STS CONSULTANTS

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RECEIVED
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By

June 6, 2007

FID # 241535470
BRRTS# 0241102520
Milwaukee County

Ms. Brenda Boyce
Wisconsin Department of Natural Resources
P. O. Box 12436
2300 Dr. Martin Luther King Jr. Drive
Milwaukee, Wisconsin 53212

RE: Work Plan for Deep Groundwater Investigation; Wiscraft, Inc. located at 5316 West State Street in Milwaukee, Wisconsin – STS Project No. 5-89350XA

Dear Ms. Boyce:

On behalf of the State of Wisconsin Division of State Facilities (DSF), STS Consultants, Ltd. (STS) has prepared this Work Plan for conducting a deep groundwater investigation at the above-referenced Wiscraft, Inc. (Wiscraft) site. The purpose of the deep groundwater investigation is to further delineate the magnitude and extent of volatile organic compounds (VOCs) that were detected in two piezometers installed at the Wiscraft site in December 2005. The two piezometers were installed as required by the Wisconsin Department of Natural Resources (WDNR) to define the vertical extent of VOCs. This Work Plan letter presents the groundwater sampling results from the two piezometer installations and the rationale for the deep groundwater investigation, including proposed locations and methods.

We are asking for WDNR review and approval of the proposed scope of work, and we have submitted the required s. NR 749 review fee of $500.

The following sections present the results of the installation and sampling of the two piezometers and the proposed Scope of Work for the deep groundwater investigation, including the installation of additional piezometers and groundwater monitoring for the site. Figure 1 presents the proposed locations for the additional piezometers.

BACKGROUND

Wiscraft, Inc. occupies the subject property, which is owned by the State of Wisconsin. Both chlorinated and non-chlorinated VOCs were identified in the soil and groundwater at the site following a series of site investigation activities. VOC impacts in soil and groundwater were reported beneath the former scrap metal pits and the warehouse building, and extend to the east in the direction of groundwater flow. The principal soil and groundwater contaminants were tetrachloroethene (PCE) and trichloroethene (TCE) and their degradation products [i.e., cis-1,2-dichloroethene (1,2-DCE), and vinyl chloride (VC)].

Source area soils in the area of the former scrap metal pits were excavated and disposed off-site as hazardous waste in 1995. Subsequently, Montgomery Watson performed additional investigation activities and evaluated various alternatives for remediating the site. Additional information regarding the investigation and evaluation activities are contained in the following Montgomery Watson (formerly Warzyn, Inc.) reports, which were submitted to the WDNR:

- Integrated Phase I/II Environmental Site Assessment, dated September 1992 - Prepared for Whyte & Hirschboeck (General Counsel to Wiscraft).

- Site Investigation and Remedial Action Plan, dated July 1995 - Prepared for Wisconsin Department of Administration (WDOA).

- Pre-Design Investigation Wiscraft, Inc., dated January 8, 1997 - Prepared for WDOA.
- Air Sparge/Soil Vapor Extraction Test and Off-Site Investigation Results, dated May 23, 1997 - Prepared for WDOA.

Montgomery Watson submitted a Conceptual Design Report to the WDNR dated August 19, 1997, which outlines the remediation program selected for this site. In summary, Montgomery Watson developed a remedial action plan with the primary objectives of reducing contaminant mass in the source area and providing a down-gradient barrier to plume migration. In 1999, an active remediation system was installed consisting of source area mass removal by groundwater recovery and soil vapor extraction, and a down-gradient barrier to plume migration by air sparging with soil vapor extraction. Montgomery Watson submitted a Construction Documentation and Operation, Maintenance, & Monitoring Plan to the WDNR dated May 2000 to summarize construction and start-up activities associated with the groundwater extraction, soil vapor extraction, and air sparging treatment systems.

In addition, biodegradation processes including natural anaerobic biodegradation for source area remediation and enhanced aerobic biodegradation for down-gradient plume migration control were integral to achieving the site remediation objectives; the monitoring of natural attenuation processes was included as part of the remedial action plan. On-site groundwater treatment was designed to allow for the discharge of treated groundwater to surface water (Menomonee River) under the General Wisconsin Pollution Discharge Elimination System (WPDES) permit.

Montgomery Watson (later known as MWH Americas, Inc.) prepared periodic Progress Reports #1 to #9 from start-up of the remediation system on February 9, 2000 until May 10, 2004. These nine progress reports reported operational and monitoring data on the performance of the remediation system. The final progress report (#9) also discussed the in-situ injection treatment of the source area with potassium permanganate solution in February 2004.

In November 2004, DSF and their former consultant (MWH Americas, Inc.) attended a meeting with WDNR to discuss closure considerations for the site. With one exception, the WDNR agreed that the site was a candidate for conditional site closure with appropriate listing on the WDNR Geographical Information System (GIS) Registry for Closed Sites. The only exception was regarding the WDNR's request for additional investigation to determine the vertical extent of VOCs. Therefore, the WDNR required that two piezometers be installed at the site to confirm that VOCs have not migrated below the clay layer underlying the facility. If the piezometers confirm that VOCs are not present at depth, the WDNR agreed that a conditional site closure would be appropriate.

Furthermore, based on discussions at the November 2004 meeting, the WDNR agreed that the operation of the remediation system was no longer necessary. Therefore, the remediation system has been shut down and the utilities disconnected. Because the remediation system is no longer operating, discharge monitoring reports (DMRs) for the site's Wisconsin Pollutant Discharge Elimination System (WPDES) permit have also been discontinued.

RESULTS OF NEW PIEZOMETER INSTALLATIONS

In December 2005, STS installed two piezometers (PZ01 and PZ02) at the Wiscraft site. The piezometers were installed through a permanent outer casing that sealed the new wells from VOCs in groundwater occurring in the shallow sand layer. Documentation for the installation of the piezometers, including boring logs, well construction forms, and well development forms, are presented as Attachment A.

The boring logs for the new piezometers indicate that the stratigraphy consists, in descending order, of the following:

- Approximately 4 to 7 ft of sand and clay fill,
- Approximately 10 to 15 ft of sand and gravel (known VOC impacts in groundwater) – *shallow sand and gravel layer,*
- Approximately 10 ft to 15 ft of silty clay (permanent outer casing keyed into),
- Approximately 3 to 5 ft of sand (screened unit for new piezometers) – *deep sand layer, and*
- Approximately 3 or more ft of silty clay before encountering dolomite bedrock

The two piezometers were paired with existing water table monitoring wells to form two well nests. The piezometers were screened in the deep sand layer encountered beneath the silty clay layer that separated the deep sand layer from the overlying shallow sand and gravel layer. Based on water levels collected on February 1, 2006, the vertical hydraulic gradient at the PZ01/MW11 well nest is downward and at the PZ02/MW13 well nest is upward. Based on water levels from only the two piezometers, the horizontal hydraulic gradient appears to potentially indicate a southeastern flow direction, which is similar to the water table flow direction (see Figure 1).

Groundwater samples were collected and analyzed for VOCs from the two new piezometers. Laboratory analytical reports are presented as Attachment B. The results of the groundwater analyses for the two piezometers are summarized in the following table:

Well	Date	PCE	TCE	1,2-DCE	VC
PZ01	1/17/06	64,000	<750	<3,000	<600
	2/1/06	120,000	920	<3,000	<600
PZ02	1/17/06	140	1.0	<0.60	<0.12
	2/1/06	2.7	<0.15	<0.60	<0.12
	5/10/06	1.7	<0.15	<0.60	<0.12
ES		5.0	5.0	70	0.2
PAL		0.5	0.5	7.0	0.02

The elevated concentrations of tetrachloroethene (PCE) detected at PZ01 appears to indicate the potential for an **additional source** of VOC impacts. Piezometer PZ01 is located approximately 70 ft downgradient of the original source area identified and excavated at the RW02 location. Furthermore, given the solubility of PCE in water (150 mg/L) and the magnitude of the PCE concentrations at PZ01 (120 mg/L), a high probability exists that a residual nonaqueous phase liquid (NAPL) is present at PZ01 and may extend back toward the original source area in the vicinity of recovery well RW02.

The concentrations of VOCs at PZ02 are significantly lower and appear to be stable below the ES. Although the initial concentration was elevated above the ES, two consecutive rounds confirm the lower concentration. The anomalous initial reading may have been the result of possible carry-over during the initial development and sampling of the two new piezometers before an indication of their relative water quality was known.

SCOPE OF WORK

Deep Groundwater Investigation

The deep groundwater investigation has the following objectives:

1) determine the horizontal magnitude and extent of VOCs detected in the deep sand layer where piezometers PZ01 and PZ02 are screened, and

2) determine if VOC impacts have migrated vertically to the top of bedrock.

To determine the magnitude and extent of VOC impacts in the deep sand layer, the installation of seven piezometers are proposed at the following locations:

- nested with recovery well RW02 to determine if a residual VOC source exists at the former source area in the deep sand layer below the remedial excavation and the current groundwater extraction system (Wiscraft Property),
- nested with water table monitoring MW05 at the south site boundary (Wiscraft Property),
- nested with water table monitoring MW09 at an intermediate location approximately 40 ft south of the former source area (Wiscraft Property),
- nested with water table monitoring MW14 at the southeast site boundary (Steigerwald Property),
- new intermediate location approximately 80 ft southeast of PZ01 to evaluate the potential downgradient attenuation of the VOC impacts observed at PZ01 (Steigerwald Property),
- new intermediate location approximately 80 ft east of PZ01 to evaluate the potential downgradient attenuation of the VOC impacts observed at PZ01 (Heat Treat Engineers Property), and
- new location at the south site boundary between MW05 and MW14 locations to address a potential data gap in monitoring well array (Wiscraft Property).

To determine the potential vertical extent of VOC impacts below the deep sand layer, the installation of one bedrock piezometer is proposed to be nested with the a deep sand layer piezometer. The bedrock piezometer will be installed after testing of the deep sand layer piezometers to determine a downgradient location that is not likely to have residual DNAPL present in the formation that could lead to impacts to deeper zones.

Health and Safety Plan & Utility Clearances

A health and safety plan will be updated for the current work, which will guide the health safety activities for STS employees onsite. As part of the safety element, local utilities coming onto the site will be marked by Digger's Hotline and/or local utilities, as appropriate.

Piezometer Installations

Seven deep sand layer piezometers are proposed to be installed through the existing VOC plume and an underlying clay layer into the deep sand layer. Because results from the existing deep sand layer piezometer PZ01 indicates the presence of DNAPL, a double-cased well construction method will be used to minimize the potential that VOCs could be transmitted through the clay layer during the well installation process.

The drilling method proposed for the piezometer installations is sonic drilling using multiple temporary casings. The sonic drilling will be performed in a two step process by first advancing an 8-inch diameter temporary outer casing keying into the upper clay layer to seal off the VOC impacted shallow sand and gravel layer. The second step will be to advance a 6-inch diameter temporary inner casing through the clay layer and into the underlying deep sand layer. The 6-inch diameter inner casing would be advanced to the bottom of the deep sand layer. The sonic drilling method allows for the complete recovery of the unconsolidated soils in the drilled interval. The boring will be logged for soil stratigraphy and soil samples will be screened for the presence of VOCs using a photoionization detector (PID) and for DNAPL using field tests with hydrophobic dye. The soil samples will be visually classified using American Society for Testing and Materials (ASTM) D-2488 Standard Method for Classification of Soils in the Field. Information on each completed soil boring will be recorded directly on a standard soil boring log form in the field.

In addition to field screening of soils recovered from the piezometer borings, soil samples will also be collected for laboratory analyses. Two discrete soil samples per boring will be collected for VOC and total organic carbon (TOC) analyses. The VOC soil results will provide information to help quantify the mass of VOCs in the subsurface, and the TOC results will help estimate the potential contaminant migration retardation in the sampled formation. The soil samples will be collected from the clay till layers above and below the deep sand layer. If a soil sample cannot be collected from the clay layer below the deep sand layer, then the soil sample will be collected from the deep sand layer.

Once the target depth in the deep sand layer has been reached with the sonic drilling equipment, the borehole will be purged with a submersible pump, and a groundwater sample will be collected for overnight VOC analysis to determine the general water quality and the potential for presence of DNAPL. Based on the results of the laboratory results, an appropriate casing and screen material will be selected for the construction of the piezometer. If the groundwater laboratory results or other observations indicate the potential presence of DNAPL, the piezometer will be constructed with a stainless steel well screen and sump with black-carbon steel riser pipe. If the laboratory results indicate only moderate or lower VOC concentrations, the piezometer will be constructed of SCH 40 PVC well screen and riser.

The deep sand layer piezometers will be installed through the temporary double-casing into the deep sand layer. As well materials are placed in the borehole for construction of the piezometer, the 6-inch diameter temporary casing will be pulled back to expose the formation. For the annular seal, high-solids bentonite-cement grout will be tremie pumped as the 6-inch and 8-inch diameter temporary casings are sequentially pulled back and removed to allow for proper sealing of the annulus of the borehole. The anticipated screened interval for the deep sand layer piezometers is the approximately 3 to 5 ft thick sand layer located beneath the overlying clay layer that was observed in piezometers PZ01 and PZ02.

