THE SIGMA GROUP
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April 15, 2008

Project Reference #10813

Ms. Karen Dettmer
City of Milwaukee
809 North Broadway
Milwaukee, Wisconsin 53202

RE: Summary of Phase II Investigation Findings & Geotechnical Investigations
1027 N. Edison St.
Milwaukee, Wisconsin

Dear Ms. Dettmer:

INTRODUCTION

Sigma Environmental Services, Inc. (Sigma) was retained by the City of Milwaukee, Department of City Development, to complete subsurface investigation activities and a geotechnical investigation at the property 1027 North Edison Street, Milwaukee, Wisconsin. The purpose of the subsurface investigation was to evaluate potential environmental concerns identified in the July 2000 Phase I Environmental Site Assessment report, while the proposed geotechnical activities were completed to evaluate the physical/geotechnical soil conditions with respect to the proposed site development project (as provided by the City of Milwaukee on November 29, 2007). This letter presents the results of the completed subsurface investigation activities and geotechnical investigation along with recommendations based on these results.

BACKGROUND

The site is located in the northeast ¼ of the northeast ¼ of Section 29, Township 7 North, Range 22 East in the City of Milwaukee, Milwaukee County Wisconsin. The site is located on the west side of N. Edison Street on the east edge of the Milwaukee River between Juneau Avenue to the north and State Street to the south. The site is approximately 19,985 square feet in size; however, only the southern half of the site is readily developable due to underground utilities and public access for a pedestrian bridge (over the Milwaukee River) on the northern portion of the site (*Figure 1*).

The City completed a Phase I Environmental Assessment of the site in July 2000; this Phase I report was again reviewed by the City and approved on July 12, 2007. As summarized in the report, the following historic uses of the parcel raise concerns regarding the potential for site impact: a coal yard, a second-hand materials yard, and a snow dump. Past operations at adjacent properties include, but are not limited to, a coal yard, Edison Electric Illumination Co., fur cleaning and dyeing, auto garage/repair/painting, roofing company, junk shop, gas station, electrical contractor, printing company, City yard/trucking yard, wholesale salvage, cleaning supplies manufacturer, and a wax company.

Limited Phase II investigation activities were conducted between January 31, 2008 and February 28, 2008 to assess the site conditions relative to historic uses. The scope of activities, results and recommendations are presented below.

PHASE II SCOPE OF WORK

Sigma on behalf of the City of Milwaukee completed the following:

1) A magnetometer survey to identify the potential presence of underground storage tanks (USTs),
2) Soil sampling via geoprobe soil boring advancement to evaluate site soil characteristics and quality, and
3) Groundwater sampling from temporary wells to screen groundwater quality.

The activities completed in January and February 2008 provide the following results.

INVESTIGATION ACTIVITIES

Magnetometer Survey

To evaluate the potential presence of USTs at the 1027 N. Edison St. Street site, Sigma completed a magnetometer survey of the site using a cesium magnetic gradiometer. The gradiometer provides a relatively quick and easy way to accurately locate USTs at the depths which they are likely to be buried (less than 10 foot bgs).

Sigma completed east-west and north-south transects on a ten foot grid spacing over the two separate sections of the site. The grid size at the southern section of the site (south of the pedestrian walkway) was approximately 110 feet (ft) by 60 ft. The grid size at the northern section of the site (north of the pedestrian walkway) was approximately 110 ft by 20 ft. The information generated through the magnetometer survey was used to finalize the soil sampling plan.

Subsurface Investigation

On February 25, 2008 six Geoprobe® soil borings were completed within the boundaries of the site. The Geoprobe® borings were advanced to a depth of between 16 to 20 feet bgs. The soil borings were strategically located around the site, four (GP-1 through GP-4) on the southern portion, and two (GP-5 and GP-6) on the northern portion. Soil boring locations are presented on *Figure 1*.

During boring advancement, soil samples were collected on a continuous basis and described on the basis of color, texture, grain size, and plasticity, and classified in accordance with the 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 an organic vapor monitor (OVM) that was periodically calibrated for direct response to 250 ppm isobutylene in air. Field screening results are presented on Soil Boring Logs in *Attachment A*.

Soil samples were also collected from each sample interval, containerized and preserved (where necessary) for potential laboratory analysis of one or more of the following analytes: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), RCRA metals, polychlorinated biphenyls (PCBs), and chlorides. Select soil samples, accompanied by a chain-of-custody document, were submitted to a certified laboratory for analysis based on field screening results and observations.

Five of the Geoprobe® soil borings were completed as temporary groundwater monitoring wells (TW-1 through TW-5). The monitoring wells included a ten-foot length of one-inch diameter PVC screen (0.010 slot) connected to an appropriate length of PVC riser pipe.

The temporary wells were sampled on February 27 and 28, 2008. The groundwater samples collected from the wells were submitted under chain-of-custody documentation to a certified laboratory for VOCs, SVOCs, dissolved RCRA metals, PCBs, and chloride analysis.

The soil boring that was not converted to a temporary monitoring well was abandoned upon completion. The borehole abandonment form is included in *Attachment B*.

LIMITED PHASE II INVESTIGATION RESULTS

Magnetometer Survey

No magnetic high anomalies were identified in the east-west and north-south transects during the magnetometer surveys. The east-west and north-south trending images of the metallic/magnetic plotting are attached in *Attachment C.* As no anomalies were identified in the subsurface, the proposed soil borings were completed at locations across the site to evaluate site conditions as a whole.

Geology

Based on information obtained during Sigma's subsurface investigation, the site appears to be covered with eight to twelve feet of fill comprised of soft sandy silts and silty sands containing gravel along with amounts of brick and wood debris and traces of glass and cinders. The lithology beneath the fill material generally consists of deposits of saturated fine sandy and clayey silts and silty clays to the maximum depth investigated (20 feet bgs). The specific soil characteristics and depths encountered during drilling activities are shown on the soil boring logs in *Attachment A*.

Hydrogeology

During groundwater sampling activities from the temporary wells good water recovery was noted, in general, and depths to groundwater ranged from 9 to 13 feet bgs. Based on the static groundwater elevations groundwater is interpreted to flow to the northeast. Groundwater elevations are presented in *Table 1*. A groundwater elevation map is included as *Figure 2*.

Soil Analytical Results

A total of twelve soil samples collected at the site were submitted for laboratory analysis of one or more of the following parameters: VOCs, SVOCs, PAHs RCRA metals, PCBs, and chloride.

VOCs Discussion: Review of the soil analytical results indicate that naphthalene was reported at concentrations greater than laboratory method detection limits in the soil samples collected from boring GP-1 at depths between 2 to 4 and 6 to 8 feet below ground surface (bgs) and from boring GP-3 at depths between 2 to 4 feet bgs. Toluene was reported at a concentration greater than the laboratory method detection limit in the soil sample collected from soil boring GP-1 at depths between 6 to 8 feet bgs. The reported naphthalene and toluene concentrations did not exceed applicable Ch. NR 720 Generic Residual Contaminant Levels (RCLs) for the protection of groundwater. No other VOCs were reported at concentrations greater than laboratory method detection limits.

SVOCs/PAHs Discussion: The shallower soil sample of the two soil samples collected from each soil boring was submitted for laboratory analysis of SVOCs (which include all PAH compounds) while the deeper sample was submitted for laboratory analysis of PAHs. Only one non-PAH SVOC constituent was reported at a concentration greater than laboratory method detection limits: carbazole[1] in the soil sample collected between 2 to 4 feet bgs in soil boring GP-1. The reported carbazole concentration was well below the EPA Region IX Preliminary Remediation Goal (PRG) for soil at a non-industrial site.

Detectable concentrations of one or more PAH constituents were measured in soil samples collected from soil borings GP-1 (2 to 4 and 6 to 8 feet bgs), GP-3 (2 to 4 and 6 to 8 feet bgs), GP-4 (4 to 8 feet bgs), GP-5 (6 to 8 feet bgs), and GP-6 (6 to 8 feet bgs). Applying the WDNR Interim PAH Generic RCLs for both the protection of groundwater standards and the non-industrial direct contact pathway standards show that there are up to seven PAH compounds that exceed protection of groundwater standards or the non-industrial direct contact pathway standards when a target risk factor of 1×10^{-6} is used (per s.NR 720.19(5)(a)) to calculate the direct contact RCLs:

- The soil samples collected between 6 to 8 feet bgs in soil boring GP-1, 4 to 8 feet bgs in soil boring GP-4, and 6 to 8 feet bgs in soil boring GP-6 contained reported concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene greater than the Interim Guidance RCLs for the direct contact pathway at a non-industrial site and reported concentrations of naphthalene and phenanthrene greater than the Interim Guidance RCLs for protection of groundwater.
- The soil sample collected between 6 to 8 feet bgs in soil boring GP-5 contained reported concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)-fluoranthene, and indeno(1,2,3-cd)pyrene greater than the Interim Guidance RCLs for the direct contact pathway at a non-industrial site and a reported concentration of phenanthrene greater than the Interim Guidance RCL for protection of groundwater.

1 Carbazole can be found in coal tar and is also used in the manufacture of dyes.

- The soil sample collected between 6 to 8 feet bgs in soil boring GP-3 contained reported concentrations of benzo(a)anthracene and benzo(a)pyrene greater than the Interim Guidance RCLs for the direct contact pathway at a non-industrial site.

All other detected PAH concentrations were below applicable standards. In addition, no soil samples collected within 4 feet of the ground surface contained concentrations of PAHs greater than the Interim Guidance RCLs for the non-industrial direct contact pathway when a target risk factor of 1×10^{-6} is used (per s.NR 720.19(5)(a)) to calculate the direct contact RCLs.

RCRA Metals: Concentrations of arsenic were reported greater than the Ch. NR 720 RCL for direct contact at a non-industrial site but are typical of background concentrations at sites in southeastern Wisconsin.

Concentrations of lead greater than the Ch. NR 720 RCL for direct contact at a non-industrial site were reported in soil samples collected from boring GP-1 (2 to 4 feet bgs and 6 to 8 feet bgs), GP-2 (2 to 4 feet bgs), GP-3 (2 to 4 feet and 6 to 8 feet bgs), GP-4 (4 to 8 feet bgs), GP-5 (6 to 8 feet bgs), and GP-6 (0 to 2 and 6 to 8 feet bgs).

No other RCRA Metal concentrations were reported greater than applicable standards.

PCBs: PCBs were not reported at concentrations greater than laboratory method detection limits in soil samples collected from the site.

Chloride: The reported concentrations of chloride in the soil samples collected from the soil borings completed at the site ranged between 58 to 200 mg/kg.

Sigma's soil laboratory analytical results for the site are summarized in *Table 2*. Copies of the soil laboratory analytical reports are included in *Attachment D*. A soil quality map is included as *Figure 3.*

Groundwater Quality Results

Groundwater samples from the five temporary monitoring wells (TW-1 through TW-5) were submitted for laboratory analysis of the following parameters: VOCs, SVOCs, dissolved RCRA metals, PCBs, and chloride. It is important to note that although the groundwater quality data has been reviewed and compared to regulatory standards, the groundwater samples were collected from temporary wells and these results may not be representative of actual groundwater conditions.

VOCs: Review of the laboratory analytical results indicate that select VOC constituents including ethylbenzene, naphthalene, toluene, trimethylbenzenes, and xylenes were reported greater than laboratory method detection limits in groundwater samples collected from temporary monitoring wells TW-1, TW-2, and TW-5. No VOC constituents were reported at concentrations greater than Ch. NR 140 Preventive Action Limits (PALs).

SVOCs: Review of Sigma's groundwater quality results indicates that pyridine[2] was reported at a concentration greater than the Ch. NR 140 PAL in the groundwater sample

2 Pyridine is found in coal tar and is also a solvent.

collected from temporary well TW-1. The groundwater sample collected from temporary well TW-5 contained a reported concentration of chrysene that was greater than the Ch. NR 140 Enforcement Standard (ES). The pyridine and chrysene concentrations were flagged by the analytical laboratory as between the Limit of Detection and Limit of Quantitation. No other SVOC constituents were reported at concentrations greater than applicable Ch. NR 140 PALs.

Dissolved RCRA Metals: Concentrations of dissolved arsenic were reported at concentrations greater than the Ch. NR 140 PAL in the groundwater samples collected from temporary wells TW-1, TW-2, TW-4 and TW-5. In addition, the groundwater sample collected from temporary well TW-2 contained chromium at a concentration greater than the Ch. NR 140 PAL. No other reported concentrations of dissolved RCRA metals were greater than Ch. NR 140 PALs.

PCBs: PCBs were not reported at concentrations greater than laboratory method detection limits in the groundwater samples collected from temporary monitoring wells installed at the site.

Chloride: Concentrations of chloride were reported greater than the Ch. NR 140 ES in the groundwater sample collected from temporary well TW-2 and greater than the Ch. NR 140 PAL in the groundwaters sample collected from temporary wells TW-1, TW-3.

Groundwater analytical data are summarized in *Table 3*. Copies of the soil laboratory analytical reports are included in *Attachment E*. A groundwater quality map is included as *Figure 4*.

GEOTECHNICAL INVESTIGATION RESULTS

Results of the geotechnical investigation are included in GESTRA's report entitled *Geotechnical Engineering Report, Highland Riverwalk Development, Milwaukee, WI* included as *Attachment F*.

DISCUSSION / RECOMMENDATION

Review of the magnetometer results and the site specific physical and chemical characteristics indicates that fill material containing concentrations of select PAH constituents and lead at concentrations greater than RCLs for the direct contact pathway is present at the site. The impacted fill material does not appear to be present at the ground surface but extends to depths of between 8 to 12 feet bgs. Although the fill material also contains concentrations of naphthalene and phenanthrene greater than the RCL for the protection of groundwater, groundwater at the site did not contain concentrations of naphthalene or phenanthrene greater than Ch. NR 140 PALs. The soil sample collected from below the fill material at 10 to 12 feet bgs in soil boring GP-2 did not contain concentrations of PAHs greater than laboratory method detection limits and the reported concentration of lead in this sample was below the Ch. NR 720 RCL.

Residual impacts to groundwater beneath the site appear to be limited to chloride at concentrations greater than the Ch. NR 140 ES and PAL in temporary wells TW-1, TW-2, and TW-3, chrysene at a concentration greater than the Ch. NR 140 ES in temporary well

TW-5, pyridine at a concentration greater than the Ch. NR 140 PAL in temporary well TW-1, dissolved chromium at a concentration greater than the Ch. NR 140 PAL in temporary well TW-2, and dissolved arsenic at concentrations greater than the Ch. NR 140 PAL in temporary wells TW-1, TW-2, TW-4, and TW-5. As noted above, although the groundwater quality data has been reviewed and compared to regulatory standards, the groundwater samples were collected from temporary wells and these results may not be representative of actual groundwater conditions. The WDNR may require the installation of Ch. NR 141-compliant groundwater monitoring wells for additional groundwater sampling prior to granting regulatory case closure for the site.

The residual soil and groundwater impacts detected in soil and groundwater at the site indicate that a release, most likely associated with historic fill, has occurred at the site; therefore, Sigma recommends that the Wisconsin Department of Natural Resources (WDNR) be notified of a release at the subject site. Due to the presence of historic fill material at the site containing glass and traces of other non-exempt fill, the WDNR will require an exemption to ch. NR 506.085 and NR 500.08(4) of the Wisconsin Administrative Code to build on a historic landfill be obtained prior to development activities. In addition, based on the proposed site development project (as provided by the City of Milwaukee on November 29, 2007), development activities will require excavation and off-site disposal of subsurface material from the southern portion of the property. Therefore, additional investigation activities to further characterize residual subsurface impacts at the site in the area of excavation are recommended.

Please call us at (414) 643-4200 if you have any questions regarding the recommendations presented in this report.

Sincerely,

SIGMA ENVIRONMENTAL SERVICES, INC.

Stephen Meer, P.E.
Staff Engineer

Kristin Kurzka, P.E.
Senior Engineer

Enclosures

Attachment A – Soil Boring Logs
Attachment B – Borehole Abandonment Form
Attachment C – Magnetometer Survey Results
Attachment D – Soil Laboratory Analytical Report
Attachment E – Groundwater Analytical Report
Attachment F – GESTRA's Geotechnical Report

Figure 1 – Site Plan Map
Figure 2 – Groundwater Contour Map
Figure 3 – Soil Quality Map
Figure 4 – Groundwater Quality Map

Table 1 – Groundwater Elevation Data
Table 2 - Soil Analytical Results
Table 3 – Groundwater Analytical Results

TABLES

Table 1
Groundwater Elevation Data
1027 N. Edison St.
City of Milwaukee, Milwaukee Wisconsin
Sigma Project #10813

Well Identification	Ground Surface Elevation (feet site)	Top of Casing Elevation (feet site)	Screen Interval (feet bgs)	Depth to Groundwater (feet toc)	Depth to Groundwater (feet bgs)	Groundwater Elevation (feet site)	Date
TW-1	97.49	98.74 Stick-Up	5-15	11.47	10.22	87.27	02/27/2008
TW-2	100.2	101.52 Stick-Up	7-17	14.46	13.14	87.06	02/27/2008
TW-3	97.39	99.12 Stick-Up	6-16	11.84	9.79	88.26	02/27/2008
TW-4	100.7	102.27 Stick-Up	7-17	14.80	12.75	85.30	02/27/2008
TW-5	98.05	100.10 Stick-Up	6-16	11.48	9.43	88.62	02/27/2008

Notes: MSL = mean sea level
feet toc = feet below top of casing
feet bgs = feet below ground surface

Table 2
Soil Quality Results
1027 N. Edison St., Milwaukee, Wisconsin
Sigma Project No. 10813

Soil Sample Location:		GP-1/TW-1		GP-2		GP-3/TW-2		GP-4/TW-3		GP-5/TW-4		GP-6/TW-5		GW RCLs [4]	DC RCLs for Non-Industrial Soil [5]	PRG for Residential Soil [6]	SSL [7]
Sample Depth (feet bgs):		2 - 4	6-8	2-4	10-12	2 - 4	6 - 8	0-2	4-8	2-4	6-8	0-2	6-8				
	Date:	02/25/08		02/25/08		02/25/08		02/25/08		02/25/08		02/25/08					
Organic Vapor Monitor	ppm	0.0	0.0	0.3	1.8	0.9	0	1.5	2.2	0.3	0.3	0.6	0.3	NS	NS	NS	NS
PVOCs & Detected VOCs																	
Benzene	µg/kg	<30	<31	<30	<32	<31	<38	<29	<33	<28	<31	<30	<29	5.5	8,500 / 1,100	640	30
Ethylbenzene	µg/kg	<30	<31	<30	<32	<31	<38	<29	<33	<28	<31	<30	<29	2,900	4,600 / NS	400,000	13,000
Methyl-tert-butyl-ether	µg/kg	<30	<31	<30	<32	<31	<38	<29	<33	<28	<31	<30	<29	NS	NS	32,000	NS
Toluene	µg/kg	<30	68	<30	<32	<31	<38	<29	<33	<28	<31	<30	<29	1,500	38,000 / NS	520,000	12,000
1,2,4-Trimethylbenzene	µg/kg	<30	<31	<30	<32	<31	<38	<29	<33	<28	<31	<30	<29	NS	83,000 / NS	52,000	NS
1,3,5-Trimethylbenzene	µg/kg	<30	<31	<30	<32	<31	<38	<29	<33	<28	<31	<30	<29	NS	11,000 / NS	21,000	NS
Xylenes (total)	µg/kg	<100	<110	<100	<110	<110	<130	<97	<110	<94	<110	<100	<98	4,100	42,000 / NS	270,000	210,000
Naphthalene	µg/kg	130	67	<59	<64	75	<75	<57	<65	<55	<62	<61	<58	NS	2,700 / NS	56,000	84,000
PAHs & Detected SVOCs																	
Acenaphthene	µg/kg	2.88	2500	<1.96	<64	<2.05	<940	<0.377	1200	<1.83	<7800	<2.01	880	38,000	9,000,000	---	---
Acenaphthylene	µg/kg	<2.01	<1600	<1.96	<110	<2.05	<1600	<0.377	<1400	<1.83	<13000	<2.01	<1200	700	180,000	---	---
Anthracene	µg/kg	6.37	3300	<1.96	<6.4	6.79	360	<0.377	2300	<1.83	3400	<2.01	2800	3,000,000	50,000,000	---	---
Benzo(a)anthracene	µg/kg	16.4	5800	<1.96	<6.4	22.2	1000	<0.377	4200	<1.83	5400	<2.01	5400	17,000	880	---	---
Benzo(a)pyrene	µg/kg	15.9	5200	<1.96	<6.4	21.7	1100	<0.377	3900	<1.83	5000	<2.01	3600	48,000	88.0	---	---
Benzo(b)fluoranthene	µg/kg	12.3	4200	<1.96	<6.4	17.4	700	<0.377	2900	<1.83	3200	<2.01	2800	360,000	880	---	---
Benzo(ghi)perylene	µg/kg	10.1	3000	<1.96	<6.4	11.4	510	<0.377	1900	<1.83	2600	<2.01	1900	6,800,000	18,000	---	---
Benzo(k)fluoranthene	µg/kg	12.7	2600	<1.96	<6.4	17.8	480	<0.377	1800	<1.83	2100	<2.01	1600	870,000	8,800	---	---
Chrysene	µg/kg	17.6	4000	<1.96	<6.4	23.2	160	<0.377	2900	<1.83	4300	<2.01	3200	37,000	88,000	---	---
Dibenzo(a,h)anthracene	µg/kg	3.22	650	<1.96	<9.6	4.27	<140	<0.377	450	<1.83	<1200	<2.01	380	38,000	88.0	---	---
Fluoranthene	µg/kg	41.8	16000	<1.96	<13	53.1	2200	<0.377	11000	<1.83	17000	<2.01	12,000	500,000	6,000,000	---	---
Fluorene	µg/kg	2.96	1600	<1.96	<13	2.15	<190	<0.377	1000	<1.83	1900	<2.01	1400	100,000	6,000,000	---	---
Indeno(1,2,3-cd)pyrene	µg/kg	8.92	3300	<1.96	<6.4	10.9	690	<0.377	2300	<1.83	3200	<2.01	2300	680,000	880	---	---
1-Methylnaphthalene	µg/kg	<2.01	1200	<1.96	<38	<2.05	<560	<0.377	770	<1.83	<4700	<2.01	1100	23,000	11,000,000	---	---
2-Methylnaphthalene	µg/kg	<2.01	8400	<1.96	<32	<2.05	770	<0.377	5000	<1.83	6500	<2.01	6500	20,000	6,000,000	---	---
Naphthalene	µg/kg	2.88	**870**	<1.96	<32	<2.05	<560	<0.377	**770**	<1.83	<4700	<2.01	**1500**	400	200,000	---	---
Phenanthrene	µg/kg	22.8	**12000**	<1.96	<6.4	28.4	940	<0.377	**8100**	<1.83	**17000**	<2.01	**10000**	1,800	180,000	---	---
Pyrene	µg/kg	27.0	9000	<1.96	<6.4	41	2000	<0.377	5900	<1.83	17000	<2.01	10,000	8,700,000	5,000,000	---	---
Carbazole	µg/kg	2.23	NA	<1.96	NA	<2.05	NA	<0.377	NA	<1.83	NA	<2.01	NA	NS	NS	18,000,000	NS
Metals																	
Arsenic	mg/kg	[13]	10	[16]	3.2	[9.6]	8.7	[2.8]	9.3	[5.7]	17	[8.6]	6.3	---	0.039	0.39	29
Barium	mg/kg	200	280	100	47	120	110	54	120	30	58	69	61	---	NS	5,400	1,600
Cadmium	mg/kg	0.72	0.92	0.63	<0.13	0.84	0.48	<0.11	0.40	0.12	0.93	0.49	<0.12	---	8	37	8
Chromium	mg/kg	13	26	8.8	4.8	10	5.5	12	9.9	7.6	4.3	12	8.5	---	NS	210	38
Lead	mg/kg	[850]	1700	[140]	5.2	[530]	320	17	420	37	68	[130]	430	---	50	400	NS
Mercury	mg/kg	37	1.5	0.32	<0.013	0.42	0.72	0.13	0.17	0.22	0.18	0.14	0.27	---	NS	23	NS
Selenium	mg/kg	<4.9	<5.0	<4.8	<5.1	<5.0	<6.0	<4.6	<5.2	<4.4	<5.0	<4.9	<4.6	---	NS	390	5
Silver	mg/kg	0.36	0.53	<0.13	0.34	0.31	0.38	0.31	0.42	0.2	<0.14	<0.13	<0.13	---	NS	390	34
PCBs	mg/kg	<0.0609	<1.26	<0.0594	<0.0637	<0.0623	<0.0751	<0.0571	<1.30	<0.0555	<0.0620	<0.0608	<0.0578	---	---	0.22	---
Chloride	mg/kg	58	70	66	69	63	77	200	140	83	91	61	64	---	---	---	---

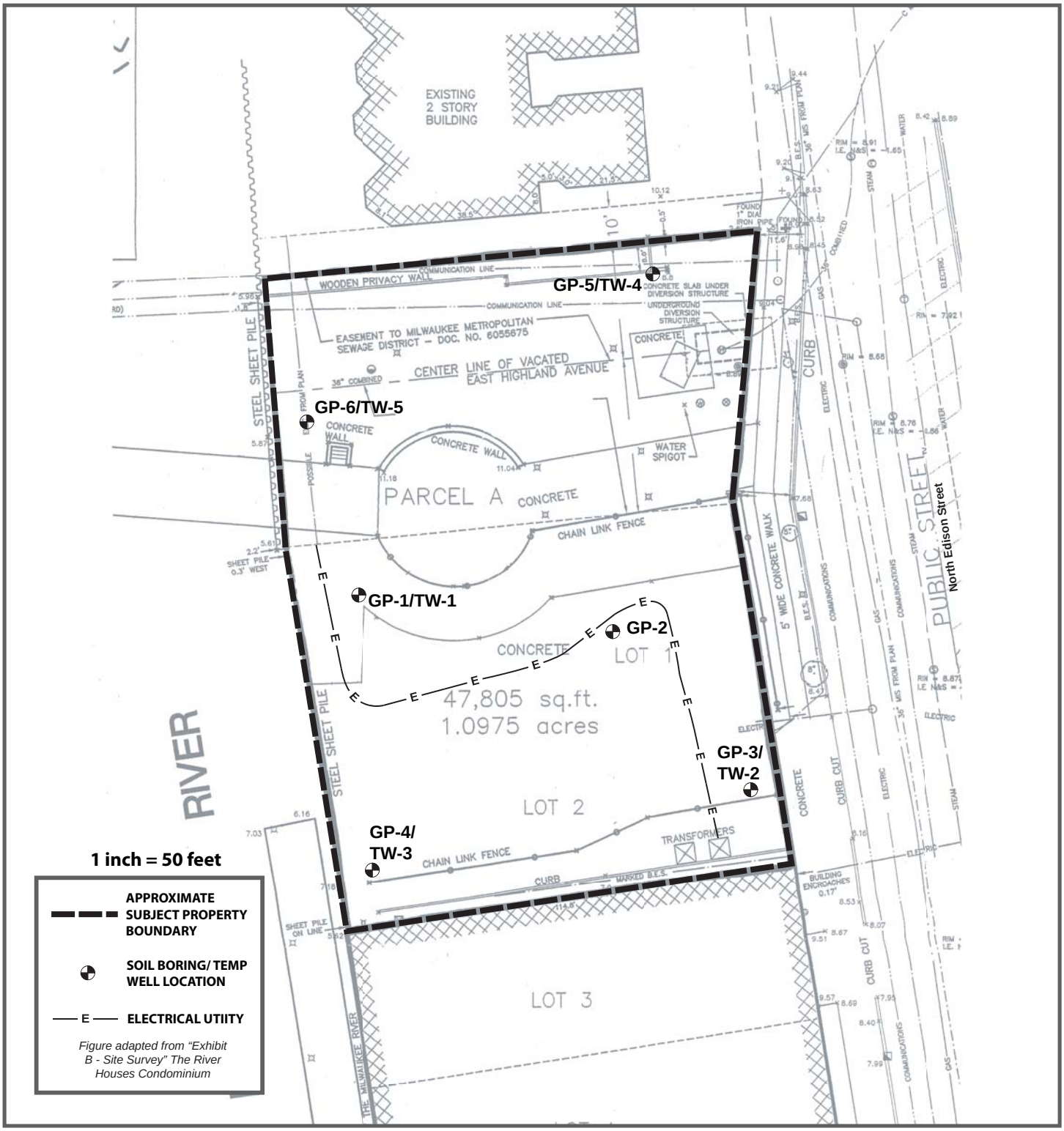
Notes:
1. µg/kg = micrograms per kilogram (equivalent to parts per billion, ppb)
2. mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
3. NA = not analyzed
4. GW RCLs = Groundwater Residual Contaminant Levels based on the following:
   For petroleum hydrocarbons, GW RCLs based on Wisconsin Administrative Code, Chapter NR 720.09 generic Residual Contaminant Level for protection of groundwater.
   For PAHs, GW RCLs based on interim guidance RCL for protection of groundwater pathway from PAH compounds, from WDNR publication RR-519-97 *"Soil Cleanup Levels for Polycyclic Aromatic Hydrocarbons (PAHs) Interim Guidance"* (April 1997)
5. DC RCLs for Non-Industrial Soil = Direct Contact Residual Contaminant Levels based on the following:
   For petroleum hydrocarbons, DC RCLs based on Wisconsin Administrative Code, Chapter NR 746.06 Table 1 ("Indicators of Residual Petroleum Product in Soil Pores") soil screening levels / Table 2 ("Protection of Human Health from Direct Contact with Contaminated Soil") concentrations.
   For PAHs, DC RCLs based on interim guidance RCL for protection of direct contact with PAH compounds for non-industrial land use, from WDNR publication RR-519-97 *"Soil Cleanup Levels for Polycyclic Aromatic Hydrocarbons (PAHs) Interim Guidance"* (April 1997), target risk of 1×10^{-6} used per NR 720.19(5)(a).
   For metals, DC RCLs based on Wisconsin Administrative Code, Chapter NR 720.11 generic Residual Contaminant Level for protection of direct contact for non-industrial land use
6. PRG for Residential Soil = US EPA Region IX Preliminary Remediation Goal for residential soil (Otober 2004) to use as a guideline to evaluate the direct contact exposure pathway
7. SSL = US EPA Region IX Soil Screening Level for protection of groundwater with a dilution-attenuation factor of 20 (October 2004) - provided as a guideline to evaluate soil
8. --- = PRG and SSL not provided for PAHs because complete list of WDNR interim guidance standards exists for the PAH compounds
9. NS = no standard established
10. Laboratory flags: "J" = Analyte detected between Limit of Dection and Limit of Quantitation
11. Exceedances: box = Concentration exceeds GW RCL
    [brackets] = Concentration exceeds DC RCL for Non-Industrial Soil (note that soil is located within 4 feet of the ground surface)
    underline = Concentration exceeds DC RCL for Non-Industrial Soil (note that soil is located deeper than 4 feet of the ground surface)
    * Exceedances for PRGs and SSLs are not identified in this table, as these values are intended only as a preliminary screening tool at this time.

