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February 16, 2001

Project #3125

Mr. Andrew F. Boettcher
Remediation and Redevelopment Team
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Drive
P. O. Box 12436
Milwaukee, WI 53121-0436

Subject: Results of the Investigation Activities Completed South of the Webster Middle School, Milwaukee, Wisconsin

Dear Mr. Boettcher:

At the request of the Village of Whitefish Bay, Sigma Environmental Services, Inc. (Sigma) has completed an investigation south of Webster Middle School (located at the intersection of 53rd Street and Green Tree Road) to further define the down-gradient impacts associated with the former Good Hope Road Landfill Site. The investigation activities were completed in accordance with the scope of work approved by the Wisconsin Department of Natural Resources (WDNR) on August 15, 2000. The investigation activities were designed to address the following concerns:

- the potential for volatile organic compound (VOC) migration within unsaturated material underlying the residential subdivision located south of the Green Tree Road, and

- the degree and extent of groundwater impacts south of the Green Tree Road.

The following sections present brief descriptions of the field activities and summarizes the findings of the investigation.

INVESTIGATION ACTIVITIES

Subsurface Vapor Study. A subsurface soil vapor study was completed to determine the potential for the generation and migration of vapors in near-surface unsaturated soils from dissolved-phase VOC contaminants in the shallow groundwater system. Sigma installed eleven temporary vapor probes in City of Milwaukee road right-of-ways within the residential area between Green Tree Road and Mill Road (Figure 1). Due to access restrictions, one sample location (east of Lincoln Creek bridge along Green Tree Road) was abandoned.
On October 17, 2000, Sigma personnel supervised the advancement of eleven Geoprobe® soil borings (GP-2 through GP-12) completed to depths ranging from 12 to 16 feet below ground

surface (bgs). Soil borings were completed to the water table as observed during field activities. During boring advancement, soil samples were continuously collected and described on the basis of color, texture, grain size, and plasticity, and classified in general accordance with the Unified Soil Classification System (USCS). The soil classifications, sampling intervals, and descriptions are presented on the soil boring logs in Attachment A.

Soil samples were collected from each sampling interval and containerized for headspace analysis using a photoionization detector (PID) that was periodically calibrated for direct response to 100 instrument units as isobutylene (iui). Field screening results are presented on the soil boring logs in Attachment A.

Upon the completion of each Geoprobe® soil boring, the borehole was converted to a vapor monitoring point in accordance with Sigma's letter to the WDNR dated June 5, 2000. All soil borings were strategically located to delineate the lateral extent of vapor migration, specifically targeting the residential area depicted in Figure 1. The soil vapor probes were completed by attaching ¼-inch diameter tygon tubing to an appropriate length of decontaminated wood rod. Slits were cut into the bottom two inches of the tygon tubing to allow vapor flow into the tubing. After the borehole was completed, the wood rod and tygon tubing equipment was lowered into the open Geoprobe® borehole to depths ranging from six to eight feet bgs, varying with observed water table depths. The vapor probes were completed by filling the bottom of the hole and the annular space around the tubing with coarse sand. Coarse sand extended to a minimum of two feet past the tip of the vapor probe (four to six feet bgs). Granular bentonite was added to each borehole to fill the upper four to six feet and subsequently hydrated to ensure a proper surface seal.

On October 17 and 18, 2000, Sigma personnel completed the vapor study at vapor probes GP-2 through GP-12. (As mentioned above, GP-1 was not completed due to access restrictions.) A SUMMA™ canister provided by Air Toxics Ltd. was connected to the tygon tubing of the vapor probes. Each SUMMA™ canister was equipped with a flow control valve to regulate the collection of vapors over a one-hour time interval to ensure representative sample collection. Upon initiation of the test, the start time and canister vacuum reading were recorded. The canister reading was recorded every 15 minutes to monitor the amount of gas intake and remaining space within the canister. The flow control valve was closed after one hour. All SUMMA™ canisters were sent to Air Toxics Ltd. for analysis of VOCs using EPA Method T014.

Following the vapor probe study, all wood rods and tygon tubing devices were removed from the soil borings and the boreholes were abandoned. Where necessary, soil borings were topped

off with granular bentonite to ensure the surface seal. Borehole abandonment forms are included in Attachment B.

Groundwater Plume Delineation. In order to further assess the lateral and vertical extent of groundwater impacts south of the Webster Middle School property, Sigma completed a subsurface investigation that consisted of installing three shallow monitoring wells and four piezometers. The following items summarize the activities completed for the groundwater investigation:

- Installation of three shallow monitoring wells. Two shallow wells were installed in City of Milwaukee road right-of-ways (one at the southeast corner of 54th Street and Hassel Lane, and one near the northeast corner of 51st Street and Mill Road) and one shallow well was installed near the western edge (approximately equivalent to 49th Street) of Graceland Cemetery. The well screens were positioned to intercept the shallow water table present in the saturated sand/silt/clay unit at an estimated depth of 10 to 15 feet bgs. The location of these wells are depicted on Figure 1.

- Installation of four double-cased piezometers. Three of the piezometers were nested with the newly installed shallow wells, plus one piezometer was nested with the existing shallow well MPS: P-6 on the Webster Middle School Property. The piezometers were completed to depths of approximately 45 to 70 feet bgs to determine groundwater quality in the deep groundwater zone; well screens were positioned to intercept the deeper flow system immediately above the bedrock unit. The boreholes were double cased during drilling activities to prevent cross-contamination between the shallow groundwater and deeper groundwater system.

- Development of the newly installed shallow wells and piezometers during the first week of December. In December 2000, one round of groundwater samples and water level measurements from select existing wells and piezometers south of the landfill property (MPS: P-4,MPS: P-5, and MPS: P-6) and all the newly installed wells and piezometers was completed. Groundwater samples were submitted to the project laboratory for analysis of VOCs by EPA Method 8260. A second round of water level measurements was also collected in January 2001.

- Survey of the newly installed shallow wells and piezometers. The survey, performed in accordance with Chapter NR 700 requirements, included well and piezometer locations relative to the state plane coordinate system and elevations relative to mean sea level.

Monitoring Well/Piezometer Installation

Between November 14 and 28, 2000, Sigma completed the installation of three shallow groundwater monitoring wells (MW-8 through MW-10) and four deep piezometers (PZ-7 through PZ-10) in the residential area south of Webster Middle School. Locations of the shallow wells and piezometers are shown in Figure 1.

Soil borings were drilled with a truck-mounted Diedrich D-120 rotary drill rig. Generally, 2¼-inch I.D. continuous flight hollow-stem augers (HSAs) were used to collect soil samples to a depths of approximately 35 to 45 feet bgs. After these HSAs were removed, 9¼-inch I.D. HSAs were advanced to the depth were soil sampling had stopped. 8-inch diameter steel casing was then lowered through the center of the large HSAs to the bottom of the borehole. The annulus between the outside of the steel casing and the borehole wall was filled from the bottom to the top with a bentonite-cement mix to secure the casing and prevent vertical migration of groundwater. After waiting at least 48 hours, 4¼-inch I.D. HSAs were lowered through the steel casing and used to complete the soil boring to the final completion depth of each piezometer. Soil samples were classified in accordance with the USCS and screened with a PID; field data and soil descriptions were recorded on soil boring log forms (Attachment C). Upon completion of each deep soil boring, the piezometer was constructed of 2-inch diameter PVC screen (0.010-inch machine slotted) placed near the bottom of the borehole and attached to an appropriate length of PVC riser.

For the shallow monitoring wells, boreholes were advanced with 4¼-inch I.D. HSAs. Upon completion of each shallow boring, the groundwater monitoring well was constructed of 2-inch diameter PVC riser with a 15-foot-long, 0.010-inch machine-slotted screen placed near the bottom of the borehole (approximately 20 feet bgs). Each monitoring well and piezometer was completed with a compression cap, lock, and flush-mount well protector with concrete pad. The construction details for the monitoring wells and piezometers are recorded on the well construction forms (Attachment D).

SUMMARY OF INVESTIGATION RESULTS

The following sections present a summary of the data and results from the subsurface vapor study and groundwater plume investigation.

Local Geology. The unconsolidated near-surface geology (upper 20 feet) observed during shallow drilling activities generally consists of a silty clay/clayey silt unit underlain by sand and gravel. The relatively impermeable silty clay/clayey silt unit appears to slightly thicken towards the east across the investigation area. Generally, near Green Tree Road the silty clay and/or clayey silt unit was encountered from the ground surface to a depth of 6 to 10 feet bgs. Further to the south (closer to Hassel Lane), the silty clay/clayey silt unit increased in thickness, often with several thin lenses of well-graded sand to clayey sand. Furthest to the south at Mill Road, the silty clay/clayey silt unit extended to a depth of 17.5 feet bgs. Geologic cross sections have been developed across the investigation area; locations are shown on Figure 2. Figure 3 shows a west-east trending geologic cross section that focuses on the shallow geology.

The soil borings completed for the piezometers extended through the near-surface geology described above. The thickness of the sand and gravel unit (underlying the shallow silt and clay unit) ranged from 15 to 25 feet; the relative percentage of fine materials (silt and clay) generally increased toward the south. Based on previously completed soil borings north of the present investigation area, it appears that this granular layer is continuous from the former Good Hope Road Landfill Site south through the residential neighborhood. Beneath the sand and gravel unit was a very hard silt to clayey silt "hardpan" unit, which varied in thickness from approximately 7 to 25 feet. Two deep soil borings also encountered a clay layer (3 to 12 feet thick), which was interpreted to be severely weathered bedrock residuum, below the "hardpan". Lastly, dolomitic limestone bedrock was encountered at various depths, but generally ranging between 39 and 71 feet bgs. Two cross sections have been developed to show the general geologic conditions. Figure 4 presents a north-south trending geologic cross section that extends from the Good Hope Road Landfill Site to Mill Road; Figure 5 presents a west-east trending cross section between 54th Street and Graceland Cemetery.

Local Hydrogeology. Static water levels were measured in the groundwater monitoring wells to determine the horizontal and vertical gradients and flow directions within the shallow and deep groundwater systems beneath the project area. Water levels were first measured on December 8, 2000 during the groundwater sampling event; water levels were measured a second time on January 12, 2001 to confirm initial measurements.

Based on the static groundwater elevations, the groundwater flow direction in the shallow groundwater system is generally to the south. However, due to the presence of Lincoln Creek and other local anomalies (utilities, detention pond, building structures, etc.) and geologic heterogeneities in the subsurface, local variations in the direction of shallow groundwater flow are present. Groundwater elevations are presented in Table 1, and a groundwater contour map for the shallow groundwater system is presented in Figure 6.

The direction of groundwater flow of the deep groundwater system, as based on static water levels in piezometers screened at the bedrock interface, is generally to the west and northwest in the northern portion of the study area, and predominantly south in the southern portion of the study area. Considering the changes in elevation of the bedrock interface from north to south, it is possible that a groundwater divide may have been developed by a series of bedrock highs and lows (as depicted in the geologic cross-section A-A', Figure 4), and as such resulted in changes in the direction of the deep groundwater flow system. In addition, a large area east of the school property has been developed into a surface water detention basin. It is possible, depending upon the geology beneath the pond area, that groundwater flow may have been seasonally influenced by the detention pond. Based on a review of the potentiometric surface contour map and geologic cross-section trending north-south through the study area, it is estimated that the groundwater divide in the deep groundwater system may be present half-way between Green Tree Road and Hassel Lane. A potentiometric surface map for the deep groundwater flow system is shown in Figure 7.

The vertical gradients between the shallow wells and deeper piezometers varied across the investigation area. However, it appears that there is a general trend of downward gradients in the northern portion of the project area, and upward gradients in the southern portion of the study area.

Subsurface Vapor Conditions. Table 2 presents a summary of the laboratory analytical results of the gas samples collected during the subsurface vapor study. Note that the summary table includes only petroleum and chlorinated VOCs. The laboratory analytical report for the gas samples is included in Attachment E.

Review of the results indicates that vinyl chloride was not detected above the laboratory detection limit in the subsurface at any of the sample locations. Several other chlorinated compounds were detected at or above the laboratory detection limit which includes: cis- and trans-1,2-dichloroethene (cis-1,2-DCE; trans-1,2-DCE) detected at GP-3; trichloroethene (TCE) detected at GP-2, and 1,1,1-trichloroethane (1,1,1-TCA) detected at GP-4. Two other

compounds (tetrachloroethene [PCE] and 1,1-dichloroethane [1,1-DCA]) were detected at more than one soil probe location. Some petroleum-related compounds were also detected in all the vapor samples at or above the laboratory detection limits.

It is important to note that groundwater quality data collected from the northern and western portion of the study area (specifically water quality data from MPS: P-6 and MW-8, respectively, summarized in Table 3) does not indicate the presence of petroleum compounds or some of the chlorinated compounds (e.g., PCE and TCE) in groundwater. It is possible that many of the detected VOCs in the soil vapor samples may not necessarily represent the volatilization of contaminants from the dissolved phase in groundwater but rather, ambient atmospheric air quality conditions. (This conclusion can also be supported by the data generated by a WDNR study for the Wisconsin Urban Air Toxics Monitoring, July 1997 through June 1998. In the report, several VOC compounds appear to be present in the ambient air.)

Groundwater Conditions South of Good Hope Road Landfill Site. Sigma completed one round of groundwater sampling on December 8, 2000. Groundwater samples were collected from the new monitoring wells and piezometers, in addition to select existing wells. The groundwater samples were analyzed at the laboratory for VOCs (EPA Method 8260); in situ measurements were recorded in the field during the sampling event. Groundwater analytical results are summarized in Table 3 (laboratory report is included as Attachment F), and in situ measurements are shown in Table 4.

Review of the analytical data from the shallow monitoring wells (screened across the water table interface) and/or within the sand and gravel unit indicates that no detectable concentrations of PCE or TCE have been identified in any of the existing Webster Middle School wells or newly installed wells south of the school. However, some of the break-down compounds (e.g., cis-1,2-DCE and vinyl chloride) have been detected in wells located on Webster Middle School property; wells located further downgradient (south) in the residential neighborhood did not exhibit any detectable concentrations of these contaminants in the subsurface.

Analytical results from the December 2000 sampling event for the deep piezometers screened at the bedrock interface also indicate a similar contaminant distribution profile; cis-1,2-DCE and vinyl chloride impacts are identified beneath the Webster Middle School property and no detectable concentrations of these contaminants are identified in the subsurface further downgradient (south) beneath the residential neighborhood.

In situ measurements indicate that both the shallow and deep groundwater systems have low dissolved oxygen (less than 1 ppm), suggesting anaerobic conditions are present. Reduction-oxidation potential measurements are also generally indicative of an oxygen-limiting subsurface environment.

Extent of Impacts. As shown in Figures 8 and 9, concentrations of cis-1,2-DCE and vinyl chloride in groundwater generally decrease in the downgradient direction, from north of the school property to the south. Further downgradient at the residential neighborhood, no detectable concentrations of VOCs were identified in the newly installed wells/piezometers. It is evident that the contaminant plume identified in groundwater beneath the school property has not migrated to these newly installed well/piezometer locations. However, considering the large distance between the impacted wells/piezometers located on the school property and non-impacted well/piezometer on Mill Road, the downgradient edge of the plume has not been well defined.

CONCLUSIONS

Based on Sigma's subsurface vapor study and groundwater plume delineation activities, the following conclusions in relation to the environmental conditions at the project site have been developed:

- Concentrations of soil vapors detected in the subsurface above the shallow water table were relatively low and consistent across the vapor study area. A surficial silt and clay unit is generally present from the ground surface to a depth of 6 to over 15 feet bgs. This soil layer is relatively impermeable to vapor flow, thus lowering the potential for any volatilized gas vapors from the shallow groundwater to enter subsurface structures.

- Groundwater samples collected from shallow monitoring wells on the Webster Middle School property exhibit impacts from cis-1,2-DCE and vinyl chloride, but no detectable concentrations of either PCE or TCE were identified. The newly installed wells south of the school property did not exhibit detectable concentrations of cis-1,2-DCE or vinyl chloride. Therefore, the shallow groundwater plume has not migrated to the newly installed wells.

- Groundwater samples collected from deep piezometers screened at the top of bedrock on the Webster Middle School property exhibit impacts from cis-1,2-DCE and vinyl chloride, but no detectable concentrations of either PCE or TCE were

identified. The newly installed piezometers south of the school property did not exhibit detectable concentrations of cis-1,2-DCE or vinyl chloride. Similar to the shallow groundwater system, the contaminant plume within the deep groundwater near the top of bedrock has not migrated to these newly installed piezometers (PZ-8, PZ-9, and PZ-10).

- The downgradient plume of cis-1,2-DCE and vinyl chloride appears to dissipate between Green Tree Road and Mill Road. The groundwater south of Green Tree Road is not generating detectable concentrations of vinyl chloride soil gas vapors. Consideration should now be given to identifying all contributing sources to the DCE and vinyl chloride plume detected beneath the Webster Middle School property and designing a comprehensive remediation plan.

Please contact Sigma at (414) 768-7144 with any questions or comments about this project.

Sincerely,

SIGMA ENVIRONMENTAL SERVICES, INC.

Randy E. Boness, P.G.
Senior Project Manager

Mafizul Islam, P.E.
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Adam Roder, E.I.T.
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Enclosures:

Table 1 - Static Groundwater Level Data
Table 2 - Soil Gas Study Results
Table 3 - Groundwater Quality Results
Table 4 - Groundwater In-Situ Measurement Data
Figure 1 - Monitoring Well and Geoprobe Locations
Figure 2 - Geologic Cross Section Location Map
Figure 3 - Shallow Geologic Cross Section
Figure 4 - Geologic Cross Section A-A'

Figure 5 - Geologic Cross Section B-B'
Figure 6 - Shallow Groundwater Contour Map (1-12-01)
Figure 7 - Potentiometric Surface Contour Map (1-12-01)
Figure 8 - Shallow Groundwater Quality Map
Figure 9 - Deep Groundwater Quality Map
Attachment A - Soil Boring Logs (Vapor Probes)
Attachment B - Borehole Abandonment Forms (Vapor Probes)
Attachment C - Soil Boring Logs (Shallow Wells and Piezometers)
Attachment D- Shallow Well and Piezometer Construction Forms
Attachment E - Vapor Study Laboratory Analytical Report
Attachment F - Groundwater Laboratory Analytical Report

cc: Mr. James Thomas - Village of Whitefish Bay
Mr. Dennis L. Fisher - Meissner Tierney et. al.
Mr. Henry Nehls-Lowe - Department of Health and Family Services
Ms. Terry Linder - City of Milwaukee Health Department
Mr. Thomas J. Chojnacki - Milwaukee Public School

TABLES

Table 1
Static Groundwater Level Data
Village of Whitefish Bay - Former Good Hope Road Landfill Site
Sigma Project No. 3125

Well ID	Top of Casing Elevation (ft MSL)	Depth of Well (ft)	Depth to Water (ft)	Groundwater Elevation (MSL)	Date	Comments
MPS MW-1	708.95	18.2	8.92	700.03	08/19/1998	Sampling event
			9.13	699.82	12/08/2000	Sampling event
			9.12	699.83	01/12/2001	Water level only
MPS P-1	708.99	32.3	25.08	683.91	08/19/1998	Sampling event
			27.49	681.50	01/21/1999	Sampling event
			27.13	681.86	12/08/2000	Sampling event
			27.36	681.63	01/12/2001	Water level only
MPS MW-2	703.42	17.8	16.96	686.46	01/12/2001	Water level only
MPS P-2	703.58	33.4	19.68	683.90	08/19/1998	Sampling event
			22.09	681.49	01/21/1999	Sampling event
			21.98	681.60	01/12/2001	Water level only
MPS MW-3	696.41	11.0	DRY	DRY	01/12/2001	Water level only
MPS P-3	696.58	31.1	12.64	683.94	08/19/1998	Sampling event
			15.06	681.52	01/21/1999	Sampling event
			14.94	681.64	01/12/2001	Water level only
MPS P-4	703.01	32.5	19.42	683.59	01/18/1999	Sampling event
			21.23	681.78	12/08/2000	Sampling event
			21.47	681.54	01/12/2001	Water level only
MPS P-5	703.12	75.7	19.55	683.57	01/25/1999	Sampling event
			21.04	682.08	12/08/2000	Sampling event
			21.43	681.69	01/12/2001	Water level only
MPS P-6	693.22	19.9	9.75	683.47	02/13/1999	Sampling event
	693.30		11.50	681.80	12/07/2000	Sampling event
			11.79	681.51	01/12/2001	Water level only
MPS P-7	693.04	41.9	10.97	682.07	12/07/2000	Sampling event
			11.20	681.84	01/12/2001	Water level only
PZ-8	696.21	67.4	13.88	682.33	12/07/2000	Sampling event
			14.06	682.15	01/12/2001	Water level only
MW-8	696.24	19.9	13.86	682.38	12/07/2000	Sampling event
			14.16	682.08	01/12/2001	Water level only
PZ-9	697.68	60.5	11.29	686.39	12/07/2000	Sampling event
			11.71	685.97	01/12/2001	Water level only
MW-9	697.70	19.8	7.47	690.23	12/07/2000	Sampling event
			8.19	689.51	01/12/2001	Water level only
PZ-10	686.84	42.5	13.75	673.09	12/07/2000	Sampling event
			14.05	672.79	01/12/2001	Water level only
MW-10	687.10	19.5	15.53	671.57	12/07/2000	Sampling event
			15.94	671.16	01/12/2001	Water level only

Notes:
1. Top of casing elevations for MPS MW-1 through MPS P-6 from Natural Resource Technology report (4/16/99). Top of casing elevations for MPS P-6 through MW-10 surveyed by Northshore Engineering on December 12, 2000 (MPS P-6 re-surveyed).
2. Depth of well measured from top of casing.

Table 2
Soil Gas Study - South of Webster Middle School
Village of Whitefish Bay - Former Good Hope Road Landfill Site
Milwaukee, Wisconsin
October 17 & 18, 2000

Sample Location	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12
Parameters (ppbv)											
Tetrachlorethene	3.3	2.0	0.80	1.4	0.53	0.86	<1.7	1.2	0.51	0.45	5.0
Trichloroethene	0.49	<0.88	<0.36	<0.45	<0.17	<0.29	<1.7	<0.35	<0.36	<0.18	<0.30
1,1,1 Trichloroethane	<0.18	<0.88	2.6	<0.45	<0.17	<0.29	<1.7	<0.35	<0.36	<0.18	<0.30
1,1,2 Trichloroethane	<0.18	<0.88	<0.36	<0.45	<0.17	<0.29	<1.7	<0.35	<0.36	<0.18	<0.30
1,1 Dichloroethane	5.5	4.4	<0.36	<0.45	0.23	<0.29	<1.7	<0.35	<0.36	<0.18	<0.30
1,1 Dichloroethene	<0.18	<0.88	<0.36	<0.45	<0.17	<0.29	<1.7	<0.35	<0.36	<0.18	<0.30
cis-1.2-Dichloroethene	<0.18	250	<0.36	<0.45	<0.17	<0.29	<1.7	<0.35	<0.36	<0.18	<0.30
1,2-Dichloroethane	<0.18	<0.88	<0.36	<0.45	<0.17	<0.29	<1.7	<0.35	<0.36	<0.18	<0.30
trans-1,2-Dichloroethene	<0.92	41	<1.8	<2.2	<0.84	<1.5	<8.4	<1.8	<1.8	<0.90	<1.5
Vinyl Chloride	<0.18	<0.88	<0.36	<0.45	<0.17	<0.29	<1.7	<0.35	<0.36	<0.18	<0.30
Benzene	13	3.5	4.8	3.2	10	11	12	11	14	4.8	7.3
Toluene	54	9.9	24	120	22	31	40	88	34	16	24
Ethyl Benzene	6.0	1.4	10	1.4	9.6	6.5	5.7	41	8.7	6.1	8.4
Xylenes, Total	28.8	6.3	74	9.2	63	25	24.7	243	37	25.7	37
Trimethylbenzenes, Total	8.2	5.2	109	8.2	53	20.2	18.7	146	52	31	62
Hexane	230	27	20	81	55	73	48	48	120	23	38

Notes:
1. Only laboratory results for chlorinated volatile organic compounds (CVOCs) and petroleum volatile organic compounds (PVOCs) shown in table.
2. Due to access constraints soil gas sample location GP-1 was not installed .

Table 3
Groundwater Quality Data
Village of Whitefish Bay - Former Good Hope Road Landfill Site
Sigma Project No. 3125

MPS MW-1 Screened Interval: 5.7 to 15.7 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
08/19/1998	<0.27	<0.32	<0.27	<0.43	<0.35	<0.30	<0.35	<0.43	<0.28	<0.79	<0.35	<0.36	<0.43	<0.30	<0.37	<0.20
12/08/2000	<0.10	<0.25	<0.10	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

MPS P-1 Screened Interval: 24.5 to 29.5 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
08/19/1998	<5.4	<6.4	<5.4	<8.6	<7.0	<6.0	<7.0	<8.6	**2,600**	<16	8.4	<7.2	<8.6	<6.0	<7.4	**820**
01/21/1999	<6.8	<8.0	<6.8	<11	<8.8	<7.5	<8.8	<11	**3,200**	<20	11	<9.0	<11	<7.5	<9.2	**1,100**
12/08/2000	<10	<25	<10	<25	<25	<25	<25	<25	**3,200**	<25	<25	<25	<25	<25	<25	**1,600**
12/00 Duo.	<10	<25	<10	<25	<25	<25	<25	<25	**3,100**	<25	<25	<25	<25	<25	<25	**1,400**

MPS P-2 Screened Interval: 25.6 to 30.6 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
08/19/1998	<2.7	<3.2	<2.7	4.6	<3.5	<3.0	<3.5	<4.3	**1,000**	8.9	5.2	**3.7**	<4.3	<3.0	<3.7	**810**
01/21/1999	<5.4	<6.4	<5.4	<8.6	<7.0	<6.0	<7.0	<8.6	**1,900**	<16	8.2	<7.2	<8.6	<6.0	<7.4	**1,600**

MPS P-3 Screened Interval: 23 to 28 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
08/19/1998	<0.54	<0.64	<0.54	<0.86	<0.70	<0.60	<0.70	<0.86	**320**	1.7	<0.70	**1.0**	<0.86	<0.60	<0.74	**150**
01/21/1999	<0.54	<0.64	<0.54	<0.86	<0.70	<0.60	<0.70	<0.86	**340**	3.7	0.78	<0.72	<0.86	<0.60	<0.74	**240**

MPS P-4 Screened Interval: 28 to 33 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
01/18/1999	<2.7	<3.2	<2.7	<4.3	<3.5	<3.0	<3.5	<4.3	**1,500**	11	7.9	**7.2**	<4.3	<3.0	<3.7	**1,000**
12/08/2000	<4.0	<10	<4.0	<10	<10	<10	<10	<10	**880**	<10	<10	<10	<10	<10	<10	**760**

MPS P-5 Screened Interval: 71.5 to 76.5 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
01/25/1999	<0.27	<0.32	0.98	<0.43	0.38	**0.81**	**1.1**	<0.43	**18**	<0.79	<0.35	<0.36	<0.43	<0.30	<0.37	**110**
12/08/2000	<0.20	<0.50	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	**10**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**91**

Table 3
Groundwater Quality Data
Village of Whitefish Bay - Former Good Hope Road Landfill Site
Sigma Project No. 3125

MPS P-6 Screened Interval: 15.5 to 20.5 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
02/13/1999	<2.7	<3.2	<2.7	<4.3	<3.5	<3.0	<3.5	<4.3	**850**	<7.9	4.7	<3.6	<4.3	<3.0	<3.7	**810**
12/07/2000	<0.10	<0.25	<0.10	<0.25	<0.25	<0.25	<0.25	<0.25	**670**	3.6	3.2	<0.25	<0.25	<0.25	<0.25	**530**

MPS P-7 Screened Interval: 45 to 50 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
12/07/2000	<0.10	<0.25	0.63	4.5	0.36	<0.25	<0.25	<0.25	33	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**1,400**

PZ-8 Screened Interval: 63 to 68 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
12/07/2000	<0.10	<0.25	<0.10	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

MW-8 Screened Interval: 5.5 to 20.5 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
12/07/2000	<0.10	<0.25	<0.10	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

PZ-9 Screened Interval: 56 to 61 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
12/07/2000	<0.10	<0.25	2.2	0.54	3.2	0.57	0.45	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

MW-9 Screened Interval: 5 to 20 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
12/07/2000	<0.10	<0.25	<0.10	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

Table 3
Groundwater Quality Data
Village of Whitefish Bay - Former Good Hope Road Landfill Site
Sigma Project No. 3125

PZ-10 Screened Interval: 38 to 43 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
12/07/2000	<0.10	<0.25	0.79	<0.25	2.8	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

MW-10 Screened Interval: 5 to 20 feet bgs

Sampling Date	VOCs															
	Benzene	Ethyl-benzene	Toluene	Xylenes, total	Naph-thalene	Bromodi-chloromethane	Cloroform	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	Methylene Chloride	PCE	1,1,1-TCA	TCE	Vinyl Chloride
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR 140 ES	5	700	1,000	10,000	40	0.6	6	7	70	100	850	5	5	200	5	0.2
NR 140 PAL	0.5	140	200	1,000	8	0.06	0.6	0.7	7	20	85	0.5	0.5	40	0.5	0.02
12/07/2000	<0.10	<0.25	<0.10	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

Notes:

1. Groundwater samples prior to December 2000 sampling event collected by Natural Resource Technology. Groundwater samples beginning in December 2000 collected by Sigma Environmental Servi
2. NR 140 ES = Wis. Adm. Code Chapter NR 140 Enforcement Standard
3. NR 140 PAL = Wis. Adm. Code Chapter NR 140 Preventive Action Limit
4. Abbreviations: ug/l = micrograms per liter (equivalent to parts per billion, ppb)
   NS = No Standard
   1,1-DCE = 1,1-Dichloroethene
   cis-1,2-DCE = cis-1,2-Dichloroethene
   trans-1,2-DCE = trans-1,2-Dichloroethene
   1,1-DCA = 1,1-Dichloroethane
   PCE = Tetrachloroethene
   1,1,1-TCA = 1,1,1-Trichloroethane
   TCE = Trichloroethene
6. Exceedances: = Concentration above NR 140 ES
   = Concentration above NR 140 PAL
7. QA/QC notes: 12/7/00: Chlorobenzene detected in Equipment Blank at 0.73 µg/l; Methylene Chloride detected in Trip Blank at 0.56 µg/l (flagged as common laboratory solvent and contaminant)

Table 4
Groundwater In-Situ Measurement Data
Village of Whitefish Bay - Former Good Hope Road Landfill Site
Sigma Project No. 3125

MPS MW-1	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.61	109.6	7	0	12.0

MPS P-1	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.31	47.2	7	0	13.1

MPS P-4	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.42	22.3	7	0	13.7

MPS P-5	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.61	19.7	7	0	13.4

MPS P-6	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.43	38.9	7	0	14.2

MPS P-7	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.32	-43.7	77	0	13.5

Table 4
Groundwater In-Situ Measurement Data
Village of Whitefish Bay - Former Good Hope Road Landfill Site
Sigma Project No. 3125

PZ-8	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.61	136.1	7	0.8	13.7

MW-8	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	1.09	212.2	7	0.2	13.9

PZ-9	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.79	157.7	7	0	13.5

MW-9	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.62	133.4	7	0	12.2

PZ-10	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.39	18.9	11	0	13.2

Table 4
Groundwater In-Situ Measurement Data
Village of Whitefish Bay - Former Good Hope Road Landfill Site
Sigma Project No. 3125

MW-10	In-Situ Parameters				
DATE	DO (mg/l)	REDOX (mV)	pH	Ferrous Iron (ppm)	Temp (°C)
12/07/2000	0.56	79.4	7	0	15.4

Notes:

1. In-situ data only available for Sigma Environmental sampling events.
2. Abbreviations:

mg/l = milligrams per liter (equivalent to parts per million, ppm)
µg/l = micrograms per liter (equivalent to parts per billion, ppb)
NA = Not Analyzed
DO = Dissolved Oxygen
REDOX = Reduction-oxidation potential
mV = millivolts
°C = Degrees Celcius

FIGURES

PROPERTY LINE

PRESIDIO SQUARE APARTMENT COMPLEX

FORMER LANDFILL

PROPERTY LINE

HUSTIS STREET

MW-6
PZ-A
MW-A
MW-104
MW-103
P-101
MW-101
MW-102
P-102
MW-4
MW-107
P-107
MW-E
MW-C
PZ-C
MW-27
MW-106
MW-108
P-108
P-106
PZ-D
MW-B
PZ-B
MW-245
MW-240
MW-25
MW-26

MPS P-3
MPS MW-3
MPS:MW-1
MPS:P-1
MPS P-2
MPS MW-2

WEBSTER MIDDLE SCHOOL
(MILWAUKEE PUBLIC SCHOOL PROPERTY)

MPS:P-5
MPS:P-4

LINCOLN CREEK

55th STREET

WYRICK PARK
(MILWAUKEE COUNTY PROPERTY)

53rd STREET

MPS:P-6
PZ-7

GREEN TREE ROAD

CASPER STREET

CODY STREET

RESIDENTIAL

HASSEL LANE

MW-8
PZ-8

PZ-9
MW-9

GRACELAND CEMETERY

RESIDENTIAL

56th STREET

55th STREET

54th STREET

53rd STREET

52nd STREET

51st STREET

BRENTWOOD

RESIDENTIAL

BRENTWOOD

49th STREET

47th STREET

MW-10
PZ-10

MILL ROAD

0 200 400 800

LEGEND

= MONITORING WELL

= PIEZOMETER

= GEOPROBE BORING (GAS PROBE)

= CHAIN LINK FENCE

NOTES:
1. BOUNDARIES ARE APPROXIMATE.
2. THIS MAP WAS DEVELOPED FROM A MILWAUKEE COUNTY MAP, THIENSVILLE QUADRANGLE TOPOGRAPHIC MAP, AND SURVEY DATA.