The piezometers are anticipated to be installed by the two-casing sonic drilling technique through the VOC impacted zones to the following estimated depths:

Piezometer	Anticipated Outer 8-in Diameter Temporary Casing Depth (ft)	Anticipated Inner 6-in Diameter Temporary Casing and Well Bottom Depth (ft)
Deep Sand Layer	30 (keyed into clay)	40 (5 ft screen length)
Bedrock	50 (keyed into competent rock)	60 (5 ft screen length)

The bedrock piezometer will be installed at a downgradient location after the results of the groundwater samples from the new deep sand layer piezometer borings have been evaluated. The deep sand piezometer groundwater results will be evaluated to select a downgradient location that does not have indications that DNAPL is present. Using this criterion provides a location that is likely to provide information on whether VOCs have migrated into bedrock upgradient of the location while minimizing the risk of cross-contaminating layers by penetrating the clay till confining layers through a zone with the potential presence of DNAPL. The bedrock piezometer will be installed using the same two-casing sonic drilling method as for the deep sand piezometers with the exception for the bedrock piezometer that a rotary method will be used once the temporary casing is keyed into the competent rock.

Based on the results of the groundwater samples from the new deep sand layer piezometer borings, wells will be constructed of either Schedule 40 PVC or stainless steel. Stainless steel will be selected at piezometer locations that have high VOC concentrations or other indications that a DNAPL may be present, and Schedule 40 PVC will be used at the other locations. The well screens and riser pipe will be 2-inch diameter with flush-threaded joints. The well screens will be 5 feet long with 0.01-inch slots. Appropriate filter packs and annular seals will be placed by gravity or tremie methods. The piezometers will be completed with flush-mounted well protectors and water-tight plug caps.

The piezometer locations and elevations (ground surface, top of riser, and protective casing) will be surveyed for purposes of evaluating groundwater elevations and flow direction. Water levels will be measured for the purpose of evaluating horizontal (as part of the overall monitoring network) and vertical gradients.

The piezometers will be developed after installation by surging and pumping in accordance with NR 141 requirements. The purge water will be barreled and staged onsite until water quality analysis on the wells determines how to appropriately manage the disposal of the water. Soil cuttings from the newly installed monitoring wells will be contained on site, pending a determination of how to appropriately manage the disposal of the soil.

Groundwater Monitoring

Two rounds of groundwater samples will be collected from the new and existing piezometers. The first round will be collected approximately one week after well development, or once adequate water is present to collect a groundwater sample. The first sample round will include analysis only for VOCs (Method 8260). The results will be used to determine future sampling sequences so that wells are sampled from the least to most impacted.

The second round of samples will be collected approximately three months after the first round to confirm the initial results. The following parameters will be analyzed in the groundwater samples: VOCs, and the field parameters pH, dissolved oxygen (DO), oxidation/reduction potential (ORP), conductivity, and temperature. In addition, the groundwater samples will be submitted for laboratory analyses of the following parameters: total organic carbon (TOC), total and dissolved iron, total and dissolved manganese, sulfate, nitrate/nitrite, and select dissolved gases (ethene, ethane, and methane).

One duplicate sample, field blank, and trip blank will be collected for VOC analyses during each event for quality assurance/quality control (QA/QC). Water samples for laboratory analyses will be submitted to a State of Wisconsin certified laboratory for selected analyses.

Water levels will be measured during both sampling events at the other existing monitoring and recovery wells. The water levels will be used to determine horizontal and vertical hydraulic gradients.

Hydraulic Conductivity Testing

The three of the new deep sand layer piezometers will be selected to conduct in-situ hydraulic conductivity testing. The deep sand piezometers will be selected from the downgradient locations that groundwater results do not indicate the potential presence of DNAPL.

Rising-head and/or falling-head slug tests will be completed at the selected wells. Water level measurements will be performed using an in-situ pressure transducer and data logger. Data will be analyzed using an applicable analytical method.

Data Analysis and Evaluation

Data collected from this assessment will be analyzed to define the presence of DNAPL and the PCE plume along with its transport. Data analysis and evaluation will include:

- Evaluating the presence of DNAPL
- Evaluating the site conditions for biodegradation potential
- Analyzing slug testing data
- Calculate horizontal and vertical hydraulic gradients

Reporting

The data collected during the investigation will be summarized and interpreted in the Site Investigation Report (SIR). This report will be prepared in accordance with Chapter NR 716, Wisconsin Administrative Code (WAC). The report will include tables of results and figures where appropriate. Groundwater sampling results will be compared to Chapter NR140, WAC, groundwater quality standards including the Enforcement Standard (ES) and the Preventive Action Limit (PAL). The conclusions from the site investigation will be included in the report and discuss whether there are environmental risk factors as identified under NR746, WAC. The results of the SIR will be used to determine the next course of action for the site.

We propose to proceed with the deep groundwater investigation after receiving comments and approval from the WDNR. If you have any questions regarding the investigation, please contact us at your earliest convenience.

Respectfully,

STS CONSULTANTS, LTD.

Leo B. Linnemanstons, P.G.
Senior Project Hydrogeologist

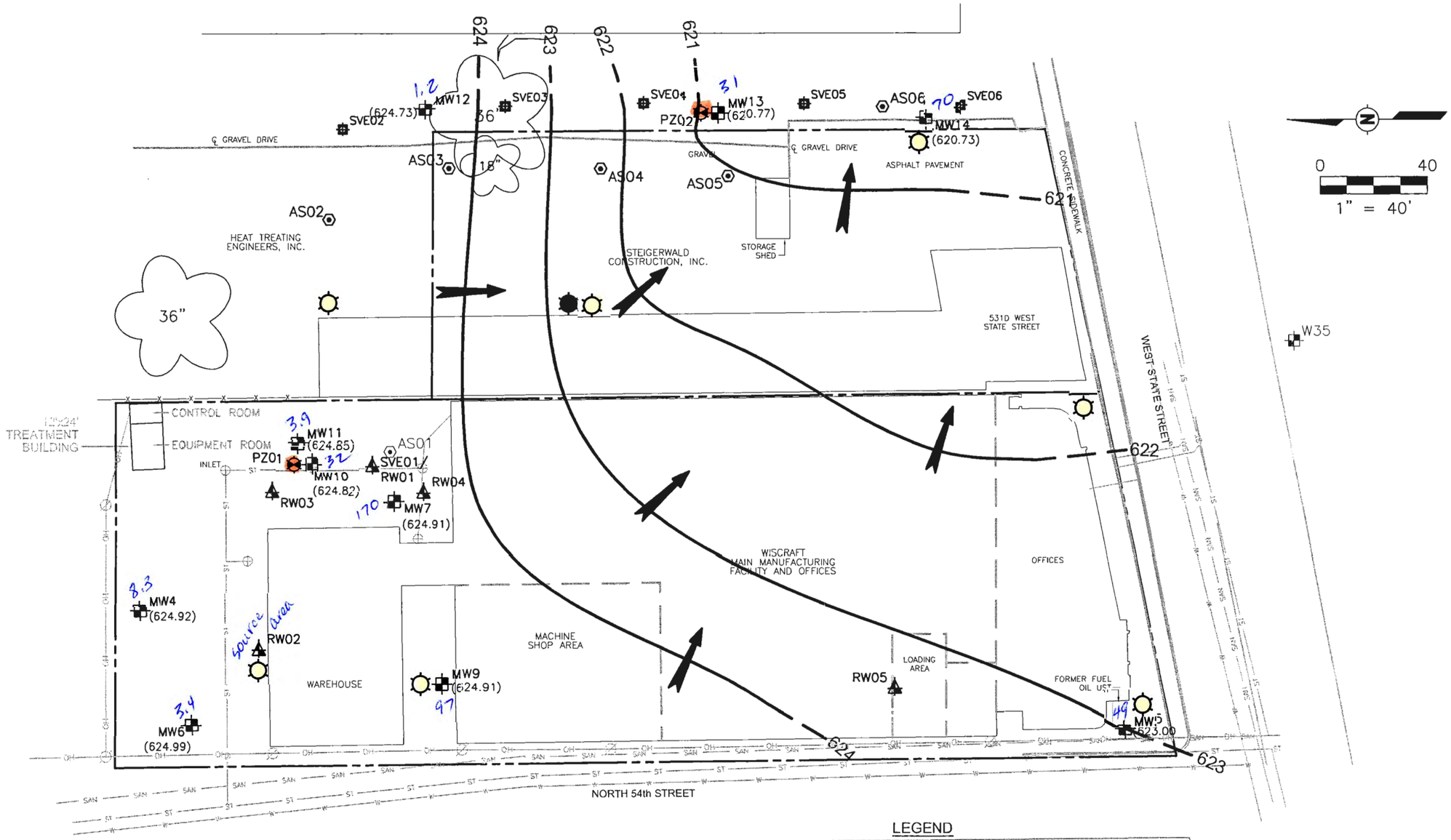
cc: Mr. James McMillan, WDOA - Division of Facilities Management

Attachments:

Figure 1 - Proposed Piezometer Location Map
Attachment A - Piezometers Installation Documentation (boring logs, well construction & development forms)
Attachment B – Laboratory Analytical Reports
WDNR Site Investigation Workplan Review Fee - STS Check #000910 for $500.00

Figure 1

Proposed Piezometer Location Map



NOTES

1. BASE MAP DEVELOPED FROM A SURVEY PERFORMED BY NATIONAL SURVEY & ENGINEERING, DATED SEPTEMBER 16, 1993. GROUNDWATER MONITORING WELL LOCATIONS MW4–MW9 ALSO SURVEYED ON SEPTEMBER 16, 1993. SURVEY UPDATED BY NATIONAL SURVEY & ENGINEERING ON FEBRUARY 9, 2000.
2. WATER, STORM SEWER, AND SANITARY SEWER INFORMATION PROVIDED BY WISCRAFT, INC. AND VERIFIED DURING A SITE VISIT BY MONTGOMERY WATSON. GROUNDWATER RECOVERY SYSTEM SHUTDOWN ON NOVEMBER 25,
3. 2003 TO EVALUATE DIFFERENT REMEDIAL OPTIONS. AS/SVE SYSTEM SHUTDOWN ON MARCH 23, 2003 FOR MAINTAINANCE.

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- FENCE LINE
- GAS LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- WATER LINE
- OVERHEAD POWER LINE
- PROPOSED DEEP SAND PIEZOMETER
- PROPOSED BEDROCK PIEZOMETER
- MW1 — GROUNDWATER MONITORING WELL LOCATION AND NUMBER
- SVE01/ RW01 — GROUNDWATER RECOVERY WELL LOCATION AND NUMBER
- AS01 — AIR SPARGING/PILOT TEST POINT LOCATION AND NUMBER
- AS02 — AIR SPARGE WELL LOCATION AND NUMBER
- SVE02 — SOIL VAPOR EXTRACTION WELL LOCATION AND NUMBER
- PZ01 — PIEZOMETER LOCATION AND NUMBER
- UTILITY POLE
- TREES
- 622 — GROUNDWATER CONTOUR, IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL = 1.0 FT)
- (624.47) GROUNDWATER ELEVATION
- GROUNDWATER FLOW DIRECTION

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WATER TABLE MAP - FEBRUARY 1, 2006
DEEP GROUNDWATER INVESTIGATION WORK PLAN
WISCRAFT INC. REMEDIATION PROJECT
5316 WEST STATE STREET
MILWAUKEE, WISCONSIN

Drawn:	CJH	9/21/2006
Checked:	LBL	9/21/2006
Approved:	LBL	9/21/2006
PROJECT NUMBER	589350XA	
FIGURE NUMBER	1	

X:\Projects\589350XA\dwg\589350XA-WORKPLAN.dwg; 6/6/2007 10:08:23 AM; DREW, PAUL

Attachment A

Piezometers Installation Documentation

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
WDOA Wiscraft - 589350XA		PZ-01

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Chuck Guenther Wisconsin Soil Testing	12/5/2005	12/9/2005	rotary (air or mud)

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
PM185		PZ-01	Feet MSL	631.5 Feet MSL	6.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 26, T 7 N, R 21 E
Lat ___° ___' ___"
Long ___° ___' ___"
Local Grid Location ☐ N ☐ E
Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	486			Boring advanced without sampling (See B-01 for Soil Descriptions)										
			4	Boring advanced from ground surface to 30.0 feet using 10 inch roller bit and air rotary technique to install 6 inch diameter permanenet steel casing										
			8											
			12											
			16											
			20											
			24											
			28											
			32	Boring advanced from 30 to 40.5 feet using 6 inch diameter roller bit and mud rotary technique										
			36											
			40	End of Boring at 40.5 feet										

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

Signature	Firm	
Leo Linnemanstons	STS Consultants Ltd. 2821 Dairy Drive, Suite 5 Madison, WI 53718	Tel: 608-222-7231 Fax: 608-222-3765

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: WDOA Wiscraft - 589350XA	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: PZ-01
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: PM185 / DNR Well Number:
Facility ID	St. Plane ____ ft. N, ____ ft. E. Ⓢ/C/N	Date Well Installed: 12/09/2005
Type of Well: Well Code 12/pz	Section Location of Waste/Source: NE 1/4 of NW 1/4 of Sec. 26, T. 7 N, R. 21 ☒E ☐W	Well Installed By: (Person's Name and Firm): Chuck Guenther; Wisconsin Soil and Testing
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation ____ ft. MSL
B. Well casing, top elevation 631.16 ft. MSL
C. Land surface elevation 631.5 ft. MSL
D. Surface seal, bottom 631.0 ft. MSL or 0.5 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

