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February 16, 2010

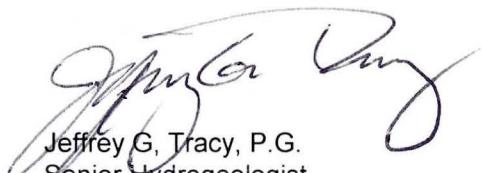
Mr. James Walden
Bureau of Remediation and Redevelopment
Wisconsin Department of Natural Resources
PO Box 7921
Madison, WI 53707-7921

Subject: Review Fee Submittal – Ansul Fire and Technology Center, Marinette, Wisconsin
WDNR BRRTS No. 03-38-001345
AECOM Project No. 60135634

Enclosed is the \$750 review fee for the Department review of AECOM's Additional Investigation Report, Ansul Fire Technology Center, dated December 23, 2009. AECOM, on behalf of Ansul Fire Technology Center, requests that the Department review the report and provide comments on the proposed work plan.

Thank you in advance, and please call or e-mail me at (414) 225-1698 if you have any questions.

Respectfully,



Jeffrey G. Tracy, P.G.
Senior Hydrogeologist
jeff.tracy@aecom.com

Attachment: Check No. 014012874

Cc: Mr. Dunny Toy, Tyco Fire Suppression and Safety Products, 451 North Cannon Road, Lansdale, PA 19446

To enhance and sustain the world's built, natural and social environments



AECOM
1020 North Broadway, Suite 400
Milwaukee, WI 53202

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414.225.5111 fax

December 23, 2009

Mr. James Walden
Wisconsin Department of Natural Resources
PO Box 7921
Madison, WI 53707-7921

Subject: Additional Investigation Report and Request for Review
Ansul Fire Technology Center
2700 Industrial Parkway South, Marinette, Wisconsin
WDNR BRRTS No. 03-38-001345

Dear Mr. Walden;

The Additional Investigation Report for the Ansul Fire Technology Center in Marinette, Wisconsin, is attached. The report presents data collected during delineation of groundwater contamination at the site, and describes our recommendations for a groundwater monitoring plan.

Please update the WDNR records to reflect that Mr. Harlan Dunny Toy is currently managing this project for Tyco Fire and Safety Products. Mr. Toy's contact information is:

Mr. Dunny Toy
Director Environmental, Health and Safety
Tyco Fire and Safety Products
451 North Cannon Avenue
Lansdale, PA 19446
Tel: (215) 412-3849

AECOM, on behalf of Tyco Fire and Safety Products, requests that the WDNR review the enclosed report and provide written approval of the proposed monitoring activities described in the report. AECOM will forward the \$750 review fee under separate cover. Tyco Fire and Safety Products is prepared to begin the proposed monitoring program following its approval from the Wisconsin Department of Natural Resources (WNR).

We appreciate your review of the attached report and look forward to hearing from you. Please call me at (414) 225-1698 with any questions.

Respectfully,

Jeffrey G. Tracy, P.G.
Project Manager - Environment
jeff.tracy@aecom.com

Enclosure as noted

cc: Mr. Dunny Toy

Received

JAN - 4 2010

REMEDIAL &
REDEVELOPMENT



Environment

Submitted to:
Tyco Fire and Safety Products
Marinette, Wisconsin

Submitted by:
AECOM
Milwaukee, WI
60135634.07
December 23, 2009

Additional Investigation Report

**Ansul Fire Technology Center
2700 Industrial Parkway South, Marinette, Wisconsin**



Environment

Submitted to:
Tyco Fire and Safety Products
Marinette, Wisconsin

Submitted by:
AECOM
Milwaukee, WI
60135634.07
December 23, 2009

Additional Investigation Report

**Ansul Fire Technology Center
2700 Industrial Parkway South, Marinette, Wisconsin**

Prepared By Snejana Karakis

Reviewed By Jeffrey G. Tracy, P.G.

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1.0 Introduction

AECOM was retained by Tyco Fire and Safety Products (Tyco) in April 2009 to enhance data collected during a site investigation that was initiated in 1993 and a groundwater monitoring program that was conducted between 2002 and 2007. AECOM was retained to complete additional groundwater investigation activities at the Ansul Fire Technology Center (FTC) located at 2700 Industrial Parkway South in the City of Marinette, Marinette County, Wisconsin (Site, **Figure 1**). The purpose of the investigation was supplementary assessment of groundwater quality in the shallow and deep overburden aquifer, and evaluation of the presence of free phase petroleum product at a former groundwater monitoring well location (abandoned as part of the FTC Fuel System Upgrade).

The objectives of the groundwater assessment were to further assess the nature and extent of groundwater quality in both the shallow and deep portions of the aquifer underlying the property to determine where permanent downgradient and side-gradient groundwater monitoring wells may be installed, and to develop a groundwater monitoring plan.

1.1 Facility Background

The FTC is a fire suppressant training, testing, research, and development facility built in the early 1960s. Activities generally occur in two areas at the facility: the Fire Training School area and the Research and Development (R&D) area. The Site layout is illustrated on **Figure 2**. The public land survey description locates the Site in the NE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 13, Township 30 North, Range 23 East. The FTC encompasses approximately 270 acres with approximately 26 acres (9.6%) used as the Fire Training School and 5 acres (1.8%) used as the R&D area. The Site-related groundwater impacts originated in the Fire Training School area, which is approximately $\frac{1}{2}$ to $\frac{1}{2}$ mile from the nearest property boundary.

1.2 Facility Upgrades

Historically, the Fire Training School and R&D facilities used two 12,000-gallon aboveground storage tanks (ASTs) containing heptane, with their associated underground distribution piping, as a fuel source for fire training activities. In May 2005, AECOM (formerly Earth Tech) conducted tightness and cathodic protection testing of the underground lines associated with the AST fuel distribution system. Four piping runs were tightness tested and one piping run was tested for cathodic protection. Three piping runs that serviced the Fire Training School did not pass tightness testing (and therefore cathodic protection testing was unnecessary). These lines were purged of fuel and immediately removed from service (abandoned in place) by capping and disconnecting the lines from the ASTs. The fourth pipe run, which serviced the R&D portion of the facility, passed its tightness test but did not pass the cathodic protection test.

Subsequently, a temporary fuel distribution system was constructed that allowed the Fire Training School to operate during the 2005 training season. Concurrently, Tyco completed an engineering design for an upgraded permanent fuel distribution system for both the Fire Training School and R&D facilities.

During 2006, the facility upgrade project was performed in a phased approach to accommodate the Fire Training School schedule. Tyco has invested over \$2M in facility upgrades to eliminate or minimize the potential for future releases of petroleum hydrocarbons to the environment. The first phase of work for

the fuel distribution system upgrade project began in January 2006 with: 1) the removal of the existing fuel distribution piping; 2) soil excavation activities, and; 3) the demolition and removal of a select number of fire training pans and props. The facility upgrade project was completed in the fall of 2006.

1.3 Soil Remedial Action

Soil excavation occurred as part of the demolition excavation activities conducted in January 2006. Approximately 4,820 cubic yards of petroleum impacted soil were excavated, characterized, and transported to the Waste Management landfill facility located in Menominee, Michigan, for disposal. In addition, approximately 100 tons of concrete that exhibited petroleum staining was transported to the landfill for disposal as construction and demolition debris. The impacted soils removed during facility upgrade activities have reduced the volume of potential source materials to groundwater at the FTC.

1.4 Quarterly Groundwater Monitoring Program

On October 23, 2007, AECOM (formerly Earth Tech, Inc.) submitted the *Groundwater Monitoring Report – April 2006 through March 2007* (Earth Tech, October 2007) to the Wisconsin Department of Natural Resources (WDNR). The report included a summary of historical groundwater quality data, a summary of the recent soil remedial action, and data collected during the 2nd, 3rd, and 4th quarters of 2006, and 1st quarter of 2007. The historical groundwater analytical results are presented in Appendix A.

Based on data collected during the previous monitoring events, the primary groundwater flow direction in the shallow wells is generally toward the east, with a southern flow component along the northern portion of the Site. The primary groundwater flow direction in the deeper piezometers is generally toward the east and northeast. Generally, the horizontal gradient values across the Site range between approximately 0.005 and 0.023, and the vertical gradients are generally downward, ranging between approximately 1.5×10^{-1} and 8.2×10^{-3} .

2.0 Additional Investigation Activities

2.1 Objective

The additional investigation objectives included delineating the northern extent of the shallow petroleum plume, delineating the eastern extent of the deep plume, and evaluating for the presence of free phase petroleum product near former groundwater monitoring well FTC-28, which was abandoned as part of the FTC Fuel System Upgrade. The Site layout is illustrated on **Figure 2**.

2.2 Field Activities

AECOM prepared a site-specific Health and Safety Plan (in accordance with the Occupational Safety and Health Administration, OSHA 29 CFR 1910) for the field activities. The Site Health and Safety Plan was reviewed with all field personnel prior to commencing the field activities. In addition, Tyco provided on-Site personnel with a safety briefing before field activities were initiated. Diggers Hotline was contacted to locate all public utilities, and a private utility locator was contracted to locate the on-site private utilities.

2.2.1 Soil Boring and Temporary Well Installation

In July 2009, three shallow (G-1S through GP-3S) and three deep (G-1D through GP-3D) soil borings were advanced at the Site using Geoprobe® sampling techniques. A dual tube sampling method was utilized to collect continuous soil cores with the added benefit of a cased hole, from which soil samples can be recovered while minimizing the potential for cross contamination between the geologic strata. The maximum depth reached during the soil boring advancement was 51 feet below grade. Refusal was encountered at 42.5 feet at soil boring GP-2S. The soil borings were converted into temporary wells, which were constructed through the dual tube casing with a temporary 1 inch screen set at the base of the boring. The shallow temporary wells were installed to a depth of approximately 12 feet below ground surface (bgs), and the shallow groundwater samples were collected directly below the water table surface. The deep temporary wells were installed to a depth of approximately 45 feet, and the deep groundwater samples were collected from a depth of approximately 44 feet bgs.

Additionally, one soil boring (GP-FTC-28) was advanced utilizing a Geoprobe® unit to a depth of approximately 15 feet bgs near the location of former monitoring well FTC-28 to determine the presence of free phase petroleum product. Continuous soil samples were collected from the ground surface to the groundwater table to visually assess the soil for the presence of free phase petroleum product. The boring and temporary well locations are illustrated on **Figure 3**.

In September 2009, three additional deep soil borings (GP-4D through GP-6D) were advanced at the Site, approximately 300 feet downgradient of the July 2009 deep soil borings (G-1D through GP-3D), utilizing Geoprobe® sampling technology (**Figure 3**). The maximum depth reached during the soil boring advancement was 50 feet bgs. Refusal was encountered at approximately 48 and 44 feet bgs at soil borings GP-4D and GP-6D, respectively. The deep temporary wells were installed to depths of approximately 30, 35, and 43 feet bgs and groundwater samples were collected from within 2 feet of the well bottoms at each location.

In November 2009, three additional deep soil borings (GP-7D through GP-9D) were advanced at the property boundary, near the northeast corner of the Site (**Figure 3**). The three borings were advanced using dual-tube Geoprobe® sampling techniques. Soil samples were collected at 5-foot intervals from the ground surface to the depth of the confining layer to document the lithology of the Site. Probe refusal was encountered at 33 (GP-7D), 42 (GP-8D), and 36 feet (GP-9D) bgs, respectively. The soil borings were converted into temporary wells, which were constructed through the dual tube (casing) by placing a temporary 1 inch screen set at the base of the boring. The deep temporary wells were installed to the maximum depths at each boring. Groundwater samples were collected from approximately 1 foot above the base of each temporary monitoring well.

The borings and temporary monitoring wells advanced during the three sample collection events were properly abandoned with bentonite immediately after the groundwater samples were collected. Copies of the abandonment forms are included in **Appendix B**.

2.3 Sampling and Analysis

2.3.1 Soil

The soil samples collected from each boring were divided for in-field classification and field screening. Field classification consisted of noting the soil type, moisture, and staining or odors, if any, and recording the information on soil boring logs. A portion of each soil sample was screened for volatile organic compounds (VOCs) using a photoionization detector (PID) equipped with a 10.6 electron volt (eV) electrodeless discharge lamp that was calibrated using 100 parts per million (ppm) isobutylene in air span gas. No soil samples were submitted for laboratory analysis. The PID results were recorded on the boring logs, which are included in **Appendix B**.

2.3.2 Groundwater

Groundwater samples were collected from three shallow (GP-1S through GP-3S) and nine deep (GP-1D through GP-9D) Geoprobe® borings that were converted to temporary wells installed at the Site. The temporary wells were purged to remove residual materials remaining in the wells after installation and to re-establish the natural hydraulic flow conditions of the formations which may have been disturbed during Geoprobe® and well construction activities.

Groundwater samples were collected using low-flow sampling techniques from the temporary wells. During the July 2009 sample collection event, groundwater quality measurements, including temperature, dissolved oxygen, pH, specific conductivity, oxidation-reduction potential, and turbidity, were recorded prior to the collection of groundwater samples. During the November 2009 event, the following groundwater quality measurements were recorded prior to the collection of groundwater samples: temperature, dissolved oxygen, pH, specific conductivity, and turbidity. The groundwater samples were collected after the groundwater quality parameters were stable.

The groundwater samples were submitted to Synergy Environmental Laboratory, Inc. (Synergy), a laboratory licensed by the Wisconsin Department of Natural Resources (WDNR), for analysis of petroleum volatile organic compounds (PVOCS) and naphthalene following U.S. EPA SW846 Method 8260B. For quality control purposes, one trip blank was analyzed for PVOCS, in accordance with the Wisconsin Administrative Code (WAC) Ch. NR 716. All samples were transferred to the laboratory under standard chain of custody control. Copies of all laboratory analytical reports and chain of custody forms are in **Appendix C**.

Following receipt of laboratory analytical results, the detected compounds were compared to the WAC Ch. NR 140 preventive action limits (PAL) and the more stringent enforcement standards (ES) criteria.

3.0 Site Investigation Results

3.1 Field Observations

Generally, the soil observed during the field investigation consisted of brown fine sand with traces of fine gravel to a depth of at least 30–40 feet bgs, underlain by silty sand and/or clay with traces of fine gravel to the boring termini. Saturated soils were encountered at depths of approximately 4 to 6 feet bgs. Olfactory evidence (petroleum odor) of contamination was noted in soil boring GP-FTC-28, which was advanced in the vicinity of the former monitoring well FTC-28 to determine the presence of free phase petroleum product. No visual evidence of free phase petroleum product was noted in the soil samples collected from GP-FTC-28. Photoionization detector readings ranged from 0 to 857 instrument units (equivalent to parts per million) in the soil samples collected from GP-FTC-28. No soil samples were submitted for laboratory analysis.

3.2 Groundwater Analytical Results

The analytical results indicate the northern extent of contamination in the shallow groundwater system has been delineated. Additional evaluation of the deeper groundwater system may be necessary to confirm deeper groundwater system quality at the downgradient property boundary.

Shallow Groundwater System

No PVOCS or naphthalene were detected in samples GP-1S, GP-2S, or GP-3S, which were collected to characterize the northern extent of the shallow groundwater system. The results confirm the extent of contaminants in the shallow groundwater system was delineated.

Deep Groundwater System

Benzene and MTBE were detected at concentrations exceeding the ES in sample GP-2D; benzene and MTBE were detected at concentrations exceeding the PAL in sample GP-3D, and no compounds were detected above regulatory standards in GP-1D, which were collected in July 2009. Based on the data, additional investigation was necessary toward the north and east to delineate the contaminant plume in the deep groundwater system.

Additional groundwater investigation activities were completed in September 2009. Benzene and MTBE were detected at concentrations exceeding the ES in sample GP-4D; no compounds were detected in GP-5D, and no compounds were detected at concentrations exceeding regulatory levels in sample GP-6D. Based on the data, further investigation was necessary toward the north and east to delineate the contaminant plume in the deep groundwater system.

A third round of groundwater investigation activities was completed in November 2009 to evaluate the groundwater quality in the deep system near the northeast boundary of the Property in November 2009. No compounds were detected in samples collected from GP-8D or GP-9D; benzene was detected at a concentration (5.2 µg/L) slightly exceeding the ES (5.0 µg/L) in the sample collected from GP-7D. Based on the data, further investigation may be necessary to confirm the temporary results and evaluate whether the deep groundwater system contaminant plume migrates beyond the property boundary.

The groundwater analytical results are summarized in **Table 1**. Compounds that were detected at concentrations exceeding regulatory levels are presented on **Figures 3 and 4**. The laboratory analytical report is provided in **Appendix C**.

4.0 Conclusions and Recommendations

4.1 Conclusions

Groundwater at the FTC is known to contain petroleum-related compounds at concentrations exceeding regulatory levels. The source of contaminants originated from the former system that distributed fuel to the FTC training grounds. The system was replaced in 2006. Groundwater data collected between 1993 and 2007 indicated that contaminants were present in two interconnected groundwater systems at the Property. The shallow, water table system plume was delineated to the west, east, and south; the deeper system plume, which is above the bedrock surface, was delineated to the south and west. Free phase petroleum product was present in the former FTC-28 groundwater monitoring well; however, the well was removed and contaminated soil that may have contained free phase product was removed during facility upgrade activities.

The purposes of the additional investigation completed in 2009 were to:

- Delineate the northern extent of the shallow groundwater plume
- Delineate the northern and eastern extents of the deeper groundwater plume
- Evaluate whether free phase petroleum product was present near the former FTC-28

Groundwater samples were collected from temporary wells installed in three soil borings advanced to evaluate the northern extent of the shallow groundwater plume. No compounds were detected at concentrations exceeding regulatory levels in the groundwater samples collected from the temporary wells; therefore, the northern extent of contamination in the shallow groundwater system was delineated.

Groundwater samples were also collected from nine temporary wells installed to evaluate the deeper groundwater plume. Three temporary wells were installed in July 2009, three in September 2009, and three in November 2009. The September and November 2009 wells were installed to further assess groundwater quality identified in the July and September 2009 sampling events. The extent of contamination has been delineated north and east of the site; however, benzene was detected at a concentration slightly exceeding the ES in the temporary well installed at the northeast corner of the property.

Free product was not observed in the soil samples collected from GP-FTC-28; however, a petroleum odor and elevated PID readings were observed in the soil samples collected from GP-FTC-28. The results indicate residual petroleum may be present near former monitoring well FTC-28.