VILLAGE OF WHITEFISH BAY MILWAUKEE, WI			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 12-14-00	DR. BY: NKB	DR.# 3125-039	SCALE: 1" = 400'
MONITORING WELL AND GEOPROBE LOCATIONS			FIGURE 1

PROPERTY LINE

PRESIDIO SQUARE APARTMENT COMPLEX

A

FORMER LANDFILL

PROPERTY LINE

HUSTIS STREET

MPS P-3

MPS MW-3

MPS:MW-1

MPS:P-1

MPS P-2

MPS MW-2

WEBSTER MIDDLE SCHOOL
(MILWAUKEE PUBLIC SCHOOL PROPERTY)

MPS:P-5

MPS:P-4

WYRICK PARK
(MILWAUKEE COUNTY PROPERTY)

55th STREET

53rd STREET

LINCOLN CREEK

MPS:P-6

PZ-7

GREEN TREE ROAD

W-9

W-42

C

CASPER STREET

B

B'

CODY STREET

RESIDENTIAL

C'

HASSEL LANE

MW-8

PZ-8

PZ-9

MW-9

GRACELAND CEMETERY

W-31

W-6

RESIDENTIAL

BRENTWOOD

BRENTWOOD

51st STREET

49th STREET

47th STREET

MW-10

PZ-10

A'

MILL ROAD

56th STREET

55th STREET

54th STREET

53rd STREET

52nd STREET

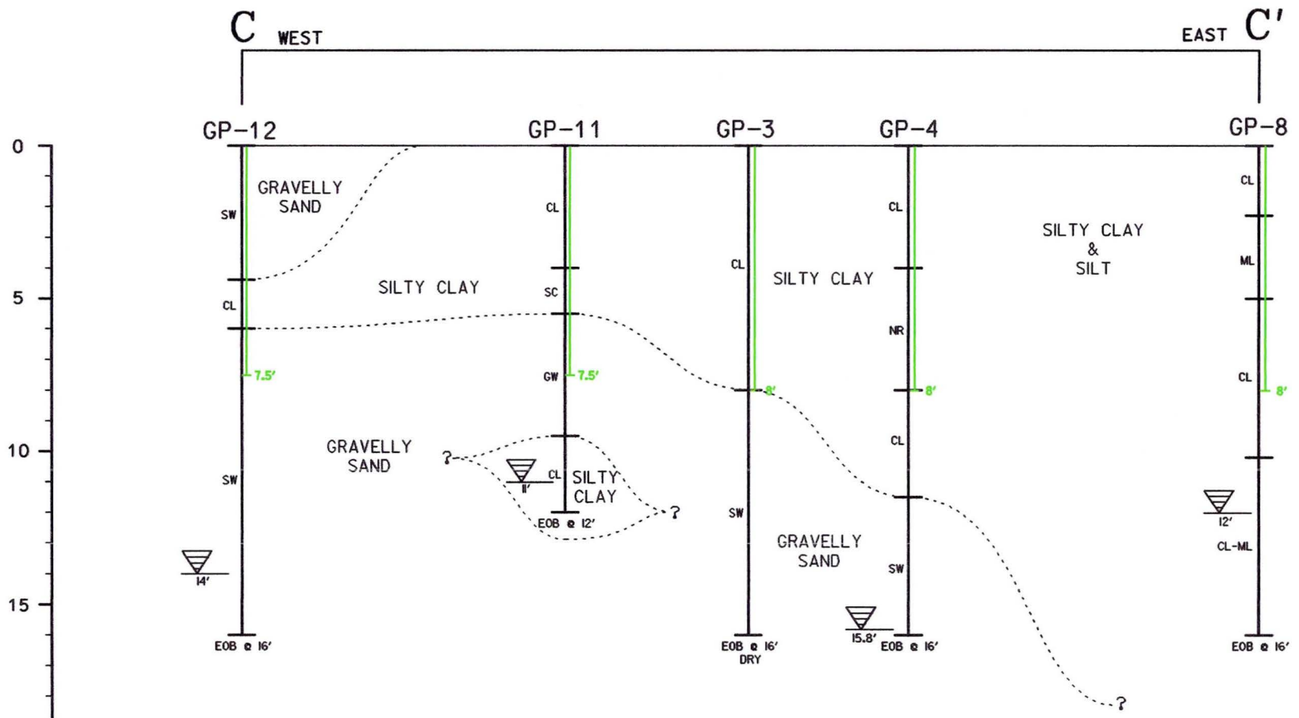
0 200 400 800

LEGEND

- ● = ABANDONED WELL (FORMER RESIDENTIAL WELL)
- ◓ = MONITORING WELL
- ⊕ = PIEZOMETER
- ⌖ = GEOPROBE BORING (GAS PROBE)
- —x— = CHAIN LINK FENCE

NOTES:
1. BOUNDARIES ARE APPROXIMATE.
2. THIS MAP WAS DEVELOPED FROM A MILWAUKEE COUNTY MAP, THIENSVILLE QUADRANGLE TOPOGRAPHIC MAP, AND SURVEY DATA.

VILLAGE OF WHITEFISH BAY MILWAUKEE, WI			ΣSIGMA ENVIRONMENTAL SERVICES INC.
DATE: 12-14-00	DR. BY: NKB	DR.# 3125-043	SCALE: 1" = 400'
GEOLOGIC CROSS SECTION LOCATION MAP			FIGURE 2



DEPTH BELOW GROUND SURFACE (IN FEET)

NR – NO RECOVERY
SW – GRAVELLY SAND (TRACE FINES)
SC – SANDY CLAY
GW – SANDY GRAVEL (TRACE FINES)
CL – CLAY OR SILTY CLAY
ML – SILT

LEGEND

= GAS PROBE: LOWER 2–3" SLOTTED

= ESTIMATED GROUNDWATER TABLE AS ENCOUNTERED DURING DRILLING

NOTES:
1. HORIZONTAL SCALE 1" = 200'
2. VERTICAL SCALE 1" = 5'
3. GROUND SURFACE ELEVATIONS NOT SURVEYED; ASSUMED TO BE HORIZONTAL BETWEEN BORINGS.

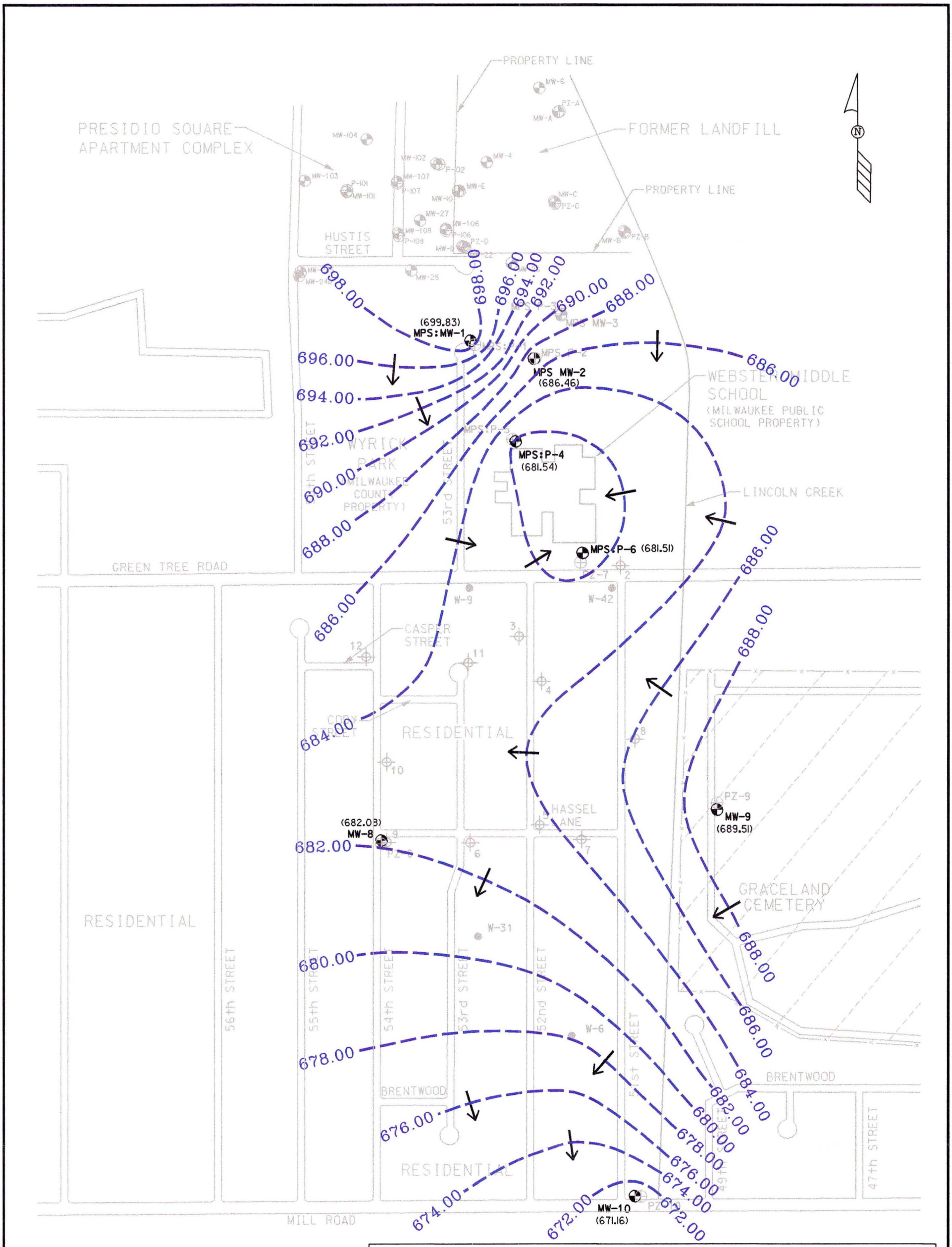
VILLAGE OF WHITEFISH BAY
MILWAUKEE, WI

SIGMA ENVIRONMENTAL SERVICES INC.

DATE: 12-28-00	DR. BY: TMM	DR.# 3125-042	SCALE: SEE NOTE

SHALLOW GEOLOGIC CROSS SECTION C – C'

FIGURE 3



LEGEND

- ● = ABANDONED WELL (FORMER RESIDENTIAL WELL)
- ◒ = MONITORING WELL
- ⊕ = PIEZOMETER
- ⌖ = GEOPROBE BORING (GAS PROBE)
- —x— = CHAIN LINK FENCE
- – – – = GROUNDWATER CONTOUR LINE, CONTOUR INTERVAL = 2.0′
- ( ) = STATIC GROUNDWATER LEVEL (1-12-01)
- → = GROUNDWATER FLOW DIRECTION

NOTES:
1. BOUNDARIES ARE APPROXIMATE.
2. THIS MAP WAS DEVELOPED FROM A MILWAUKEE COUNTY MAP, THIENSVILLE QUADRANGLE TOPOGRAPHIC MAP, AND SURVEY DATA.

VILLAGE OF WHITEFISH BAY MILWAUKEE, WI			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 12-14-00	DR. BY: NKB	DR.# 3125-044	SCALE: 1″ = 400′
SHALLOW GROUNDWATER CONTOUR MAP (1-12-01)			FIGURE 6

PROPERTY LINE

PRESIDIO SQUARE APARTMENT COMPLEX

FORMER LANDFILL

PROPERTY LINE

HUSTIS STREET

WYRICK PARK (MILWAUKEE COUNTY PROPERTY)

WEBSTER MIDDLE SCHOOL (MILWAUKEE PUBLIC SCHOOLS PROPERTY)

LINCOLN CREEK

GREEN TREE ROAD

CASPER STREET

CODY STREET

HASSEL LANE

RESIDENTIAL

RESIDENTIAL

BRENTWOOD

BRENTWOOD

GRACELAND CEMETERY

55th STREET

53rd STREET

51st STREET

47th STREET

MW-6
PZ-A
MW-A
MW-104
MW-103
P-101
MW-101
MW-102
P-102
MW-4
MW-107
P-107
MW-E
MW-10
MW-C
PZ-C
MW-27
MW-106
MW-108
P-108
P-106
PZ-D
MW-D
MW-B
PZ-B
MW-24S
MW-24D
MW-25
MW-26
MPS P-3
MPS MW-3
MPS:MW-
MPS:P-1
MPS P-2
MPS MW-2
(681.69)
MPS:P-5
MPS:P-4
MPS:P-6
PZ-7
(681.84)
W-9
W-42
W-31
W-6
PZ-9
(685.97)
MW-9
PZ-8
(682.15)
PZ-10
(672.79)

681.00
682.00
683.00
684.00
685.00
681.00
680.00
679.00
678.00
677.00
676.00
675.00
674.00
673.00

N

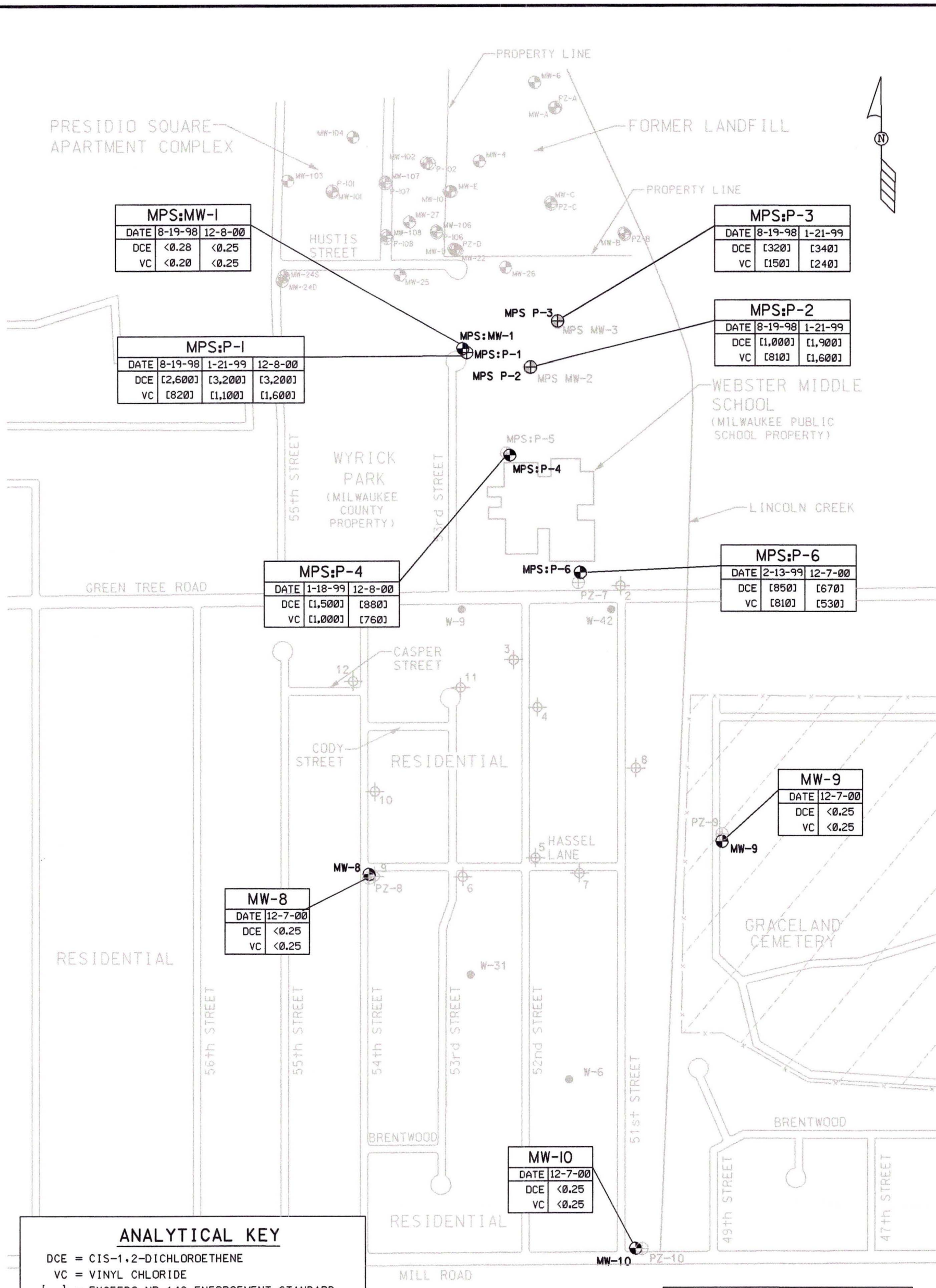
0 200 400 800

LEGEND

- ● = ABANDONED WELL (FORMER RESIDENTIAL WELL)
- ◒ = MONITORING WELL
- ⊕ = PIEZOMETER
- ⊕ = GEOPROBE BORING (GAS PROBE)
- —x— = CHAIN LINK FENCE
- = GROUNDWATER CONTOUR LINE, CONTOUR INTERVAL = 1.0'
- ( ) = STATIC GROUNDWATER LEVEL (1-12-01)
- → = GROUNDWATER FLOW DIRECTION

NOTES:
1. BOUNDARIES ARE APPROXIMATE.
2. THIS MAP WAS DEVELOPED FROM A MILWAUKEE COUNTY MAP, THIENSVILLE QUADRANGLE TOPOGRAPHIC MAP, AND SURVEY DATA.

VILLAGE OF WHITEFISH BAY MILWAUKEE, WI			ΣSIGMA ENVIRONMENTAL SERVICES INC.
DATE: 12-14-00	DR. BY: NKB	DR.# 3125-045	SCALE: 1" = 400'
POTENTIOMETRIC SURFACE CONTOUR MAP (1-12-01)			FIGURE 7



ANALYTICAL KEY

DCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
[ ] = EXCEEDS NR 140 ENFORCEMENT STANDARD
( ) = EXCEEDS NR 140 PREVENTIVE ACTION LIMIT

ALL CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER (ug/l)

LEGEND

- = ABANDONED WELL (FORMER RESIDENTIAL WELL)
- = MONITORING WELL
- = PIEZOMETER
- = GEOPROBE BORING (GAS PROBE)
- —x— = CHAIN LINK FENCE

NOTES:
1. BOUNDARIES ARE APPROXIMATE.
2. THIS MAP WAS DEVELOPED FROM A MILWAUKEE COUNTY MAP, THIENSVILLE QUADRANGLE TOPOGRAPHIC MAP, AND SURVEY DATA.

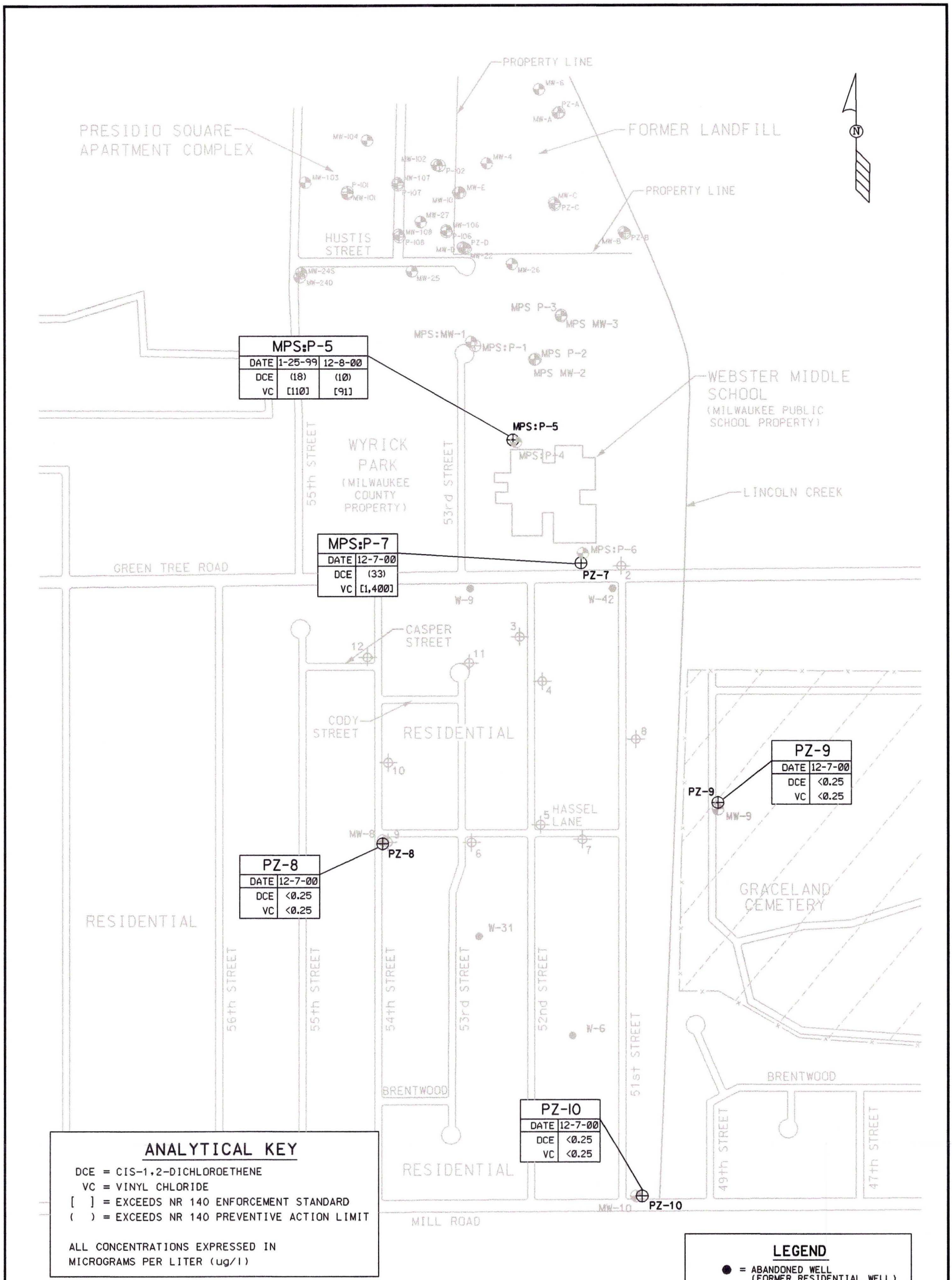
VILLAGE OF WHITEFISH BAY
MILWAUKEE, WI

SIGMA ENVIRONMENTAL SERVICES INC.

DATE: 12-14-00 | DR. BY: NKB | DR.# 3125-047 | SCALE: 1" = 400'

SHALLOW GROUNDWATER QUALITY MAP

FIGURE 8



MPS:P-5		
DATE	1-25-99	12-8-00
DCE	(18)	(10)
VC	[110]	[91]

MPS:P-7	
DATE	12-7-00
DCE	(33)
VC	[1,400]

PZ-8	
DATE	12-7-00
DCE	<0.25
VC	<0.25

PZ-9	
DATE	12-7-00
DCE	<0.25
VC	<0.25

PZ-10	
DATE	12-7-00
DCE	<0.25
VC	<0.25

ANALYTICAL KEY

DCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
[ ] = EXCEEDS NR 140 ENFORCEMENT STANDARD
( ) = EXCEEDS NR 140 PREVENTIVE ACTION LIMIT

ALL CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER (ug/l)

LEGEND

- = ABANDONED WELL (FORMER RESIDENTIAL WELL)
- = MONITORING WELL
- = PIEZOMETER
- = GEOPROBE BORING (GAS PROBE)
- —×— = CHAIN LINK FENCE

NOTES:
1. BOUNDARIES ARE APPROXIMATE.
2. THIS MAP WAS DEVELOPED FROM A MILWAUKEE COUNTY MAP, THIENSVILLE QUADRANGLE TOPOGRAPHIC MAP, AND SURVEY DATA.

VILLAGE OF WHITEFISH BAY
MILWAUKEE, WI

SIGMA ENVIRONMENTAL SERVICES INC.

DATE: 12-14-00 | DR. BY: NKB | DR.# 3125-046 | SCALE: 1" = 400'

DEEP GROUNDWATER QUALITY MAP

FIGURE 9

ATTACHMENT A
SOIL BORING LOGS (VAPOR PROBES)

State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-2**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Denny	**10 / 17 / 00** (MM DD YY)	**10 / 17 / 00** (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___ ___	___ ___ ___ ___ ___ ___		_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	20	push	0.0	**0.0 to 2.0 Silty CLAY with gravel, plastic, root debris, moist**	CL			1.9		M				No Odor
2	20	push	2.0	**2.0 to 4.0 Silty CLAY with gravel, yellowish brown (10YR5/4:M)**	CL			2		M				No Odor
3	8	push	4.0	**4.0 to 8.0 Silty CLAY, plastic, no mottling, grayish brown (10YR5/2:M/W)**	CL			2.3		M/W				No Odor
4	24	push	8.0	**8.0 to 10.0 Sandy SILT with trace gravel, dense, no mottling, moist**	SM			1.7		M				No Odor
5	24	push	10.0	**10.0 to 12.0 SILT, dense, very fine grained, no mottling, gray, (5Y5/3:M)**	ML			2.6		M				No Odor
6	24	push	12.0	**12.0 to 14.0 SILT, dense, very fine grained, no mottling, wet at 13', gray, (5Y5/3:W)**	ML			2.8		W				No Odor
7	24	push	14.0	**14.0 to 16.0 SILT, dense, very fine grained, no mottling, gray, (5Y5/3:W)**	ML			2.5		W				No Odor
			16.0											
			18.0	**End of boring at 16' bgs. Probe set at 8' bgs. Coarse sand from 5' to 16' bgs. Bentonite from 0.5' to 5' bgs.**										
			20.0											
			22.0											
			24.0											

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

Signature Jodi Vanderwalden

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-3**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Denny	**10 / 17 / 00** (MM DD YY)	**10 / 17 / 00** (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	20		0	**0.0 to 2.0 Silty CLAY, organic rich, black, dense, moist, root debris.**	CL			4.5		moist				no odor
2	24		2.0	**2.0 to 4.0 Silty CLAY, 10yr6/4, moist, mottling, tr. gravel.**	CL			6.8		moist				no odor
3	24		4.0	**4.0 to 6.0 Silty CLAY, 10yr5/4, moist, nomottling. plastic.**	CL			3.2		moist				no odor
4	24		6.0	**6.0 to 8.0 Silty CLAY, 10yr5/4, no mottling, plastic, moist.**	CL			3.9		moist				no odor
5	20		8.0	**8.0 to 10.0 Gravelly SAND w/ cobbles, dry, poorly sorted, m-vc gr.**	SW			4.6		dry				no odor
6	24		10.0	**10.0 to 12.0 Gravelly SAND w/ cobbles, dry, poorly sorted, m-vc gr.**	SW			7.4		dry				no odor
7	24		12.0	**12.0 to 14.0 Gravelly SAND w/ cobbles, dry, poorly sorted, m-vc gr.**	SW			4.2		dry				no odor
8	24		14.0	**14.0 to 16.0 Gravelly SAND w/ cobbles, dry, poorly sorted, m-vc gr, wet at bottom.**	SW			3.7		dry				no odor
			16.0											
			18.0	**End of boring at 16' bgs. Probe set at 8' bgs. Coarse sand from 6' to 16' bgs. Bentonite from 0.5' to 6' bgs.**										
			20.0											
			22.0											
			24.0											

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

Signature Jodi Vanden Heuvel | Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-4**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM / DD / YY)	Date Drilling Completed (MM / DD / YY)	Drilling Method
On-Site Environmental - Denny	**10 / 17 / 00**	**10 / 17 / 00**	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	18		0.0	**0.0 to 2.0 Silty CLAY, plastic Moist, 10yr3/2.**	CL			0		moist				no odor
2	18		2.0	**2.0 to 4.0 Silty CLAY, w/ sand and root debris.**	CL			1.5		moist				no odor
3	0		4.0	**4.0 to 8.0 no recovery - rock.**										
4	36		8.0	**8.0 to 12.0 silty CLAY, moist 10yr5/4, plastic, no mottling.**	CL			2.2		moist				no odor
5	24		12.0	**12.0 to 14.0 Gravelly SAND, p. sorted, dry vc grained.**	SW			2.9		dry				no odor
6	24		14.0	**14.0 to 16.0 Gravelly SAND, p. sorted, wet @15.8'.**	SW			2.2		wet				no odor
			16.0	**End of boring at 16' bgs. Probe set at 8' bgs. Coarse sand from 6' to 16' bgs. Bentonite from 0.5' to 6' bgs.**										
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature Jodi Vandenhelden