Table 3
Groundwater Quality Results – 1027 N. Edison Street Site
Milwaukee, Wisconsin
Sigma Project No. 10813

Well ID:		TW-1	TW-2	TW-3	TW-4	TW-5	NR 140	NR 140
Analytes	**Date**	**02/29/08**	**02/29/08**	**02/29/08**	**02/29/08**	**02/29/08**	**ES**	**PAL**
RCRA Metals - Soluble								
Arsenic	µg/L	**1.2**	**1.6**	0.34	**3.0**	**4.7**	10	1
Barium	µg/L	69	140	120	89	98	2,000	400
Cadmium	µg/L	0.05	0.02 J	<0.010	0.02 J	0.04	5	0.5
Chromium	µg/L	3.6	**20**	9.3	3.2	6.5	100	10
Lead	µg/L	0.24	0.42	0.04 J	0.08 J	0.36	15	1.5
Mercury	µg/L	0.086 J	0.089 J	0.082 J	0.082 J	0.078 J	2	0.2
Selenium	µg/L	0.85	1.5	1.1	4.3	7.8	50	10
Silver	µg/L	0.03 J	0.10 J	<0.02	0.02 J	0.02 J	50	10
PVOCs/Detected VOCs								
Benzene	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20	5	0.5
sec-Butylbenzene	µg/L	0.46 J	<0.25	<0.25	<0.25	<0.25	NS	NS
n-Butylbenzene	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20	NS	NS
1,2-Dichloroethane	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	5	0.5
Ethylbenzene	µg/L	1.6 J	<0.50	<0.50	<0.50	<0.50	700	140
Isopropylbenzene	µg/L	0.49 J	<0.20	<0.20	<0.20	<0.20	NS	NS
p-Isopropyltoluene	µg/L	0.42 J	<0.20	<0.20	<0.20	<0.20	NS	NS
Methyl-tert-butyl-ether	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	60	12
Naphthalene	µg/L	9.2	0.35 J	<0.25	<0.25	0.72 J	100	10
n-Propylbenzene	µg/L	0.85 J	<0.50	<0.50	<0.50	<0.50	NS	NS
Toluene	µg/L	1.9	<0.20	<0.20	<0.20	<0.20	1,000	200
1,2,4-Trimethylbenzene	µg/L	9	<0.20	<0.20	<0.20	<0.20	NS	NS
1,3,5-Trimethylbenzene	µg/L	1.7	<0.20	<0.20	<0.20	<0.20	NS	NS
Total Trimethylbenzene	µg/L	10.7	<0.40	<0.40	<0.40	<0.40	480	96
Xylenes, Total	µg/L	9.5	<0.50	<0.50	<0.50	<0.50	10,000	1,000
PAHs								
Acenaphthene	µg/L	<1.89	<2.10	<1.89	<1.89	<2.12	NS	NS
Acenaphthylene	µg/L	<1.41	<1.57	<1.41	<1.41	<1.58	NS	NS
Anthracene	µg/L	1.70 J	<1.28	<1.15	<1.15	<1.29	3000	600
Benz(a)anthracene	µg/L	<1.1	<1.22	<1.10	<1.10	1.49 J	NS	NS
Benzo(b)fluoranthene	µg/L	<1.9	<2.11	<1.90	<1.90	<2.13	0.2	0.02
Benzo(k)fluoranthene	µg/L	<2.12	<2.36	<2.12	<2.12	<2.38	NS	NS
Benzo(a)pyrene	µg/L	<1.93	<2.14	<1.93	<1.93	<2.17	0.2	0.02
Benzo(ghi)perylene	µg/L	<2.03	<2.26	<2.03	<2.03	<2.28	NS	NS
Chrysene	µg/L	<1.33	<1.48	<1.33	<1.33	**1.50 J**	0.2	0.02
Dibenz(a,h)anthracene	µg/L	<2.20	<2.44	<2.20	<2.20	<2.47	NS	NS
Fluoranthene	µg/L	<1.27	<1.41	<1.27	<1.27	3.51 J	400	80
Fluorene	µg/L	<1.56	<1.73	<1.56	<1.56	<1.75	400	80
Indeno(1,2,3-cd)pyrene	µg/L	<1.62	<1.80	<1.62	<1.62	<1.82	NS	NS
1-Methylnaphthalene	µg/L	NA	NA	NA	NA	NA	NS	NS
2-Methylnaphthalene	µg/L	7.37 J	<1.67	<1.50	<1.50	<1.69	NS	NS
Naphthalene	µg/L	5.13 J	<1.66	<1.49	<1.49	<1.67	100	10
Phenanthrene	µg/L	<1.37	<1.52	<1.37	<1.37	3.32 J	NS	NS
Pyrene	µg/L	<1.28	<1.42	<1.28	<1.28	3.34 J	250	50
Dimethyl phthalate	µg/L	3.23 J	<1.49	<1.55	<1.55	<1.74	NS	NS
2,4-Dimethylphenol	µg/L	0.899 J	<0.999	<0.899	<0.899	<1.01	NS	NS
Pyridine	µg/L	**5.28 J**	<0.744	<0.670	<0.670	<0.753	10	2
Chloride	µg/L	**200**	**350**	**130**	100	77	250	125
PCBs	µg/L	<0.490	<0.490	<0.490	<0.490	<0.557	0.03	0.003

Notes:
2. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard.
3. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit.
4. NS = no standard
5. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
6. mg/L = milligrams per liter (equivalent to parts per million, ppm)
7. NA = Not Analyzed
Quantitation.
11. Exceedances: **bold** = Concentration exceeds NR 140 ES
bold = Concentration exceeds NR 140 PAL

FIGURES



Client: City of Milwaukee

Site Address: 1027 North Edison Street
Milwaukee, WI 53202

Project: #10813

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Milwaukee, WI 53233
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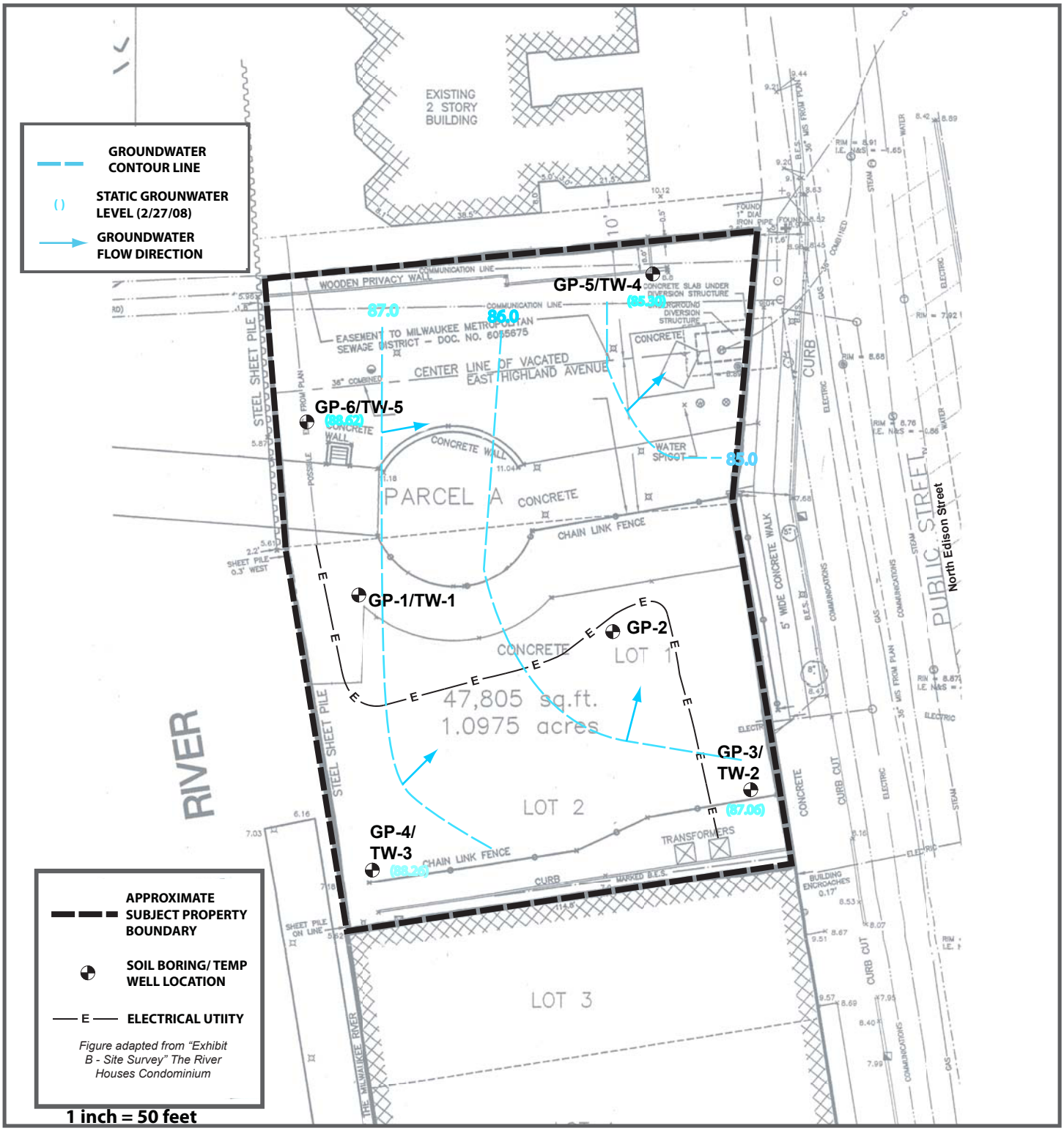
FIGURE 1
SITE PLAN MAP



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Project:	#10813

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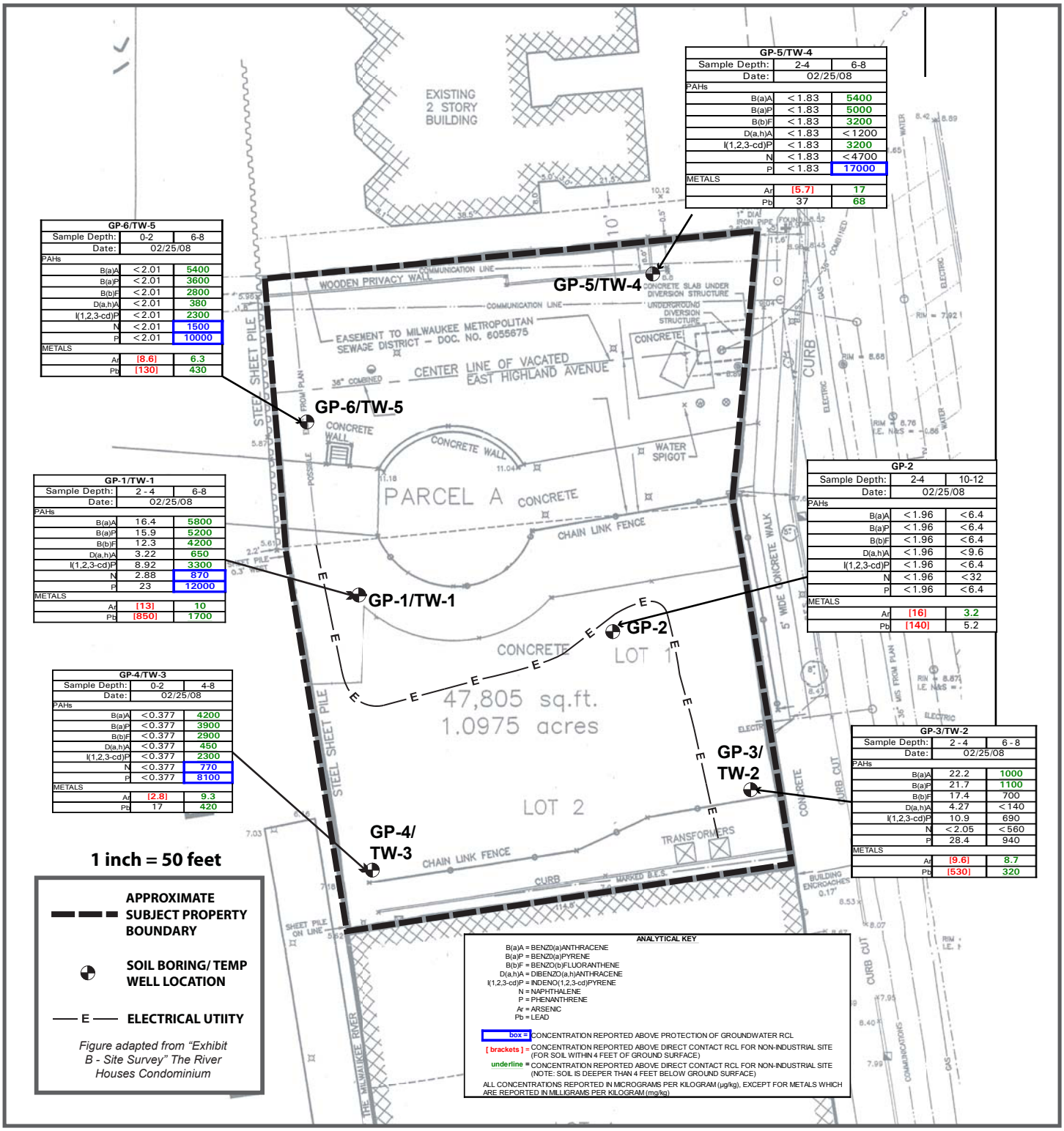
FIGURE 2

GROUNDWATER CONTOUR MAP (2/27/08)



GP-5/TW-4		
Sample Depth:	2-4	6-8
Date:	02/25/08	
PAHs		
B(a)A	< 1.83	5400
B(a)P	< 1.83	5000
B(b)F	< 1.83	3200
D(a,h)A	< 1.83	< 1200
I(1,2,3-cd)P	< 1.83	3200
N	< 1.83	< 4700
P	< 1.83	17000
METALS		
Ar	[5.7]	17
Pb	37	68

GP-6/TW-5		
Sample Depth:	0-2	6-8
Date:	02/25/08	
PAHs		
B(a)A	< 2.01	5400
B(a)P	< 2.01	3600
B(b)F	< 2.01	2800
D(a,h)A	< 2.01	380
I(1,2,3-cd)P	< 2.01	2300
N	< 2.01	1500
P	< 2.01	10000
METALS		
Ar	[8.6]	6.3
Pb	[130]	430

GP-1/TW-1		
Sample Depth:	2 - 4	6-8
Date:	02/25/08	
PAHs		
B(a)A	16.4	5800
B(a)P	15.9	5200
B(b)F	12.3	4200
D(a,h)A	3.22	650
I(1,2,3-cd)P	8.92	3300
N	2.88	870
P	23	12000
METALS		
Ar	[13]	10
Pb	[850]	1700

GP-2		
Sample Depth:	2-4	10-12
Date:	02/25/08	
PAHs		
B(a)A	< 1.96	< 6.4
B(a)P	< 1.96	< 6.4
B(b)F	< 1.96	< 6.4
D(a,h)A	< 1.96	< 9.6
I(1,2,3-cd)P	< 1.96	< 6.4
N	< 1.96	< 32
P	< 1.96	< 6.4
METALS		
Ar	[16]	3.2
Pb	[140]	5.2

GP-4/TW-3		
Sample Depth:	0-2	4-8
Date:	02/25/08	
PAHs		
B(a)A	< 0.377	4200
B(a)P	< 0.377	3900
B(b)F	< 0.377	2900
D(a,h)A	< 0.377	450
I(1,2,3-cd)P	< 0.377	2300
N	< 0.377	770
P	< 0.377	8100
METALS		
Ar	[2.8]	9.3
Pb	17	420

GP-3/TW-2		
Sample Depth:	2 - 4	6 - 8
Date:	02/25/08	
PAHs		
B(a)A	22.2	1000
B(a)P	21.7	1100
B(b)F	17.4	700
D(a,h)A	4.27	< 140
I(1,2,3-cd)P	10.9	690
N	< 2.05	< 560
P	28.4	940
METALS		
Ar	[9.6]	8.7
Pb	[530]	320

ANALYTICAL KEY

B(a)A = BENZO(a)ANTHRACENE
B(a)P = BENZO(a)PYRENE
B(b)F = BENZO(b)FLUORANTHENE
D(a,h)A = DIBENZO(a,h)ANTHRACENE
I(1,2,3-cd)P = INDENO(1,2,3-cd)PYRENE
N = NAPHTHALENE
P = PHENANTHRENE
Ar = ARSENIC
Pb = LEAD

box = CONCENTRATION REPORTED ABOVE PROTECTION OF GROUNDWATER RCL
[brackets] = CONCENTRATION REPORTED ABOVE DIRECT CONTACT RCL FOR NON-INDUSTRIAL SITE (FOR SOIL WITHIN 4 FEET OF GROUND SURFACE)
underline = CONCENTRATION REPORTED ABOVE DIRECT CONTACT RCL FOR NON-INDUSTRIAL SITE (NOTE: SOIL IS DEEPER THAN 4 FEET BELOW GROUND SURFACE)

ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER KILOGRAM (µg/kg), EXCEPT FOR METALS WHICH ARE REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)

Client: City of Milwaukee

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Project: #10813

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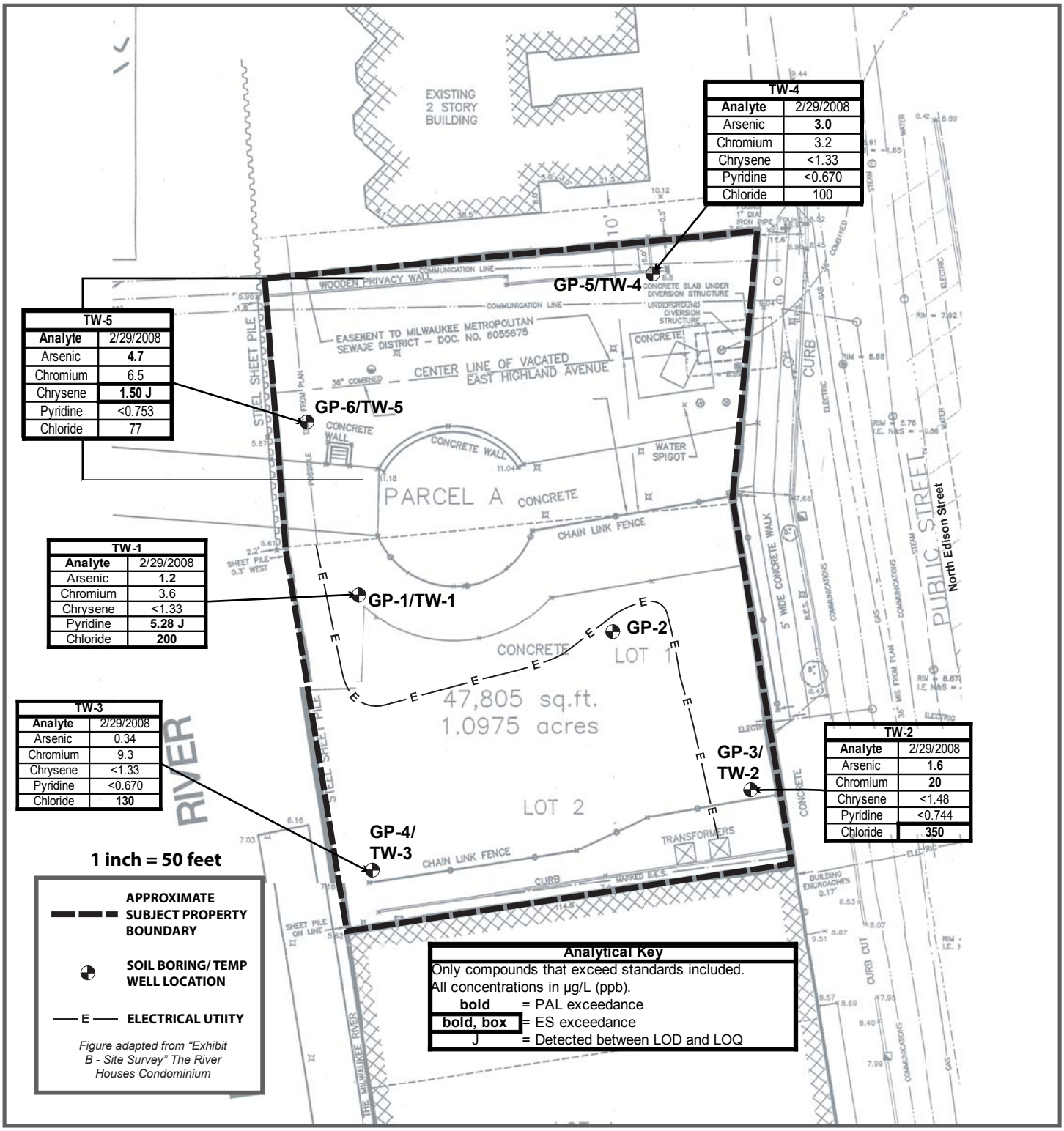
FIGURE 3
SOIL QUALITY MAP



TW-4	
Analyte	2/29/2008
Arsenic	**3.0**
Chromium	3.2
Chrysene	<1.33
Pyridine	<0.670
Chloride	100

TW-5	
Analyte	2/29/2008
Arsenic	**4.7**
Chromium	6.5
Chrysene	**1.50 J**
Pyridine	<0.753
Chloride	77

TW-1	
Analyte	2/29/2008
Arsenic	**1.2**
Chromium	3.6
Chrysene	<1.33
Pyridine	**5.28 J**
Chloride	**200**

TW-3	
Analyte	2/29/2008
Arsenic	0.34
Chromium	9.3
Chrysene	<1.33
Pyridine	<0.670
Chloride	**130**

TW-2	
Analyte	2/29/2008
Arsenic	**1.6**
Chromium	**20**
Chrysene	<1.48
Pyridine	<0.744
Chloride	**350**

Analytical Key	
Only compounds that exceed standards included.	
All concentrations in µg/L (ppb).	
bold	= PAL exceedance
bold, box	= ES exceedance
J	= Detected between LOD and LOQ

Client: City of Milwaukee

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Project: #10813

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FIGURE 4
GROUNDWATER QUALITY MAP

ATTACHMENT A

Soil Boring Logs

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
1027 N. Edison St.	-	GP-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Rick Filbrandt GESTRA	2/25/2008	2/25/2008	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		TW-1	Feet Site	Feet Site	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E S/C/N
NE 1/4 of NE 1/4 of Section 29, T 7 N, R 22 E
Lat ___° ___' ___"
Long ___° ___' ___"
Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	24 20	PUSH PUSH PUSH PUSH PUSH PUSH PUSH PUSH		Small gray cobbles w/sand, loose	GW			0.0						
			1.5	Silty sand w/gravel, brick and cinder debris, v. dark brown, loose, sl. moist										
2 GP	24 20		3.0					0.0						Lab sample (2-4)
3 GP	24 24		4.5	V. dark brown to dark gray, tr. wood debris, moist to v. moist	SM			0.0						
4 GP	24 24		6.0					0.0						Lab sample (6-8)
			7.5	Wet										
5 GP	24 24		9.0	Sandy silt w/shells, gray/dark gray, river bottom sediment, v. moist to wet				0.0						
6 GP	24 24		10.5		ML			0.0						
7 GP	24 24		12.0	Saturated				0.0						
			13.5											
8 GP	24 24		15.0	Clayey silt, gray/dark gray, v. moist, soft, sl. sulur odor	ML			0.0						
				End of boring. Temporary well TW-1 installed.										

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.
1300 W. Canal Street Milwaukee, WI 53233
Tel: (414) 643-4200
Fax: (414) 643-4210

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

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
1027 N. Edison St.	-	GP-2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Rick Filbrandt GESTRA	2/25/2008	2/25/2008	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet Site	Feet Site	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E S/C/N
NE 1/4 of NE 1/4 of Section 29, T 7 N, R 22 E
Lat ___° ___' ___"
Long ___° ___' ___"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	24 18	PUSH		6" concrete over 2" asphalt				0.0						
		PUSH	1.5	Gravelly sand fill - brick debris, dark gray/black, loose, sl. moist	SW			0.3						Lab sample (2-4)
2 GP	24 18	PUSH	3.0	Sandy silt, yellowish brown, soft, sl. moist	ML									
				Silty sand w/gravel, dark gray	SM									
3 GP	24 12	PUSH	4.5	Sandy silt, dark gray, soft, moist				0.0						
4 GP	24 12	PUSH	6.0					0.0						
		PUSH	7.5											
5 GP	24 20	PUSH	9.0	Dark gray/gray, moist to v. moist	ML			0.9						
6 GP	24 20	PUSH	10.5					1.8						Lab sample (10-12)
7 GP	24 20	PUSH	12.0	Shell debris, v. moist to wet				0.0						
		PUSH	13.5											
8 GP	24 20	PUSH	15.0					0.0						
		PUSH		Clayey silt, dark gray, soft, v. moist	CL-ML									
9 GP	24 20	PUSH	16.5	Fine silty sand, gray, saturated, loose - anaerobic decay odor				10.4						
10 GP	24 20	PUSH	18.0		SM			10.4						
		PUSH	19.5											
		PUSH		End of boring. Abandoned w/bentonite chips.										

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.
1300 W. Canal Street Milwaukee, WI 53233
Tel: (414) 643-4200
Fax: (414) 643-4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
1027 N. Edison St.	-	GP-3

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Rick Filbrandt GESTRA	2/25/2008	2/25/2008	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		TW-2	Feet Site	Feet Site	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E S/C/N
NE 1/4 of NE 1/4 of Section 29, T 7 N, R 22 E
Lat ___° ___' ___"
Long ___° ___' ___"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	24 20	PUSH		6" concrete over 2" asphalt				0.9						
		PUSH	1.5	Gravelly sandy silt, brick and glass debris, black, frozen	ML			0.9						
2 GP	24 20	PUSH	3.0											Lab sample (2-4)
3 GP	24 16	PUSH	4.5	Gravelly sandy silt, brick and wood debris, black, moist, soft	ML			0.0						
4 GP	24 16	PUSH	6.0					0.0						Lab sample (6-8)
		PUSH	7.5											
5 GP	24 20	PUSH	9.0	Sandy silt, dark gray w/black mottles, soft, moist	ML			0.0						
6 GP	24 20	PUSH	10.5					0.0						
7 GP	24 24	PUSH	12.0	increasing clay content w/depth				0.0						
		PUSH	13.5											
8 GP	24 24	PUSH	15.0					0.0						
9 GP	24 24	PUSH	16.5	Fine silty sand, dark gray, saturated, loose	SM			0.0						
10 GP	24 24	PUSH	18.0					0.0						
		PUSH	19.5											
		PUSH		End of boring. Install temporary well TW-2.										