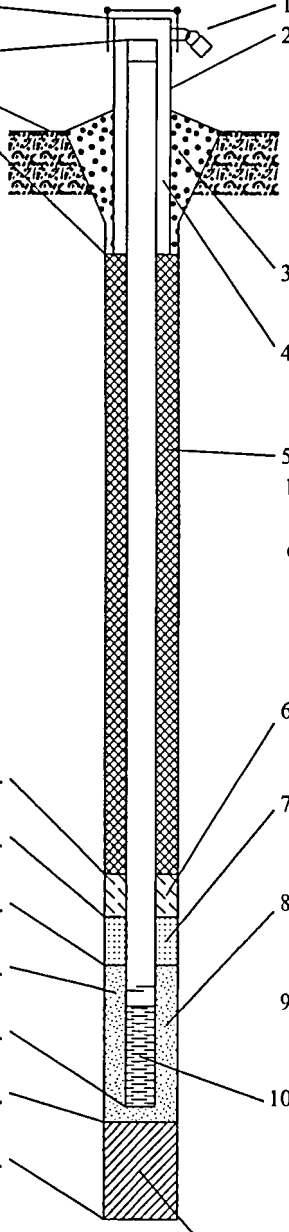
14. Drilling method used: Rotary ☒ 50; Hollow Stem Auger ☐ 41; ____ Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☒ 03 None ☐ 99

16. Drilling additives used? ☒ Yes ☐ No
Describe Super Gel X

17. Source of water (attach analysis, if required):
Schmitz Concrete Plant, Butler, WI

E. Bentonite seal, top 631.0 ft. MSL or 0.5 ft.
F. Fine sand, top 600.5 ft. MSL or 31.0 ft.
G. Filter pack, top 598.5 ft. MSL or 33.0 ft.
H. Screen joint, top 596.5 ft. MSL or 35.0 ft.
I. Well bottom 591.5 ft. MSL or 40.0 ft.
J. Filter pack, bottom 591.0 ft. MSL or 40.5 ft.
K. Borehole, bottom 591.0 ft. MSL or 40.5 ft.
L. Borehole, diameter 6.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 9.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04; ____ Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 30; Concrete ☒ 01; ____ Other ☐ __
4. Material between well casing and protective pipe: Bentonite ☐ 30; Sand Other ☒ __
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 50
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a. Red Arrow Silica 80-120 __
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint 35-45 __
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; ____ Other ☐ __
10. Screen material: PVC Schedule 40 __
a. Screen Type: Factory cut ☒ 11; Continuous slot ☐ 01; ____ Other ☐ __
b. Manufacturer Environmental Well Products
c. Slot size: 0.010 in.
d. Slotted length: 5.0 ft.
11. Backfill material (below filter pack): None ☒ 14; ____ Other ☐ __

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

Signature: Leo Limmanstons | Firm: STS Consultants Ltd., 2821 Dairy Drive, Suite 5 Madison, WI 53718 | Tel: 608-222-7231 Fax: 608-222-3765

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	County	Well Name
WDOA Wiscraft - 589350XA	Milwaukee	PZ-01

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	41	PM185	

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
bailed 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): 38.7 ft.

5. Inside diameter of well: 2.07 in.

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

7. Volume of water removed from well: 60.0 gal.

8. Volume of water added (if any): 0.0 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.	9.17 ft.	23.17 ft.
Date b.	12/9/2005	12/9/2006
Time c.	☒ a.m. 12:00 ☐ p.m.	☒ a.m. 12:00 ☐ p.m.
12. Sediment in well bottom	0.5 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Dark Gray	Clear ☒ 20 Turbid ☐ 25 (Describe)

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. Well developed by: Person's Name and Firm
Adam Florin
STS Consultants, Ltd.

17. Additional comments on development:
Surged Well 7 Times

Facility Address or Owner/Responsible Party Address

Name: _____

Firm: _____

Street: _____

City/State/Zip: _____

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

Signature: Leo Linnemanstons

Print Name: Leo Linnemanstons

Firm: STS Consultants Ltd.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
WDOA Wiscraft - 589350XA		B-01

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
John Carlson STS Consultants, Ltd.	11/29/2005	11/30/2005	rotary (air or mud)

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	4.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 26, T 7 N, R 21 E

Lat ___° ___' ___"
Long ___° ___' ___"

Local Grid Location
☐ N Feet ☐ E
☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 20	4 4 7 8	1.5	3" of Asphalt (Driller's Observation)	Asphal			0.0						
				Fill: Fine to Coarse Sand and Clayey Silt, little fine gravel - brown, light brown and reddish brown - moist (Fill)										
2 SS	24 24	3 4 4 7	3.0 4.5		Fill			0.0						
3 SS	24 24	9 13 12 11	6.0 7.5					0.0						
4 SS	24 19	3 8 6 7	9.0	Clayey Silt and Fine to Coarse Sand - brown - wet (CL)	CL			0.0						
5 SS	24 24	10 17 28 25	10.5 12.0	Fine to Coarse Sand and Fine Gravel - brown - gray - wet (SP)				0.0						
6 SS	24 24	9 22 20 18	13.5 15.0		SP			0.0						
7 SS	24 22	7 15 22 28	16.5					0.0						
8 SS	24 12	21 32 50/0.3 -	18.0 19.5					0.0						

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

Signature Lee Linnemanstons

Firm STS Consultants Ltd.
2821 Dairy Drive, Suite 5 Madison, WI 53718

Tel: 608-222-7231
Fax: 608-222-3765

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number B-01 Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Sample Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
9 SS	24 12	56 50 - -	21.0	Fine to Coarse Sand and Fine Gravel - brown - gray - wet (SP) *(continued)*	SP			0.0						
			22.5											
10 SS	24 12	47 36 26 18	24.0	Silty Clay and Fine to Medium Sand - gray - wet (CL)				0.0	4.5					
11 SS	24 24	8 18 22 32	25.5		CL			0.0	4.5					
			27.0											
12 SS	24 24	12 20 35 35	28.5					0.0	4.5					
			30.0											
13 SS	24 19	12 25 32 46	31.5	Silty Clay and Fine to Coarse Sand, little fine gravel - gray - wet (CL)				0.0	3					
14 SS	24 20	29 22 26 32	33.0		CL			0.0						
			34.5											
15 SS	24 6	26 50/0.4 - -	36.0	Fine to Coarse Sand and Fine Gravel - gray - wet (SP)	SP			0.0						
			37.5											
16 SS	24 24	28 30 32 36	39.0	Silty Clay and Fine to Medium Sand, trace coarse sand - gray - wet (CL)	CL			0.0	4.5					
			40.5	End of Boring at 40.5 feet Boring advanced from 0.0 to 10.5 feet with a hollow stem auger. Boring advanced from 10.5 feet to 40.5 feet with mud rotary. 15.0 feet of temporary casing installed. Boring abandoned with bentonite-sand slurry.										

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

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

(1) GENERAL INFORMATION

WI Unique Well No. | DNR Well ID No. | County: Milwaukee

Common Well Name _____ Gov't Lot (if applicable) _____

Grid Location: NE 1/4 of NW 1/4 of Sec. 26 ; T. 7 N; R. 21 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat ___° ___' ___" Long ___° ___' ___"

State Plane _____ ft. N. _____ ft. E. ☒ S ☐ C ☐ N Zone

Reason For Abandonment: Site Investigation | WI Unique Well No. of Replacement Well:

(2) FACILITY /OWNER INFORMATION

Facility Name: WDOA Wiscraft - 589350XA

Facility ID | License/Permit/Monitoring No.

Street Address of Well: 5316 W. State Street

City, Village, or Town: Milwaukee

Present Well Owner: WI Dept. of Administration | Original Owner

Street Address or Route of Owner: 101 E. Wilson St., 7th Floor

City, State, Zip Code: Madison, Wisconsin 53702

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 11/29/2005

☐ Monitoring Well
☐ Water Well
☒ Drillhole / Borehole

If a Well Construction Report is available, please attach.

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

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) (From ground surface): 40.5 Casing Diameter (in.) _____
Casing Depth (ft.) _____

Lower Drillhole Diameter (in.): 4.0

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☐ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☐ No	

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

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☒ Bentonite-Sand Slurry
☒ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)		Mix Ratio or Mud Weight
Asphalt Patch	Surface	0.5		
Chipped Bentonite	0.5	5.5		
Bentonite-Sand Slurry	5.5	40.5		

(6) Comments _____

(7) Name of Person or Firm Doing Sealing Work: Subsurface Testing Services, Inc. | Date of Abandonment: 11/30/05

Signature of Person Doing Work | Date Signed

Street or Route: 1035 Kepler Drive | Telephone Number: 920-468-1978

City, State, Zip Code: Green Bay, Wisconsin 54311

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
WDOA Wiscraft - 589350XA		PZ-02

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Chuck Guenther Wisconsin Soil Testing	12/5/2005	12/7/2005	rotary (air or mud)

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
PS680		PZ-02	Feet MSL	630.2 Feet MSL	6.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 26, T 7 N, R 21 E
Lat ___° ___' ___"
Long ___° ___' ___"
Local Grid Location
☐ N Feet ☐ S. ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	450			Boring advanced without sampling (See B-02 for Soil Descriptions)										
			4	Boring advanced from ground surface to 25.0 feet using 8.25 inch ID hollow stem augers to install 6 inch diameter permanent steel casing										
			8											
			12											
			16											
			20											
			24											
				Boring advanced from 25.0 to 37.5 feet using 6 inch diameter roller bit and mud rotary technique										
			28											
			32											
			36											
				End of Boring at 37.5 feet										

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

Signature	Firm	
Leo Linnemanstons	STS Consultants Ltd. 2821 Dairy Drive, Suite 5 Madison, WI 53718	Tel: 608-222-7231 Fax: 608-222-3765

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State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: WDOA Wiscraft - 589350XA	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: PZ-02
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: PS680 / DNR Well Number:
Facility ID	St. Plane ____ ft. N, ____ ft. E. Ⓢ/C/N	Date Well Installed: 12/07/2005
Type of Well: Well Code 12/pz	Section Location of Waste/Source: NE 1/4 of NW 1/4 of Sec. 26, T. 7 N, R. 21 ☒E ☐W	Well Installed By: (Person's Name and Firm): Chuck Guenther; Wisconsin Soil and Testing
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number:

A. Protective pipe, top elevation ____ ft. MSL
B. Well casing, top elevation 629.96 ft. MSL
C. Land surface elevation 630.2 ft. MSL
D. Surface seal, bottom 629.7 ft. MSL or 0.5 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

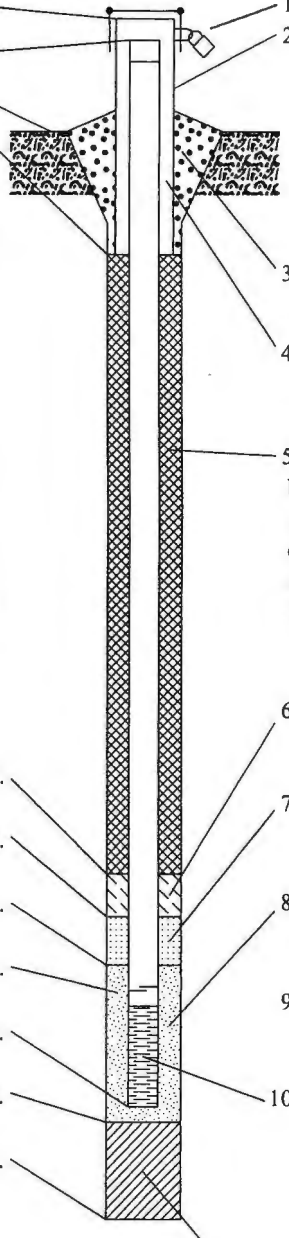
14. Drilling method used: Rotary ☒ 5 0
Hollow Stem Auger ☐ 4 1
____ Other ☐ __

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

16. Drilling additives used? ☒ Yes ☐ No
Describe Super Gel X

17. Source of water (attach analysis, if required):
Schmitz Concrete Plant, Butler, WI

E. Bentonite seal, top 626.2 ft. MSL or 4.0 ft.
F. Fine sand, top 602.7 ft. MSL or 27.5 ft.
G. Filter pack, top 600.7 ft. MSL or 29.5 ft.
H. Screen joint, top 597.9 ft. MSL or 32.3 ft.
I. Well bottom 592.7 ft. MSL or 37.5 ft.
J. Filter pack, bottom 592.7 ft. MSL or 37.5 ft.
K. Borehole, bottom 592.7 ft. MSL or 37.5 ft.
L. Borehole, diameter 6.0 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 9.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 0 4
____ Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 3 0
Concrete ☒ 0 1
____ Other ☐ __
4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Sand Other ☒ __
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 3 3
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 5 0
e. ____ Ft^3 volume added for any of the above
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. ____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a. Red Arrow Silica 80-120 __
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint 35-45 __
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
____ Other ☐ __
10. Screen material: PVC Schedule 40
a. Screen Type: Factory cut ☒ 1 1
Continuous slot ☐ 0 1
____ Other ☐ __
b. Manufacturer Environmental Well Products
c. Slot size: 0.010 in.
d. Slotted length: 5.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4
____ Other ☐ __

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

Signature: Leo Zimmerman

Firm: STS Consultants Ltd.
2821 Dairy Drive, Suite 5 Madison, WI 53718
Tel: 608-222-7231
Fax: 608-222-3765

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State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	County	Well Name
WDOA Wiscraft - 589350XA	Milwaukee	PZ-02

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
	41	PS680	

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
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
other _____	☐	--

3. Time spent developing well 60 min.

4. Depth of well (from top of well casing) 37.0 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing gal.

7. Volume of water removed from well 35.0 gal.

8. Volume of water added (if any) 0.0 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.	6.80 ft.	7.17 ft.
Date	b.	12/9/2005	12/9/2005
Time	c.	12:00 ☒ a.m. ☐ p.m.	12:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom		0.3 inches	0.0 inches
13. Water clarity		Clear ☐ 10 Turbid ☒ 15 (Describe) Dark Gray	Clear ☒ 20 Turbid ☐ 25 (Describe)

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. Well developed by: Person's Name and Firm
Adam Florin
STS Consultants, Ltd.