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-5**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Denny	**10 / 17 / 00** (MM DD YY)	**10 / 17 / 00** (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___	___		_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	15		0	**0.0 to 2.0 Silty CLAY, dry, root debris, w/cobbles.**	CL			1.2		dry				no odor
2	15		2.0	**2.0 to 4.0 6" silty CLAY, dry, 9" SAND, dry 7.5yr5/6.**	CL			1.6		dry				no odor
3	24		4.0	**4.0 to 6.0 SILT, m/w, 10yr6/3, vf grained.**	ML			1.6	m/w					no odor
4	24		6.0	**6.0 to 8.0 Silty CLAY, gray, plastic, moist, slight mottling 10yr5/2.**	CL			1.6		moist				no odor
5	24		8.0	**8.0 to 10.0 Silty CLAY, gray, plastic, moist, slight mottling 10yr5/2.**	CL			1.3		moist				no odor
6	24		10.0	**10.0 to 12.0 Silty CLAY, 10yr5/4, plastic, moist, slight mottling, wet at bottom 1" gravel seam.**	CL			2.2		wet				no odor
			12.0	**End of probe. End of boring at 12' bgs. Probe set at 6' bgs. Coarse sand from 4' to 12' bgs. Bentonite from 0.5' to 4' bgs.**										
			14.0											
			16.0											
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature [signature] Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-6**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Denny	**10 / 17 / 00** (MM DD YY)	**10 / 17 / 00** (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	20	push	0	**0.0 to 2.0 Silty CLAY with cobbles, mottling, root debris, dry, plastic**	CL			3.4		D				No Odor
2	20	push	2.0	**2.0 to 4.0 Silty CLAY with cobbles, mottling, root debris, dry, plastic**	CL			5.3		D				No Odor
3	8	push	4.0	**4.0 to 6.0 Silty CLAY, plastic, yellowish brown (10YR5/4:M)**	CL			4		M				No Odor
4	8	push	6.0	**6.0 to 8.0 Silty CLAY, mottling, plastic, yellowish brown (10YR5/4:M)**	CL			5.3		M				No Odor
5	10	push	8.0	**8.0 to 10.0 Silty CLAY, no mottling, plastic, yellowish brown (10YR5/4:M)**	CL			3.9		M				No Odor
6	8	push	10.0	**10.0 to 12.0 4" SAME, gray. 4" Gravelly SAND, poorly sorted, loose, dry**	SW			5.7		D				No Odor
7	12	push	12.0	**12.0 to 14.0 Silty CLAY, gray, plastic, no mottling**	CL			4.9						No Odor
8	12	push	14.0	**14.0 to 16.0 Silty CLAY, gray, plastic, no mottling**	CL			5.2						No Odor
			16.0	**End of boring at 16' bgs. Probe set at 8' bgs. Coarse sand from 5' to 16' bgs. Bentonite from 0.5' to 5' bgs.**										
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature Jodi Lander Wilde

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-7**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Denny	**10 / 17 / 00** (MM DD YY)	**10 / 17 / 00** (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___ ___ ___	___ ___ ___ ___ ___ ___		_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	24		0	**0.0 to 2.0 Silty CLAY, dense, dry,10yr4/3 at top to 10yr3/1, root debris.**	CL			1.4		dry				no odor
2	24		2.0	**2.0 to 4.0 18" Silty CLAY, dense, dry, 10yr3/1, 6" Silty SAND, dense, hard, p. sorted, dry, 10yr5/3.**	CL			1.0		dry				no odor
3	24		4.0		CL			1.1		dry				no odor
4	24		6.0	**4.0 to 6.0 Silty CLAYw/ some sand, mottling, dry 10yr5/3.**				1.7		D/W				no odor
5	24		8.0	**6.0 to 8.0 8" SAND, 10yr5/6, p. sorted, dry, m-c grained. 12" SILT, wet, vf grained 10yr5/4, dense. 4" Gravelly SAND, dry, p. sorted m-vc grained, 10yr5/6.**	CL			1.8		M/W				no odor
6	24		10.0		CL			1.9						no odor
			12.0	**8.0 to 10.0 Silty CLAY w/ gravel m/w slight mottling 10yr5/4 to 10yr4/1.**										
			14.0											
			16.0	**10.0 to 12.0 Silty CLAY, dense, plastic, gray.**										
			18.0	**End of boring at 12' bgs. Probe set at 8' bgs. Coarse sand from 6' to 12' bgs. Bentonite from 0.5' to 6' bgs.**										
			20.0											
			22.0											
			24.0											

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

Signature Jodi VanderVelden

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-8**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Denny	10 / 17 / 00 (MM DD YY)	10 / 17 / 00 (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	20		0	**0.0 to 2.0 Silty CLAY w/ some sand, moist plastic 10yr4/4, tr. gravel.**	CL			0		moist				no odor
2	20		2.0	**2.0 to 4.0 4"Silty CLAY w/some sand, 16" SILT, 10yr5/1, dry, no mottling.**	ML			0		dry				no odor
3	24		4.0	**4.0 to 6.0 12" SILT, Silty CLAY w/ some sand, 12" Silty CLAY, mottling, plastic, 1G5/5g.**	CL			0		moist				no odor
4	24		6.0	**6.0 to 8.0 Silty CLAY, mottling, plastic, Moist, 1g5/5g.**	CL			0		moist				no odor
5	4		8.0	**8.0 to 12.0 Silty CLAY, plastic, moist, slight mottling, gray.**	CL			0		moist				no odor
6	24		12.0	**12.0 to 14.0 Clayey SILT, gray, saturated, loose.**	ML			0		sat.				no odor
7	24		14.0	**14.0 to 16.0 12" Clayey SILT, 12" Denser, wet.**	ML			0		wet				no odor
			16.0	**End of boring at 16' bgs. Probe set at 8' bgs. Coarse sand from 6' to 16' bgs. Bentonite from 0.5' to 6' bgs.**										
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature Jodi Vander Velden

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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3125

State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-9**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Denny	**10 / 17 / 00** (MM DD YY)	**10 / 17 / 00** (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	24	push	0.0	**0.0 to 2.0 Silty CLAY, plastic, very dark gray (10YR3/1:M)**	CL			5.5		M				No Odor
2	24	push	2.0	**2.0 to 4.0 Silty CLAY, mottling, plastic, yellowish brown (10YR5/6:M)**	CL			3.7		M				No Odor
3	24	push	4.0	**4.0 to 6.0 Silty CLAY, mottling, plastic, yellowish brown (10YR5/6:M)**	CL			5.3		M				No Odor
4	24	push	6.0	**6.0 to 8.0 Silty CLAY, less mottling, plastic, yellowish brown (10YR5/6:M)**	CL			5.5		M				No Odor
5	24	push	8.0	**8.0 to 10.0 Silty CLAY, dense, no mottling, gray, moist**	CL			7.4		M				No Odor
6	24	push	10.0	**10.0 to 12.0 Silty CLAY, dense, no mottling, gray, moist**	CL			6.7		M				No Odor
			12.0	**End of boring at 12'. Probe bottom set at 7' bgs. Coarse sand from 5' to 12' bgs. Bentonite from 5' to 0.5' bgs.**										
			14.0											
			16.0											
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature Jodi VandenWeldon

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-10**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Denny	**10** / **17** / **00** (MM DD YY)	**10** / **17** / **00** (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	18		0.0	**0.0 to 2.0 Silty CLAY, organic rich moist, plastic.**	CL			3.6		moist				no odor
2	24		2.0	**2.0 to 4.0 Silty SAND w/ gravel, f-grained, p. sorted, 10yr5/6, dry.**	SM			3.8		dry				no odor
3	24		4.0	**4.0 to 6.0 Silty CLAY, dense, moist, tr. gravel, no mottling, plastic 10yr5/4.**	CL			4.5		moist				no odor
4	24		6.0	**6.0 to 8.0 Silty CLAY, dense, moist, tr. gravel, no mottling, plastic 10yr5/4, gray.**	CL			4.9		moist				no odor
5	24		8.0	**8.0 to 10.0 4" gravelly SAND 20" Sandy SILT, f-m grained, tr. gravel, m/w 10yr5/3.**	SM			5.2		m/w				no odor
6	24		10.0	**10.0 to 12.0 Silty SAND, w/ gray, f-m grained, dense.**	SM			3.1		wet				no odor
			12.0	**End of Probe.**										
			14.0	**End of boring at 12' bgs. Probe set at 7.5' bgs. Coarse sand from 5' to 12' bgs. Bentonite from 0.5' to 5' bgs.**										
			16.0											
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature Jodi Vander Heiden

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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3125

State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-11**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Denny	10 / 17 / 00 (MM DD YY)	10 / 17 / 00 (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E

Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	24	push	0.0	**0.0 to 2.0 Silty CLAY, mottling, with root debris, moderately dense, plastic, trace sand**	CL			3.9						No Odor
2	24	push	2.0	**2.0 to 4.0 Silty CLAY, mottling, with root debris, moderately dense, plastic, trace sand, orange staining**	CL			4.2						No Odor
3	12	push	4.0	**4.0 to 6.0 Sandy CLAY, with cobbles, plastic, yellowish brown (10YR5/4:M/W)**	SC			3.5		M/W				No Odor
4	12	push	6.0	**6.0 to 8.0 Sandy GRAVEL, poorly sorted medium to very coarse grained, loose, dry**	GW			3.6		D				No Odor
5	12	push	8.0	**8.0 to 10.0 Sandy GRAVEL, poorly sorted medium to very coarse grained, loose, dry**	GW			3.5		D				No Odor
6	12	push	10.0	**10.0 to 12.0 Silty CLAY, no mottling, trace gravel, wet @ 11', gray (10YR5/1:W)**	CL			2.5		W				No Odor
			12.0	**End of boring at 12' bgs. Probe set at 7.5' bgs. Coarse sand from 5' to 12' bgs. Bentonite from 0.5' to 5' bgs.**										
			14.0											
			16.0											
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature Jodi Vanden Velden

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**GP-12**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
On-Site Environmental - Deny	**10** / **17** / **00** (MM DD YY)	**10** / **17** / **00** (MM DD YY)	**Geo probe**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___	___		_____ Feet MSL	_____ Feet MSL	**2.00** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	24		0	**0.0 to 2.0 Gravelly SAND, dry, poorly sorted, loose.**	SW			2.0		dry				no odor
2	24		2.0	**2.0 to 4.0 Gravelly SAND, dry, poorly sorted, loose.**	SW			2.7		dry				no odor
3	20		4.0	**4.0 to 6.0 4" Gravelly SAND, dry, poorly sorted, loose, 16" silty CLAY, moist plastic, mottling, 10yr5/6.**	CL			2.9		moist				no odor
4	20		6.0	**6.0 to 8.0 Gavelly SAND, p. sorted, dry, m-c grained.**	SW			3.4		dry				no odor
5	24		8.0	**8.0 to 10.0 Gavelly SAND, p. sorted, dry, m-c grained.**	SW			3.9		dry				no odor
6	24		10.0	**10.0 to 12.0 Gavelly SAND, p. sorted, dry, m-c grained.**	SW			3.5		dry				no odor
7	24		12.0	**12.0 to 14.0 Gavelly SAND, p. sorted, dry, m-c grained.**	SW			2.7		dry				no odor
8	24		14.0	**14.0 to 16.0 SAND w/ gravel, m/w 10yr4/4, m-c grained p. sorted.**	SW			2.9		m/w				no odor
			16.0	**End of boring at 16' bgs. Probe set at 7.5' bgs. Coarse sand from 5' to 16' bgs. Bentonite from 0.5' to 5' bgs.**										
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature Jodi VanderLeeden

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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3125

ATTACHMENT B
BOREHOLE ABANDONMENT FORMS (VAPOR PROBES)

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of SW 1/4 Sec. 23 ; T. 8 N; R. 21 ☒ E ☐ W

(If applicable) Gov't Lot ____ Grid Number ____

Grid Location ____ ft. ☐ N. ☐ S., ____ ft. ☐ E. ☐ W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-2**

WI Unique Well No: _ _ _ _ _

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On (Date) **10/17/00**

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☐ Yes ☒ No

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

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) **8.0** (From groundsurface) Casing Diameter (ins.) ____ Casing Depth (ft.) ____

Lower Drillhole Diameter (in.) ____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? ____ Feet

(4) Depth to Water (Feet) ____

Pump & Piping Removed?	☒ Yes	☐ No	☐ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☒ Yes	☐ No	☐ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	**NA**
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☐ No	**NA**

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☒ Other (Explain) **gravity**

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite
☐ Bentonite Pellets
☒ Granular Bentonite
☐ Bentonite- Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	**5.0**		
Coarse Sand	**5.0**	**16.0**		

(8) Comments:

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: Jodi Underkilden — Date Signed: 12-18-00

Street or Route: **220 East Ryan Road** — Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

DNR/COUNTY

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

3125

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of **SW** 1/4 Sec. **23** ; T. **8** N; R. **21** [X] E [ ] W

(If applicable) Gov't Lot _____ Grid Number _____

Grid Location _____ ft. [ ] N. [ ] S., _____ ft. [ ] E. [ ] W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-3**

WI Unique Well No: _ _ _ _ _ _

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

[ ] Monitoring Well
[ ] Water Well
[ ] Drillhole
[X] Borehole

Construction Report Available? [ ] Yes [X] No

Construction Type:
[ ] Drilled [X] Driven (Sandpoint) [ ] Dug
[ ] Other (Specify) _____

Formation Type:
[X] Unconsolidated Formation [ ] Bedrock

Total Well Depth (ft.) **8.0** (From groundsurface)

Casing Diameter (ins.) _____
Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? [ ] Yes [ ] No [ ] Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) _____

Pump & Piping Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Liner(s) Removed?	[ ] Yes	[ ] No	[X] Not Applicable
Screen Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Casing Left in Place?	[ ] Yes	[X] No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	[ ] Yes	[ ] No	**NA**
Did Sealing Material Rise to Surface?	[X] Yes	[ ] No	
Did Material Settle After 24 Hours?	[ ] Yes	[X] No	
If Yes, Was Hole Retopped?	[ ] Yes	[ ] No	**NA**

(5) Required Method of Placing Sealing Material

[ ] Conductor Pipe-Gravity [ ] Conductor Pipe-Pumped
[ ] Dump Bailer [X] Other (Explain) **gravity**

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only

[ ] Neat Cement Grout
[ ] Sand-Cement (Concrete) Grout
[ ] Concrete
[ ] Clay-Sand Slurry
[ ] Bentonite-Sand Slurry
[ ] Chipped Bentonite
[ ] Bentonite Pellets
[X] Granular Bentonite
[ ] Bentonite- Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	6.0		
Coarse Sand	6.0	16.0		

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: Jodi Vanden Velden
Date Signed: 12-18-00

Street or Route: **220 East Ryan Road**
Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	[ ] Complying Work [ ] Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

3125

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of SW 1/4 Sec. 23 ; T. 8 N; R. 21 [X] E [ ] W

(If applicable) Gov't Lot _____ Grid Number _____

Grid Location _____ ft. [ ] N. [ ] S., _____ ft. [ ] E. [ ] W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-4**

WI Unique Well No

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

[ ] Monitoring Well
[ ] Water Well
[ ] Drillhole
[X] Borehole

Construction Report Available? [ ] Yes [X] No

Construction Type:
[ ] Drilled [X] Driven (Sandpoint) [ ] Dug
[ ] Other (Specify)

Formation Type:
[X] Unconsolidated Formation [ ] Bedrock

Total Well Depth (ft.) **8.0** (From groundsurface)
Casing Diameter (ins.) _____
Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? [ ] Yes [ ] No [ ] Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) _____

Pump & Piping Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Liner(s) Removed?	[ ] Yes	[ ] No	[X] Not Applicable
Screen Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Casing Left in Place?	[ ] Yes	[X] No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	[ ] Yes	[ ] No	NA
Did Sealing Material Rise to Surface?	[X] Yes	[ ] No	
Did Material Settle After 24 Hours?	[ ] Yes	[X] No	
If Yes, Was Hole Retopped?	[ ] Yes	[ ] No	NA

(5) Required Method of Placing Sealing Material
[ ] Conductor Pipe-Gravity [ ] Conductor Pipe-Pumped
[ ] Dump Bailer [X] Other (Explain) **gravity**

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only
[ ] Neat Cement Grout
[ ] Sand-Cement (Concrete) Grout
[ ] Concrete
[ ] Clay-Sand Slurry
[ ] Bentonite-Sand Slurry
[ ] Chipped Bentonite
[ ] Bentonite Pellets
[X] Granular Bentonite
[ ] Bentonite- Cement Grout

(7)

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	6.0		
Coarse Sand	6.0	16.0		

(8) Comments:

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: John VanderVelden
Date Signed: 12-18-00

Street or Route: **220 East Ryan Road**
Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	[ ] Complying Work [ ] Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

3125

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of **SW** 1/4 Sec. **23** ; T. **8** N; R. **21** [X] E [ ] W

(If applicable) Gov't Lot _____ Grid Number _____

Grid Location _____ ft. [ ] N. [ ] S., _____ ft. [ ] E. [ ] W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-5**

WI Unique Well No: _ _ _ _ _ _

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

[ ] Monitoring Well
[ ] Water Well
[ ] Drillhole
[X] Borehole

Construction Report Available? [ ] Yes [X] No

Construction Type:
[ ] Drilled [X] Driven (Sandpoint) [ ] Dug
[ ] Other (Specify)

Formation Type:
[X] Unconsolidated Formation [ ] Bedrock

Total Well Depth (ft.) **6.0** (From groundsurface)
Casing Diameter (ins.) ____
Casing Depth (ft.) ____

Lower Drillhole Diameter (in.) ____

Was Well Annular Space Grouted? [ ] Yes [ ] No [ ] Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) ____

Pump & Piping Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Liner(s) Removed?	[ ] Yes	[ ] No	[X] Not Applicable
Screen Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Casing Left in Place?	[ ] Yes	[X] No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	[ ] Yes	[ ] No	**NA**
Did Sealing Material Rise to Surface?	[X] Yes	[ ] No	
Did Material Settle After 24 Hours?	[ ] Yes	[X] No	
If Yes, Was Hole Retopped?	[ ] Yes	[ ] No	**NA**

(5) Required Method of Placing Sealing Material
[ ] Conductor Pipe-Gravity [ ] Conductor Pipe-Pumped
[ ] Dump Bailer [X] Other (Explain) **gravity**

(6) Sealing Materials
[ ] Neat Cement Grout
[ ] Sand-Cement (Concrete) Grout
[ ] Concrete
[ ] Clay-Sand Slurry
[ ] Bentonite-Sand Slurry
[ ] Chipped Bentonite

For monitoring wells and monitoring well boreholes only
[ ] Bentonite Pellets
[X] Granular Bentonite
[ ] Bentonite- Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	**4.0**		
Coarse Sand	**4.0**	**12.0**		

(8) Comments:

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: Jodi VanderWelden
Date Signed: 12-15-00

Street or Route: **220 East Ryan Road**
Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	[ ] Complying Work [ ] Noncomplying Work
Follow-up Necessary	

3125

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of **SW** 1/4 Sec. **23** ; T. **8** N; R. **21** [X] E [ ] W

(If applicable) Gov't Lot _____ Grid Number _____

Grid Location _____ ft. [ ] N. [ ] S., _____ ft. [ ] E. [ ] W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-6**

WI Unique Well No: _ _ _ _ _ _

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

[ ] Monitoring Well
[ ] Water Well
[ ] Drillhole
[X] Borehole

Construction Report Available? [ ] Yes [X] No

Construction Type:
[ ] Drilled [X] Driven (Sandpoint) [ ] Dug
[ ] Other (Specify)

Formation Type:
[X] Unconsolidated Formation [ ] Bedrock

Total Well Depth (ft.) **8.0** (From groundsurface)
Casing Diameter (ins.) _____
Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? [ ] Yes [ ] No [ ] Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) _____

Pump & Piping Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Liner(s) Removed?	[ ] Yes	[ ] No	[X] Not Applicable
Screen Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Casing Left in Place?	[ ] Yes	[X] No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	[ ] Yes	[ ] No	**NA**
Did Sealing Material Rise to Surface?	[X] Yes	[ ] No	
Did Material Settle After 24 Hours?	[ ] Yes	[X] No	
If Yes, Was Hole Retopped?	[ ] Yes	[ ] No	**NA**

(5) Required Method of Placing Sealing Material
[ ] Conductor Pipe-Gravity [ ] Conductor Pipe-Pumped
[ ] Dump Bailer [X] Other (Explain) **gravity**

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only
[ ] Neat Cement Grout
[ ] Sand-Cement (Concrete) Grout
[ ] Concrete
[ ] Clay-Sand Slurry
[ ] Bentonite-Sand Slurry
[ ] Chipped Bentonite
[ ] Bentonite Pellets
[X] Granular Bentonite
[ ] Bentonite- Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	5.0		
Coarse Sand	5.0	16.0		

(8) Comments:

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: Josh VanderVelden
Date Signed: 12-18-00

Street or Route: **220 East Ryan Road**
Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	[ ] Complying Work [ ] Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

3125

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of **SW** 1/4 Sec. **23** ; T. **8** N; R. **21** [X] E [ ] W

(If applicable)

Gov't Lot _____ Grid Number _____

Grid Location

_____ ft. [ ] N. [ ] S., _____ ft. [ ] E. [ ] W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-7**

WI Unique Well No: _ _ _ _ _ _

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

[ ] Monitoring Well
[ ] Water Well
[ ] Drillhole
[X] Borehole

Construction Report Available? [ ] Yes [X] No

Construction Type:
[ ] Drilled [X] Driven (Sandpoint) [ ] Dug
[ ] Other (Specify) _____

Formation Type:
[X] Unconsolidated Formation [ ] Bedrock

Total Well Depth (ft.) **8.0** (From groundsurface)
Casing Diameter (ins.) _____
Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? [ ] Yes [ ] No [ ] Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) _____

Pump & Piping Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Liner(s) Removed?	[ ] Yes	[ ] No	[X] Not Applicable
Screen Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Casing Left in Place?	[ ] Yes	[X] No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	[ ] Yes	[ ] No	**NA**
Did Sealing Material Rise to Surface?	[X] Yes	[ ] No	
Did Material Settle After 24 Hours?	[ ] Yes	[X] No	
If Yes, Was Hole Retopped?	[ ] Yes	[ ] No	**NA**

(5) Required Method of Placing Sealing Material
[ ] Conductor Pipe-Gravity [ ] Conductor Pipe-Pumped
[ ] Dump Bailer [X] Other (Explain) **gravity**

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only
[ ] Neat Cement Grout
[ ] Sand-Cement (Concrete) Grout
[ ] Concrete
[ ] Clay-Sand Slurry
[ ] Bentonite-Sand Slurry
[ ] Chipped Bentonite
[ ] Bentonite Pellets
[X] Granular Bentonite
[ ] Bentonite- Cement Grout

(7)

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	6.0		
Coarse Sand	6.0	16.0		

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: Jodi Vanderwielen — Date Signed: 12-18-00

Street or Route: **220 East Ryan Road** — Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	[ ] Complying Work [ ] Noncomplying Work
Follow-up Necessary	

3125

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of **SW** 1/4 Sec. **23** ; T. **8** N; R. **21** ☒ E ☐ W

(If applicable) Gov't Lot _____ Grid Number _____

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

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-8**

WI Unique Well No

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☐ Yes ☒ No

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

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) **8.0** (From groundsurface)
Casing Diameter (ins.) ____
Casing Depth (ft.) ____

Lower Drillhole Diameter (in.) ____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) ____

Pump & Piping Removed?	☒ Yes	☐ No	☐ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☒ Yes	☐ No	☐ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	☐ Yes	☐ No	**NA**
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☐ No	**NA**

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☒ Other (Explain) **gravity**

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite
☐ Bentonite Pellets
☒ Granular Bentonite
☐ Bentonite- Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	6.0		
Coarse Sand	6.0	16.0		

(8) Comments:

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: Jodi VanderWalker
Date Signed: 12-18-00

Street or Route: **220 East Ryan Road**
Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	☐ Complying Work ☐ Noncomplying Work
Follow-up Necessary	

3125

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of **SW** 1/4 Sec. **23** ; T. **8** N; R. **21** [X] E [ ] W

(If applicable)

Gov't Lot _____ Grid Number _____

Grid Location

_____ ft. [ ] N. [ ] S., _____ ft. [ ] E. [ ] W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-9**

WI Unique Well No: _ _ _ _ _ _

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

[ ] Monitoring Well
[ ] Water Well
[ ] Drillhole
[X] Borehole

Construction Report Available? [ ] Yes [X] No

Construction Type:
[ ] Drilled [X] Driven (Sandpoint) [ ] Dug
[ ] Other (Specify) _____

Formation Type:
[X] Unconsolidated Formation [ ] Bedrock

Total Well Depth (ft.) **7.0** (From groundsurface)
Casing Diameter (ins.) _____
Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? [ ] Yes [ ] No [ ] Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) _____

Pump & Piping Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Liner(s) Removed?	[ ] Yes	[ ] No	[X] Not Applicable
Screen Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Casing Left in Place?	[ ] Yes	[X] No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	[ ] Yes	[ ] No	**NA**
Did Sealing Material Rise to Surface?	[X] Yes	[ ] No	
Did Material Settle After 24 Hours?	[ ] Yes	[X] No	
If Yes, Was Hole Retopped?	[ ] Yes	[ ] No	**NA**

(5) Required Method of Placing Sealing Material

[ ] Conductor Pipe-Gravity [ ] Conductor Pipe-Pumped
[ ] Dump Bailer [X] Other (Explain) **gravity**

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only

[ ] Neat Cement Grout
[ ] Sand-Cement (Concrete) Grout
[ ] Concrete
[ ] Clay-Sand Slurry
[ ] Bentonite-Sand Slurry
[ ] Chipped Bentonite
[ ] Bentonite Pellets
[X] Granular Bentonite
[ ] Bentonite- Cement Grout

(7)

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	**5.0**		
Coarse Sand	**5.0**	**12.0**		

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work

Sigma Environmental Services, Inc.

Signature of Person Doing Work: Jodi VanderWilden — Date Signed: 12-18-00

Street or Route: **220 East Ryan Road** — Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	[ ] Complying Work [ ] Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

3125

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BORFHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of **SW** 1/4 Sec. **23** ; T. **8** N; R. **21** [X] E [ ] W

(If applicable)

Gov't Lot _____ Grid Number _____

Grid Location

_____ ft. [ ] N. [ ] S., _____ ft. [ ] E. [ ] W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-10**

WI Unique Well No: _ _ _ _ _ _

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

[ ] Monitoring Well
[ ] Water Well
[ ] Drillhole
[X] Borehole

Construction Report Available? [ ] Yes [X] No

Construction Type:
[ ] Drilled [X] Driven (Sandpoint) [ ] Dug
[ ] Other (Specify) _____

Formation Type:
[X] Unconsolidated Formation [ ] Bedrock

Total Well Depth (ft.) **7.5** (From groundsurface)
Casing Diameter (ins.) _____
Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? [ ] Yes [ ] No [ ] Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) _____

Pump & Piping Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Liner(s) Removed?	[ ] Yes	[ ] No	[X] Not Applicable
Screen Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Casing Left in Place?	[ ] Yes	[X] No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	[ ] Yes	[ ] No	**NA**
Did Sealing Material Rise to Surface?	[X] Yes	[ ] No	
Did Material Settle After 24 Hours?	[ ] Yes	[X] No	
If Yes. Was Hole Retopped?	[ ] Yes	[ ] No	**NA**

(5) Required Method of Placing Sealing Material

[ ] Conductor Pipe-Gravity [ ] Conductor Pipe-Pumped
[ ] Dump Bailer [X] Other (Explain) **gravity**

(6) Sealing Materials

[ ] Neat Cement Grout
[ ] Sand-Cement (Concrete) Grout
[ ] Concrete
[ ] Clay-Sand Slurry
[ ] Bentonite-Sand Slurry
[ ] Chipped Bentonite

For monitoring wells and monitoring well boreholes only

[ ] Bentonite Pellets
[X] Granular Bentonite
[ ] Bentonite- Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	5.0		
Coarse Sand	5.0	12.0		

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: Jodi Vanderhelden
Date Signed: 12-18-00

Street or Route: **220 East Ryan Road**
Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	[ ] Complying Work [ ] Noncomplying Work
Follow-up Necessary	

DNR/COUNTY

3125

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of SW 1/4 Sec. 23 ; T. 8 N; R. 21 [X] E [ ] W

(If applicable) Gov't Lot ____ Grid Number ____

Grid Location ____ ft. [ ] N. [ ] S., ____ ft. [ ] E. [ ] W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-11**

WI Unique Well No: _ _ _ _ _ _

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

[ ] Monitoring Well
[ ] Water Well
[ ] Drillhole
[X] Borehole

Construction Report Available? [ ] Yes [X] No

Construction Type:
[ ] Drilled [X] Driven (Sandpoint) [ ] Dug
[ ] Other (Specify)

Formation Type:
[X] Unconsolidated Formation [ ] Bedrock

Total Well Depth (ft.) 7.5 (From groundsurface) Casing Diameter (ins.) ____ Casing Depth (ft.) ____

Lower Drillhole Diameter (in.) ____

Was Well Annular Space Grouted? [ ] Yes [ ] No [ ] Unknown
If Yes, To What Depth? ____ Feet

(4) Depth to Water (Feet) ____

Pump & Piping Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Liner(s) Removed?	[ ] Yes	[ ] No	[X] Not Applicable
Screen Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Casing Left in Place?	[ ] Yes	[X] No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	[ ] Yes	[ ] No	NA
Did Sealing Material Rise to Surface?	[X] Yes	[ ] No	
Did Material Settle After 24 Hours?	[ ] Yes	[X] No	
If Yes, Was Hole Retopped?	[ ] Yes	[ ] No	NA

(5) Required Method of Placing Sealing Material
[ ] Conductor Pipe-Gravity [ ] Conductor Pipe-Pumped
[ ] Dump Bailer [X] Other (Explain) **gravity**

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only
[ ] Neat Cement Grout
[ ] Sand-Cement (Concrete) Grout
[ ] Concrete
[ ] Clay-Sand Slurry
[ ] Bentonite-Sand Slurry
[ ] Chipped Bentonite
[ ] Bentonite Pellets
[X] Granular Bentonite
[ ] Bentonite- Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	5.0		
Coarse Sand	5.0	12.0		

(8) Comments: ____

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: Jodi VanderVelden — Date Signed: 12-18-00

Street or Route: **220 East Ryan Road** — Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	[ ] Complying Work [ ] Noncomplying Work
Follow-up Necessary	

3125

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 3-94

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 1 Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION

Well/drillhole/Borehole Location

County: **Milwaukee**

NE 1/4 of **SW** 1/4 Sec. **23** ; T. **8** N; R. **21** [X] E [ ] W

(If applicable) Gov't Lot _____ Grid Number _____

Grid Location _____ ft. [ ] N. [ ] S., _____ ft. [ ] E. [ ] W.