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.
1300 W. Canal Street Milwaukee, WI 53233
Tel: (414) 643-4200
Fax: (414) 643-4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
1027 N. Edison St.	-	GP-4

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Rick Filbrandt GESTRA	2/25/2008	2/25/2008	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		TW-3	Feet Site	Feet Site	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E S/C/N
NE 1/4 of NE 1/4 of Section 29, T 7 N, R 22 E
Lat ___° ___' ___"
Long ___° ___' ___"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	24 18	PUSH		6" concrete over 2" asphalt				1.5						Lab sample (0-2)
			1.5	Silty clay, brown, sl. stiff, damp	CL									
2 GP	24 18	PUSH	3.0					0.6						
3 GP	24 6	PUSH	4.5	Gravelly sandy silt, black, loose Poor recovery, cobble, black gravelly sand silt w/brick and wood debris	ML			2.2						Lab sample (4-8)
4 GP	24 6	PUSH	6.0					2.2						
5 GP	24 6	PUSH	7.5	Fine sandy silt, dark gray, soft, v. moist to wet	ML			0.9						
6 GP	24 6	PUSH	9.0					0.9						
7 GP	24 24	PUSH	10.5					0.0						
8 GP	24 24	PUSH	12.0					0.0						
			13.5											
			15.0	Fine silty sand, gray, wet, loose	SM									
				End of boring. Install temporary well TW-3.										

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.
1300 W. Canal Street Milwaukee, WI 53233
Tel: (414) 643-4200
Fax: (414) 643-4210

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

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
1027 N. Edison St.	-	GP-5

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Rick Filbrandt GESTRA	2/25/2008	2/25/2008	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		TW-4	Feet Site	Feet Site	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E S/C/N
NE 1/4 of NE 1/4 of Section 29, T 7 N, R 22 E
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	24 24	PUSH		Brown silty topsoil	ML			0.0						
		PUSH	1.5	Gravelly sandy silt w/wood and brick debris, dark brown/v. dark brown, soft, sl. moist										
2 GP	24 24	PUSH	3.0		ML			0.3						Lab sample (2-4)
3 GP	24 24	PUSH	4.5					0.3						
4 GP	24 24	PUSH	6.0	Sandy gravel, brown, loose	GW			0.3						Lab sample (6-8)
5 GP	24 12	PUSH	7.5	Sand fine to coarse, glass/flaky debris, black	SW			0.0						
6 GP	24 12	PUSH	9.0	Silty sand, brown, loose, moist	SM			0.0						
7 GP	24 24	PUSH	10.5											
8 GP	24 24	PUSH	12.0	Clayey silt, gray, moist, soft	CL-ML			0.3						
9 GP	24 16	PUSH	13.5					0.3						
10 GP	24 16	PUSH	15.0	Silty fine sand, gray, moist to wet	SM			0.3						
		PUSH	16.5											
		PUSH	18.0					0.3						
		PUSH	19.5											
				End of boring. Install temporary well TW-4.										

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.
1300 W. Canal Street Milwaukee, WI 53233
Tel: (414) 643-4200
Fax: (414) 643-4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
1027 N. Edison St.	-	GP-6

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Rick Filbrandt GESTRA	2/25/2008	2/25/2008	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		TW-5	Feet Site	Feet Site	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E S/C/N
NE 1/4 of NE 1/4 of Section 29, T 7 N, R 22 E
Lat ___° ___' ___"
Long ___° ___' ___"
Local Grid Location
☐ N ☐ E
Feet ☐ S Feet ☐ W

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

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	24 18	PUSH	1.5	Topsoil, silty, brown	ML			0.6						Lab sample (0-2)
2 GP	24 18	PUSH	3.0	Sandy silt w/concrete cobbles & coarse gravel, black	ML			0.3						
3 GP	24 24	PUSH	4.5	Silty w/gravel and sand, brick and wood debris, dark brown, moist, soft	ML			0.3						
4 GP	24 24	PUSH	6.0					0.3						Lab sample (6-8)
5 GP	24 24	PUSH	7.5	Clayey silt, v. dark gray, soft, moist to v. moist	CL-ML			0.0						
6 GP	24 24	PUSH	9.0					0.0						
7 GP	24 24	PUSH	10.5	Silty sand, dark gray, saturated	SM			0.6						
8 GP	24 24	PUSH	12.0	Clayey silt, v. dark gray, soft, moist	CL-ML			0.6						
			13.5	End of boring. Install temporary well TW-5.										
			15.0											

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.
1300 W. Canal Street Milwaukee, WI 53233
Tel: (414) 643-4200
Fax: (414) 643-4210

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

ATTACHMENT B

Borehole Abandonment Form

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000

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

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

(1) GENERAL INFORMATION

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

Common Well Name: GP-2 Gov't Lot (if applicable):

Grid Location: NE 1/4 of NE 1/4 of Sec. 29 ; T. 7 N; R. 22 ☒ E ☐ W

ft. ☐ N. ☐ S., ft. ☐ E. ☐ W.

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

Lat ° ' " Long ° ' " or

State Plane ft. N. ft. E. S C N Zone

Reason For Abandonment: Investigation soil boring

WI Unique Well No. of Replacement Well:

(2) FACILITY /OWNER INFORMATION

Facility Name: 1027 N. Edison St.

Facility ID:
License/Permit/Monitoring No.: -

Street Address of Well: 1027 N. Edison St.

City, Village, or Town: Milwaukee

Present Well Owner:
Original Owner:

Street Address or Route of Owner:

City, State, Zip Code:

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date:

☐ Monitoring Well
☐ Water Well
☐ Drillhole / Borehole

If a Well Construction Report is available, please attach.

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

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) (From ground surface):
Casing Diameter (in.):
Casing Depth (ft.):
Lower Drillhole Diameter (in.): 2.0

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

If Yes, To What Depth? Feet

Depth to Water (Feet):

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

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

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

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

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

(5) Sealing Material Used	From (Ft.)	To (Ft.)		Mix Ratio or Mud Weight
3/8" bentonite chips	Surface	20.0		

(6) Comments

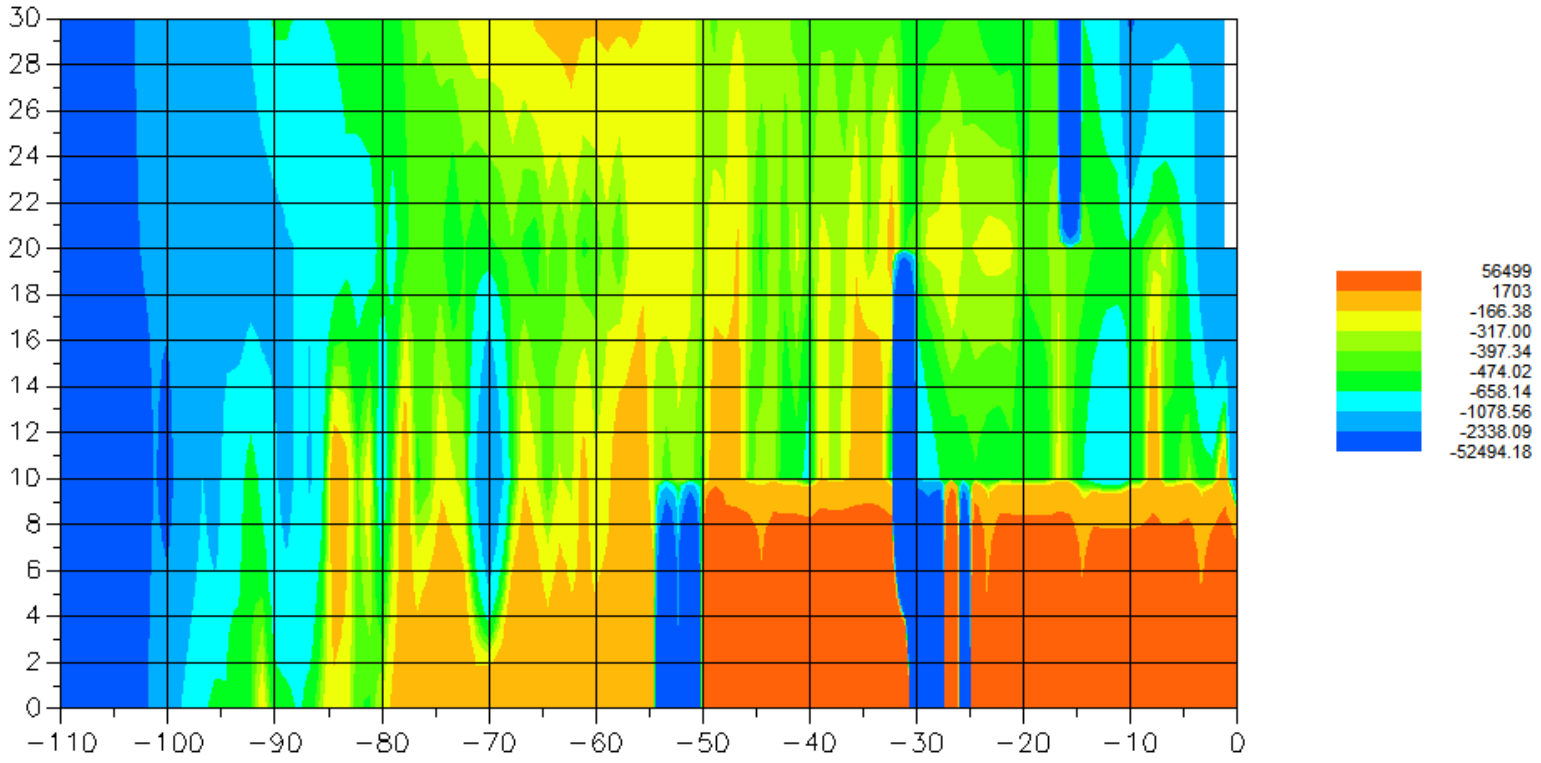
(7) Name of Person or Firm Doing Sealing Work: Sigma Environmental Services, Inc.
Date of Abandonment: 2/25/08
Signature of Person Doing Work:
Date Signed: 2/28/08
Street or Route: 1300 West Canal Street
Telephone Number: 414-643-4200
City, State, Zip Code: Milwaukee, WI 53233

FOR DNR OR COUNTY USE ONLY
Date Received:
Noted By:
Comments:

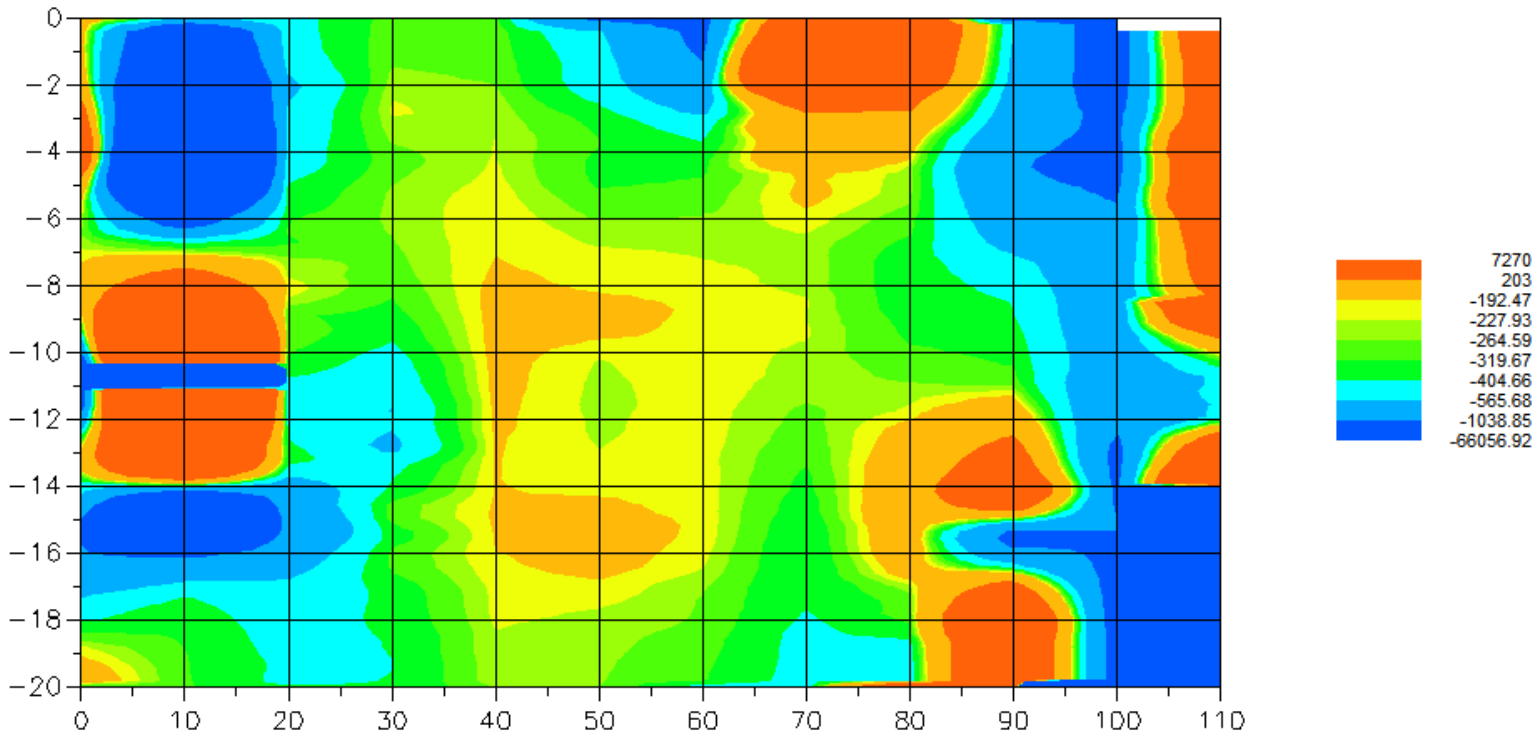
ATTACHMENT C

Magnetometer Survey Results

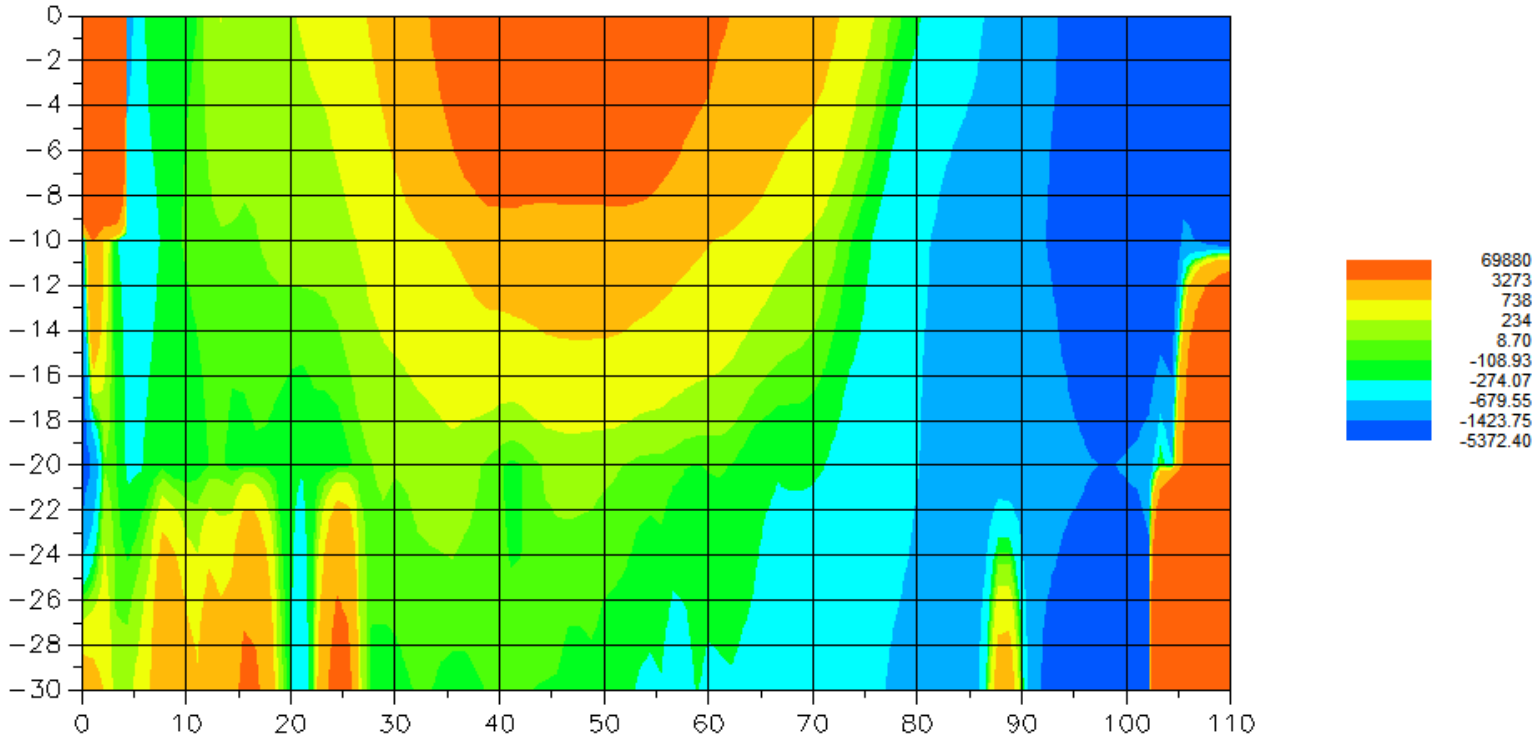
Plotting Mag Field in 2D Contours for Pseudo Gradient (2-1)



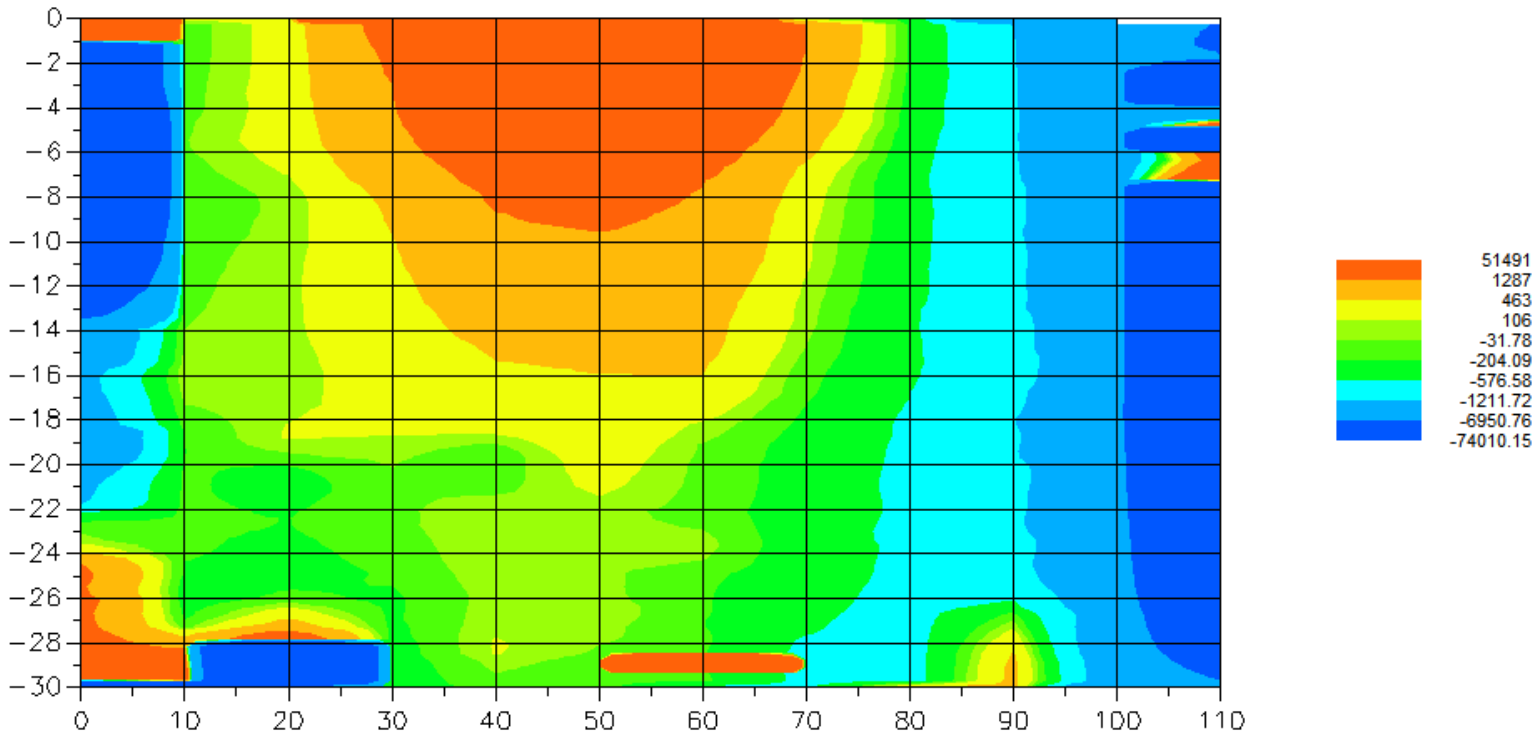
Plotting Mag Field in 2D Contours for Pseudo Gradient (2-1)



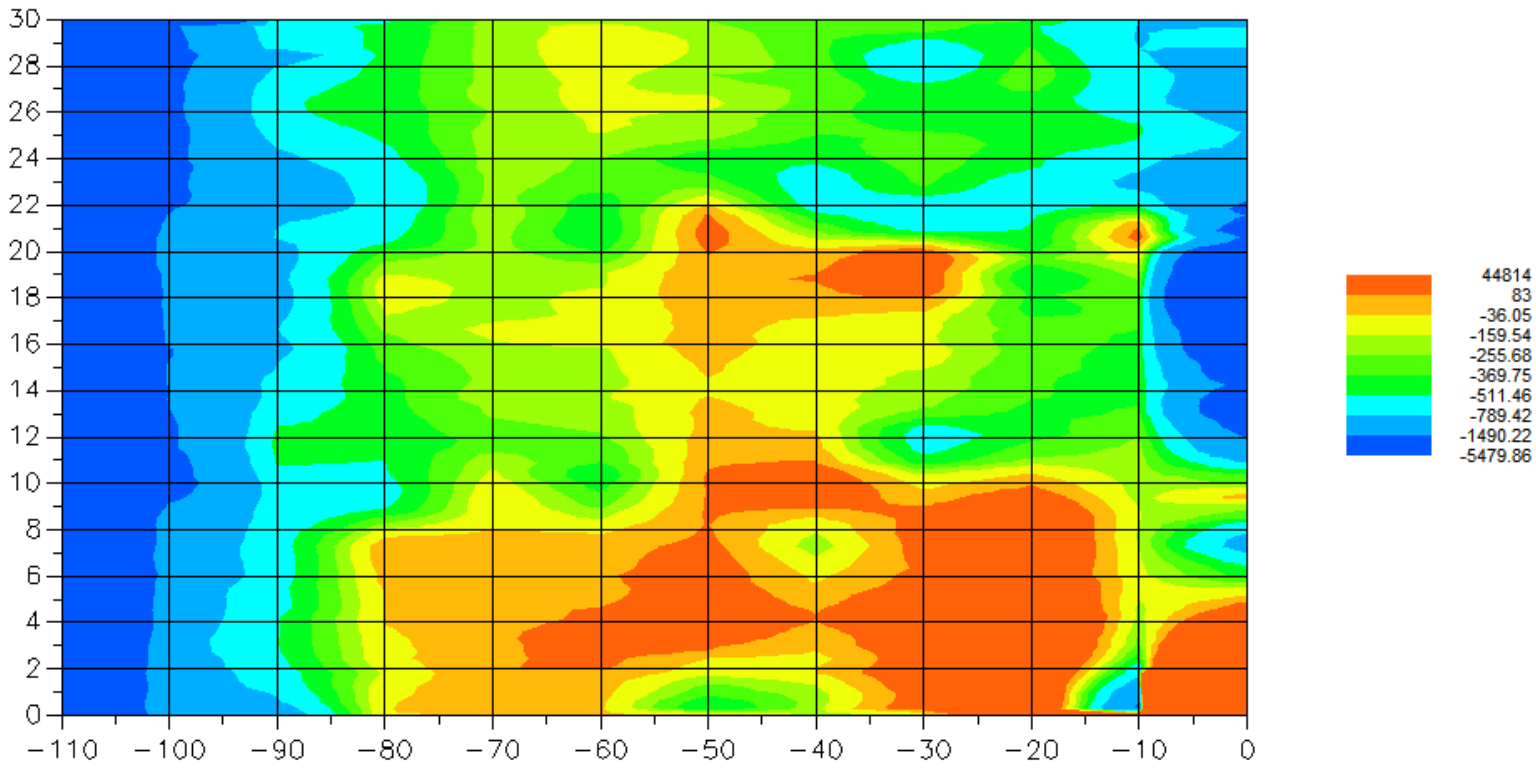
Plotting Mag Field in 2D Contours for Pseudo Gradient (2-1)



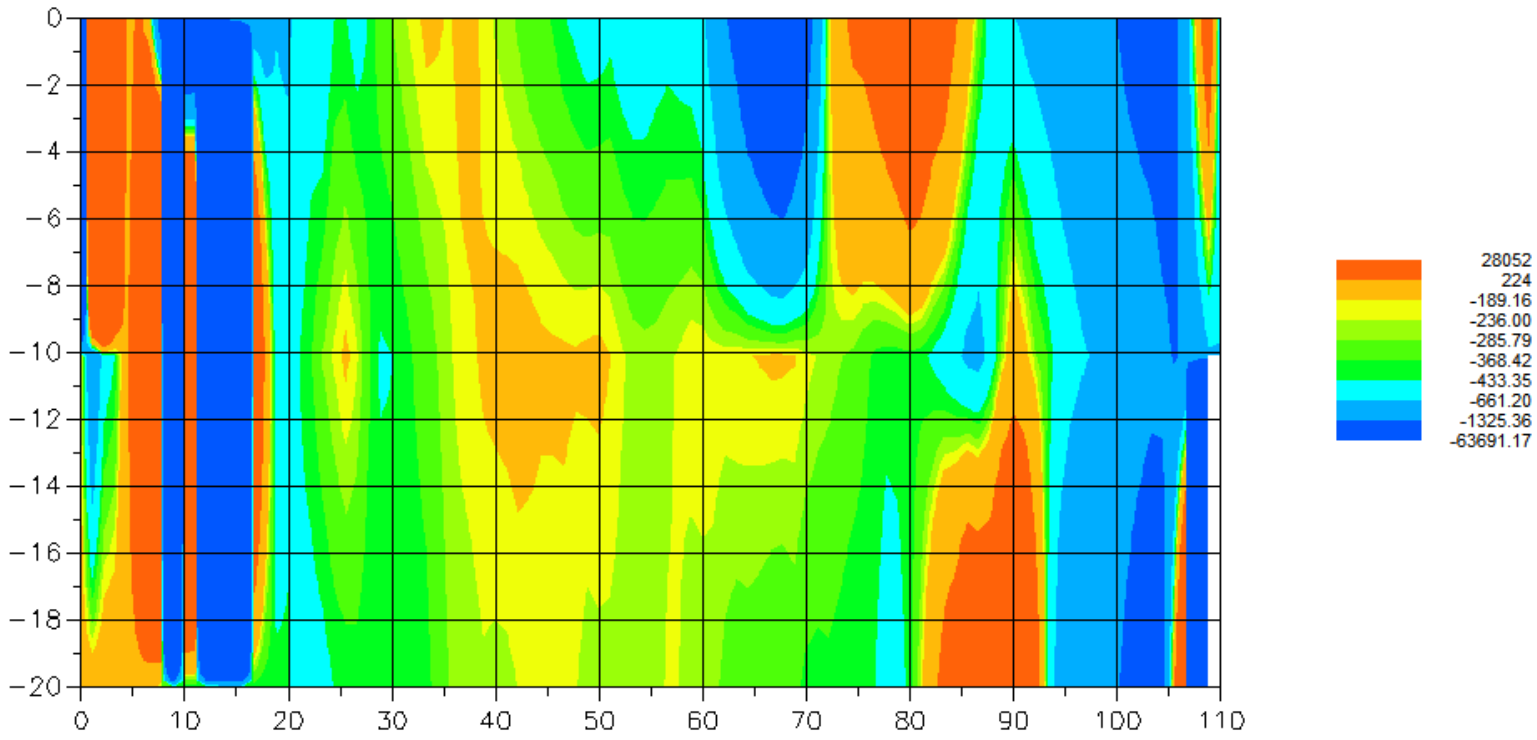
Plotting Mag Field in 2D Contours for Pseudo Gradient (2-1)



Plotting Mag Field in 2D Contours for Pseudo Gradient (2-1)



Plotting Mag Field in 2D Contours for Pseudo Gradient (2-1)



ATTACHMENT D

Soil Laboratory Analytical Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
602 Commerce Drive Watertown, WI 53094 * 800-833-7036 * Fax 920-261-8120

RECEIVED
MAR 10 2008

March 06, 2008

Client:	SIGMA ENVIRONMENTAL SERV. - Milwaukee 1300 West Canal Street Milwaukee, WI 53233	Work Order: Project Name: Project Number:	WRB0772 10813 City of Milwaukee 10813 - 1027 N. Edison Street
Attn:	Mr. Steve Meer	Date Received:	02/26/08

An executed copy of the chain of custody is also included as an addendum to this report.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-833-7036

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
GP-1 2-4	WRB0772-01	02/25/08 09:15
GP-1 6-8	WRB0772-02	02/25/08 09:45
GP-2 2-4	WRB0772-03	02/25/08 10:30
GP-2 10-12	WRB0772-04	02/25/08 11:00
GP-3 2-4	WRB0772-05	02/25/08 12:00
GP-3 6-8	WRB0772-06	02/25/08 12:30
GP-4 0-2	WRB0772-07	02/25/08 13:00
GP-4 4-8	WRB0772-08	02/25/08 13:00
GP-5 2-4	WRB0772-09	02/25/08 14:00
GP-5 6-8	WRB0772-10	02/25/08 14:30
GP-6 0-2	WRB0772-11	02/25/08 15:00
GP-6 6-8	WRB0772-12	02/25/08 15:30

SW 8082, SW 8270C analysis performed at Lab ID: 999917270

Samples were received into laboratory on ice.