17. Additional comments on development:
Surged Well 5 Times

Facility Address or Owner/Responsible Party Address

Name: _____

Firm: _____

Street: _____

City/State/Zip: _____

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

Signature: Leo Linnemanstons

Print Name: Leo Linnemanstons

Firm: STS Consultants Ltd.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
WDOA Wiscraft - 589350XA		B-02

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
John Carlson STS Consultants, Ltd.	11/28/2005	11/29/2005	rotary (air or mud)

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	4.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
NE 1/4 of NW 1/4 of Section 26, T 7 N, R 21 E
Lat ___° ___' ___"
Long ___° ___' ___"
Local Grid Location
Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 SS	24 5	4 5 5 7	1.5	Fill: Clayey Silt, Fine to Coarse Sand and Fine Gravel - some concrete - brown - moist (Fill)	Fill			0.0						
2 SS	24 16	4 3 3 5	3.0 4.5					0.0						
3 SS	24 22	10 12 13 21	6.0	Fine to Coarse Sand and Fine Gravel - light brown and brown - moist (SP)	SP			0.0						
4 SS	24 24	13 17 16 21	7.5 9.0					0.0						
5 SS	24 24	6 7 16 27	10.5 12.0	Fine to Coarse Sand and Fine Gravel - brown and gray - wet (SP)	SP			0.0						
6 SS	24 22	12 14 19 16	13.5					0.0						
7 SS	24 24	13 15 21 30	15.0 16.5	Silty Clay and Fine to Coarse Sand, some fine gravel - gray - wet (CL)	CL			0.0	0.5					
8 SS	24 23	12 21 25 31	18.0 19.5					0.0	1					

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

Signature	Firm	
Leo Linnemanstons	STS Consultants Ltd. 2821 Dairy Drive, Suite 5 Madison, WI 53718	Tel: 608-222-7231 Fax: 608-222-3765

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number B-02 Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
9 SS	24 24	17 28 38 35	21.0	Silty Clay and Fine to Coarse Sand, some fine gravel - gray - wet (CL)*(continued)*				0.0	2.5					
10 SS	24 12	25 40 50/0.4 -	22.5 24.0		CL			0.0	1.75					
11 SS	24 24	8 12 28 30	25.5 27.0					0.0	4.5					
12 SS	24 20	6 8 20 21	28.5	Silty Clay and Fine to Medium Sand with 4.0" sand seam - gray - wet (CL)				0.0	3.5					
13 SS	24 19	7 9 14 16	30.0 31.5		CL			0.0						
14 SS	24 24	9 15 15 21	33.0 34.5					0.0						
15 SS	24 24	12 27 25 24	36.0	Fine to Coarse Sand and Fine Gravel - gray - wet (SP)				0.0						
16 SS	24 13	16 28 38 50/0.4	37.5 39.0		SP			0.0						
17 SS	24 2	50/0.5 - - -	40.5 42.0	Silty Clay and Fine to Coarse Sand - gray - wet (CL)	CL			0.0	4					
18 SS	12	50/0 - - -	43.5	Dolomite Bedrock	Bedrock			0.0						
				Note: No recovery from Sample No. 18										
				End of Boring at 44.5 feet										
				Boring advanced from 0.0 to 10.0 feet with a hollow stem auger. Boring advanced from 10.0 feet to 44.5 feet with mud rotary. 15.0 feet of temporary casing installed. Boring abandoned with bentonite-sand slurry.										

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

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

(1) GENERAL INFORMATION

WI Unique Well No. | DNR Well ID No. | County: Milwaukee

Common Well Name _____ Gov't Lot (if applicable) _____

Grid Location: NE 1/4 of NW 1/4 of Sec. 26 ; T. 7 N; R. 21 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat ___ ° ___ ' ___ " Long ___ ° ___ ' ___ "

State Plane _____ ft. N. _____ ft. E. ☒ S ☐ C ☐ N Zone

Reason For Abandonment: Site Investigation | WI Unique Well No. of Replacement Well:

(2) FACILITY /OWNER INFORMATION

Facility Name: WDOA Wiscraft - 589350XA

Facility ID | License/Permit/Monitoring No.

Street Address of Well: 5316 W. State Street

City, Village, or Town: Milwaukee

Present Well Owner: WI Dept. of Administration | Original Owner

Street Address or Route of Owner: 101 E. Wilson St., 7th Floor

City, State, Zip Code: Madison, Wisconsin 53702

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 11/28/2005

☐ Monitoring Well
☐ Water Well
☒ Drillhole / Borehole

If a Well Construction Report is available, please attach.

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

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) (From ground surface): 44.5 Casing Diameter (in.) _____
Casing Depth (ft.) _____

Lower Drillhole Diameter (in.): 4.0

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet): 9.2

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☐ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☐ No	

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

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☒ Bentonite-Sand Slurry
☒ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)		Mix Ratio or Mud Weight
Chipped Bentonite	Surface	5.0		
Bentonite-Sand Slurry	5.0	44.5		

(6) Comments _____

(7) Name of Person or Firm Doing Sealing Work: Subsurface Testing Services, Inc. | Date of Abandonment: 11/29/05

Signature of Person Doing Work | Date Signed

Street or Route: 1035 Kepler Drive | Telephone Number: 920-468-1978

City, State, Zip Code: Green Bay, Wisconsin 54311

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

Attachment B

Laboratory Analytical Reports

CTLaboratories

1230 Lange Court
Baraboo, WI 53913-3109
Phone: (800) 228-3012
Fax: (608) 356-2766
www.ctlaboratories.com

ANALYTICAL REPORT

STS CONSULTANTS
LEO LINNEMANSTONS
2821 DAIRY DRIVE
SUITE 5
MADISON, WI 53718

Project Name: WISCRAFT
Contract #: 2023
Project #: 89350 XA, T-1000
Folder #: 51774
Purchase Order #:
Arrival Temperature: See COC

Report Date: 1/30/2006
Date Received: 1/18/2006

Reprint Date:

CT Lab#: 365488 Sample Description: PZ-01 Sampled: 1/17/2006 1000

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Organic Results										
1,1,2-Trichloroethane	<2000	ug/L	2000	6500	5,000.0			1/27/2006	APG	EPA 8260B
1,1,1,2-Tetrachloroethane	<2500	ug/L	2500	8500	5,000.0			1/27/2006	APG	EPA 8260B
1,1,1-Trichloroethane	<3000	ug/L	3000	10000	5,000.0			1/27/2006	APG	EPA 8260B
1,1,2,2-Tetrachloroethane	<750	ug/L	750	2600	5,000.0			1/27/2006	APG	EPA 8260B
1,1-Dichloroethane	<2500	ug/L	2500	8500	5,000.0			1/27/2006	APG	EPA 8260B
1,1-Dichloroethene	<2500	ug/L	2500	9000	5,000.0			1/27/2006	APG	EPA 8260B
1,1-Dichloropropene	<2500	ug/L	2500	7500	5,000.0			1/27/2006	APG	EPA 8260B
1,2,3-Trichlorobenzene	<3000	ug/L	3000	9500	5,000.0			1/27/2006	APG	EPA 8260B
1,2,3-Trichloropropane	<3000	ug/L	3000	11000	5,000.0			1/27/2006	APG	EPA 8260B
1,2,4-Trichlorobenzene	<3500	ug/L	3500	12000	5,000.0			1/27/2006	APG	EPA 8260B
1,2,4-Trimethylbenzene	<2000	ug/L	2000	7500	5,000.0			1/27/2006	APG	EPA 8260B
1,2-Dibromo-3-chloropropane	<5500	ug/L	5500	18000	5,000.0			1/27/2006	APG	EPA 8260B
1,2-Dibromoethane	<3000	ug/L	3000	9500	5,000.0			1/27/2006	APG	EPA 8260B
1,2-Dichlorobenzene	<2500	ug/L	2500	9000	5,000.0			1/27/2006	APG	EPA 8260B
1,2-Dichloroethane	<2500	ug/L	2500	7500	5,000.0			1/27/2006	APG	EPA 8260B
cis-1,2-Dichloroethene	<3000	ug/L	3000	9500	5,000.0			1/27/2006	APG	EPA 8260B
trans-1,2-Dichloroethene	<3000	ug/L	3000	10000	5,000.0			1/27/2006	APG	EPA 8260B
1,2-Dichloropropane	<2500	ug/L	2500	9000	5,000.0			1/27/2006	APG	EPA 8260B
cis-1,3-Dichloropropene	<600	ug/L	600	2100	5,000.0			1/27/2006	APG	EPA 8260B
trans-1,3-Dichloropropene	<700	ug/L	700	2400	5,000.0			1/27/2006	APG	EPA 8260B
1,3,5-Trimethylbenzene	<2500	ug/L	2500	8000	5,000.0			1/27/2006	APG	EPA 8260B
1,3-Dichlorobenzene	<2500	ug/L	2500	8500	5,000.0			1/27/2006	APG	EPA 8260B
1,3-Dichloropropane	<3000	ug/L	3000	9500	5,000.0			1/27/2006	APG	EPA 8260B

WI DNR Lab Certification Number: 15-7066030
DATCP Certification Number: 105-000289
LA NELAP Certification Number: 04091

Solid sample results reported on a Dry Weight Basis

CT Lab#: 365488 Sample Description: PZ-01 Sampled: 1/17/2006 1000

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
1,4-Dichlorobenzene	<2500	ug/L	2500	8500	5,000.0			1/27/2006	APG	EPA 8260B
2,2-Dichloropropane	<3000	ug/L	3000	10000	5,000.0			1/27/2006	APG	EPA 8260B
2-Butanone	<35000	ug/L	35000	130000	5,000.0			1/27/2006	APG	EPA 8260B
2-Chlorotoluene	<2500	ug/L	2500	9000	5,000.0			1/27/2006	APG	EPA 8260B
2-Hexanone	<35000	ug/L	35000	120000	5,000.0			1/27/2006	APG	EPA 8260B
4-Chlorotoluene	<2000	ug/L	2000	7500	5,000.0			1/27/2006	APG	EPA 8260B
4-Methyl-2-pentanone	<35000	ug/L	35000	120000	5,000.0			1/27/2006	APG	EPA 8260B
Acetone	<45000	ug/L	45000	150000	5,000.0			1/27/2006	APG	EPA 8260B
Benzene	<2000	ug/L	2000	6500	5,000.0			1/27/2006	APG	EPA 8260B
Bromobenzene	<2500	ug/L	2500	8500	5,000.0			1/27/2006	APG	EPA 8260B
Bromochloromethane	<2500	ug/L	2500	7500	5,000.0			1/27/2006	APG	EPA 8260B
Bromodichloromethane	<650	ug/L	650	2100	5,000.0			1/27/2006	APG	EPA 8260B
Bromoform	<2500	ug/L	2500	8500	5,000.0			1/27/2006	APG	EPA 8260B
Bromomethane	<4000	ug/L	4000	14000	5,000.0			1/27/2006	APG	EPA 8260B
n-Butylbenzene	<3000	ug/L	3000	9500	5,000.0			1/27/2006	APG	EPA 8260B
sec-Butylbenzene	<2500	ug/L	2500	8500	5,000.0			1/27/2006	APG	EPA 8260B
tert-Butylbenzene	<2500	ug/L	2500	8000	5,000.0			1/27/2006	APG	EPA 8260B
Carbon disulfide	<5500	ug/L	5500	19000	5,000.0			1/27/2006	APG	EPA 8260B
Carbon tetrachloride	<2500	ug/L	2500	8000	5,000.0			1/27/2006	APG	EPA 8260B
Chlorobenzene	<2500	ug/L	2500	9000	5,000.0			1/27/2006	APG	EPA 8260B
Chloroethane	<3500	ug/L	3500	11000	5,000.0			1/27/2006	APG	EPA 8260B
Chloroform	<2500	ug/L	2500	8500	5,000.0			1/27/2006	APG	EPA 8260B
Chloromethane	<1200	ug/L	1200	4000	5,000.0			1/27/2006	APG	EPA 8260B
Dibromochloromethane	<3000	ug/L	3000	10000	5,000.0			1/27/2006	APG	EPA 8260B
Dibromomethane	<3500	ug/L	3500	12000	5,000.0			1/27/2006	APG	EPA 8260B
Dichlorodifluoromethane	<3000	ug/L	3000	11000	5,000.0			1/27/2006	APG	EPA 8260B
Diisopropyl ether	<2500	ug/L	2500	9000	5,000.0			1/27/2006	APG	EPA 8260B
Ethylbenzene	<2500	ug/L	2500	7500	5,000.0			1/27/2006	APG	EPA 8260B
Hexachlorobutadiene	<3000	ug/L	3000	9000	5,000.0			1/27/2006	APG	EPA 8260B
Isopropylbenzene	<2000	ug/L	2000	7000	5,000.0			1/27/2006	APG	EPA 8260B
p-Isopropyltoluene	<2000	ug/L	2000	7000	5,000.0			1/27/2006	APG	EPA 8260B
Methyl tert-butyl ether	<3000	ug/L	3000	9500	5,000.0			1/27/2006	APG	EPA 8260B
Methylene chloride	7800	ug/L	2000	6500	5,000.0	B		1/27/2006	APG	EPA 8260B
Naphthalene	<3000	ug/L	3000	10000	5,000.0			1/27/2006	APG	EPA 8260B
n-Propylbenzene	<2000	ug/L	2000	6500	5,000.0			1/27/2006	APG	EPA 8260B
Styrene	<2500	ug/L	2500	8000	5,000.0			1/27/2006	APG	EPA 8260B
Tetrachloroethene	64000	ug/L	2000	7000	5,000.0			1/27/2006	APG	EPA 8260B