Civil Town Name

Street Address of Well

City, Village

(2) FACILITY NAME

Original Well Owner (If Known)

Present Well Owner: **Village of Whitefish Bay**

Street or Route

City, State, Zip Code

Facility Well No. and/or Name (If Applicable): **GP-12**

WI Unique Well No: _ _ _ _ _ _

Reason For Abandonment: **Installed for Vapor Investigation Only**

Date of Abandonment: **10/17/00**

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) **10/17/00**

[ ] Monitoring Well
[ ] Water Well
[ ] Drillhole
[X] Borehole

Construction Report Available? [ ] Yes [X] No

Construction Type:
[ ] Drilled [X] Driven (Sandpoint) [ ] Dug
[ ] Other (Specify)

Formation Type:
[X] Unconsolidated Formation [ ] Bedrock

Total Well Depth (ft.) **7.5** (From groundsurface)
Casing Diameter (ins.) _____
Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? [ ] Yes [ ] No [ ] Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) _____

Pump & Piping Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Liner(s) Removed?	[ ] Yes	[ ] No	[X] Not Applicable
Screen Removed?	[X] Yes	[ ] No	[ ] Not Applicable
Casing Left in Place?	[ ] Yes	[X] No	

If No, Explain **pulled out**

Was Casing Cut Off Below Surface?	[ ] Yes	[ ] No	NA
Did Sealing Material Rise to Surface?	[X] Yes	[ ] No	
Did Material Settle After 24 Hours?	[ ] Yes	[X] No	
If Yes, Was Hole Retopped?	[ ] Yes	[ ] No	NA

(5) Required Method of Placing Sealing Material
[ ] Conductor Pipe-Gravity [ ] Conductor Pipe-Pumped
[ ] Dump Bailer [X] Other (Explain) **gravity**

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only
[ ] Neat Cement Grout
[ ] Sand-Cement (Concrete) Grout
[ ] Concrete
[ ] Clay-Sand Slurry
[ ] Bentonite-Sand Slurry
[ ] Chipped Bentonite
[ ] Bentonite Pellets
[X] Granular Bentonite
[ ] Bentonite- Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	5.0		
Coarse Sand	5.0	16.0		

(8) Comments:

(9) Name of Person or Firm Doing Sealing Work
Sigma Environmental Services, Inc.

Signature of Person Doing Work: Jodi VanderVelden
Date Signed: 12-18-00

Street or Route: **220 East Ryan Road**
Telephone Number: **(414)-768-7144**

City, State, Zip Code: **Oak Creek, WI 53154**

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	[ ] Complying Work [ ] Noncomplying Work
Follow-up Necessary	

3125

DNR/COUNTY

ATTACHMENT C
SOIL BORING LOGS (SHALLOW WELLS AND PIEZOMETERS)

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**MPS P-7**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Mid-America Drilling Services, Inc. **Dusty**	11 / 16 / 00 MM DD YY	11 / 22 / 00 MM DD YY	**9 1/4" ID HSA/** **4 1/4" ID HSA**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _	PB705	**MPS P-7**	_____ Feet MSL	_____ Feet MSL	8.25 inches

Boring Location
State Plane _____ N, _____ E S
SE 1/4 of NW 1/4 of Section 23, T 8 N, R 21 E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0	**Refer to boring log for monitoring well MPS P-6 (installed 2/13/99 by Natural Resource Technology) for surficial geology.**										

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

Signature Adam Roder

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

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

Boring Number **MPS P-7** Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			13.0											
			14.0											
			15.0											
			16.0											
			17.0											
			18.0											PZ-7 drilled with 9.25" HSAs to depth of 41' bgs.
			19.0											
			20.0											8" ID/ 8.75" OD steel casing set to 41' bgs with 9.25" HSAs
			21.0											
			22.0											
			23.0											Piezometer installed through 4.25" HSAs through casing.
SS-1	7	16 20 17 25	24.0	24.0 to 26.8 Gray coarse to fine SAND, some coarse to fine gravel, trace silt, well graded, dense, saturated	SW			4.0		S				
			25.0											
			26.0											
			27.0	26.8 to 31.8 Gray coarse to fine GRAVEL, little coarse to fine sand, trace silt, well graded, very dense, saturated	GW									
			28.0											
SS-2	6	55 40 50/3"	29.0					4.6		S				Spoon refusal
			30.0											
			31.0											
			32.0	31.8 to 36.7 Gray coarse to fine SAND, some coarse to fine gravel	SM									

State of Wisconsin
Department of Natural Resources
Boring Number **MPS P-7**

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A Rev. 5-92
Use only as an attachment to Form 4400-122.

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			33.0	**some coarse to fine gravel, little silt, well graded, very dense, saturated**										
SS-3	3	80 96/5"	34.0					1.0		S				Spoon refusal
			35.0											
			36.0											
			37.0	**36.7 to 45.0 Gray SILT, some coarse to fine sand, little clay, very dense, moist to wet**	ML									
			38.0											
SS-4	6	50 175/4"	39.0					8.9		M/W				Spoon refusal
			40.0											
			41.0											
			42.0											
			43.0											
SS-5	3	100/3"	44.0	**Trace fine gravel, moist**				7.2		M				Spoon refusal. HSAs grinding at 45' bgs - top of bedrock.
			45.0	**45.0 to 50.0 Gray DOLOMITE bedrock**	DOLO									
			46.0											
			47.0											
			48.0											
SS-6	2	100/2"	49.0					6.0						Spoon refusal. Competent bedrock at 48'.
			50.0											
			51.0	**End of boring at 50 feet - HSA refusal.**										
			52.0											

Village of Whitefish Bay
3125

State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**MW-8**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Mid-America Drilling Services, Inc. **Dusty**	11 / 27 / 00 MM DD YY	11 / 27 / 00 MM DD YY	4 1/4" ID HSA Diedrich D-120

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___	P 8 7 0 2	MW-8	_____ Feet MSL	_____ Feet MSL	8.25 inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of SW 1/4 of Section 23, T 8 N, R 21 E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0 22.0 24.0	**Blind drill MW-8 to depth of 20.5 feet bgs. Refer to boring log for PZ-8 for description of geology.**										

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

Signature Adam Roder

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**PZ-8**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM / DD / YY)	Date Drilling Completed (MM / DD / YY)	Drilling Method
Mid-America Drilling Services, Inc. **Dusty**	11 / 14 / 00	11 / 27 / 00	2 1/4" ID HSA/ 4 1/4" ID HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	PB761	**PZ-8**	_____ Feet MSL	_____ Feet MSL	**8.25** inches

Boring Location
State Plane _____ N, _____ E S
NE 1/4 of **SW** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1.0	**Refer to boring log for Gas Probe #9 for surficial geology.**										
			2.0											
			3.0											
			4.0											
			5.0											
			6.0											
			7.0											
			8.0											
			9.0											
			10.0											
SS-1	12	30 30 43 41	11.0	11.0 to 13.5 **Light brown coarse to fine SAND, little coarse to fine gravel, trace silt, well**	SW			5.7		D				**PZ-8 drilled with 2.25" HSAs to depth of 46 feet.**
			12.0											

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

Signature Adam Roder

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

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

Boring Number **PZ-8** Use only as an attachment to Form 4400-122.

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			13.0	graded, very dense, dry										
SS-2	15	30 40 13 15	14.0	13.5 to 15.0 Gray silty CLAY, trace coarse to fine gravel, trace coarse to fine sand, stiff, medium plasticity, moist	CL			5.5		M				8" ID/ 8.75" OD steel casing set to 45' bgs with 9.25" HSAs
SS-3	4	12 36 36 41	15.0 16.0	15.0 to 17.5 Gray coarse to fine SAND, little to some silty clay, well graded, very dense, moist to wet	SC			5.4		M/W				Piezometer installed through 4.25" HSAs through casing.
SS-4	20	18 12 12 24	17.0	17.5 to 21.8 Gray silty CLAY, little coarse to fine sand, trace coarse to fine gravel, stiff, medium plasticity, moist	CL			4.1		S/M				
SS-5	5	12 18 20 25	18.0 19.0 20.0 21.0	Wet at 19 feet				3.8		W				
			22.0	21.8 to 31.6 Gray coarse to fine SAND, little silty clay, trace coarse to fine gravel, well graded, very dense, saturated	SC									
SS-6	8	25 50/5"	24.0 25.0 26.0 27.0 28.0					4.0		S				Spoon refusal
SS-7	3	35 50/5"	29.0 30.0 31.0	Wet to saturated				4.1		W/S				Spoon refusal
			32.0	31.6 to 36.8 Gray silty CLAY, little coarse to fine sand, hard,	CL									

State of Wisconsin
Department of Natural Resources
Boring Number **PZ-8**

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A Rev. 5-92
Use only as an attachment to Form 4400-122.

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			33.0	**medium plasticity, moist**										
SS-8	6	95/6"	34.0					3.3		M				Spoon refusal
			35.0											
			36.0											
			37.0	**36.8 to 41.7 Gray clayey SILT, trace coarse to fine sand, hard, low plasticity, dry to moist**	CL-ML									
			38.0											
SS-9	4	100/4"	39.0					4.3		D/M				Spoon refusal
			40.0											
			41.0											
			42.0	**41.7 to 54.2 Gray clayey SILT to silty CLAY, trace fine gravel, trace coarse to fine sand, hard, low plasticity, moist**	CL-ML									
			43.0											
SS-10	9	49 50/4"	44.0					3.8		M				Spoon refusal
			45.0											
			46.0											
			47.0											
			48.0											
SS-11	0	100/2"	49.0											Spoon refusal
			50.0											
			51.0											
			52.0											

Village of Whitefish Bay
3125

State of Wisconsin
Department of Natural Resources
Boring Number **PZ-8**

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A Rev. 5-92
Use only as an attachment to Form 4400-122.

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Sample: Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			53.0											
SS-12	13	14 28 38 50/4"	54.0	54.2 to 66.0 **Blue-gray CLAY, trace coarse to fine sand, hard, medium plasticity, moist**	CL			6.1		M				Spoon refusal
			55.0											
			56.0											
			57.0											
			58.0											
SS-13	10	40 55 50/5"	59.0	**Trace fine gravel**				0.1		M				Spoon refusal
			60.0											
			61.0											
			62.0											
			63.0											
SS-14	3	44 38 45 50/5"	64.0					0		M				Spoon refusal
			65.0											
			66.0	66.0 to 68.2 **Gray DOLOMITE bedrock**	DOLO									
			67.0											
SS-15	2	100/2"	68.0					0						Spoon refusal. HSAs grinding at 66' - top of bedrock.
			69.0											
			70.0	**End of boring at 68.2 feet - HSA refusal.**										
			71.0											
			72.0											

Village of Whitefish Bay
3125

State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**MW-9**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM / DD / YY)	Date Drilling Completed (MM / DD / YY)	Drilling Method
Mid-America Drilling Services, Inc. **Dusty**	11 / 21 / 00	11 / 21 / 00	**4 1/4" ID HSA** **Diedrich D-120**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___ ___ ___	P8767	**MW-9**	_____ Feet MSL	_____ Feet MSL	**8.25** inches

Boring Location
State Plane _____ N, _____ E S
NW 1/4 of **SE** 1/4 of Section **23**, T **8** N, R **21** E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			2.0	**Blind drill MW-9 to depth of 20 feet bgs. Refer to boring log for PZ-9 for description of geology.**										
			4.0											
			6.0											
			8.0											
			10.0											
			12.0											
			14.0											
			16.0											
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature Adam Roder

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than $10 nor more than $5,000 for each violation. Fined not less than $10 or more than $100 or imprisoned not less than 30 days or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 4

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**PZ-9**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Mid-America Drilling Services, Inc. **Dusty**	11 / 20 / 00 MM DD YY	11 / 29 / 00 MM DD YY	2 1/4" ID HSA/ 4 1/4" ID HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
___	PB764	**PZ-9**	_____ Feet MSL	_____ Feet MSL	8.25 inches

Boring Location
State Plane _____ N, _____ E S
NW 1/4 of SE 1/4 of Section 23, T 8 N, R 21 E

Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
SS-1	13	4 5 6 7	0.0	**0.0 to 0.5 Dark brown silty CLAY topsoil, moist**	OL CL			0		M				**PZ-9 drilled with 2.25" HSAs to depth of 46' bgs.**
			1.0	**0.5 to 9.2 Yellowish-brown to brown silty CLAY, trace coarse to fine sand, medium stiff, medium plasticity, moist**										
SS-2	14	8 11 12 12	2.0					0.4		M				**8" ID/ 8.75" OD steel casing set to 45' bgs with 9.25" HSAs**
			3.0											
SS-3	11	7 8 20 25	4.0	**Trace fine gravel, trace rust mottling**				0.7		M				**Piezometer installed through 4.25" HSAs through casing.**
			5.0	**HSAs grinding on cobbles/boulder at 6 to 7.5 feet**										
			6.0											
			7.0											
SS-4	4	60/5"	8.0					7.1		M				**Spoon refusal**
			9.0	**9.2 to 11.5 Gray silty CLAY to clayey SILT, trace coarse to fine sand, very stiff to hard, low plasticity, moist**	CL-ML									
SS-5	12	30 40 23 17	10.0					2.5		M				
			11.0											
			12.0	**11.5 to 15.2 Gray SILT, very dense, saturated**	ML									

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

Signature Adam Roder

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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State of Wisconsin
Department of Natural Resources
Boring Number PZ-9

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A Rev. 5-92
Use only as an attachment to Form 4400-122.

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
SS-6	18	29 37 49 58	13.0					1.5		S				
SS-7	20	29 38 42 25	14.0 15.0	2 inch medium to fine sand lens at 15 to 15.2 feet				1.6		S				
				15.2 to 31.8 Gray clayey SILT, little coarse to fine sand, trace fine gravel, hard, low plasticity, moist	CL-ML									
SS-8	15	25 37 41 47	16.0 17.0					2.7		M				
SS-9	12	18 35 50/4"	18.0 19.0	Dry				8.4		D				Spoon refusal
			20.0 21.0 22.0 23.0											
SS-10	19	47 34 33 50/5"	24.0 25.0	Dry to moist				7.4		D/M				Spoon refusal
			26.0 27.0 28.0											
SS-11	6	56/6"	29.0 30.0 31.0					6.3		D/M				Spoon refusal
			32.0	31.8 to 36.7 Gray coarse to fine SAND, little silty clay	SC									

Village of Whitefish Bay
3125

State of Wisconsin
Department of Natural Resources
Boring Number **PZ-9**

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A Rev. 5-92
Use only as an attachment to Form 4400-122.

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			33.0	little silty clay, occassional cobbles, trace coarse to fine gravel, well graded, very dense, wet to saturated										
SS-12	4	95/6"	34.0					2.8		W/S				Spoon refisal. Difficult drilling due to cobbles.
			35.0											
			36.0											
			37.0	36.7 to 41.6 Gray coarse to fine GRAVEL, little coarse to fine sand, little silty clay, well graded, very dense, wet to saturated	GC									
			38.0											
SS-13	3	100/5"	39.0					4.1		W/S				Spoon refusal
			40.0											
			41.0											
			42.0	41.6 to 47.0 Dark gray to gray silty CLAY, trace coarse to fine sand, medium stiff, medium plasticity, moist	CL									
			43.0											
SS-14	12	42 33 35 50/5"	44.0					3.2		M				Spoon refusal
			45.0											
			46.0											
			47.0	47.0 to 59.0 Dark gray clayey SILT, trace medium to fine sand, hard, low plasticity, dry to moist	CL-ML									
			48.0											
SS-15	8	30 50/3"	49.0					4.0		D/M				Spoon refusal
			50.0											
			51.0											
			52.0											

State of Wisconsin
Department of Natural Resources

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

Boring Number **PZ-9** Use only as an attachment to Form 4400-122. Page 4 of 4

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
SS-16	9	50 100/4"	53.0 54.0 55.0 56.0 57.0 58.0					0		D/M				Spoon refusal
SS-17	2	100/2"	59.0 60.0 61.0 62.0 63.0 64.0 65.0 66.0 67.0 68.0 69.0 70.0 71.0 72.0	**59.0 to 61.0 Gray DOLOMITE bedrock** **End of boring at 61 feet - HSA refusal.**	DOLO			0						Spoon refusal. HSA refusal at 61' bgs.

Village of Whitefish Bay

3125

State of Wisconsin
Department of Natural Resources

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

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

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**MW-10**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started (MM / DD / YY)	Date Drilling Completed (MM / DD / YY)	Drilling Method
Mid-America Drilling Services, Inc. **Dusty**	11 / 22 / 00	11 / 22 / 00	4 1/4" ID HSA **Diedrich D-120**

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	PB764	**MW-10**	_____ Feet MSL	_____ Feet MSL	8.25 inches

Boring Location
State Plane _____ N, _____ E S
SW 1/4 of SE 1/4 of Section 23, T 8 N, R 21 E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			2.0	**Blind drill MW-10 to depth of 20 feet bgs. Refer to boring log for PZ-10 for description of geology.**										
			4.0											
			6.0											
			8.0											
			10.0											
			12.0											
			14.0											
			16.0											
			18.0											
			20.0											
			22.0											
			24.0											

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

Signature Adam Roder

Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Village of Whitefish Bay		**PZ-10**

Boring Drilled By (Firm name and name of crew chief)	Date Drilling Started	Date Drilling Completed	Drilling Method
Mid-America Drilling Services, Inc. **Dusty**	11 / 15 / 00 (MM DD YY)	11 / 22 / 00 (MM DD YY)	2 1/4" ID HSA/ 4 1/4" ID HSA

DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	PB763	PZ-10	_____ Feet MSL	_____ Feet MSL	8.25 inches

Boring Location
State Plane _____ N, _____ E S
SW 1/4 of SE 1/4 of Section 23, T 8 N, R 21 E
Lat ° ' "
Long ° ' "

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

County	DNR County Code	Civil Town/City/ or Village
Milwaukee	**41**	**Village of Whitefish Bay**

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
SS-1	18	2 4 6 4	1.0	**0.0 to 0.5** Dark brown silty CLAY topsoil, roots, trace coarse to fine sand, moist	OL / FILL			5.2		M				PZ-10 drilled with 2.25" HSAs to end of boring.
				0.5 to 3.4 Brown silty CLAY, little coarse to fine sand, medium stiff, medium plasticity, moist										
SS-2	8	4 6 5 6	2.0 3.0					5.6		M				8" ID/ 8.75" OD steel casing set to 35' bgs with 9.25" HSAs
				3.4 to 5.6 Gray silty CLAY with rust and black mottling, trace coarse to fine sand, medium stiff, medium plasticity, moist to wet	CL									
SS-3	14	3 3 5 7	4.0 5.0					5.4		M/W				Piezometer installed through 4.25" HSAs through casing.
				5.6 to 10.6 Tannish-gray silty CLAY with trace rust mottling, trace fine gravel, trace coarse to fine sand, medium stiff, low to medium plasticity, moist to wet	CL									
SS-4	18	3 3 4 5	6.0 7.0					5.9		M/W				
SS-5	16	3 5 8 10	8.0 9.0					3.6		W				
SS-6	24	6 9 8 9	10.0 11.0					4.8		W				
				10.6 to 13.0 Gray silty CLAY, trace coarse to fine gravel, trace coarse to fine sand, stiff, medium plasticity, wet	CL									
			12.0											

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

Signature Adam Roder

Firm **Sigma Environmental Services, Inc.**
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State of Wisconsin
Department of Natural Resources
Boring Number **PZ-10**

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A Rev. 5-92
Use only as an attachment to Form 4400-122.

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
SS-7	0	8 9 9 9	13.0											Pushed piece of gravel
				13.0 to 17.5 Gray clayey SILT, little coarse to fine sand, trace fine gravel, medium stiff, low plasticity, saturated	CL-ML									
SS-8	24	4 6 7 7	14.0 15.0					4.9		S				
SS-9	12	9 16 14 11	16.0 17.0					4.0		S				
				17.5 to 26.8 Gray coarse to fine GRAVEL, little coarse to fine sand, trace silt, well graded, dense to medium dense, saturated	GW									
SS-10	8	32 35 15 26	18.0 19.0 20.0 21.0 22.0 23.0 24.0					5.1		S				
SS-11	9	16 14 12 15	25.0 26.0					3.5		S				
				26.8 to 31.9 Gray coarse to fine SAND, little coarse to fine gravel, trace silt, well graded, dense, saturated	SW									
SS-12	10	6 17 16 23	27.0 28.0 29.0 30.0 31.0					4.7		S				
			32.0	31.9 to 39.0 Gray clayey SILT, trace	CL-ML									

Village of Whitefish Bay
3125

State of Wisconsin
Department of Natural Resources
Boring Number **PZ-10**

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A Rev. 5-92
Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geological Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			33.0	**coarse to fine sand, hard, low plasticity, dry to moist**										
SS-13	10	42 50/5"	34.0					3.2		D/M				**Spoon refusal**
			35.0											
			36.0											
			37.0											
SS-14	0	50/3"	38.0											**Spoon refusal. HSAs grinding on bedrock at 39'**
			39.0	**39.0 to 44.3 Gray DOLOMITE bedrock**	DOLO									
			40.0											
			41.0											
			42.0											
			43.0											
SS-15	3	100/3"	44.0					0.4						
			45.0											
			46.0	**End of boring at 44.3 feet**										
			47.0											
			48.0											
			49.0											
			50.0											
			51.0											
			52.0											

Village of Whitefish Bay
3125

ATTACHMENT D
SHALLOW WELL AND PIEZOMETER CONSTRUCTION FORMS

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name **Village of Whitefish Bay**	Local Grid Location of Well _____ ft. ☐ N. _____ ft. ☐ E. ☐ S. ☐ W.	Well Name **MPS P-7**
Facility License, Permit or Monitoring Number _ _ _ _ _ _ _ _	Grid Origin Location Lat. _ _ _ _ _ _ Long. _ _ _ _ _ _ or	Wis. Unique Well Number DNR Well Number P B765 _ _ _
Type of Well Water Table Observation Well ☐ 11 Piezometer ☒ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed 1 1 / 2 2 / 0 0 m m d d y y
Distance Well Is From Waste/Source Boundary ft.	Section Location of Waste/Source ☒ E. SE 1/4 of NW 1/4 of Sec. 23, T. 8 N, R. 21 ☐ W.	Well Installed By: (Person's Name and Firm) **Mid-America Drilling Services, Inc.** **Dusty**
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No	Location of Well Relative to Waste/Source u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	

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

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

13. Sieve analysis attached? ☐ Yes ☒ No

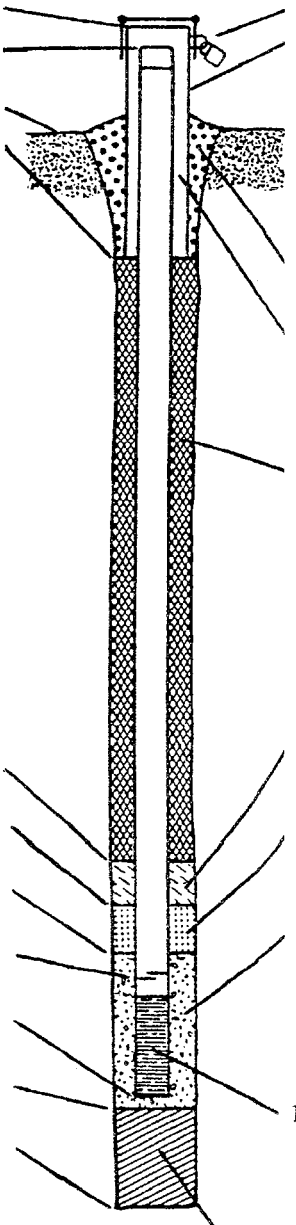
14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐ ▒▒
_____

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

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis):
_____

E. Bentonite seal, top _ _ _ _ ft. MSL or **37.0** ft.
F. Fine sand, top _ _ _ _ ft. MSL or _ _ _ _ ft.
G. Filter pack, top _ _ _ _ ft. MSL or **43.2** ft.
H. Screen joint, top _ _ _ _ ft. MSL or **45.0** ft.
I. Well bottom _ _ _ _ ft. MSL or **50.0** ft.
J. Filter pack, bottom _ _ _ _ ft. MSL or **50.0** ft.
K. Borehole, bottom _ _ _ _ ft. MSL or **50.0** ft.
L. Borehole, diameter **8.25** in.
M. O.D. well casing **2.00** in.
N. I.D. well casing **1.90** in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: **9.00** in.
b. Length: **0.7** ft.
c. Material: Steel ☒ 04
Flushmount Other ☐ ▒▒
d. Additional protection? ☒ Yes ☐ No
If yes, describe: **Compression cap**
3. Surface seal: Bentonite ☐ 30
Concrete ☒ 01
_____ Other ☐ ▒▒
4. Material between well casing and protective pipe:
Bentonite ☐ 30
Annular space seal ☐ ▒▒
Sand Other ☒ ▒▒
5. Annular space seal: a. Granular Bentonite ☐ 33
b. _____ Lbs/gal mud weight..Bentonite-sand slurry ☐ 35
c. **1** Lbs/gal mud weight ..... Bentonite slurry ☒ 31
d. _____ % Bentonite ..... Bentonite-cement grout ☐ 50
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☒ 02
Gravity ☐ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
c. _____ Other ☐ ▒▒
7. Fine sand material: Manufacturer, product name & mesh size
a. _____ ▒▒
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. **R.W. Sidley, Inc.; #5** ▒▒
b. Volume added **200 lb** ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
outer 8" steel casing to 41' bgs Other ☐ ▒▒
10. Screen material: **PVC** ▒▒
a. Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
_____ Other ☐ ▒▒
b. Manufacturer _____
c. Slot size: **0.010** in.
d. Slotted length: **5.0** ft.
11. Backfill material (below filter pack): None ☒ 14
_____ Other ☐ ▒▒

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

Signature *Adam Roder* Firm **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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

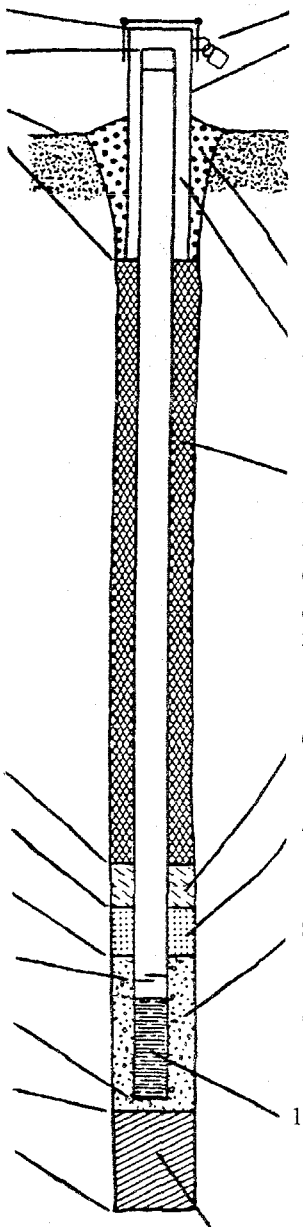
3125

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name **Village of Whitefish Bay**	Local Grid Location of Well _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name **MW-8**
Facility License, Permit or Monitoring Number _____	Grid Origin Location Lat. ___ ___ ___ Long. ___ ___ ___ or	Wis. Unique Well Number DNR Well Number PB762 _____
Type of Well Water Table Observation Well ☒ 11 Piezometer ☐ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed 1 1 / 2 7 / 0 0 m m d d y y
Distance Well Is From Waste/Source Boundary _____ ft.	Section Location of Waste/Source **NE** 1/4 of **SW** 1/4 of Sec. **23**, T. **8** N, R. **21** ☒ E. ☐ W.	Well Installed By: (Person's Name and Firm) **Mid-America Drilling Services, Inc.**
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No	Location of Well Relative to Waste/Source u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	**Dusty**



A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

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

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

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐ _____

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

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis):
_____

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

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

G. Filter pack, top _____ ft. MSL or **4.0** ft.

H. Screen joint, top _____ ft. MSL or **5.5** ft.

I. Well bottom _____ ft. MSL or **20.5** ft.

J. Filter pack, bottom _____ ft. MSL or **20.5** ft.

K. Borehole, bottom _____ ft. MSL or **20.5** ft.

L. Borehole, diameter **8.25** in.

M. O.D. well casing **2.00** in.

N. I.D. well casing **1.90** in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: **9.00** in.
b. Length: **0.7** ft.
c. Material: Steel ☒ 04
Flushmount Other ☐
d. Additional protection? ☒ Yes ☐ No
If yes, describe: **Compression cap**

3. Surface seal: Bentonite ☐ 30
Concrete ☒ 01
_____ Other ☐

4. Material between well casing and protective pipe:
Bentonite ☐ 30
Annular space seal ☐
Sand Other ☒

5. Annular space seal: a. Granular Bentonite ☐ 33
b. ____ Lbs/gal mud weight..Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight ..... Bentonite slurry ☐ 31
d. ____ % Bentonite ..... Bentonite-cement grout ☐ 50
e. ____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☐ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
c. _____ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **R.W. Sidley, Inc.; #5**
b. Volume added **450 lb** ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
_____ Other ☐

10. Screen material: **PVC**
a. Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
_____ Other ☐
b. Manufacturer _____
c. Slot size: **0.010** in.
d. Slotted length: **15.0** ft.

11. Backfill material (below filter pack): None ☒ 14
_____ Other ☐

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

Signature	Firm
	Sigma Environmental Services, Inc. 220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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

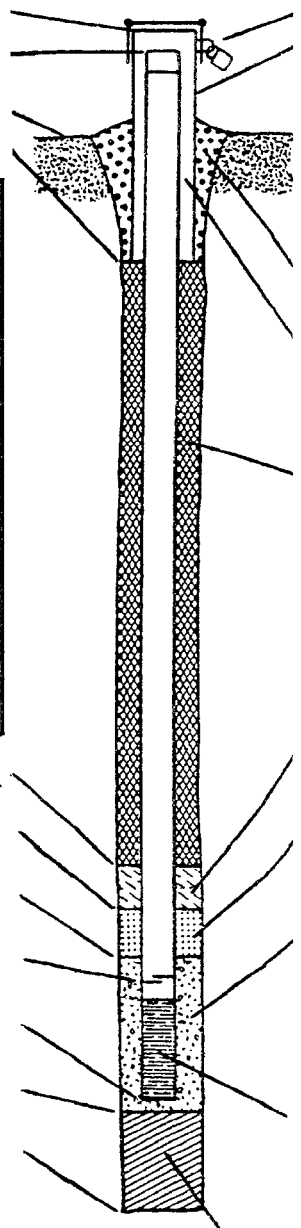
3125

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: **Village of Whitefish Bay**	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: **PZ-8**
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ____ ____ ____ Long. ____ ____ ____ or	Wis. Unique Well Number: PB761 DNR Well Number: _____
Type of Well: Water Table Observation Well ☐ 11; Piezometer ☒ 12	St. Plane ____ ft. N, ____ ft. E.	Date Well Installed: 1 1 / 2 7 / 0 0 (m m d d y y)
Distance Well Is From Waste/Source Boundary: ____ ft.	Section Location of Waste/Source: NE 1/4 of SW 1/4 of Sec. 23, T. 8 N, R. 21 ☒ E. ☐ W.	Well Installed By: (Person's Name and Firm): **Mid-America Drilling Services, Inc.**
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient; d ☒ Downgradient n ☐ Not Known	**Dusty**



A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

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

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

13. Sieve analysis attached? ☐ Yes ☒ No

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

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

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis):

E. Bentonite seal, top _____ ft. MSL or 56.0 ft.

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

G. Filter pack, top _____ ft. MSL or 61.5 ft.

H. Screen joint, top _____ ft. MSL or 63.0 ft.

I. Well bottom _____ ft. MSL or 68.0 ft.

J. Filter pack, bottom _____ ft. MSL or 68.0 ft.

K. Borehole, bottom _____ ft. MSL or 68.0 ft.

L. Borehole, diameter 8.25 in.

M. O.D. well casing 2.00 in.

N. I.D. well casing 1.90 in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 9.00 in.
b. Length: 0.7 ft.
c. Material: Steel ☒ 04; Other ☐ ____
Flushmount
d. Additional protection? ☒ Yes ☐ No
If yes, describe: **Compression cap**

3. Surface seal: Bentonite ☐ 30; Concrete ☒ 01; Other ☐ ____

4. Material between well casing and protective pipe: Bentonite ☐ 30; Annular space seal ☐ ____; Other ☒ ____
Sand

5. Annular space seal: a. Granular Bentonite ☐ 33
b. ____ Lbs/gal mud weight..Bentonite-sand slurry ☐ 35
c. 1 Lbs/gal mud weight ..... Bentonite slurry ☐ 31
d. ____ % Bentonite ..... Bentonite-cement grout ☐ 50
e. ____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☒ 02; Gravity ☐ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
c. _____ Other ☐ ____

7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **R.W. Sidley, Inc.; #5**
b. Volume added **200 lb** ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24
outer 8" steel casing to 45' bgs Other ☐ ____

10. Screen material: **PVC**
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ ____
b. Manufacturer _____
c. Slot size: 0.010 in.
d. Slotted length: 5.0 ft.

