	50	50	U	50	U	**330**		**3300**		**220**		**200**		50	U	**3400**	
Toluene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Tetrachloroethene	50	**570**		**750**		**18000**		**3300**		**280**		**350**		**2300**		**2300**	
Dibromofluoromethane	%	86.8		89.1		117		116		83.6		116		78.0		91.1	
Toluene-d8	%	95.7		98.5		90.0		96.9		91.5		92.0		93.3		96.8	
4-Bromofluorobenzene	%	99.7		103		95.0		105		96.7		94.1		93.4		101	

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-043 A8-2.5'		2203-046 A8-10'		2203-047 A4-2.5'		2203-048 A4-5'		2203-050 A4-10'		2203-051 C8-2.5'		2203-057 E8-2.5'		2203-060 C9-2.5'	
Vinyl chloride	50	50	U	**500**		50	U	**88**		50	U	**190**		50	U	**730**	
1,1-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
trans-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	**110**		50	U
cis-1,2-Dichloroethene	50	50	U	**1700**		50	U	50	U	50	U	**1700**		**4900**		**3400**	
Benzene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Trichloroethene	50	50	U	50	U	50	U	50	U	50	U	**3500**		50	U	50	U
Toluene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	**140**	
Tetrachloroethene	50	**450**		**1900**		50	U	**140**		50	U	**1900**		**960**		**1000**	
Dibromofluoromethane	%	120		75.2		116		117		119		119		79.1		92.4	
Toluene-d8	%	93.0		94.7		92.3		93.3		91.9		99.8		93.5		102	
4-Bromofluorobenzene	%	94.9		94.3		98.3		93.1		96.0		105		94.9		108	

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-066 E9-2.5'		2203-067 E9-5'		2203-068 E9-7.5'		2203-069 D10-2.5'		2203-070 D10-5'		2203-072 C10-2.5'		2203-075 B16-2.5'		2203-079 B17-5'	
Vinyl chloride	50	50	U	50	U	50	U	50	U	50	U	**710**		**81**		50	U
1,1-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	**580**		50	U	50	U
trans-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	**490**		50	U	50	U
cis-1,2-Dichloroethene	50	**560**		**630**		**540**		50	U	**1000**		50	U	50	U	50	U
Benzene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Trichloroethene	50	50	U	**550**		**1000**		50	U	50	U	**1100**		**220**		50	U
Toluene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Tetrachloroethene	50	**62**		**1200**		**1300**		**72**		**72**		**750**		**1100**		**2300**	
Dibromofluoromethane	%	82.0		75.7		89.0		120		78.0		88.8		77.5		116	
Toluene-d8	%	93.4		93.3		99.6		94.7		92.9		97.1		95.5		97.2	
4-Bromofluorobenzene	%	97.5		91.4		102		92.3		92.7		101		93.6		104	

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-081 D17-2.5'	2203-082 D17-5'	2203-084 D18-2.5'	2203-085 D18-5'	2203-087 D19-2.5'	2203-088 D19-7.5'	2203-089 B19-2.5'	2203-090 B19-5'
Vinyl chloride	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,1-Dichloroethene	50	50 U	50 U	50 U	**94**	50 U	50 U	50 U	50 U
trans-1,2-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
cis-1,2-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Trichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Toluene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Tetrachloroethene	50	**170**	**400**	50 U	**250**	50 U	50 U	50 U	50 U
Dibromofluoromethane	%	97.3	92.5	119	120	92.0	118	93.1	92.9
Toluene-d8	%	97.3	98.1	98.3	97.4	97.1	97.7	97.4	97.9
4-Bromofluorobenzene	%	102	104	103	104	101	103	103	104

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-091 B19-7.5'		2203-092 C19-2.5'		2203-093 C19-5'		2203-094 C19-7.5'		2203-095 B18-2.5'		2203-096 B18-5'		2203-097 B18-7.5'		2203-098 C17-2.5'	
Vinyl chloride	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
1,1-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
trans-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
cis-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Benzene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Trichloroethene	50	**290**		50	U	50	U	**380**		50	U	50	U	50	U	**150**	
Toluene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Tetrachloroethene	50	50	U	50	U	50	U	**69**		50	U	**80**		**120**		50	U
Dibromofluoromethane	%	89.4		92.4		91.5		116		89.8		87.7		89.4		91.0	
Toluene-d8	%	97.7		98.1		98.3		97.0		98.6		97.0		98.7		98.1	
4-Bromofluorobenzene	%	103		103		103		102		103		101		103		103	

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-099 C17-5'	2203-100 C17-7.5'	2203-101 B15-2.5'	2203-102 B15-5'	2203-103 B15-7.5'	2203-104 D15-2.5'	2203-105 D15-5'	2203-106 D15-7.5'
Vinyl chloride	50	**77**	**75**	50 U	50 U	**52**	**60**	50 U	**53**
1,1-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
trans-1,2-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
cis-1,2-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Trichloroethene	50	**690**	**3600**	**140**	**180**	**890**	50 U	50 U	**1500**
Toluene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Tetrachloroethene	50	**480**	**2300**	**180**	**690**	**3000**	**78**	50 U	**1400**
Dibromofluoromethane	%	78.8	77.8	91.6	77.8	78.9	77.9	90.5	79.3
Toluene-d8	%	93.0	94.1	98.6	93.9	92.0	93.8	97.4	92.7
4-Bromofluorobenzene	%	92.6	97.3	102	93.1	94.1	94.0	103	93.6