Solid sample results reported on a Dry Weight Basis

CT Lab#: 365488 Sample Description: PZ-01 Sampled: 1/17/2006 1000

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Tetrahydrofuran	<35000	ug/L	35000	120000	5,000.0			1/27/2006	APG	EPA 8260B
Toluene	<2000	ug/L	2000	6000	5,000.0			1/27/2006	APG	EPA 8260B
Trichloroethene	<750	ug/L	750	2500	5,000.0			1/27/2006	APG	EPA 8260B
Trichlorofluoromethane	<2500	ug/L	2500	8000	5,000.0			1/27/2006	APG	EPA 8260B
Vinyl acetate	<40000	ug/L	40000	140000	5,000.0			1/27/2006	APG	EPA 8260B
Vinyl chloride	<600	ug/L	600	2000	5,000.0			1/27/2006	APG	EPA 8260B
m & p-Xylene	<5000	ug/L	5000	17000	5,000.0			1/27/2006	APG	EPA 8260B
o-Xylene	<2000	ug/L	2000	7500	5,000.0			1/27/2006	APG	EPA 8260B

CT Lab#: 365489 Sample Description: PZ-02 Sampled: 1/17/2006 1000

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Organic Results										
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1.0			1/27/2006	APG	EPA 8260B
1,1,1,2-Tetrachloroethane	<0.50	ug/L	0.50	1.7	1.0			1/27/2006	APG	EPA 8260B
1,1,1-Trichloroethane	<0.60	ug/L	0.60	2.0	1.0			1/27/2006	APG	EPA 8260B
1,1,2,2-Tetrachloroethane	<0.15	ug/L	0.15	0.52	1.0			1/27/2006	APG	EPA 8260B
1,1-Dichloroethane	<0.50	ug/L	0.50	1.7	1.0			1/27/2006	APG	EPA 8260B
1,1-Dichloroethene	<0.50	ug/L	0.50	1.8	1.0			1/27/2006	APG	EPA 8260B
1,1-Dichloropropene	<0.50	ug/L	0.50	1.5	1.0			1/27/2006	APG	EPA 8260B
1,2,3-Trichlorobenzene	<0.60	ug/L	0.60	1.9	1.0			1/27/2006	APG	EPA 8260B
1,2,3-Trichloropropane	<0.60	ug/L	0.60	2.1	1.0			1/27/2006	APG	EPA 8260B
1,2,4-Trichlorobenzene	<0.70	ug/L	0.70	2.4	1.0			1/27/2006	APG	EPA 8260B
1,2,4-Trimethylbenzene	<0.40	ug/L	0.40	1.5	1.0			1/27/2006	APG	EPA 8260B
1,2-Dibromo-3-chloropropane	<1.1	ug/L	1.1	3.6	1.0			1/27/2006	APG	EPA 8260B
1,2-Dibromoethane	<0.60	ug/L	0.60	1.9	1.0			1/27/2006	APG	EPA 8260B
1,2-Dichlorobenzene	<0.50	ug/L	0.50	1.8	1.0			1/27/2006	APG	EPA 8260B
1,2-Dichloroethane	<0.50	ug/L	0.50	1.5	1.0			1/27/2006	APG	EPA 8260B
cis-1,2-Dichloroethene	<0.60	ug/L	0.60	1.9	1.0			1/27/2006	APG	EPA 8260B
trans-1,2-Dichloroethene	<0.60	ug/L	0.60	2.0	1.0			1/27/2006	APG	EPA 8260B
1,2-Dichloropropane	<0.50	ug/L	0.50	1.8	1.0			1/27/2006	APG	EPA 8260B
cis-1,3-Dichloropropene	<0.12	ug/L	0.12	0.42	1.0			1/27/2006	APG	EPA 8260B
trans-1,3-Dichloropropene	<0.14	ug/L	0.14	0.48	1.0			1/27/2006	APG	EPA 8260B
1,3,5-Trimethylbenzene	<0.50	ug/L	0.50	1.6	1.0			1/27/2006	APG	EPA 8260B
1,3-Dichlorobenzene	<0.50	ug/L	0.50	1.7	1.0			1/27/2006	APG	EPA 8260B
1,3-Dichloropropane	<0.60	ug/L	0.60	1.9	1.0			1/27/2006	APG	EPA 8260B

Solid sample results reported on a Dry Weight Basis

CT Lab#: 365489 Sample Description: PZ-02 Sampled: 1/17/2006 1000

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
1,4-Dichlorobenzene	<0.50	ug/L	0.50	1.7	1.0			1/27/2006	APG	EPA 8260B
2,2-Dichloropropane	<0.60	ug/L	0.60	2.0	1.0			1/27/2006	APG	EPA 8260B
2-Butanone	<7.0	ug/L	7.0	25	1.0			1/27/2006	APG	EPA 8260B
2-Chlorotoluene	<0.50	ug/L	0.50	1.8	1.0			1/27/2006	APG	EPA 8260B
2-Hexanone	<7.0	ug/L	7.0	23	1.0			1/27/2006	APG	EPA 8260B
4-Chlorotoluene	<0.40	ug/L	0.40	1.5	1.0			1/27/2006	APG	EPA 8260B
4-Methyl-2-pentanone	<7.0	ug/L	7.0	24	1.0			1/27/2006	APG	EPA 8260B
Acetone	<9.0	ug/L	9.0	29	1.0			1/27/2006	APG	EPA 8260B
Benzene	<0.40	ug/L	0.40	1.3	1.0			1/27/2006	APG	EPA 8260B
Bromobenzene	<0.50	ug/L	0.50	1.7	1.0			1/27/2006	APG	EPA 8260B
Bromochloromethane	<0.50	ug/L	0.50	1.5	1.0			1/27/2006	APG	EPA 8260B
Bromodichloromethane	0.93	ug/L	0.13	0.42	1.0			1/27/2006	APG	EPA 8260B
Bromoform	<0.50	ug/L	0.50	1.7	1.0			1/27/2006	APG	EPA 8260B
Bromomethane	<0.80	ug/L	0.80	2.7	1.0			1/27/2006	APG	EPA 8260B
n-Butylbenzene	<0.60	ug/L	0.60	1.9	1.0			1/27/2006	APG	EPA 8260B
sec-Butylbenzene	<0.50	ug/L	0.50	1.7	1.0			1/27/2006	APG	EPA 8260B
tert-Butylbenzene	<0.50	ug/L	0.50	1.6	1.0			1/27/2006	APG	EPA 8260B
Carbon disulfide	<1.1	ug/L	1.1	3.8	1.0			1/27/2006	APG	EPA 8260B
Carbon tetrachloride	<0.50	ug/L	0.50	1.6	1.0			1/27/2006	APG	EPA 8260B
Chlorobenzene	<0.50	ug/L	0.50	1.8	1.0			1/27/2006	APG	EPA 8260B
Chloroethane	<0.70	ug/L	0.70	2.2	1.0			1/27/2006	APG	EPA 8260B
Chloroform	1.0	ug/L	0.50	1.7	1.0	*		1/27/2006	APG	EPA 8260B
Chloromethane	<0.24	ug/L	0.24	0.79	1.0			1/27/2006	APG	EPA 8260B
Dibromochloromethane	0.68	ug/L	0.60	2.0	1.0	*		1/27/2006	APG	EPA 8260B
Dibromomethane	<0.70	ug/L	0.70	2.3	1.0			1/27/2006	APG	EPA 8260B
Dichlorodifluoromethane	<0.60	ug/L	0.60	2.1	1.0			1/27/2006	APG	EPA 8260B
Diisopropyl ether	<0.50	ug/L	0.50	1.8	1.0			1/27/2006	APG	EPA 8260B
Ethylbenzene	<0.50	ug/L	0.50	1.5	1.0			1/27/2006	APG	EPA 8260B
Hexachlorobutadiene	<0.60	ug/L	0.60	1.8	1.0			1/27/2006	APG	EPA 8260B
Isopropylbenzene	<0.40	ug/L	0.40	1.4	1.0			1/27/2006	APG	EPA 8260B
p-Isopropyltoluene	<0.40	ug/L	0.40	1.4	1.0			1/27/2006	APG	EPA 8260B
Methyl tert-butyl ether	<0.60	ug/L	0.60	1.9	1.0			1/27/2006	APG	EPA 8260B
Methylene chloride	<0.40	ug/L	0.40	1.3	1.0			1/27/2006	APG	EPA 8260B
Naphthalene	<0.60	ug/L	0.60	2.0	1.0			1/27/2006	APG	EPA 8260B
n-Propylbenzene	<0.40	ug/L	0.40	1.3	1.0			1/27/2006	APG	EPA 8260B
Styrene	<0.50	ug/L	0.50	1.6	1.0			1/27/2006	APG	EPA 8260B
Tetrachloroethene	140	ug/L	4.0	14	10.0			1/27/2006	APG	EPA 8260B

Solid sample results reported on a Dry Weight Basis

CT Lab#: 365489 Sample Description: PZ-02 Sampled: 1/17/2006 1000

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Tetrahydrofuran	<7.0	ug/L	7.0	23	1.0			1/27/2006	APG	EPA 8260B
Toluene	<0.40	ug/L	0.40	1.2	1.0			1/27/2006	APG	EPA 8260B
Trichloroethene	1.0	ug/L	0.15	0.50	1.0			1/27/2006	APG	EPA 8260B
Trichlorofluoromethane	<0.50	ug/L	0.50	1.6	1.0			1/27/2006	APG	EPA 8260B
Vinyl acetate	<8.0	ug/L	8.0	27	1.0			1/27/2006	APG	EPA 8260B
Vinyl chloride	<0.12	ug/L	0.12	0.39	1.0			1/27/2006	APG	EPA 8260B
m & p-Xylene	<1.0	ug/L	1.0	3.4	1.0			1/27/2006	APG	EPA 8260B
o-Xylene	<0.40	ug/L	0.40	1.5	1.0			1/27/2006	APG	EPA 8260B

CT Lab#: 365490 Sample Description: TRIP BLANK Sampled: 1/17/2006

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Organic Results										
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1.0			1/26/2006	APG	EPA 8260B
1,1,1,2-Tetrachloroethane	<0.50	ug/L	0.50	1.7	1.0			1/26/2006	APG	EPA 8260B
1,1,1-Trichloroethane	<0.60	ug/L	0.60	2.0	1.0			1/26/2006	APG	EPA 8260B
1,1,2,2-Tetrachloroethane	<0.15	ug/L	0.15	0.52	1.0			1/26/2006	APG	EPA 8260B
1,1-Dichloroethane	<0.50	ug/L	0.50	1.7	1.0			1/26/2006	APG	EPA 8260B
1,1-Dichloroethene	<0.50	ug/L	0.50	1.8	1.0			1/26/2006	APG	EPA 8260B
1,1-Dichloropropene	<0.50	ug/L	0.50	1.5	1.0			1/26/2006	APG	EPA 8260B
1,2,3-Trichlorobenzene	<0.60	ug/L	0.60	1.9	1.0			1/26/2006	APG	EPA 8260B
1,2,3-Trichloropropane	<0.60	ug/L	0.60	2.1	1.0			1/26/2006	APG	EPA 8260B
1,2,4-Trichlorobenzene	<0.70	ug/L	0.70	2.4	1.0			1/26/2006	APG	EPA 8260B
1,2,4-Trimethylbenzene	<0.40	ug/L	0.40	1.5	1.0			1/26/2006	APG	EPA 8260B
1,2-Dibromo-3-chloropropane	<1.1	ug/L	1.1	3.6	1.0			1/26/2006	APG	EPA 8260B
1,2-Dibromoethane	<0.60	ug/L	0.60	1.9	1.0			1/26/2006	APG	EPA 8260B
1,2-Dichlorobenzene	<0.50	ug/L	0.50	1.8	1.0			1/26/2006	APG	EPA 8260B
1,2-Dichloroethane	<0.50	ug/L	0.50	1.5	1.0			1/26/2006	APG	EPA 8260B
cis-1,2-Dichloroethene	<0.60	ug/L	0.60	1.9	1.0			1/26/2006	APG	EPA 8260B
trans-1,2-Dichloroethene	<0.60	ug/L	0.60	2.0	1.0			1/26/2006	APG	EPA 8260B
1,2-Dichloropropane	<0.50	ug/L	0.50	1.8	1.0			1/26/2006	APG	EPA 8260B
cis-1,3-Dichloropropene	<0.12	ug/L	0.12	0.42	1.0			1/26/2006	APG	EPA 8260B
trans-1,3-Dichloropropene	<0.14	ug/L	0.14	0.48	1.0			1/26/2006	APG	EPA 8260B
1,3,5-Trimethylbenzene	<0.50	ug/L	0.50	1.6	1.0			1/26/2006	APG	EPA 8260B
1,3-Dichlorobenzene	<0.50	ug/L	0.50	1.7	1.0			1/26/2006	APG	EPA 8260B
1,3-Dichloropropane	<0.60	ug/L	0.60	1.9	1.0			1/26/2006	APG	EPA 8260B