11. Backfill material (below filter pack): None ☒ 14; Other ☐ ____

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

Signature: Adam Roder

Firm: **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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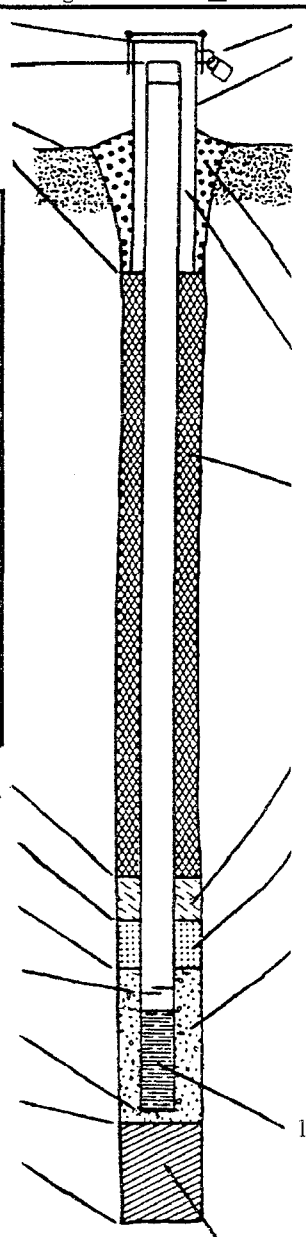
3125

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name **Village of Whitefish Bay**	Local Grid Location of Well _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name **MW-9**
Facility License, Permit or Monitoring Number _____	Grid Origin Location Lat. ____ Long. ____ or	Wis. Unique Well Number DNR Well Number PB767 ____
Type of Well Water Table Observation Well ☒ 11 Piezometer ☐ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed 1 1 / 2 1 / 0 0 m m d d y y
Distance Well Is From Waste/Source Boundary ft.	Section Location of Waste/Source ☒ E. NW 1/4 of SE 1/4 of Sec. 23, T. 8 N, R. 21 ☐ W.	Well Installed By: (Person's Name and Firm) **Dusty** **Mid-America Drilling Services, Inc.**
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No	Location of Well Relative to Waste/Source u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	



A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or __1.0_ ft.

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

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐
_____

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

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis):
_____

E. Bentonite seal, top _____ ft. MSL or __1.0_ ft.

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

G. Filter pack, top _____ ft. MSL or __3.9_ ft.

H. Screen joint, top _____ ft. MSL or __5.0_ ft.

I. Well bottom _____ ft. MSL or _20.0_ ft.

J. Filter pack, bottom _____ ft. MSL or _20.0_ ft.

K. Borehole, bottom _____ ft. MSL or _20.0_ ft.

L. Borehole, diameter _8.25_ in.

M. O.D. well casing _2.00_ in.

N. I.D. well casing _1.90_ in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: _9.00 in.
b. Length: _0.7_ ft.
c. Material: Steel ☒ 04
Flushmount Other ☐
d. Additional protection? ☒ Yes ☐ No
If yes, describe: **Compression cap**

3. Surface seal: Bentonite ☐ 30
Concrete ☒ 01
_____ Other ☐

4. Material between well casing and protective pipe:
Bentonite ☐ 30
Annular space seal ☐
Sand Other ☒

5. Annular space seal: a. Granular Bentonite ☐ 33
b. _____ Lbs/gal mud weight..Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight ..... Bentonite slurry ☐ 31
d. _____ % Bentonite ..... Bentonite-cement grout ☐ 50
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☐ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
c. _____ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **R.W. Sidley, Inc.; #5**
b. Volume added **425 lb** ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
_____ Other ☐

10. Screen material: **PVC**
a. Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
_____ Other ☐
b. Manufacturer _____
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.

11. Backfill material (below filter pack): None ☒ 14
_____ Other ☐

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

Signature Adam Roder	Firm **Sigma Environmental Services, Inc.** 220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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3125

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: **Village of Whitefish Bay**	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: **PZ-9**
Facility License, Permit or Monitoring Number: _ _ _ _ _ _ _	Grid Origin Location: Lat. _ _ _ _ _ Long. _ _ _ _ _ or	Wis. Unique Well Number: PB766 DNR Well Number: _ _ _ _
Type of Well: Water Table Observation Well ☐ 11; Piezometer ☒ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed: 1 1 / 2 8 / 0 0 (m m d d y y)
Distance Well Is From Waste/Source Boundary: ft.	Section Location of Waste/Source: ☒E. NW 1/4 of SE 1/4 of Sec. 23, T. 8 N, R. 21 ☐W.	Well Installed By: (Person's Name and Firm) **Mid-America Drilling Services, Inc.**
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient; d ☒ Downgradient n ☐ Not Known	**Dusty**

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

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

13. Sieve analysis attached? ☐ Yes ☒ No

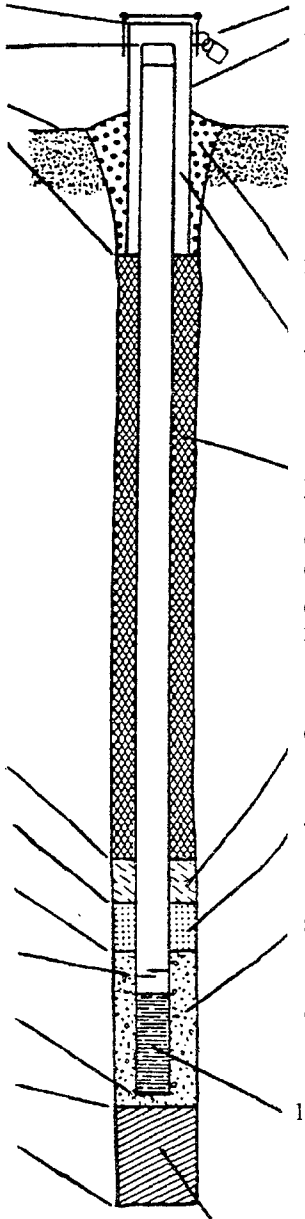
14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; Other ☐ _____

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

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis):
_____

E. Bentonite seal, top _ _ _ _ ft. MSL or 49.5 ft.
F. Fine sand, top _ _ _ _ ft. MSL or _ _ _ _ ft.
G. Filter pack, top _ _ _ _ ft. MSL or 54.5 ft.
H. Screen joint, top _ _ _ _ ft. MSL or 56.0 ft.
I. Well bottom _ _ _ _ ft. MSL or 61.0 ft.
J. Filter pack, bottom _ _ _ _ ft. MSL or 61.0 ft.
K. Borehole, bottom _ _ _ _ ft. MSL or 61.0 ft.
L. Borehole, diameter 8.25 in.
M. O.D. well casing 2.00 in.
N. I.D. well casing 1.90 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 9.00 in.
b. Length: 0.7 ft.
c. Material: Steel ☒ 04; Other ☐
Flushmount
d. Additional protection? ☒ Yes ☐ No
If yes, describe: **Compression cap**
3. Surface seal: Bentonite ☐ 30; Concrete ☒ 01; Other ☐
_____
4. Material between well casing and protective pipe: Bentonite ☐ 30; Annular space seal ☐; Other ☒
Sand
5. Annular space seal: a. Granular Bentonite ☐ 33
b. _____ Lbs/gal mud weight..Bentonite-sand slurry ☐ 35
c. 1 Lbs/gal mud weight ..... Bentonite slurry ☒ 31
d. _____ % Bentonite ..... Bentonite-cement grout ☐ 50
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☒ 02; Gravity ☐ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
c. _____ Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. **R.W. Sidley, Inc.; #5**
b. Volume added **175 lb** ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24
outer 8" steel casing to 45' bgs Other ☐
10. Screen material: **PVC**
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐
_____
b. Manufacturer _____
c. Slot size: 0.010 in.
d. Slotted length: 5.0 ft.
11. Backfill material (below filter pack): None ☒ 14; Other ☐
_____

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

Signature: Adam Roder
Firm: **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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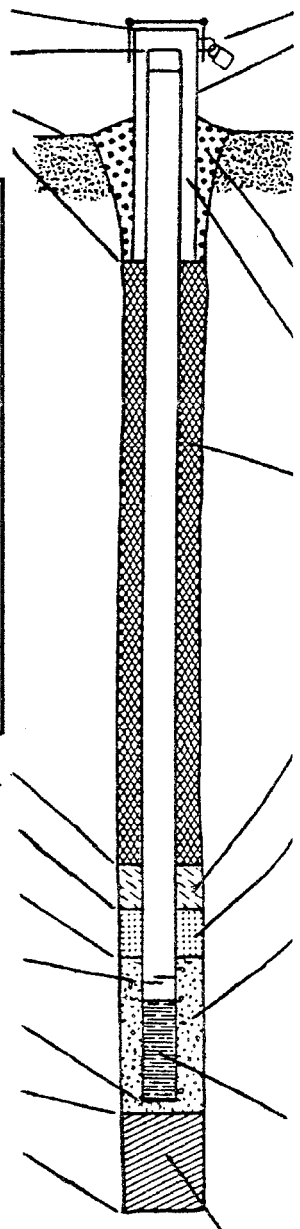
3125

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: **Village of Whitefish Bay**	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: **MW-10**
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. ____ Long. ____ or	Wis. Unique Well Number: PB764 DNR Well Number: ____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	St. Plane ____ ft. N, ____ ft. E.	Date Well Installed: 11/22/00 (m m d d y y)
Distance Well Is From Waste/Source Boundary: ____ ft.	Section Location of Waste/Source: SW 1/4 of SE 1/4 of Sec. 23, T. 8 N, R. 21 ☒ E. ☐ W.	Well Installed By: (Person's Name and Firm) **Mid-America Drilling Services, Inc.**
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient; d ☒ Downgradient n ☐ Not Known	**Dusty**



A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

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

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

13. Sieve analysis attached? ☐ Yes ☒ No

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

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

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis):
_____

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

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

G. Filter pack, top _____ ft. MSL or **3.7** ft.

H. Screen joint, top _____ ft. MSL or **5.0** ft.

I. Well bottom _____ ft. MSL or **20.0** ft.

J. Filter pack, bottom _____ ft. MSL or **20.0** ft.

K. Borehole, bottom _____ ft. MSL or **20.0** ft.

L. Borehole, diameter **8.25** in.

M. O.D. well casing **2.00** in.

N. I.D. well casing **1.90** in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: **9.00** in.
b. Length: **7.0** ft.
c. Material: Steel ☒ 04; **Flushmount** Other ☐ ___
d. Additional protection? ☒ Yes ☐ No
If yes, describe: **Compression cap**

3. Surface seal: Bentonite ☐ 30; Concrete ☒ 01; _____ Other ☐ ___

4. Material between well casing and protective pipe: Bentonite ☐ 30; Annular space seal ☐ ___; **Sand** Other ☒ ___

5. Annular space seal: a. Granular Bentonite ☐ 33
b. _____ Lbs/gal mud weight..Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight ..... Bentonite slurry ☐ 31
d. _____ % Bentonite ..... Bentonite-cement grout ☐ 50
e. _____ Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☐ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
c. _____ Other ☐ ___

7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **R.W. Sidley, Inc.; #5**
b. Volume added **525 lb** ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; _____ Other ☐ ___

10. Screen material: **PVC**
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; _____ Other ☐ ___
b. Manufacturer _____
c. Slot size: **0.010** in.
d. Slotted length: **15.0** ft.

11. Backfill material (below filter pack): None ☒ 14; _____ Other ☐ ___

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

Signature: Adam Roder

Firm: **Sigma Environmental Services, Inc.**
220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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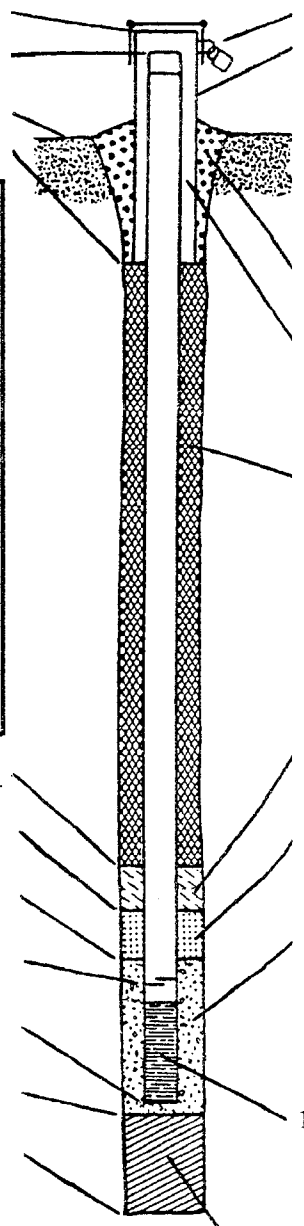
3125

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name **Village of Whitefish Bay**	Local Grid Location of Well _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name **PZ-10**
Facility License, Permit or Monitoring Number _____	Grid Origin Location Lat. _____ Long. _____ or	Wis. Unique Well Number DNR Well Number PB763 _____
Type of Well Water Table Observation Well ☐ 11 Piezometer ☒ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed 1 1 / 2 2 / 0 0 m m d d y y
Distance Well Is From Waste/Source Boundary _____ ft.	Section Location of Waste/Source ☒ E. SW 1/4 of SE 1/4 of Sec. 23, T. 8 N, R. 21 ☐ W.	Well Installed By: (Person's Name and Firm) **Mid-America Drilling Services, Inc.** **Dusty**
Is Well A Point of Enforcement Std. Application? ☐ Yes ☐ No	Location of Well Relative to Waste/Source u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	



A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

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

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

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐
_____

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

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis):
_____

E. Bentonite seal, top _____ ft. MSL or 28.7 ft.

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

G. Filter pack, top _____ ft. MSL or 36.3 ft.

H. Screen joint, top _____ ft. MSL or 38.0 ft.

I. Well bottom _____ ft. MSL or 43.0 ft.

J. Filter pack, bottom _____ ft. MSL or 44.3 ft.

K. Borehole, bottom _____ ft. MSL or 44.3 ft.

L. Borehole, diameter 8.25 in.

M. O.D. well casing 2.00 in.

N. I.D. well casing 1.90 in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 9.00 in.
b. Length: 0.7 ft.
c. Material: Steel ☒ 04
Flushmount Other ☐
d. Additional protection? ☒ Yes ☐ No
If yes, describe: **Compression Cap**

3. Surface seal: Bentonite ☐ 30
Concrete ☒ 01
_____ Other ☐

4. Material between well casing and protective pipe:
Bentonite ☐ 30
Annular space seal ☐
Sand Other ☒

5. Annular space seal: a. Granular Bentonite ☐ 33
b. ____ Lbs/gal mud weight..Bentonite-sand slurry ☐ 35
c. 1 Lbs/gal mud weight ..... Bentonite slurry ☒ 31
d. ____ % Bentonite ..... Bentonite-cement grout ☐ 50
e. 75 gal Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☒ 02
Gravity ☐ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32
c. _____ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **R.W. Sidley, Inc.; #5**
b. Volume added **150 lb** ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
outer 8" steel casing to 35' bgs Other ☐

10. Screen material: **PVC**
a. Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
_____ Other ☐
b. Manufacturer _____
c. Slot size: 0.010 in.
d. Slotted length: 5.0 ft.

11. Backfill material (below filter pack): None ☐ 14
Filter pack Other ☒

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

Signature Adam Roder	Firm **Sigma Environmental Services, Inc.** 220 E. Ryan Road, Oak Creek, WI 53154 (414) 768-7144

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

3125

ATTACHMENT E
VAPOR STUDY LABORATORY ANALYTICAL REPORT

@ AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0010334

Work Order Summary

CLIENT:	Mr. Mafizul Islam Sigma Environmental 220 E. Ryan Road Oak Creek, WI 53154	**BILL TO:**	Mr. Mafizul Islam Sigma Environmental 220 E. Ryan Road Oak Creek, WI 53154
PHONE:	414-768-7144	**P.O. #**	
FAX:	414-768-7158	**PROJECT #**	3125 Whitefish Bay LF
DATE RECEIVED:	10/19/00		
DATE COMPLETED:	11/2/00		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	GP-8	TO-14-S	6.0 "Hg
02A	GP-7	TO-14-S	7.0 "Hg
03A	GP-4	TO-14-S	7.5 "Hg
04A	GP-3	TO-14-S	7.0 "Hg
05A	GP-12	TO-14-S	8.0 "Hg
06A	GP-10	TO-14-S	7.5 "Hg
07A	GP-9	TO-14-S	7.0 "Hg
08A	GP-6	TO-14-S	6.0 "Hg
09A	GP-11	TO-14-S	7.5 "Hg
10A	GP-2	TO-14-S	8.0 "Hg
11A	GP-5	TO-14-S	7.5 "Hg
12A	Lab Blank	TO-14-S	NA
12B	Lab Blank	TO-14-S	NA
12C	Lab Blank	TO-14-S	NA

CERTIFIED BY: _____ Laboratory Director

DATE: 11/2/00

Certfication numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
TO-14 Low Level
Sigma Environmental
Workorder# 0010334

Eleven 6 Liter Summa Canister samples were received on October 19, 2000. The laboratory performed analysis via EPA Method TO-14 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

During the five point calibration, two low-level standards are used. The low-level standard for TO-14 compounds is spiked at 0.1 ppbv and represents the reporting limit for these compounds. The low-level standard for the non-TO-14 compounds is spiked at 0.5 ppbv and represents the reporting limit for these compounds. The TO-14 compounds are present in both standards but are excluded from reporting in the 0.5 ppbv standard since a lower level is already included in the curve.

Method modifications taken to run these samples include:

Requirement	*TO-14 Low Level*	*ATL Modifications*
Sampling/concentrator system	Nafion Drier	Multisorbent concentrator
Canister cleaning - clean air supply	Cryogenic Trap	Use of Humidified UHP Air
Canister certification	Pressurize w/humidified zero air	Pressurize w/dry UHP nitrogen
Sample load volume	400 mL	Up to 0.5 liter
Blank	Humid air blank	Humid air blank for standard analysis. Dry air blank for low level analysis.
Blank acceptance criteria	< DL	< DL
BFB absolute abundance criteria	Within 10% of that from previous day.	CCV surrogate recoveries demonstrate stability from one day to the next
BFB acceptance criteria	SW-846 Protocol	SW-846 protocol
Concentration of IS spike	Not specified	10 ppbv
Dilutions for initial calibration	Dynamic dilutions or static using canisters.	Syringe dilutions
Flow rates/operating parameters	Not specified	Optimized. See procedures section.
ICAL RRF %RSD acceptance criteria	Not specified	30% or less for standard compounds, 40% or less for non-standard and polar compounds
IS recoveries	Within 40% of mean over ICAL for blanks. and w/in 40% of daily CCV for samples.	Within 40% of CCV recoveries for blank and samples.
IS RTs	Within .33 min from most recent calibration (either ICAL or daily)	Within 0.5 min of RT in daily CCV
Daily CCV	70 - 130%	Standard compounds: 70 - 130% for at least 90%; Non-standard and polar compounds: 60 - 140% for at least 80%
RF for quantitation	From daily CCV	From ICAL

Requirement	*TO-14 Low Level*	*ATL Modifications*
Canister leak check	24 hour, positive pressure	20 min, vacuum check
MSD scan range	35 - 300 amu	35 - 350 amu

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The recovery of surrogate Bromofluorobenzene in sample GP-5 was outside control limits due to high level hydrocarbon matrix interference. The un-subtracted raw spectra is provided to confirm the presence of hydrocarbon interference. Data is reported as qualified.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

N - The identification is based on presumptive evidence.

AIR TOXICS LTD.

SAMPLE NAME : GP-8

ID#: 0010334-01A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	**t102208**	**Date of Collection:**	**10/17/00**
Dil. Factor:	**16.8**	**Date of Analysis:**	**10/22/00**

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	1.7	8.4	160	820
Freon 114	1.7	12	Not Detected	Not Detected
Chloromethane	1.7	3.5	Not Detected	Not Detected
Vinyl Chloride	1.7	4.4	Not Detected	Not Detected
Bromomethane	1.7	6.6	Not Detected	Not Detected
Chloroethane	1.7	4.5	Not Detected	Not Detected
Freon 11	1.7	9.6	500	2900
1,1-Dichloroethene	1.7	6.8	Not Detected	Not Detected
Freon 113	1.7	13	Not Detected	Not Detected
Methylene Chloride	1.7	5.9	Not Detected	Not Detected
1,1-Dichloroethane	1.7	6.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	1.7	6.8	Not Detected	Not Detected
Chloroform	1.7	8.3	Not Detected	Not Detected
1,1,1-Trichloroethane	1.7	9.3	Not Detected	Not Detected
Carbon Tetrachloride	1.7	11	3.1	20
Benzene	1.7	5.4	12	39
1,2-Dichloroethane	1.7	6.9	Not Detected	Not Detected
Trichloroethene	1.7	9.2	Not Detected	Not Detected
1,2-Dichloropropane	1.7	7.9	Not Detected	Not Detected
cis-1,3-Dichloropropene	1.7	7.8	Not Detected	Not Detected
Toluene	1.7	6.4	40	150
trans-1,3-Dichloropropene	1.7	7.8	Not Detected	Not Detected
1,1,2-Trichloroethane	1.7	9.3	Not Detected	Not Detected
Tetrachloroethene	1.7	12	Not Detected	Not Detected
Ethylene Dibromide	1.7	13	Not Detected	Not Detected
Chlorobenzene	1.7	7.9	Not Detected	Not Detected
Ethyl Benzene	1.7	7.4	5.7	25
m,p-Xylene	1.7	7.4	18	81
o-Xylene	1.7	7.4	6.7	30
Styrene	1.7	7.3	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	1.7	12	Not Detected	Not Detected
1,3,5-Trimethylbenzene	1.7	8.4	3.7	18
1,2,4-Trimethylbenzene	1.7	8.4	15	75
1,3-Dichlorobenzene	1.7	10	Not Detected	Not Detected
1,4-Dichlorobenzene	1.7	10	Not Detected	Not Detected
Chlorotoluene	1.7	8.8	Not Detected	Not Detected
1,2-Dichlorobenzene	1.7	10	Not Detected	Not Detected
1,2,4-Trichlorobenzene	1.7	13	Not Detected	Not Detected
Hexachlorobutadiene	1.7	18	Not Detected	Not Detected
Propylene	8.4	15	Not Detected	Not Detected
1,3-Butadiene	8.4	19	Not Detected	Not Detected
Acetone	8.4	20	31	75

AIR TOXICS LTD.

SAMPLE NAME : GP-8

ID#: 0010334-01A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102208	Date of Collection:	10/17/00
Dil. Factor:	16.8	Date of Analysis:	10/22/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	8.4	26	Not Detected	Not Detected
2-Propanol	8.4	21	Not Detected	Not Detected
trans-1,2-Dichloroethene	8.4	34	Not Detected	Not Detected
Vinyl Acetate	8.4	30	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	8.4	25	9.5	28
Hexane	8.4	30	48	170
Tetrahydrofuran	8.4	25	Not Detected	Not Detected
Cyclohexane	8.4	29	Not Detected	Not Detected
1,4-Dioxane	8.4	31	Not Detected	Not Detected
Bromodichloromethane	8.4	57	Not Detected	Not Detected
4-Methyl-2-pentanone	8.4	35	Not Detected	Not Detected
2-Hexanone	8.4	35	Not Detected	Not Detected
Dibromochloromethane	8.4	73	Not Detected	Not Detected
Bromoform	8.4	88	Not Detected	Not Detected
4-Ethyltoluene	8.4	42	9.9	49
Ethanol	8.4	16	50	95
Methyl tert-Butyl Ether	8.4	31	Not Detected	Not Detected
Heptane	8.4	35	13	56

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	114	70-130
4-Bromofluorobenzene	88	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-7

ID#: 0010334-02A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102115	Date of Collection:	10/17/00
Dil. Factor:	2.92	Date of Analysis:	10/21/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.29	1.5	20	100
Freon 114	0.29	2.1	Not Detected	Not Detected
Chloromethane	0.29	0.61	Not Detected	Not Detected
Vinyl Chloride	0.29	0.76	Not Detected	Not Detected
Bromomethane	0.29	1.2	Not Detected	Not Detected
Chloroethane	0.29	0.78	Not Detected	Not Detected
Freon 11	0.29	1.7	50	290
1,1-Dichloroethene	0.29	1.2	Not Detected	Not Detected
Freon 113	0.29	2.3	Not Detected	Not Detected
Methylene Chloride	0.29	1.0	Not Detected	Not Detected
1,1-Dichloroethane	0.29	1.2	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.29	1.2	Not Detected	Not Detected
Chloroform	0.29	1.4	Not Detected	Not Detected
1,1,1-Trichloroethane	0.29	1.6	Not Detected	Not Detected
Carbon Tetrachloride	0.29	1.9	2.0	13
Benzene	0.29	0.95	11	37
1,2-Dichloroethane	0.29	1.2	Not Detected	Not Detected
Trichloroethene	0.29	1.6	Not Detected	Not Detected
1,2-Dichloropropane	0.29	1.4	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.29	1.3	Not Detected	Not Detected
Toluene	0.29	1.1	31	120
trans-1,3-Dichloropropene	0.29	1.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.29	1.6	Not Detected	Not Detected
Tetrachloroethene	0.29	2.0	0.86	5.9
Ethylene Dibromide	0.29	2.3	Not Detected	Not Detected
Chlorobenzene	0.29	1.4	Not Detected	Not Detected
Ethyl Benzene	0.29	1.3	6.5	29
m,p-Xylene	0.29	1.3	18	79
o-Xylene	0.29	1.3	7.0	31
Styrene	0.29	1.3	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.29	2.0	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.29	1.4	4.2	21
1,2,4-Trimethylbenzene	0.29	1.4	16	82
1,3-Dichlorobenzene	0.29	1.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.29	1.8	Not Detected	Not Detected
Chlorotoluene	0.29	1.5	Not Detected	Not Detected
1,2-Dichlorobenzene	0.29	1.8	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.29	2.2	Not Detected	Not Detected
Hexachlorobutadiene	0.29	3.2	Not Detected	Not Detected
Propylene	1.5	2.6	Not Detected	Not Detected
1,3-Butadiene	1.5	3.3	Not Detected	Not Detected
Acetone	1.5	3.5	23	55

AIR TOXICS LTD.

SAMPLE NAME : GP-7

ID#: 0010334-02A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102115	Date of Collection:	10/17/00
Dil. Factor:	2.92	Date of Analysis:	10/21/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	1.5	4.6	Not Detected	Not Detected
2-Propanol	1.5	3.6	Not Detected	Not Detected
trans-1,2-Dichloroethene	1.5	5.9	Not Detected	Not Detected
Vinyl Acetate	1.5	5.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.5	4.4	14	42
Hexane	1.5	5.2	73	260
Tetrahydrofuran	1.5	4.4	Not Detected	Not Detected
Cyclohexane	1.5	5.1	18	63
1,4-Dioxane	1.5	5.3	Not Detected	Not Detected
Bromodichloromethane	1.5	9.9	Not Detected	Not Detected
4-Methyl-2-pentanone	1.5	6.1	Not Detected	Not Detected
2-Hexanone	1.5	6.1	Not Detected	Not Detected
Dibromochloromethane	1.5	13	Not Detected	Not Detected
Bromoform	1.5	15	Not Detected	Not Detected
4-Ethyltoluene	1.5	7.3	11	54
Ethanol	1.5	2.8	51	98
Methyl tert-Butyl Ether	1.5	5.4	Not Detected	Not Detected
Heptane	1.5	6.1	34	140

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	114	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-4

ID#: 0010334-03A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102906	Date of Collection:	10/17/00
Dil. Factor:	3.58	Date of Analysis:	10/29/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.36	1.8	7.1	36
Freon 114	0.36	2.5	Not Detected	Not Detected
Chloromethane	0.36	0.75	1.1	2.3
Vinyl Chloride	0.36	0.93	Not Detected	Not Detected
Bromomethane	0.36	1.4	Not Detected	Not Detected
Chloroethane	0.36	0.96	Not Detected	Not Detected
Freon 11	0.36	2.0	34	190
1,1-Dichloroethene	0.36	1.4	Not Detected	Not Detected
Freon 113	0.36	2.8	Not Detected	Not Detected
Methylene Chloride	0.36	1.3	0.66	2.3
1,1-Dichloroethane	0.36	1.5	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.36	1.4	Not Detected	Not Detected
Chloroform	0.36	1.8	Not Detected	Not Detected
1,1,1-Trichloroethane	0.36	2.0	2.6	14
Carbon Tetrachloride	0.36	2.3	2.4	15
Benzene	0.36	1.2	4.8	15
1,2-Dichloroethane	0.36	1.5	Not Detected	Not Detected
Trichloroethene	0.36	2.0	Not Detected	Not Detected
1,2-Dichloropropane	0.36	1.7	6.9	32
cis-1,3-Dichloropropene	0.36	1.6	Not Detected	Not Detected
Toluene	0.36	1.4	24	92
trans-1,3-Dichloropropene	0.36	1.6	Not Detected	Not Detected
1,1,2-Trichloroethane	0.36	2.0	Not Detected	Not Detected
Tetrachloroethene	0.36	2.5	0.60	4.1
Ethylene Dibromide	0.36	2.8	Not Detected	Not Detected
Chlorobenzene	0.36	1.7	Not Detected	Not Detected
Ethyl Benzene	0.36	1.6	10	45
m,p-Xylene	0.36	1.6	51	220
o-Xylene	0.36	1.6	23	100
Styrene	0.36	1.5	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.36	2.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.36	1.8	24	120
1,2,4-Trimethylbenzene	0.36	1.8	85	420
1,3-Dichlorobenzene	0.36	2.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.36	2.2	Not Detected	Not Detected
Chlorotoluene	0.36	1.9	Not Detected	Not Detected
1,2-Dichlorobenzene	0.36	2.2	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.36	2.7	Not Detected	Not Detected
Hexachlorobutadiene	0.36	3.9	Not Detected	Not Detected
Propylene	1.8	3.1	Not Detected	Not Detected
1,3-Butadiene	1.8	4.0	Not Detected	Not Detected
Acetone	1.8	4.3	36	86

AIR TOXICS LTD.