4.2 Recommendations

AECOM recommends completing the following activities at the property:

- Install a network of piezometers in the deep groundwater system and bedrock along the deep groundwater plume centerline to evaluate and monitor the horizontal and vertical extents of the deep groundwater plume, and to monitor groundwater flow directions
- Install deep groundwater system piezometers up/sidegradient of GP-8D and GP-9D to evaluate groundwater quality side gradient of the deep groundwater system plume

- Collect groundwater samples from the proposed piezometers and existing monitoring well/piezometer network to establish a baseline for evaluating groundwater quality (first round of monitoring)
- Collect groundwater samples from the proposed piezometers on a quarterly basis (2nd, 3rd, and 4th monitoring rounds) to monitor the effectiveness of natural attenuation as a remedial alternative in the deeper groundwater system
- Analyze the groundwater samples for PVOCs, nitrate/nitrite, sulfate, iron, and manganese to evaluate contaminant trends and secondary indications that contaminants are naturally biodegrading
- Collect soil samples from four borings surrounding former FTC-28 to further evaluate for the presence of free phase petroleum products
- Analyze select soil samples for gasoline range organics (GRO), diesel range organics (DRO), and PVOCs

The proposed piezometer network locations are presented on **Figure 4**.

AECOM recommends submitting a brief letter presenting the groundwater data after the first three quarterly monitoring events to the WDNR. In addition, an annual report presenting the monitoring program results, conclusions based on the results, and recommendations based on the monitoring results should be submitted to the WDNR after the fourth quarterly monitoring event. The WDNR should be notified following any monitoring event where an expanding plume, the presence of free product, or other conditions warrant notification.

Tables





TABLE 1
GROUNDWATER SAMPLES - GEOPROBE INVESTIGATION
ANSUL FIRE TECHNOLOGY CENTER
2700 INDUSTRIAL PARKWAY SOUTH
MARINETTE, WISCONSIN

Well ID Sample Depth (feet) Sample Date	ES	PAL	GP-1S	GP-2S	GP-3S	GP-1D	GP-2D	GP-3D	GP-4D	GP-5D	GP-6D	GP-7D	GP-8D	GP-9D								
			SHALLOW SAMPLES			DEEP SAMPLES																
			11	11	11	44	44	44	28	34	41	31	41	35	7/7/09	7/8/09	7/8/09	9/14/09	9/14/09	9/15/09	11/16/09	11/17/09
Petroleum Volatile Organic Compounds (µg/L)																						
Benzene	5	0.5	<0.45	<0.45	<0.45	<0.45	(24.4)	1.48	(78)	<0.45	<0.45	(5.2)	<0.41	<0.45								
Ethylbenzene	700	140	<0.76	<0.76	<0.76	<0.76	14	1.35	25.1	<0.76	<0.76	<0.87	<0.87	<0.76								
Methyl tert-butyl ether	60	12	<0.42	<0.42	<0.42	<0.42	(730)	37	(1,000)	<0.42	1.88	1.36	<0.5	<0.42								
Naphthalene	100	10	<1.4	<1.4	<1.4	<1.4	6.3	<1.4	5.4	<1.4	<1.4	<1.7	<1.7	<1.7								
Toluene	1,000	200	<0.53	<0.53	<0.53	0.71	1.81	1.33	2.04	<0.53	<0.53	<0.51	<0.51	<0.51								
Total Trimethylbenzene	480	96	<1.13	<1.13	<1.13	<1.13	11.9	1.68	17.8	<1.13	<1.13	<2.6	<2.6	<2.6								
Xylenes	10,000	1,000	<1.58	<1.58	<1.58	<1.58	10.77	5.31	34.41	<1.58	<1.58	<2.13	<2.13	<2.13								

Notes:

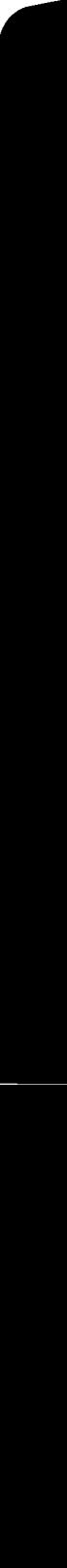
µg/L - micrograms per liter (parts per billion)

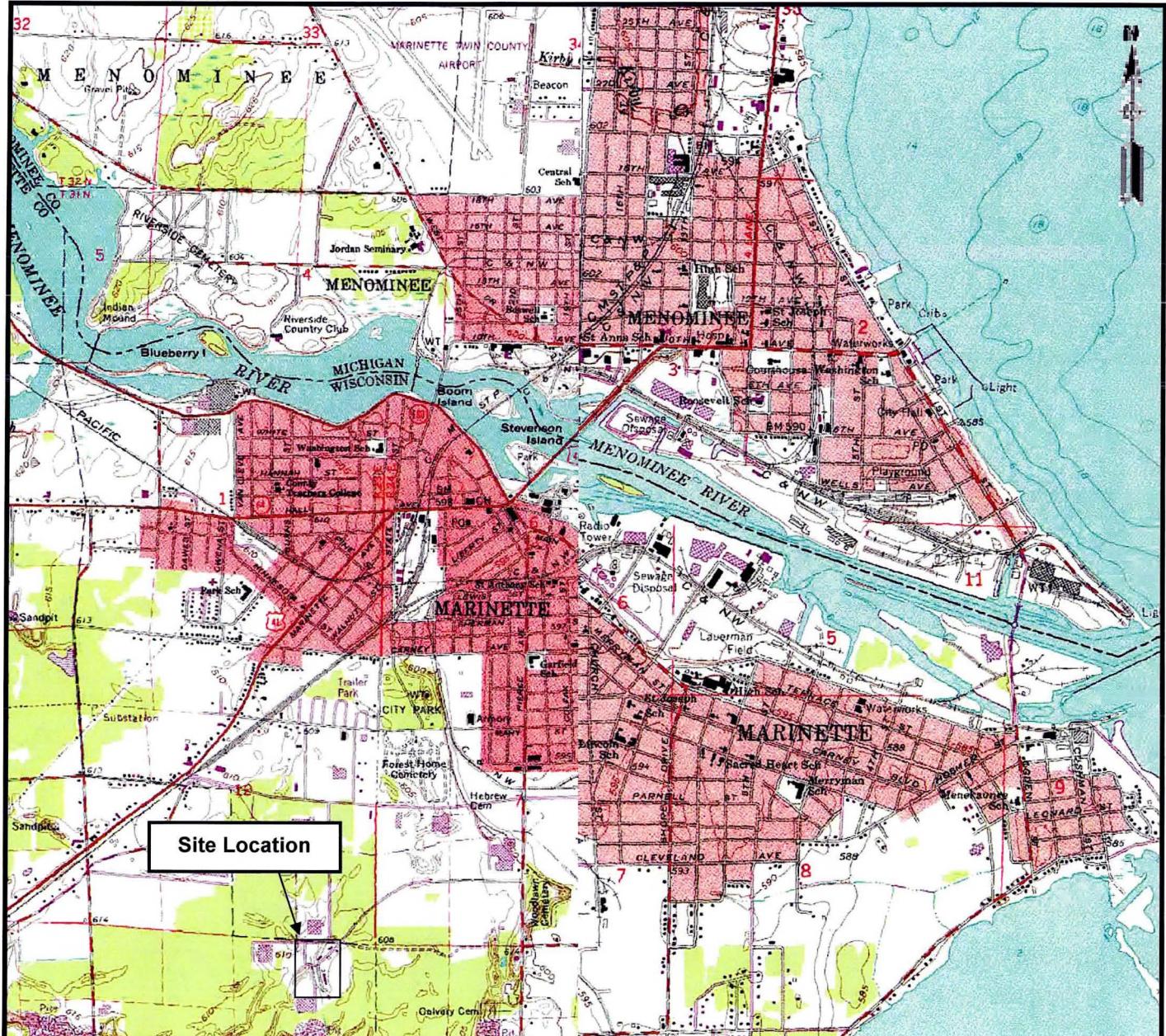
PAL - Preventive Action Limit (Wisconsin Administrative Code Chapter NR 140. January 2008).

ES - Enforcement Standard (Wisconsin Administrative Code Chapter NR 140. January 2008).

(24.4) - Bold, italicized, and underlined text in parentheses indicates the concentration exceeds the ES.

1.48 - Bold, italicized, and underlined text indicates the concentration exceeds the PAL.





Note: Not to Scale

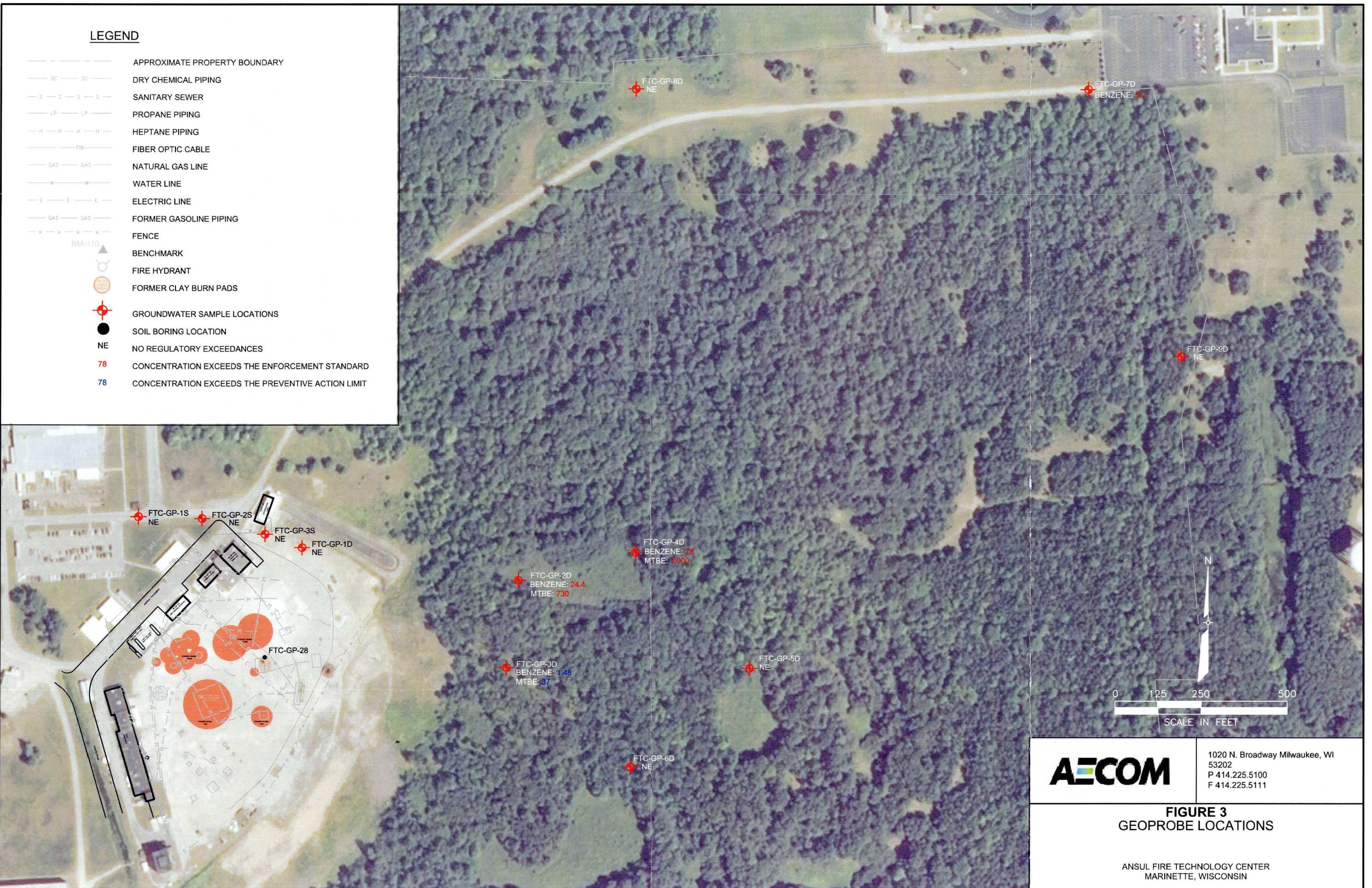
Source: USGS 7.5-Minute Marinette Topographic Quadrangle

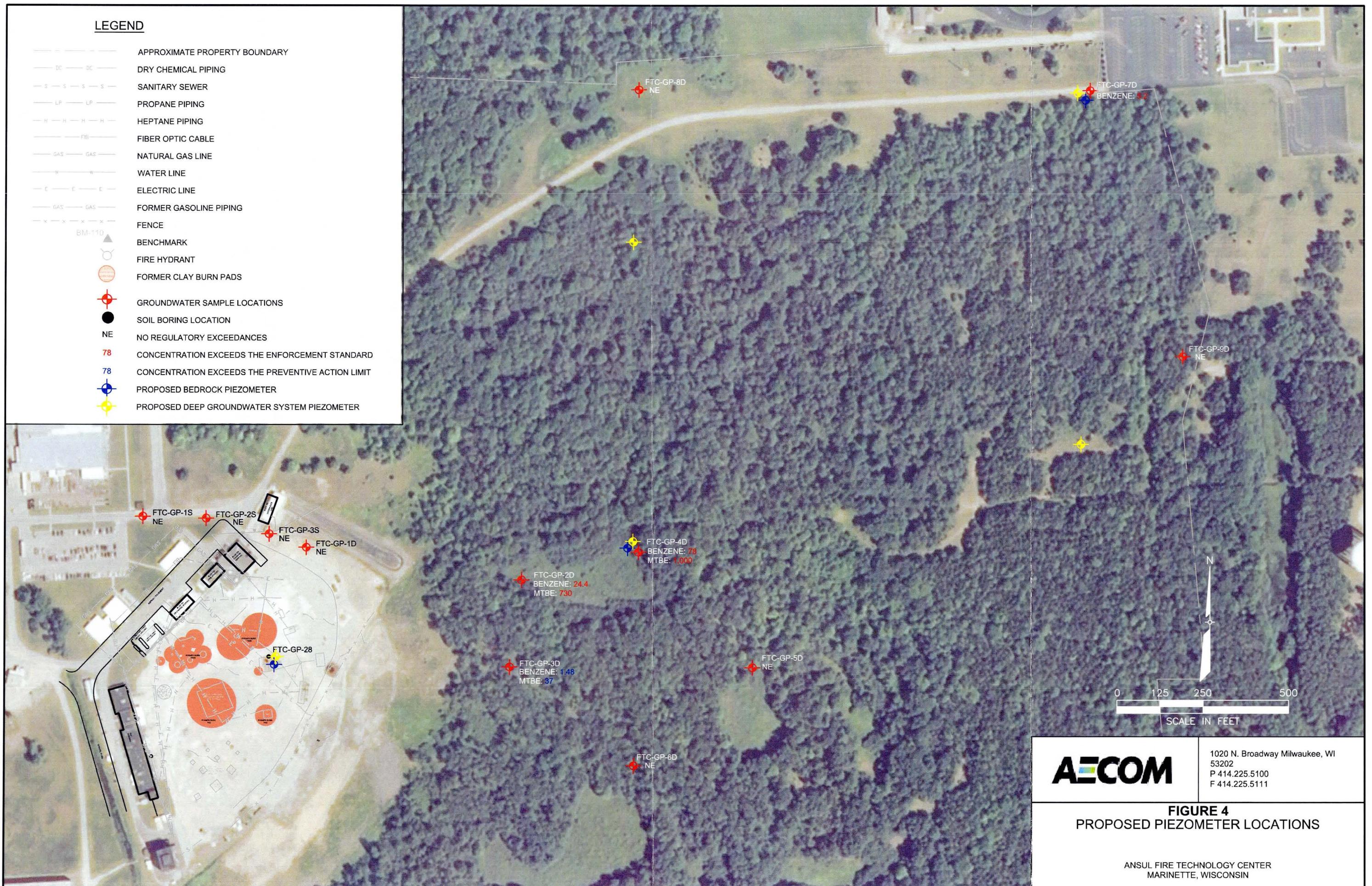
AECOM

**FIGURE 1
SITE LOCATION**

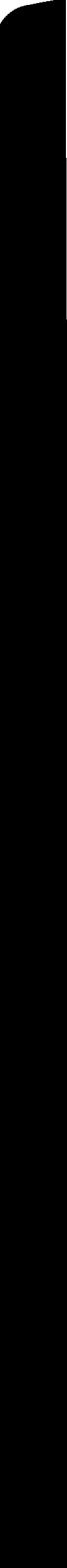
Ansul Fire Technology Center
Marinette, Wisconsin







Appendix A



Appendix A

Historical Groundwater Analytical Results

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID	Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-1			FTC-2S						
				5/21/93	4/20/95	5/1/96	5/21/93	4/20/95	5/1/96	11/21/02	5/6/03	11/3/03	3/29/04
Volatile Organic Compounds (µg/L)													
Benzene		5	0.5	100	<1	<0.5	11800	9000	19000	17000	17000	19000	8100
1,2-Dichloroethane		5	0.5	<5	—	—	<500	—	—	<110	—	—	—
cis 1,2-Dichloroethene		70	7	<5	—	—	<500	—	—	<160	—	—	—
Dichlorodifluoromethane		1000	200	<10	—	—	<1000	—	—	<110	—	—	—
trans 1,2-Dichloroethene		100	20	<5	—	—	<500	—	—	<160	—	—	—
Di-isopropyl ether		—	—	<5	—	—	<500	—	—	<120	—	—	—
Ethylbenzene		700	140	13	<1	<1	1500	870	1600	1600	2300	2100	1200
Isopropylbenzene		—	—	<5	—	—	<500	—	—	<130	—	—	—
Methylene Chloride		5	0.5	<5	—	—	<500	—	—	<94	—	—	—
Methyl tert-butyl ether		60	12	<5	<1	1.6	<500	2600	2000	<170	<120	<140	<25
Naphthalene		100	10	—	—	—	<500	—	—	230	520	460	—
N-Heptane		—	—	<5	—	—	—	—	—	—	—	—	49
n-Propylbenzene		—	—	<5	—	—	<500	—	—	<190	—	—	—
Tetrachloroethene		5	0.5	<5	—	—	<500	—	—	<130	—	—	—
Toluene		1000	200	140	<1	1.2	11000	9300	20000	24000	34000	31000	19000
Total Trimethylbenzene		480	96	17	<2	<2	2400	900	1250	1300	2100	1670	1530
Trichloroethene		5	0.5	<5	—	—	<500	—	—	<78	—	—	—
Vinyl Chloride		0.2	0.02	<10	—	—	<1000	—	—	<22	—	—	—
Xylenes		10,000	1000	58	<3	<3	4,800	2,500	7,100	6,900	10700	9000	5300
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene		—	—	—	—	—	—	—	—	<9.0	—	—	—
Acenaphthylene		—	—	—	—	—	—	—	—	<9.5	—	—	—
Anthracene		3000	600	—	—	—	—	—	—	<10	—	—	—
Fluorene		400	80	—	—	—	—	—	—	<8.5	—	—	—
2-Methyl Naphthalene		—	—	—	—	—	—	—	—	97	—	—	—
1-Methyl Naphthalene		—	—	—	—	—	—	—	—	49	—	—	—
Naphthalene		100	10	—	—	—	—	—	—	200	—	—	—
Phenanthrene		—	—	—	—	—	—	—	—	<8.0	—	—	—
Lead (mg/L)													
Dissolved Lead		0.015	0.0015	<0.002	<0.002	<0.005	0.06	0.02	0.025	—	0.020	0.013	0.01