Wisconsin Certification Number: 128053530

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

Unless subcontracted, volatiles analyses (including VOC, PVOC, GRO, BTEX, and TPH gasoline) performed by TestAmerica Watertown at 1101 Industrial Drive, Units 9&10. All other analyses performed at the address shown in the heading of this report.

Approved By:

Brian DeJong

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

ANALYTICAL REPORT

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-01 (GP-1 2-4 - Solid/Soil)						**Sampled: 02/25/08 09:15**			
General Chemistry Parameters									
% Solids	**82**		%	NA	1	02/27/08 12:15	CLJ	8020508	SW 5035
Chloride	**58**		mg/kg dry	30	1	03/04/08 15:36	pxm	8030053	SW 9251
Metals									
Arsenic	**13**		mg/kg dry	1.7	1	02/28/08 16:47	mmm	8020504	SW 6010B
Barium	**200**		mg/kg dry	0.13	1	02/28/08 16:47	mmm	8020504	SW 6010B
Cadmium	**0.72**		mg/kg dry	0.12	1	02/28/08 16:47	mmm	8020504	SW 6010B
Chromium	**13**		mg/kg dry	0.22	1	02/28/08 16:47	mmm	8020504	SW 6010B
Lead	**850**		mg/kg dry	1.5	1	02/28/08 16:47	mmm	8020504	SW 6010B
Mercury	**37**		mg/kg dry	1.2	100	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<4.9		mg/kg dry	4.9	1	02/28/08 16:47	mmm	8020504	SW 6010B
Silver	**0.36**		mg/kg dry	0.13	1	02/28/08 16:47	mmm	8020504	SW 6010B
VOCs by SW8260B									
Benzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Bromobenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Bromochloromethane	<43		ug/kg dry	43	1	02/27/08 18:40	lck	8020500	SW 8260B
Bromodichloromethane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Bromoform	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Bromomethane	<120		ug/kg dry	120	1	02/27/08 18:40	lck	8020500	SW 8260B
n-Butylbenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
sec-Butylbenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
tert-Butylbenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Carbon Tetrachloride	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Chlorobenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Chlorodibromomethane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Chloroethane	<61		ug/kg dry	61	1	02/27/08 18:40	lck	8020500	SW 8260B
Chloroform	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Chloromethane	<61		ug/kg dry	61	1	02/27/08 18:40	lck	8020500	SW 8260B
2-Chlorotoluene	<61		ug/kg dry	61	1	02/27/08 18:40	lck	8020500	SW 8260B
4-Chlorotoluene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,2-Dibromo-3-chloropropane	<61		ug/kg dry	61	1	02/27/08 18:40	lck	8020500	SW 8260B
1,2-Dibromoethane (EDB)	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Dibromomethane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,2-Dichlorobenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,3-Dichlorobenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,4-Dichlorobenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Dichlorodifluoromethane	<61	C9	ug/kg dry	61	1	02/27/08 18:40	lck	8020500	SW 8260B
1,1-Dichloroethane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,2-Dichloroethane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,1-Dichloroethene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
cis-1,2-Dichloroethene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
trans-1,2-Dichloroethene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,2-Dichloropropane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,3-Dichloropropane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
2,2-Dichloropropane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,1-Dichloropropene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
cis-1,3-Dichloropropene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
trans-1,3-Dichloropropene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
2,3-Dichloropropene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Isopropyl Ether	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Ethylbenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-01 (GP-1 2-4 - Solid/Soil) - cont. **Sampled: 02/25/08 09:15**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
Hexachlorobutadiene	<43		ug/kg dry	43	1	02/27/08 18:40	lck	8020500	SW 8260B
Isopropylbenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
p-Isopropyltoluene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Methylene Chloride	<61		ug/kg dry	61	1	02/27/08 18:40	lck	8020500	SW 8260B
Methyl tert-Butyl Ether	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Naphthalene	**130**		ug/kg dry	61	1	02/27/08 18:40	lck	8020500	SW 8260B
n-Propylbenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Styrene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,1,1,2-Tetrachloroethane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,1,2,2-Tetrachloroethane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Tetrachloroethene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Toluene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,2,3-Trichlorobenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,2,4-Trichlorobenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,1,1-Trichloroethane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,1,2-Trichloroethane	<43		ug/kg dry	43	1	02/27/08 18:40	lck	8020500	SW 8260B
Trichloroethene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Trichlorofluoromethane	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,2,3-Trichloropropane	<61		ug/kg dry	61	1	02/27/08 18:40	lck	8020500	SW 8260B
1,2,4-Trimethylbenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
1,3,5-Trimethylbenzene	<30		ug/kg dry	30	1	02/27/08 18:40	lck	8020500	SW 8260B
Vinyl chloride	<43		ug/kg dry	43	1	02/27/08 18:40	lck	8020500	SW 8260B
Xylenes, total	<100		ug/kg dry	100	1	02/27/08 18:40	lck	8020500	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*97 %*								
Surr: Toluene-d8 (91-106%)	*99 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*99 %*								
General Chemistry Parameters									
% Solids	**82.1**		%	0.100	1	02/27/08 00:00	am	8030134	SM 2540 G
Semivolatile Organics by GC/MS									
Acenaphthene	**2.88**		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Acenaphthylene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Anthracene	**6.37**	M1	mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Benzidine	<20.1		mg/kg dry	20.1	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Benzo (a) anthracene	**16.4**	M1	mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Benzo (b) fluoranthene	**12.3**	M1	mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Benzo (k) fluoranthene	**12.7**	M1	mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Benzo (a) pyrene	**15.9**	M1	mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Benzo (g,h,i) perylene	**10.1**	M1	mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Benzyl alcohol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Butyl benzyl phthalate	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Bis(2-chloroethyl)ether	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Bis(2-chloroethoxy)methane	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Bis(2-ethylhexyl)phthalate	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Bis(2-chloroisopropyl) ether	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
4-Bromophenyl phenyl ether	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Carbazole	**2.23**		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
4-Chloroaniline	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2-Chloronaphthalene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
4-Chlorophenyl phenyl ether	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Chrysene	**17.6**	M1	mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Dibenzo (a,h) anthracene	**3.22**		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Dibenzofuran	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-01 (GP-1 2-4 - Solid/Soil) - cont. **Sampled: 02/25/08 09:15**

Semivolatile Organics by GC/MS - cont.

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Di-n-butyl phthalate	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
1,2-Dichlorobenzene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
1,3-Dichlorobenzene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
1,4-Dichlorobenzene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
3,3'-Dichlorobenzidine	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Diethyl phthalate	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Dimethyl phthalate	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2,4-Dinitrotoluene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2,6-Dinitrotoluene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Di-n-octyl phthalate	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Fluoranthene	**41.8**	M1	mg/kg dry	20.1	49.9	03/06/08 11:55	dmd	8020961	SW 8270C
Fluorene	**2.96**		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Hexachlorobenzene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Hexachlorobutadiene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Hexachlorocyclopentadiene	<4.02		mg/kg dry	4.02	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Hexachloroethane	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Indeno (1,2,3-cd) pyrene	**8.92**	M1	mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Isophorone	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2-Methylnaphthalene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Naphthalene	**2.88**		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2-Nitroaniline	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
3-Nitroaniline	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
4-Nitroaniline	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Nitrobenzene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
N-Nitrosodimethylamine	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
N-Nitrosodiphenylamine	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
N-Nitrosodi-n-propylamine	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Phenanthrene	**22.8**	M1	mg/kg dry	20.1	49.9	03/06/08 11:55	dmd	8020961	SW 8270C
Pyrene	**27.0**		mg/kg dry	20.1	49.9	03/06/08 11:55	dmd	8020961	SW 8270C
Pyridine	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
1,2,4-Trichlorobenzene	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Benzoic acid	<4.02		mg/kg dry	4.02	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
4-Chloro-3-methylphenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2-Chlorophenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Cresol(s)	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2,4-Dichlorophenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2,4-Dimethylphenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2,4-Dinitrophenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
4,6-Dinitro-2-methylphenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2-Methylphenol (o-Cresol)	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
4-Methylphenol (p-Cresol)	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2-Nitrophenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
4-Nitrophenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Pentachlorophenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Phenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2,4,5-Trichlorophenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
2,4,6-Trichlorophenol	<2.01		mg/kg dry	2.01	4.99	03/06/08 12:30	dmd	8020961	SW 8270C
Surr: Nitrobenzene-d5 (25-110%)	*79 %*								
Surr: 2-Fluorobiphenyl (20-115%)	*87 %*								
Surr: Terphenyl-d14 (40-135%)	*96 %*								
Surr: Phenol-d6 (30-125%)	*73 %*								
Surr: 2-Fluorophenol (25-120%)	*66 %*								

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-01 (GP-1 2-4 - Solid/Soil) - cont.						**Sampled: 02/25/08 09:15**			
Semivolatile Organics by GC/MS - cont.									
Surr: 2,4,6-Tribromophenol (35-130%)	*78 %*								
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0609		mg/kg dry	0.0609	0.99	02/29/08 17:51	slt	8020909	SW 8082
PCB-1221	<0.0609		mg/kg dry	0.0609	0.99	02/29/08 17:51	slt	8020909	SW 8082
PCB-1232	<0.0609		mg/kg dry	0.0609	0.99	02/29/08 17:51	slt	8020909	SW 8082
PCB-1242	<0.0609		mg/kg dry	0.0609	0.99	02/29/08 17:51	slt	8020909	SW 8082
PCB-1248	<0.0609		mg/kg dry	0.0609	0.99	02/29/08 17:51	slt	8020909	SW 8082
PCB-1254	<0.0609		mg/kg dry	0.0609	0.99	02/29/08 17:51	slt	8020909	SW 8082
PCB-1260	<0.0609		mg/kg dry	0.0609	0.99	02/29/08 17:51	slt	8020909	SW 8082
PCB-1268	<0.0609		mg/kg dry	0.0609	0.99	02/29/08 17:51	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*90 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*106 %*								
Sample ID: WRB0772-02 (GP-1 6-8 - Solid/Soil)						**Sampled: 02/25/08 09:45**			
General Chemistry Parameters									
% Solids	**80**		%	NA	1	02/27/08 12:15	CLJ	8020508	SW 5035
Chloride	**70**		mg/kg dry	31	1	03/04/08 15:39	pxm	8030053	SW 9251
Metals									
Arsenic	**10**		mg/kg dry	1.8	1	02/28/08 16:51	mmm	8020504	SW 6010B
Barium	**280**		mg/kg dry	0.14	1	02/28/08 16:51	mmm	8020504	SW 6010B
Cadmium	**0.92**		mg/kg dry	0.13	1	02/28/08 16:51	mmm	8020504	SW 6010B
Chromium	**26**		mg/kg dry	0.23	1	02/28/08 16:51	mmm	8020504	SW 6010B
Lead	**1700**		mg/kg dry	1.5	1	02/28/08 16:51	mmm	8020504	SW 6010B
Mercury	**1.5**		mg/kg dry	0.063	5	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<5.0		mg/kg dry	5.0	1	02/28/08 16:51	mmm	8020504	SW 6010B
Silver	**0.53**		mg/kg dry	0.14	1	02/28/08 16:51	mmm	8020504	SW 6010B
VOCs by SW8260B									
Benzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Bromobenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Bromochloromethane	<44		ug/kg dry	44	1	02/27/08 19:07	lck	8020500	SW 8260B
Bromodichloromethane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Bromoform	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Bromomethane	<130		ug/kg dry	130	1	02/27/08 19:07	lck	8020500	SW 8260B
n-Butylbenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
sec-Butylbenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
tert-Butylbenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Carbon Tetrachloride	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Chlorobenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Chlorodibromomethane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Chloroethane	<63		ug/kg dry	63	1	02/27/08 19:07	lck	8020500	SW 8260B
Chloroform	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Chloromethane	<63		ug/kg dry	63	1	02/27/08 19:07	lck	8020500	SW 8260B
2-Chlorotoluene	<63		ug/kg dry	63	1	02/27/08 19:07	lck	8020500	SW 8260B
4-Chlorotoluene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,2-Dibromo-3-chloropropane	<63		ug/kg dry	63	1	02/27/08 19:07	lck	8020500	SW 8260B
1,2-Dibromoethane (EDB)	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Dibromomethane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,2-Dichlorobenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,3-Dichlorobenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,4-Dichlorobenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Dichlorodifluoromethane	<63	C9	ug/kg dry	63	1	02/27/08 19:07	lck	8020500	SW 8260B
1,1-Dichloroethane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-02 (GP-1 6-8 - Solid/Soil) - cont. **Sampled: 02/25/08 09:45**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
1,2-Dichloroethane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,1-Dichloroethene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
cis-1,2-Dichloroethene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
trans-1,2-Dichloroethene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,2-Dichloropropane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,3-Dichloropropane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
2,2-Dichloropropane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,1-Dichloropropene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
cis-1,3-Dichloropropene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
trans-1,3-Dichloropropene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
2,3-Dichloropropene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Isopropyl Ether	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Ethylbenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Hexachlorobutadiene	<44		ug/kg dry	44	1	02/27/08 19:07	lck	8020500	SW 8260B
Isopropylbenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
p-Isopropyltoluene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Methylene Chloride	<63		ug/kg dry	63	1	02/27/08 19:07	lck	8020500	SW 8260B
Methyl tert-Butyl Ether	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Naphthalene	**67**		ug/kg dry	63	1	02/27/08 19:07	lck	8020500	SW 8260B
n-Propylbenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Styrene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,1,1,2-Tetrachloroethane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,1,2,2-Tetrachloroethane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Tetrachloroethene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Toluene	**68**		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,2,3-Trichlorobenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,2,4-Trichlorobenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,1,1-Trichloroethane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,1,2-Trichloroethane	<44		ug/kg dry	44	1	02/27/08 19:07	lck	8020500	SW 8260B
Trichloroethene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Trichlorofluoromethane	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,2,3-Trichloropropane	<63		ug/kg dry	63	1	02/27/08 19:07	lck	8020500	SW 8260B
1,2,4-Trimethylbenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
1,3,5-Trimethylbenzene	<31		ug/kg dry	31	1	02/27/08 19:07	lck	8020500	SW 8260B
Vinyl chloride	<44		ug/kg dry	44	1	02/27/08 19:07	lck	8020500	SW 8260B
Xylenes, total	<110		ug/kg dry	110	1	02/27/08 19:07	lck	8020500	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*97 %*								
Surr: Toluene-d8 (91-106%)	*99 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*98 %*								
PNAs by SW8310									
Acenaphthene	**2500**		ug/kg dry	940	15	03/05/08 22:17	CLJ	8020499	SW 8310
Acenaphthylene	<1600		ug/kg dry	1600	15	03/05/08 22:17	CLJ	8020499	SW 8310
Anthracene	**3300**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
Benzo (a) anthracene	**5800**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
Benzo (b) fluoranthene	**4200**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
Benzo (k) fluoranthene	**2600**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
Benzo (a) pyrene	**5200**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
Benzo (g,h,i) perylene	**3000**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
Chrysene	**4000**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
Dibenzo (a,h) anthracene	**650**		ug/kg dry	140	15	03/05/08 22:17	CLJ	8020499	SW 8310
Fluoranthene	**16000**		ug/kg dry	190	15	03/05/08 22:17	CLJ	8020499	SW 8310
Fluorene	**1600**		ug/kg dry	190	15	03/05/08 22:17	CLJ	8020499	SW 8310

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-02 (GP-1 6-8 - Solid/Soil) - cont.						**Sampled: 02/25/08 09:45**			
PNAs by SW8310 - cont.									
Indeno (1,2,3-cd) pyrene	**3300**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
1-Methylnaphthalene	**1200**		ug/kg dry	570	15	03/05/08 22:17	CLJ	8020499	SW 8310
2-Methylnaphthalene	**8400**		ug/kg dry	470	15	03/05/08 22:17	CLJ	8020499	SW 8310
Naphthalene	**870**		ug/kg dry	570	15	03/05/08 22:17	CLJ	8020499	SW 8310
Phenanthrene	**12000**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
Pyrene	**9000**		ug/kg dry	94	15	03/05/08 22:17	CLJ	8020499	SW 8310
Surr: 2-Fluorobiphenyl (61-128%)	*0.00 %*	*Z3*							
General Chemistry Parameters									
% Solids	**79.6**		%	0.100	1	02/27/08 00:00	am	8030134	SM 2540 G
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<1.26		mg/kg dry	1.26	19.7	03/03/08 18:46	slt	8020909	SW 8082
PCB-1221	<1.26		mg/kg dry	1.26	19.7	03/03/08 18:46	slt	8020909	SW 8082
PCB-1232	<1.26		mg/kg dry	1.26	19.7	03/03/08 18:46	slt	8020909	SW 8082
PCB-1242	<1.26		mg/kg dry	1.26	19.7	03/03/08 18:46	slt	8020909	SW 8082
PCB-1248	<1.26		mg/kg dry	1.26	19.7	03/03/08 18:46	slt	8020909	SW 8082
PCB-1254	<0.0628		mg/kg dry	0.0628	0.987	02/29/08 18:01	slt	8020909	SW 8082
PCB-1260	<0.0628		mg/kg dry	0.0628	0.987	02/29/08 18:01	slt	8020909	SW 8082
PCB-1268	<0.0628		mg/kg dry	0.0628	0.987	02/29/08 18:01	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*78 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*479 %*	*ZX*							
Sample ID: WRB0772-03 (GP-2 2-4 - Solid/Soil)						**Sampled: 02/25/08 10:30**			
General Chemistry Parameters									
% Solids	**84**		%	NA	1	02/27/08 12:15	CLJ	8020508	SW 5035
Chloride	**66**		mg/kg dry	30	1	03/04/08 15:39	pxm	8030053	SW 9251
Metals									
Arsenic	**16**		mg/kg dry	1.7	1	02/28/08 16:55	mmm	8020504	SW 6010B
Barium	**100**		mg/kg dry	0.13	1	02/28/08 16:55	mmm	8020504	SW 6010B
Cadmium	**0.63**		mg/kg dry	0.12	1	02/28/08 16:55	mmm	8020504	SW 6010B
Chromium	**8.8**		mg/kg dry	0.21	1	02/28/08 16:55	mmm	8020504	SW 6010B
Lead	**140**		mg/kg dry	1.4	1	02/28/08 16:55	mmm	8020504	SW 6010B
Mercury	**0.32**		mg/kg dry	0.012	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<4.8		mg/kg dry	4.8	1	02/28/08 16:55	mmm	8020504	SW 6010B
Silver	<0.13		mg/kg dry	0.13	1	02/28/08 16:55	mmm	8020504	SW 6010B
VOCs by SW8260B									
Benzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Bromobenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Bromochloromethane	<42		ug/kg dry	42	1	02/29/08 12:49	lck	8020562	SW 8260B
Bromodichloromethane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Bromoform	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Bromomethane	<120		ug/kg dry	120	1	02/29/08 12:49	lck	8020562	SW 8260B
n-Butylbenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
sec-Butylbenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
tert-Butylbenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Carbon Tetrachloride	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Chlorobenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Chlorodibromomethane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Chloroethane	<59		ug/kg dry	59	1	02/29/08 12:49	lck	8020562	SW 8260B
Chloroform	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Chloromethane	<59		ug/kg dry	59	1	02/29/08 12:49	lck	8020562	SW 8260B
2-Chlorotoluene	<59		ug/kg dry	59	1	02/29/08 12:49	lck	8020562	SW 8260B
4-Chlorotoluene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-03 (GP-2 2-4 - Solid/Soil) - cont. **Sampled: 02/25/08 10:30**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
1,2-Dibromo-3-chloropropane	<59		ug/kg dry	59	1	02/29/08 12:49	lck	8020562	SW 8260B
1,2-Dibromoethane (EDB)	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Dibromomethane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Dichlorodifluoromethane	<59		ug/kg dry	59	1	02/29/08 12:49	lck	8020562	SW 8260B
1,1-Dichloroethane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,2-Dichloroethane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,1-Dichloroethene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,2-Dichloropropane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,3-Dichloropropane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
2,2-Dichloropropane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,1-Dichloropropene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
2,3-Dichloropropene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Isopropyl Ether	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Ethylbenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Hexachlorobutadiene	<42		ug/kg dry	42	1	02/29/08 12:49	lck	8020562	SW 8260B
Isopropylbenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
p-Isopropyltoluene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Methylene Chloride	<59		ug/kg dry	59	1	02/29/08 12:49	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Naphthalene	<59		ug/kg dry	59	1	02/29/08 12:49	lck	8020562	SW 8260B
n-Propylbenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Styrene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Tetrachloroethene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Toluene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<42		ug/kg dry	42	1	02/29/08 12:49	lck	8020562	SW 8260B
Trichloroethene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Trichlorofluoromethane	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<59		ug/kg dry	59	1	02/29/08 12:49	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<30		ug/kg dry	30	1	02/29/08 12:49	lck	8020562	SW 8260B
Vinyl chloride	<42		ug/kg dry	42	1	02/29/08 12:49	lck	8020562	SW 8260B
Xylenes, total	<100		ug/kg dry	100	1	02/29/08 12:49	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*98 %*								
Surr: Toluene-d8 (91-106%)	*98 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*99 %*								
General Chemistry Parameters									
% Solids	**84.2**		%	0.100	1	02/27/08 00:00	am	8030134	SM 2540 G
Semivolatile Organics by GC/MS									
Acenaphthene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Acenaphthylene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
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Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-03 (GP-2 2-4 - Solid/Soil) - cont. **Sampled: 02/25/08 10:30**

Semivolatile Organics by GC/MS - cont.

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Anthracene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Benzidine	<19.6	RL1	mg/kg dry	19.6	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Benzo (a) anthracene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Benzo (b) fluoranthene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Benzo (k) fluoranthene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Benzo (a) pyrene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Benzo (g,h,i) perylene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Benzyl alcohol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Butyl benzyl phthalate	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Bis(2-chloroethyl)ether	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Bis(2-chloroethoxy)methane	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Bis(2-ethylhexyl)phthalate	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Bis(2-chloroisopropyl) ether	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
4-Bromophenyl phenyl ether	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Carbazole	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
4-Chloroaniline	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2-Chloronaphthalene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
4-Chlorophenyl phenyl ether	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Chrysene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Dibenzo (a,h) anthracene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Dibenzofuran	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Di-n-butyl phthalate	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
1,2-Dichlorobenzene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
1,3-Dichlorobenzene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
1,4-Dichlorobenzene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
3,3'-Dichlorobenzidine	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Diethyl phthalate	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Dimethyl phthalate	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2,4-Dinitrotoluene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2,6-Dinitrotoluene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Di-n-octyl phthalate	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Fluoranthene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Fluorene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Hexachlorobenzene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Hexachlorobutadiene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Hexachlorocyclopentadiene	<3.92	RL1	mg/kg dry	3.92	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Hexachloroethane	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Indeno (1,2,3-cd) pyrene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Isophorone	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2-Methylnaphthalene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Naphthalene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2-Nitroaniline	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
3-Nitroaniline	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
4-Nitroaniline	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Nitrobenzene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
N-Nitrosodimethylamine	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
N-Nitrosodiphenylamine	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
N-Nitrosodi-n-propylamine	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Phenanthrene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Pyrene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Pyridine	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
1,2,4-Trichlorobenzene	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-03 (GP-2 2-4 - Solid/Soil) - cont. **Sampled: 02/25/08 10:30**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Semivolatile Organics by GC/MS - cont.									
Benzoic acid	<3.92	RL1	mg/kg dry	3.92	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
4-Chloro-3-methylphenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2-Chlorophenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Cresol(s)	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2,4-Dichlorophenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2,4-Dimethylphenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2,4-Dinitrophenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
4,6-Dinitro-2-methylphenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2-Methylphenol (o-Cresol)	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
4-Methylphenol (p-Cresol)	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2-Nitrophenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
4-Nitrophenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Pentachlorophenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Phenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2,4,5-Trichlorophenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
2,4,6-Trichlorophenol	<1.96	RL1	mg/kg dry	1.96	4.99	03/05/08 01:55	dmd	8020961	SW 8270C
Surr: Nitrobenzene-d5 (25-110%)	*67 %*	*RL1*							
Surr: 2-Fluorobiphenyl (20-115%)	*80 %*	*RL1*							
Surr: Terphenyl-d14 (40-135%)	*88 %*	*RL1*							
Surr: Phenol-d6 (30-125%)	*67 %*	*RL1*							
Surr: 2-Fluorophenol (25-120%)	*62 %*	*RL1*							
Surr: 2,4,6-Tribromophenol (35-130%)	*79 %*	*RL1*							
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0594		mg/kg dry	0.0594	0.983	02/29/08 18:33	slt	8020909	SW 8082
PCB-1221	<0.0594		mg/kg dry	0.0594	0.983	02/29/08 18:33	slt	8020909	SW 8082
PCB-1232	<0.0594		mg/kg dry	0.0594	0.983	02/29/08 18:33	slt	8020909	SW 8082
PCB-1242	<0.0594		mg/kg dry	0.0594	0.983	02/29/08 18:33	slt	8020909	SW 8082
PCB-1248	<0.0594		mg/kg dry	0.0594	0.983	02/29/08 18:33	slt	8020909	SW 8082
PCB-1254	<0.0594		mg/kg dry	0.0594	0.983	02/29/08 18:33	slt	8020909	SW 8082
PCB-1260	<0.0594		mg/kg dry	0.0594	0.983	02/29/08 18:33	slt	8020909	SW 8082
PCB-1268	<0.0594		mg/kg dry	0.0594	0.983	02/29/08 18:33	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*87 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*85 %*								