Solid sample results reported on a Dry Weight Basis

CT Lab#: 365490 Sample Description: TRIP BLANK Sampled: 1/17/2006

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
1,4-Dichlorobenzene	<0.50	ug/L	0.50	1.7	1.0			1/26/2006	APG	EPA 8260B
2,2-Dichloropropane	<0.60	ug/L	0.60	2.0	1.0			1/26/2006	APG	EPA 8260B
2-Butanone	<7.0	ug/L	7.0	25	1.0			1/26/2006	APG	EPA 8260B
2-Chlorotoluene	<0.50	ug/L	0.50	1.8	1.0			1/26/2006	APG	EPA 8260B
2-Hexanone	<7.0	ug/L	7.0	23	1.0			1/26/2006	APG	EPA 8260B
4-Chlorotoluene	<0.40	ug/L	0.40	1.5	1.0			1/26/2006	APG	EPA 8260B
4-Methyl-2-pentanone	<7.0	ug/L	7.0	24	1.0			1/26/2006	APG	EPA 8260B
Acetone	<9.0	ug/L	9.0	29	1.0			1/26/2006	APG	EPA 8260B
Benzene	<0.40	ug/L	0.40	1.3	1.0			1/26/2006	APG	EPA 8260B
Bromobenzene	<0.50	ug/L	0.50	1.7	1.0			1/26/2006	APG	EPA 8260B
Bromochloromethane	<0.50	ug/L	0.50	1.5	1.0			1/26/2006	APG	EPA 8260B
Bromodichloromethane	<0.13	ug/L	0.13	0.42	1.0			1/26/2006	APG	EPA 8260B
Bromoform	<0.50	ug/L	0.50	1.7	1.0			1/26/2006	APG	EPA 8260B
Bromomethane	<0.80	ug/L	0.80	2.7	1.0			1/26/2006	APG	EPA 8260B
n-Butylbenzene	<0.60	ug/L	0.60	1.9	1.0			1/26/2006	APG	EPA 8260B
sec-Butylbenzene	<0.50	ug/L	0.50	1.7	1.0			1/26/2006	APG	EPA 8260B
tert-Butylbenzene	<0.50	ug/L	0.50	1.6	1.0			1/26/2006	APG	EPA 8260B
Carbon disulfide	<1.1	ug/L	1.1	3.8	1.0			1/26/2006	APG	EPA 8260B
Carbon tetrachloride	<0.50	ug/L	0.50	1.6	1.0			1/26/2006	APG	EPA 8260B
Chlorobenzene	<0.50	ug/L	0.50	1.8	1.0			1/26/2006	APG	EPA 8260B
Chloroethane	<0.70	ug/L	0.70	2.2	1.0			1/26/2006	APG	EPA 8260B
Chloroform	<0.50	ug/L	0.50	1.7	1.0			1/26/2006	APG	EPA 8260B
Chloromethane	<0.24	ug/L	0.24	0.79	1.0			1/26/2006	APG	EPA 8260B
Dibromochloromethane	<0.60	ug/L	0.60	2.0	1.0			1/26/2006	APG	EPA 8260B
Dibromomethane	<0.70	ug/L	0.70	2.3	1.0			1/26/2006	APG	EPA 8260B
Dichlorodifluoromethane	<0.60	ug/L	0.60	2.1	1.0			1/26/2006	APG	EPA 8260B
Diisopropyl ether	<0.50	ug/L	0.50	1.8	1.0			1/26/2006	APG	EPA 8260B
Ethylbenzene	<0.50	ug/L	0.50	1.5	1.0			1/26/2006	APG	EPA 8260B
Hexachlorobutadiene	<0.60	ug/L	0.60	1.8	1.0			1/26/2006	APG	EPA 8260B
Isopropylbenzene	<0.40	ug/L	0.40	1.4	1.0			1/26/2006	APG	EPA 8260B
p-Isopropyltoluene	<0.40	ug/L	0.40	1.4	1.0			1/26/2006	APG	EPA 8260B
Methyl tert-butyl ether	<0.60	ug/L	0.60	1.9	1.0			1/26/2006	APG	EPA 8260B
Methylene chloride	5.2	ug/L	0.40	1.3	1.0	B		1/26/2006	APG	EPA 8260B
Naphthalene	<0.60	ug/L	0.60	2.0	1.0			1/26/2006	APG	EPA 8260B
n-Propylbenzene	<0.40	ug/L	0.40	1.3	1.0			1/26/2006	APG	EPA 8260B
Styrene	<0.50	ug/L	0.50	1.6	1.0			1/26/2006	APG	EPA 8260B
Tetrachloroethene	<0.40	ug/L	0.40	1.4	1.0			1/26/2006	APG	EPA 8260B

Solid sample results reported on a Dry Weight Basis

CT Lab#: 365490 Sample Description: TRIP BLANK Sampled: 1/17/2006

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Tetrahydrofuran	<7.0	ug/L	7.0	23	1.0			1/26/2006	APG	EPA 8260B
Toluene	<0.40	ug/L	0.40	1.2	1.0			1/26/2006	APG	EPA 8260B
Trichloroethene	<0.15	ug/L	0.15	0.50	1.0			1/26/2006	APG	EPA 8260B
Trichlorofluoromethane	<0.50	ug/L	0.50	1.6	1.0			1/26/2006	APG	EPA 8260B
Vinyl acetate	<8.0	ug/L	8.0	27	1.0			1/26/2006	APG	EPA 8260B
Vinyl chloride	<0.12	ug/L	0.12	0.39	1.0			1/26/2006	APG	EPA 8260B
m & p-Xylene	<1.0	ug/L	1.0	3.4	1.0			1/26/2006	APG	EPA 8260B
o-Xylene	<0.40	ug/L	0.40	1.5	1.0			1/26/2006	APG	EPA 8260B

Solid sample results reported on a Dry Weight Basis

Notes regarding entire Chain of Custody:

Notes: * Indicates Value in between LOD and LOQ.
All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

This report satisfies the requirements of your project but has not been prepared to comply with NELAP reporting requirements.

Submitted by: PML

Pat M. Letterer
Project Manager
608-356-2760

QC Qualifiers

Code	Description
A	Analyte averaged calibration criteria within acceptable limits.
B	Analyte detected in associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Calibration criteria exceeded.

Rev. 3/2003

Chain of Custody

Page 1 of 1

CTLaboratories

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Tel. Fx 608-356-2766
www.ctlaboratories.com

Company Name: STS Consultants
Project Contact: Lee Linnemanstons
Telephone: 414-359-3030
Project Name: Wiscraft
Project Number: 89350 XA, T4
Project Location: Milwaukee
Sampled By: AHF

Folder #: 51774
Company: STS CONSULTANTS
Project: WISCRAFT
Logged By: JLW PM: PMI

Ice Present (Yes) No
Temperature 5.2
Initials JLW
Date 1/18/06 Time 1125
Cooler #

Mail Report To: Leo L.
Company: STS - Madison
Address:
City/State/Zip:

Invoice To: Same
Company:
Address:
City/State/Zip:

PO No.

Contract No.

Regulatory Program:
UST RCRA SDWA NPDE
Solid Waste Other

Turnaround Time
(Normal) RUSH* Date Needed
*Notify Lab prior to sending in RUSH
Surcharges 24 hr 200% 2-3 days 100% 4-9 days 50%
Surcharges subject to change without notice.

Landfill License Number

Client Special Instructions:
Please return cooler to STS-Milwaukee

Collection Date	Collection Time	Field Screen	Field ID	Grab/ Comp	Sample ID Description	Filt'd Y/N	WDNR Well ID #	**Matrix:	VOCs							Total No of Containers	Total No of Cont. Rec'd	Preservation*	Lab ID #
							Fill in Spaces with Bottles per Test													
1/17/06	10:00			G	PZ-01	N		GW	X							3		B	365488
↓	11:00			G	PZ-02	N		GW	X							3		B	365489
—	—			—	Trip Blank	—		—	X							1		B	365490

Relinquished By:	Date/Time	Relinquished By:	Date/Time
[signature]	1/17/06 14:10		
Received by:	Date/Time	Received by:	Date/Time
		[signature]	1/18/06 1153

**Matrix
S-Soil A-Air Slg-Sludge M-Misc Waste
GW-Groundwater SW-Surface Water
WW-Wastewater DW-Drinking Water

*** Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other

CTLaboratories

1230 Lange Court
Baraboo, WI 53913-3109
Phone: (800) 228-3012
Fax: (608) 356-2766
www.ctlaboratories.com

ANALYTICAL REPORT

STS CONSULTANTS
LEO LINNEMANSTONS
2821 DAIRY DRIVE
SUITE 5
MADISON, WI 53718

Project Name: WISCRAFT
Contract #: 2031
Project #: X589350XA
Folder #: 51989
Purchase Order #:
Arrival Temperature: See COC

Report Date: 2/9/2006
Date Received: 2/2/2006

Reprint Date:

CT Lab#: 368387 Sample Description: PZ01 Sampled: 2/1/2006 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Organic Results										
1,1,2-Trichloroethane	<2000	ug/L	2000	6500	5,000.0			2/6/2006	APG	EPA 8260B
1,1,1,2-Tetrachloroethane	<2500	ug/L	2500	8500	5,000.0			2/6/2006	APG	EPA 8260B
1,1,1-Trichloroethane	<3000	ug/L	3000	10000	5,000.0			2/6/2006	APG	EPA 8260B
1,1,2,2-Tetrachloroethane	<750	ug/L	750	2600	5,000.0			2/6/2006	APG	EPA 8260B
1,1-Dichloroethane	<2500	ug/L	2500	8500	5,000.0			2/6/2006	APG	EPA 8260B
1,1-Dichloroethene	<2500	ug/L	2500	9000	5,000.0			2/6/2006	APG	EPA 8260B
1,1-Dichloropropene	<2500	ug/L	2500	7500	5,000.0			2/6/2006	APG	EPA 8260B
1,2,3-Trichlorobenzene	<3000	ug/L	3000	9500	5,000.0			2/6/2006	APG	EPA 8260B
1,2,3-Trichloropropane	<3000	ug/L	3000	11000	5,000.0			2/6/2006	APG	EPA 8260B
1,2,4-Trichlorobenzene	<3500	ug/L	3500	12000	5,000.0			2/6/2006	APG	EPA 8260B
1,2,4-Trimethylbenzene	<2000	ug/L	2000	7500	5,000.0			2/6/2006	APG	EPA 8260B
1,2-Dibromo-3-chloropropane	<5500	ug/L	5500	18000	5,000.0			2/6/2006	APG	EPA 8260B
1,2-Dibromoethane	<3000	ug/L	3000	9500	5,000.0			2/6/2006	APG	EPA 8260B
1,2-Dichlorobenzene	<2500	ug/L	2500	9000	5,000.0			2/6/2006	APG	EPA 8260B
1,2-Dichloroethane	<2500	ug/L	2500	7500	5,000.0			2/6/2006	APG	EPA 8260B
cis-1,2-Dichloroethene	<3000	ug/L	3000	9500	5,000.0			2/6/2006	APG	EPA 8260B
trans-1,2-Dichloroethene	<3000	ug/L	3000	10000	5,000.0			2/6/2006	APG	EPA 8260B
1,2-Dichloropropane	<2500	ug/L	2500	9000	5,000.0			2/6/2006	APG	EPA 8260B
cis-1,3-Dichloropropene	<600	ug/L	600	2100	5,000.0			2/6/2006	APG	EPA 8260B
trans-1,3-Dichloropropene	<700	ug/L	700	2400	5,000.0			2/6/2006	APG	EPA 8260B
1,3,5-Trimethylbenzene	<2500	ug/L	2500	8000	5,000.0			2/6/2006	APG	EPA 8260B
1,3-Dichlorobenzene	<2500	ug/L	2500	8500	5,000.0			2/6/2006	APG	EPA 8260B
1,3-Dichloropropane	<3000	ug/L	3000	9500	5,000.0			2/6/2006	APG	EPA 8260B

WI DNR Lab Certification Number: 15-7066030
DATCP Certification Number: 105-000289
LA NELAP Certification Number: 04091