Notes:

— Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code Chapter NR 140, Groundwater Quality Standards, November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-2S										
			5/19/04	8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	11/8/05	3/30/06	5/23/06	5/23/06 (Dup)	
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	18000	21000	13000	13000	14000	17000	16000	9700	3300	4600	12000
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	2300	2700	2100	1800	2100	2100	2100	1400	600	770	1200
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	<72	<90	<90	<36	<90	<240	<120	<120	<61	<61	<120
Naphthalene	100	10	540	600	410	380	410	420	740	250	120	160	280
N-Heptane	--	--	--	--	--	--	--	<560	<280	<280	<140	<140	<280
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	37000	40000	29000	24000	28000	37000	33000	23000	8900	11000	23000
Total Trimethylbenzene	480	96	1770	2140	1790	1550	2050	1200	2600	1270	499	640	1220
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	10500	11800	9300	7600	9300	9300	9600	7100	2810	3800	7000
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	--	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	0.032	0.032	0.011	0.011	0.016	0.017	0.012	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action Limits (PAL) from Wisconsin Administrative Code Chapter NR 140, Groundwater Quality Standards, November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-2S					FTC-2D						
			8/26/06 (Dup)	11/2/06 (Dup)	11/2/06 (Dup)	3/29/07 (Dup)	3/29/07 (Dup)	5/21/93	4/20/95	5/1/96	11/21/02	11/3/03	3/29/04	5/19/04
Volatile Organic Compounds (µg/L)														
Benzene	5	0.5	12000	9400	8100	5300	5400	22	3	14	2	6.5	0.78	3.6
1,2-Dichloroethane	5	0.5	--	--	--	--	--	<5	--	--	<0.55	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	<5	--	--	<0.81	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	<10	--	--	<0.57	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	<5	--	--	<0.80	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	<5	--	--	<0.60	--	--	--
Ethylbenzene	700	140	1200	1200	1100	990	960	32	<1	1.1	<0.53	<0.6	<0.22	0.52
Isopropylbenzene	--	--	--	--	--	--	--	<5	--	--	<0.66	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	<5	--	--	0.65	--	--	--
Methyl tert-butyl ether	60	12	<120	<120	<120	<61	<61	<5	4	13	<0.87	<0.58	<0.25	<0.36
Naphthalene	100	10	290	--	--	140	120	<5	--	--	<0.63	--	--	--
N-Heptane	--	--	<280	<280	<280	--	--	--	--	--	--	--	<0.26	--
n-Propylbenzene	--	--	--	--	--	--	--	<5	--	--	<0.95	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	<5	--	--	<0.63	--	--	--
Toluene	1000	200	24000	16000	14000	11000	11000	71	1	7.6	<0.84	2.2	1.5	1.4
Total Trimethylbenzene	480	96	1230	930	860	730	710	66	<2	<2	<1.33	<1.18	<0.35	<0.79
Trichloroethene	5	0.5	--	--	--	--	--	<5	--	--	<0.39	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	<10	--	--	<0.11	--	--	--
Xylenes	10,000	1000	7200	5500	4900	4200	4100	93	<3	<3	<1.83	<1.84	<0.65	1.29
Polynuclear Aromatic Hydrocarbons (µg/L)														
Acenaphthene	--	--	--	--	--	--	--	--	--	--	<0.018	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	<0.019	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	<0.020	--	--	--
Fluorene	400	80	--	--	--	--	--	--	--	--	<0.017	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	0.33	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	0.18	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	0.36	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	<0.016	--	--	--
Lead (mg/L)														
Dissolved Lead	0.015	0.0015	--	--	--	--	--	<0.002	<0.002	<0.005	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action Limits (PAL) from Wisconsin Administrative Code Chapter NR 140, Groundwater Quality Standards, November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-2D										
			8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	11/8/05	3/30/06	5/23/06	8/16/06	11/2/06	3/29/07
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	0.36	0.42	2.4	—	—	6.8	<0.41	<0.41	<0.41	<0.41	<0.41
1,2-Dichloroethane	5	0.5	—	—	—	—	—	—	—	—	—	—	—
cis 1,2-Dichloroethene	70	7	—	—	—	—	—	—	—	—	—	—	—
Dichlorodifluoromethane	1000	200	—	—	—	—	—	—	—	—	—	—	—
trans 1,2-Dichloroethene	100	20	—	—	—	—	—	—	—	—	—	—	—
Di-isopropyl ether	—	—	—	—	—	—	—	—	—	—	—	—	—
Ethylbenzene	700	140	<0.4	<0.4	<0.4	—	—	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Isopropylbenzene	—	—	—	—	—	—	—	—	—	—	—	—	—
Methylene Chloride	5	0.5	—	—	—	—	—	—	—	—	—	—	—
Methyl tert-butyl ether	60	12	<0.36	<0.36	<0.36	—	—	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
Naphthalene	100	10	—	—	—	—	—	—	<0.74	<0.74	<0.74	<0.74	—
N-Heptane	—	—	—	—	—	—	—	<1.4	<1.4	<1.4	<1.4	<1.4	—
n-Propylbenzene	—	—	—	—	—	—	—	—	—	—	—	—	—
Tetrachloroethene	5	0.5	—	—	—	—	—	—	—	—	—	—	—
Toluene	1000	200	0.75	0.60	4.40	—	—	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67
Total Trimethylbenzene	480	96	<0.79	<0.79	<0.79	—	—	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80
Trichloroethene	5	0.5	—	—	—	—	—	—	—	—	—	—	—
Vinyl Chloride	0.2	0.02	—	—	—	—	—	—	—	—	—	—	—
Xylenes	10,000	1000	<1.1	<1.1	1.32	—	—	<2.63	<2.63	<2.63	<2.63	<2.63	<2.63
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	—	—	—	—	—	—	—	—	—	—	—	—	—
Acenaphthylene	—	—	—	—	—	—	—	—	—	—	—	—	—
Anthracene	3000	600	—	—	—	—	—	—	—	—	—	—	—
Fluorene	400	80	—	—	—	—	—	—	—	—	—	—	—
2-Methyl Naphthalene	—	—	—	—	—	—	—	—	—	—	—	—	—
1-Methyl Naphthalene	—	—	—	—	—	—	—	—	—	—	—	—	—
Naphthalene	100	10	—	—	—	—	—	—	—	—	—	—	—
Phenanthrene	—	—	—	—	—	—	—	—	—	—	—	—	—
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	—	—	—	—	—	—	—	—	—	—	—

Notes:

— Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action Limits (PAL) from Wisconsin Administrative Code Chapter NR 140, Groundwater Quality Standards, November 2006.

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HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-3										
			5/21/93	5/1/96	11/21/02	5/6/03	11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/10/05	5/20/05
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	1200	90	190	160	680	290	250	830	510	960	280
1,2-Dichloroethane	5	0.5	<25	--	<0.55	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	<25	--	<0.81	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	<25	--	<0.57	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	<25	--	<0.80	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	<25	--	<0.60	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	630	41	120	110	320	240	170	450	320	700	210
Isopropylbenzene	--	--	<25	--	4.5	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	<25	--	<0.47	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	<25	<5	<0.87	2.6	11	<0.63	4.7	6.4	12	16	<1.8
Naphthalene	100	10	<25	--	14	13	67	--	27	89	63	99	--
N-Heptane	--	--	--	--	--	--	--	4.6	--	--	--	--	--
n-Propylbenzene	--	--	<25	--	13	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	<25	--	<0.63	--	--	--	--	--	--	--	--
Toluene	1000	200	1700	72	97	120	1200	150	120	1600	170	1300	190
Total Trimethylbenzene	480	96	580	53	155	127	590	290	222	820	170	890	210
Trichloroethene	5	0.5	<25	--	<0.39	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	<25	--	<0.11	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	2890	130	440	460	1760	1320	590	2320	990	3070	930
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	--	--	<0.90	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	<0.95	--	--	--	--	--	--	--	--
Anthracene	3000	600	--	--	<1.0	--	--	--	--	--	--	--	--
Fluorene	400	80	--	--	<0.85	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	7.6	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	3.9	--	--	--	--	--	--	--	--
Naphthalene	100	10	--	--	17	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	<0.80	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	<0.002	<0.005	--	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

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TABLE A-1
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ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID	Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-3							FTC-27			
				8/12/05	11/8/05	3/30/06	5/23/06	8/16/06	11/2/06	3/29/07	4/20/95	5/1/96	11/21/02	5/6/03
Volatile Organic Compounds (µg/L)														
Benzene	5	0.5	430	840	280	160	29	91	44	6800	4600	2900	4400	
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	--	--	<11	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--	<16	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--	<11	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--	<16	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--	<12	--
Ethylbenzene	700	140	230	640	210	120	20	45	37	920	720	370	750	
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	<13	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--	<9.4	--
Methyl tert-butyl ether	60	12	<3.0	6.9	<3.0	<6.1	<3.0	<0.61	<0.61	2100	880	82	110	
Naphthalene	100	10	--	--	42	29	7.0	--	7.5	--	--	61	170	
n-Heptane	--	--	12	<14	8.2	<14	<7.0	<1.4	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	<19	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	<13	--
Toluene	1000	200	370	1600	170	69	12	12	4.8	2000	2100	1500	1500	
Total Trimethylbenzene	480	96	371.8	830	306	170	20.6	90	48	650	415	74	580	
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	<7.8	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--	<2.2	--
Xylenes	10,000	1000	750	2690	800	450	50	109	44	1700	2,000	650	1960	
Polynuclear Aromatic Hydrocarbons (µg/L)														
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	<0.36	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	<0.38	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	--	--	<0.40	--
Fluorene	400	80	--	--	--	--	--	--	--	--	--	--	<0.34	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	11	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	7.6	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	--	--	55	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	<0.32	--
Lead (mg/L)														
Dissolved Lead	0.015	0.0015	--	--	--	--	--	--	--	0.009	<0.005	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action Limits (PAL) from Wisconsin Administrative Code Chapter NR 140, Groundwater Quality Standards, November 2006.

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ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-27										
			11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	11/8/05	3/30/06	5/23/06
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	380	2900	1300	17	110	1300	2600	<0.41	1400	2500	2400
1,2-Dichloroethane	5	0.5	—	—	—	—	—	—	—	—	—	—	—
cis 1,2-Dichloroethene	70	7	—	—	—	—	—	—	—	—	—	—	—
Dichlorodifluoromethane	1000	200	—	—	—	—	—	—	—	—	—	—	—
trans 1,2-Dichloroethene	100	20	—	—	—	—	—	—	—	—	—	—	—
Di-isopropyl ether	—	—	—	—	—	—	—	—	—	—	—	—	—
Ethylbenzene	700	140	75	460	240	2.5	19	250	530	<0.54	270	500	480
Isopropylbenzene	—	—	—	—	—	—	—	—	—	—	—	—	—
Methylene Chloride	5	0.5	—	—	—	—	—	—	—	—	—	—	—
Methyl tert-butyl ether	60	12	11	45	38	7.9	14.0	39.0	65	3.9	29	<12	46
Naphthalene	100	10	16	—	62	0.78	3.0	56	110	<0.74	58	88	96
N-Heptane	—	—	—	<5.3	—	—	—	—	—	<1.4	<28	<28	<28
n-Propylbenzene	—	—	—	—	—	—	—	—	—	—	—	—	—
Tetrachloroethene	5	0.5	—	—	—	—	—	—	—	—	—	—	—
Toluene	1000	200	9.2	320	94	0.44	3.20	36	140	<0.67	24	69	69
Total Trimethylbenzene	480	96	60	376	194	1.98	12.9	220	410	<1.33	202	294	315
Trichloroethene	5	0.5	—	—	—	—	—	—	—	—	—	—	—
Vinyl Chloride	0.2	0.02	—	—	—	—	—	—	—	—	—	—	—
Xylenes	10,000	1000	107	660	395	0.86	29.1	281	579	<2.63	260	248	300
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	—	—	—	—	—	—	—	—	—	—	—	—	—
Acenaphthylene	—	—	—	—	—	—	—	—	—	—	—	—	—
Anthracene	3000	600	—	—	—	—	—	—	—	—	—	—	—
Fluorene	400	80	—	—	—	—	—	—	—	—	—	—	—
2-Methyl Naphthalene	—	—	—	—	—	—	—	—	—	—	—	—	—
1-Methyl Naphthalene	—	—	—	—	—	—	—	—	—	—	—	—	—
Naphthalene	100	10	—	—	—	—	—	—	—	—	—	—	—
Phenanthrene	—	—	—	—	—	—	—	—	—	—	—	—	—
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	—	—	—	<0.0011	—	—	—	—	—	—	—

Notes:

— Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action Limits (PAL) from Wisconsin Administrative Code Chapter NR 140, Groundwater Quality Standards, November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-27			FTC-28 (Abandoned in January 2006)					FTC-29		
			8/16/06	11/2/06	3/29/07	4/20/95	5/1/96	5/6/03	9/15/05	11/8/05	4/20/95	5/1/96	11/21/02
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	64	1.4	1500	810	970	--	--	--	<1	<0.5	<0.25
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	--	--	<0.55
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--	<0.81
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--	<0.57
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--	<0.80
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--	<0.60
Ethylbenzene	700	140	12	<0.54	330	410	<100	--	--	--	<1	<1	<0.53
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	<0.66
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--	0.99
Methyl tert-butyl ether	60	12	4.7	1.9	26	<100	<100	--	--	--	<1	<1	<0.87
Naphthalene	100	10	<3.7	--	47	--	--	--	--	--	--	--	<0.63
N-Heptane	--	--	<7.0	<1.4	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	<0.95
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	<0.63
Toluene	1000	200	4.1	<0.67	60	1300	940	--	--	--	<1	<1	<0.84
Total Trimethylbenzene	480	96	<8.9	<1.8	134	3870	280	--	--	--	<2	<2	<1.33
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	<0.39
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--	<0.11
Xylenes	10,000	1000	<13.1	<2.63	110	1600	540	--	--	--	<3	<3	<1.83
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	--	--	--	--	--	<9.0	--	--	--	--	<0.018
Acenaphthylene	--	--	--	--	--	--	--	<9.5	--	--	--	--	<0.019
Anthracene	3000	600	--	--	--	--	--	<10	--	--	--	--	<0.020
Fluorene	400	80	--	--	--	--	--	8.9	--	--	--	--	<0.017
2-Methyl Naphthalene	--	--	--	--	--	--	--	240	--	--	--	--	<0.017
1-Methyl Naphthalene	--	--	--	--	--	--	--	170	--	--	--	--	<0.017
Naphthalene	100	10	--	--	--	--	--	180	--	--	--	--	<0.024
Phenanthrene	--	--	--	--	--	--	--	21	--	--	--	--	<0.016
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	--	--	--	0.005	<0.005	0.022	--	--	<0.005	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action Limits (PAL) from Wisconsin Administrative Code Chapter NR 140, Groundwater Quality Standards, November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-29											
			11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/10/05	11/8/05	3/30/06	5/23/06	8/16/06	11/2/06	3/29/07
Volatile Organic Compounds (µg/L)														
Benzene	5	0.5	<0.3	<0.15	<0.14	<0.14	<0.14	<0.14	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
1,2-Dichloroethane	5	0.5	—	—	—	—	—	—	—	—	—	—	—	—
cis 1,2-Dichloroethene	70	7	—	—	—	—	—	—	—	—	—	—	—	—
Dichlorodifluoromethane	1000	200	—	—	—	—	—	—	—	—	—	—	—	—
trans 1,2-Dichloroethene	100	20	—	—	—	—	—	—	—	—	—	—	—	—
Di-isopropyl ether	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ethylbenzene	700	140	<0.6	<0.22	<0.40	<0.40	<0.40	<0.40	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Isopropylbenzene	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Methylene Chloride	5	0.5	—	—	—	—	—	—	—	—	—	—	—	—
Methyl tert-butyl ether	60	12	<0.58	<0.25	<0.36	<0.36	<0.36	<0.36	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
Naphthalene	100	10	—	—	—	—	—	—	—	<0.74	<0.74	<0.74	—	<0.74
N-Heptane	—	—	—	<0.26	—	—	—	—	<1.4	<1.4	<1.4	<1.4	<1.4	—
n-Propylbenzene	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tetrachloroethene	5	0.5	—	—	—	—	—	—	—	—	—	—	—	—
Toluene	1000	200	<0.58	<0.17	<0.36	<0.36	<0.36	<0.36	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67
Total Trimethylbenzene	480	96	<1.18	<0.35	<0.79	<0.79	<0.79	<0.79	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80
Trichloroethene	5	0.5	—	—	—	—	—	—	—	—	—	—	—	—
Vinyl Chloride	0.2	0.02	—	—	—	—	—	—	—	—	—	—	—	—
Xylenes	10,000	1000	<1.84	<0.65	<1.1	<1.1	<1.1	<1.1	<2.63	<2.63	<2.63	<2.63	<2.63	<2.63
Polynuclear Aromatic Hydrocarbons (µg/L)														
Acenaphthene	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acenaphthylene	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Anthracene	3000	600	—	—	—	—	—	—	—	—	—	—	—	—
Fluorene	400	80	—	—	—	—	—	—	—	—	—	—	—	—
2-Methyl Naphthalene	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1-Methyl Naphthalene	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Naphthalene	100	10	—	—	—	—	—	—	—	—	—	—	—	—
Phenanthrene	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lead (mg/L)														
Dissolved Lead	0.015	0.0015	<0.005	—	—	—	—	—	—	—	—	—	—	—