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-04 (GP-2 10-12 - Solid/Soil)						**Sampled: 02/25/08 11:00**			
General Chemistry Parameters									
% Solids	**79**		%	NA	1	02/27/08 12:15	CLJ	8020508	SW 5035
Chloride	**69**		mg/kg dry	32	1	03/04/08 15:40	pxm	8030053	SW 9251
Metals									
Arsenic	**3.2**		mg/kg dry	1.8	1	02/28/08 16:59	mmm	8020504	SW 6010B
Barium	**47**		mg/kg dry	0.14	1	02/28/08 16:59	mmm	8020504	SW 6010B
Cadmium	<0.13		mg/kg dry	0.13	1	02/28/08 16:59	mmm	8020504	SW 6010B
Chromium	**4.8**		mg/kg dry	0.23	1	02/28/08 16:59	mmm	8020504	SW 6010B
Lead	**5.2**		mg/kg dry	1.5	1	02/28/08 16:59	mmm	8020504	SW 6010B
Mercury	<0.013		mg/kg dry	0.013	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<5.1		mg/kg dry	5.1	1	02/28/08 16:59	mmm	8020504	SW 6010B
Silver	**0.34**		mg/kg dry	0.14	1	02/28/08 16:59	mmm	8020504	SW 6010B
VOCs by SW8260B									
Benzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Bromobenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Bromochloromethane	<45		ug/kg dry	45	1	02/29/08 13:16	lck	8020562	SW 8260B
Bromodichloromethane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Bromoform	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Bromomethane	<130		ug/kg dry	130	1	02/29/08 13:16	lck	8020562	SW 8260B
n-Butylbenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
sec-Butylbenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
tert-Butylbenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Carbon Tetrachloride	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Chlorobenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Chlorodibromomethane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Chloroethane	<64		ug/kg dry	64	1	02/29/08 13:16	lck	8020562	SW 8260B
Chloroform	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Chloromethane	<64		ug/kg dry	64	1	02/29/08 13:16	lck	8020562	SW 8260B
2-Chlorotoluene	<64		ug/kg dry	64	1	02/29/08 13:16	lck	8020562	SW 8260B
4-Chlorotoluene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,2-Dibromo-3-chloropropane	<64		ug/kg dry	64	1	02/29/08 13:16	lck	8020562	SW 8260B
1,2-Dibromoethane (EDB)	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Dibromomethane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Dichlorodifluoromethane	<64		ug/kg dry	64	1	02/29/08 13:16	lck	8020562	SW 8260B
1,1-Dichloroethane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,2-Dichloroethane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,1-Dichloroethene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,2-Dichloropropane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,3-Dichloropropane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
2,2-Dichloropropane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,1-Dichloropropene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
2,3-Dichloropropene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Isopropyl Ether	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Ethylbenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Hexachlorobutadiene	<45		ug/kg dry	45	1	02/29/08 13:16	lck	8020562	SW 8260B
Isopropylbenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-04 (GP-2 10-12 - Solid/Soil) - cont. **Sampled: 02/25/08 11:00**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
p-Isopropyltoluene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Methylene Chloride	<64		ug/kg dry	64	1	02/29/08 13:16	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Naphthalene	<64		ug/kg dry	64	1	02/29/08 13:16	lck	8020562	SW 8260B
n-Propylbenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Styrene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Tetrachloroethene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Toluene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<45		ug/kg dry	45	1	02/29/08 13:16	lck	8020562	SW 8260B
Trichloroethene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Trichlorofluoromethane	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<64		ug/kg dry	64	1	02/29/08 13:16	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<32		ug/kg dry	32	1	02/29/08 13:16	lck	8020562	SW 8260B
Vinyl chloride	<45		ug/kg dry	45	1	02/29/08 13:16	lck	8020562	SW 8260B
Xylenes, total	<110		ug/kg dry	110	1	02/29/08 13:16	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*99 %*								
Surr: Toluene-d8 (91-106%)	*99 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*96 %*								
PNAs by SW8310									
Acenaphthene	<64		ug/kg dry	64	1	03/04/08 16:22	CLJ	8020499	SW 8310
Acenaphthylene	<110		ug/kg dry	110	1	03/04/08 16:22	CLJ	8020499	SW 8310
Anthracene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
Benzo (a) anthracene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
Benzo (b) fluoranthene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
Benzo (k) fluoranthene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
Benzo (a) pyrene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
Benzo (g,h,i) perylene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
Chrysene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
Dibenzo (a,h) anthracene	<9.6		ug/kg dry	9.6	1	03/04/08 16:22	CLJ	8020499	SW 8310
Fluoranthene	<13		ug/kg dry	13	1	03/04/08 16:22	CLJ	8020499	SW 8310
Fluorene	<13		ug/kg dry	13	1	03/04/08 16:22	CLJ	8020499	SW 8310
Indeno (1,2,3-cd) pyrene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
1-Methylnaphthalene	<38		ug/kg dry	38	1	03/04/08 16:22	CLJ	8020499	SW 8310
2-Methylnaphthalene	<32		ug/kg dry	32	1	03/04/08 16:22	CLJ	8020499	SW 8310
Naphthalene	<38		ug/kg dry	38	1	03/04/08 16:22	CLJ	8020499	SW 8310
Phenanthrene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
Pyrene	<6.4		ug/kg dry	6.4	1	03/04/08 16:22	CLJ	8020499	SW 8310
Surr: 2-Fluorobiphenyl (61-128%)	*99 %*								
General Chemistry Parameters									
% Solids	**78.5**		%	0.100	1	02/27/08 00:00	am	8030134	SM 2540 G
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0637		mg/kg dry	0.0637	0.991	02/29/08 18:44	slt	8020909	SW 8082
PCB-1221	<0.0637		mg/kg dry	0.0637	0.991	02/29/08 18:44	slt	8020909	SW 8082
PCB-1232	<0.0637		mg/kg dry	0.0637	0.991	02/29/08 18:44	slt	8020909	SW 8082
PCB-1242	<0.0637		mg/kg dry	0.0637	0.991	02/29/08 18:44	slt	8020909	SW 8082

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-04 (GP-2 10-12 - Solid/Soil) - cont.						**Sampled: 02/25/08 11:00**			
Polychlorinated Biphenyls by EPA Method 8082 - cont.									
PCB-1248	<0.0637		mg/kg dry	0.0637	0.991	02/29/08 18:44	slt	8020909	SW 8082
PCB-1254	<0.0637		mg/kg dry	0.0637	0.991	02/29/08 18:44	slt	8020909	SW 8082
PCB-1260	<0.0637		mg/kg dry	0.0637	0.991	02/29/08 18:44	slt	8020909	SW 8082
PCB-1268	<0.0637		mg/kg dry	0.0637	0.991	02/29/08 18:44	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*68 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*90 %*								
Sample ID: WRB0772-05 (GP-3 2-4 - Solid/Soil)						**Sampled: 02/25/08 12:00**			
General Chemistry Parameters									
% Solids	**80**		%	NA	1	02/27/08 12:15	CLJ	8020508	SW 5035
Chloride	**63**		mg/kg dry	31	1	03/04/08 15:41	pxm	8030053	SW 9251
Metals									
Arsenic	**9.6**		mg/kg dry	1.7	1	02/28/08 17:03	mmm	8020504	SW 6010B
Barium	**120**		mg/kg dry	0.14	1	02/28/08 17:03	mmm	8020504	SW 6010B
Cadmium	**0.84**		mg/kg dry	0.12	1	02/28/08 17:03	mmm	8020504	SW 6010B
Chromium	**10**		mg/kg dry	0.22	1	02/28/08 17:03	mmm	8020504	SW 6010B
Lead	**530**		mg/kg dry	1.5	1	02/28/08 17:03	mmm	8020504	SW 6010B
Mercury	**0.42**		mg/kg dry	0.012	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<5.0		mg/kg dry	5.0	1	02/28/08 17:03	mmm	8020504	SW 6010B
Silver	**0.31**		mg/kg dry	0.14	1	02/28/08 17:03	mmm	8020504	SW 6010B
VOCs by SW8260B									
Benzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Bromobenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Bromochloromethane	<44		ug/kg dry	44	1	02/29/08 13:43	lck	8020562	SW 8260B
Bromodichloromethane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Bromoform	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Bromomethane	<120		ug/kg dry	120	1	02/29/08 13:43	lck	8020562	SW 8260B
n-Butylbenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
sec-Butylbenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
tert-Butylbenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Carbon Tetrachloride	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Chlorobenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Chlorodibromomethane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Chloroethane	<62		ug/kg dry	62	1	02/29/08 13:43	lck	8020562	SW 8260B
Chloroform	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Chloromethane	<62		ug/kg dry	62	1	02/29/08 13:43	lck	8020562	SW 8260B
2-Chlorotoluene	<62		ug/kg dry	62	1	02/29/08 13:43	lck	8020562	SW 8260B
4-Chlorotoluene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,2-Dibromo-3-chloropropane	<62		ug/kg dry	62	1	02/29/08 13:43	lck	8020562	SW 8260B
1,2-Dibromoethane (EDB)	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Dibromomethane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Dichlorodifluoromethane	<62		ug/kg dry	62	1	02/29/08 13:43	lck	8020562	SW 8260B
1,1-Dichloroethane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,2-Dichloroethane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,1-Dichloroethene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,2-Dichloropropane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,3-Dichloropropane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-05 (GP-3 2-4 - Solid/Soil) - cont. **Sampled: 02/25/08 12:00**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
2,2-Dichloropropane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,1-Dichloropropene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
2,3-Dichloropropene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Isopropyl Ether	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Ethylbenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Hexachlorobutadiene	<44		ug/kg dry	44	1	02/29/08 13:43	lck	8020562	SW 8260B
Isopropylbenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
p-Isopropyltoluene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Methylene Chloride	<62		ug/kg dry	62	1	02/29/08 13:43	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Naphthalene	**75**		ug/kg dry	62	1	02/29/08 13:43	lck	8020562	SW 8260B
n-Propylbenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Styrene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Tetrachloroethene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Toluene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<44		ug/kg dry	44	1	02/29/08 13:43	lck	8020562	SW 8260B
Trichloroethene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Trichlorofluoromethane	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<62		ug/kg dry	62	1	02/29/08 13:43	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<31		ug/kg dry	31	1	02/29/08 13:43	lck	8020562	SW 8260B
Vinyl chloride	<44		ug/kg dry	44	1	02/29/08 13:43	lck	8020562	SW 8260B
Xylenes, total	<110		ug/kg dry	110	1	02/29/08 13:43	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*99 %*								
Surr: Toluene-d8 (91-106%)	*98 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*99 %*								
General Chemistry Parameters									
% Solids	**80.3**		%	0.100	1	02/27/08 00:00	am	8030134	SM 2540 G
Semivolatile Organics by GC/MS									
Acenaphthene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Acenaphthylene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Anthracene	**6.79**		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Benzidine	<20.5		mg/kg dry	20.5	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Benzo (a) anthracene	**22.2**		mg/kg dry	20.5	49.1	03/06/08 13:04	dmd	8020961	SW 8270C
Benzo (b) fluoranthene	**17.4**		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Benzo (k) fluoranthene	**17.8**		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Benzo (a) pyrene	**21.7**		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Benzo (g,h,i) perylene	**11.4**		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Benzyl alcohol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Butyl benzyl phthalate	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Bis(2-chloroethyl)ether	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Bis(2-chloroethoxy)methane	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Bis(2-ethylhexyl)phthalate	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Bis(2-chloroisopropyl) ether	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
4-Bromophenyl phenyl ether	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-05 (GP-3 2-4 - Solid/Soil) - cont. **Sampled: 02/25/08 12:00**

Semivolatile Organics by GC/MS - cont.

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Carbazole	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
4-Chloroaniline	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2-Chloronaphthalene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
4-Chlorophenyl phenyl ether	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Chrysene	**23.2**		mg/kg dry	20.5	49.1	03/06/08 13:04	dmd	8020961	SW 8270C
Dibenzo (a,h) anthracene	**4.27**		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Dibenzofuran	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Di-n-butyl phthalate	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
1,2-Dichlorobenzene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
1,3-Dichlorobenzene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
1,4-Dichlorobenzene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
3,3'-Dichlorobenzidine	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Diethyl phthalate	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Dimethyl phthalate	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2,4-Dinitrotoluene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2,6-Dinitrotoluene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Di-n-octyl phthalate	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Fluoranthene	**53.1**		mg/kg dry	20.5	49.1	03/06/08 13:04	dmd	8020961	SW 8270C
Fluorene	**2.15**		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Hexachlorobenzene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Hexachlorobutadiene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Hexachlorocyclopentadiene	<4.11		mg/kg dry	4.11	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Hexachloroethane	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Indeno (1,2,3-cd) pyrene	**10.9**		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Isophorone	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2-Methylnaphthalene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Naphthalene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2-Nitroaniline	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
3-Nitroaniline	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
4-Nitroaniline	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Nitrobenzene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
N-Nitrosodimethylamine	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
N-Nitrosodiphenylamine	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
N-Nitrosodi-n-propylamine	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Phenanthrene	**28.4**		mg/kg dry	20.5	49.1	03/06/08 13:04	dmd	8020961	SW 8270C
Pyrene	**41.0**		mg/kg dry	20.5	49.1	03/06/08 13:04	dmd	8020961	SW 8270C
Pyridine	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
1,2,4-Trichlorobenzene	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Benzoic acid	<4.11		mg/kg dry	4.11	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
4-Chloro-3-methylphenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2-Chlorophenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Cresol(s)	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2,4-Dichlorophenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2,4-Dimethylphenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2,4-Dinitrophenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
4,6-Dinitro-2-methylphenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2-Methylphenol (o-Cresol)	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
4-Methylphenol (p-Cresol)	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2-Nitrophenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
4-Nitrophenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Pentachlorophenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Phenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
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Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
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Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-05 (GP-3 2-4 - Solid/Soil) - cont.						**Sampled: 02/25/08 12:00**			
Semivolatile Organics by GC/MS - cont.									
2,4,5-Trichlorophenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
2,4,6-Trichlorophenol	<2.05		mg/kg dry	2.05	4.91	03/06/08 13:38	dmd	8020961	SW 8270C
Surr: Nitrobenzene-d5 (25-110%)	*74 %*								
Surr: 2-Fluorobiphenyl (20-115%)	*81 %*								
Surr: Terphenyl-d14 (40-135%)	*101 %*								
Surr: Phenol-d6 (30-125%)	*79 %*								
Surr: 2-Fluorophenol (25-120%)	*68 %*								
Surr: 2,4,6-Tribromophenol (35-130%)	*84 %*								
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0623		mg/kg dry	0.0623	0.981	02/29/08 18:55	slt	8020909	SW 8082
PCB-1221	<0.0623		mg/kg dry	0.0623	0.981	02/29/08 18:55	slt	8020909	SW 8082
PCB-1232	<0.0623		mg/kg dry	0.0623	0.981	02/29/08 18:55	slt	8020909	SW 8082
PCB-1242	<0.0623		mg/kg dry	0.0623	0.981	02/29/08 18:55	slt	8020909	SW 8082
PCB-1248	<0.0623		mg/kg dry	0.0623	0.981	02/29/08 18:55	slt	8020909	SW 8082
PCB-1254	<0.0623		mg/kg dry	0.0623	0.981	02/29/08 18:55	slt	8020909	SW 8082
PCB-1260	<0.0623		mg/kg dry	0.0623	0.981	02/29/08 18:55	slt	8020909	SW 8082
PCB-1268	<0.0623		mg/kg dry	0.0623	0.981	02/29/08 18:55	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*81 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*78 %*								
Sample ID: WRB0772-06 (GP-3 6-8 - Solid/Soil)						**Sampled: 02/25/08 12:30**			
General Chemistry Parameters									
% Solids	**67**		%	NA	1	02/27/08 12:15	CLJ	8020508	SW 5035
Chloride	**77**		mg/kg dry	38	1	03/04/08 15:42	pxm	8030053	SW 9251
Metals									
Arsenic	**8.7**		mg/kg dry	2.1	1	02/28/08 17:18	mmm	8020504	SW 6010B
Barium	**110**		mg/kg dry	0.17	1	02/28/08 17:18	mmm	8020504	SW 6010B
Cadmium	**0.48**		mg/kg dry	0.15	1	02/28/08 17:18	mmm	8020504	SW 6010B
Chromium	**5.5**		mg/kg dry	0.27	1	02/28/08 17:18	mmm	8020504	SW 6010B
Lead	**320**		mg/kg dry	1.8	1	02/28/08 17:18	mmm	8020504	SW 6010B
Mercury	**0.72**		mg/kg dry	0.015	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<6.0		mg/kg dry	6.0	1	02/28/08 17:18	mmm	8020504	SW 6010B
Silver	**0.38**		mg/kg dry	0.17	1	02/28/08 17:18	mmm	8020504	SW 6010B
VOCs by SW8260B									
Benzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Bromobenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Bromochloromethane	<53		ug/kg dry	53	1	02/29/08 14:10	lck	8020562	SW 8260B
Bromodichloromethane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Bromoform	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Bromomethane	<150		ug/kg dry	150	1	02/29/08 14:10	lck	8020562	SW 8260B
n-Butylbenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
sec-Butylbenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
tert-Butylbenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Carbon Tetrachloride	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Chlorobenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Chlorodibromomethane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Chloroethane	<75		ug/kg dry	75	1	02/29/08 14:10	lck	8020562	SW 8260B
Chloroform	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Chloromethane	<75		ug/kg dry	75	1	02/29/08 14:10	lck	8020562	SW 8260B
2-Chlorotoluene	<75		ug/kg dry	75	1	02/29/08 14:10	lck	8020562	SW 8260B
4-Chlorotoluene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,2-Dibromo-3-chloropropane	<75		ug/kg dry	75	1	02/29/08 14:10	lck	8020562	SW 8260B

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Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-06 (GP-3 6-8 - Solid/Soil) - cont. **Sampled: 02/25/08 12:30**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
1,2-Dibromoethane (EDB)	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Dibromomethane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Dichlorodifluoromethane	<75		ug/kg dry	75	1	02/29/08 14:10	lck	8020562	SW 8260B
1,1-Dichloroethane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,2-Dichloroethane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,1-Dichloroethene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,2-Dichloropropane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,3-Dichloropropane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
2,2-Dichloropropane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,1-Dichloropropene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
2,3-Dichloropropene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Isopropyl Ether	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Ethylbenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Hexachlorobutadiene	<53		ug/kg dry	53	1	02/29/08 14:10	lck	8020562	SW 8260B
Isopropylbenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
p-Isopropyltoluene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Methylene Chloride	<75		ug/kg dry	75	1	02/29/08 14:10	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Naphthalene	<75		ug/kg dry	75	1	02/29/08 14:10	lck	8020562	SW 8260B
n-Propylbenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Styrene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Tetrachloroethene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Toluene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<53		ug/kg dry	53	1	02/29/08 14:10	lck	8020562	SW 8260B
Trichloroethene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Trichlorofluoromethane	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<75		ug/kg dry	75	1	02/29/08 14:10	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<38		ug/kg dry	38	1	02/29/08 14:10	lck	8020562	SW 8260B
Vinyl chloride	<53		ug/kg dry	53	1	02/29/08 14:10	lck	8020562	SW 8260B
Xylenes, total	<130		ug/kg dry	130	1	02/29/08 14:10	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*98 %*								
Surr: Toluene-d8 (91-106%)	*98 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*99 %*								
PNAs by SW8310									
Acenaphthene	<940		ug/kg dry	940	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Acenaphthylene	<1600		ug/kg dry	1600	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Anthracene	**360**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Benzo (a) anthracene	**1000**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Benzo (b) fluoranthene	**700**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-06 (GP-3 6-8 - Solid/Soil) - cont.						**Sampled: 02/25/08 12:30**			
PNAs by SW8310 - cont.									
Benzo (k) fluoranthene	**480**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Benzo (a) pyrene	**1100**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Benzo (g,h,i) perylene	**510**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Chrysene	**160**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Dibenzo (a,h) anthracene	<140		ug/kg dry	140	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Fluoranthene	**2200**		ug/kg dry	190	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Fluorene	<190		ug/kg dry	190	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Indeno (1,2,3-cd) pyrene	**690**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
1-Methylnaphthalene	<560		ug/kg dry	560	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
2-Methylnaphthalene	**770**		ug/kg dry	470	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Naphthalene	<560		ug/kg dry	560	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Phenanthrene	**940**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Pyrene	**2000**		ug/kg dry	94	12.5	03/04/08 20:39	CLJ	8020499	SW 8310
Surr: 2-Fluorobiphenyl (61-128%)	*126 %*								
General Chemistry Parameters									
% Solids	**66.6**		%	0.100	1	02/27/08 00:00	am	8030134	SM 2540 G
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0751		mg/kg dry	0.0751	0.999	02/29/08 19:05	slt	8020909	SW 8082
PCB-1221	<0.0751		mg/kg dry	0.0751	0.999	02/29/08 19:05	slt	8020909	SW 8082
PCB-1232	<0.0751		mg/kg dry	0.0751	0.999	02/29/08 19:05	slt	8020909	SW 8082
PCB-1242	<0.0751		mg/kg dry	0.0751	0.999	02/29/08 19:05	slt	8020909	SW 8082
PCB-1248	<0.0751		mg/kg dry	0.0751	0.999	02/29/08 19:05	slt	8020909	SW 8082
PCB-1254	<0.0751		mg/kg dry	0.0751	0.999	02/29/08 19:05	slt	8020909	SW 8082
PCB-1260	<0.0751		mg/kg dry	0.0751	0.999	02/29/08 19:05	slt	8020909	SW 8082
PCB-1268	<0.0751		mg/kg dry	0.0751	0.999	02/29/08 19:05	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*74 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*99 %*								
Sample ID: WRB0772-07 (GP-4 0-2 - Solid/Soil)						**Sampled: 02/25/08 13:00**			
General Chemistry Parameters									
% Solids	**88**		%	NA	1	02/27/08 12:15	CLJ	8020508	SW 5035
Chloride	**200**		mg/kg dry	29	1	03/04/08 15:43	pxm	8030053	SW 9251
Metals									
Arsenic	**2.8**		mg/kg dry	1.6	1	02/28/08 17:22	mmm	8020504	SW 6010B
Barium	**54**		mg/kg dry	0.13	1	02/28/08 17:22	mmm	8020504	SW 6010B
Cadmium	<0.11		mg/kg dry	0.11	1	02/28/08 17:22	mmm	8020504	SW 6010B
Chromium	**12**		mg/kg dry	0.21	1	02/28/08 17:22	mmm	8020504	SW 6010B
Lead	**17**		mg/kg dry	1.4	1	02/28/08 17:22	mmm	8020504	SW 6010B
Mercury	**0.13**		mg/kg dry	0.011	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<4.6		mg/kg dry	4.6	1	02/28/08 17:22	mmm	8020504	SW 6010B
Silver	**0.31**		mg/kg dry	0.13	1	02/28/08 17:22	mmm	8020504	SW 6010B
VOCs by SW8260B									
Benzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Bromobenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Bromochloromethane	<40		ug/kg dry	40	1	02/29/08 14:36	lck	8020562	SW 8260B
Bromodichloromethane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Bromoform	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Bromomethane	<110		ug/kg dry	110	1	02/29/08 14:36	lck	8020562	SW 8260B
n-Butylbenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
sec-Butylbenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
tert-Butylbenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Carbon Tetrachloride	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B

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Work Order: WRB0772
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Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-07 (GP-4 0-2 - Solid/Soil) - cont. **Sampled: 02/25/08 13:00**

VOCs by SW8260B - cont.

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Chlorobenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Chlorodibromomethane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Chloroethane	<57		ug/kg dry	57	1	02/29/08 14:36	lck	8020562	SW 8260B
Chloroform	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Chloromethane	<57		ug/kg dry	57	1	02/29/08 14:36	lck	8020562	SW 8260B
2-Chlorotoluene	<57		ug/kg dry	57	1	02/29/08 14:36	lck	8020562	SW 8260B
4-Chlorotoluene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,2-Dibromo-3-chloropropane	<57		ug/kg dry	57	1	02/29/08 14:36	lck	8020562	SW 8260B
1,2-Dibromoethane (EDB)	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Dibromomethane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Dichlorodifluoromethane	<57		ug/kg dry	57	1	02/29/08 14:36	lck	8020562	SW 8260B
1,1-Dichloroethane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,2-Dichloroethane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,1-Dichloroethene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,2-Dichloropropane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,3-Dichloropropane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
2,2-Dichloropropane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,1-Dichloropropene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
2,3-Dichloropropene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Isopropyl Ether	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Ethylbenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Hexachlorobutadiene	<40		ug/kg dry	40	1	02/29/08 14:36	lck	8020562	SW 8260B
Isopropylbenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
p-Isopropyltoluene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Methylene Chloride	<57		ug/kg dry	57	1	02/29/08 14:36	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Naphthalene	<57		ug/kg dry	57	1	02/29/08 14:36	lck	8020562	SW 8260B
n-Propylbenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Styrene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Tetrachloroethene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Toluene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<40		ug/kg dry	40	1	02/29/08 14:36	lck	8020562	SW 8260B
Trichloroethene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Trichlorofluoromethane	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<57		ug/kg dry	57	1	02/29/08 14:36	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<29		ug/kg dry	29	1	02/29/08 14:36	lck	8020562	SW 8260B
Vinyl chloride	<40		ug/kg dry	40	1	02/29/08 14:36	lck	8020562	SW 8260B
Xylenes, total	<97		ug/kg dry	97	1	02/29/08 14:36	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*98 %*								

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
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Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-07 (GP-4 0-2 - Solid/Soil) - cont.						**Sampled: 02/25/08 13:00**			
VOCs by SW8260B - cont.									
Surr: Toluene-d8 (91-106%)	*99 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*97 %*								
General Chemistry Parameters									
% Solids	**87.6**		%	0.100	1	02/27/08 00:00	am	8030134	SM 2540 G
Semivolatile Organics by GC/MS									
Acenaphthene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Acenaphthylene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Anthracene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Benzidine	<3.77		mg/kg dry	3.77	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Benzo (a) anthracene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Benzo (b) fluoranthene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Benzo (k) fluoranthene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Benzo (a) pyrene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Benzo (g,h,i) perylene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Benzyl alcohol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Butyl benzyl phthalate	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Bis(2-chloroethyl)ether	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Bis(2-chloroethoxy)methane	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Bis(2-ethylhexyl)phthalate	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Bis(2-chloroisopropyl) ether	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
4-Bromophenyl phenyl ether	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Carbazole	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
4-Chloroaniline	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2-Chloronaphthalene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
4-Chlorophenyl phenyl ether	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Chrysene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Dibenzo (a,h) anthracene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Dibenzofuran	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Di-n-butyl phthalate	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
1,2-Dichlorobenzene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
1,3-Dichlorobenzene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
1,4-Dichlorobenzene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
3,3'-Dichlorobenzidine	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Diethyl phthalate	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Dimethyl phthalate	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2,4-Dinitrotoluene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2,6-Dinitrotoluene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Di-n-octyl phthalate	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Fluoranthene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Fluorene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Hexachlorobenzene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Hexachlorobutadiene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Hexachlorocyclopentadiene	<0.753		mg/kg dry	0.753	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Hexachloroethane	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Indeno (1,2,3-cd) pyrene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Isophorone	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2-Methylnaphthalene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Naphthalene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2-Nitroaniline	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
3-Nitroaniline	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
4-Nitroaniline	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Nitrobenzene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-07 (GP-4 0-2 - Solid/Soil) - cont. **Sampled: 02/25/08 13:00**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Semivolatile Organics by GC/MS - cont.									
N-Nitrosodimethylamine	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
N-Nitrosodiphenylamine	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
N-Nitrosodi-n-propylamine	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Phenanthrene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Pyrene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Pyridine	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
1,2,4-Trichlorobenzene	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Benzoic acid	<0.753		mg/kg dry	0.753	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
4-Chloro-3-methylphenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2-Chlorophenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Cresol(s)	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2,4-Dichlorophenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2,4-Dimethylphenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2,4-Dinitrophenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
4,6-Dinitro-2-methylphenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2-Methylphenol (o-Cresol)	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
4-Methylphenol (p-Cresol)	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2-Nitrophenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
4-Nitrophenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Pentachlorophenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Phenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2,4,5-Trichlorophenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
2,4,6-Trichlorophenol	<0.377		mg/kg dry	0.377	0.998	03/05/08 01:21	dmd	8020961	SW 8270C
Surr: Nitrobenzene-d5 (25-110%)	*81 %*								
Surr: 2-Fluorobiphenyl (20-115%)	*82 %*								
Surr: Terphenyl-d14 (40-135%)	*86 %*								
Surr: Phenol-d6 (30-125%)	*79 %*								
Surr: 2-Fluorophenol (25-120%)	*77 %*								
Surr: 2,4,6-Tribromophenol (35-130%)	*81 %*								
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0571		mg/kg dry	0.0571	0.976	02/29/08 19:16	slt	8020909	SW 8082
PCB-1221	<0.0571		mg/kg dry	0.0571	0.976	02/29/08 19:16	slt	8020909	SW 8082
PCB-1232	<0.0571		mg/kg dry	0.0571	0.976	02/29/08 19:16	slt	8020909	SW 8082
PCB-1242	<0.0571		mg/kg dry	0.0571	0.976	02/29/08 19:16	slt	8020909	SW 8082
PCB-1248	<0.0571		mg/kg dry	0.0571	0.976	02/29/08 19:16	slt	8020909	SW 8082
PCB-1254	<0.0571		mg/kg dry	0.0571	0.976	02/29/08 19:16	slt	8020909	SW 8082
PCB-1260	<0.0571		mg/kg dry	0.0571	0.976	02/29/08 19:16	slt	8020909	SW 8082
PCB-1268	<0.0571		mg/kg dry	0.0571	0.976	02/29/08 19:16	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*83 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*78 %*								