SAMPLE NAME : GP-4

ID#: 0010334-03A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102906	Date of Collection:	10/17/00
Dil. Factor:	3.58	Date of Analysis:	10/29/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	1.8	5.7	2.2	7.1
2-Propanol	1.8	4.5	2.7	6.8
trans-1,2-Dichloroethene	1.8	7.2	Not Detected	Not Detected
Vinyl Acetate	1.8	6.4	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.8	5.4	6.1	18
Hexane	1.8	6.4	20	74
Tetrahydrofuran	1.8	5.4	Not Detected	Not Detected
Cyclohexane	1.8	6.3	6.0	21
1,4-Dioxane	1.8	6.6	2.6	9.7
Bromodichloromethane	1.8	12	Not Detected	Not Detected
4-Methyl-2-pentanone	1.8	7.4	1.8	7.7
2-Hexanone	1.8	7.4	Not Detected	Not Detected
Dibromochloromethane	1.8	15	Not Detected	Not Detected
Bromoform	1.8	19	Not Detected	Not Detected
4-Ethyltoluene	1.8	8.9	59	290
Ethanol	1.8	3.4	180 E	350 E
Methyl tert-Butyl Ether	1.8	6.6	Not Detected	Not Detected
Heptane	1.8	7.4	20	81

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	124	70-130
4-Bromofluorobenzene	104	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-3

ID#: 0010334-04A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102207	Date of Collection:	10/17/00
Dil. Factor:	8.75	Date of Analysis:	10/22/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.88	4.4	6.3	32
Freon 114	0.88	6.2	Not Detected	Not Detected
Chloromethane	0.88	1.8	Not Detected	Not Detected
Vinyl Chloride	0.88	2.3	Not Detected	Not Detected
Bromomethane	0.88	3.4	Not Detected	Not Detected
Chloroethane	0.88	2.3	Not Detected	Not Detected
Freon 11	0.88	5.0	37	210
1,1-Dichloroethene	0.88	3.5	Not Detected	Not Detected
Freon 113	0.88	6.8	Not Detected	Not Detected
Methylene Chloride	0.88	3.1	Not Detected	Not Detected
1,1-Dichloroethane	0.88	3.6	4.4	18
cis-1,2-Dichloroethene	0.88	3.5	250	1000
Chloroform	0.88	4.3	Not Detected	Not Detected
1,1,1-Trichloroethane	0.88	4.8	Not Detected	Not Detected
Carbon Tetrachloride	0.88	5.6	Not Detected	Not Detected
Benzene	0.88	2.8	3.5	11
1,2-Dichloroethane	0.88	3.6	Not Detected	Not Detected
Trichloroethene	0.88	4.8	Not Detected	Not Detected
1,2-Dichloropropane	0.88	4.1	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.88	4.0	Not Detected	Not Detected
Toluene	0.88	3.4	9.9	38
trans-1,3-Dichloropropene	0.88	4.0	Not Detected	Not Detected
1,1,2-Trichloroethane	0.88	4.8	Not Detected	Not Detected
Tetrachloroethene	0.88	6.0	2.0	14
Ethylene Dibromide	0.88	6.8	Not Detected	Not Detected
Chlorobenzene	0.88	4.1	Not Detected	Not Detected
Ethyl Benzene	0.88	3.9	1.4	6.2
m,p-Xylene	0.88	3.9	3.8	17
o-Xylene	0.88	3.9	2.5	11
Styrene	0.88	3.8	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.88	6.1	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.88	4.4	1.7	8.3
1,2,4-Trimethylbenzene	0.88	4.4	3.5	17
1,3-Dichlorobenzene	0.88	5.3	Not Detected	Not Detected
1,4-Dichlorobenzene	0.88	5.3	Not Detected	Not Detected
Chlorotoluene	0.88	4.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.88	5.3	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.88	6.6	Not Detected	Not Detected
Hexachlorobutadiene	0.88	9.5	Not Detected	Not Detected
Propylene	4.4	7.6	Not Detected	Not Detected
1,3-Butadiene	4.4	9.8	Not Detected	Not Detected
Acetone	4.4	10	21	51

AIR TOXICS LTD.

SAMPLE NAME : GP-3

ID#: 0010334-04A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102207	Date of Collection:	10/17/00
Dil. Factor:	8.75	Date of Analysis:	10/22/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	4.4	14	Not Detected	Not Detected
2-Propanol	4.4	11	Not Detected	Not Detected
trans-1,2-Dichloroethene	4.4	18	41	170
Vinyl Acetate	4.4	16	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	13	Not Detected	Not Detected
Hexane	4.4	16	27	95
Tetrahydrofuran	4.4	13	Not Detected	Not Detected
Cyclohexane	4.4	15	8.4	30
1,4-Dioxane	4.4	16	Not Detected	Not Detected
Bromodichloromethane	4.4	30	Not Detected	Not Detected
4-Methyl-2-pentanone	4.4	18	Not Detected	Not Detected
2-Hexanone	4.4	18	Not Detected	Not Detected
Dibromochloromethane	4.4	38	Not Detected	Not Detected
Bromoform	4.4	46	Not Detected	Not Detected
4-Ethyltoluene	4.4	22	Not Detected	Not Detected
Ethanol	4.4	8.4	35	67
Methyl tert-Butyl Ether	4.4	16	Not Detected	Not Detected
Heptane	4.4	18	19	78

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	89	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-12

ID#: 0010334-05A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102211	Date of Collection:	10/17/00
Dil. Factor:	3.05	Date of Analysis:	10/22/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.30	1.5	3.8	19
Freon 114	0.30	2.2	Not Detected	Not Detected
Chloromethane	0.30	0.64	0.37	0.77
Vinyl Chloride	0.30	0.79	Not Detected	Not Detected
Bromomethane	0.30	1.2	Not Detected	Not Detected
Chloroethane	0.30	0.82	Not Detected	Not Detected
Freon 11	0.30	1.7	26	150
1,1-Dichloroethene	0.30	1.2	Not Detected	Not Detected
Freon 113	0.30	2.4	Not Detected	Not Detected
Methylene Chloride	0.30	1.1	0.35	1.2
1,1-Dichloroethane	0.30	1.2	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.30	1.2	Not Detected	Not Detected
Chloroform	0.30	1.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.30	1.7	Not Detected	Not Detected
Carbon Tetrachloride	0.30	2.0	Not Detected	Not Detected
Benzene	0.30	0.99	7.3	24
1,2-Dichloroethane	0.30	1.2	Not Detected	Not Detected
Trichloroethene	0.30	1.7	Not Detected	Not Detected
1,2-Dichloropropane	0.30	1.4	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.30	1.4	Not Detected	Not Detected
Toluene	0.30	1.2	24	94
trans-1,3-Dichloropropene	0.30	1.4	Not Detected	Not Detected
1,1,2-Trichloroethane	0.30	1.7	Not Detected	Not Detected
Tetrachloroethene	0.30	2.1	5.0	34
Ethylene Dibromide	0.30	2.4	Not Detected	Not Detected
Chlorobenzene	0.30	1.4	Not Detected	Not Detected
Ethyl Benzene	0.30	1.3	8.4	37
m,p-Xylene	0.30	1.3	26	110
o-Xylene	0.30	1.3	11	50
Styrene	0.30	1.3	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.30	2.1	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.30	1.5	13	65
1,2,4-Trimethylbenzene	0.30	1.5	49	240
1,3-Dichlorobenzene	0.30	1.9	Not Detected	Not Detected
1,4-Dichlorobenzene	0.30	1.9	Not Detected	Not Detected
Chlorotoluene	0.30	1.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.30	1.9	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.30	2.3	Not Detected	Not Detected
Hexachlorobutadiene	0.30	3.3	Not Detected	Not Detected
Propylene	1.5	2.7	Not Detected	Not Detected
1,3-Butadiene	1.5	3.4	Not Detected	Not Detected
Acetone	1.5	3.7	10	25

AIR TOXICS LTD.

SAMPLE NAME : GP-12

ID#: 0010334-05A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102211	Date of Collection:	10/17/00
Dil. Factor:	3.05	Date of Analysis:	10/22/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	1.5	4.8	Not Detected	Not Detected
2-Propanol	1.5	3.8	Not Detected	Not Detected
trans-1,2-Dichloroethene	1.5	6.1	Not Detected	Not Detected
Vinyl Acetate	1.5	5.4	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.5	4.6	4.3	13
Hexane	1.5	5.5	38	140
Tetrahydrofuran	1.5	4.6	Not Detected	Not Detected
Cyclohexane	1.5	5.3	13	46
1,4-Dioxane	1.5	5.6	Not Detected	Not Detected
Bromodichloromethane	1.5	10	Not Detected	Not Detected
4-Methyl-2-pentanone	1.5	6.3	Not Detected	Not Detected
2-Hexanone	1.5	6.3	Not Detected	Not Detected
Dibromochloromethane	1.5	13	Not Detected	Not Detected
Bromoform	1.5	16	Not Detected	Not Detected
4-Ethyltoluene	1.5	7.6	29	140
Ethanol	1.5	2.9	99	190
Methyl tert-Butyl Ether	1.5	5.6	Not Detected	Not Detected
Heptane	1.5	6.4	32	130

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	120	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-10

ID#: 0010334-06A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102212	Date of Collection:	10/17/00
Dil. Factor:	3.58	Date of Analysis:	10/22/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.36	1.8	9.2	46
Freon 114	0.36	2.5	Not Detected	Not Detected
Chloromethane	0.36	0.75	Not Detected	Not Detected
Vinyl Chloride	0.36	0.93	Not Detected	Not Detected
Bromomethane	0.36	1.4	Not Detected	Not Detected
Chloroethane	0.36	0.96	Not Detected	Not Detected
Freon 11	0.36	2.0	56	320
1,1-Dichloroethene	0.36	1.4	Not Detected	Not Detected
Freon 113	0.36	2.8	Not Detected	Not Detected
Methylene Chloride	0.36	1.3	Not Detected	Not Detected
1,1-Dichloroethane	0.36	1.5	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.36	1.4	Not Detected	Not Detected
Chloroform	0.36	1.8	Not Detected	Not Detected
1,1,1-Trichloroethane	0.36	2.0	Not Detected	Not Detected
Carbon Tetrachloride	0.36	2.3	1.9	12
Benzene	0.36	1.2	14	46
1,2-Dichloroethane	0.36	1.5	Not Detected	Not Detected
Trichloroethene	0.36	2.0	Not Detected	Not Detected
1,2-Dichloropropane	0.36	1.7	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.36	1.6	Not Detected	Not Detected
Toluene	0.36	1.4	34	130
trans-1,3-Dichloropropene	0.36	1.6	Not Detected	Not Detected
1,1,2-Trichloroethane	0.36	2.0	Not Detected	Not Detected
Tetrachloroethene	0.36	2.5	0.51	3.5
Ethylene Dibromide	0.36	2.8	Not Detected	Not Detected
Chlorobenzene	0.36	1.7	Not Detected	Not Detected
Ethyl Benzene	0.36	1.6	8.7	38
m,p-Xylene	0.36	1.6	26	110
o-Xylene	0.36	1.6	11	48
Styrene	0.36	1.5	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.36	2.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.36	1.8	12	57
1,2,4-Trimethylbenzene	0.36	1.8	40	200
1,3-Dichlorobenzene	0.36	2.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.36	2.2	Not Detected	Not Detected
Chlorotoluene	0.36	1.9	Not Detected	Not Detected
1,2-Dichlorobenzene	0.36	2.2	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.36	2.7	Not Detected	Not Detected
Hexachlorobutadiene	0.36	3.9	Not Detected	Not Detected
Propylene	1.8	3.1	Not Detected	Not Detected
1,3-Butadiene	1.8	4.0	Not Detected	Not Detected
Acetone	1.8	4.3	38	91

AIR TOXICS LTD.

SAMPLE NAME : GP-10

ID#: 0010334-06A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102212	Date of Collection:	10/17/00
Dil. Factor:	3.58	Date of Analysis:	10/22/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	1.8	5.7	8.2	26
2-Propanol	1.8	4.5	Not Detected	Not Detected
trans-1,2-Dichloroethene	1.8	7.2	Not Detected	Not Detected
Vinyl Acetate	1.8	6.4	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.8	5.4	6.7	20
Hexane	1.8	6.4	120	420
Tetrahydrofuran	1.8	5.4	Not Detected	Not Detected
Cyclohexane	1.8	6.3	41	140
1,4-Dioxane	1.8	6.6	Not Detected	Not Detected
Bromodichloromethane	1.8	12	Not Detected	Not Detected
4-Methyl-2-pentanone	1.8	7.4	Not Detected	Not Detected
2-Hexanone	1.8	7.4	Not Detected	Not Detected
Dibromochloromethane	1.8	15	Not Detected	Not Detected
Bromoform	1.8	19	Not Detected	Not Detected
4-Ethyltoluene	1.8	8.9	26	130
Ethanol	1.8	3.4	140	260
Methyl tert-Butyl Ether	1.8	6.6	Not Detected	Not Detected
Heptane	1.8	7.4	74	310

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	117	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-9

ID#: 0010334-07A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102916	Date of Collection:	10/17/00
Dil. Factor:	3.50	Date of Analysis:	10/30/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.35	1.8	4.6	23
Freon 114	0.35	2.5	Not Detected	Not Detected
Chloromethane	0.35	0.73	Not Detected	Not Detected
Vinyl Chloride	0.35	0.91	Not Detected	Not Detected
Bromomethane	0.35	1.4	Not Detected	Not Detected
Chloroethane	0.35	0.94	Not Detected	Not Detected
Freon 11	0.35	2.0	29	170
1,1-Dichloroethene	0.35	1.4	Not Detected	Not Detected
Freon 113	0.35	2.7	Not Detected	Not Detected
Methylene Chloride	0.35	1.2	Not Detected	Not Detected
1,1-Dichloroethane	0.35	1.4	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.35	1.4	Not Detected	Not Detected
Chloroform	0.35	1.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.35	1.9	Not Detected	Not Detected
Carbon Tetrachloride	0.35	2.2	16	100
Benzene	0.35	1.1	11	37
1,2-Dichloroethane	0.35	1.4	Not Detected	Not Detected
Trichloroethene	0.35	1.9	Not Detected	Not Detected
1,2-Dichloropropane	0.35	1.6	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.35	1.6	Not Detected	Not Detected
Toluene	0.35	1.3	88	340
trans-1,3-Dichloropropene	0.35	1.6	Not Detected	Not Detected
1,1,2-Trichloroethane	0.35	1.9	Not Detected	Not Detected
Tetrachloroethene	0.35	2.4	1.2	8.7
Ethylene Dibromide	0.35	2.7	Not Detected	Not Detected
Chlorobenzene	0.35	1.6	Not Detected	Not Detected
Ethyl Benzene	0.35	1.5	41	180
m,p-Xylene	0.35	1.5	170	770
o-Xylene	0.35	1.5	73	320
Styrene	0.35	1.5	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.35	2.4	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.35	1.7	36	180
1,2,4-Trimethylbenzene	0.35	1.7	110	550
1,3-Dichlorobenzene	0.35	2.1	Not Detected	Not Detected
1,4-Dichlorobenzene	0.35	2.1	Not Detected	Not Detected
Chlorotoluene	0.35	1.8	Not Detected	Not Detected
1,2-Dichlorobenzene	0.35	2.1	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.35	2.6	Not Detected	Not Detected
Hexachlorobutadiene	0.35	3.8	Not Detected	Not Detected
Propylene	1.8	3.1	Not Detected	Not Detected
1,3-Butadiene	1.8	3.9	Not Detected	Not Detected
Acetone	1.8	4.2	32	77

AIR TOXICS LTD.

SAMPLE NAME : GP-9

ID#: 0010334-07A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102916	Date of Collection:	10/17/00
Dil. Factor:	3.50	Date of Analysis:	10/30/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	1.8	5.5	11	34
2-Propanol	1.8	4.4	Not Detected	Not Detected
trans-1,2-Dichloroethene	1.8	7.0	Not Detected	Not Detected
Vinyl Acetate	1.8	6.3	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.8	5.2	4.7	14
Hexane	1.8	6.3	48	170
Tetrahydrofuran	1.8	5.2	Not Detected	Not Detected
Cyclohexane	1.8	6.1	13	47
1,4-Dioxane	1.8	6.4	Not Detected	Not Detected
Bromodichloromethane	1.8	12	Not Detected	Not Detected
4-Methyl-2-pentanone	1.8	7.3	Not Detected	Not Detected
2-Hexanone	1.8	7.3	Not Detected	Not Detected
Dibromochloromethane	1.8	15	Not Detected	Not Detected
Bromoform	1.8	18	Not Detected	Not Detected
4-Ethyltoluene	1.8	8.7	95	470
Ethanol	1.8	3.4	150 E	290 E
Methyl tert-Butyl Ether	1.8	6.4	Not Detected	Not Detected
Heptane	1.8	7.3	29	120

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	120	70-130
4-Bromofluorobenzene	109	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-6

ID#: 0010334-08A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102214	Date of Collection:	10/17/00
Dil. Factor:	1.68	Date of Analysis:	10/22/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.17	0.84	1.8	9.3
Freon 114	0.17	1.2	Not Detected	Not Detected
Chloromethane	0.17	0.35	Not Detected	Not Detected
Vinyl Chloride	0.17	0.44	Not Detected	Not Detected
Bromomethane	0.17	0.66	Not Detected	Not Detected
Chloroethane	0.17	0.45	Not Detected	Not Detected
Freon 11	0.17	0.96	18	100
1,1-Dichloroethene	0.17	0.68	Not Detected	Not Detected
Freon 113	0.17	1.3	Not Detected	Not Detected
Methylene Chloride	0.17	0.59	Not Detected	Not Detected
1,1-Dichloroethane	0.17	0.69	0.23	0.93
cis-1,2-Dichloroethene	0.17	0.68	Not Detected	Not Detected
Chloroform	0.17	0.83	Not Detected	Not Detected
1,1,1-Trichloroethane	0.17	0.93	Not Detected	Not Detected
Carbon Tetrachloride	0.17	1.1	Not Detected	Not Detected
Benzene	0.17	0.54	10	34
1,2-Dichloroethane	0.17	0.69	Not Detected	Not Detected
Trichloroethene	0.17	0.92	Not Detected	Not Detected
1,2-Dichloropropane	0.17	0.79	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.17	0.78	Not Detected	Not Detected
Toluene	0.17	0.64	22	82
trans-1,3-Dichloropropene	0.17	0.78	Not Detected	Not Detected
1,1,2-Trichloroethane	0.17	0.93	Not Detected	Not Detected
Tetrachloroethene	0.17	1.2	0.53	3.6
Ethylene Dibromide	0.17	1.3	Not Detected	Not Detected
Chlorobenzene	0.17	0.79	Not Detected	Not Detected
Ethyl Benzene	0.17	0.74	9.6	42
m,p-Xylene	0.17	0.74	44	190
o-Xylene	0.17	0.74	19	84
Styrene	0.17	0.73	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.17	1.2	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.17	0.84	13	66
1,2,4-Trimethylbenzene	0.17	0.84	40	200
1,3-Dichlorobenzene	0.17	1.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.17	1.0	0.19	1.1
Chlorotoluene	0.17	0.88	Not Detected	Not Detected
1,2-Dichlorobenzene	0.17	1.0	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.17	1.3	Not Detected	Not Detected
Hexachlorobutadiene	0.17	1.8	Not Detected	Not Detected
Propylene	0.84	1.5	Not Detected	Not Detected
1,3-Butadiene	0.84	1.9	Not Detected	Not Detected
Acetone	0.84	2.0	26	62

AIR TOXICS LTD.

SAMPLE NAME : GP-6

ID#: 0010334-08A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102214	Date of Collection:	10/17/00
Dil. Factor:	1.68	Date of Analysis:	10/22/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	0.84	2.6	9.4	30
2-Propanol	0.84	2.1	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.84	3.4	Not Detected	Not Detected
Vinyl Acetate	0.84	3.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.84	2.5	7.2	21
Hexane	0.84	3.0	55	200
Tetrahydrofuran	0.84	2.5	Not Detected	Not Detected
Cyclohexane	0.84	2.9	23	82
1,4-Dioxane	0.84	3.1	Not Detected	Not Detected
Bromodichloromethane	0.84	5.7	Not Detected	Not Detected
4-Methyl-2-pentanone	0.84	3.5	Not Detected	Not Detected
2-Hexanone	0.84	3.5	Not Detected	Not Detected
Dibromochloromethane	0.84	7.3	Not Detected	Not Detected
Bromoform	0.84	8.8	Not Detected	Not Detected
4-Ethyltoluene	0.84	4.2	31	160
Ethanol	0.84	1.6	61	120
Methyl tert-Butyl Ether	0.84	3.1	Not Detected	Not Detected
Heptane	0.84	3.5	29	120

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	121	70-130
Toluene-d8	112	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-11

ID#: 0010334-09A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102910	Date of Collection:	10/17/00
Dil. Factor:	1.79	Date of Analysis:	10/29/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.18	0.90	1.9	9.5
Freon 114	0.18	1.3	Not Detected	Not Detected
Chloromethane	0.18	0.38	Not Detected	Not Detected
Vinyl Chloride	0.18	0.46	Not Detected	Not Detected
Bromomethane	0.18	0.71	Not Detected	Not Detected
Chloroethane	0.18	0.48	Not Detected	Not Detected
Freon 11	0.18	1.0	8.2	47
1,1-Dichloroethene	0.18	0.72	Not Detected	Not Detected
Freon 113	0.18	1.4	Not Detected	Not Detected
Methylene Chloride	0.18	0.63	0.36	1.3
1,1-Dichloroethane	0.18	0.74	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.18	0.72	Not Detected	Not Detected
Chloroform	0.18	0.89	Not Detected	Not Detected
1,1,1-Trichloroethane	0.18	0.99	Not Detected	Not Detected
Carbon Tetrachloride	0.18	1.1	Not Detected	Not Detected
Benzene	0.18	0.58	4.8	16
1,2-Dichloroethane	0.18	0.74	Not Detected	Not Detected
Trichloroethene	0.18	0.98	Not Detected	Not Detected
1,2-Dichloropropane	0.18	0.84	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.18	0.82	Not Detected	Not Detected
Toluene	0.18	0.68	16	61
trans-1,3-Dichloropropene	0.18	0.82	Not Detected	Not Detected
1,1,2-Trichloroethane	0.18	0.99	Not Detected	Not Detected
Tetrachloroethene	0.18	1.2	0.45	3.1
Ethylene Dibromide	0.18	1.4	Not Detected	Not Detected
Chlorobenzene	0.18	0.84	Not Detected	Not Detected
Ethyl Benzene	0.18	0.79	5.1	22
m,p-Xylene	0.18	0.79	18	78
o-Xylene	0.18	0.79	7.7	34
Styrene	0.18	0.77	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.18	1.2	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.18	0.89	7.0	35
1,2,4-Trimethylbenzene	0.18	0.89	24	120
1,3-Dichlorobenzene	0.18	1.1	Not Detected	Not Detected
1,4-Dichlorobenzene	0.18	1.1	Not Detected	Not Detected
Chlorotoluene	0.18	0.94	Not Detected	Not Detected
1,2-Dichlorobenzene	0.18	1.1	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.18	1.4	Not Detected	Not Detected
Hexachlorobutadiene	0.18	1.9	Not Detected	Not Detected
Propylene	0.90	1.6	Not Detected	Not Detected
1,3-Butadiene	0.90	2.0	Not Detected	Not Detected
Acetone	0.90	2.2	23	56

AIR TOXICS LTD.

SAMPLE NAME : GP-11

ID#: 0010334-09A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102910	Date of Collection:	10/17/00
Dil. Factor:	1.79	Date of Analysis:	10/29/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	0.90	2.8	1.2	3.7
2-Propanol	0.90	2.2	2.3	5.6
trans-1,2-Dichloroethene	0.90	3.6	Not Detected	Not Detected
Vinyl Acetate	0.90	3.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.90	2.7	5.5	16
Hexane	0.90	3.2	23	84
Tetrahydrofuran	0.90	2.7	Not Detected	Not Detected
Cyclohexane	0.90	3.1	9.2	32
1,4-Dioxane	0.90	3.3	Not Detected	Not Detected
Bromodichloromethane	0.90	6.1	Not Detected	Not Detected
4-Methyl-2-pentanone	0.90	3.7	Not Detected	Not Detected
2-Hexanone	0.90	3.7	Not Detected	Not Detected
Dibromochloromethane	0.90	7.7	Not Detected	Not Detected
Bromoform	0.90	9.4	Not Detected	Not Detected
4-Ethyltoluene	0.90	4.5	16	79
Ethanol	0.90	1.7	52	100
Methyl tert-Butyl Ether	0.90	3.3	Not Detected	Not Detected
Heptane	0.90	3.7	19	78

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	123	70-130
4-Bromofluorobenzene	105	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-2

ID#: 0010334-10A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102907	Date of Collection:	10/18/00
Dil. Factor:	1.83	Date of Analysis:	10/29/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.18	0.92	5.7	29
Freon 114	0.18	1.3	Not Detected	Not Detected
Chloromethane	0.18	0.38	9.7	20
Vinyl Chloride	0.18	0.48	Not Detected	Not Detected
Bromomethane	0.18	0.72	Not Detected	Not Detected
Chloroethane	0.18	0.49	Not Detected	Not Detected
Freon 11	0.18	1.0	36	200
1,1-Dichloroethene	0.18	0.74	Not Detected	Not Detected
Freon 113	0.18	1.4	Not Detected	Not Detected
Methylene Chloride	0.18	0.65	Not Detected	Not Detected
1,1-Dichloroethane	0.18	0.75	5.5	22
cis-1,2-Dichloroethene	0.18	0.74	Not Detected	Not Detected
Chloroform	0.18	0.91	Not Detected	Not Detected
1,1,1-Trichloroethane	0.18	1.0	Not Detected	Not Detected
Carbon Tetrachloride	0.18	1.2	60	380
Benzene	0.18	0.59	13	41
1,2-Dichloroethane	0.18	0.75	Not Detected	Not Detected
Trichloroethene	0.18	1.0	0.49	2.7
1,2-Dichloropropane	0.18	0.86	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.18	0.84	Not Detected	Not Detected
Toluene	0.18	0.70	54	210
trans-1,3-Dichloropropene	0.18	0.84	Not Detected	Not Detected
1,1,2-Trichloroethane	0.18	1.0	Not Detected	Not Detected
Tetrachloroethene	0.18	1.3	3.3	23
Ethylene Dibromide	0.18	1.4	Not Detected	Not Detected
Chlorobenzene	0.18	0.86	Not Detected	Not Detected
Ethyl Benzene	0.18	0.81	6.0	27
m,p-Xylene	0.18	0.81	21	92
o-Xylene	0.18	0.81	7.8	34
Styrene	0.18	0.79	0.55	2.4
1,1,2,2-Tetrachloroethane	0.18	1.3	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.18	0.91	8.2	41
1,2,4-Trimethylbenzene	0.18	0.91	Not Detected	Not Detected
1,3-Dichlorobenzene	0.18	1.1	Not Detected	Not Detected
1,4-Dichlorobenzene	0.18	1.1	2.0	12
Chlorotoluene	0.18	0.96	Not Detected	Not Detected
1,2-Dichlorobenzene	0.18	1.1	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.18	1.4	Not Detected	Not Detected
Hexachlorobutadiene	0.18	2.0	Not Detected	Not Detected
Propylene	0.92	1.6	Not Detected	Not Detected
1,3-Butadiene	0.92	2.0	Not Detected	Not Detected
Acetone	0.92	2.2	6.8	16

AIR TOXICS LTD.

SAMPLE NAME : GP-2

ID#: 0010334-10A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	**t102907**	**Date of Collection:**	**10/18/00**
Dil. Factor:	**1.83**	**Date of Analysis:**	**10/29/00**

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	0.92	2.9	4.5	14
2-Propanol	0.92	2.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.92	3.7	Not Detected	Not Detected
Vinyl Acetate	0.92	3.3	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	2.7	1.2	3.6
Hexane	0.92	3.3	230 E	840 E
Tetrahydrofuran	0.92	2.7	Not Detected	Not Detected
Cyclohexane	0.92	3.2	31	110
1,4-Dioxane	0.92	3.4	1.5	5.4
Bromodichloromethane	0.92	6.2	Not Detected	Not Detected
4-Methyl-2-pentanone	0.92	3.8	Not Detected	Not Detected
2-Hexanone	0.92	3.8	Not Detected	Not Detected
Dibromochloromethane	0.92	7.9	Not Detected	Not Detected
Bromoform	0.92	9.6	Not Detected	Not Detected
4-Ethyltoluene	0.92	4.6	15	74
Ethanol	0.92	1.8	4.6	8.8
Methyl tert-Butyl Ether	0.92	3.4	Not Detected	Not Detected
Heptane	0.92	3.8	70	290

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	121	70-130
4-Bromofluorobenzene	115	70-130

AIR TOXICS LTD.

SAMPLE NAME : GP-5

ID#: 0010334-11A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102909	Date of Collection:	10/18/00
Dil. Factor:	4.48	Date of Analysis:	10/29/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.45	2.2	2.4	12
Freon 114	0.45	3.2	Not Detected	Not Detected
Chloromethane	0.45	0.94	Not Detected	Not Detected
Vinyl Chloride	0.45	1.2	Not Detected	Not Detected
Bromomethane	0.45	1.8	Not Detected	Not Detected
Chloroethane	0.45	1.2	Not Detected	Not Detected
Freon 11	0.45	2.6	7.9	45
1,1-Dichloroethene	0.45	1.8	Not Detected	Not Detected
Freon 113	0.45	3.5	Not Detected	Not Detected
Methylene Chloride	0.45	1.6	0.65	2.3
1,1-Dichloroethane	0.45	1.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.45	1.8	Not Detected	Not Detected
Chloroform	0.45	2.2	Not Detected	Not Detected
1,1,1-Trichloroethane	0.45	2.5	Not Detected	Not Detected
Carbon Tetrachloride	0.45	2.9	Not Detected	Not Detected
Benzene	0.45	1.4	3.2	10
1,2-Dichloroethane	0.45	1.8	Not Detected	Not Detected
Trichloroethene	0.45	2.4	Not Detected	Not Detected
1,2-Dichloropropane	0.45	2.1	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.45	2.1	Not Detected	Not Detected
Toluene	0.45	1.7	120	450
trans-1,3-Dichloropropene	0.45	2.1	Not Detected	Not Detected
1,1,2-Trichloroethane	0.45	2.5	Not Detected	Not Detected
Tetrachloroethene	0.45	3.1	1.4	9.8
Ethylene Dibromide	0.45	3.5	Not Detected	Not Detected
Chlorobenzene	0.45	2.1	Not Detected	Not Detected
Ethyl Benzene	0.45	2.0	1.4	6.2
m,p-Xylene	0.45	2.0	5.3	23
o-Xylene	0.45	2.0	3.9	17
Styrene	0.45	1.9	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.45	3.1	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.45	2.2	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.45	2.2	8.2	41
1,3-Dichlorobenzene	0.45	2.7	Not Detected	Not Detected
1,4-Dichlorobenzene	0.45	2.7	1.7	10
Chlorotoluene	0.45	2.4	Not Detected	Not Detected
1,2-Dichlorobenzene	0.45	2.7	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.45	3.4	Not Detected	Not Detected
Hexachlorobutadiene	0.45	4.8	Not Detected	Not Detected
Propylene	2.2	3.9	Not Detected	Not Detected
1,3-Butadiene	2.2	5.0	Not Detected	Not Detected
Acetone	2.2	5.4	15	35

AIR TOXICS LTD.