Notes:

— Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action Limits (PAL) from Wisconsin Administrative Code Chapter NR 140, Groundwater Quality Standards, November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID	Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-29D							FTC-30			
				8/12/05	11/8/05	3/30/06	5/23/06	8/16/06	11/2/06	3/29/07	4/20/95	5/1/96	11/21/02	5/6/03
Volatile Organic Compounds (µg/L)														
Benzene		5	0.5	490	500	570	590	560	610	340	180	390	650	360
1,2-Dichloroethane		5	0.5	--	--	--	--	--	--	--	--	--	<55	--
cis 1,2-Dichloroethene		70	7	--	--	--	--	--	--	--	--	--	<81	--
Dichlorodifluoromethane		1000	200	--	--	--	--	--	--	--	--	--	<57	--
trans 1,2-Dichloroethene		100	20	--	--	--	--	--	--	--	--	--	<80	--
Di-isopropyl ether		--	--	--	--	--	--	--	--	--	--	--	<60	--
Ethylbenzene		700	140	52	43	46	44	53	74	54	<100	81	110	71
Isopropylbenzene		--	--	--	--	--	--	--	--	--	--	--	<66	--
Methylene Chloride		5	0.5	--	--	--	--	--	--	--	--	--	<47	--
Methyl tert-butyl ether		60	12	200	160	190	180	190	180	69	15000	7500	15000	12000
Naphthalene		100	10	7.9	--	8.8	10	8.4	--	9.4	--	--	69	59
N-Heptane		--	--	<7.0	<7.0	<7.0	<7.0	<7.0	<14	--	--	--	--	--
n-Propylbenzene		--	--	--	--	--	--	--	--	--	--	--	<95	--
Tetrachloroethene		5	0.5	--	--	--	--	--	--	--	--	--	<63	--
Toluene		1000	200	4.4	3.6	5.8	8.9	35	81	38	1400	3800	2600	2000
Total Trimethylbenzene		480	96	9.8	9.8	15	16	13	18	16	140	267	130	163
Trichloroethene		5	0.5	--	--	--	--	--	--	--	--	--	<39	--
Vinyl Chloride		0.2	0.02	--	--	--	--	--	--	--	--	--	<11	--
Xylenes		10,000	1000	22	<13.1	10	12	38.7	105	85	<300	860	750	580
Polynuclear Aromatic Hydrocarbons (µg/L)														
Acenaphthene		--	--	--	--	--	--	--	--	--	--	--	<4.5	--
Acenaphthylene		--	--	--	--	--	--	--	--	--	--	--	<4.8	--
Anthracene		3000	600	--	--	--	--	--	--	--	--	--	<5.0	--
Fluorene		400	80	--	--	--	--	--	--	--	--	--	<4.2	--
2-Methyl Naphthalene		--	--	--	--	--	--	--	--	--	--	--	--	35
1-Methyl Naphthalene		--	--	--	--	--	--	--	--	--	--	--	--	20
Naphthalene		100	10	--	--	--	--	--	--	--	--	--	69	--
Phenanthrene		--	--	--	--	--	--	--	--	--	--	--	<4.0	--
Lead (mg/L)														
Dissolved Lead		0.015	0.0015	<0.0011	<0.0011	--	--	--	--	--	0.002	<0.005	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,
November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID	Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-30										
				11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	11/8/05	3/30/06	5/23/06
Volatile Organic Compounds (µg/L)														
Benzene		5	0.5	430	460	310	450	340	400	450	390	210	340	360
1,2-Dichloroethane		5	0.5	--	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene		70	7	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane		1000	200	--	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene		100	20	--	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether		--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene		700	140	89	98	65	95	66	82	95	76	<54	70	63
Isopropylbenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride		5	0.5	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether		60	12	18000	5600	13000	9200	18000	14000	4000	12000	18000	9700	8100
Naphthalene		100	10	78	--	73	94	66	48	69	85	<74	<74	<74
N-Heptane		--	--	--	<13	--	--	--	--	--	<140	<140	<140	<140
n-Propylbenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene		5	0.5	--	--	--	--	--	--	--	--	--	--	--
Toluene		1000	200	1300	1900	130	400	98	250	35	<67	<67	<67	<67
Total Trimethylbenzene		480	96	140	191	121	175	170	120	185	140	<133	<180	<180
Trichloroethene		5	0.5	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride		0.2	0.02	--	--	--	--	--	--	--	--	--	--	--
Xylenes		10,000	1000	690	670	370	670	610	610	510	620	320	440	310
Polynuclear Aromatic Hydrocarbons (µg/L)														
Acenaphthene		--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene		--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene		3000	600	--	--	--	--	--	--	--	--	--	--	--
Fluorene		400	80	--	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene		--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene		--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene		100	10	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene		--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)														
Dissolved Lead		0.015	0.0015	--	--	--	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-30			FTC-31					
			8/16/06	11/2/06	3/29/07	4/20/95	5/1/96	11/21/02	11/3/03	3/29/04	5/19/04
Volatile Organic Compounds (µg/L)											
Benzene	5	0.5	220	110	99	<1	<0.5	<0.25	<0.3	<0.15	<0.14
1,2-Dichloroethane	5	0.5	--	--	--	--	--	<0.55	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	<0.81	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	<0.57	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	<0.80	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	<0.60	--	--	--
Ethylbenzene	700	140	42	22	18	<1	<1	<0.53	<0.6	<0.22	<0.4
Isopropylbenzene	--	--	--	--	--	--	--	<0.66	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	0.87	--	--	--
Methyl tert-butyl ether	60	12	4300	2100	620	<1	<1	<0.87	<0.58	<0.25	<0.36
Naphthalene	100	10	<37	--	8.2	--	--	<0.63	--	--	<0.47
N-Heptane	--	--	<70	<35	--	--	--	--	<0.26	--	--
n-Propylbenzene	--	--	--	--	--	--	--	<0.95	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	<0.63	--	--	--
Toluene	1000	200	42	<17	4.7	<1	<1	<0.84	<0.58	<0.17	<0.36
Total Trimethylbenzene	480	96	<90	31	23.1	<2	<2	<1.33	<1.18	<0.35	<0.79
Trichloroethene	5	0.5	--	--	--	--	--	<0.39	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	<0.11	--	--	--
Xylenes	10,000	1000	167	<66	21	<3	<3	<1.83	<1.84	<0.65	<1.1
Polynuclear Aromatic Hydrocarbons (µg/L)											
Acenaphthene	--	--	--	--	--	--	--	<0.018	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	<0.019	--	--	--
Anthracene	3000	600	--	--	--	--	--	<0.020	--	--	--
Fluorene	400	80	--	--	--	--	--	<0.017	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	<0.017	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	<0.017	--	--	--
Naphthalene	100	10	--	--	--	--	--	<0.024	--	--	--
Phenanthrene	--	--	--	--	--	--	--	<0.016	--	--	--
Lead (mg/L)											
Dissolved Lead	0.015	0.0015	--	--	--	<0.002	<0.005	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-31					FTC-32S					
			2/10/05	5/20/05	8/12/05	11/8/05	3/29/06	5/1/96	11/21/02	5/6/03	11/3/03	3/29/04	5/19/04
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	0.3	--	--	<0.41	<0.41	1200	1900	110	1400	810	1200
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	<5.5	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	<8.1	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	<5.7	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	<8.0	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	<6.0	--	--	--	--
Ethylbenzene	700	140	<0.4	--	--	<0.54	<0.54	310	510	28	380	200	320
Isopropylbenzene	--	--	--	--	--	--	--	--	14	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	<4.7	--	--	--	--
Methyl tert-butyl ether	60	12	<0.36	--	--	<0.61	<0.61	<50	560	34	480	220	400
Naphthalene	100	10	<0.47	--	--	<0.74	<0.74	--	260	18	240	--	220
N-Heptane	--	--	--	--	--	<1.4	<1.4	--	--	--	--	3.5	--
n-Propylbenzene	--	--	--	--	--	--	--	--	44	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	<6.3	--	--	--	--
Toluene	1000	200	<0.36	--	--	<0.67	<0.67	1300	2100	120	1600	1100	1400
Total Trimethylbenzene	480	96	<0.79	--	--	<1.33	<1.8	291	489	29.2	359	213	306
Trichloroethene	5	0.5	--	--	--	--	--	--	<3.9	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	<1.1	--	--	--	--
Xylenes	10,000	1000	<1.1	--	--	<2.63	<2.63	940	1,500	85	1150	650	980
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	--	--	--	--	--	--	2	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	0.85	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	1.7	--	--	--	--
Fluorene	400	80	--	--	--	--	--	--	20	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	140	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	90	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	180	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	6.1	--	--	--	--
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	--	--	--	--	--	<0.005	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-32S										
			8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	11/8/05	3/30/06	5/23/06	8/16/06	11/2/06	3/29/07
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	1100	1800	2200	1700	1600	1400	1800	1300	1300	1200	1200
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	310	470	580	450	390	350	440	360	320	330	310
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	330	660	850	560	550	380	370	260	330	400	350
Naphthalene	100	10	190	230	280	230	210	230	240	230	170	--	160
N-Heptane	--	--	--	--	--	--	<14	<28	<350	<70	<70	<70	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	1300	2100	2600	1900	2000	1600	1900	1400	1300	1200	1300
Total Trimethylbenzene	480	96	318	399	500	396	351	361	310	364	288	310	297
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	950	1380	1760	1380	1220	1140	1360	1120	950	970	950
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	--	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	--	--	--	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

µg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-32D										
			11/21/02	11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	11/8/05	3/30/06
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	1.8	<0.30	<0.15	24	0.2	1.1	0.21	1.7	<0.41	<0.41	<0.41
1,2-Dichloroethane	5	0.5	<0.55	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	<0.81	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	<0.57	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	<0.80	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	<0.60	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	<0.53	<0.6	<0.22	4.6	<0.4	<0.4	<0.4	<0.4	<0.54	<0.54	<0.54
Isopropylbenzene	--	--	<0.66	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	1.1	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	1.3	<0.58	<0.25	22	<0.36	1.1	<0.36	1.5	<0.61	<0.61	<0.61
Naphthalene	100	10	<0.63	--	--	--	--	--	--	--	--	<0.74	<0.74
N-Heptane	--	--	--	--	<0.26	--	--	--	--	--	<1.4	<1.4	<1.4
n-Propylbenzene	--	--	<0.95	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	<0.63	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	1.1	<0.58	<0.17	16	<0.36	0.7	<0.36	0.99	<0.67	<0.67	<0.67
Total Trimethylbenzene	480	96	<1.33	<1.18	<0.35	4.8	<0.79	<0.79	<0.79	<0.79	<1.33	<1.33	<1.8
Trichloroethene	5	0.5	<0.39	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	<0.11	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	<1.83	<1.84	<0.65	14.6	<1.1	<1.1	<1.1	<1.10	<2.63	<2.63	<2.63
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	<0.018	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	<0.019	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	<0.020	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	<0.017	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	0.15	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	0.11	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	0.21	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	<0.016	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	--	--	--	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-32D				FTC-33S					
			5/23/06	8/16/06	11/2/06	3/29/07	5/1/96	11/21/02	5/6/03	11/3/03	3/29/04	5/19/04
Volatile Organic Compounds (µg/L)												
Benzene	5	0.5	<0.41	<0.41	<0.41	<0.41	0.76	<5.0	<1.2	<1.5	0.72	0.74
1,2-Dichloroethane	5	0.5	--	--	--	--	--	<11	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	<16	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	<11	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	<16	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	90	--	--	--	--
Ethylbenzene	700	140	<0.54	<0.54	<0.54	<0.54	<1	<11	<2.4	<3.0	1.3	<2.0
Isopropylbenzene	--	--	--	--	--	--	--	<13	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	<9.4	--	--	--	--
Methyl tert-butyl ether	60	12	<0.61	<0.61	<0.61	<0.61	200	830	890	770	880	800
Naphthalene	100	10	<0.74	<0.74	--	<0.74	--	<13	--	--	--	<2.3
N-Heptane	--	--	<1.4	<1.4	<1.4	--	--	--	--	<0.26	--	--
n-Propylbenzene	--	--	--	--	--	--	--	<19	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	<13	--	--	--	--
Toluene	1000	200	<0.67	<0.67	<0.67	<0.67	<1	<17	<2.3	<2.9	0.47	<1.8
Total Trimethylbenzene	480	96	<1.8	<1.8	<1.8	<1.8	1.6	<27	<4.7	<5.9	2.61	2.1
Trichloroethene	5	0.5	--	--	--	--	--	<7.8	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	<2.2	--	--	--	--
Xylenes	10,000	1000	<2.63	<2.63	<2.63	<2.63	<3	<37	<7.4	<9.2	2.29	<5.5
Polynuclear Aromatic Hydrocarbons (µg/L)												
Acenaphthene	--	--	--	--	--	--	--	<0.090	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	<0.095	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	<0.100	--	--	--	--
Fluorene	400	80	--	--	--	--	--	<0.085	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	0.65	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	0.57	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	1.6	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	<0.080	--	--	--	--
Lead (mg/L)												
Dissolved Lead	0.015	0.0015	--	--	--	--	0.015	--	0.0086	0.0069	--	0.011
												0.0089

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

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November 2006.

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Values in bold and underlined exceed the NR 140 ES.

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ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-33S										
			11/1/04	2/10/05	5/20/05	8/12/05	11/8/05	3/29/06	3/29/06 (DUP)	5/23/06	8/16/06	11/2/06	3/29/07
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	1.10	<1.4	<3.4	<4.1	<4.1	<200	<200	<4.1	<2.0	<1.0	<2.0
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	<2.0	<4.0	<10	<5.4	<5.4	<270	<270	<5.4	<2.7	<1.4	<2.7
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	770	700	620	600	520	540	520	230	200	220	450
Naphthalene	100	10	--	--	--	--	--	<370	<370	<7.4	<3.7	--	<3.7
N-Heptane	--	--	--	--	--	<14	<14	<700	<700	<14	<7.0	<3.5	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	<1.8	<3.6	<8.9	<6.7	<6.7	<340	<340	<6.7	<3.4	<1.7	<3.4
Total Trimethylbenzene	480	96	2.9	<7.9	<19.7	<13.3	<13.3	<900	<900	<18	<8.9	<4.5	<8.9
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	<5.5	<1.1	<28.0	<26.3	<26.3	<1320	<1320	<26.3	<13.1	<6.6	<13.1
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	--	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	0.0013	0.0013	--	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

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ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID	Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-33D												
				5/1/96	11/21/02	11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	11/8/05	3/29/06	5/23/06
Volatile Organic Compounds (µg/L)																
Benzene		5	0.5	0.63	<0.25	<0.3	<0.15	<0.14	<0.14	<0.14	--	--	<0.41	<0.41	<0.41	
1,2-Dichloroethane		5	0.5	--	<0.55	--	--	--	--	--	--	--	--	--	--	
cis 1,2-Dichloroethene		70	7	--	<0.81	--	--	--	--	--	--	--	--	--	--	
Dichlorodifluoromethane		1000	200	--	<0.57	--	--	--	--	--	--	--	--	--	--	
trans 1,2-Dichloroethene		100	20	--	<0.80	--	--	--	--	--	--	--	--	--	--	
Di-isopropyl ether		--	--	--	<0.60	--	--	--	--	--	--	--	--	--	--	
Ethylbenzene		700	140	<1	<0.53	<0.6	<0.22	<0.4	<0.4	<0.4	<0.4	--	--	<0.54	<0.54	
Isopropylbenzene		--	--	--	<0.66	--	--	--	--	--	--	--	--	--	--	
Methylene Chloride		5	0.5	--	<0.47	--	--	--	--	--	--	--	--	--	--	
Methyl tert-butyl ether		60	12	46	<0.87	<0.58	<0.25	<0.36	0.4	0.63	0.81	--	--	<0.61	3.2	<0.61
Naphthalene		100	10	--	<0.63	--	--	--	--	--	--	--	--	--	<0.74	<0.74
N-Heptane		--	--	--	--	--	<0.26	--	--	--	--	--	--	<1.4	<1.4	<1.4
n-Propylbenzene		--	--	--	<0.95	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene		5	0.5	--	<0.63	--	--	--	--	--	--	--	--	--	--	--
Toluene		1000	200	<1	<0.84	<0.58	<0.17	<0.36	<0.36	<0.36	<0.36	--	--	<0.67	<0.67	<0.67
Total Trimethylbenzene		480	96	<2	<1.33	<1.18	<0.35	<0.79	<0.79	<0.79	<0.79	--	--	<1.33	<1.8	<1.8
Trichloroethene		5	0.5	--	<0.39	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride		0.2	0.02	--	<0.11	--	--	--	--	--	--	--	--	--	--	--
Xylenes		10,000	1000	<3	<1.83	<1.84	<0.65	<1.1	<1.1	<1.1	<1.1	--	--	<2.63	<2.63	<2.63
Polynuclear Aromatic Hydrocarbons (µg/L)																
Acenaphthene		--	--	--	<0.018	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene		--	--	--	<0.019	--	--	--	--	--	--	--	--	--	--	--
Anthracene		3000	600	--	<0.020	--	--	--	--	--	--	--	--	--	--	--
Fluorene		400	80	--	<0.017	--	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene		--	--	--	<0.017	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene		--	--	--	<0.017	--	--	--	--	--	--	--	--	--	--	--
Naphthalene		100	10	--	<0.024	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene		--	--	--	<0.016	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)																
Dissolved Lead		0.015	0.0015	<0.005	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code
Chapter NR 140, Groundwater Quality Standards,
November 2006.