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-08 (GP-4 4-8 - Solid/Soil)						**Sampled: 02/25/08 13:00**			
General Chemistry Parameters									
% Solids	**77**		%	NA	1	03/03/08 14:12	CLJ	8030034	SW 5035
Chloride	**140**		mg/kg dry	33	1	03/04/08 15:43	pxm	8030053	SW 9251
Metals									
Arsenic	**9.3**		mg/kg dry	1.8	1	02/28/08 17:26	mmm	8020504	SW 6010B
Barium	**120**		mg/kg dry	0.14	1	02/28/08 17:26	mmm	8020504	SW 6010B
Cadmium	**0.40**		mg/kg dry	0.13	1	02/28/08 17:26	mmm	8020504	SW 6010B
Chromium	**9.9**		mg/kg dry	0.23	1	02/28/08 17:26	mmm	8020504	SW 6010B
Lead	**420**		mg/kg dry	1.6	1	02/28/08 17:26	mmm	8020504	SW 6010B
Mercury	**0.17**		mg/kg dry	0.013	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<5.2		mg/kg dry	5.2	1	02/28/08 17:26	mmm	8020504	SW 6010B
Silver	**0.42**		mg/kg dry	0.14	1	02/28/08 17:26	mmm	8020504	SW 6010B
VOCs by SW8260B									
Benzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Bromobenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Bromochloromethane	<46		ug/kg dry	46	1	02/29/08 15:03	lck	8020562	SW 8260B
Bromodichloromethane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Bromoform	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Bromomethane	<130		ug/kg dry	130	1	02/29/08 15:03	lck	8020562	SW 8260B
n-Butylbenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
sec-Butylbenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
tert-Butylbenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Carbon Tetrachloride	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Chlorobenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Chlorodibromomethane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Chloroethane	<65		ug/kg dry	65	1	02/29/08 15:03	lck	8020562	SW 8260B
Chloroform	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Chloromethane	<65		ug/kg dry	65	1	02/29/08 15:03	lck	8020562	SW 8260B
2-Chlorotoluene	<65		ug/kg dry	65	1	02/29/08 15:03	lck	8020562	SW 8260B
4-Chlorotoluene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,2-Dibromo-3-chloropropane	<65		ug/kg dry	65	1	02/29/08 15:03	lck	8020562	SW 8260B
1,2-Dibromoethane (EDB)	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Dibromomethane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Dichlorodifluoromethane	<65		ug/kg dry	65	1	02/29/08 15:03	lck	8020562	SW 8260B
1,1-Dichloroethane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,2-Dichloroethane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,1-Dichloroethene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,2-Dichloropropane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,3-Dichloropropane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
2,2-Dichloropropane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,1-Dichloropropene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
2,3-Dichloropropene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Isopropyl Ether	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Ethylbenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Hexachlorobutadiene	<46		ug/kg dry	46	1	02/29/08 15:03	lck	8020562	SW 8260B
Isopropylbenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-08 (GP-4 4-8 - Solid/Soil) - cont. **Sampled: 02/25/08 13:00**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
p-Isopropyltoluene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Methylene Chloride	<65		ug/kg dry	65	1	02/29/08 15:03	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Naphthalene	<65		ug/kg dry	65	1	02/29/08 15:03	lck	8020562	SW 8260B
n-Propylbenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Styrene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Tetrachloroethene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Toluene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<46		ug/kg dry	46	1	02/29/08 15:03	lck	8020562	SW 8260B
Trichloroethene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Trichlorofluoromethane	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<65		ug/kg dry	65	1	02/29/08 15:03	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<33		ug/kg dry	33	1	02/29/08 15:03	lck	8020562	SW 8260B
Vinyl chloride	<46		ug/kg dry	46	1	02/29/08 15:03	lck	8020562	SW 8260B
Xylenes, total	<110		ug/kg dry	110	1	02/29/08 15:03	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*98 %*								
Surr: Toluene-d8 (91-106%)	*98 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*98 %*								
PNAs by SW8310									
Acenaphthene	**1200**		ug/kg dry	810	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Acenaphthylene	<1400		ug/kg dry	1400	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Anthracene	**2300**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Benzo (a) anthracene	**4200**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Benzo (b) fluoranthene	**2900**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Benzo (k) fluoranthene	**1800**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Benzo (a) pyrene	**3900**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Benzo (g,h,i) perylene	**1900**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Chrysene	**2900**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Dibenzo (a,h) anthracene	**450**		ug/kg dry	120	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Fluoranthene	**11000**		ug/kg dry	160	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Fluorene	**1000**		ug/kg dry	160	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Indeno (1,2,3-cd) pyrene	**2300**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
1-Methylnaphthalene	**770**		ug/kg dry	490	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
2-Methylnaphthalene	**5000**		ug/kg dry	410	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Naphthalene	**770**		ug/kg dry	490	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Phenanthrene	**8100**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Pyrene	**5900**		ug/kg dry	81	12.5	03/05/08 23:24	CLJ	8020499	SW 8310
Surr: 2-Fluorobiphenyl (61-128%)	*0.00 %*	*Z3*							
General Chemistry Parameters									
% Solids	**76.8**		%	0.100	1	03/03/08 00:00	am	8030134	SM 2540 G
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<1.30		mg/kg dry	1.30	19.7	03/03/08 18:57	slt	8020909	SW 8082
PCB-1221	<1.30		mg/kg dry	1.30	19.7	03/03/08 18:57	slt	8020909	SW 8082
PCB-1232	<1.30		mg/kg dry	1.30	19.7	03/03/08 18:57	slt	8020909	SW 8082
PCB-1242	<1.30		mg/kg dry	1.30	19.7	03/03/08 18:57	slt	8020909	SW 8082

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-08RE1 (GP-4 4-8 - Solid/Soil) - cont.						**Sampled: 02/25/08 13:00**			
Polychlorinated Biphenyls by EPA Method 8082 - cont.									
PCB-1248	<1.30		mg/kg dry	1.30	19.7	03/03/08 18:57	slt	8020909	SW 8082
PCB-1254	<0.0651		mg/kg dry	0.0651	0.985	02/29/08 19:27	slt	8020909	SW 8082
PCB-1260	<0.0651		mg/kg dry	0.0651	0.985	02/29/08 19:27	slt	8020909	SW 8082
PCB-1268	<0.0651		mg/kg dry	0.0651	0.985	02/29/08 19:27	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*91 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*267 %*	*ZX*							
Sample ID: WRB0772-09 (GP-5 2-4 - Solid/Soil)						**Sampled: 02/25/08 14:00**			
General Chemistry Parameters									
% Solids	**90**		%	NA	1	03/03/08 14:12	CLJ	8030034	SW 5035
Chloride	**83**		mg/kg dry	28	1	03/04/08 15:44	pxm	8030053	SW 9251
Metals									
Arsenic	**5.7**		mg/kg dry	1.6	1	02/28/08 17:30	mmm	8020504	SW 6010B
Barium	**30**		mg/kg dry	0.12	1	02/28/08 17:30	mmm	8020504	SW 6010B
Cadmium	**0.12**		mg/kg dry	0.11	1	02/28/08 17:30	mmm	8020504	SW 6010B
Chromium	**7.6**		mg/kg dry	0.20	1	02/28/08 17:30	mmm	8020504	SW 6010B
Lead	**37**		mg/kg dry	1.3	1	02/28/08 17:30	mmm	8020504	SW 6010B
Mercury	**0.22**		mg/kg dry	0.011	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<4.4		mg/kg dry	4.4	1	02/28/08 17:30	mmm	8020504	SW 6010B
Silver	**0.20**		mg/kg dry	0.12	1	02/28/08 17:30	mmm	8020504	SW 6010B
VOCs by SW8260B									
Benzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Bromobenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Bromochloromethane	<39		ug/kg dry	39	1	02/29/08 15:30	lck	8020562	SW 8260B
Bromodichloromethane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Bromoform	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Bromomethane	<110		ug/kg dry	110	1	02/29/08 15:30	lck	8020562	SW 8260B
n-Butylbenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
sec-Butylbenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
tert-Butylbenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Carbon Tetrachloride	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Chlorobenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Chlorodibromomethane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Chloroethane	<55		ug/kg dry	55	1	02/29/08 15:30	lck	8020562	SW 8260B
Chloroform	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Chloromethane	<55		ug/kg dry	55	1	02/29/08 15:30	lck	8020562	SW 8260B
2-Chlorotoluene	<55		ug/kg dry	55	1	02/29/08 15:30	lck	8020562	SW 8260B
4-Chlorotoluene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,2-Dibromo-3-chloropropane	<55		ug/kg dry	55	1	02/29/08 15:30	lck	8020562	SW 8260B
1,2-Dibromoethane (EDB)	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Dibromomethane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Dichlorodifluoromethane	<55		ug/kg dry	55	1	02/29/08 15:30	lck	8020562	SW 8260B
1,1-Dichloroethane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,2-Dichloroethane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,1-Dichloroethene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,2-Dichloropropane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,3-Dichloropropane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-09 (GP-5 2-4 - Solid/Soil) - cont. **Sampled: 02/25/08 14:00**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
2,2-Dichloropropane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,1-Dichloropropene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
2,3-Dichloropropene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Isopropyl Ether	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Ethylbenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Hexachlorobutadiene	<39		ug/kg dry	39	1	02/29/08 15:30	lck	8020562	SW 8260B
Isopropylbenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
p-Isopropyltoluene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Methylene Chloride	<55		ug/kg dry	55	1	02/29/08 15:30	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Naphthalene	<55		ug/kg dry	55	1	02/29/08 15:30	lck	8020562	SW 8260B
n-Propylbenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Styrene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Tetrachloroethene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Toluene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<39		ug/kg dry	39	1	02/29/08 15:30	lck	8020562	SW 8260B
Trichloroethene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Trichlorofluoromethane	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<55		ug/kg dry	55	1	02/29/08 15:30	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<28		ug/kg dry	28	1	02/29/08 15:30	lck	8020562	SW 8260B
Vinyl chloride	<39		ug/kg dry	39	1	02/29/08 15:30	lck	8020562	SW 8260B
Xylenes, total	<94		ug/kg dry	94	1	02/29/08 15:30	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*97 %*								
Surr: Toluene-d8 (91-106%)	*99 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*97 %*								
General Chemistry Parameters									
% Solids	**90.1**		%	0.100	1	03/03/08 00:00	am	8030134	SM 2540 G
Semivolatile Organics by GC/MS									
Acenaphthene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Acenaphthylene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Anthracene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Benzidine	<18.3	RL1	mg/kg dry	18.3	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Benzo (a) anthracene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Benzo (b) fluoranthene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Benzo (k) fluoranthene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Benzo (a) pyrene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Benzo (g,h,i) perylene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Benzyl alcohol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Butyl benzyl phthalate	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Bis(2-chloroethyl)ether	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Bis(2-chloroethoxy)methane	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Bis(2-ethylhexyl)phthalate	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Bis(2-chloroisopropyl) ether	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
4-Bromophenyl phenyl ether	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-09 (GP-5 2-4 - Solid/Soil) - cont. **Sampled: 02/25/08 14:00**

Semivolatile Organics by GC/MS - cont.

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Carbazole	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
4-Chloroaniline	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2-Chloronaphthalene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
4-Chlorophenyl phenyl ether	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Chrysene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Dibenzo (a,h) anthracene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Dibenzofuran	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Di-n-butyl phthalate	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
1,2-Dichlorobenzene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
1,3-Dichlorobenzene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
1,4-Dichlorobenzene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
3,3'-Dichlorobenzidine	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Diethyl phthalate	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Dimethyl phthalate	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2,4-Dinitrotoluene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2,6-Dinitrotoluene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Di-n-octyl phthalate	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Fluoranthene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Fluorene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Hexachlorobenzene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Hexachlorobutadiene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Hexachlorocyclopentadiene	<3.66	RL1	mg/kg dry	3.66	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Hexachloroethane	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Indeno (1,2,3-cd) pyrene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Isophorone	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2-Methylnaphthalene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Naphthalene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2-Nitroaniline	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
3-Nitroaniline	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
4-Nitroaniline	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Nitrobenzene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
N-Nitrosodimethylamine	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
N-Nitrosodiphenylamine	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
N-Nitrosodi-n-propylamine	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Phenanthrene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Pyrene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Pyridine	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
1,2,4-Trichlorobenzene	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Benzoic acid	<3.66	RL1	mg/kg dry	3.66	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
4-Chloro-3-methylphenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2-Chlorophenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Cresol(s)	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2,4-Dichlorophenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2,4-Dimethylphenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2,4-Dinitrophenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
4,6-Dinitro-2-methylphenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2-Methylphenol (o-Cresol)	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
4-Methylphenol (p-Cresol)	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2-Nitrophenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
4-Nitrophenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Pentachlorophenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Phenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
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Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
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Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-09 (GP-5 2-4 - Solid/Soil) - cont.						**Sampled: 02/25/08 14:00**			
Semivolatile Organics by GC/MS - cont.									
2,4,5-Trichlorophenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
2,4,6-Trichlorophenol	<1.83	RL1	mg/kg dry	1.83	4.95	03/05/08 02:29	dmd	8020961	SW 8270C
Surr: Nitrobenzene-d5 (25-110%)	*79 %*	*RL1*							
Surr: 2-Fluorobiphenyl (20-115%)	*83 %*	*RL1*							
Surr: Terphenyl-d14 (40-135%)	*87 %*	*RL1*							
Surr: Phenol-d6 (30-125%)	*80 %*	*RL1*							
Surr: 2-Fluorophenol (25-120%)	*74 %*	*RL1*							
Surr: 2,4,6-Tribromophenol (35-130%)	*80 %*	*RL1*							
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0555		mg/kg dry	0.0555	0.984	02/29/08 19:37	slt	8020909	SW 8082
PCB-1221	<0.0555		mg/kg dry	0.0555	0.984	02/29/08 19:37	slt	8020909	SW 8082
PCB-1232	<0.0555		mg/kg dry	0.0555	0.984	02/29/08 19:37	slt	8020909	SW 8082
PCB-1242	<0.0555		mg/kg dry	0.0555	0.984	02/29/08 19:37	slt	8020909	SW 8082
PCB-1248	<0.0555		mg/kg dry	0.0555	0.984	02/29/08 19:37	slt	8020909	SW 8082
PCB-1254	<0.0555		mg/kg dry	0.0555	0.984	02/29/08 19:37	slt	8020909	SW 8082
PCB-1260	<0.0555		mg/kg dry	0.0555	0.984	02/29/08 19:37	slt	8020909	SW 8082
PCB-1268	<0.0555		mg/kg dry	0.0555	0.984	02/29/08 19:37	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*86 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*84 %*								
Sample ID: WRB0772-10 (GP-5 6-8 - Solid/Soil)						**Sampled: 02/25/08 14:30**			
General Chemistry Parameters									
% Solids	**81**		%	NA	1	03/03/08 14:12	CLJ	8030034	SW 5035
Chloride	**91**		mg/kg dry	31	1	03/04/08 15:45	pxm	8030053	SW 9251
Metals									
Arsenic	**17**		mg/kg dry	1.7	1	03/04/08 12:32	mmm	8030022	SW 6010B
Barium	**58**		mg/kg dry	0.14	1	03/04/08 12:32	mmm	8030022	SW 6010B
Cadmium	**0.93**		mg/kg dry	0.12	1	03/04/08 12:32	mmm	8030022	SW 6010B
Chromium	**4.3**		mg/kg dry	0.22	1	03/04/08 12:32	mmm	8030022	SW 6010B
Lead	**68**		mg/kg dry	1.5	1	03/04/08 12:32	mmm	8030022	SW 6010B
Mercury	**0.18**		mg/kg dry	0.012	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<5.0		mg/kg dry	5.0	1	03/04/08 12:32	mmm	8030022	SW 6010B
Silver	<0.14		mg/kg dry	0.14	1	03/04/08 12:32	mmm	8030022	SW 6010B
VOCs by SW8260B									
Benzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Bromobenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Bromochloromethane	<43		ug/kg dry	43	1	02/29/08 15:57	lck	8020562	SW 8260B
Bromodichloromethane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Bromoform	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Bromomethane	<120		ug/kg dry	120	1	02/29/08 15:57	lck	8020562	SW 8260B
n-Butylbenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
sec-Butylbenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
tert-Butylbenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Carbon Tetrachloride	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Chlorobenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Chlorodibromomethane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Chloroethane	<62		ug/kg dry	62	1	02/29/08 15:57	lck	8020562	SW 8260B
Chloroform	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Chloromethane	<62		ug/kg dry	62	1	02/29/08 15:57	lck	8020562	SW 8260B
2-Chlorotoluene	<62		ug/kg dry	62	1	02/29/08 15:57	lck	8020562	SW 8260B
4-Chlorotoluene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,2-Dibromo-3-chloropropane	<62		ug/kg dry	62	1	02/29/08 15:57	lck	8020562	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-10 (GP-5 6-8 - Solid/Soil) - cont. **Sampled: 02/25/08 14:30**

VOCs by SW8260B - cont.

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
1,2-Dibromoethane (EDB)	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Dibromomethane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Dichlorodifluoromethane	<62		ug/kg dry	62	1	02/29/08 15:57	lck	8020562	SW 8260B
1,1-Dichloroethane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,2-Dichloroethane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,1-Dichloroethene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,2-Dichloropropane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,3-Dichloropropane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
2,2-Dichloropropane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,1-Dichloropropene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
2,3-Dichloropropene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Isopropyl Ether	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Ethylbenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Hexachlorobutadiene	<43		ug/kg dry	43	1	02/29/08 15:57	lck	8020562	SW 8260B
Isopropylbenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
p-Isopropyltoluene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Methylene Chloride	<62		ug/kg dry	62	1	02/29/08 15:57	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Naphthalene	<62		ug/kg dry	62	1	02/29/08 15:57	lck	8020562	SW 8260B
n-Propylbenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Styrene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Tetrachloroethene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Toluene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<43		ug/kg dry	43	1	02/29/08 15:57	lck	8020562	SW 8260B
Trichloroethene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Trichlorofluoromethane	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<62		ug/kg dry	62	1	02/29/08 15:57	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<31		ug/kg dry	31	1	02/29/08 15:57	lck	8020562	SW 8260B
Vinyl chloride	<43		ug/kg dry	43	1	02/29/08 15:57	lck	8020562	SW 8260B
Xylenes, total	<110		ug/kg dry	110	1	02/29/08 15:57	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*98 %*								
Surr: Toluene-d8 (91-106%)	*98 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*96 %*								

PNAs by SW8310

Acenaphthene	<7800		ug/kg dry	7800	125	03/04/08 19:34	CLJ	8020499	SW 8310
Acenaphthylene	<13000		ug/kg dry	13000	125	03/04/08 19:34	CLJ	8020499	SW 8310
Anthracene	**3400**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310
Benzo (a) anthracene	**5400**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310
Benzo (b) fluoranthene	**3200**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-10 (GP-5 6-8 - Solid/Soil) - cont.						**Sampled: 02/25/08 14:30**			
PNAs by SW8310 - cont.									
Benzo (k) fluoranthene	**2100**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310
Benzo (a) pyrene	**5000**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310
Benzo (g,h,i) perylene	**2600**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310
Chrysene	**4300**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310
Dibenzo (a,h) anthracene	<1200		ug/kg dry	1200	125	03/04/08 19:34	CLJ	8020499	SW 8310
Fluoranthene	**17000**		ug/kg dry	1600	125	03/04/08 19:34	CLJ	8020499	SW 8310
Fluorene	**1900**		ug/kg dry	1600	125	03/04/08 19:34	CLJ	8020499	SW 8310
Indeno (1,2,3-cd) pyrene	**3200**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310
1-Methylnaphthalene	<4700		ug/kg dry	4700	125	03/04/08 19:34	CLJ	8020499	SW 8310
2-Methylnaphthalene	**6500**		ug/kg dry	3900	125	03/04/08 19:34	CLJ	8020499	SW 8310
Naphthalene	<4700		ug/kg dry	4700	125	03/04/08 19:34	CLJ	8020499	SW 8310
Phenanthrene	**17000**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310
Pyrene	**17000**		ug/kg dry	780	125	03/04/08 19:34	CLJ	8020499	SW 8310
Surr: 2-Fluorobiphenyl (61-128%)	*0.00 %*	*Z3*							
General Chemistry Parameters									
% Solids	**80.6**		%	0.100	1	03/03/08 00:00	am	8030134	SM 2540 G
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0620		mg/kg dry	0.0620	0.994	02/29/08 19:48	slt	8020909	SW 8082
PCB-1221	<0.0620		mg/kg dry	0.0620	0.994	02/29/08 19:48	slt	8020909	SW 8082
PCB-1232	<0.0620		mg/kg dry	0.0620	0.994	02/29/08 19:48	slt	8020909	SW 8082
PCB-1242	<0.0620		mg/kg dry	0.0620	0.994	02/29/08 19:48	slt	8020909	SW 8082
PCB-1248	<0.0620		mg/kg dry	0.0620	0.994	02/29/08 19:48	slt	8020909	SW 8082
PCB-1254	<0.0620		mg/kg dry	0.0620	0.994	02/29/08 19:48	slt	8020909	SW 8082
PCB-1260	<0.0620		mg/kg dry	0.0620	0.994	02/29/08 19:48	slt	8020909	SW 8082
PCB-1268	<0.0620		mg/kg dry	0.0620	0.994	02/29/08 19:48	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*89 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*85 %*								
Sample ID: WRB0772-11 (GP-6 0-2 - Solid/Soil)						**Sampled: 02/25/08 15:00**			
General Chemistry Parameters									
% Solids	**82**		%	NA	1	03/03/08 14:12	CLJ	8030034	SW 5035
Chloride	**61**		mg/kg dry	30	1	03/04/08 15:46	pxm	8030053	SW 9251
Metals									
Arsenic	**8.6**		mg/kg dry	1.7	1	03/04/08 12:44	mmm	8030022	SW 6010B
Barium	**69**		mg/kg dry	0.13	1	03/04/08 12:44	mmm	8030022	SW 6010B
Cadmium	**0.49**		mg/kg dry	0.12	1	03/04/08 12:44	mmm	8030022	SW 6010B
Chromium	**12**		mg/kg dry	0.22	1	03/04/08 12:44	mmm	8030022	SW 6010B
Lead	**130**		mg/kg dry	1.5	1	03/04/08 12:44	mmm	8030022	SW 6010B
Mercury	**0.14**		mg/kg dry	0.012	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<4.9		mg/kg dry	4.9	1	03/04/08 12:44	mmm	8030022	SW 6010B
Silver	<0.13		mg/kg dry	0.13	1	03/04/08 12:44	mmm	8030022	SW 6010B
VOCs by SW8260B									
Benzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Bromobenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Bromochloromethane	<43		ug/kg dry	43	1	02/29/08 16:24	lck	8020562	SW 8260B
Bromodichloromethane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Bromoform	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Bromomethane	<120		ug/kg dry	120	1	02/29/08 16:24	lck	8020562	SW 8260B
n-Butylbenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
sec-Butylbenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
tert-Butylbenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Carbon Tetrachloride	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-11 (GP-6 0-2 - Solid/Soil) - cont. **Sampled: 02/25/08 15:00**

VOCs by SW8260B - cont.

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Chlorobenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Chlorodibromomethane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Chloroethane	<61		ug/kg dry	61	1	02/29/08 16:24	lck	8020562	SW 8260B
Chloroform	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Chloromethane	<61		ug/kg dry	61	1	02/29/08 16:24	lck	8020562	SW 8260B
2-Chlorotoluene	<61		ug/kg dry	61	1	02/29/08 16:24	lck	8020562	SW 8260B
4-Chlorotoluene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,2-Dibromo-3-chloropropane	<61		ug/kg dry	61	1	02/29/08 16:24	lck	8020562	SW 8260B
1,2-Dibromoethane (EDB)	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Dibromomethane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Dichlorodifluoromethane	<61		ug/kg dry	61	1	02/29/08 16:24	lck	8020562	SW 8260B
1,1-Dichloroethane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,2-Dichloroethane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,1-Dichloroethene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,2-Dichloropropane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,3-Dichloropropane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
2,2-Dichloropropane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,1-Dichloropropene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
2,3-Dichloropropene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Isopropyl Ether	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Ethylbenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Hexachlorobutadiene	<43		ug/kg dry	43	1	02/29/08 16:24	lck	8020562	SW 8260B
Isopropylbenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
p-Isopropyltoluene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Methylene Chloride	<61		ug/kg dry	61	1	02/29/08 16:24	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Naphthalene	<61		ug/kg dry	61	1	02/29/08 16:24	lck	8020562	SW 8260B
n-Propylbenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Styrene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Tetrachloroethene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Toluene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<43		ug/kg dry	43	1	02/29/08 16:24	lck	8020562	SW 8260B
Trichloroethene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Trichlorofluoromethane	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<61		ug/kg dry	61	1	02/29/08 16:24	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<30		ug/kg dry	30	1	02/29/08 16:24	lck	8020562	SW 8260B
Vinyl chloride	<43		ug/kg dry	43	1	02/29/08 16:24	lck	8020562	SW 8260B
Xylenes, total	<100		ug/kg dry	100	1	02/29/08 16:24	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*97 %*								

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-11 (GP-6 0-2 - Solid/Soil) - cont. **Sampled: 02/25/08 15:00**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
Surr: Toluene-d8 (91-106%)	*99 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*97 %*								
General Chemistry Parameters									
% Solids	**82.2**		%	0.100	1	03/03/08 00:00	am	8030134	SM 2540 G
Semivolatile Organics by GC/MS									
Acenaphthene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Acenaphthylene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Anthracene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Benzidine	<20.1		mg/kg dry	20.1	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Benzo (a) anthracene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Benzo (b) fluoranthene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Benzo (k) fluoranthene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Benzo (a) pyrene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Benzo (g,h,i) perylene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Benzyl alcohol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Butyl benzyl phthalate	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Bis(2-chloroethyl)ether	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Bis(2-chloroethoxy)methane	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Bis(2-ethylhexyl)phthalate	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Bis(2-chloroisopropyl) ether	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
4-Bromophenyl phenyl ether	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Carbazole	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
4-Chloroaniline	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2-Chloronaphthalene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
4-Chlorophenyl phenyl ether	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Chrysene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Dibenzo (a,h) anthracene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Dibenzofuran	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Di-n-butyl phthalate	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
1,2-Dichlorobenzene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
1,3-Dichlorobenzene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
1,4-Dichlorobenzene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
3,3'-Dichlorobenzidine	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Diethyl phthalate	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Dimethyl phthalate	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2,4-Dinitrotoluene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2,6-Dinitrotoluene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Di-n-octyl phthalate	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Fluoranthene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Fluorene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Hexachlorobenzene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Hexachlorobutadiene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Hexachlorocyclopentadiene	<4.01		mg/kg dry	4.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Hexachloroethane	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Indeno (1,2,3-cd) pyrene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Isophorone	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2-Methylnaphthalene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Naphthalene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2-Nitroaniline	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
3-Nitroaniline	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
4-Nitroaniline	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Nitrobenzene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-11 (GP-6 0-2 - Solid/Soil) - cont. **Sampled: 02/25/08 15:00**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Semivolatile Organics by GC/MS - cont.									
N-Nitrosodimethylamine	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
N-Nitrosodiphenylamine	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
N-Nitrosodi-n-propylamine	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Phenanthrene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Pyrene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Pyridine	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
1,2,4-Trichlorobenzene	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Benzoic acid	<4.01		mg/kg dry	4.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
4-Chloro-3-methylphenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2-Chlorophenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Cresol(s)	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2,4-Dichlorophenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2,4-Dimethylphenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2,4-Dinitrophenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
4,6-Dinitro-2-methylphenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2-Methylphenol (o-Cresol)	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
4-Methylphenol (p-Cresol)	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2-Nitrophenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
4-Nitrophenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Pentachlorophenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Phenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2,4,5-Trichlorophenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
2,4,6-Trichlorophenol	<2.01		mg/kg dry	2.01	4.94	03/05/08 03:38	dmd	8020961	SW 8270C
Surr: Nitrobenzene-d5 (25-110%)	*63 %*								
Surr: 2-Fluorobiphenyl (20-115%)	*70 %*								
Surr: Terphenyl-d14 (40-135%)	*84 %*								
Surr: Phenol-d6 (30-125%)	*66 %*								
Surr: 2-Fluorophenol (25-120%)	*63 %*								
Surr: 2,4,6-Tribromophenol (35-130%)	*81 %*								
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0608		mg/kg dry	0.0608	0.997	02/29/08 19:59	slt	8020909	SW 8082
PCB-1221	<0.0608		mg/kg dry	0.0608	0.997	02/29/08 19:59	slt	8020909	SW 8082
PCB-1232	<0.0608		mg/kg dry	0.0608	0.997	02/29/08 19:59	slt	8020909	SW 8082
PCB-1242	<0.0608		mg/kg dry	0.0608	0.997	02/29/08 19:59	slt	8020909	SW 8082
PCB-1248	<0.0608		mg/kg dry	0.0608	0.997	02/29/08 19:59	slt	8020909	SW 8082
PCB-1254	<0.0608		mg/kg dry	0.0608	0.997	02/29/08 19:59	slt	8020909	SW 8082
PCB-1260	<0.0608		mg/kg dry	0.0608	0.997	02/29/08 19:59	slt	8020909	SW 8082
PCB-1268	<0.0608		mg/kg dry	0.0608	0.997	02/29/08 19:59	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*87 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*86 %*								