SAMPLE NAME : GP-5

ID#: 0010334-11A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102909	Date of Collection:	10/18/00
Dil. Factor:	4.48	Date of Analysis:	10/29/00

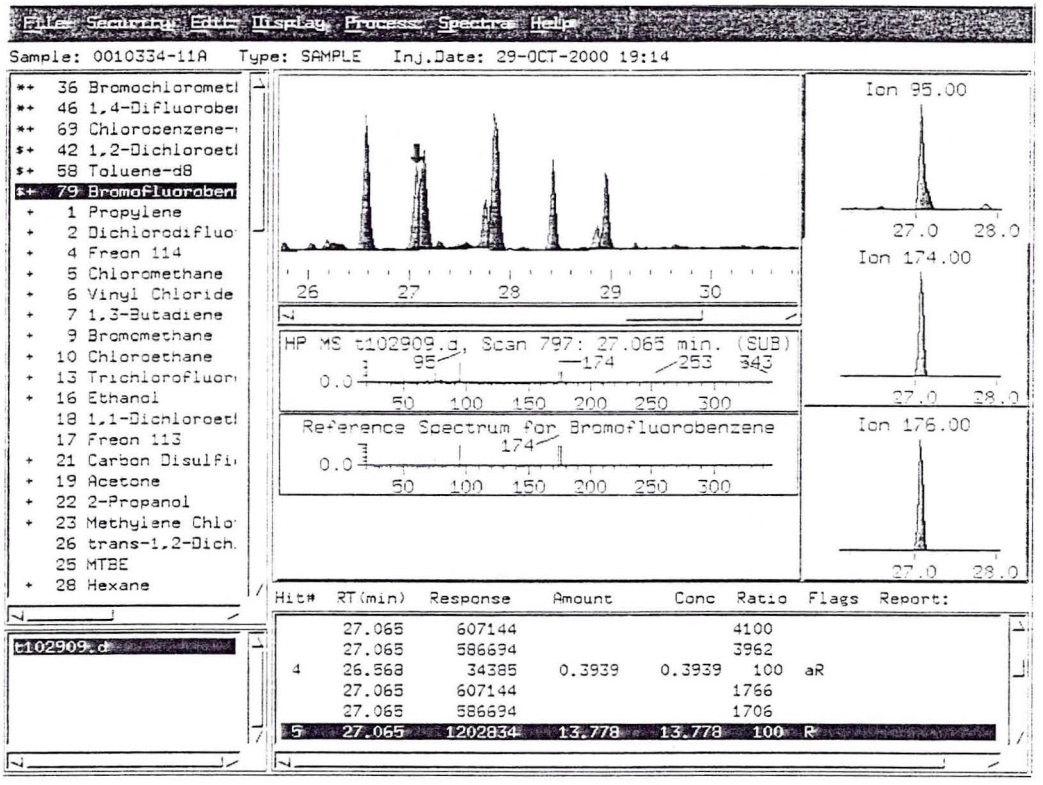
Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	2.2	7.1	Not Detected	Not Detected
2-Propanol	2.2	5.6	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.2	9.0	Not Detected	Not Detected
Vinyl Acetate	2.2	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.2	6.7	Not Detected	Not Detected
Hexane	2.2	8.0	81	290
Tetrahydrofuran	2.2	6.7	Not Detected	Not Detected
Cyclohexane	2.2	7.8	10	36
1,4-Dioxane	2.2	8.2	Not Detected	Not Detected
Bromodichloromethane	2.2	15	Not Detected	Not Detected
4-Methyl-2-pentanone	2.2	9.3	Not Detected	Not Detected
2-Hexanone	2.2	9.3	Not Detected	Not Detected
Dibromochloromethane	2.2	19	Not Detected	Not Detected
Bromoform	2.2	24	Not Detected	Not Detected
4-Ethyltoluene	2.2	11	3.4	17
Ethanol	2.2	4.3	Not Detected	Not Detected
Methyl tert-Butyl Ether	2.2	8.2	Not Detected	Not Detected
Heptane	2.2	9.3	180 E	750 E

E = Exceeds instrument calibration range.

Q = Exceeds Quality Control limits of 70% to 130%, due to matrix effects.

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	128	70-130
4-Bromofluorobenzene	138 Q	70-130



Bromofluorobenzene elevated due to matrix effect. TH 11/11/00

AIR TOXICS LTD.

SAMPLE NAME : Lab Blank

ID#: 0010334-12A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102105	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/21/00	

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.10	0.50	Not Detected	Not Detected
Freon 114	0.10	0.71	Not Detected	Not Detected
Chloromethane	0.10	0.21	Not Detected	Not Detected
Vinyl Chloride	0.10	0.26	Not Detected	Not Detected
Bromomethane	0.10	0.39	Not Detected	Not Detected
Chloroethane	0.10	0.27	Not Detected	Not Detected
Freon 11	0.10	0.57	Not Detected	Not Detected
1,1-Dichloroethene	0.10	0.40	Not Detected	Not Detected
Freon 113	0.10	0.78	Not Detected	Not Detected
Methylene Chloride	0.10	0.35	Not Detected	Not Detected
1,1-Dichloroethane	0.10	0.41	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.40	Not Detected	Not Detected
Chloroform	0.10	0.50	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.55	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.64	Not Detected	Not Detected
Benzene	0.10	0.32	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.41	Not Detected	Not Detected
Trichloroethene	0.10	0.55	Not Detected	Not Detected
1,2-Dichloropropane	0.10	0.47	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.10	0.46	Not Detected	Not Detected
Toluene	0.10	0.38	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.10	0.46	Not Detected	Not Detected
1,1,2-Trichloroethane	0.10	0.55	Not Detected	Not Detected
Tetrachloroethene	0.10	0.69	Not Detected	Not Detected
Ethylene Dibromide	0.10	0.78	Not Detected	Not Detected
Chlorobenzene	0.10	0.47	Not Detected	Not Detected
Ethyl Benzene	0.10	0.44	Not Detected	Not Detected
m,p-Xylene	0.10	0.44	Not Detected	Not Detected
o-Xylene	0.10	0.44	Not Detected	Not Detected
Styrene	0.10	0.43	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.10	0.70	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.10	0.50	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.10	0.50	Not Detected	Not Detected
1,3-Dichlorobenzene	0.10	0.61	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.61	Not Detected	Not Detected
Chlorotoluene	0.10	0.53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.10	0.61	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.10	0.75	Not Detected	Not Detected
Hexachlorobutadiene	0.10	1.1	Not Detected	Not Detected
Propylene	0.50	0.87	Not Detected	Not Detected
1,3-Butadiene	0.50	1.1	Not Detected	Not Detected
Acetone	0.50	1.2	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME : Lab Blank

ID#: 0010334-12A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	**t102105**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/21/00**	

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	0.50	1.6	Not Detected	Not Detected
2-Propanol	0.50	1.2	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Vinyl Acetate	0.50	1.8	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	1.5	Not Detected	Not Detected
Hexane	0.50	1.8	Not Detected	Not Detected
Tetrahydrofuran	0.50	1.5	Not Detected	Not Detected
Cyclohexane	0.50	1.7	Not Detected	Not Detected
1,4-Dioxane	0.50	1.8	Not Detected	Not Detected
Bromodichloromethane	0.50	3.4	Not Detected	Not Detected
4-Methyl-2-pentanone	0.50	2.1	Not Detected	Not Detected
2-Hexanone	0.50	2.1	Not Detected	Not Detected
Dibromochloromethane	0.50	4.3	Not Detected	Not Detected
Bromoform	0.50	5.2	Not Detected	Not Detected
4-Ethyltoluene	0.50	2.5	Not Detected	Not Detected
Ethanol	0.50	0.96	Not Detected	Not Detected
Methyl tert-Butyl Ether	0.50	1.8	Not Detected	Not Detected
Heptane	0.50	2.1	Not Detected	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	117	70-130
4-Bromofluorobenzene	85	70-130

AIR TOXICS LTD.

SAMPLE NAME : Lab Blank

ID#: 0010334-12B

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102205	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/22/00	

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.10	0.50	Not Detected	Not Detected
Freon 114	0.10	0.71	Not Detected	Not Detected
Chloromethane	0.10	0.21	Not Detected	Not Detected
Vinyl Chloride	0.10	0.26	Not Detected	Not Detected
Bromomethane	0.10	0.39	Not Detected	Not Detected
Chloroethane	0.10	0.27	Not Detected	Not Detected
Freon 11	0.10	0.57	Not Detected	Not Detected
1,1-Dichloroethene	0.10	0.40	Not Detected	Not Detected
Freon 113	0.10	0.78	Not Detected	Not Detected
Methylene Chloride	0.10	0.35	Not Detected	Not Detected
1,1-Dichloroethane	0.10	0.41	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.40	Not Detected	Not Detected
Chloroform	0.10	0.50	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.55	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.64	Not Detected	Not Detected
Benzene	0.10	0.32	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.41	Not Detected	Not Detected
Trichloroethene	0.10	0.55	Not Detected	Not Detected
1,2-Dichloropropane	0.10	0.47	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.10	0.46	Not Detected	Not Detected
Toluene	0.10	0.38	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.10	0.46	Not Detected	Not Detected
1,1,2-Trichloroethane	0.10	0.55	Not Detected	Not Detected
Tetrachloroethene	0.10	0.69	Not Detected	Not Detected
Ethylene Dibromide	0.10	0.78	Not Detected	Not Detected
Chlorobenzene	0.10	0.47	Not Detected	Not Detected
Ethyl Benzene	0.10	0.44	Not Detected	Not Detected
m,p-Xylene	0.10	0.44	Not Detected	Not Detected
o-Xylene	0.10	0.44	Not Detected	Not Detected
Styrene	0.10	0.43	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.10	0.70	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.10	0.50	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.10	0.50	Not Detected	Not Detected
1,3-Dichlorobenzene	0.10	0.61	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.61	Not Detected	Not Detected
Chlorotoluene	0.10	0.53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.10	0.61	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.10	0.75	Not Detected	Not Detected
Hexachlorobutadiene	0.10	1.1	Not Detected	Not Detected
Propylene	0.50	0.87	Not Detected	Not Detected
1,3-Butadiene	0.50	1.1	Not Detected	Not Detected
Acetone	0.50	1.2	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME : Lab Blank

ID#: 0010334-12B

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102205	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/22/00	

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	0.50	1.6	Not Detected	Not Detected
2-Propanol	0.50	1.2	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Vinyl Acetate	0.50	1.8	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	1.5	Not Detected	Not Detected
Hexane	0.50	1.8	Not Detected	Not Detected
Tetrahydrofuran	0.50	1.5	Not Detected	Not Detected
Cyclohexane	0.50	1.7	Not Detected	Not Detected
1,4-Dioxane	0.50	1.8	Not Detected	Not Detected
Bromodichloromethane	0.50	3.4	Not Detected	Not Detected
4-Methyl-2-pentanone	0.50	2.1	Not Detected	Not Detected
2-Hexanone	0.50	2.1	Not Detected	Not Detected
Dibromochloromethane	0.50	4.3	Not Detected	Not Detected
Bromoform	0.50	5.2	Not Detected	Not Detected
4-Ethyltoluene	0.50	2.5	Not Detected	Not Detected
Ethanol	0.50	0.96	Not Detected	Not Detected
Methyl tert-Butyl Ether	0.50	1.8	Not Detected	Not Detected
Heptane	0.50	2.1	Not Detected	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	111	70-130
4-Bromofluorobenzene	88	70-130

AIR TOXICS LTD.

SAMPLE NAME : Lab Blank

ID#: 0010334-12C

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102903	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/29/00

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.10	0.50	Not Detected	Not Detected
Freon 114	0.10	0.71	Not Detected	Not Detected
Chloromethane	0.10	0.21	Not Detected	Not Detected
Vinyl Chloride	0.10	0.26	Not Detected	Not Detected
Bromomethane	0.10	0.39	Not Detected	Not Detected
Chloroethane	0.10	0.27	Not Detected	Not Detected
Freon 11	0.10	0.57	Not Detected	Not Detected
1,1-Dichloroethene	0.10	0.40	Not Detected	Not Detected
Freon 113	0.10	0.78	Not Detected	Not Detected
Methylene Chloride	0.10	0.35	Not Detected	Not Detected
1,1-Dichloroethane	0.10	0.41	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.40	Not Detected	Not Detected
Chloroform	0.10	0.50	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.55	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.64	Not Detected	Not Detected
Benzene	0.10	0.32	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.41	Not Detected	Not Detected
Trichloroethene	0.10	0.55	Not Detected	Not Detected
1,2-Dichloropropane	0.10	0.47	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.10	0.46	Not Detected	Not Detected
Toluene	0.10	0.38	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.10	0.46	Not Detected	Not Detected
1,1,2-Trichloroethane	0.10	0.55	Not Detected	Not Detected
Tetrachloroethene	0.10	0.69	Not Detected	Not Detected
Ethylene Dibromide	0.10	0.78	Not Detected	Not Detected
Chlorobenzene	0.10	0.47	Not Detected	Not Detected
Ethyl Benzene	0.10	0.44	Not Detected	Not Detected
m,p-Xylene	0.10	0.44	Not Detected	Not Detected
o-Xylene	0.10	0.44	Not Detected	Not Detected
Styrene	0.10	0.43	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.10	0.70	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.10	0.50	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.10	0.50	Not Detected	Not Detected
1,3-Dichlorobenzene	0.10	0.61	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.61	Not Detected	Not Detected
Chlorotoluene	0.10	0.53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.10	0.61	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.10	0.75	Not Detected	Not Detected
Hexachlorobutadiene	0.10	1.1	Not Detected	Not Detected
Propylene	0.50	0.87	Not Detected	Not Detected
1,3-Butadiene	0.50	1.1	Not Detected	Not Detected
Acetone	0.50	1.2	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME : Lab Blank

ID#: 0010334-12C

EPA METHOD TO-14 GC/MS Full Scan

File Name:	t102903	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 10/29/00	

Compound	Det. Limit (ppbv)	Det. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	0.50	1.6	Not Detected	Not Detected
2-Propanol	0.50	1.2	Not Detected	Not Detected
trans-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Vinyl Acetate	0.50	1.8	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	1.5	Not Detected	Not Detected
Hexane	0.50	1.8	Not Detected	Not Detected
Tetrahydrofuran	0.50	1.5	Not Detected	Not Detected
Cyclohexane	0.50	1.7	Not Detected	Not Detected
1,4-Dioxane	0.50	1.8	Not Detected	Not Detected
Bromodichloromethane	0.50	3.4	Not Detected	Not Detected
4-Methyl-2-pentanone	0.50	2.1	Not Detected	Not Detected
2-Hexanone	0.50	2.1	Not Detected	Not Detected
Dibromochloromethane	0.50	4.3	Not Detected	Not Detected
Bromoform	0.50	5.2	Not Detected	Not Detected
4-Ethyltoluene	0.50	2.5	Not Detected	Not Detected
Ethanol	0.50	0.96	Not Detected	Not Detected
Methyl tert-Butyl Ether	0.50	1.8	Not Detected	Not Detected
Heptane	0.50	2.1	Not Detected	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	112	70-130
4-Bromofluorobenzene	98	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Mafizul Islam
Company: Sigma Environmental Services
Address: 220 E Rya. Rd City: Oak Creek State: WI Zip: 53154
Phone: 414-768-7144 FAX: 414-768-7158
Collected By: Signature: [signature]

Project info:
P.O. #:
Project #: 3125
Project Name: Whitefish Bay II

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
-10A	6P-2	10/18/00	TO 14S	-29	-7	8.0" Hg
-11A	6P-5	10/18/00	TO 14S	-29.5	-8	7.5" Hg
			TO			

Relinquished By: (Signature) Date/Time: [signature] 10/18/00
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: 10/19/00 9B
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FED EX	8005 8017 7746 7796 1802 1705	AS	ambient	good	Yes No (None)	0010334

Form 1293 rev. 09

Page 32

ATTACHMENT F
GROUNDWATER LABORATORY ANALYTICAL REPORT

TestAmerica
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ANALYTICAL AND QUALITY CONTROL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000

Job No: 00.10667

Enclosed are the Analytical and Quality Control reports for the following samples submitted for analysis:

Sample Number	Sample Description	Date Taken	Date Received
421710	PZ-9 3125 Whitefish Bay LF	12/07/2000	12/11/2000
421711	MW-9 3125 Whitefish Bay LF	12/07/2000	12/11/2000
421712	PZ-10 3125 Whitefish Bay LF	12/07/2000	12/11/2000
421713	MW-10 3125 Whitefish Bay LF	12/07/2000	12/11/2000
421714	PZ-8 3125 Whitefish Bay LF	12/07/2000	12/11/2000
421715	MW-8 3125 Whitefish Bay LF	12/07/2000	12/11/2000
421716	MPS:P-7 3125 Whitefish Bay LF	12/07/2000	12/11/2000
421717	MPS:P-6 3125 Whitefish Bay LF	12/07/2000	12/11/2000
421718	MPS:MW-1 3125 Whitefish Bay LF	12/08/2000	12/11/2000
421719	MPS:P-1 3125 Whitefish Bay LF	12/08/2000	12/11/2000
421720	MPS:P-4 3125 Whitefish Bay LF	12/08/2000	12/11/2000
421721	MPS:P-5 3125 Whitefish Bay LF	12/08/2000	12/11/2000
421722	Duplicate 3125 Whitefish Bay LF	12/07/2000	12/11/2000
421723	Equipment Blk 3125 Whitefish Ba	12/07/2000	12/11/2000
421724	Trip Blank 3125 Whitefish Bay L	12/07/2000	12/11/2000

Soil results are reported on a dry weight basis. The above sample(s) may have a result flag shown on the report. The following are the result flag definitions:

A = Analyzed/extracted past hold time
B = Blank is contaminated
C = Standard outside of control limits
D = Diluted for analysis
F = Sample filtered in lab
G = Received past hold time
H = Late eluting hydrocarbons present
I = Improperly handled sample
J = Estimated concentration
L = Common lab solvent and contaminant
M = Matrix interference
P = Improperly preserved sample
Q = Result confirmed via re-analysis
S = Sediment present
T = Does not match typical pattern
W = BOD re-set due to missed dilution
X = Unidentified compound(s) present
Z = Internal standard outside limits

Brian D. DeJong
Organic Operations Manager

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421710
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: PZ-9 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 11:05 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2249
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Bromodichloromethane	0.57	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Chloroform	0.45	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2249
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421710
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: PZ-9 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 11:05 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Naphthalene	3.2	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Toluene	2.2	ug/L	0.10	0.33	SW 8260B	12/18/2000	2249
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2249
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2249
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Xylenes, Total	0.54	ug/L	0.25	0.83	SW 8260B	12/18/2000	2249
Surr: Dibromofluoromethane	97.6	%		87-115	SW 8260B	12/18/2000	2249
Surr: Toluene-d8	95.8	%		86-111	SW 8260B	12/18/2000	2249
Surr: Bromofluorobenzene	96.2	%		90-109	SW 8260B	12/18/2000	2249

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421711
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-9 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 10:55 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421711
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-9 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 10:55 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Surr: Dibromofluoromethane	96.4	%		87-115	SW 8260B	12/17/2000	2249
Surr: Toluene-d8	96.4	%		86-111	SW 8260B	12/17/2000	2249
Surr: Bromofluorobenzene	96.4	%		90-109	SW 8260B	12/17/2000	2249

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421712
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: PZ-10 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 12:40 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421712
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: PZ-10 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 12:40 Date Received: 12/11/2000

Parameter		Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
p-Isopropyltoluene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methylene Chloride		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methyl-t-butyl ether		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Naphthalene		2.8	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Propylbenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Styrene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Tetrachloroethene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Toluene		0.79	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,2,3-Trichlorobenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trichlorobenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1-Trichloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2-Trichloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichloroethene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichlorofluoromethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,3-Trichloropropane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trimethylbenzene		<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,3,5-Trimethylbenzene		<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Vinyl Chloride	C	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Xylenes, Total		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Surr: Dibromofluoromethane		95.6	%		87-115	SW 8260B	12/17/2000	2250
Surr: Toluene-d8		96.4	%		86-111	SW 8260B	12/17/2000	2250
Surr: Bromofluorobenzene		95.2	%		90-109	SW 8260B	12/17/2000	2250

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Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421713
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-10 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 12:50 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421713
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-10 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 12:50 Date Received: 12/11/2000

Parameter		Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
p-Isopropyltoluene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methylene Chloride		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methyl-t-butyl ether		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Naphthalene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Propylbenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Styrene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Tetrachloroethene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Toluene		<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,2,3-Trichlorobenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trichlorobenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1-Trichloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2-Trichloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichloroethene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichlorofluoromethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,3-Trichloropropane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trimethylbenzene		<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,3,5-Trimethylbenzene		<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Vinyl Chloride	C	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Xylenes, Total		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Surr: Dibromofluoromethane		94.8	%		87-115	SW 8260B	12/17/2000	2250
Surr: Toluene-d8		96.6	%		86-111	SW 8260B	12/17/2000	2250
Surr: Bromofluorobenzene		95.4	%		90-109	SW 8260B	12/17/2000	2250

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ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421714
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: PZ-8 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 14:15 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421714
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: PZ-8 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 14:15 Date Received: 12/11/2000

Parameter		Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
p-Isopropyltoluene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methylene Chloride		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methyl-t-butyl ether		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Naphthalene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Propylbenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Styrene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Tetrachloroethene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Toluene		<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,2,3-Trichlorobenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trichlorobenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1-Trichloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2-Trichloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichloroethene		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichlorofluoromethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,3-Trichloropropane		<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trimethylbenzene		<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,3,5-Trimethylbenzene		<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Vinyl Chloride	C	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Xylenes, Total		0.27	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Surr: Dibromofluoromethane		96.4	%		87-115	SW 8260B	12/17/2000	2250
Surr: Toluene-d8		96.2	%		86-111	SW 8260B	12/17/2000	2250
Surr: Bromofluorobenzene		95.8	%		90-109	SW 8260B	12/17/2000	2250

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421715
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-8 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 14:25 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421715
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MW-8 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 14:25 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2249
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2249
Surr: Dibromofluoromethane	96.8	%		87-115	SW 8260B	12/17/2000	2249
Surr: Toluene-d8	96.6	%		86-111	SW 8260B	12/17/2000	2249
Surr: Bromofluorobenzene	96.6	%		90-109	SW 8260B	12/17/2000	2249

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421716
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-7 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 16:00 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,2-Dichloroethene	33	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421716
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-7 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 16:00 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Naphthalene	0.36	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Toluene	0.63	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Vinyl Chloride	1,400	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Xylenes, Total	4.5	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Surr: Dibromofluoromethane	96.4	%		87-115	SW 8260B	12/17/2000	2250
Surr: Toluene-d8	96.6	%		86-111	SW 8260B	12/17/2000	2250
Surr: Bromofluorobenzene	94.8	%		90-109	SW 8260B	12/17/2000	2250

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INCORPORATED

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421717
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-6 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 15:30 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethane	3.2	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,2-Dichloroethene	670	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
trans-1,2-Dichloroethene	3.6	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421717
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-6 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 15:30 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/17/2000	2250
Vinyl Chloride	530	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	12/17/2000	2250
Surr: Dibromofluoromethane	96.8	%		87-115	SW 8260B	12/17/2000	2250
Surr: Toluene-d8	97.4	%		86-111	SW 8260B	12/17/2000	2250
Surr: Bromofluorobenzene	95.4	%		90-109	SW 8260B	12/17/2000	2250

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421718
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:MW-1 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/08/2000 13:00 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421718
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:MW-1 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/08/2000 13:00 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Surr: Dibromofluoromethane	110.4	%		87-115	SW 8260B	12/18/2000	2251
Surr: Toluene-d8	100.4	%		86-111	SW 8260B	12/18/2000	2251
Surr: Bromofluorobenzene	97.0	%		90-109	SW 8260B	12/18/2000	2251

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421719
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-1 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/08/2000 13:20 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
Bromobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromochloromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromodichloromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromoform	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromomethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
n-Butylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
sec-Butylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
tert-Butylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Carbon Tetrachloride	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chlorodibromomethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloroform	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
2-Chlorotoluene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
4-Chlorotoluene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dibromo-3-Chloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dibromoethane (EDB)	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Dibromomethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,3-Dichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,4-Dichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Dichlorodifluoromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloroethene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
cis-1,2-Dichloroethene	3,200	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
trans-1,2-Dichloroethene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,3-Dichloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
2,2-Dichloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloropropene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
cis-1,3-Dichloropropene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
trans-1,3-Dichloropropene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Di-isopropyl ether	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Ethylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Hexachlorobutadiene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421719
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-1 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/08/2000 13:20 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
p-Isopropyltoluene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Methylene Chloride	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Methyl-t-butyl ether	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Naphthalene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
n-Propylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Styrene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,1,2-Tetrachloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,2,2-Tetrachloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Tetrachloroethene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Toluene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
1,2,3-Trichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,4-Trichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,1-Trichloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,2-Trichloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Trichloroethene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Trichlorofluoromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,3-Trichloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,4-Trimethylbenzene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
1,3,5-Trimethylbenzene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
Vinyl Chloride	1,600	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Xylenes, Total	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Surr: Dibromofluoromethane	95.4	%		87-115	SW 8260B	12/18/2000	2252
Surr: Toluene-d8	96.2	%		86-111	SW 8260B	12/18/2000	2252
Surr: Bromofluorobenzene	96.4	%		90-109	SW 8260B	12/18/2000	2252

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421720
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-4 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/08/2000 11:25 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<4.0	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
Bromobenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromochloromethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromodichloromethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromoform	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromomethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
n-Butylbenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
sec-Butylbenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
tert-Butylbenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Carbon Tetrachloride	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chlorobenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chlorodibromomethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloroethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloroform	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloromethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
2-Chlorotoluene	<4.0	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
4-Chlorotoluene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dibromo-3-Chloropropane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dibromoethane (EDB)	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Dibromomethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichlorobenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,3-Dichlorobenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,4-Dichlorobenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Dichlorodifluoromethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloroethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichloroethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloroethene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
cis-1,2-Dichloroethene	880	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
trans-1,2-Dichloroethene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichloropropane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,3-Dichloropropane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
2,2-Dichloropropane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloropropene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
cis-1,3-Dichloropropene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
trans-1,3-Dichloropropene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Di-isopropyl ether	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Ethylbenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Hexachlorobutadiene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421720
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-4 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/08/2000 11:25 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
p-Isopropyltoluene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Methylene Chloride	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Methyl-t-butyl ether	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Naphthalene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
n-Propylbenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Styrene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,1,2-Tetrachloroethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,2,2-Tetrachloroethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Tetrachloroethene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Toluene	<4.0	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
1,2,3-Trichlorobenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,4-Trichlorobenzene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,1-Trichloroethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,2-Trichloroethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Trichloroethene	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Trichlorofluoromethane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,3-Trichloropropane	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,4-Trimethylbenzene	<4.0	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
1,3,5-Trimethylbenzene	<4.0	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
Vinyl Chloride	760	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Xylenes, Total	<10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Surr: Dibromofluoromethane	96.2	%		87-115	SW 8260B	12/18/2000	2252
Surr: Toluene-d8	95.8	%		86-111	SW 8260B	12/18/2000	2252
Surr: Bromofluorobenzene	96.4	%		90-109	SW 8260B	12/18/2000	2252

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421721
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-5 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/08/2000 11:45 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.20	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
Bromobenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromochloromethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromodichloromethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromoform	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromomethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
n-Butylbenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
sec-Butylbenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
tert-Butylbenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Carbon Tetrachloride	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chlorobenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chlorodibromomethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloroethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloroform	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloromethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
2-Chlorotoluene	<0.20	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
4-Chlorotoluene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dibromo-3-Chloropropane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dibromoethane (EDB)	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Dibromomethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichlorobenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,3-Dichlorobenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,4-Dichlorobenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Dichlorodifluoromethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloroethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichloroethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloroethene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
cis-1,2-Dichloroethene	10	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
trans-1,2-Dichloroethene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichloropropane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,3-Dichloropropane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
2,2-Dichloropropane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloropropene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
cis-1,3-Dichloropropene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
trans-1,3-Dichloropropene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Di-isopropyl ether	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Ethylbenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Hexachlorobutadiene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421721
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: MPS:P-5 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/08/2000 11:45 Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
p-Isopropyltoluene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Methylene Chloride	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Methyl-t-butyl ether	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Naphthalene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
n-Propylbenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Styrene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,1,2-Tetrachloroethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Tetrachloroethene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Toluene	<0.20	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
1,2,3-Trichlorobenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,4-Trichlorobenzene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,1-Trichloroethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,2-Trichloroethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Trichloroethene	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Trichlorofluoromethane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,3-Trichloropropane	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,4-Trimethylbenzene	<0.20	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
1,3,5-Trimethylbenzene	<0.20	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
Vinyl Chloride	91	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Xylenes, Total	<0.50	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Surr: Dibromofluoromethane	96.6	%		87-115	SW 8260B	12/18/2000	2252
Surr: Toluene-d8	96.8	%		86-111	SW 8260B	12/18/2000	2252
Surr: Bromofluorobenzene	97.0	%		90-109	SW 8260B	12/18/2000	2252

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421722
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: Duplicate 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 UNKNOWN Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
Bromobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromochloromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromodichloromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromoform	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Bromomethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
n-Butylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
sec-Butylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
tert-Butylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Carbon Tetrachloride	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chlorodibromomethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloroform	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Chloromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
2-Chlorotoluene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
4-Chlorotoluene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dibromo-3-Chloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dibromoethane (EDB)	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Dibromomethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,3-Dichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,4-Dichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Dichlorodifluoromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloroethene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
cis-1,2-Dichloroethene	3,100	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
trans-1,2-Dichloroethene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2-Dichloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,3-Dichloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
2,2-Dichloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1-Dichloropropene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
cis-1,3-Dichloropropene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
trans-1,3-Dichloropropene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Di-isopropyl ether	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Ethylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Hexachlorobutadiene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421722
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: Duplicate 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 UNKNOWN Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
p-Isopropyltoluene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Methylene Chloride	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Methyl-t-butyl ether	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Naphthalene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
n-Propylbenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Styrene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,1,2-Tetrachloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,2,2-Tetrachloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Tetrachloroethene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Toluene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
1,2,3-Trichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,4-Trichlorobenzene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,1-Trichloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,1,2-Trichloroethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Trichloroethene	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Trichlorofluoromethane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,3-Trichloropropane	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
1,2,4-Trimethylbenzene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
1,3,5-Trimethylbenzene	<10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2252
Vinyl Chloride	1,400	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Xylenes, Total	<25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2252
Surr: Dibromofluoromethane	96.0	%		87-115	SW 8260B	12/18/2000	2252
Surr: Toluene-d8	96.6	%		86-111	SW 8260B	12/18/2000	2252
Surr: Bromofluorobenzene	97.0	%		90-109	SW 8260B	12/18/2000	2252

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421723
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: Equipment Blk 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 UNKNOWN Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chlorobenzene	0.73	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251