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ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID	Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-33D				FTC-34S							
				8/16/06	11/2/06	3/29/07		5/1/96	11/21/02	11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/10/05
Volatile Organic Compounds (µg/L)															
Benzene		5	0.5	<0.41	<0.41	<0.41	<0.5	<0.25	<0.3	<0.15	<0.14	<0.14	<0.14	<0.14	--
1,2-Dichloroethane		5	0.5	--	--	--	--	<0.55	--	--	--	--	--	--	--
cis 1,2-Dichloroethene		70	7	--	--	--	--	<0.81	--	--	--	--	--	--	--
Dichlorodifluoromethane		1000	200	--	--	--	--	<0.57	--	--	--	--	--	--	--
trans 1,2-Dichloroethene		100	20	--	--	--	--	<0.80	--	--	--	--	--	--	--
Di-isopropyl ether		--	--	--	--	--	--	<0.60	--	--	--	--	--	--	--
Ethylbenzene		700	140	<0.54	<0.54	<0.54	<1	<0.53	<0.6	<0.22	<0.4	<0.4	<0.4	<0.4	--
Isopropylbenzene		--	--	--	--	--	--	<0.66	--	--	--	--	--	--	--
Methylene Chloride		5	0.5	--	--	--	--	1.0	--	--	--	--	--	--	--
Methyl tert-butyl ether		60	12	<0.61	3.1	<0.61	<1	<0.87	<0.58	<0.25	<0.36	0.52	<0.36	<0.36	--
Naphthalene		100	10	<0.74	--	<0.74	--	<0.63	--	--	--	--	--	--	--
N-Heptane		--	--	<1.4	<1.4	--	--	--	--	<0.26	--	--	--	--	--
n-Propylbenzene		--	--	--	--	--	--	<0.95	--	--	--	--	--	--	--
Tetrachloroethene		5	0.5	--	--	--	--	<0.63	--	--	--	--	--	--	--
Toluene		1000	200	<0.67	<0.67	<0.67	<1	<0.84	<0.58	<0.17	<0.36	<0.36	<0.36	<0.36	--
Total Trimethylbenzene		480	96	<1.8	<1.8	<1.8	<2	<1.33	<1.18	<0.35	<0.79	<0.79	<0.79	<0.79	--
Trichloroethene		5	0.5	--	--	--	--	<0.39	--	--	--	--	--	--	--
Vinyl Chloride		0.2	0.02	--	--	--	--	<0.11	--	--	--	--	--	--	--
Xylenes		10,000	1000	<2.63	<2.63	<2.63	<3	<1.83	<1.84	<0.65	<1.1	<1.1	<1.1	<1.1	--
Polynuclear Aromatic Hydrocarbons (µg/L)															
Acenaphthene		--	--	--	--	--	--	<0.018	--	--	--	--	--	--	--
Acenaphthylene		--	--	--	--	--	--	<0.019	--	--	--	--	--	--	--
Anthracene		3000	600	--	--	--	--	<0.020	--	--	--	--	--	--	--
Fluorene		400	80	--	--	--	--	<0.017	--	--	--	--	--	--	--
2-Methyl Naphthalene		--	--	--	--	--	--	<0.017	--	--	--	--	--	--	--
1-Methyl Naphthalene		--	--	--	--	--	--	<0.017	--	--	--	--	--	--	--
Naphthalene		100	10	--	--	--	--	<0.024	--	--	--	--	--	--	--
Phenanthrene		--	--	--	--	--	--	<0.016	--	--	--	--	--	--	--
Lead (mg/L)															
Dissolved Lead		0.015	0.0015	--	--	--	<0.005	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

µg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-34S						FTC-34D			
			8/12/05	11/8/05	3/29/06	5/23/06	8/16/06	11/2/06	3/29/07	5/1/96	11/21/02	5/6/03
Volatile Organic Compounds (µg/L)												
Benzene	5	0.5	--	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	140	4	56
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	12	<1.8
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	1100	<4.2
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	7.9	<5.0
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	18	<4.4
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	<6.0	<3.8
Ethylbenzene	700	140	--	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	52	<5.3	28
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	<6.6	<3.0
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	11	<2.2
Methyl tert-butyl ether	60	12	--	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	<50	<8.7	680
Naphthalene	100	10	--	--	<0.74	<0.74	<0.74	--	<0.74	--	<6.3	17
N-Heptane	--	--	--	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	<9.5	5.8
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	110	<2.2
Toluene	1000	200	--	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<50	<8.4	<3.4
Total Trimethylbenzene	480	96	--	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	61	<13.3	42
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	120	<2.4
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	110	<0.9
Xylenes	10,000	1000	--	<2.63	<2.63	<2.63	<2.63	<2.63	<2.63	230	<18.3	64
Polynuclear Aromatic Hydrocarbons (µg/L)												
Acenaphthene	--	--	--	--	--	--	--	--	--	--	<0.36	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	<0.38	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	<0.40	--
Fluorene	400	80	--	--	--	--	--	--	--	--	<0.34	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	2.1	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	2.9	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	7.7	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	<0.32	--
Lead (mg/L)												
Dissolved Lead	0.015	0.0015	--	--	--	--	--	--	--	<0.005	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,
November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-34D										
			6/9/03	8/4/03	11/3/03	3/29/04	5/19/04	8/23/04	8-23-04 (Dup)	11/1/04	11-1-04 (Dup)	2/10/05	2-10-05 (Dup)
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	56	59	54	58	72	70	75	74	73	56	56
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	29	35	30	23	32	30	34	32	32	29	28
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	820	490	480	320	480	810	750	900	860	340	340
Naphthalene	100	10	--	--	21	--	20	15	--	13	13	16	16
N-Heptane	--	--	--	--	--	6.1	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	<1.4	<2.9	1.5	0.78	0.9	<1.8	<1.8	<3.6	<3.6	<0.89	<0.89
Total Trimethylbenzene	480	96	36.5	37	47	52	39.6	35.5	40.4	26.1	26.3	38.9	38.7
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	51	64	58.6	84.96	62.3	50	55	30	30	70.96	69.95
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	--	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	--	--	--	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,
November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-34D										
			5/20/05	5-20-05 (Dup)	8/12/05	8-12-05 (Dup)	11/8/05	11-08-05 (Dup)	3/30/06	5/23/06	8/16/06	11/2/06	3/29/07
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	51	55	78	85	20	19	36	74	42	47	41
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	22	22	33	36	9.9	8.8	15	32	25	32	26
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	350	390	810	850	590	590	1,100	720	640	1,100	1,200
Naphthalene	100	10	--	--	--	--	--	--	<7.4	<7.4	6.7	--	<7.4
N-Heptane	--	--	--	--	<14	<14	<14	<14	<14	<14	<14	<28	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	<8.9	<3.6	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<6.7	<3.4	<13 <6.7
Total Trimethylbenzene	480	96	18	29.7	24	24	<13.3	<13.3	<18	<18	<18	<8.9	<36 <18
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	45	48	39	42	<26.3	<26.3	<26.3	<26.3	<13.1	<53	<26.3
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	--	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	--	--	--	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,
November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-35										
			11/21/02	11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/13/05	5/20/05	8/12/05	11/8/05	3/29/06
Volatile Organic Compounds (µg/L)													
Benzene	5	0.5	<0.25	<0.3	<0.15	<0.14	<0.14	<0.14	<0.14	--	--	<0.41	<0.41
1,2-Dichloroethane	5	0.5	<0.55	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	<0.81	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	<0.57	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	<0.80	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	<0.60	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	<0.53	<0.6	<0.22	<0.4	<0.4	<0.4	<0.4	--	--	<0.54	<0.54
Isopropylbenzene	--	--	<0.66	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	0.95	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	<0.87	<0.58	<0.25	<0.36	<0.36	<0.36	<0.36	--	--	<0.61	<0.61
Naphthalene	100	10	<0.63	--	--	--	--	--	--	--	--	--	--
N-Heptane	--	--	--	--	<0.26	--	--	--	--	--	--	<1.4	<1.4
n-Propylbenzene	--	--	<0.95	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	<0.63	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	<0.84	<0.58	<0.17	<0.36	<0.36	<0.36	<0.36	--	--	<0.67	<0.67
Total Trimethylbenzene	480	96	<1.33	<1.18	<0.35	<0.79	<0.79	<0.79	<0.79	--	--	<1.80	<1.80
Trichloroethene	5	0.5	<0.39	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	<0.11	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	<1.83	<1.84	<0.65	<1.1	<1.1	<1.1	<1.1	--	--	<2.63	<2.63
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene	--	--	<0.018	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	<0.019	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	<0.020	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	<0.017	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	<0.017	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	<0.017	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	0.024	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	<0.016	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead	0.015	0.0015	--	--	--	--	--	--	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID	Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-42									
				5/6/03	11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	11/8/05
Volatile Organic Compounds (µg/L)													
Benzene		5	0.5	<0.3	<0.3	<0.15	<0.14	<0.14	<0.14	--	--	<0.41	<2.0
1,2-Dichloroethane		5	0.5	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene		70	7	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane		1000	200	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene		100	20	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether		--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene		700	140	<0.6	<0.6	<0.22	<0.4	<0.4	<0.4	--	--	<0.54	<2.7
Isopropylbenzene		--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride		5	0.5	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether		60	12	<0.58	<0.58	<0.25	<0.36	<0.36	<0.36	--	--	<0.61	<3.0
Naphthalene		100	10	<0.58	--	--	--	--	--	--	--	--	<3.7
N-Heptane		--	--	--	--	<0.26	--	--	--	--	--	--	<1.4
n-Propylbenzene		--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene		5	0.5	--	--	--	--	--	--	--	--	--	--
Toluene		1000	200	<0.58	<0.58	<0.17	<0.36	<0.36	<0.36	--	--	<0.67	<3.4
Total Trimethylbenzene		480	96	<1.18	<1.18	<0.35	<0.79	<0.79	<0.79	<0.79	--	--	<1.80
Trichloroethene		5	0.5	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride		0.2	0.02	--	--	--	--	--	--	--	--	--	--
Xylenes		10,000	1000	<1.84	<1.84	<0.65	<1.1	<1.1	<1.1	<1.1	--	--	<2.63
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene		--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene		--	--	--	--	--	--	--	--	--	--	--	--
Anthracene		3000	600	--	--	--	--	--	--	--	--	--	--
Fluorene		400	80	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene		--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene		--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene		100	10	--	--	--	--	--	--	--	--	--	--
Phenanthrene		--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead		0.015	0.0015	0.0041	--	--	0.001	--	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

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ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID	Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-44									
				5/6/03	6/9/03	8/4/03	11/3/03	3/29/04	5/19/04	8/23/04	11/1/04	2/10/05	5/20/05
Volatile Organic Compounds (µg/L)													
Benzene		5	0.5	<0.3	<3.0	<0.3	<0.3	<0.15	<0.14	<0.14	<0.14	<1.4	<3.4
1,2-Dichloroethane		5	0.5	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene		70	7	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane		1000	200	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene		100	20	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether		--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene		700	140	<0.6	<6.0	<0.6	<0.6	<0.22	<0.4	<0.4	<0.4	<4.0	<10
Isopropylbenzene		--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride		5	0.5	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether		60	12	170	86	69	74	85	100	93	63	91	38
Naphthalene		100	10	<0.58	--	--	--	--	--	--	--	--	--
N-Heptane		--	--	--	--	--	--	<0.26	--	--	--	--	--
n-Propylbenzene		--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene		5	0.5	--	--	--	--	--	--	--	--	--	--
Toluene		1000	200	<0.58	<5.8	<0.58	<0.58	<0.17	<0.36	<0.36	<0.36	<3.6	<8.9
Total Trimethylbenzene		480	96	<1.18	<11.8	<1.18	<1.18	<0.35	<0.79	<0.79	<0.79	<7.9	<19.7
Trichloroethene		5	0.5	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride		0.2	0.02	--	--	--	--	--	--	--	--	--	--
Xylenes		10,000	1000	<1.84	<18.4	<1.84	<1.84	<0.65	<1.1	<1.1	<1.1	<11.0	<28
Polynuclear Aromatic Hydrocarbons (µg/L)													
Acenaphthene		--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene		--	--	--	--	--	--	--	--	--	--	--	--
Anthracene		3000	600	--	--	--	--	--	--	--	--	--	--
Fluorene		400	80	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene		--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene		--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene		100	10	--	--	--	--	--	--	--	--	--	--
Phenanthrene		--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)													
Dissolved Lead		0.015	0.0015	0.019	--	--	--	0.022	0.021	0.0097	0.0095	--	--

Notes:

-- Not analyzed.

µg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-44								FTC-45			
			8/12/05	11/8/05	3/30/06	3/30/06 (DUP)	5/23/06	8/16/06	11/2/06	3/29/07	6/9/03	8/4/03	11/3/03	3/29/04
Volatile Organic Compounds (µg/L)														
Benzene	5	0.5	<4.1	<0.41	<0.41	<0.41	<4.1	<4.1	<0.41	<0.41	<0.3	<0.3	<0.3	<0.15
1,2-Dichloroethane	-5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	<5.4	<0.54	<0.54	<0.54	<5.4	<2.7	<0.54	<0.54	<0.6	<0.6	<0.6	<0.22
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	79	75	6.2	6.9	12	11	14	4.0	<0.58	<0.58	<0.58	<0.25
Naphthalene	100	10	--	--	<0.74	<0.74	<7.4	<3.7	--	<0.74	--	--	--	--
N-Heptane	--	--	<14	<1.4	<1.4	<1.4	<14	<7.0	<1.4	--	--	--	--	<0.26
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	<6.7	<0.67	<0.67	<0.67	<6.7	<3.4	<0.67	<0.67	<0.58	<0.58	<0.58	<0.17
Total Trimethylbenzene	480	96	<13.3	<1.80	<1.80	<1.80	<18	<8.9	<1.8	<1.8	<1.18	<1.18	<1.18	<0.35
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	<26.3	<2.63	<2.63	<2.63	<26.3	<13.1	<2.63	<2.63	<1.84	<1.84	<1.84	<0.65
Polynuclear Aromatic Hydrocarbons (µg/L)														
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	--	--	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)														
Dissolved Lead	0.015	0.0015	--	--	<0.0068	<0.0068	--	--	--	--	--	<0.0013	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-45						FTC-46S					
			8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	3/29/06	5/19/04	8/23/04	11/1/04	2/10/05	5/20/05	8/12/05
Volatile Organic Compounds (µg/L)														
Benzene	5	0.5	<0.14	<0.14	<0.14	--	--	<0.41	<0.14	<0.14	<0.14	<0.14	<3.4	<2.0
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	<0.4	<0.4	<0.4	--	--	<0.54	<0.4	<0.4	<0.4	<0.4	<10	<2.7
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	<0.36	<0.36	<0.36	--	--	<0.61	<0.36	<0.36	<0.36	<0.36	<9.0	<3.0
Naphthalene	100	10	--	--	--	--	--	<0.74	--	--	--	--	--	--
N-Heptane	--	--	--	--	--	--	--	<1.4	--	--	--	--	--	<7.0
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	<0.36	<0.36	<0.36	--	--	<0.67	<0.36	<0.36	<0.36	<0.36	<8.9	<3.4
Total Trimethylbenzene	480	96	<0.79	<0.79	<0.79	--	--	<1.8	<7.9	<7.9	<0.79	<0.79	<19.7	<6.6
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	<1.1	<1.1	<1.1	--	--	<2.63	<1.1	<1.1	<1.1	<1.1	<28	<13.1
Polynuclear Aromatic Hydrocarbons (µg/L)														
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	--	--	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)														
Dissolved Lead	0.015	0.0015	--	--	--	--	--	--	0.0012	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-46S				FTC-46D					
			11/8/05	3/30/06	5/19/04	8/23/04	11/1/04	2/10/05	5/20/05	8/12/05	11/8/05	3/30/06
Volatile Organic Compounds (µg/L)												
Benzene	5	0.5	<0.41	<2.0	0.88	0.85	0.64	0.40	<1.4	<2.0	0.81	<20
1,2-Dichloroethane	5	0.5	--	--	--	--	--	--	--	--	--	--
cis 1,2-Dichloroethene	70	7	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	1000	200	--	--	--	--	--	--	--	--	--	--
trans 1,2-Dichloroethene	100	20	--	--	--	--	--	--	--	--	--	--
Di-isopropyl ether	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	700	140	<0.54	<2.7	<0.22	<0.4	<0.4	<0.4	<4.0	<2.7	<0.54	<27
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	5	0.5	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	60	12	<0.61	<3.0	18	15	17	16	27	30	21	<30
Naphthalene	100	10	--	<3.7	--	--	--	--	--	--	--	<37
N-Heptane	--	--	<1.4	<7.0	<0.26	--	--	--	--	<7.0	<1.4	<70
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--
Toluene	1000	200	<0.67	<3.4	<0.17	<0.36	<0.36	<0.36	<3.6	<3.4	<0.67	<34
Total Trimethylbenzene	480	96	<1.80	<8.9	1.18	1	1.1	0.88	<7.9	<6.6	<1.80	<90
Trichloroethene	5	0.5	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	0.2	0.02	--	--	--	--	--	--	--	--	--	--
Xylenes	10,000	1000	<2.63	<13.1	<0.65	<1.1	<1.1	<1.1	<11.0	<13.1	<2.63	<132
Polynuclear Aromatic Hydrocarbons (µg/L)												
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	3000	600	--	--	--	--	--	--	--	--	--	--
Fluorene	400	80	--	--	--	--	--	--	--	--	--	--
2-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--
1-Methyl Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	100	10	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--
Lead (mg/L)												
Dissolved Lead	0.015	0.0015	--	--	0.0035	0.0016	<0.0011	<0.0011	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,

November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

TABLE A-1
HISTORICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER
ANSUL FIRE TECHNOLOGY CENTER
MARINETTE, WISCONSIN

Well ID	Date Sampled	ES ⁽¹⁾	PAL ⁽¹⁾	FTC-47				
				9/3/04	11/1/04	5/20/05	8/12/05	5/23/06
Volatile Organic Compounds (µg/L)								
Benzene		5	0.5	<0.14	<0.14	<0.14	<0.41	<0.41
1,2-Dichloroethane		5	0.5	--	--	--	--	--
cis 1,2-Dichloroethene		70	7	--	--	--	--	--
Dichlorodifluoromethane		1000	200	--	--	--	--	--
trans 1,2-Dichloroethene		100	20	--	--	--	--	--
Di-isopropyl ether		--	--	--	--	--	--	--
Ethylbenzene		700	140	<0.4	<0.4	<0.4	<0.54	<0.54
Isopropylbenzene		--	--	--	--	--	--	--
Methylene Chloride		5	0.5	--	--	--	--	--
Methyl tert-butyl ether		60	12	<0.36	<0.36	<0.36	<0.61	<0.61
Naphthalene		100	10	<0.47	--	--	--	<0.74
N-Heptane		--	--	--	--	--	<1.4	<1.4
n-Propylbenzene		--	--	--	--	--	--	--
Tetrachloroethene		5	0.5	--	--	--	--	--
Toluene		1000	200	<0.36	<0.36	<0.36	<0.67	<0.67
Total Trimethylbenzene		480	96	<0.79	<0.79	<0.79	<1.33	<1.8
Trichloroethene		5	0.5	--	--	--	--	--
Vinyl Chloride		0.2	0.02	--	--	--	--	--
Xylenes		10,000	1000	<1.10	<1.10	<1.10	<2.63	<2.63
Polynuclear Aromatic Hydrocarbons (µg/L)								
Acenaphthene		--	--	--	--	--	--	--
Acenaphthylene		--	--	--	--	--	--	--
Anthracene		3000	600	--	--	--	--	--
Fluorene		400	80	--	--	--	--	--
2-Methyl Naphthalene		--	--	--	--	--	--	--
1-Methyl Naphthalene		--	--	--	--	--	--	--
Naphthalene		100	10	--	--	--	--	--
Phenanthrene		--	--	--	--	--	--	--
Lead (mg/L)								
Dissolved Lead		0.015	0.0015	--	--	--	--	--

Notes:

-- Not analyzed.

mg/L - milligrams per liter.