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-12 (GP-6 6-8 - Solid/Soil)						**Sampled: 02/25/08 15:30**			
General Chemistry Parameters									
% Solids	**86**		%	NA	1	03/03/08 14:12	CLJ	8030034	SW 5035
Chloride	**64**		mg/kg dry	29	1	03/04/08 15:47	pxm	8030053	SW 9251
Metals									
Arsenic	**6.3**		mg/kg dry	1.6	1	03/04/08 12:48	mmm	8030022	SW 6010B
Barium	**61**		mg/kg dry	0.13	1	03/04/08 12:48	mmm	8030022	SW 6010B
Cadmium	<0.12		mg/kg dry	0.12	1	03/04/08 12:48	mmm	8030022	SW 6010B
Chromium	**8.5**		mg/kg dry	0.21	1	03/04/08 12:48	mmm	8030022	SW 6010B
Lead	**430**		mg/kg dry	1.4	1	03/04/08 12:48	mmm	8030022	SW 6010B
Mercury	**0.27**		mg/kg dry	0.012	1	03/05/08 15:36	jej	8020571	EPA 245.5
Selenium	<4.6		mg/kg dry	4.6	1	03/04/08 12:48	mmm	8030022	SW 6010B
Silver	<0.13		mg/kg dry	0.13	1	03/04/08 12:48	mmm	8030022	SW 6010B
VOCs by SW8260B									
Benzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Bromobenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Bromochloromethane	<40		ug/kg dry	40	1	02/29/08 16:51	lck	8020562	SW 8260B
Bromodichloromethane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Bromoform	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Bromomethane	<120		ug/kg dry	120	1	02/29/08 16:51	lck	8020562	SW 8260B
n-Butylbenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
sec-Butylbenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
tert-Butylbenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Carbon Tetrachloride	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Chlorobenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Chlorodibromomethane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Chloroethane	<58		ug/kg dry	58	1	02/29/08 16:51	lck	8020562	SW 8260B
Chloroform	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Chloromethane	<58		ug/kg dry	58	1	02/29/08 16:51	lck	8020562	SW 8260B
2-Chlorotoluene	<58		ug/kg dry	58	1	02/29/08 16:51	lck	8020562	SW 8260B
4-Chlorotoluene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,2-Dibromo-3-chloropropane	<58		ug/kg dry	58	1	02/29/08 16:51	lck	8020562	SW 8260B
1,2-Dibromoethane (EDB)	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Dibromomethane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,2-Dichlorobenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,3-Dichlorobenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,4-Dichlorobenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Dichlorodifluoromethane	<58		ug/kg dry	58	1	02/29/08 16:51	lck	8020562	SW 8260B
1,1-Dichloroethane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,2-Dichloroethane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,1-Dichloroethene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
cis-1,2-Dichloroethene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
trans-1,2-Dichloroethene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,2-Dichloropropane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,3-Dichloropropane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
2,2-Dichloropropane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,1-Dichloropropene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
cis-1,3-Dichloropropene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
trans-1,3-Dichloropropene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
2,3-Dichloropropene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Isopropyl Ether	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Ethylbenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Hexachlorobutadiene	<40		ug/kg dry	40	1	02/29/08 16:51	lck	8020562	SW 8260B
Isopropylbenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Sample ID: WRB0772-12 (GP-6 6-8 - Solid/Soil) - cont. **Sampled: 02/25/08 15:30**

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.									
p-Isopropyltoluene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Methylene Chloride	<58		ug/kg dry	58	1	02/29/08 16:51	lck	8020562	SW 8260B
Methyl tert-Butyl Ether	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Naphthalene	<58		ug/kg dry	58	1	02/29/08 16:51	lck	8020562	SW 8260B
n-Propylbenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Styrene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,1,1,2-Tetrachloroethane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,1,2,2-Tetrachloroethane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Tetrachloroethene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Toluene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,2,3-Trichlorobenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,2,4-Trichlorobenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,1,1-Trichloroethane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,1,2-Trichloroethane	<40		ug/kg dry	40	1	02/29/08 16:51	lck	8020562	SW 8260B
Trichloroethene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Trichlorofluoromethane	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,2,3-Trichloropropane	<58		ug/kg dry	58	1	02/29/08 16:51	lck	8020562	SW 8260B
1,2,4-Trimethylbenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
1,3,5-Trimethylbenzene	<29		ug/kg dry	29	1	02/29/08 16:51	lck	8020562	SW 8260B
Vinyl chloride	<40		ug/kg dry	40	1	02/29/08 16:51	lck	8020562	SW 8260B
Xylenes, total	<98		ug/kg dry	98	1	02/29/08 16:51	lck	8020562	SW 8260B
Surr: Dibromofluoromethane (82-112%)	*98 %*								
Surr: Toluene-d8 (91-106%)	*99 %*								
Surr: 4-Bromofluorobenzene (89-110%)	*98 %*								
PNAs by SW8310									
Acenaphthene	**880**		ug/kg dry	720	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Acenaphthylene	<1200		ug/kg dry	1200	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Anthracene	**2800**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Benzo (a) anthracene	**5400**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Benzo (b) fluoranthene	**2800**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Benzo (k) fluoranthene	**1600**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Benzo (a) pyrene	**3600**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Benzo (g,h,i) perylene	**1900**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Chrysene	**3200**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Dibenzo (a,h) anthracene	**380**		ug/kg dry	110	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Fluoranthene	**12000**		ug/kg dry	140	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Fluorene	**1400**		ug/kg dry	140	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Indeno (1,2,3-cd) pyrene	**2300**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
1-Methylnaphthalene	**1100**		ug/kg dry	430	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
2-Methylnaphthalene	**6500**		ug/kg dry	360	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Naphthalene	**1500**		ug/kg dry	430	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Phenanthrene	**10000**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Pyrene	**10000**		ug/kg dry	72	12.5	03/04/08 18:30	CLJ	8020499	SW 8310
Surr: 2-Fluorobiphenyl (61-128%)	*0.00 %*	*Z3*							
General Chemistry Parameters									
% Solids	**86.5**		%	0.100	1	03/03/08 00:00	am	8030134	SM 2540 G
Polychlorinated Biphenyls by EPA Method 8082									
PCB-1016	<0.0578		mg/kg dry	0.0578	0.997	02/29/08 20:09	slt	8020909	SW 8082
PCB-1221	<0.0578		mg/kg dry	0.0578	0.997	02/29/08 20:09	slt	8020909	SW 8082
PCB-1232	<0.0578		mg/kg dry	0.0578	0.997	02/29/08 20:09	slt	8020909	SW 8082
PCB-1242	<0.0578		mg/kg dry	0.0578	0.997	02/29/08 20:09	slt	8020909	SW 8082

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
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Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

Analyte	Sample Result	Data Qualifiers	Units	MRL	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0772-12 (GP-6 6-8 - Solid/Soil) - cont.						**Sampled: 02/25/08 15:30**			
Polychlorinated Biphenyls by EPA Method 8082 - cont.									
PCB-1248	<0.0578		mg/kg dry	0.0578	0.997	02/29/08 20:09	slt	8020909	SW 8082
PCB-1254	<0.0578		mg/kg dry	0.0578	0.997	02/29/08 20:09	slt	8020909	SW 8082
PCB-1260	<0.0578		mg/kg dry	0.0578	0.997	02/29/08 20:09	slt	8020909	SW 8082
PCB-1268	<0.0578		mg/kg dry	0.0578	0.997	02/29/08 20:09	slt	8020909	SW 8082
Surr: Decachlorobiphenyl (59-140%)	*87 %*								
Surr: Tetrachloro-meta-xylene (46-136%)	*83 %*								

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SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
PNAs by SW8310							
SW 8310	8020499	WRB0772-02	25	3	02/27/08 09:35	TLH	SW 3550B
SW 8310	8020499	WRB0772-04	25	2	02/27/08 09:35	TLH	SW 3550B
SW 8310	8020499	WRB0772-06	25	3	02/27/08 09:35	TLH	SW 3550B
SW 8310	8020499	WRB0772-08	25	3	02/27/08 09:35	TLH	SW 3550B
SW 8310	8020499	WRB0772-10	25	3	02/27/08 09:35	TLH	SW 3550B
SW 8310	8020499	WRB0772-12	25	3	02/27/08 09:35	TLH	SW 3550B
Polychlorinated Biphenyls by EPA Method 8082							
SW 8082	8020909	WRB0772-01	30	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-02	30	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-03	31	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-04	30	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-05	31	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-06	30	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-07	31	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-08	30	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-09	30	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-10	30	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-11	30	10	02/28/08 12:04	AM	SW 3550B GC
SW 8082	8020909	WRB0772-12	30	10	02/28/08 12:04	AM	SW 3550B GC
Semivolatile Organics by GC/MS							
SW 8270C	8020961	WRB0772-01	30	1	02/29/08 12:37	AM	SW 3550B GCMS
SW 8270C	8020961	WRB0772-03	30	1	02/29/08 12:37	AM	SW 3550B GCMS
SW 8270C	8020961	WRB0772-05	31	1	02/29/08 12:37	AM	SW 3550B GCMS
SW 8270C	8020961	WRB0772-07	30	1	02/29/08 12:37	AM	SW 3550B GCMS
SW 8270C	8020961	WRB0772-09	30	1	02/29/08 12:37	AM	SW 3550B GCMS
SW 8270C	8020961	WRB0772-11	30	1	02/29/08 12:37	AM	SW 3550B GCMS

TestAmerica Watertown
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LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
General Chemistry Parameters														
Chloride	8030053			mg/kg wet	N/A	25	<25							
Metals														
Arsenic	8020504			mg/kg wet	N/A	1.4	<1.4							
Barium	8020504			mg/kg wet	N/A	0.11	<0.11							
Cadmium	8020504			mg/kg wet	N/A	0.10	<0.10							
Chromium	8020504			mg/kg wet	N/A	0.18	<0.18							
Lead	8020504			mg/kg wet	N/A	1.2	<1.2							
Selenium	8020504			mg/kg wet	N/A	4.0	<4.0							
Silver	8020504			mg/kg wet	N/A	0.11	<0.11							
Mercury	8020571			mg/kg wet	N/A	0.010	<0.010							
Arsenic	8030022			mg/kg wet	N/A	1.4	<1.4							
Barium	8030022			mg/kg wet	N/A	0.11	<0.11							
Cadmium	8030022			mg/kg wet	N/A	0.10	<0.10							
Chromium	8030022			mg/kg wet	N/A	0.18	<0.18							
Lead	8030022			mg/kg wet	N/A	1.2	<1.2							
Selenium	8030022			mg/kg wet	N/A	4.0	<4.0							
Silver	8030022			mg/kg wet	N/A	0.11	<0.11							
VOCs by SW8260B														
Benzene	8020500			ug/kg wet	N/A	25	<25							
Bromobenzene	8020500			ug/kg wet	N/A	25	<25							
Bromochloromethane	8020500			ug/kg wet	N/A	35	<35							
Bromodichloromethane	8020500			ug/kg wet	N/A	25	<25							
Bromoform	8020500			ug/kg wet	N/A	25	<25							
Bromomethane	8020500			ug/kg wet	N/A	100	<100							
n-Butylbenzene	8020500			ug/kg wet	N/A	25	<25							
sec-Butylbenzene	8020500			ug/kg wet	N/A	25	<25							
tert-Butylbenzene	8020500			ug/kg wet	N/A	25	<25							
Carbon Tetrachloride	8020500			ug/kg wet	N/A	25	<25							
Chlorobenzene	8020500			ug/kg wet	N/A	25	<25							
Chlorodibromomethane	8020500			ug/kg wet	N/A	25	<25							
Chloroethane	8020500			ug/kg wet	N/A	50	<50							
Chloroform	8020500			ug/kg wet	N/A	25	<25							
Chloromethane	8020500			ug/kg wet	N/A	50	<50							
2-Chlorotoluene	8020500			ug/kg wet	N/A	50	<50							
4-Chlorotoluene	8020500			ug/kg wet	N/A	25	<25							
1,2-Dibromo-3-chloropropane	8020500			ug/kg wet	N/A	50	<50							
1,2-Dibromoethane (EDB)	8020500			ug/kg wet	N/A	25	<25							
Dibromomethane	8020500			ug/kg wet	N/A	25	<25							
1,2-Dichlorobenzene	8020500			ug/kg wet	N/A	25	<25							
1,3-Dichlorobenzene	8020500			ug/kg wet	N/A	25	<25							
1,4-Dichlorobenzene	8020500			ug/kg wet	N/A	25	<25							
Dichlorodifluoromethane	8020500			ug/kg wet	N/A	50	<50							C9
1,1-Dichloroethane	8020500			ug/kg wet	N/A	25	<25							
1,2-Dichloroethane	8020500			ug/kg wet	N/A	25	<25							
1,1-Dichloroethene	8020500			ug/kg wet	N/A	25	<25							

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LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
cis-1,2-Dichloroethene	8020500			ug/kg wet	N/A	25	<25							
trans-1,2-Dichloroethene	8020500			ug/kg wet	N/A	25	<25							
1,2-Dichloropropane	8020500			ug/kg wet	N/A	25	<25							
1,3-Dichloropropane	8020500			ug/kg wet	N/A	25	<25							
2,2-Dichloropropane	8020500			ug/kg wet	N/A	25	<25							
1,1-Dichloropropene	8020500			ug/kg wet	N/A	25	<25							
cis-1,3-Dichloropropene	8020500			ug/kg wet	N/A	25	<25							
trans-1,3-Dichloropropene	8020500			ug/kg wet	N/A	25	<25							
2,3-Dichloropropene	8020500			ug/kg wet	N/A	25	<25							
Isopropyl Ether	8020500			ug/kg wet	N/A	25	<25							
Ethylbenzene	8020500			ug/kg wet	N/A	25	<25							
Hexachlorobutadiene	8020500			ug/kg wet	N/A	35	<35							
Isopropylbenzene	8020500			ug/kg wet	N/A	25	<25							
p-Isopropyltoluene	8020500			ug/kg wet	N/A	25	<25							
Methylene Chloride	8020500			ug/kg wet	N/A	50	<50							
Methyl tert-Butyl Ether	8020500			ug/kg wet	N/A	25	<25							
Naphthalene	8020500			ug/kg wet	N/A	50	<50							
n-Propylbenzene	8020500			ug/kg wet	N/A	25	<25							
Styrene	8020500			ug/kg wet	N/A	25	<25							
1,1,1,2-Tetrachloroethane	8020500			ug/kg wet	N/A	25	<25							
1,1,2,2-Tetrachloroethane	8020500			ug/kg wet	N/A	25	<25							
Tetrachloroethene	8020500			ug/kg wet	N/A	25	<25							
Toluene	8020500			ug/kg wet	N/A	25	<25							
1,2,3-Trichlorobenzene	8020500			ug/kg wet	N/A	25	<25							
1,2,4-Trichlorobenzene	8020500			ug/kg wet	N/A	25	<25							
1,1,1-Trichloroethane	8020500			ug/kg wet	N/A	25	<25							
1,1,2-Trichloroethane	8020500			ug/kg wet	N/A	35	<35							
Trichloroethene	8020500			ug/kg wet	N/A	25	<25							
Trichlorofluoromethane	8020500			ug/kg wet	N/A	25	<25							
1,2,3-Trichloropropane	8020500			ug/kg wet	N/A	50	<50							
1,2,4-Trimethylbenzene	8020500			ug/kg wet	N/A	25	<25							
1,3,5-Trimethylbenzene	8020500			ug/kg wet	N/A	25	<25							
Vinyl chloride	8020500			ug/kg wet	N/A	35	<35							
Xylenes, total	8020500			ug/kg wet	N/A	85	<85							
Surrogate: Dibromofluoromethane	*8020500*			ug/kg wet					*94*		*82-112*			
Surrogate: Toluene-d8	*8020500*			ug/kg wet					*99*		*91-106*			
Surrogate: 4-Bromofluorobenzene	*8020500*			ug/kg wet					*96*		*89-110*			
Benzene	8020562			ug/kg wet	N/A	25	<25							
Bromobenzene	8020562			ug/kg wet	N/A	25	<25							
Bromochloromethane	8020562			ug/kg wet	N/A	35	<35							
Bromodichloromethane	8020562			ug/kg wet	N/A	25	<25							
Bromoform	8020562			ug/kg wet	N/A	25	<25							
Bromomethane	8020562			ug/kg wet	N/A	100	<100							
n-Butylbenzene	8020562			ug/kg wet	N/A	25	<25							

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LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
sec-Butylbenzene	8020562			ug/kg wet	N/A	25	<25							
tert-Butylbenzene	8020562			ug/kg wet	N/A	25	<25							
Carbon Tetrachloride	8020562			ug/kg wet	N/A	25	<25							
Chlorobenzene	8020562			ug/kg wet	N/A	25	<25							
Chlorodibromomethane	8020562			ug/kg wet	N/A	25	<25							
Chloroethane	8020562			ug/kg wet	N/A	50	<50							
Chloroform	8020562			ug/kg wet	N/A	25	<25							
Chloromethane	8020562			ug/kg wet	N/A	50	<50							
2-Chlorotoluene	8020562			ug/kg wet	N/A	50	<50							
4-Chlorotoluene	8020562			ug/kg wet	N/A	25	<25							
1,2-Dibromo-3-chloropropane	8020562			ug/kg wet	N/A	50	<50							
1,2-Dibromoethane (EDB)	8020562			ug/kg wet	N/A	25	<25							
Dibromomethane	8020562			ug/kg wet	N/A	25	<25							
1,2-Dichlorobenzene	8020562			ug/kg wet	N/A	25	<25							
1,3-Dichlorobenzene	8020562			ug/kg wet	N/A	25	<25							
1,4-Dichlorobenzene	8020562			ug/kg wet	N/A	25	<25							
Dichlorodifluoromethane	8020562			ug/kg wet	N/A	50	<50							
1,1-Dichloroethane	8020562			ug/kg wet	N/A	25	<25							
1,2-Dichloroethane	8020562			ug/kg wet	N/A	25	<25							
1,1-Dichloroethene	8020562			ug/kg wet	N/A	25	<25							
cis-1,2-Dichloroethene	8020562			ug/kg wet	N/A	25	<25							
trans-1,2-Dichloroethene	8020562			ug/kg wet	N/A	25	<25							
1,2-Dichloropropane	8020562			ug/kg wet	N/A	25	<25							
1,3-Dichloropropane	8020562			ug/kg wet	N/A	25	<25							
2,2-Dichloropropane	8020562			ug/kg wet	N/A	25	<25							
1,1-Dichloropropene	8020562			ug/kg wet	N/A	25	<25							
cis-1,3-Dichloropropene	8020562			ug/kg wet	N/A	25	<25							
trans-1,3-Dichloropropene	8020562			ug/kg wet	N/A	25	<25							
2,3-Dichloropropene	8020562			ug/kg wet	N/A	25	<25							
Isopropyl Ether	8020562			ug/kg wet	N/A	25	<25							
Ethylbenzene	8020562			ug/kg wet	N/A	25	<25							
Hexachlorobutadiene	8020562			ug/kg wet	N/A	35	<35							
Isopropylbenzene	8020562			ug/kg wet	N/A	25	<25							
p-Isopropyltoluene	8020562			ug/kg wet	N/A	25	<25							
Methylene Chloride	8020562			ug/kg wet	N/A	50	<50							
Methyl tert-Butyl Ether	8020562			ug/kg wet	N/A	25	<25							
Naphthalene	8020562			ug/kg wet	N/A	50	<50							
n-Propylbenzene	8020562			ug/kg wet	N/A	25	<25							
Styrene	8020562			ug/kg wet	N/A	25	<25							
1,1,1,2-Tetrachloroethane	8020562			ug/kg wet	N/A	25	<25							
1,1,2,2-Tetrachloroethane	8020562			ug/kg wet	N/A	25	<25							
Tetrachloroethene	8020562			ug/kg wet	N/A	25	<25							
Toluene	8020562			ug/kg wet	N/A	25	<25							
1,2,3-Trichlorobenzene	8020562			ug/kg wet	N/A	25	<25							
1,2,4-Trichlorobenzene	8020562			ug/kg wet	N/A	25	<25							

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LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
1,1,1-Trichloroethane	8020562			ug/kg wet	N/A	25	<25							
1,1,2-Trichloroethane	8020562			ug/kg wet	N/A	35	<35							
Trichloroethene	8020562			ug/kg wet	N/A	25	<25							
Trichlorofluoromethane	8020562			ug/kg wet	N/A	25	<25							
1,2,3-Trichloropropane	8020562			ug/kg wet	N/A	50	<50							
1,2,4-Trimethylbenzene	8020562			ug/kg wet	N/A	25	<25							
1,3,5-Trimethylbenzene	8020562			ug/kg wet	N/A	25	<25							
Vinyl chloride	8020562			ug/kg wet	N/A	35	<35							
Xylenes, total	8020562			ug/kg wet	N/A	85	<85							
Surrogate: Dibromofluoromethane	*8020562*			ug/kg wet					*96*		*82-112*			
Surrogate: Toluene-d8	*8020562*			ug/kg wet					*101*		*91-106*			
Surrogate: 4-Bromofluorobenzene	*8020562*			ug/kg wet					*94*		*89-110*			
PNAs by SW8310														
Acenaphthene	8020499			ug/kg wet	N/A	50	<50							
Acenaphthylene	8020499			ug/kg wet	N/A	85	<85							
Anthracene	8020499			ug/kg wet	N/A	5.0	<5.0							
Benzo (a) anthracene	8020499			ug/kg wet	N/A	5.0	<5.0							
Benzo (b) fluoranthene	8020499			ug/kg wet	N/A	5.0	<5.0							
Benzo (k) fluoranthene	8020499			ug/kg wet	N/A	5.0	<5.0							
Benzo (a) pyrene	8020499			ug/kg wet	N/A	5.0	<5.0							
Benzo (g,h,i) perylene	8020499			ug/kg wet	N/A	5.0	<5.0							
Chrysene	8020499			ug/kg wet	N/A	5.0	<5.0							
Dibenzo (a,h) anthracene	8020499			ug/kg wet	N/A	7.5	<7.5							
Fluoranthene	8020499			ug/kg wet	N/A	10	<10							
Fluorene	8020499			ug/kg wet	N/A	10	<10							
Indeno (1,2,3-cd) pyrene	8020499			ug/kg wet	N/A	5.0	<5.0							
1-Methylnaphthalene	8020499			ug/kg wet	N/A	30	<30							
2-Methylnaphthalene	8020499			ug/kg wet	N/A	25	<25							
Naphthalene	8020499			ug/kg wet	N/A	30	<30							
Phenanthrene	8020499			ug/kg wet	N/A	5.0	<5.0							
Pyrene	8020499			ug/kg wet	N/A	5.0	<5.0							
Surrogate: 2-Fluorobiphenyl	*8020499*			ug/kg wet					*105*		*61-128*			
Semivolatile Organics by GC/MS														
Acenaphthene	8020961			mg/kg wet	N/A	0.330	<0.330							
Acenaphthylene	8020961			mg/kg wet	N/A	0.330	<0.330							
Anthracene	8020961			mg/kg wet	N/A	0.330	<0.330							
Benzidine	8020961			mg/kg wet	N/A	3.30	<3.30							
Benzo (a) anthracene	8020961			mg/kg wet	N/A	0.330	<0.330							
Benzo (b) fluoranthene	8020961			mg/kg wet	N/A	0.330	<0.330							
Benzo (k) fluoranthene	8020961			mg/kg wet	N/A	0.330	<0.330							
Benzo (a) pyrene	8020961			mg/kg wet	N/A	0.330	<0.330							
Benzo (g,h,i) perylene	8020961			mg/kg wet	N/A	0.330	<0.330							
Benzyl alcohol	8020961			mg/kg wet	N/A	0.330	<0.330							
Butyl benzyl phthalate	8020961			mg/kg wet	N/A	0.330	<0.330							

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Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Semivolatile Organics by GC/MS														
Bis(2-chloroethyl)ether	8020961			mg/kg wet	N/A	0.330	<0.330							
Bis(2-chloroethoxy)methane	8020961			mg/kg wet	N/A	0.330	<0.330							
Bis(2-ethylhexyl)phthalate	8020961			mg/kg wet	N/A	0.330	<0.330							
Bis(2-chloroisopropyl) ether	8020961			mg/kg wet	N/A	0.330	<0.330							
4-Bromophenyl phenyl ether	8020961			mg/kg wet	N/A	0.330	<0.330							
Carbazole	8020961			mg/kg wet	N/A	0.330	<0.330							
4-Chloroaniline	8020961			mg/kg wet	N/A	0.330	<0.330							
2-Chloronaphthalene	8020961			mg/kg wet	N/A	0.330	<0.330							
4-Chlorophenyl phenyl ether	8020961			mg/kg wet	N/A	0.330	<0.330							
Chrysene	8020961			mg/kg wet	N/A	0.330	<0.330							
Dibenzo (a,h) anthracene	8020961			mg/kg wet	N/A	0.330	<0.330							
Dibenzofuran	8020961			mg/kg wet	N/A	0.330	<0.330							
Di-n-butyl phthalate	8020961			mg/kg wet	N/A	0.330	<0.330							
1,2-Dichlorobenzene	8020961			mg/kg wet	N/A	0.330	<0.330							
1,3-Dichlorobenzene	8020961			mg/kg wet	N/A	0.330	<0.330							
1,4-Dichlorobenzene	8020961			mg/kg wet	N/A	0.330	<0.330							
3,3'-Dichlorobenzidine	8020961			mg/kg wet	N/A	0.330	<0.330							
Diethyl phthalate	8020961			mg/kg wet	N/A	0.330	<0.330							
Dimethyl phthalate	8020961			mg/kg wet	N/A	0.330	<0.330							
2,4-Dinitrotoluene	8020961			mg/kg wet	N/A	0.330	<0.330							
2,6-Dinitrotoluene	8020961			mg/kg wet	N/A	0.330	<0.330							
Di-n-octyl phthalate	8020961			mg/kg wet	N/A	0.330	<0.330							
Fluoranthene	8020961			mg/kg wet	N/A	0.330	<0.330							
Fluorene	8020961			mg/kg wet	N/A	0.330	<0.330							
Hexachlorobenzene	8020961			mg/kg wet	N/A	0.330	<0.330							
Hexachlorobutadiene	8020961			mg/kg wet	N/A	0.330	<0.330							
Hexachlorocyclopentadiene	8020961			mg/kg wet	N/A	0.660	<0.660							
Hexachloroethane	8020961			mg/kg wet	N/A	0.330	<0.330							
Indeno (1,2,3-cd) pyrene	8020961			mg/kg wet	N/A	0.330	<0.330							
Isophorone	8020961			mg/kg wet	N/A	0.330	<0.330							
2-Methylnaphthalene	8020961			mg/kg wet	N/A	0.330	<0.330							
Naphthalene	8020961			mg/kg wet	N/A	0.330	<0.330							
2-Nitroaniline	8020961			mg/kg wet	N/A	0.330	<0.330							
3-Nitroaniline	8020961			mg/kg wet	N/A	0.330	<0.330							
4-Nitroaniline	8020961			mg/kg wet	N/A	0.330	<0.330							
Nitrobenzene	8020961			mg/kg wet	N/A	0.330	<0.330							
N-Nitrosodimethylamine	8020961			mg/kg wet	N/A	0.330	<0.330							
N-Nitrosodiphenylamine	8020961			mg/kg wet	N/A	0.330	<0.330							
N-Nitrosodi-n-propylamine	8020961			mg/kg wet	N/A	0.330	<0.330							
Phenanthrene	8020961			mg/kg wet	N/A	0.330	<0.330							
Pyrene	8020961			mg/kg wet	N/A	0.330	<0.330							
Pyridine	8020961			mg/kg wet	N/A	0.330	<0.330							
1,2,4-Trichlorobenzene	8020961			mg/kg wet	N/A	0.330	<0.330							
Benzoic acid	8020961			mg/kg wet	N/A	0.660	<0.660							
4-Chloro-3-methylphenol	8020961			mg/kg wet	N/A	0.330	<0.330							