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ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421723
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: Equipment Blk 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 UNKNOWN Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
p-Isopropyltoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Methylene Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Methyl-t-butyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Naphthalene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
n-Propylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Styrene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1,1,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1,2,2-Tetrachloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Tetrachloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Toluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
1,2,3-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2,4-Trichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1,1-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,1,2-Trichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Trichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Trichlorofluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
1,2,4-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
1,3,5-Trimethylbenzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/18/2000	2251
Vinyl Chloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Xylenes, Total	<0.25	ug/L	0.25	0.83	SW 8260B	12/18/2000	2251
Surr: Dibromofluoromethane	108.2	%		87-115	SW 8260B	12/18/2000	2251
Surr: Toluene-d8	100.4	%		86-111	SW 8260B	12/18/2000	2251
Surr: Bromofluorobenzene	97.4	%		90-109	SW 8260B	12/18/2000	2251

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ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421724
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: Trip Blank 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 UNKNOWN Date Received: 12/11/2000

Parameter	Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
VOC - AQUEOUS - EPA 8260B							
Benzene	<0.10	ug/L	0.10	0.33	SW 8260B	12/16/2000	2248
Bromobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Bromochloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Bromodichloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Bromoform	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Bromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
n-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
sec-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
tert-Butylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Carbon Tetrachloride	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Chlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Chlorodibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Chloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Chloroform	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Chloromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
2-Chlorotoluene	<0.10	ug/L	0.10	0.33	SW 8260B	12/16/2000	2248
4-Chlorotoluene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,2-Dibromo-3-Chloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,2-Dibromoethane (EDB)	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Dibromomethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,2-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,3-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,4-Dichlorobenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Dichlorodifluoromethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,1-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,2-Dichloroethane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,1-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,3-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
2,2-Dichloropropane	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,1-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
cis-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
trans-1,3-Dichloropropene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Di-isopropyl ether	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Ethylbenzene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Hexachlorobutadiene	<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248

ANALYTICAL REPORT

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

12/19/2000
Job No: 00.10667
Sample No: 421724
Account No: 65300

JOB DESCRIPTION: 3125 Whitefish Bay/Good Hope LF
PROJECT DESCRIPTION: Groundwater Analysis
SAMPLE DESCRIPTION: Trip Blank 3125 Whitefish Bay LF
Rec'd at 4 degrees C

Date/Time Taken: 12/07/2000 UNKNOWN Date Received: 12/11/2000

Parameter		Results	Units	MDL	LOQ	Method	Date Analyzed	Prep/Run Batch
Isopropylbenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
p-Isopropyltoluene		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Methylene Chloride	L	0.56	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Methyl-t-butyl ether		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Naphthalene		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
n-Propylbenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Styrene		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,1,1,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,1,2,2-Tetrachloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Tetrachloroethene		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Toluene		<0.10	ug/L	0.10	0.33	SW 8260B	12/16/2000	2248
1,2,3-Trichlorobenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,2,4-Trichlorobenzene		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,1,1-Trichloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,1,2-Trichloroethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Trichloroethene		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Trichlorofluoromethane		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,2,3-Trichloropropane		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
1,2,4-Trimethylbenzene		<0.10	ug/L	0.10	0.33	SW 8260B	12/16/2000	2248
1,3,5-Trimethylbenzene		<0.10	ug/L	0.10	0.33	SW 8260B	12/16/2000	2248
Vinyl Chloride		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Xylenes, Total		<0.25	ug/L	0.25	0.83	SW 8260B	12/16/2000	2248
Surr: Dibromofluoromethane		106.6	%		87-115	SW 8260B	12/16/2000	2248
Surr: Toluene-d8		99.4	%		86-111	SW 8260B	12/16/2000	2248
Surr: Bromofluorobenzene		97.0	%		90-109	SW 8260B	12/16/2000	2248

QUALITY CONTROL REPORT

BLANKS

12/19/2000

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

Job No: 00.10667
Account No: 65300

Job Description: 3125 Whitefish Bay/Good Hope LF

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
VOC - AQUEOUS - EPA 8260B						
Benzene		2248	<0.10	0.10	0.33	ug/L
Bromobenzene		2248	<0.25	0.25	0.83	ug/L
Bromochloromethane		2248	<0.25	0.25	0.83	ug/L
Bromodichloromethane		2248	<0.25	0.25	0.83	ug/L
Bromoform		2248	<0.25	0.25	0.83	ug/L
Bromomethane		2248	<0.25	0.25	0.83	ug/L
n-Butylbenzene		2248	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		2248	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		2248	<0.25	0.25	0.83	ug/L
Carbon Tetrachloride		2248	<0.25	0.25	0.83	ug/L
Chlorobenzene		2248	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		2248	<0.25	0.25	0.83	ug/L
Chloroethane		2248	<0.25	0.25	0.83	ug/L
Chloroform		2248	<0.25	0.25	0.83	ug/L
Chloromethane		2248	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		2248	<0.10	0.10	0.33	ug/L
4-Chlorotoluene		2248	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		2248	<0.25	0.25	0.83	ug/L
1,2-Dibromoethane (EDB)		2248	<0.25	0.25	0.83	ug/L
Dibromomethane		2248	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		2248	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		2248	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		2248	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		2248	<0.25	0.25	0.83	ug/L
1,1-Dichloroethane		2248	<0.25	0.25	0.83	ug/L
1,2-Dichloroethane		2248	<0.25	0.25	0.83	ug/L
1,1-Dichloroethene		2248	<0.25	0.25	0.83	ug/L
cis-1,2-Dichloroethene		2248	<0.25	0.25	0.83	ug/L
trans-1,2-Dichloroethene		2248	<0.25	0.25	0.83	ug/L
1,2-Dichloropropane		2248	<0.25	0.25	0.83	ug/L
1,3-Dichloropropane		2248	<0.25	0.25	0.83	ug/L
2,2-Dichloropropane		2248	<0.25	0.25	0.83	ug/L
1,1-Dichloropropene		2248	<0.25	0.25	0.83	ug/L
cis-1,3-Dichloropropene		2248	<0.25	0.25	0.83	ug/L
trans-1,3-Dichloropropene		2248	<0.25	0.25	0.83	ug/L
Di-isopropyl ether		2248	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT

BLANKS

12/19/2000

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

Job No: 00.10667
Account No: 65300

Job Description: 3125 Whitefish Bay/Good Hope LF

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Ethylbenzene		2248	<0.25	0.25	0.83	ug/L
Hexachlorobutadiene		2248	<0.25	0.25	0.83	ug/L
Isopropylbenzene		2248	<0.25	0.25	0.83	ug/L
p-Isopropyltoluene		2248	<0.25	0.25	0.83	ug/L
Methylene Chloride		2248	<0.25	0.25	0.83	ug/L
Methyl-t-butyl ether		2248	<0.25	0.25	0.83	ug/L
Naphthalene		2248	<0.25	0.25	0.83	ug/L
n-Propylbenzene		2248	<0.25	0.25	0.83	ug/L
Styrene		2248	<0.25	0.25	0.83	ug/L
1,1,1,2-Tetrachloroethane		2248	<0.25	0.25	0.83	ug/L
1,1,2,2-Tetrachloroethane		2248	<0.25	0.25	0.83	ug/L
Tetrachloroethene		2248	<0.25	0.25	0.83	ug/L
Toluene		2248	<0.10	0.10	0.33	ug/L
1,2,3-Trichlorobenzene		2248	<0.25	0.25	0.83	ug/L
1,2,4-Trichlorobenzene		2248	<0.25	0.25	0.83	ug/L
1,1,1-Trichloroethane		2248	<0.25	0.25	0.83	ug/L
1,1,2-Trichloroethane		2248	<0.25	0.25	0.83	ug/L
Trichloroethene		2248	<0.25	0.25	0.83	ug/L
Trichlorofluoromethane		2248	<0.25	0.25	0.83	ug/L
1,2,3-Trichloropropane		2248	<0.25	0.25	0.83	ug/L
1,2,4-Trimethylbenzene		2248	<0.10	0.10	0.33	ug/L
1,3,5-Trimethylbenzene		2248	<0.10	0.10	0.33	ug/L
Vinyl Chloride		2248	<0.25	0.25	0.83	ug/L
Xylenes, Total		2248	<0.25	0.25	0.83	ug/L
Surr: Dibromofluoromethane		2248	105.6		87-115	%
Surr: Toluene-d8		2248	100.4		86-111	%
Surr: Bromofluorobenzene		2248	97.2		90-109	%
VOC - AQUEOUS - EPA 8260B						
Benzene		2249	<0.10	0.10	0.33	ug/L
Bromobenzene		2249	<0.25	0.25	0.83	ug/L
Bromochloromethane		2249	<0.25	0.25	0.83	ug/L
Bromodichloromethane		2249	<0.25	0.25	0.83	ug/L
Bromoform		2249	<0.25	0.25	0.83	ug/L
Bromomethane		2249	<0.25	0.25	0.83	ug/L
n-Butylbenzene		2249	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		2249	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		2249	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

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QUALITY CONTROL REPORT

BLANKS

12/19/2000

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

Job No: 00.10667
Account No: 65300

Job Description: 3125 Whitefish Bay/Good Hope LF

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Carbon Tetrachloride		2249	<0.25	0.25	0.83	ug/L
Chlorobenzene		2249	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		2249	<0.25	0.25	0.83	ug/L
Chloroethane		2249	<0.25	0.25	0.83	ug/L
Chloroform		2249	<0.25	0.25	0.83	ug/L
Chloromethane		2249	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		2249	<0.10	0.10	0.33	ug/L
4-Chlorotoluene		2249	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		2249	<0.25	0.25	0.83	ug/L
1,2-Dibromoethane (EDB)		2249	<0.25	0.25	0.83	ug/L
Dibromomethane		2249	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		2249	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		2249	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		2249	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		2249	<0.25	0.25	0.83	ug/L
1,1-Dichloroethane		2249	<0.25	0.25	0.83	ug/L
1,2-Dichloroethane		2249	<0.25	0.25	0.83	ug/L
1,1-Dichloroethene		2249	<0.25	0.25	0.83	ug/L
cis-1,2-Dichloroethene		2249	<0.25	0.25	0.83	ug/L
trans-1,2-Dichloroethene		2249	<0.25	0.25	0.83	ug/L
1,2-Dichloropropane		2249	<0.25	0.25	0.83	ug/L
1,3-Dichloropropane		2249	<0.25	0.25	0.83	ug/L
2,2-Dichloropropane		2249	<0.25	0.25	0.83	ug/L
1,1-Dichloropropene		2249	<0.25	0.25	0.83	ug/L
cis-1,3-Dichloropropene		2249	<0.25	0.25	0.83	ug/L
trans-1,3-Dichloropropene		2249	<0.25	0.25	0.83	ug/L
Di-isopropyl ether		2249	<0.25	0.25	0.83	ug/L
Ethylbenzene		2249	<0.25	0.25	0.83	ug/L
Hexachlorobutadiene		2249	<0.25	0.25	0.83	ug/L
Isopropylbenzene		2249	<0.25	0.25	0.83	ug/L
p-Isopropyltoluene		2249	<0.25	0.25	0.83	ug/L
Methylene Chloride		2249	<0.25	0.25	0.83	ug/L
Methyl-t-butyl ether		2249	<0.25	0.25	0.83	ug/L
Naphthalene		2249	<0.25	0.25	0.83	ug/L
n-Propylbenzene		2249	<0.25	0.25	0.83	ug/L
Styrene		2249	<0.25	0.25	0.83	ug/L
1,1,1,2-Tetrachloroethane		2249	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT
BLANKS

12/19/2000

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

Job No: 00.10667
Account No: 65300

Job Description: 3125 Whitefish Bay/Good Hope LF

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
1,1,2,2-Tetrachloroethane		2249	<0.25	0.25	0.83	ug/L
Tetrachloroethene		2249	<0.25	0.25	0.83	ug/L
Toluene		2249	<0.10	0.10	0.33	ug/L
1,2,3-Trichlorobenzene		2249	<0.25	0.25	0.83	ug/L
1,2,4-Trichlorobenzene		2249	<0.25	0.25	0.83	ug/L
1,1,1-Trichloroethane		2249	<0.25	0.25	0.83	ug/L
1,1,2-Trichloroethane		2249	<0.25	0.25	0.83	ug/L
Trichloroethene		2249	<0.25	0.25	0.83	ug/L
Trichlorofluoromethane		2249	<0.25	0.25	0.83	ug/L
1,2,3-Trichloropropane		2249	<0.25	0.25	0.83	ug/L
1,2,4-Trimethylbenzene		2249	<0.10	0.10	0.33	ug/L
1,3,5-Trimethylbenzene		2249	<0.10	0.10	0.33	ug/L
Vinyl Chloride		2249	<0.25	0.25	0.83	ug/L
Xylenes, Total		2249	<0.25	0.25	0.83	ug/L
Surr: Dibromofluoromethane		2249	96.4		87-115	%
Surr: Toluene-d8		2249	95.8		86-111	%
Surr: Bromofluorobenzene		2249	96.0		90-109	%
VOC - AQUEOUS - EPA 8260B						
Benzene		2250	<0.10	0.10	0.33	ug/L
Bromobenzene		2250	<0.25	0.25	0.83	ug/L
Bromochloromethane		2250	<0.25	0.25	0.83	ug/L
Bromodichloromethane		2250	<0.25	0.25	0.83	ug/L
Bromoform		2250	<0.25	0.25	0.83	ug/L
Bromomethane		2250	<0.25	0.25	0.83	ug/L
n-Butylbenzene		2250	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		2250	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		2250	<0.25	0.25	0.83	ug/L
Carbon Tetrachloride		2250	<0.25	0.25	0.83	ug/L
Chlorobenzene		2250	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		2250	<0.25	0.25	0.83	ug/L
Chloroethane		2250	<0.25	0.25	0.83	ug/L
Chloroform		2250	<0.25	0.25	0.83	ug/L
Chloromethane		2250	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		2250	<0.10	0.10	0.33	ug/L
4-Chlorotoluene		2250	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		2250	<0.25	0.25	0.83	ug/L
1,2-Dibromoethane (EDB)		2250	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT

BLANKS

12/19/2000

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

Job No: 00.10667
Account No: 65300

Job Description: 3125 Whitefish Bay/Good Hope LF

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Dibromomethane		2250	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		2250	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		2250	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		2250	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		2250	<0.25	0.25	0.83	ug/L
1,1-Dichloroethane		2250	<0.25	0.25	0.83	ug/L
1,2-Dichloroethane		2250	<0.25	0.25	0.83	ug/L
1,1-Dichloroethene		2250	<0.25	0.25	0.83	ug/L
cis-1,2-Dichloroethene		2250	<0.25	0.25	0.83	ug/L
trans-1,2-Dichloroethene		2250	<0.25	0.25	0.83	ug/L
1,2-Dichloropropane		2250	<0.25	0.25	0.83	ug/L
1,3-Dichloropropane		2250	<0.25	0.25	0.83	ug/L
2,2-Dichloropropane		2250	<0.25	0.25	0.83	ug/L
1,1-Dichloropropene		2250	<0.25	0.25	0.83	ug/L
cis-1,3-Dichloropropene		2250	<0.25	0.25	0.83	ug/L
trans-1,3-Dichloropropene		2250	<0.25	0.25	0.83	ug/L
Di-isopropyl ether		2250	<0.25	0.25	0.83	ug/L
Ethylbenzene		2250	<0.25	0.25	0.83	ug/L
Hexachlorobutadiene		2250	<0.25	0.25	0.83	ug/L
Isopropylbenzene		2250	<0.25	0.25	0.83	ug/L
p-Isopropyltoluene		2250	<0.25	0.25	0.83	ug/L
Methylene Chloride		2250	<0.25	0.25	0.83	ug/L
Methyl-t-butyl ether		2250	<0.25	0.25	0.83	ug/L
Naphthalene		2250	<0.25	0.25	0.83	ug/L
n-Propylbenzene		2250	<0.25	0.25	0.83	ug/L
Styrene		2250	<0.25	0.25	0.83	ug/L
1,1,1,2-Tetrachloroethane		2250	<0.25	0.25	0.83	ug/L
1,1,2,2-Tetrachloroethane		2250	<0.25	0.25	0.83	ug/L
Tetrachloroethene		2250	<0.25	0.25	0.83	ug/L
Toluene		2250	<0.10	0.10	0.33	ug/L
1,2,3-Trichlorobenzene		2250	<0.25	0.25	0.83	ug/L
1,2,4-Trichlorobenzene		2250	<0.25	0.25	0.83	ug/L
1,1,1-Trichloroethane		2250	<0.25	0.25	0.83	ug/L
1,1,2-Trichloroethane		2250	<0.25	0.25	0.83	ug/L
Trichloroethene		2250	<0.25	0.25	0.83	ug/L
Trichlorofluoromethane		2250	<0.25	0.25	0.83	ug/L
1,2,3-Trichloropropane		2250	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT

BLANKS

12/19/2000

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

Job No: 00.10667
Account No: 65300

Job Description: 3125 Whitefish Bay/Good Hope LF

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
1,2,4-Trimethylbenzene		2250	<0.10	0.10	0.33	ug/L
1,3,5-Trimethylbenzene		2250	<0.10	0.10	0.33	ug/L
Vinyl Chloride		2250	<0.25	0.25	0.83	ug/L
Xylenes, Total		2250	<0.25	0.25	0.83	ug/L
Surr: Dibromofluoromethane		2250	96.2		87-115	%
Surr: Toluene-d8		2250	97.6		86-111	%
Surr: Bromofluorobenzene		2250	96.0		90-109	%
VOC - AQUEOUS - EPA 8260B						
Benzene		2251	<0.10	0.10	0.33	ug/L
Bromobenzene		2251	<0.25	0.25	0.83	ug/L
Bromochloromethane		2251	<0.25	0.25	0.83	ug/L
Bromodichloromethane		2251	<0.25	0.25	0.83	ug/L
Bromoform		2251	<0.25	0.25	0.83	ug/L
Bromomethane		2251	<0.25	0.25	0.83	ug/L
n-Butylbenzene		2251	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		2251	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		2251	<0.25	0.25	0.83	ug/L
Carbon Tetrachloride		2251	<0.25	0.25	0.83	ug/L
Chlorobenzene		2251	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		2251	<0.25	0.25	0.83	ug/L
Chloroethane		2251	<0.25	0.25	0.83	ug/L
Chloroform		2251	<0.25	0.25	0.83	ug/L
Chloromethane		2251	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		2251	<0.10	0.10	0.33	ug/L
4-Chlorotoluene		2251	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		2251	<0.25	0.25	0.83	ug/L
1,2-Dibromoethane (EDB)		2251	<0.25	0.25	0.83	ug/L
Dibromomethane		2251	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		2251	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		2251	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		2251	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		2251	<0.25	0.25	0.83	ug/L
1,1-Dichloroethane		2251	<0.25	0.25	0.83	ug/L
1,2-Dichloroethane		2251	<0.25	0.25	0.83	ug/L
1,1-Dichloroethene		2251	<0.25	0.25	0.83	ug/L
cis-1,2-Dichloroethene		2251	<0.25	0.25	0.83	ug/L
trans-1,2-Dichloroethene		2251	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT

BLANKS

12/19/2000

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

Job No: 00.10667
Account No: 65300

Job Description: 3125 Whitefish Bay/Good Hope LF

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
1,2-Dichloropropane		2251	<0.25	0.25	0.83	ug/L
1,3-Dichloropropane		2251	<0.25	0.25	0.83	ug/L
2,2-Dichloropropane		2251	<0.25	0.25	0.83	ug/L
1,1-Dichloropropene		2251	<0.25	0.25	0.83	ug/L
cis-1,3-Dichloropropene		2251	<0.25	0.25	0.83	ug/L
trans-1,3-Dichloropropene		2251	<0.25	0.25	0.83	ug/L
Di-isopropyl ether		2251	<0.25	0.25	0.83	ug/L
Ethylbenzene		2251	<0.25	0.25	0.83	ug/L
Hexachlorobutadiene		2251	<0.25	0.25	0.83	ug/L
Isopropylbenzene		2251	<0.25	0.25	0.83	ug/L
p-Isopropyltoluene		2251	<0.25	0.25	0.83	ug/L
Methylene Chloride		2251	<0.25	0.25	0.83	ug/L
Methyl-t-butyl ether		2251	<0.25	0.25	0.83	ug/L
Naphthalene		2251	<0.25	0.25	0.83	ug/L
n-Propylbenzene		2251	<0.25	0.25	0.83	ug/L
Styrene		2251	<0.25	0.25	0.83	ug/L
1,1,1,2-Tetrachloroethane		2251	<0.25	0.25	0.83	ug/L
1,1,2,2-Tetrachloroethane		2251	<0.25	0.25	0.83	ug/L
Tetrachloroethene		2251	<0.25	0.25	0.83	ug/L
Toluene		2251	<0.10	0.10	0.33	ug/L
1,2,3-Trichlorobenzene		2251	<0.25	0.25	0.83	ug/L
1,2,4-Trichlorobenzene		2251	<0.25	0.25	0.83	ug/L
1,1,1-Trichloroethane		2251	<0.25	0.25	0.83	ug/L
1,1,2-Trichloroethane		2251	<0.25	0.25	0.83	ug/L
Trichloroethene		2251	<0.25	0.25	0.83	ug/L
Trichlorofluoromethane		2251	<0.25	0.25	0.83	ug/L
1,2,3-Trichloropropane		2251	<0.25	0.25	0.83	ug/L
1,2,4-Trimethylbenzene		2251	<0.10	0.10	0.33	ug/L
1,3,5-Trimethylbenzene		2251	<0.10	0.10	0.33	ug/L
Vinyl Chloride		2251	<0.25	0.25	0.83	ug/L
Xylenes, Total		2251	<0.25	0.25	0.83	ug/L
Surr: Dibromofluoromethane		2251	106.4		87-115	%
Surr: Toluene-d8		2251	99.2		86-111	%
Surr: Bromofluorobenzene		2251	96.8		90-109	%
VOC - AQUEOUS - EPA 8260B						
Benzene		2252	<0.10	0.10	0.33	ug/L
Bromobenzene		2252	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

QUALITY CONTROL REPORT

BLANKS

12/19/2000

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

Job No: 00.10667
Account No: 65300

Job Description: 3125 Whitefish Bay/Good Hope LF

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
Bromochloromethane		2252	<0.25	0.25	0.83	ug/L
Bromodichloromethane		2252	<0.25	0.25	0.83	ug/L
Bromoform		2252	<0.25	0.25	0.83	ug/L
Bromomethane		2252	<0.25	0.25	0.83	ug/L
n-Butylbenzene		2252	<0.25	0.25	0.83	ug/L
sec-Butylbenzene		2252	<0.25	0.25	0.83	ug/L
tert-Butylbenzene		2252	<0.25	0.25	0.83	ug/L
Carbon Tetrachloride		2252	<0.25	0.25	0.83	ug/L
Chlorobenzene		2252	<0.25	0.25	0.83	ug/L
Chlorodibromomethane		2252	<0.25	0.25	0.83	ug/L
Chloroethane		2252	<0.25	0.25	0.83	ug/L
Chloroform		2252	<0.25	0.25	0.83	ug/L
Chloromethane		2252	<0.25	0.25	0.83	ug/L
2-Chlorotoluene		2252	<0.10	0.10	0.33	ug/L
4-Chlorotoluene		2252	<0.25	0.25	0.83	ug/L
1,2-Dibromo-3-Chloropropane		2252	<0.25	0.25	0.83	ug/L
1,2-Dibromoethane (EDB)		2252	<0.25	0.25	0.83	ug/L
Dibromomethane		2252	<0.25	0.25	0.83	ug/L
1,2-Dichlorobenzene		2252	<0.25	0.25	0.83	ug/L
1,3-Dichlorobenzene		2252	<0.25	0.25	0.83	ug/L
1,4-Dichlorobenzene		2252	<0.25	0.25	0.83	ug/L
Dichlorodifluoromethane		2252	<0.25	0.25	0.83	ug/L
1,1-Dichloroethane		2252	<0.25	0.25	0.83	ug/L
1,2-Dichloroethane		2252	<0.25	0.25	0.83	ug/L
1,1-Dichloroethene		2252	<0.25	0.25	0.83	ug/L
cis-1,2-Dichloroethene		2252	<0.25	0.25	0.83	ug/L
trans-1,2-Dichloroethene		2252	<0.25	0.25	0.83	ug/L
1,2-Dichloropropane		2252	<0.25	0.25	0.83	ug/L
1,3-Dichloropropane		2252	<0.25	0.25	0.83	ug/L
2,2-Dichloropropane		2252	<0.25	0.25	0.83	ug/L
1,1-Dichloropropene		2252	<0.25	0.25	0.83	ug/L
cis-1,3-Dichloropropene		2252	<0.25	0.25	0.83	ug/L
trans-1,3-Dichloropropene		2252	<0.25	0.25	0.83	ug/L
Di-isopropyl ether		2252	<0.25	0.25	0.83	ug/L
Ethylbenzene		2252	<0.25	0.25	0.83	ug/L
Hexachlorobutadiene		2252	<0.25	0.25	0.83	ug/L
Isopropylbenzene		2252	<0.25	0.25	0.83	ug/L

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

TestAmerica
INCORPORATED

QUALITY CONTROL REPORT

BLANKS

12/19/2000

Mr. Mafizul Islam
SIGMA ENVIRONMENTAL SERV.
220 East Ryan Road
Oak Creek, WI 53154-4533

Job No: 00.10667
Account No: 65300

Job Description: 3125 Whitefish Bay/Good Hope LF

Parameter	Prep Batch	Run Batch	Blank Result	MDL	LOQ	Units
p-Isopropyltoluene		2252	<0.25	0.25	0.83	ug/L
Methylene Chloride		2252	<0.25	0.25	0.83	ug/L
Methyl-t-butyl ether		2252	<0.25	0.25	0.83	ug/L
Naphthalene		2252	<0.25	0.25	0.83	ug/L
n-Propylbenzene		2252	<0.25	0.25	0.83	ug/L
Styrene		2252	<0.25	0.25	0.83	ug/L
1,1,1,2-Tetrachloroethane		2252	<0.25	0.25	0.83	ug/L
1,1,2,2-Tetrachloroethane		2252	<0.25	0.25	0.83	ug/L
Tetrachloroethene		2252	<0.25	0.25	0.83	ug/L
Toluene		2252	<0.10	0.10	0.33	ug/L
1,2,3-Trichlorobenzene		2252	<0.25	0.25	0.83	ug/L
1,2,4-Trichlorobenzene		2252	<0.25	0.25	0.83	ug/L
1,1,1-Trichloroethane		2252	<0.25	0.25	0.83	ug/L
1,1,2-Trichloroethane		2252	<0.25	0.25	0.83	ug/L
Trichloroethene		2252	<0.25	0.25	0.83	ug/L
Trichlorofluoromethane		2252	<0.25	0.25	0.83	ug/L
1,2,3-Trichloropropane		2252	<0.25	0.25	0.83	ug/L
1,2,4-Trimethylbenzene		2252	<0.10	0.10	0.33	ug/L
1,3,5-Trimethylbenzene		2252	<0.10	0.10	0.33	ug/L
Vinyl Chloride		2252	<0.25	0.25	0.83	ug/L
Xylenes, Total		2252	<0.25	0.25	0.83	ug/L
Surr: Dibromofluoromethane		2252	96.2		87-115	%
Surr: Toluene-d8		2252	96.6		86-111	%
Surr: Bromofluorobenzene		2252	98.0		90-109	%

Method blank results exceed control limits when results are higher than the highest of any of the following: 1 - The limit of detection; . 2 - Five percent of the regulatory limit for that analyte; 3 - Five percent of the measured concentration in the sample. NR149.14 (3)d

 CO.10661

TestAmerica INCORPORATED

Watertown Division
602 Commerce Drive
Watertown, WI 53094

Phone: 920-261-1660
Fax: 920-261-8120

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: SIGMA ENVIRONMENTAL Client #: _____
Address: 220 E. RYAN ROAD
City/State/Zip Code: OAK CREEK, WI
Project Manager: MAFIZUL ISLAM
Telephone Number: 414-768-7144 Fax: 414-768-7158
Sampler Name: (Print Name) TOM McCOY
Sampler Signature:

Project Name: WHITEFISH BAY-GOOD HOPE LANDFILL
Project #: 3125
Site/Location ID: MILWAUKEE State: WI
Report To: MAFIZUL ISLAM
Invoice To: " "
Quote #: _____ PO#: _____

TAT
___ Standard
___ Rush (surcharges may apply)
Date Needed: _____
Fax Results: Y N

QC Deliverables
___ None
___ Level 2 (Batch QC)
___ Level 3
___ Level 4
Other: _____

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: VOC (8260)	REMARKS
MPS:P-4	12/8/00	11:25		N	GW		3						X	
MPS:P-5	12/8/00	11:45		N	GW		3						X	
DUPLICATE	—	—		N	GW		3						X	
EQUIPMENT BLANK	—	—		N	—		3						X	
TRIP BLANK	—	—		N	—		1						X	

Special Instructions:

LABORATORY COMMENTS:
Init Lab Temp: 1 °C
Rec Lab Temp:
Custody Seals: Y N N/A
Bottles Supplied by TestAmerica: (Y) N
Method of Shipment: FT

	Date	Time		Date	Time
Relinquished By:	12/8/00	14:10	Received By:	12/11/00	10:11
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	12/11/00 Date:	Time: 13:45

R 12/12/00

00.10661

TestAmerica INCORPORATED

Watertown Division
602 Commerce Drive
Watertown, WI 53094

Phone: 920-261-1660
Fax: 920-261-8120

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: SIGMA ENVIRONMENTAL Client #: _____
Address: 220 E. RYAN ROAD
City/State/Zip Code: OAK CREEK, WI
Project Manager: MAFIZUL ISLAM
Telephone Number: 414-768-7144 Fax: 414-768-7158
Sampler Name: (Print Name) TOM McCOY
Sampler Signature:

Project Name: WHITEFISH BAY - GOOD HOPE LANDFILL
Project #: 3125
Site/Location ID: MILWAUKEE State: WI
Report To: MAFIZUL ISLAM
Invoice To: " "
Quote #: _____ PO#: _____

TAT
___ Standard
___ Rush (surcharges may apply)
Date Needed: _____
Fax Results: Y N

QC Deliverables
___ None
___ Level 2 (Batch QC)
___ Level 3
___ Level 4
Other: _____

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: VOC (8260)	REMARKS
PZ-9	12/7/00	11:05		N	GW		3						X	
MW-9	12/7/00	10:55		N	GW		3						X	
PZ-10	12/7/00	12:40		N	GW		3						X	
MW-10	12/7/00	12:50		N	GW		3						X	
PZ-8	12/7/00	14:15		N	GW		3						X	
MW-8	12/7/00	14:25		N	GW		3						X	
MPS; P-7	12/7/00	16:00		N	GW		3						X	
MPS: P-6	12/7/00	15:30		N	GW		3						X	
MPS: MW-1	12/8/00	13:00		N	GW		3						X	
MPS: P-1	12/8/00	13:20		N	GW		3						X	

Special Instructions: Please send all test results to: MAFIZUL ISLAM @ SIGMA

Relinquished By:	12/8/00	14:10	Received By:	12/11/00	10:15
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	12/11/00	13:45

LABORATORY COMMENTS:
Init Lab Temp: 4 °C
Rec Lab Temp:
Custody Seals: Y N N/A
Bottles Supplied by TestAmerica: (Y) N
Method of Shipment: TT

12/12/00