Solid sample results reported on a Dry Weight Basis

CT Lab#: 368387 Sample Description: PZ01 Sampled: 2/1/2006 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
1,4-Dichlorobenzene	<2500	ug/L	2500	8500	5,000.0			2/6/2006	APG	EPA 8260B
2,2-Dichloropropane	<3000	ug/L	3000	10000	5,000.0			2/6/2006	APG	EPA 8260B
2-Butanone	<35000	ug/L	35000	130000	5,000.0			2/6/2006	APG	EPA 8260B
2-Chlorotoluene	<2500	ug/L	2500	9000	5,000.0			2/6/2006	APG	EPA 8260B
2-Hexanone	<35000	ug/L	35000	120000	5,000.0			2/6/2006	APG	EPA 8260B
4-Chlorotoluene	<2000	ug/L	2000	7500	5,000.0			2/6/2006	APG	EPA 8260B
4-Methyl-2-pentanone	<35000	ug/L	35000	120000	5,000.0			2/6/2006	APG	EPA 8260B
Acetone	<45000	ug/L	45000	150000	5,000.0			2/6/2006	APG	EPA 8260B
Benzene	<2000	ug/L	2000	6500	5,000.0			2/6/2006	APG	EPA 8260B
Bromobenzene	<2500	ug/L	2500	8500	5,000.0			2/6/2006	APG	EPA 8260B
Bromochloromethane	<2500	ug/L	2500	7500	5,000.0			2/6/2006	APG	EPA 8260B
Bromodichloromethane	<650	ug/L	650	2100	5,000.0			2/6/2006	APG	EPA 8260B
Bromoform	<2500	ug/L	2500	8500	5,000.0			2/6/2006	APG	EPA 8260B
Bromomethane	<4000	ug/L	4000	14000	5,000.0			2/6/2006	APG	EPA 8260B
n-Butylbenzene	<3000	ug/L	3000	9500	5,000.0			2/6/2006	APG	EPA 8260B
sec-Butylbenzene	<2500	ug/L	2500	8500	5,000.0			2/6/2006	APG	EPA 8260B
tert-Butylbenzene	<2500	ug/L	2500	8000	5,000.0			2/6/2006	APG	EPA 8260B
Carbon disulfide	<5500	ug/L	5500	19000	5,000.0			2/6/2006	APG	EPA 8260B
Carbon tetrachloride	<2500	ug/L	2500	8000	5,000.0			2/6/2006	APG	EPA 8260B
Chlorobenzene	<2500	ug/L	2500	9000	5,000.0			2/6/2006	APG	EPA 8260B
Chloroethane	<3500	ug/L	3500	11000	5,000.0			2/6/2006	APG	EPA 8260B
Chloroform	<2500	ug/L	2500	8500	5,000.0			2/6/2006	APG	EPA 8260B
Chloromethane	<1200	ug/L	1200	4000	5,000.0			2/6/2006	APG	EPA 8260B
Dibromochloromethane	<3000	ug/L	3000	10000	5,000.0			2/6/2006	APG	EPA 8260B
Dibromomethane	<3500	ug/L	3500	12000	5,000.0			2/6/2006	APG	EPA 8260B
Dichlorodifluoromethane	<3000	ug/L	3000	11000	5,000.0			2/6/2006	APG	EPA 8260B
Diisopropyl ether	<2500	ug/L	2500	9000	5,000.0			2/6/2006	APG	EPA 8260B
Ethylbenzene	<2500	ug/L	2500	7500	5,000.0			2/6/2006	APG	EPA 8260B
Hexachlorobutadiene	<3000	ug/L	3000	9000	5,000.0			2/6/2006	APG	EPA 8260B
Isopropylbenzene	<2000	ug/L	2000	7000	5,000.0			2/6/2006	APG	EPA 8260B
p-Isopropyltoluene	<2000	ug/L	2000	7000	5,000.0			2/6/2006	APG	EPA 8260B
Methyl tert-butyl ether	<3000	ug/L	3000	9500	5,000.0			2/6/2006	APG	EPA 8260B
Methylene chloride	<2000	ug/L	2000	6500	5,000.0			2/6/2006	APG	EPA 8260B
Naphthalene	<3000	ug/L	3000	10000	5,000.0			2/6/2006	APG	EPA 8260B
n-Propylbenzene	<2000	ug/L	2000	6500	5,000.0			2/6/2006	APG	EPA 8260B
Styrene	<2500	ug/L	2500	8000	5,000.0			2/6/2006	APG	EPA 8260B
Tetrachloroethene	120000	ug/L	2000	7000	5,000.0			2/6/2006	APG	EPA 8260B

Solid sample results reported on a Dry Weight Basis

CT Lab#: 368387 Sample Description: PZ01 Sampled: 2/1/2006 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Tetrahydrofuran	<35000	ug/L	35000	120000	5,000.0			2/6/2006	APG	EPA 8260B
Toluene	<2000	ug/L	2000	6000	5,000.0			2/6/2006	APG	EPA 8260B
Trichloroethene	920	ug/L	750	2500	5,000.0	*		2/6/2006	APG	EPA 8260B
Trichlorofluoromethane	<2500	ug/L	2500	8000	5,000.0			2/6/2006	APG	EPA 8260B
Vinyl acetate	<40000	ug/L	40000	140000	5,000.0			2/6/2006	APG	EPA 8260B
Vinyl chloride	<600	ug/L	600	2000	5,000.0			2/6/2006	APG	EPA 8260B
m & p-Xylene	<5000	ug/L	5000	17000	5,000.0			2/6/2006	APG	EPA 8260B
o-Xylene	<2000	ug/L	2000	7500	5,000.0			2/6/2006	APG	EPA 8260B

CT Lab#: 368388 Sample Description: PZ02 Sampled: 2/1/2006 1200

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Organic Results										
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1.0			2/7/2006	APG	EPA 8260B
1,1,1,2-Tetrachloroethane	<0.50	ug/L	0.50	1.7	1.0			2/7/2006	APG	EPA 8260B
1,1,1-Trichloroethane	<0.60	ug/L	0.60	2.0	1.0			2/7/2006	APG	EPA 8260B
1,1,2,2-Tetrachloroethane	<0.15	ug/L	0.15	0.52	1.0			2/7/2006	APG	EPA 8260B
1,1-Dichloroethane	<0.50	ug/L	0.50	1.7	1.0			2/7/2006	APG	EPA 8260B
1,1-Dichloroethene	<0.50	ug/L	0.50	1.8	1.0			2/7/2006	APG	EPA 8260B
1,1-Dichloropropene	<0.50	ug/L	0.50	1.5	1.0			2/7/2006	APG	EPA 8260B
1,2,3-Trichlorobenzene	<0.60	ug/L	0.60	1.9	1.0			2/7/2006	APG	EPA 8260B
1,2,3-Trichloropropane	<0.60	ug/L	0.60	2.1	1.0			2/7/2006	APG	EPA 8260B
1,2,4-Trichlorobenzene	<0.70	ug/L	0.70	2.4	1.0			2/7/2006	APG	EPA 8260B
1,2,4-Trimethylbenzene	<0.40	ug/L	0.40	1.5	1.0			2/7/2006	APG	EPA 8260B
1,2-Dibromo-3-chloropropane	<1.1	ug/L	1.1	3.6	1.0			2/7/2006	APG	EPA 8260B
1,2-Dibromoethane	<0.60	ug/L	0.60	1.9	1.0			2/7/2006	APG	EPA 8260B
1,2-Dichlorobenzene	<0.50	ug/L	0.50	1.8	1.0			2/7/2006	APG	EPA 8260B
1,2-Dichloroethane	<0.50	ug/L	0.50	1.5	1.0			2/7/2006	APG	EPA 8260B
cis-1,2-Dichloroethene	<0.60	ug/L	0.60	1.9	1.0			2/7/2006	APG	EPA 8260B
trans-1,2-Dichloroethene	<0.60	ug/L	0.60	2.0	1.0			2/7/2006	APG	EPA 8260B
1,2-Dichloropropane	<0.50	ug/L	0.50	1.8	1.0			2/7/2006	APG	EPA 8260B
cis-1,3-Dichloropropene	<0.12	ug/L	0.12	0.42	1.0			2/7/2006	APG	EPA 8260B
trans-1,3-Dichloropropene	<0.14	ug/L	0.14	0.48	1.0			2/7/2006	APG	EPA 8260B
1,3,5-Trimethylbenzene	<0.50	ug/L	0.50	1.6	1.0			2/7/2006	APG	EPA 8260B
1,3-Dichlorobenzene	<0.50	ug/L	0.50	1.7	1.0			2/7/2006	APG	EPA 8260B
1,3-Dichloropropane	<0.60	ug/L	0.60	1.9	1.0			2/7/2006	APG	EPA 8260B

Solid sample results reported on a Dry Weight Basis

CT Lab#: 368388 Sample Description: PZ02 Sampled: 2/1/2006 1200

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
1,4-Dichlorobenzene	<0.50	ug/L	0.50	1.7	1.0			2/7/2006	APG	EPA 8260B
2,2-Dichloropropane	<0.60	ug/L	0.60	2.0	1.0			2/7/2006	APG	EPA 8260B
2-Butanone	<7.0	ug/L	7.0	25	1.0			2/7/2006	APG	EPA 8260B
2-Chlorotoluene	<0.50	ug/L	0.50	1.8	1.0			2/7/2006	APG	EPA 8260B
2-Hexanone	<7.0	ug/L	7.0	23	1.0			2/7/2006	APG	EPA 8260B
4-Chlorotoluene	<0.40	ug/L	0.40	1.5	1.0			2/7/2006	APG	EPA 8260B
4-Methyl-2-pentanone	<7.0	ug/L	7.0	24	1.0			2/7/2006	APG	EPA 8260B
Acetone	<9.0	ug/L	9.0	29	1.0			2/7/2006	APG	EPA 8260B
Benzene	<0.40	ug/L	0.40	1.3	1.0			2/7/2006	APG	EPA 8260B
Bromobenzene	<0.50	ug/L	0.50	1.7	1.0			2/7/2006	APG	EPA 8260B
Bromochloromethane	<0.50	ug/L	0.50	1.5	1.0			2/7/2006	APG	EPA 8260B
Bromodichloromethane	<0.13	ug/L	0.13	0.42	1.0			2/7/2006	APG	EPA 8260B
Bromoform	<0.50	ug/L	0.50	1.7	1.0			2/7/2006	APG	EPA 8260B
Bromomethane	<0.80	ug/L	0.80	2.7	1.0			2/7/2006	APG	EPA 8260B
n-Butylbenzene	<0.60	ug/L	0.60	1.9	1.0			2/7/2006	APG	EPA 8260B
sec-Butylbenzene	<0.50	ug/L	0.50	1.7	1.0			2/7/2006	APG	EPA 8260B
tert-Butylbenzene	<0.50	ug/L	0.50	1.6	1.0			2/7/2006	APG	EPA 8260B
Carbon disulfide	<1.1	ug/L	1.1	3.8	1.0			2/7/2006	APG	EPA 8260B
Carbon tetrachloride	<0.50	ug/L	0.50	1.6	1.0			2/7/2006	APG	EPA 8260B
Chlorobenzene	<0.50	ug/L	0.50	1.8	1.0			2/7/2006	APG	EPA 8260B
Chloroethane	<0.70	ug/L	0.70	2.2	1.0			2/7/2006	APG	EPA 8260B
Chloroform	<0.50	ug/L	0.50	1.7	1.0			2/7/2006	APG	EPA 8260B
Chloromethane	<0.24	ug/L	0.24	0.79	1.0			2/7/2006	APG	EPA 8260B
Dibromochloromethane	<0.60	ug/L	0.60	2.0	1.0			2/7/2006	APG	EPA 8260B
Dibromomethane	<0.70	ug/L	0.70	2.3	1.0			2/7/2006	APG	EPA 8260B
Dichlorodifluoromethane	<0.60	ug/L	0.60	2.1	1.0			2/7/2006	APG	EPA 8260B
Diisopropyl ether	<0.50	ug/L	0.50	1.8	1.0			2/7/2006	APG	EPA 8260B
Ethylbenzene	<0.50	ug/L	0.50	1.5	1.0			2/7/2006	APG	EPA 8260B
Hexachlorobutadiene	<0.60	ug/L	0.60	1.8	1.0			2/7/2006	APG	EPA 8260B
Isopropylbenzene	<0.40	ug/L	0.40	1.4	1.0			2/7/2006	APG	EPA 8260B
p-Isopropyltoluene	<0.40	ug/L	0.40	1.4	1.0			2/7/2006	APG	EPA 8260B
Methyl tert-butyl ether	<0.60	ug/L	0.60	1.9	1.0			2/7/2006	APG	EPA 8260B
Methylene chloride	<0.40	ug/L	0.40	1.3	1.0			2/7/2006	APG	EPA 8260B
Naphthalene	<0.60	ug/L	0.60	2.0	1.0			2/7/2006	APG	EPA 8260B
n-Propylbenzene	<0.40	ug/L	0.40	1.3	1.0			2/7/2006	APG	EPA 8260B
Styrene	<0.50	ug/L	0.50	1.6	1.0			2/7/2006	APG	EPA 8260B
Tetrachloroethene	2.7	ug/L	0.40	1.4	1.0			2/7/2006	APG	EPA 8260B

WI DNR Lab Certification Number: 15-7066030
DATCP Certification Number: 105-000289
LA NELAP Certification Number: 04091

Solid sample results reported on a Dry Weight Basis

CT Lab#: 368388 Sample Description: PZ02 Sampled: 2/1/2006 1200

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Tetrahydrofuran	<7.0	ug/L	7.0	23	1.0			2/7/2006	APG	EPA 8260B
Toluene	<0.40	ug/L	0.40	1.2	1.0			2/7/2006	APG	EPA 8260B
Trichloroethene	<0.15	ug/L	0.15	0.50	1.0			2/7/2006	APG	EPA 8260B
Trichlorofluoromethane	<0.50	ug/L	0.50	1.6	1.0			2/7/2006	APG	EPA 8260B
Vinyl acetate	<8.0	ug/L	8.0	27	1.0			2/7/2006	APG	EPA 8260B
Vinyl chloride	<0.12	ug/L	0.12	0.39	1.0			2/7/2006	APG	EPA 8260B
m & p-Xylene	<1.0	ug/L	1.0	3.4	1.0			2/7/2006	APG	EPA 8260B
o-Xylene	<0.40	ug/L	0.40	1.5	1.0			2/7/2006	APG	EPA 8260B

Notes regarding entire Chain of Custody:

Notes: * Indicates Value in between LOD and LOQ.
All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

This report satisfies the requirements of your project but has not been prepared to comply with NELAP reporting requirements.