µg/L - micrograms per liter.

⁽¹⁾ Enforcement Standards (ES) and Preventive Action

Limits (PAL) from Wisconsin Administrative Code

Chapter NR 140, Groundwater Quality Standards,
November 2006.

Values in bold exceed the NR 140 PAL.

Values in bold and underlined exceed the NR 140 ES.

Appendix B

Appendix B

Soil Boring Logs and Abandonment Forms

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

Page 1 of 3

Facility/Project Name Ansol Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-1D									
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 7/7/2009	Date Drilling Completed 7/7/2009	Drilling Method Geoprobe									
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-1D	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches									
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat ° ' "	Long ° ' "	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W									
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI										
Sample		Soil/Rock Description And Geologic Origin For Each Major Unit			Soil Properties			RQD/ Comments						
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	USCS	Graphic Log	Well Diagram	PID/FID		Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 UNDIS	60 36		1 2 3 4 5 6 7 8 9 10 11 12	Fine Sand - reddish brown - moist	SW			1.3						
2 UNDIS	60 60			Fine Sand - reddish brown	SW			0.6						
3 UNDIS	60 60				SW			1.8						

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

Signature

Firm **AECOM**
11425 W. Lake Park Drive, Milwaukee, WI 53224

Tel: 414-577-1377
Fax: 414-359-0822

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.

Boring Number GP-1D

Use only as an attachment to Form 4400-122.

Page 2 of 3

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	Soil Properties				RQD/ Comments
								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
4 UNDIS	60 60		13 14 15 16 17 18 19 20 21 22 23 24 25	Fine Sand - reddish brown	SW			0.9	0.0	0.0	0.0	2 P 200
5 UNDIS	60 60		26 27 28 29 30 31 32	Sand Seams - medium	SW			0.0	0.0	0.0	0.0	
6 UNDIS	60 60		26 27 28 29 30 31 32	Sand Seams - medium	SW			0.0	0.0	0.0	0.0	
7 UNDIS	60 60		26 27 28 29 30 31 32	Sand Seams - medium	SW			0.0	0.0	0.0	0.0	

Boring Number GP-1D

Use only as an attachment to Form 4400-122.

Page 3 of 3

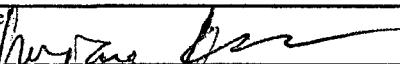
Number and Type	Length Att & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	Soil Properties							RQD/ Comments	
					USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
8 UNDIS	60 60		33 34 35 36 37 38 39	Sand Seams - medium	SW			0.5 0.0 0.0					2 P 200
9 UNDIS	60 60		40 41 42 43 44 45 46 47 48 49 50 51	Fine Sand with trace coarse sand to small gravel - light brown	SW			0.0 0.0 0.0 0.0 0.0 0.0					
10 UNDIS	60 60		45 46 47 48 49 50 51		SW			0.0 0.0 0.0 0.0 0.0 0.0					
11 UNDIS	60 12		50 51	End of Boring				0.0 0.0					

Route To: Watershed/Wastewater
Remediation/Redevelopment
Other

Page 1 of 1

Facility/Project Name Ansol Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-1S								
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 7/7/2009	Date Drilling Completed 7/7/2009	Drilling Method Geoprobe								
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-1S	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches								
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E	Lat ° ' " Long ° ' "		Local Grid Location □ N <input type="checkbox"/> E Feet □ S <input type="checkbox"/> W Feet <input type="checkbox"/>										
Facility ID 338001345	County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI										
Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil Properties					RQD/ Comments				
				USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength		Moisture Content	Liquid Limit	Plasticity Index	P 200
1 UNDIST	48 30		-1	Black Topsoil Topsoil				0.0					
2 UNDIST			-2	Fine Sand - light brown - dry				0.0					
3 UNDIST	48 48		-3					0.0					
4 UNDIST	48 48		-4					0.0					
			-5					0.0					
			-6					0.0					
			-7					0.0					
			-8					0.0					
			-9					0.0					
			-10					0.0					
			-11					0.0					
			-12	End of Boring				0.0					

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

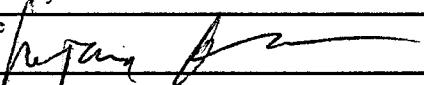
Signature:  Firm **AECOM**
11425 W. Lake Park Drive, Milwaukee, WI 53224 Tel: 414-577-1377
Fax: 414-359-0822

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

Page 1 of 3

Facility/Project Name Ansul Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-2D									
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 7/8/2009	Date Drilling Completed 7/8/2009	Drilling Method Geoprobe									
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-2D	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches									
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat <input type="checkbox"/> ° <input type="checkbox"/> ' <input type="checkbox"/> " Long <input type="checkbox"/> ° <input type="checkbox"/> ' <input type="checkbox"/> "	Local Grid Location □ N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W Feet <input type="checkbox"/> Feet <input type="checkbox"/> W										
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI										
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				RQD/ Comments
Number and Type	Length Att. & Recovered (in)									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
UNDIS	1 60 30	Topsoil Fine Sand - light brown - grayish brown - wet		Topsoil SW	0.0 0.0 0.0									
UNDIS	2 42													
UNDIS	3 60													
1 hereby certify that the information on this form is true and correct to the best of my knowledge.														

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Boring Number GP-2D

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Page 2 of 3

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	Soil Properties							RQD/ Comments	
					USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
4 UNDIS	60		11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	Fine Sand - light brown - grayish brown - wet				0.0					2
5 UNDIS	60				SW			0.0					
6 UNDIS	60							0.0					
7 UNDIS	60			Silty Clay with trace coarse sand, small gravel	ML			0.0					

Boring Number GP-2D

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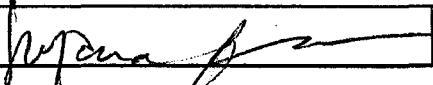
Page 3 of 3

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

Page 1 of 3

Facility/Project Name Ansul Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-2S									
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 7/7/2009	Date Drilling Completed 7/7/2009	Drilling Method Geoprobe									
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-2S	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches									
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat ° ' " Lat <input type="checkbox"/> N Long ° ' " Long <input type="checkbox"/> S	Local Grid Location Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W										
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI										
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil Properties		RQD/Comments								
				U S C S	Graphic Log		Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
UNDIS	60 60		1 2 3 4 5 6 7 8 9 10 11 12	Grass Topsoil - black - dry	Topsoil			0.2	0.0	0.0	0.0	0.0	0.0	0.0
				Possible fill: Fine Sand, trace small gravel - brown - dry	Fill	X								
				Possible Fill: Fine Sand - brown - moist	Fill	X								
UNDIS	60 6		1 2 3 4 5 6 7 8 9 10 11 12	Fine Sand, trace coarse sand to small gravel - brown - wet	SM			0.0	0.0	0.0	0.0	0.0	0.0	

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

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SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-2S

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Page 2 of 3

Sample Number and Type	Length Alt. & 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	Soil Properties					RQD/ Comments
								PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
4 UNDIS	60 48		13 14 15 16 17 18 19 20	Fine Sand, trace coarse sand to small gravel - brown - wet	SM		Well Diagram	0.0					2 P 200
				Fine Sand - brown				0.0					
5 UNDIS	60 60		21 22 23 24 25	Fine Sand- brown - wet	SM		Well Diagram	0.0					
				Fine Sand - grayish brown - wet				0.0					
6 UNDIS	60 60		26 27 28 29 30		SM		Well Diagram	0.0					
								0.0					
7 UNDIS	60 60		31 32		SM		Well Diagram	0.0					
								0.0					

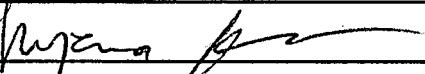
Boring Number		GP-2S		Use only as an attachment to Form 4400-122.		Page 3 of 3		RQD/ Comments										
Number and Type	Sample	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties								
Length Att. & Recovered (in)										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200				
8 UNDIS	60 60		33 34 35 36 37 38 39 40 41 42	Fine Sand - grayish brown - wet		SM			0.0					2				
				Silty Sand, silt with trace small gravel - grayish brown			SW-SM											
				Silt with coarse sand, trace clayey silt - grayish														
9 UNDIS	60 30		End of Boring			SP-SP			0.0									

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

Page 1 of 3

Facility/Project Name Ansul Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-3D										
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 7/8/2009	Date Drilling Completed 7/8/2009	Drilling Method Geoprobe										
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-3D	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches										
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat ° ' " Local Grid Location N, E S/C/N	Long ° ' " Feet <input type="checkbox"/> N S Feet <input type="checkbox"/> E W	Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W										
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI											
Number and Type of 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				RQD/ Comments
				Topsoil	Fine Sand - reddish brown - damp	SW					Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1 UNDIS	60 6		-1												
			-2												
			-3												
			-4												
			-5												
2 UNDIS	60 48		-6												
			-7												
			-8												
			-9												
			-10												
3 UNDIS	60 36		-11												
			-12												

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

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11425 W. Lake Park Drive, Milwaukee, WI 53224 Tel: 414-577-1377
Fax: 414-359-0822

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Boring Number		GP-3D		Use only as an attachment to Form 4400-122.				Soil Properties				Page 2 of 3				
Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit				USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	RQD/ Comments
Number and Type	Length Att. & Recovered (in)															
4 UNDIS	60 60		13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	Fine Sand - light brown - grayish brown - wet		SW				0.0	0.0	0.0	0.0	0.0	0.0	2 P 200
5 UNDIS	60 60		20 21 22 23 24 25 26 27 28 29 30 31 32	Coarse Sand, small gravel - light brown - grayish brown		SW				0.0	0.0	0.0	0.0	0.0	0.0	
6 UNDIS	60 60		25 26 27 28 29 30 31 32							0.0	0.0	0.0	0.0	0.0	0.0	
7 UNDIS	60 60		30 31 32							0.0	0.0	0.0	0.0	0.0	0.0	

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-3D

Use only as an attachment to Form 4400-122.

Page 3 of 3

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

Page 1 of 1

Facility/Project Name Ansul Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-3S						
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 7/7/2009	Date Drilling Completed 7/7/2009	Drilling Method Geoprobe						
WI Unique Well No. 338001345	DNR Well ID No. GP-3S	Common Well Name GP-3S	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches						
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat <input type="checkbox"/> ° <input type="checkbox"/> ' <input type="checkbox"/> "	Long <input type="checkbox"/> ° <input type="checkbox"/> ' <input type="checkbox"/> "	Local Grid Location □ N <input type="checkbox"/> E Feet □ S <input type="checkbox"/> W Feet <input type="checkbox"/> W						
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI							
Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)			USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	
1 UNDIS	48 48		1	Fine Sand, trace coarse sand to small gravel - brown - dry		0.0					
			2	Fine Sand, reddish fine sand - brown - moist							
2 UNDIS	48 48		3	Fine sand, trace small gravel, grayish fine sand - brown - moist		0.0					
			4	Fine Sand - brown - wet							
3 UNDIS	48		5			0.0					
			6								
			7								
			8								
			9								
			10								
			11								
			12	End of Boring							

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

Signature 

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

Page 1 of 3

Facility/Project Name Ansol Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-4D										
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 9/14/2009	Date Drilling Completed 9/14/2009	Drilling Method Geoprobe										
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-4D	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches										
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat ° ' " Local Grid Location	Long ° ' " Feet <input type="checkbox"/> N <input type="checkbox"/> S	Feet <input type="checkbox"/> E <input type="checkbox"/> W										
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI											
Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil Properties		RQD/ Comments									
				U S C S	Graphic Log		Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 UNDIS	48 12		1 2 3 4 5 6 7 8 9 10 11 12	Fine Sand - brown	SW										
2 UNDIS	48 45.60			Fine Sand - brown - wet	SW										
3 UNDIS	48 48				SW										

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

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Boring Number GP-4D

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Page 2 of 3

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-4D

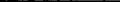
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Page 3 of 3

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

Page 1 of 3

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Boring Number GP-5D

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Page 2 of 3

Boring Number GP-5D

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Page 3 of 3

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

Page 1 of 3

Facility/Project Name Ansol Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-6D								
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 9/15/2009	Date Drilling Completed 9/15/2009	Drilling Method Geoprobe								
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-6D	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches								
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat <input type="checkbox"/> ° <input type="checkbox"/> ' <input type="checkbox"/> "	Long <input type="checkbox"/> ° <input type="checkbox"/> ' <input type="checkbox"/> "	Local Grid Location Feet <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W								
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI									
Sample	Number and Type	Length Att & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit				Soil Properties				RQD/Comments
					U S C S	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1 UNDIS	48 18			1 2 3 4 5 6 7 8 9 10 11 12	Topsoil: Fine Sand - brown Topsoil Fine Sand - brown	Topsoil SW							
2 UNDIS	48 48												
3 UNDIS	48 48												

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

Signature

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Boring Number GP-6D

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Page 2 of 3

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-6D

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Page 3 of 3

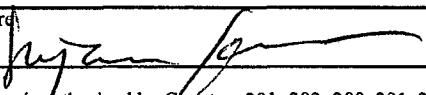
Route To: Watershed/Wastewater Remediation/Redevelopment Waste Management Other

Page 1 of 3

Facility/Project Name Ansul Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-7D
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 11/16/2009	Date Drilling Completed 11/16/2009	Drilling Method Geoprobe
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-7D	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/>	State Plane N, E S/C/N NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E		Lat <input type="checkbox"/> ° <input type="checkbox"/> ' <input type="checkbox"/> "	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> S	<input type="checkbox"/> E <input type="checkbox"/> W
Facility ID 338001345	County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI		

Sample	Number and Type Recovered (in)	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	P/D/FID	Soil Properties				RQD/ Comments
										Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1 UNDIS	48	48		1	Topsoil	Topsoil								
				2	Fine Sand - brown									
2 UNDIS	48	48		4										
				5										
3 UNDIS	24	24		8	Fine Sand - brown - wet									
				9										
4 UNDIS	60	60		10										
				11										
				12										

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

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Boring Number GP-7D

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Page 2 of 3

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	Soil Properties				RQD/ Comments
								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
5 UNDIS	24 24		13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	Fine Sand - brown - wet Fine Sand - brown	SW							2 P 200
6 UNDIS	36 36											
7 UNDIS	24 24				SW							
8 UNDIS	36 36											
9 UNDIS	24 24			Fine Sand - brown/gray								
10 UNDIS	48 48				SW							
11 UNDIS	24 24			Silty Sand, clay and gravel	ML	x x x x						

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number GP-7D

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Page 3 of 3

Route To: Watershed/Wastewater
Remediation/Redevelopment

Waste Management
Other

Page 1 of 3

Facility/Project Name Ansul Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-8D						
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 11/17/2009	Date Drilling Completed 11/17/2009	Drilling Method Geoprobe						
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-8D	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches						
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat ° ' " Local Grid Location Long ° ' " <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W								
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI							
Sample		Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	Soil Properties				RQD/ Comments
Number and Type	Length Att. & Recovered (in)						Blow Counts	PID/FID	Compressive Strength	Moisture Content	
1 UNDIS	48 48		Topsoil	Topsoil							
			Fine Sand - brown								
2 UNDIS	72 72			SW							
3 UNDIS	24 24		Fine Sand - brown - wet	SW							

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

Signature

Firm **AECOM**
11425 W. Lake Park Drive, Milwaukee, WI 53224

Tel: 414-577-1377
Fax: 414-359-0822

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.

Boring Number **GP-8D**

Use only as an attachment to Form 4400-122.

Page 2 of 3

Number and Type	Length Att. & Recovered (in)	Sample	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	Soil Properties				RQD/Comments	
									PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
4 UNDIS	60	Fine Sand - brown - wet		13										2
	60			14										
				15										
				16										
5 UNDIS	24	Fine Sand - brown		17										
	24			18										
6 UNDIS	48			19										
	48			20										
				21										
				22										
				23										
7 UNDIS	24			24										
	24			25										
8 UNDIS	60	Silty Sand - gray		26						x	x	x	x	
	60			27						x	x	x	x	
				28						x	x	x	x	
				29						x	x	x	x	
				30						x	x	x	x	
9 UNDIS	24			31						SP-SM	x	x	x	
	24			32							x	x	x	

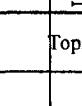
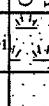
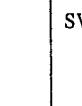
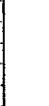
Boring Number GP-8D

Use only as an attachment to Form 4400-122.

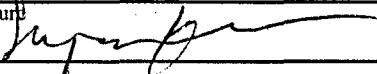
Page 3 of 3

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

Page 1 of 3

Facility/Project Name Ansul Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-9D										
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 11/18/2009	Date Drilling Completed 11/18/2009	Drilling Method Geoprobe										
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-9D	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches										
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat ° ' " Local Grid Location Long ° ' " Feet <input type="checkbox"/> N <input type="checkbox"/> E S <input type="checkbox"/> W												
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI											
Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		U S C S	Graphic Log	Well Diagram	P/D/FID	Soil Properties					RQD/Comments
Number and Type	Length Att. & Recovered (in)									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
1 UNDIS	48 48		1 2 3 4 5 6 7 8 9 10 11 12	Topsoil		Topsoil									
				Fine Sand - brown						SW					
2 UNDIS	48 48		1 2 3 4 5 6 7 8 9 10 11 12	Fine Sand - brown - wet at tip		SW									
				Fine Sand - brown - wet						SW					
3 UNDIS	48 48		1 2 3 4 5 6 7 8 9 10 11 12												

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

Signature 

Firm **AECOM**
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Boring Number GP-9D

Use only as an attachment to Form 4400-122.