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-107 D14-2.5'		2203-108 D14-5'		2203-109 D14-7.5'		2203-110 C14-2.5'		2203-111 C14-5'		2203-112 C14-7.5'		2203-113 B14-2.5'		2203-114 B14-5'	
Vinyl chloride	50	50	U	50	U	50	U	**68**		50	U	50	U	50	U	50	U
1,1-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
trans-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
cis-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Benzene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Trichloroethene	50	50	U	50	U	50	U	**480**		**520**		**350**		**510**		**180**	
Toluene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Tetrachloroethene	50	50	U	**150**		50	U	**930**		**1600**		**1500**		**3100**		**400**	
Dibromofluoromethane	%	91.1		79.5		88.9		77.7		78.8		77.0		81.0		87.5	
Toluene-d8	%	97.5		92.5		98.0		93.9		93.3		94.6		93.7		93.5	
4-Bromofluorobenzene	%	102		94.4		102		93.7		93.2		93.3		97.1		99.6	

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-115 B14-7.5'	2203-116 D3-2.5'	2203-117 D3-5'	2203-118 D3-7.5'	2203-119 D2-2.5'	2203-120 D2-5'	2203-123 E2-5'	2203-124 E2-7.5'
Vinyl chloride	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,1-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
trans-1,2-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
cis-1,2-Dichloroethene	50	50 U	50 U	50 U	50 U	**320**	50 U	50 U	50 U
Benzene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Trichloroethene	50	**100**	**170**	**53**	50 U	50 U	50 U	**460**	**70**
Toluene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Tetrachloroethene	50	**180**	**1800**	**2400**	**940**	**2300**	**1000**	**3500**	**1400**
Dibromofluoromethane	%	117	79.8	77.5	78.7	87.8	80.1	79.8	77.4
Toluene-d8	%	97.7	93.3	93.4	92.2	95.4	93.9	93.8	92.7
4-Bromofluorobenzene	%	103	97.8	95.0	93.2	101	95.9	93.9	94.1

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-126 E3-5'		2203-127 E3-7.5'		2203-129 E10-5'		2203-131 D11-2.5'		2203-133 D11-7.5'		2203-134 D12-2.5'		2203-135 D12-5'		2203-136 D12-7.5'	
Vinyl chloride	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	**97**	
1,1-Dichloroethene	50	50	U	50	U	50	U	**92**		**87**		50	U	50	U	**54**	
trans-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	**77**	
cis-1,2-Dichloroethene	50	50	U	50	U	50	U	**500**		**2300**		**2300**		**130**		**2900**	
Benzene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Trichloroethene	50	50	U	50	U	**1300**		50	U	50	U	**110**		**290**		50	U
Toluene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Tetrachloroethene	50	**660**		**620**		**4400**		50	U	**430**		50	U	**680**		50	U
Dibromofluoromethane	%	79.9		80.0		79.2		82.0		89.4		119		76.8		88.9	
Toluene-d8	%	91.7		92.2		93.3		96.3		97.2		98.6		92.8		95.9	
4-Bromofluorobenzene	%	93.6		94.5		93.5		97.0		103		104		95.7		104	

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-137 C13-2.5'		2203-138 C13-5'		2203-139 C13-7.5'		2203-141 B13-7.5'		2203-143 A13-2.5'		2203-144 A13-5'		2203-145 A13-7.5'		2203-146 X13-2.5'	
Vinyl chloride	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
1,1-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	**100**		50	U
trans-1,2-Dichloroethene	50	50	U	50	U	50	U	**53**		50	U	50	U	50	U	50	U
cis-1,2-Dichloroethene	50	50	U	50	U	50	U	**210**		50	U	50	U	50	U	50	U
Benzene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Trichloroethene	50	**560**		**390**		**290**		**1400**		50	U	50	U	50	U	50	U
Toluene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Tetrachloroethene	50	**1600**		**1300**		**750**		50	U	**51**		50	U	50	U	**110**	
Dibromofluoromethane	%	81.0		77.8		88.3		84.3		80.9		90.9		118		81.8	
Toluene-d8	%	91.9		93.2		97.0		94.4		94.9		96.7		97.4		92.9	
4-Bromofluorobenzene	%	94.0		92.8		103		97.6		94.9		105		106		93.7	