Submitted by: PML

Pat M. Letterer
Project Manager
608-356-2760

WI DNR Lab Certification Number: 15-7066030
DATCP Certification Number: 105-000289
LA NELAP Certification Number: 04091

Solid sample results reported on a Dry Weight Basis

Rev. 3/2003

Chain of Custody

Page 1 of 1

CTLaboratories

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Tel. Fx 608-356-2766
www.ctlaboratories.com

Company Name: STS Consultants
Project Contact: Leo Linnemanstons
Telephone: 414-359-3030
Project Name: Wiscraft
Project Number: X589350xA
Project Location: Milwaukee
Sampled By: AHF

Folder #: 51989
Company: STS CONSULTANTS
Project: WISCRAFT
Logged By: SAM PM: PMI

Present (Yes) No
nperature 1.6
tials
te 2/2/06 Time 1300
ooler #

Mail Report To: STS-Madison
Company: Leo Linnemanstons
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Contract No.

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other _____

Turnaround Time
(Normal) RUSH* Date Needed _____
*Notify Lab prior to sending in RUSH
Surcharges 24 hr 200% 2-3 days 100% 4-9 days 50%
Surcharges subject to change without notice.

Landfill License Number _____

Client Special Instructions:
Please return cooler to STS-Milwaukee

Collection Date	Collection Time	Field Screen	Field ID	Grab/ Comp	Sample ID Description	Filt'd Y/N	WDNR Well ID #	**Matrix:	VOCs	Total No of Containers	Total No of Cont. Rec'd	Preservation*	Lab ID #
					Fill in Spaces with Bottles per Test								
2/1/06	10:45			G	PZ01	N		GW	X	3		B	368387
↓	12:00			G	PZ02	N		GW	X	3		B	368388

Relinquished By:	Date/Time	Relinquished By:	Date/Time
	2/1/06 14:00		
Received by:	**Date/Time**	**Received by:**	**Date/Time**
		JW	2/2/06 1303

****Matrix**
S-Soil A-Air Slg-Sludge M-Misc Waste
GW-Groundwater SW-Surface Water
WW-Wastewater DW-Drinking Water

*** Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

CTLaboratories

1230 Lange Court
Baraboo, WI 53913-3109
Phone: (800) 228-3012
Fax: (608) 356-2766
www.ctlaboratories.com

ANALYTICAL REPORT

STS CONSULTANTS
LEO LINNEMANSTONS
2821 DAIRY DRIVE
SUITE 5
MADISON, WI 53718

Project Name: WISCRAFT
Contract #: 2023
Project #: X589350XA
Folder #: 53631
Purchase Order #:
Arrival Temperature: See COC

Report Date: 5/17/2006
Date Received: 5/11/2006

Reprint Date:

CT Lab#: 388272 Sample Description: PZ-02 Sampled: 5/10/2006 1415

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Organic Results										
1,1,2-Trichloroethane	<0.50	ug/L	0.50	1.8	1.0			5/15/2006	APG	EPA 8260B
1,1,1,2-Tetrachloroethane	<0.70	ug/L	0.70	2.4	1.0			5/15/2006	APG	EPA 8260B
1,1,1-Trichloroethane	<0.50	ug/L	0.50	1.6	1.0			5/15/2006	APG	EPA 8260B
1,1,2,2-Tetrachloroethane	<0.13	ug/L	0.13	0.43	1.0			5/15/2006	APG	EPA 8260B
1,1-Dichloroethane	<0.40	ug/L	0.40	1.4	1.0			5/15/2006	APG	EPA 8260B
1,1-Dichloroethene	<0.30	ug/L	0.30	1.2	1.0			5/15/2006	APG	EPA 8260B
1,1-Dichloropropene	<0.60	ug/L	0.60	1.9	1.0			5/15/2006	APG	EPA 8260B
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50	1.7	1.0			5/15/2006	APG	EPA 8260B
1,2,3-Trichloropropane	<0.70	ug/L	0.70	2.2	1.0			5/15/2006	APG	EPA 8260B
1,2,4-Trichlorobenzene	<0.70	ug/L	0.70	2.3	1.0			5/15/2006	APG	EPA 8260B
1,2,4-Trimethylbenzene	<0.50	ug/L	0.50	1.6	1.0			5/15/2006	APG	EPA 8260B
1,2-Dibromo-3-chloropropane	<0.30	ug/L	0.30	1.2	1.0			5/15/2006	APG	EPA 8260B
1,2-Dibromoethane	<0.50	ug/L	0.50	1.7	1.0			5/15/2006	APG	EPA 8260B
1,2-Dichlorobenzene	<0.50	ug/L	0.50	1.7	1.0			5/15/2006	APG	EPA 8260B
1,2-Dichloroethane	<0.50	ug/L	0.50	1.5	1.0			5/15/2006	APG	EPA 8260B
cis-1,2-Dichloroethene	<0.40	ug/L	0.40	1.4	1.0			5/15/2006	APG	EPA 8260B
trans-1,2-Dichloroethene	<0.40	ug/L	0.40	1.5	1.0			5/15/2006	APG	EPA 8260B
1,2-Dichloropropane	<0.50	ug/L	0.50	1.7	1.0			5/15/2006	APG	EPA 8260B
cis-1,3-Dichloropropene	<0.15	ug/L	0.15	0.50	1.0			5/15/2006	APG	EPA 8260B
trans-1,3-Dichloropropene	<0.14	ug/L	0.14	0.50	1.0			5/15/2006	APG	EPA 8260B
1,3,5-Trimethylbenzene	<0.40	ug/L	0.40	1.4	1.0			5/15/2006	APG	EPA 8260B
1,3-Dichlorobenzene	<0.40	ug/L	0.40	1.5	1.0			5/15/2006	APG	EPA 8260B
1,3-Dichloropropane	<0.50	ug/L	0.50	1.8	1.0			5/15/2006	APG	EPA 8260B

WI DNR Lab Certification Number: 15-7066030
DATCP Certification Number: 105-000289
LA NELAP Certification Number: 04091

Solid sample results reported on a Dry Weight Basis

CT Lab#: 388272 Sample Description: PZ-02 Sampled: 5/10/2006 1415

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
1,4-Dichlorobenzene	<0.60	ug/L	0.60	2.0	1.0			5/15/2006	APG	EPA 8260B
2,2-Dichloropropane	<0.60	ug/L	0.60	1.9	1.0			5/15/2006	APG	EPA 8260B
2-Butanone	<5.0	ug/L	5.0	18	1.0			5/15/2006	APG	EPA 8260B
2-Chlorotoluene	<0.50	ug/L	0.50	1.7	1.0			5/15/2006	APG	EPA 8260B
2-Hexanone	<8.0	ug/L	8.0	26	1.0			5/15/2006	APG	EPA 8260B
4-Chlorotoluene	<0.60	ug/L	0.60	2.0	1.0			5/15/2006	APG	EPA 8260B
4-Methyl-2-pentanone	<6.0	ug/L	6.0	20	1.0			5/15/2006	APG	EPA 8260B
Acetone	<10	ug/L	10	33	1.0			5/15/2006	APG	EPA 8260B
Benzene	<0.40	ug/L	0.40	1.3	1.0			5/15/2006	APG	EPA 8260B
Bromobenzene	<0.60	ug/L	0.60	2.1	1.0			5/15/2006	APG	EPA 8260B
Bromochloromethane	<0.70	ug/L	0.70	2.4	1.0			5/15/2006	APG	EPA 8260B
Bromodichloromethane	<0.15	ug/L	0.15	0.51	1.0			5/15/2006	APG	EPA 8260B
Bromoform	<0.21	ug/L	0.21	0.71	1.0			5/15/2006	APG	EPA 8260B
Bromomethane	<0.90	ug/L	0.90	2.9	1.0			5/15/2006	APG	EPA 8260B
n-Butylbenzene	<0.40	ug/L	0.40	1.3	1.0			5/15/2006	APG	EPA 8260B
sec-Butylbenzene	<0.50	ug/L	0.50	1.6	1.0			5/15/2006	APG	EPA 8260B
tert-Butylbenzene	<0.50	ug/L	0.50	1.7	1.0			5/15/2006	APG	EPA 8260B
Carbon disulfide	<1.0	ug/L	1.0	3.3	1.0			5/15/2006	APG	EPA 8260B
Carbon tetrachloride	<0.50	ug/L	0.50	1.8	1.0			5/15/2006	APG	EPA 8260B
Chlorobenzene	<0.40	ug/L	0.40	1.5	1.0			5/15/2006	APG	EPA 8260B
Chloroethane	<0.60	ug/L	0.60	2.0	1.0			5/15/2006	APG	EPA 8260B
Chloroform	<0.50	ug/L	0.50	1.7	1.0			5/15/2006	APG	EPA 8260B
Chloromethane	<0.30	ug/L	0.30	1.1	1.0			5/15/2006	APG	EPA 8260B
Dibromochloromethane	<0.60	ug/L	0.60	1.8	1.0			5/15/2006	APG	EPA 8260B
Dibromomethane	<0.80	ug/L	0.80	2.7	1.0			5/15/2006	APG	EPA 8260B
Dichlorodifluoromethane	<0.29	ug/L	0.29	0.97	1.0			5/15/2006	APG	EPA 8260B
Diisopropyl ether	<0.40	ug/L	0.40	1.4	1.0			5/15/2006	APG	EPA 8260B
Ethylbenzene	<0.50	ug/L	0.50	1.7	1.0			5/15/2006	APG	EPA 8260B
Hexachlorobutadiene	<0.90	ug/L	0.90	2.9	1.0			5/15/2006	APG	EPA 8260B
Isopropylbenzene	<0.60	ug/L	0.60	2.2	1.0			5/15/2006	APG	EPA 8260B
p-Isopropyltoluene	<0.40	ug/L	0.40	1.5	1.0			5/15/2006	APG	EPA 8260B
Methyl tert-butyl ether	<0.40	ug/L	0.40	1.4	1.0			5/15/2006	APG	EPA 8260B
Methylene chloride	<1.0	ug/L	1.0	3.2	1.0			5/15/2006	APG	EPA 8260B
Naphthalene	<0.70	ug/L	0.70	2.3	1.0			5/15/2006	APG	EPA 8260B
n-Propylbenzene	<0.40	ug/L	0.40	1.4	1.0			5/15/2006	APG	EPA 8260B
Styrene	<0.50	ug/L	0.50	1.6	1.0			5/15/2006	APG	EPA 8260B
Tetrachloroethene	1.7	ug/L	0.29	0.98	1.0			5/15/2006	APG	EPA 8260B

Solid sample results reported on a Dry Weight Basis

CT Lab#: 388272 Sample Description: PZ-02 Sampled: 5/10/2006 1415

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date	Analysis Date	Analyst	Method
Tetrahydrofuran	<7.0	ug/L	7.0	23	1.0			5/15/2006	APG	EPA 8260B
Toluene	<0.40	ug/L	0.40	1.4	1.0			5/15/2006	APG	EPA 8260B
Trichloroethene	<0.15	ug/L	0.15	0.50	1.0			5/15/2006	APG	EPA 8260B
Trichlorofluoromethane	<0.70	ug/L	0.70	2.5	1.0			5/15/2006	APG	EPA 8260B
Vinyl acetate	<1.7	ug/L	1.7	5.5	1.0			5/15/2006	APG	EPA 8260B
Vinyl chloride	<0.15	ug/L	0.15	0.51	1.0			5/15/2006	APG	EPA 8260B
m & p-Xylene	<0.90	ug/L	0.90	3.0	1.0			5/15/2006	APG	EPA 8260B
o-Xylene	<0.60	ug/L	0.60	1.9	1.0			5/15/2006	APG	EPA 8260B

Notes regarding entire Chain of Custody:

Notes: * Indicates Value in between LOD and LOQ.
All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

This report satisfies the requirements of your project but has not been prepared to comply with NELAP reporting requirements.

Submitted by: PML

Pat M. Letterer
Project Manager
608-356-2760

WI DNR Lab Certification Number: 15-7066030
DATCP Certification Number: 105-000289
LA NELAP Certification Number: 04091

Solid sample results reported on a Dry Weight Basis

Rev. 3/2006

Chain of Custody

Page 1 of 1

Company: STS Consultants
Project Contact: Leo Lingenmanstons
Telephone: 414-39[illegible]
Project Name: wiscraft
Project Number: X589350xA
Project Location: ~~West~~ Milwaukee
Sampled By: AHF

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other _____

CTLaboratories
1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Turnaround Time
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%, subject to change without notice.

Folder #: 53631
Company: STS CONSULTANTS
Project: WISCRAFT
Logged By: JLW PM: PMI

Mail Report To: Leo Lingenmanstons
Company: STS Consultants
Address: Madison, WI
City/State/Zip:

Invoice To: Same
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	Filt? Y/N	WDNR Well ID #	**Matrix:	VOCs							Total # of Containers	Preservation*	Lab ID #
							N									
5/10/06	14:15	6	PZ-02			GW	X							3	B	388272

Fill in Spaces with Bottles per Test

* **Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
[signature]	5/10/06 15:00		
Received by:	Date/Time	Received for Laboratory by:	Date/Time
		[signature]	5/11/06 1029

Ice Present (Yes) No
Temperature 3.3°C
Cooler # 1122

**Matrix
S-Soil A-Air Sl-Sludge M-Misc Waste
GW-Groundwater SW-Surface Water
WW-Wastewater DW-Drinking Water

WDNR Site Investigation Workplan Review Fee – STS Check #000910 for $500.00