Page 2 of 3

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	Soil Properties				RQD/Comments
Number and Type	Length Att. & Recovered (in)							Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
4 UNDIS	48 48			Fine Sand - brown - wet	SW							2
5 UNDIS	24 24		13									
6 UNDIS	48 48		14									
			15									
			16	Fine Sand - brown/gray - wet								
			17									
			18									
			19									
			20									
			21									
			22									
7 UNDIS	12 12		23									
8 UNDIS	96 96		24		SW							
			25									
			26									
			27									
			28									
			29									
			30									
			31	Silty Sand - gray - wet	SW-SM	x	x					
9 UNDIS	24 24		32			x	x					

Boring Number GP-9D

Use only as an attachment to Form 4400-122.

Page 3 of 3

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

Page 1 of 2

Facility/Project Name Ansol Fire Technology Center - 60135634.07			License/Permit/Monitoring Number		Boring Number GP-FTC-28									
Boring Drilled By: Name of crew chief (first, last) and Firm Geiss Soil & Sample, LLC			Date Drilling Started 7/8/2009	Date Drilling Completed 7/8/2009	Drilling Method Geoprobe									
WI Unique Well No.	DNR Well ID No.	Common Well Name GP-FTC-28	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2 inches									
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input type="checkbox"/> State Plane N, E S/C/N NE 1/4 of NE 1/4 of Section 13, T 30 N, R 23 E			Lat ° ' " Local Grid Location Long ° ' "	□ N Feet □ S	□ E Feet □ W									
Facility ID 338001345		County Marinette	County Code 38	Civil Town/City/ or Village Marinette, WI										
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				RQD/ Comments
				GW	SW					Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1 UNDIS	60 30		1 2 3 4 5 6 7 8 9 10 11 12	Gravel at Surface					857					
2 UNDIS	60 42			Fine Sand, trace coarse sand, small gravel - dark brown	SW				571					
3 UNDIS	60 60			Fine Sand, petroleum odor - red-brown - moist to wet	SW				125					
				Fine Sand - red brown/brown - wet	SW									

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

Signature

Firm **AECOM**
11425 W. Lake Park Drive, Milwaukee, WI 53224

Tel: 414-577-1377
Fax: 414-359-0822

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Boring Number **GP-FTC-28** Use only as an attachment to Form 4400-122.

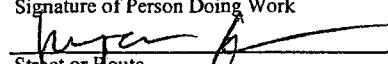
Page 2 of 2

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Gov't Lot	Grid Number	Street or Route 2700 Industrial Parkway South	
Grid Location		City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-1D	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/7/09	

WELL/DRILLHOLE/BOREHOLE INFORMATION			
(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 7/7/2009		(4) Depth to Water (Feet) _____	
<input type="checkbox"/> Monitoring Well	<input type="checkbox"/> Construction Report Available?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Water Well		<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Drillhole		<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input checked="" type="checkbox"/> Borehole		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If No, Explain _____			
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<input checked="" type="checkbox"/> Other (Specify) Geoprobe		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Total Well Depth (ft) 51.0 (From ground surface)		If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Lower Drillhole Diameter (in.) 2.0			
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet			
(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____			
(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input checked="" type="checkbox"/> Chipped Bentonite		For monitoring wells and monitoring well boreholes only	

(7) Sealing Material Used		From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips		Surface	51.0		

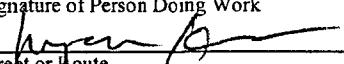
(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed 14/8/09		
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known)	Ansul FTC
NE 1/4 of NE 1/4 of Sec. 13 T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Grid Number Gov't Lot		Street or Route 2700 Industrial Parkway South	
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-1S	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/7/09	

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 7/7/2009		(4) Depth to Water (Feet)	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input type="checkbox"/> Yes <input type="checkbox"/> No	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) Geoprobe		Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation		If No, Explain _____	If No, Explain _____
Total Well Depth (ft.) (From ground surface) 12.0	Casing Diameter (in.) Casing Depth (ft.)	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Lower Drillhole Diameter (in.) 2.0		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No
Was Well Annular Space Grouted? If Yes, To What Depth?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	
		For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	

(7) Sealing Material Used		From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips		Surface	12.0		

(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed 12/8/09	Reviewer/Inspector	
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work	
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

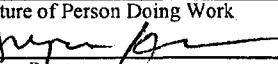
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(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known)	Ansul FTC
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Grid Number Gov't Lot		Street or Route 2700 Industrial Parkway South	
Grid Location	ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-2D	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/8/09	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 7/8/2009		(4) Depth to Water (Feet) _____	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input type="checkbox"/> Yes <input type="checkbox"/> No	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) Geoprobe		Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		If No, Explain _____	
Total Well Depth (ft.) 45.0 (From ground surface)	Casing Diameter (in.) _____ Casing Depth (ft.) _____	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Lower Drillhole Diameter (in.) 2.0		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain)		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	

(7) Sealing Material Used		From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips		Surface	45.0		

(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed 6/8/09		
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

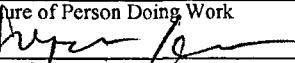
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(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known)	Ansul FTC
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Gov't Lot Grid Number		Street or Route 2700 Industrial Parkway South	
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-2S	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/7/09	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 7/7/2009		(4) Depth to Water (Feet) _____	
<input type="checkbox"/> Monitoring Well	Construction Report Available?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Water Well		<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Drillhole		<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input checked="" type="checkbox"/> Borehole		<input type="checkbox"/> Yes	<input type="checkbox"/> No
If No, Explain _____			
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<input checked="" type="checkbox"/> Other (Specify) Geoprobe		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Total Well Depth (ft.) 42.5 (From ground surface) Casing Diameter (in.) _____ Casing Depth (ft.) _____		If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Lower Drillhole Diameter (in.) 2.0			
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet			
(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____			
(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonit�-Cement Grout <input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Chipped Bentonite		For monitoring wells and monitoring well boreholes only	

(7) Sealing Material Used	From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips	Surface	42.5		

(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed 10/8/09		
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

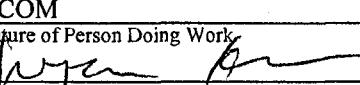
All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Gov't Lot _____ Grid Number _____		Street or Route 2700 Industrial Parkway South	
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-3D	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/8/09	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 7/8/2009		(4) Depth to Water (Feet) _____ Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain _____	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) Geoprobe		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
Total Well Depth (ft) 50.5 (From ground surface) Casing Diameter (in.) _____ Casing Depth (ft.) _____		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	
Lower Drillhole Diameter (in.) 2.0 Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet			

(7) Sealing Material Used	From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips	Surface	50.5		

(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed 11/8/09		
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

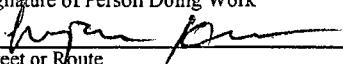
All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
<u>NE</u> 1/4 of <u>NE</u> 1/4 of Sec. <u>13</u> ; T. <u>30</u> N; R. <u>23</u> <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Grid Number Gov't Lot		Street or Route 2700 Industrial Parkway South	
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-3S	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/7/09	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) <u>7/7/2009</u>		(4) Depth to Water (Feet) _____ Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain _____	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) <u>Geoprobe</u>			
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock			
Total Well Depth (ft.) <u>12.0</u> (From ground surface)	Casing Diameter (in.) _____ Casing Depth (ft.) _____	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Lower Drillhole Diameter (in.) <u>2.0</u>			
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	

(7) Sealing Material Used	From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips	Surface	12.0		

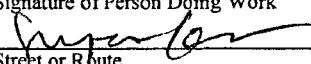
(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed <u>12/8/09</u>		
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	Complying Work Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Gov't Lot Grid Number		Street or Route 2700 Industrial Parkway South	
Grid Location	ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-4D	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/7/09	

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 9/14/2009		(4) Depth to Water (Feet) _____	
<input type="checkbox"/> Monitoring Well	Construction Report Available? <input type="checkbox"/> Yes <input type="checkbox"/> No	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Water Well		Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Drillhole		If No, Explain _____	
<input checked="" type="checkbox"/> Borehole			
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) Geoprobe		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain)	
Total Well Depth (ft.) 48.4 (From ground surface)		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	
Lower Drillhole Diameter (in.) 2.0			
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet			

(7) Sealing Material Used		From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips		Surface	48.4		

(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed 12/10/09		
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

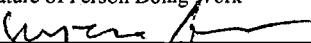
All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Grid Number		Street or Route 2700 Industrial Parkway South	
Grid Location		City, State, Zip Code Marinette, WI 54143	
ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		Facility Well No. and/or Name (If Applicable) GP-5D	
Civil Town Name		WI Unique Well No.	
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/7/09	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 9/15/2009		(4) Depth to Water (Feet) _____ Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain _____	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input type="checkbox"/> Yes <input type="checkbox"/> No	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Construction Type: <input type="checkbox"/> Drilled <input checked="" type="checkbox"/> Other (Specify) Geoprobe	<input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug	(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain)	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation	<input type="checkbox"/> Bedrock	(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	
Total Well Depth (ft.) 50.0 (From ground surface)	Casing Diameter (in.) _____ Casing Depth (ft.) _____		
Lower Drillhole Diameter (in.) 2.0			
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet			

(7) Sealing Material Used		From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips		Surface	50.0		

(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected 14/8/09	District/County
Signature of Person Doing Work 		Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
Street or Route 11425 W. Lake Park Drive, Suite 100		Follow-up Necessary	
City, State, Zip Code Milwaukee, WI 53224			

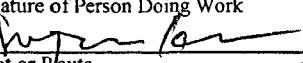
All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Gov't Lot	Grid Number	Street or Route 2700 Industrial Parkway South	
Grid Location		City, State, Zip Code Marinette, WI 54143	
ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		Facility Well No. and/or Name (If Applicable) GP-6D	WI Unique Well No.
Civil Town Name Marinette, WI		Reason For Abandonment Sampling Complete	
Street Address of Well 2700 Industrial Parkway South		Date of Abandonment 7/7/09	
City, Village Marinette, WI			

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) <u>9/15/2009</u>		(4) Depth to Water (Feet) _____	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input type="checkbox"/> Yes <input type="checkbox"/> No	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) <u>Geoprobe</u>		Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		If No, Explain _____	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Total Well Depth (ft) <u>44.0</u> (From ground surface) Casing Diameter (in.) _____ Casing Depth (ft.) _____		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Lower Drillhole Diameter (in.) <u>2.0</u>		If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	
		For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	

(7) Sealing Material Used		From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips		Surface	44.0		

(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed <u>7/8/09</u>		
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

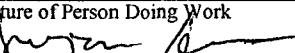
(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Gov't Lot Grid Number		Street or Route 2700 Industrial Parkway South	
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-7D	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/7/09	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 11/16/2009		(4) Depth to Water (Feet) _____ Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain _____	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) Geoprobe		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock Total Well Depth (ft) 33.0 (From ground surface) Casing Diameter (in.) _____ Casing Depth (ft.) _____		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
Lower Drillhole Diameter (in.) 2.0 Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	

(7) Sealing Material Used	From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips	Surface	33.0		

(8) Comments _____

(9) Name of Person or Firm Doing Sealing Work AECOM		(10) FOR DNR OR COUNTY USE ONLY	
Signature of Person Doing Work 	Date Signed 10/8/09	Date Received/Inspected	District/County
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

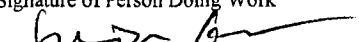
All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Grid Number Gov't Lot		Street or Route 2700 Industrial Parkway South	
Grid Location	ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-8D	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/7/09	

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 11/17/2009		(4) Depth to Water (Feet) _____ Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain _____	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) Geoprobe		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain)	
Total Well Depth (ft.) 42.0 (From ground surface)	Casing Diameter (in.) _____ Casing Depth (ft.) _____	(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	
Lower Drillhole Diameter (in.) 2.0			
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet			

(7) Sealing Material Used		From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips		Surface	42.0		

(8) Comments _____		(9) Name of Person or Firm Doing Sealing Work AECOM		(10) FOR DNR OR COUNTY USE ONLY	
Signature of Person Doing Work 		Date Signed 14/3/09	Date Received/Inspected	District/County	
Street or Route 11425 W. Lake Park Drive, Suite 100		Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work	
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary			

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

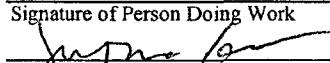
(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Grid Location	Gov't Lot _____ Grid Number _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Street or Route 2700 Industrial Parkway South	
Civil Town Name	City, State, Zip Code Marinette, WI 54143		
Street Address of Well	Facility Well No. and/or Name (If Applicable) GP-9D WI Unique Well No.		
2700 Industrial Parkway South	Reason For Abandonment Sampling Complete		
City, Village Marinette, WI	Date of Abandonment 7/7/09		

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 11/18/2009	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole	Construction Report Available? <input type="checkbox"/> Yes <input type="checkbox"/> No
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) Geoprobe	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth (ft.) 36.0 (From ground surface)	Casing Diameter (in.) _____ Casing Depth (ft.) _____
Lower Drillhole Diameter (in.) 2.0	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet	

(4) Depth to Water (Feet)	
Pump & Piping Removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Liner(s) Removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Screen Removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Casing Left in Place?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If No, Explain _____	
Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
(5) Required Method of Placing Sealing Material	
<input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Dump Bailer	<input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Other (Explain) _____
(6) Sealing Materials	
<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout

(7) Sealing Material Used		From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips		Surface	36.0		

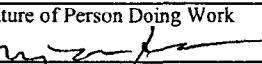
(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed 7/7/09		
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION		(2) FACILITY NAME Ansul Fire Technology Center - 60135634.07	
Well/Drillhole/Borehole Location	County Marinette	Original Well Owner (If Known) Ansul FTC	
NE 1/4 of NE 1/4 of Sec. 13 ; T. 30 N; R. 23 <input checked="" type="checkbox"/> E (If Applicable)		Present Well Owner Ansul FTC	
Gov't Lot	Grid Number	Street or Route 2700 Industrial Parkway South	
Grid Location		City, State, Zip Code Marinette, WI 54143	
Civil Town Name		Facility Well No. and/or Name (If Applicable) GP-FTC-28	WI Unique Well No.
Street Address of Well 2700 Industrial Parkway South		Reason For Abandonment Sampling Complete	
City, Village Marinette, WI		Date of Abandonment 7/8/09	

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION			
(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 7/8/2009		(4) Depth to Water (Feet)	
<input type="checkbox"/> Monitoring Well	<input type="checkbox"/> Construction Report Available?	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Water Well		<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Drillhole		<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input checked="" type="checkbox"/> Borehole		<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		If No, Explain _____	
<input checked="" type="checkbox"/> Other (Specify) Geoprobe			
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Total Well Depth (ft.) 15.0 (From ground surface)		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Casing Diameter (in.) _____ Casing Depth (ft.) _____		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Lower Drillhole Diameter (in.) 2.0		If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
		(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Chipped Bentonite <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Cement Grout	

(7) Sealing Material Used		From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips		Surface	15.0		

(8) Comments _____		(10) FOR DNR OR COUNTY USE ONLY	
(9) Name of Person or Firm Doing Sealing Work AECOM		Date Received/Inspected	District/County
Signature of Person Doing Work 	Date Signed 14/8/09		
Street or Route 11425 W. Lake Park Drive, Suite 100	Telephone Number 414-359-3030	Reviewer/Inspector	<input type="checkbox"/> Complying Work <input type="checkbox"/> Noncomplying Work
City, State, Zip Code Milwaukee, WI 53224		Follow-up Necessary	

Appendix C

Appendix C

Laboratory Reports

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

JEFF TRACY
AECOM
1020 N. BROADWAY
MILWAUKEE, WI 53202

Report Date 21-Jul-09

Project Name ANSUL FTC, MARINETTE, WI
Project # 92292

Invoice # E19252

Lab Code 5019252A
Sample ID GP-1S
Sample Matrix Water
Sample Date 7/7/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	< 0.45	ug/l	0.45	1.42	1	GRO95/8021	7/20/2009	CJR	1	
Ethylbenzene	< 0.76	ug/l	0.76	2.4	1	GRO95/8021	7/20/2009	CJR	1	
Methyl tert-butyl ether (MTBE)	< 0.42	ug/l	0.42	1.33	1	GRO95/8021	7/20/2009	CJR	1	
Naphthalene	< 1.4	ug/l	1.4	4.43	1	GRO95/8021	7/20/2009	CJR	1	
Toluene	< 0.53	ug/l	0.53	1.67	1	GRO95/8021	7/20/2009	CJR	1	
1,2,4-Trimethylbenzene	< 0.52	ug/l	0.52	1.65	1	GRO95/8021	7/20/2009	CJR	1	
1,3,5-Trimethylbenzene	< 0.61	ug/l	0.61	1.93	1	GRO95/8021	7/20/2009	CJR	1	
m&p-Xylene	< 0.84	ug/l	0.84	2.68	1	GRO95/8021	7/20/2009	CJR	1	
o-Xylene	< 0.74	ug/l	0.74	2.36	1	GRO95/8021	7/20/2009	CJR	1	

Lab Code 5019252B
Sample ID GP-3S
Sample Matrix Water
Sample Date 7/7/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	< 0.45	ug/l	0.45	1.42	1	GRO95/8021	7/20/2009	CJR	1	
Ethylbenzene	< 0.76	ug/l	0.76	2.4	1	GRO95/8021	7/20/2009	CJR	1	
Methyl tert-butyl ether (MTBE)	< 0.42	ug/l	0.42	1.33	1	GRO95/8021	7/20/2009	CJR	1	
Naphthalene	< 1.4	ug/l	1.4	4.43	1	GRO95/8021	7/20/2009	CJR	1	
Toluene	< 0.53	ug/l	0.53	1.67	1	GRO95/8021	7/20/2009	CJR	1	
1,2,4-Trimethylbenzene	< 0.52	ug/l	0.52	1.65	1	GRO95/8021	7/20/2009	CJR	1	
1,3,5-Trimethylbenzene	< 0.61	ug/l	0.61	1.93	1	GRO95/8021	7/20/2009	CJR	1	
m&p-Xylene	< 0.84	ug/l	0.84	2.68	1	GRO95/8021	7/20/2009	CJR	1	