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-147 X13-5'	2203-148 X13-7.5'	2203-149 A6-2.5'	2203-150 A6-5'	2203-151 A6-7.5'	2203-153 A10-2.5'	2203-154 A10-5'	2203-155 A10-7.5'
Vinyl chloride	50	50 U	50 U	50 U	50 U	**160**	50 U	**1200**	**260**
1,1-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**520**
trans-1,2-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
cis-1,2-Dichloroethene	50	50 U	50 U	**57**	**870**	**1600**	50 U	**490**	**1200**
Benzene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Trichloroethene	50	50 U	50 U	50 U	**56**	50 U	**62**	50 U	50 U
Toluene	50	50 U	50 U	50 U	50 U	50 U	50 U	**89**	50 U
Tetrachloroethene	50	50 U	50 U	**2300**	**120**	50 U	**4300**	**1300**	**540**
Dibromofluoromethane	%	91.5	82.0	78.4	80.6	91.6	75.6	77.6	94.4
Toluene-d8	%	97.2	94.3	92.9	92.5	97.4	91.5	92.8	96.0
4-Bromofluorobenzene	%	102	98.6	98.3	91.0	98.4	94.5	96.3	105

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-156 A10-10'	2203-157 D1-2.5'	2203-158 D1-5'	2203-159 D1-7.5'	2203-160 E1-2.5'	2203-161 E1-5'	2203-162 E1-7.5'	2203-163 E0-2.5'
Vinyl chloride	50	**79**	50 U	50 U	**58**	**59**	**61**	50 U	**58**
1,1-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
trans-1,2-Dichloroethene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
cis-1,2-Dichloroethene	50	**1900**	**1000**	**1700**	**56**	50 U	50 U	50 U	50 U
Benzene	50	**420**	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Trichloroethene	50	**3200**	**270**	50 U	50 U	50 U	**160**	50 U	**240**
Toluene	50	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Tetrachloroethene	50	**25000**	**1100**	**3800**	**370**	50 U	**1100**	**220**	**490**
Dibromofluoromethane	%	81.0	80.3	80.4	76.9	80.8	77.5	90.2	78.2
Toluene-d8	%	93.9	95.1	92.7	91.3	92.0	93.5	97.9	93.1
4-Bromofluorobenzene	%	93.2	93.9	96.9	91.8	96.4	94.0	103	92.0

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-164 E0-5'		2203-165 E0-7.5'		2203-166 D13-2.5'		2203-167 D13-5'		2203-168 D13-7.5'		2203-169 Y13-2.5'		2203-170 Y13-5'		2203-172 E11-2.5'	
Vinyl chloride	50	50	U	**97**		**64**		**55**		**57**		50	U	50	U	50	U
1,1-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
trans-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
cis-1,2-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	**200**		**96**		50	U
Benzene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Trichloroethene	50	50	U	50	U	50	U	50	U	50	U	**270**		**2000**		**1200**	
Toluene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Tetrachloroethene	50	**93**		**190**		**170**		**110**		**260**		**260**		**2800**		**1500**	
Dibromofluoromethane	%	93.7		76.0		77.6		78.5		79.0		85.9		78.4		91.3	
Toluene-d8	%	97.0		92.1		94.5		93.9		94.4		95.1		94.5		96.0	
4-Bromofluorobenzene	%	105		93.5		94.1		93.8		95.7		106		94.5		103	

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-173 E11-5'		2203-175 A15-2.5'		2203-176 A15-5'		2203-177 A15-7.5'		2203-178 A16-2.5'		2203-179 A16-5'		2203-180 A16-7.5'		2203-181 A17-2.5'	
Vinyl chloride	50	50	U	50	U	**82**		50	U	50	U	50	U	50	U	50	U
1,1-Dichloroethene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
trans-1,2-Dichloroethene	50	**460**		50	U	50	U	50	U	50	U	50	U	50	U	50	U
cis-1,2-Dichloroethene	50	**3000**		50	U	50	U	50	U	**110**		50	U	50	U	**61**	
Benzene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Trichloroethene	50	**2200**		50	U	50	U	50	U	**1300**		50	U	50	U	**280**	
Toluene	50	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Tetrachloroethene	50	**170**		50	U	**58**		50	U	**3500**		**1300**		**1500**		**1100**	
Dibromofluoromethane	%	93.3		92.4		78.2		86.6		111		95.4		77.9		79.6	
Toluene-d8	%	95.4		97.8		94.2		96.8		96.5		96.6		91.9		93.3	
4-Bromofluorobenzene	%	103		105		93.5		101		106		105		96.6		96.9	

U = Non detect.
D = Result from dilution.

TABLE 2
Former Oaks D.B. Facility - Ft. Atkinson, Wisconsin
Low Level Results
Soil Samples
Sample Description

VOLATILES	Reporting Limit ug/kg	2203-183 A17-7.5'								
Vinyl chloride	50	50	U							
1,1-Dichloroethene	50	50	U							
trans-1,2-Dichloroethene	50	50	U							
cis-1,2-Dichloroethene	50	50	U							
Benzene	50	50	U							
Trichloroethene	50	50	U							
Toluene	50	50	U							
Tetrachloroethene	50	**180**								
Dibromofluoromethane	%	93.2								
Toluene-d8	%	98.1								
4-Bromofluorobenzene	%	104								

U = Non detect.
D = Result from dilution.