Project Name	ANSUL FTC, MARINETTE, WI	Invoice #	E19252							
Project #	92292									
Lab Code	5019252B									
Sample ID	GP-3S									
Sample Matrix	Water									
Sample Date	7/7/2009									
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.74	ug/l	0.74	2.36	1	GRO95/8021	7/20/2009	CJR	1	
Lab Code	5019252C									
Sample ID	GP-2S									
Sample Matrix	Water									
Sample Date	7/7/2009									
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	< 0.45	ug/l	0.45	1.42	1	GRO95/8021	7/20/2009	CJR	1	
Ethylbenzene	< 0.76	ug/l	0.76	2.4	1	GRO95/8021	7/20/2009	CJR	1	
Methyl tert-butyl ether (MTBE)	< 0.42	ug/l	0.42	1.33	1	GRO95/8021	7/20/2009	CJR	1	
Naphthalene	< 1.4	ug/l	1.4	4.43	1	GRO95/8021	7/20/2009	CJR	1	
Toluene	< 0.53	ug/l	0.53	1.67	1	GRO95/8021	7/20/2009	CJR	1	
1,2,4-Trimethylbenzene	< 0.52	ug/l	0.52	1.65	1	GRO95/8021	7/20/2009	CJR	1	
1,3,5-Trimethylbenzene	< 0.61	ug/l	0.61	1.93	1	GRO95/8021	7/20/2009	CJR	1	
m&p-Xylene	< 0.84	ug/l	0.84	2.68	1	GRO95/8021	7/20/2009	CJR	1	
o-Xylene	< 0.74	ug/l	0.74	2.36	1	GRO95/8021	7/20/2009	CJR	1	
Lab Code	5019252D									
Sample ID	GP-1D									
Sample Matrix	Water									
Sample Date	7/7/2009									
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	< 0.45	ug/l	0.45	1.42	1	GRO95/8021	7/20/2009	CJR	1	
Ethylbenzene	< 0.76	ug/l	0.76	2.4	1	GRO95/8021	7/20/2009	CJR	1	
Methyl tert-butyl ether (MTBE)	< 0.42	ug/l	0.42	1.33	1	GRO95/8021	7/20/2009	CJR	1	
Naphthalene	< 1.4	ug/l	1.4	4.43	1	GRO95/8021	7/20/2009	CJR	1	
Toluene	0.71 "J"	ug/l	0.53	1.67	1	GRO95/8021	7/20/2009	CJR	1	
1,2,4-Trimethylbenzene	< 0.52	ug/l	0.52	1.65	1	GRO95/8021	7/20/2009	CJR	1	
1,3,5-Trimethylbenzene	< 0.61	ug/l	0.61	1.93	1	GRO95/8021	7/20/2009	CJR	1	
m&p-Xylene	< 0.84	ug/l	0.84	2.68	1	GRO95/8021	7/20/2009	CJR	1	
o-Xylene	< 0.74	ug/l	0.74	2.36	1	GRO95/8021	7/20/2009	CJR	1	
Lab Code	5019252E									
Sample ID	GP-2D									
Sample Matrix	Water									
Sample Date	7/8/2009									
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	24.4	ug/l	0.45	1.42	1	GRO95/8021	7/18/2009	CJR	1	
Ethylbenzene	14	ug/l	0.76	2.4	1	GRO95/8021	7/18/2009	CJR	1	
Methyl tert-butyl ether (MTBE)	730	ug/l	0.42	1.33	1	GRO95/8021	7/18/2009	CJR	1	
Naphthalene	6.3	ug/l	1.4	4.43	1	GRO95/8021	7/18/2009	CJR	1	
Toluene	1.81	ug/l	0.53	1.67	1	GRO95/8021	7/18/2009	CJR	1	

Project Name ANSUL FTC, MARINETTE, WI
Project # 92292

Invoice # E19252

Lab Code 5019252E
Sample ID GP-2D
Sample Matrix Water
Sample Date 7/8/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,2,4-Trimethylbenzene	7.9	ug/l	0.52	1.65	1	GRO95/8021		7/18/2009	CJR	1
1,3,5-Trimethylbenzene	4.0	ug/l	0.61	1.93	1	GRO95/8021		7/18/2009	CJR	1
m&p-Xylene	8.5	ug/l	0.84	2.68	1	GRO95/8021		7/18/2009	CJR	1
o-Xylene	2.27 "J"	ug/l	0.74	2.36	1	GRO95/8021		7/18/2009	CJR	1

Lab Code 5019252F
Sample ID GP-3D
Sample Matrix Water
Sample Date 7/8/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
--	---------------	-------------	------------	------------	------------	---------------	-----------------	-----------------	----------------	-------------

Organic

PVOC + Naphthalene

Benzene	1.48	ug/l	0.45	1.42	1	GRO95/8021		7/18/2009	CJR	1
Ethylbenzene	1.35 "J"	ug/l	0.76	2.4	1	GRO95/8021		7/18/2009	CJR	1
Methyl tert-butyl ether (MTBE)	37	ug/l	0.42	1.33	1	GRO95/8021		7/18/2009	CJR	1
Naphthalene	< 1.4	ug/l	1.4	4.43	1	GRO95/8021		7/18/2009	CJR	1
Toluene	1.33 "J"	ug/l	0.53	1.67	1	GRO95/8021		7/18/2009	CJR	1
1,2,4-Trimethylbenzene	1.68	ug/l	0.52	1.65	1	GRO95/8021		7/18/2009	CJR	1
1,3,5-Trimethylbenzene	< 0.61	ug/l	0.61	1.93	1	GRO95/8021		7/18/2009	CJR	1
m&p-Xylene	2.54 "J"	ug/l	0.84	2.68	1	GRO95/8021		7/18/2009	CJR	1
o-Xylene	2.77	ug/l	0.74	2.36	1	GRO95/8021		7/18/2009	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

Code **Comment**

1 Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight.

Authorized Signature



CHAIN OF CUSTODY RECORD

Synergy**Environmental Lab, Inc.**

Chain # No 1,969

Lab I.D. #	
Account No. :	Quote No.:
Project #: 92272	
Sampler: (signature) <i>D. Denham</i>	

Project (Name / Location): Ansul FTC, Marinette, WI

Reports To: Jeff Tracy
 Company AECOM
 Address 1620 N. Broadway
 City State Zip Milwaukee WI 53202
 Phone 414-225-5100
 FAX 414-225-5111

Invoice To:
 Company
 Address
 City State Zip
 Phone
 FAX

Sample Handling Request
 Rush Analysis Date Required
 (Rushes accepted only with prior authorization)
 Normal Turn Around

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Analysis Requested		Other Analysis	PID/FID
									DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	IRON	
5019252A	GP-15	7/7/07	11:26	X	N	N	3	GW	HCL		X	
B	GP-35	↓	12:25	-	N	N	3	GW	HCL		X	
C	GP-25	↓	15:40	X	N	N	3	GW	HCL		X	
D	GP-1D	↓	19:00	X	N	N	3	GW	HCL		X	
E	GP-2D	7/8/07	11:00	X	N	N	3	GW	HCL		X	
F	GP-3D	↓	14:40	X	N	N	3	GW	HCL		X	

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
 Method of Shipment: *Denham*
 Temp. of Temp. Blank: °C On Ice: X
 Cooler seal intact upon receipt: Yes No

Relinquished By: (sign) <i>D. Denham</i>	Time 0800	Date 7/9/07	Received By: (sign) _____	Time _____	Date _____
Received in Laboratory By: <i>Munk</i>	Time: 8:45	Date: 7/10/07			

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

JEFF TRACY
AECOM
1020 N. BROADWAY
MILWAUKEE, WI 53202

Report Date 22-Sep-09

Project Name 92292 MARINETTE

Project # 92292

Invoice # E19597

Lab Code 5019597A

Sample ID GP 4D

Sample Matrix Water

Sample Date 9/14/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
--	--------	------	-----	-----	-----	--------	----------	----------	---------	------

Organic

PVOC + Naphthalene

Benzene	78	ug/l	0.45	1.42	1	GRO95/8021	9/22/2009	CJR	1
Ethylbenzene	25.1	ug/l	0.76	2.4	1	GRO95/8021	9/22/2009	CJR	1
Methyl tert-butyl ether (MTBE)	1000	ug/l	0.42	1.33	1	GRO95/8021	9/22/2009	CJR	1
Naphthalene	5.4	ug/l	1.4	4.43	1	GRO95/8021	9/22/2009	CJR	1
Toluene	2.04	ug/l	0.53	1.67	1	GRO95/8021	9/22/2009	CJR	1
1,2,4-Trimethylbenzene	12	ug/l	0.52	1.65	1	GRO95/8021	9/22/2009	CJR	1
1,3,5-Trimethylbenzene	5.8	ug/l	0.61	1.93	1	GRO95/8021	9/22/2009	CJR	1
m&p-Xylene	32	ug/l	0.84	2.68	1	GRO95/8021	9/22/2009	CJR	1
o-Xylene	2.41	ug/l	0.74	2.36	1	GRO95/8021	9/22/2009	CJR	1

Lab Code 5019597B

Sample ID GP 5D

Sample Matrix Water

Sample Date 9/14/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
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Organic

PVOC + Naphthalene

Benzene	< 0.45	ug/l	0.45	1.42	1	GRO95/8021	9/22/2009	CJR	1
Ethylbenzene	< 0.76	ug/l	0.76	2.4	1	GRO95/8021	9/22/2009	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.42	ug/l	0.42	1.33	1	GRO95/8021	9/22/2009	CJR	1
Naphthalene	< 1.4	ug/l	1.4	4.43	1	GRO95/8021	9/22/2009	CJR	1
Toluene	< 0.53	ug/l	0.53	1.67	1	GRO95/8021	9/22/2009	CJR	1
1,2,4-Trimethylbenzene	< 0.52	ug/l	0.52	1.65	1	GRO95/8021	9/22/2009	CJR	1
1,3,5-Trimethylbenzene	< 0.61	ug/l	0.61	1.93	1	GRO95/8021	9/22/2009	CJR	1
m&p-Xylene	< 0.84	ug/l	0.84	2.68	1	GRO95/8021	9/22/2009	CJR	1

Project Name 92292 MARINETTE
Project # 92292

Invoice # E19597

Lab Code 5019597B
Sample ID GP 5D
Sample Matrix Water
Sample Date 9/14/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.74	ug/l	0.74	2.36	1	GRO95/8021		9/22/2009	CJR	1

Lab Code 5019597C
Sample ID GP 6D
Sample Matrix Water
Sample Date 9/14/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
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Organic

PVOC + Naphthalene

Benzene	< 0.45	ug/l	0.45	1.42	1	GRO95/8021		9/22/2009	CJR	1
Ethylbenzene	< 0.76	ug/l	0.76	2.4	1	GRO95/8021		9/22/2009	CJR	1
Methyl tert-butyl ether (MTBE)	1.88	ug/l	0.42	1.33	1	GRO95/8021		9/22/2009	CJR	1
Naphthalene	< 1.4	ug/l	1.4	4.43	1	GRO95/8021		9/22/2009	CJR	1
Toluene	< 0.53	ug/l	0.53	1.67	1	GRO95/8021		9/22/2009	CJR	1
1,2,4-Trimethylbenzene	< 0.52	ug/l	0.52	1.65	1	GRO95/8021		9/22/2009	CJR	1
1,3,5-Trimethylbenzene	< 0.61	ug/l	0.61	1.93	1	GRO95/8021		9/22/2009	CJR	1
m&p-Xylene	< 0.84	ug/l	0.84	2.68	1	GRO95/8021		9/22/2009	CJR	1
o-Xylene	< 0.74	ug/l	0.74	2.36	1	GRO95/8021		9/22/2009	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

Code	Comment
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1	Laboratory QC within limits.
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All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight.

Authorized Signature



CHAIN OF CUSTODY RECORD

Synergy

Chain # **No 7804**

Page _____ of _____

Lab I.D. #	
Account No. :	Quote No.:
Project #:	92292
Sampler: (signature)	Jeffrey S. Culver

Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Sample Handling Request
 Rush Analysis Date Required
(Rushes accepted only with prior authorization)
 Normal Turn Around

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.	Relinquished By: (Sign)	Time	Date	Received By: (sign)	Time	Date	
Method of Shipment:	Jeffrey Carlson					3:00pm	9/17/09
Temp. of Temp. Blank. ____ °C On Ice: <input checked="" type="checkbox"/>							
Cooler seal intact upon receipt: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Received in Laboratory By: 		Time: 8:30	Date: 9/18/09				

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

JEFF TRACY
AECOM
1020 N. BROADWAY
MILWAUKEE, WI 53202

Report Date 25-Nov-09

Project Name	TYCO	Invoice #	E19966
Project #	92292(60135634)		
Lab Code	5019966A		
Sample ID	GP 7D		
Sample Matrix	Water		
Sample Date	11/13/2009		

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	5.2	ug/l	0.41	1.3	1	8260B				
Ethylbenzene	< 0.87	ug/l	0.87	2.8	1	8260B				
Methyl tert-butyl ether (MTBE)	1.36 "J"	ug/l	0.5	1.6	1	8260B				
Naphthalene	< 1.7	ug/l	1.7	5.4	1	8260B				
Toluene	< 0.51	ug/l	0.51	1.6	1	8260B				
1,2,4-Trimethylbenzene	< 1.1	ug/l	1.1	3.5	1	8260B				
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.9	1	8260B				
m&p-Xylene	< 1.6	ug/l	1.6	5.1	1	8260B				
o-Xylene	< 0.53	ug/l	0.53	1.7	1	8260B				

Lab Code	5019966B
Sample ID	GP 8D
Sample Matrix	Water
Sample Date	11/17/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	< 0.41	ug/l	0.41	1.3	1	8260B				
Ethylbenzene	< 0.87	ug/l	0.87	2.8	1	8260B				
Methyl tert-butyl ether (MTBE)	< 0.5	ug/l	0.5	1.6	1	8260B				
Naphthalene	< 1.7	ug/l	1.7	5.4	1	8260B				
Toluene	< 0.51	ug/l	0.51	1.6	1	8260B				
1,2,4-Trimethylbenzene	< 1.1	ug/l	1.1	3.5	1	8260B				
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.9	1	8260B				
m&p-Xylene	< 1.6	ug/l	1.6	5.1	1	8260B				

Project Name TYCO
Project # 92292(60135634)

Invoice # E19966

Lab Code 5019966B

Sample ID GP 8D

Sample Matrix Water

Sample Date 11/17/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.53	ug/l	0.53	1.7	1	8260B		11/23/2009	CJR	1

Lab Code 5019966C

Sample ID GP 9D

Sample Matrix Water

Sample Date 11/18/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
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Organic

PVOC + Naphthalene

Benzene	< 0.41	ug/l	0.41	1.3	1	8260B		11/23/2009	CJR	1
Ethylbenzene	< 0.87	ug/l	0.87	2.8	1	8260B		11/23/2009	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.5	ug/l	0.5	1.6	1	8260B		11/23/2009	CJR	1
Naphthalene	< 1.7	ug/l	1.7	5.4	1	8260B		11/23/2009	CJR	1
Toluene	< 0.51	ug/l	0.51	1.6	1	8260B		11/23/2009	CJR	1
1,2,4-Trimethylbenzene	< 1.1	ug/l	1.1	3.5	1	8260B		11/23/2009	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.9	1	8260B		11/23/2009	CJR	1
m&p-Xylene	< 1.6	ug/l	1.6	5.1	1	8260B		11/23/2009	CJR	1
o-Xylene	< 0.53	ug/l	0.53	1.7	1	8260B		11/23/2009	CJR	1

Lab Code 5019966D

Sample ID TB

Sample Matrix Water

Sample Date 11/17/2009

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
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Organic

PVOC + Naphthalene

Benzene	< 0.45	ug/l	0.45	1.42	1	GRO95/8021		11/20/2009	CJR	1
Ethylbenzene	< 0.76	ug/l	0.76	2.4	1	GRO95/8021		11/20/2009	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.42	ug/l	0.42	1.33	1	GRO95/8021		11/20/2009	CJR	1
Naphthalene	< 1.4	ug/l	1.4	4.43	1	GRO95/8021		11/20/2009	CJR	1
Toluene	< 0.53	ug/l	0.53	1.67	1	GRO95/8021		11/20/2009	CJR	1
1,2,4-Trimethylbenzene	< 0.52	ug/l	0.52	1.65	1	GRO95/8021		11/20/2009	CJR	1
1,3,5-Trimethylbenzene	< 0.61	ug/l	0.61	1.93	1	GRO95/8021		11/20/2009	CJR	1
m&p-Xylene	< 0.84	ug/l	0.84	2.68	1	GRO95/8021		11/20/2009	CJR	1
o-Xylene	< 0.74	ug/l	0.74	2.36	1	GRO95/8021		11/20/2009	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

Code	Comment
-------------	----------------

1	Laboratory QC within limits.
---	------------------------------

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature

Michael J. Ricker

CHAIN C. CUSTODY RECORD

Synergy**Environmental Lab, Inc.**

Chain # No 12804

Page ____ of ____

Lab I.D. #	
Account No. :	Quote No.:
Project #: 92292 (60135634)	
Sampler: (signature) Jeffry S. Carlson	

Project (Name / Location): 92292 (60135634) Tyco - Marinette Wi

Reports To: Jeff Tracy	Invoice To: SAME
Company AECOM	Company AECOM
Address 1020 N. Broadway Ste.400	Address
City State Zip Milwaukee Wi 53202	City State Zip
Phone Email jeff.Tracy@AECOM.com	Phone
FAX Phone 414 225 5100	FAX

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Sample Handling Request
Rush Analysis Date Required _____
(Rushes accepted only with prior authorization) _____
Normal Turn Around _____

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Analysis Requested		Other Analysis	PID/ FID
									DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)		
5019966-A	GP 7D	11/13	10:00			N	3	GW	HCL		X	
	B GP 8D	11/17				N	3	GW			X	
	C GP 9D	11/18				N	3	GW			X	
	D Trip BLANK					N	1	—				

Comments/Special Instructions ("Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

5 - day turn

Sample Integrity - To be completed by receiving lab.	Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
Method of Shipment: <u>Ship</u>	<u>Jeffry S. Carlson</u>	2:30pm	11/19			
Temp. of Temp. Blank: ____ °C On Ice: X						
Cooler seal intact upon receipt: X Yes No	Received in Laboratory By: <u>Jeffrey S. Carlson</u>	Time: 11/12	Date: 11/11			