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Semivolatile Organics by GC/MS														
2-Chlorophenol	8020961			mg/kg wet	N/A	0.330	<0.330							
Cresol(s)	8020961			mg/kg wet	N/A	0.330	<0.330							
2,4-Dichlorophenol	8020961			mg/kg wet	N/A	0.330	<0.330							
2,4-Dimethylphenol	8020961			mg/kg wet	N/A	0.330	<0.330							
2,4-Dinitrophenol	8020961			mg/kg wet	N/A	0.330	<0.330							
4,6-Dinitro-2-methylphenol	8020961			mg/kg wet	N/A	0.330	<0.330							
2-Methylphenol (o-Cresol)	8020961			mg/kg wet	N/A	0.330	<0.330							
4-Methylphenol (p-Cresol)	8020961			mg/kg wet	N/A	0.330	<0.330							
2-Nitrophenol	8020961			mg/kg wet	N/A	0.330	<0.330							
4-Nitrophenol	8020961			mg/kg wet	N/A	0.330	<0.330							
Pentachlorophenol	8020961			mg/kg wet	N/A	0.330	<0.330							
Phenol	8020961			mg/kg wet	N/A	0.330	<0.330							
2,4,5-Trichlorophenol	8020961			mg/kg wet	N/A	0.330	<0.330							
2,4,6-Trichlorophenol	8020961			mg/kg wet	N/A	0.330	<0.330							
Surrogate: Nitrobenzene-d5	*8020961*			mg/kg wet					*77*		*25-110*			
Surrogate: 2-Fluorobiphenyl	*8020961*			mg/kg wet					*81*		*20-115*			
Surrogate: Terphenyl-d14	*8020961*			mg/kg wet					*88*		*40-135*			
Surrogate: Phenol-d6	*8020961*			mg/kg wet					*76*		*30-125*			
Surrogate: 2-Fluorophenol	*8020961*			mg/kg wet					*72*		*25-120*			
Surrogate: 2,4,6-Tribromophenol	*8020961*			mg/kg wet					*90*		*35-130*			
Polychlorinated Biphenyls by EPA Method 8082														
PCB-1016	8020909			mg/kg wet	N/A	0.0500	<0.0500							
PCB-1221	8020909			mg/kg wet	N/A	0.0500	<0.0500							
PCB-1232	8020909			mg/kg wet	N/A	0.0500	<0.0500							
PCB-1242	8020909			mg/kg wet	N/A	0.0500	<0.0500							
PCB-1248	8020909			mg/kg wet	N/A	0.0500	<0.0500							
PCB-1254	8020909			mg/kg wet	N/A	0.0500	<0.0500							
PCB-1260	8020909			mg/kg wet	N/A	0.0500	<0.0500							
PCB-1268	8020909			mg/kg wet	N/A	0.0500	<0.0500							
Surrogate: Decachlorobiphenyl	*8020909*			mg/kg wet					*95*		*59-140*			
Surrogate: Tetrachloro-meta-xylene	*8020909*			mg/kg wet					*72*		*46-136*			

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CCV QC DATA

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Metals														
Barium	8B28008		5.0000	mg/L	N/A	N/A	4.68		94		90-110			
Silver	8B28008		1.0000	mg/L	N/A	N/A	0.926		93		90-110			
Arsenic	8B28008		5.0000	mg/L	N/A	N/A	4.70		94		90-110			
Cadmium	8B28008		5.0000	mg/L	N/A	N/A	4.76		95		90-110			
Chromium	8B28008		5.0000	mg/L	N/A	N/A	4.70		94		90-110			
Lead	8B28008		5.0000	mg/L	N/A	N/A	4.71		94		90-110			
Selenium	8B28008		5.0000	mg/L	N/A	N/A	4.73		95		90-110			
Barium	8B28008		5.0000	mg/L	N/A	N/A	4.65		93		90-110			
Silver	8B28008		1.0000	mg/L	N/A	N/A	0.922		92		90-110			
Arsenic	8B28008		5.0000	mg/L	N/A	N/A	4.65		93		90-110			
Cadmium	8B28008		5.0000	mg/L	N/A	N/A	4.67		93		90-110			
Chromium	8B28008		5.0000	mg/L	N/A	N/A	4.62		92		90-110			
Lead	8B28008		5.0000	mg/L	N/A	N/A	4.68		94		90-110			
Selenium	8B28008		5.0000	mg/L	N/A	N/A	4.66		93		90-110			
Barium	8B28008		5.0000	mg/L	N/A	N/A	4.69		94		90-110			
Silver	8B28008		1.0000	mg/L	N/A	N/A	0.929		93		90-110			
Arsenic	8B28008		5.0000	mg/L	N/A	N/A	4.72		94		90-110			
Cadmium	8B28008		5.0000	mg/L	N/A	N/A	4.75		95		90-110			
Chromium	8B28008		5.0000	mg/L	N/A	N/A	4.70		94		90-110			
Lead	8B28008		5.0000	mg/L	N/A	N/A	4.75		95		90-110			
Selenium	8B28008		5.0000	mg/L	N/A	N/A	4.71		94		90-110			
Barium	8C04008		5.0000	mg/L	N/A	N/A	4.90		98		90-110			
Silver	8C04008		1.0000	mg/L	N/A	N/A	0.983		98		90-110			
Arsenic	8C04008		5.0000	mg/L	N/A	N/A	5.02		100		90-110			
Cadmium	8C04008		5.0000	mg/L	N/A	N/A	4.78		96		90-110			
Chromium	8C04008		5.0000	mg/L	N/A	N/A	5.00		100		90-110			
Lead	8C04008		5.0000	mg/L	N/A	N/A	4.96		99		90-110			
Selenium	8C04008		5.0000	mg/L	N/A	N/A	4.98		100		90-110			
Barium	8C04008		5.0000	mg/L	N/A	N/A	4.69		94		90-110			
Silver	8C04008		1.0000	mg/L	N/A	N/A	0.943		94		90-110			
Arsenic	8C04008		5.0000	mg/L	N/A	N/A	4.76		95		90-110			
Cadmium	8C04008		5.0000	mg/L	N/A	N/A	4.49		90		90-110			
Chromium	8C04008		5.0000	mg/L	N/A	N/A	4.74		95		90-110			
Lead	8C04008		5.0000	mg/L	N/A	N/A	4.71		94		90-110			
Selenium	8C04008		5.0000	mg/L	N/A	N/A	4.75		95		90-110			
Barium	8C04008		5.0000	mg/L	N/A	N/A	4.82		96		90-110			
Silver	8C04008		1.0000	mg/L	N/A	N/A	0.972		97		90-110			
Arsenic	8C04008		5.0000	mg/L	N/A	N/A	4.94		99		90-110			
Cadmium	8C04008		5.0000	mg/L	N/A	N/A	4.71		94		90-110			
Chromium	8C04008		5.0000	mg/L	N/A	N/A	4.98		100		90-110			
Lead	8C04008		5.0000	mg/L	N/A	N/A	4.91		98		90-110			
Selenium	8C04008		5.0000	mg/L	N/A	N/A	4.99		100		90-110			
VOCs by SW8260B														
Benzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2320		93		80-120			
Bromobenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2390		96		80-120			
Bromochloromethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2340		94		80-120			
Bromodichloromethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2300		92		80-120			
Bromoform	8B27007		2500.0	ug/kg wet	N/A	N/A	2280		91		80-120			

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VOCs by SW8260B														
Bromomethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2090		84		80-120			
n-Butylbenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2470		99		80-120			
sec-Butylbenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2470		99		80-120			
tert-Butylbenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2470		99		80-120			
Carbon Tetrachloride	8B27007		2500.0	ug/kg wet	N/A	N/A	2210		88		80-120			
Chlorobenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2350		94		80-120			
Chlorodibromomethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2350		94		80-120			
Chloroethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2050		82		80-120			
Chloroform	8B27007		2500.0	ug/kg wet	N/A	N/A	2280		91		80-120			
Chloromethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2060		83		80-120			
2-Chlorotoluene	8B27007		2500.0	ug/kg wet	N/A	N/A	2400		96		80-120			
4-Chlorotoluene	8B27007		2500.0	ug/kg wet	N/A	N/A	2410		97		80-120			
1,2-Dibromo-3-chloropropane	8B27007		2500.0	ug/kg wet	N/A	N/A	2300		92		80-120			
1,2-Dibromoethane (EDB)	8B27007		2500.0	ug/kg wet	N/A	N/A	2370		95		80-120			
Dibromomethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2280		91		80-120			
1,2-Dichlorobenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2340		94		80-120			
1,3-Dichlorobenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2400		96		80-120			
1,4-Dichlorobenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2360		95		80-120			
Dichlorodifluoromethane	8B27007		2500.0	ug/kg wet	N/A	N/A	1880		75		80-120			C9
1,1-Dichloroethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2280		91		80-120			
1,2-Dichloroethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2150		86		80-120			
1,1-Dichloroethene	8B27007		2500.0	ug/kg wet	N/A	N/A	2310		92		80-120			
cis-1,2-Dichloroethene	8B27007		2500.0	ug/kg wet	N/A	N/A	2450		98		80-120			
trans-1,2-Dichloroethene	8B27007		2500.0	ug/kg wet	N/A	N/A	2580		103		80-120			
1,2-Dichloropropane	8B27007		2500.0	ug/kg wet	N/A	N/A	2330		93		80-120			
1,3-Dichloropropane	8B27007		2500.0	ug/kg wet	N/A	N/A	2340		94		80-120			
2,2-Dichloropropane	8B27007		2500.0	ug/kg wet	N/A	N/A	2270		91		80-120			
1,1-Dichloropropene	8B27007		2500.0	ug/kg wet	N/A	N/A	2400		96		80-120			
cis-1,3-Dichloropropene	8B27007		2500.0	ug/kg wet	N/A	N/A	2390		96		80-120			
trans-1,3-Dichloropropene	8B27007		2500.0	ug/kg wet	N/A	N/A	2350		94		80-120			
2,3-Dichloropropene	8B27007		2500.0	ug/kg wet	N/A	N/A	2360		94		80-120			
Isopropyl Ether	8B27007		2500.0	ug/kg wet	N/A	N/A	2380		95		80-120			
Ethylbenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2380		95		80-120			
Hexachlorobutadiene	8B27007		2500.0	ug/kg wet	N/A	N/A	2400		96		80-120			
Isopropylbenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2420		97		80-120			
p-Isopropyltoluene	8B27007		2500.0	ug/kg wet	N/A	N/A	2480		99		80-120			
Methylene Chloride	8B27007		2500.0	ug/kg wet	N/A	N/A	2230		89		80-120			
Methyl tert-Butyl Ether	8B27007		2500.0	ug/kg wet	N/A	N/A	2480		99		80-120			
Naphthalene	8B27007		2500.0	ug/kg wet	N/A	N/A	2440		98		80-120			
n-Propylbenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2470		99		80-120			
Styrene	8B27007		2500.0	ug/kg wet	N/A	N/A	2300		92		80-120			
1,1,1,2-Tetrachloroethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2370		95		80-120			
1,1,2,2-Tetrachloroethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2380		95		80-120			
Tetrachloroethene	8B27007		2500.0	ug/kg wet	N/A	N/A	2350		94		80-120			
Toluene	8B27007		2500.0	ug/kg wet	N/A	N/A	2380		95		80-120			

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Reported: 03/06/08 15:22

CCV QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
1,2,3-Trichlorobenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2400		96		80-120			
1,2,4-Trichlorobenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2480		99		80-120			
1,1,1-Trichloroethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2220		89		80-120			
1,1,2-Trichloroethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2310		93		80-120			
Trichloroethene	8B27007		2500.0	ug/kg wet	N/A	N/A	2340		93		80-120			
Trichlorofluoromethane	8B27007		2500.0	ug/kg wet	N/A	N/A	2110		85		80-120			
1,2,3-Trichloropropane	8B27007		2500.0	ug/kg wet	N/A	N/A	2200		88		80-120			
1,2,4-Trimethylbenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2460		98		80-120			
1,3,5-Trimethylbenzene	8B27007		2500.0	ug/kg wet	N/A	N/A	2500		100		80-120			
Vinyl chloride	8B27007		2500.0	ug/kg wet	N/A	N/A	2170		87		80-120			
Xylenes, total	8B27007		7500.0	ug/kg wet	N/A	N/A	7210		96		80-120			
Surrogate: Dibromofluoromethane	*8B27007*			ug/kg wet					*98*		*80-120*			
Surrogate: Toluene-d8	*8B27007*			ug/kg wet					*101*		*80-120*			
Surrogate: 4-Bromofluorobenzene	*8B27007*			ug/kg wet					*98*		*80-120*			
Benzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2390		96		80-120			
Bromobenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2450		98		80-120			
Bromochloromethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2430		97		80-120			
Bromodichloromethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2460		98		80-120			
Bromoform	8B29004		2500.0	ug/kg wet	N/A	N/A	2410		97		80-120			
Bromomethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2450		98		80-120			
n-Butylbenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2380		95		80-120			
sec-Butylbenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2420		97		80-120			
tert-Butylbenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2450		98		80-120			
Carbon Tetrachloride	8B29004		2500.0	ug/kg wet	N/A	N/A	2320		93		80-120			
Chlorobenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2350		94		80-120			
Chlorodibromomethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2510		101		80-120			
Chloroethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2350		94		80-120			
Chloroform	8B29004		2500.0	ug/kg wet	N/A	N/A	2370		95		80-120			
Chloromethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2410		96		80-120			
2-Chlorotoluene	8B29004		2500.0	ug/kg wet	N/A	N/A	2420		97		80-120			
4-Chlorotoluene	8B29004		2500.0	ug/kg wet	N/A	N/A	2460		98		80-120			
1,2-Dibromo-3-chloropropane	8B29004		2500.0	ug/kg wet	N/A	N/A	2470		99		80-120			
1,2-Dibromoethane (EDB)	8B29004		2500.0	ug/kg wet	N/A	N/A	2480		99		80-120			
Dibromomethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2450		98		80-120			
1,2-Dichlorobenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2370		95		80-120			
1,3-Dichlorobenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2430		97		80-120			
1,4-Dichlorobenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2360		94		80-120			
Dichlorodifluoromethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2450		98		80-120			
1,1-Dichloroethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2410		97		80-120			
1,2-Dichloroethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2320		93		80-120			
1,1-Dichloroethene	8B29004		2500.0	ug/kg wet	N/A	N/A	2480		99		80-120			
cis-1,2-Dichloroethene	8B29004		2500.0	ug/kg wet	N/A	N/A	2460		98		80-120			
trans-1,2-Dichloroethene	8B29004		2500.0	ug/kg wet	N/A	N/A	2670		107		80-120			
1,2-Dichloropropane	8B29004		2500.0	ug/kg wet	N/A	N/A	2390		96		80-120			

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

CCV QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
1,3-Dichloropropane	8B29004		2500.0	ug/kg wet	N/A	N/A	2460		98		80-120			
2,2-Dichloropropane	8B29004		2500.0	ug/kg wet	N/A	N/A	2360		94		80-120			
1,1-Dichloropropene	8B29004		2500.0	ug/kg wet	N/A	N/A	2490		100		80-120			
cis-1,3-Dichloropropene	8B29004		2500.0	ug/kg wet	N/A	N/A	2510		100		80-120			
trans-1,3-Dichloropropene	8B29004		2500.0	ug/kg wet	N/A	N/A	2530		101		80-120			
2,3-Dichloropropene	8B29004		2500.0	ug/kg wet	N/A	N/A	2490		100		80-120			
Isopropyl Ether	8B29004		2500.0	ug/kg wet	N/A	N/A	2490		99		80-120			
Ethylbenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2380		95		80-120			
Hexachlorobutadiene	8B29004		2500.0	ug/kg wet	N/A	N/A	2240		89		80-120			
Isopropylbenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2400		96		80-120			
p-Isopropyltoluene	8B29004		2500.0	ug/kg wet	N/A	N/A	2450		98		80-120			
Methylene Chloride	8B29004		2500.0	ug/kg wet	N/A	N/A	2350		94		80-120			
Methyl tert-Butyl Ether	8B29004		2500.0	ug/kg wet	N/A	N/A	2670		107		80-120			
Naphthalene	8B29004		2500.0	ug/kg wet	N/A	N/A	2400		96		80-120			
n-Propylbenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2460		98		80-120			
Styrene	8B29004		2500.0	ug/kg wet	N/A	N/A	2330		93		80-120			
1,1,1,2-Tetrachloroethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2440		98		80-120			
1,1,2,2-Tetrachloroethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2510		100		80-120			
Tetrachloroethene	8B29004		2500.0	ug/kg wet	N/A	N/A	2340		94		80-120			
Toluene	8B29004		2500.0	ug/kg wet	N/A	N/A	2360		94		80-120			
1,2,3-Trichlorobenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2270		91		80-120			
1,2,4-Trichlorobenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2360		94		80-120			
1,1,1-Trichloroethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2300		92		80-120			
1,1,2-Trichloroethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2450		98		80-120			
Trichloroethene	8B29004		2500.0	ug/kg wet	N/A	N/A	2390		95		80-120			
Trichlorofluoromethane	8B29004		2500.0	ug/kg wet	N/A	N/A	2340		94		80-120			
1,2,3-Trichloropropane	8B29004		2500.0	ug/kg wet	N/A	N/A	2350		94		80-120			
1,2,4-Trimethylbenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2490		100		80-120			
1,3,5-Trimethylbenzene	8B29004		2500.0	ug/kg wet	N/A	N/A	2490		100		80-120			
Vinyl chloride	8B29004		2500.0	ug/kg wet	N/A	N/A	2440		97		80-120			
Xylenes, total	8B29004		7500.0	ug/kg wet	N/A	N/A	7210		96		80-120			
Surrogate: Dibromofluoromethane	*8B29004*			ug/kg wet					*100*		*80-120*			
Surrogate: Toluene-d8	*8B29004*			ug/kg wet					*100*		*80-120*			
Surrogate: 4-Bromofluorobenzene	*8B29004*			ug/kg wet					*97*		*80-120*			
PNAs by SW8310														
Acenaphthene	8C04004		5.0000	ug/kg wet	N/A	N/A	4.95		99		85-115			
Acenaphthylene	8C04004		10.000	ug/kg wet	N/A	N/A	9.47		95		85-115			
Anthracene	8C04004		0.5000	ug/kg wet	N/A	N/A	0.560		112		85-115			
Benzo (a) anthracene	8C04004		0.5000	ug/kg wet	N/A	N/A	0.471		94		85-115			
Benzo (b) fluoranthene	8C04004		1.0000	ug/kg wet	N/A	N/A	1.03		103		85-115			
Benzo (k) fluoranthene	8C04004		0.5000	ug/kg wet	N/A	N/A	0.542		108		85-115			
Benzo (a) pyrene	8C04004		0.5000	ug/kg wet	N/A	N/A	0.518		104		85-115			
Benzo (g,h,i) perylene	8C04004		1.0000	ug/kg wet	N/A	N/A	1.04		104		85-115			
Chrysene	8C04004		0.5000	ug/kg wet	N/A	N/A	0.455		91		85-115			

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Received: 02/26/08
Reported: 03/06/08 15:22

CCV QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
PNAs by SW8310														
Dibenzo (a,h) anthracene	8C04004		1.0000	ug/kg wet	N/A	N/A	1.04		104		85-115			
Fluoranthene	8C04004		1.0000	ug/kg wet	N/A	N/A	1.04		104		85-115			
Fluorene	8C04004		1.0000	ug/kg wet	N/A	N/A	0.979		98		85-115			
Indeno (1,2,3-cd) pyrene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.534		107		85-115			
1-Methylnaphthalene	8C04004		5.0000	ug/kg wet	N/A	N/A	5.07		101		85-115			
2-Methylnaphthalene	8C04004		5.0000	ug/kg wet	N/A	N/A	5.39		108		85-115			
Naphthalene	8C04004		5.0000	ug/kg wet	N/A	N/A	5.36		107		85-115			
Phenanthrene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.532		106		85-115			
Pyrene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.477		95		85-115			
Surrogate: 2-Fluorobiphenyl	*8C04004*			ug/kg wet					*105*		*85-115*			
Acenaphthene	8C04004		5.0000	ug/kg wet	N/A	N/A	4.97		99		85-115			
Acenaphthylene	8C04004		10.000	ug/kg wet	N/A	N/A	9.46		95		85-115			
Anthracene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.565		113		85-115			
Benzo (a) anthracene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.470		94		85-115			
Benzo (b) fluoranthene	8C04004		1.0000	ug/kg wet	N/A	N/A	1.04		104		85-115			
Benzo (k) fluoranthene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.549		110		85-115			
Benzo (a) pyrene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.530		106		85-115			
Benzo (g,h,i) perylene	8C04004		1.0000	ug/kg wet	N/A	N/A	1.04		104		85-115			
Chrysene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.455		91		85-115			
Dibenzo (a,h) anthracene	8C04004		1.0000	ug/kg wet	N/A	N/A	1.05		105		85-115			
Fluoranthene	8C04004		1.0000	ug/kg wet	N/A	N/A	1.05		105		85-115			
Fluorene	8C04004		1.0000	ug/kg wet	N/A	N/A	0.986		99		85-115			
Indeno (1,2,3-cd) pyrene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.538		108		85-115			
1-Methylnaphthalene	8C04004		5.0000	ug/kg wet	N/A	N/A	5.07		101		85-115			
2-Methylnaphthalene	8C04004		5.0000	ug/kg wet	N/A	N/A	5.37		107		85-115			
Naphthalene	8C04004		5.0000	ug/kg wet	N/A	N/A	5.32		106		85-115			
Phenanthrene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.538		108		85-115			
Pyrene	8C04004		0.50000	ug/kg wet	N/A	N/A	0.480		96		85-115			
Surrogate: 2-Fluorobiphenyl	*8C04004*			ug/kg wet					*105*		*85-115*			

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Work Order: WRB0772
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Received: 02/26/08
Reported: 03/06/08 15:22

LABORATORY DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
General Chemistry Parameters													
QC Source Sample: WRB0726-02													
% Solids	8020508	91.0		%	N/A	N/A	91.2				0	20	
QC Source Sample: WRB0772-07													
% Solids	8020508	87.6		%	N/A	N/A	88.6				1	20	
QC Source Sample: WRB0841-04													
% Solids	8030034	14.7		%	N/A	N/A	14.2				4	20	
QC Source Sample: WRB0874-01													
% Solids	8030034	89.6		%	N/A	N/A	89.6				0	20	

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
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Work Order: WRB0772
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LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Metals														
Arsenic	8020504		50.000	mg/kg wet	N/A	1.4	43.3		87		85-112			
Barium	8020504		25.000	mg/kg wet	N/A	0.11	21.3		85		78-110			
Cadmium	8020504		25.000	mg/kg wet	N/A	0.10	21.4		86		83-109			
Chromium	8020504		25.000	mg/kg wet	N/A	0.18	21.5		86		84-110			
Lead	8020504		50.000	mg/kg wet	N/A	1.2	43.1		86		84-110			
Selenium	8020504		100.00	mg/kg wet	N/A	4.0	84.7		85		79-104			
Silver	8020504		25.000	mg/kg wet	N/A	0.11	21.5		86		74-116			
Mercury	8020571		0.2500	mg/kg wet	N/A	0.010	0.204		81		76-133			
			0											
Arsenic	8030022		50.000	mg/kg wet	N/A	1.4	44.7		89		85-112			
Barium	8030022		25.000	mg/kg wet	N/A	0.11	22.2		89		78-110			
Cadmium	8030022		25.000	mg/kg wet	N/A	0.10	21.2		85		83-109			
Chromium	8030022		25.000	mg/kg wet	N/A	0.18	22.6		90		84-110			
Lead	8030022		50.000	mg/kg wet	N/A	1.2	43.7		87		84-110			
Selenium	8030022		100.00	mg/kg wet	N/A	4.0	87.3		87		79-104			
Silver	8030022		25.000	mg/kg wet	N/A	0.11	22.8		91		74-116			
VOCs by SW8260B														
Benzene	8020500		2500.0	ug/kg wet	N/A	N/A	2250		90		64-124			
Bromobenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2350		94		70-130			
Bromochloromethane	8020500		2500.0	ug/kg wet	N/A	N/A	2300		92		70-130			
Bromodichloromethane	8020500		2500.0	ug/kg wet	N/A	N/A	2290		91		70-130			
Bromoform	8020500		2500.0	ug/kg wet	N/A	N/A	2450		98		70-130			
Bromomethane	8020500		2500.0	ug/kg wet	N/A	N/A	2190		87		70-130			
n-Butylbenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2330		93		70-130			
sec-Butylbenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2310		92		70-130			
tert-Butylbenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2330		93		70-130			
Carbon Tetrachloride	8020500		2500.0	ug/kg wet	N/A	N/A	2230		89		70-130			
Chlorobenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2290		92		80-123			
Chlorodibromomethane	8020500		2500.0	ug/kg wet	N/A	N/A	2490		99		70-130			
Chloroethane	8020500		2500.0	ug/kg wet	N/A	N/A	2230		89		70-130			
Chloroform	8020500		2500.0	ug/kg wet	N/A	N/A	2200		88		70-130			
Chloromethane	8020500		2500.0	ug/kg wet	N/A	N/A	2470		99		70-130			
2-Chlorotoluene	8020500		2500.0	ug/kg wet	N/A	N/A	2330		93		70-130			
4-Chlorotoluene	8020500		2500.0	ug/kg wet	N/A	N/A	2320		93		70-130			
1,2-Dibromo-3-chloropropane	8020500		2500.0	ug/kg wet	N/A	N/A	2390		96		70-130			
1,2-Dibromoethane (EDB)	8020500		2500.0	ug/kg wet	N/A	N/A	2360		94		70-130			
Dibromomethane	8020500		2500.0	ug/kg wet	N/A	N/A	2300		92		70-130			
1,2-Dichlorobenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2320		93		70-130			
1,3-Dichlorobenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2330		93		70-130			
1,4-Dichlorobenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2310		93		70-130			
Dichlorodifluoromethane	8020500		2500.0	ug/kg wet	N/A	N/A	2400		96		70-130			C9
1,1-Dichloroethane	8020500		2500.0	ug/kg wet	N/A	N/A	2300		92		70-130			
1,2-Dichloroethane	8020500		2500.0	ug/kg wet	N/A	N/A	2140		86		70-130			
1,1-Dichloroethene	8020500		2500.0	ug/kg wet	N/A	N/A	2470		99		43-141			
cis-1,2-Dichloroethene	8020500		2500.0	ug/kg wet	N/A	N/A	2370		95		70-130			
trans-1,2-Dichloroethene	8020500		2500.0	ug/kg wet	N/A	N/A	2570		103		70-130			
1,2-Dichloropropane	8020500		2500.0	ug/kg wet	N/A	N/A	2290		92		70-130			
1,3-Dichloropropane	8020500		2500.0	ug/kg wet	N/A	N/A	2360		94		70-130			

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LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
2,2-Dichloropropane	8020500		2500.0	ug/kg wet	N/A	N/A	2200		88		70-130			
1,1-Dichloropropene	8020500		2500.0	ug/kg wet	N/A	N/A	2340		94		70-130			
cis-1,3-Dichloropropene	8020500		2500.0	ug/kg wet	N/A	N/A	2360		94		70-130			
trans-1,3-Dichloropropene	8020500		2500.0	ug/kg wet	N/A	N/A	2350		94		70-130			
Ethylbenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2280		91		79-122			
Hexachlorobutadiene	8020500		2500.0	ug/kg wet	N/A	N/A	2240		89		70-130			
Isopropylbenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2290		92		70-130			
p-Isopropyltoluene	8020500		2500.0	ug/kg wet	N/A	N/A	2340		94		70-130			
Methylene Chloride	8020500		2500.0	ug/kg wet	N/A	N/A	2190		88		70-130			
Methyl tert-Butyl Ether	8020500		2406.2	ug/kg wet	N/A	N/A	2410		100		55-137			
Naphthalene	8020500		2500.0	ug/kg wet	N/A	N/A	2470		99		70-130			
n-Propylbenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2330		93		70-130			
Styrene	8020500		2500.0	ug/kg wet	N/A	N/A	2260		90		70-130			
1,1,1,2-Tetrachloroethane	8020500		2500.0	ug/kg wet	N/A	N/A	2380		95		70-130			
1,1,2,2-Tetrachloroethane	8020500		2500.0	ug/kg wet	N/A	N/A	2400		96		70-130			
Tetrachloroethene	8020500		2500.0	ug/kg wet	N/A	N/A	2300		92		70-130			
Toluene	8020500		2500.0	ug/kg wet	N/A	N/A	2290		92		78-120			
1,2,3-Trichlorobenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2400		96		70-130			
1,2,4-Trichlorobenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2430		97		70-130			
1,1,1-Trichloroethane	8020500		2500.0	ug/kg wet	N/A	N/A	2200		88		70-130			
1,1,2-Trichloroethane	8020500		2500.0	ug/kg wet	N/A	N/A	2360		95		70-130			
Trichloroethene	8020500		2500.0	ug/kg wet	N/A	N/A	2270		91		78-124			
Trichlorofluoromethane	8020500		2500.0	ug/kg wet	N/A	N/A	2030		81		70-130			
1,2,3-Trichloropropane	8020500		2500.0	ug/kg wet	N/A	N/A	2230		89		70-130			
1,2,4-Trimethylbenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2360		94		75-128			
1,3,5-Trimethylbenzene	8020500		2500.0	ug/kg wet	N/A	N/A	2370		95		76-127			
Vinyl chloride	8020500		2500.0	ug/kg wet	N/A	N/A	2180		87		70-130			
Xylenes, total	8020500		7500.0	ug/kg wet	N/A	N/A	6970		93		79-122			
Surrogate: Dibromofluoromethane	*8020500*			ug/kg wet					*96*		*82-112*			
Surrogate: Toluene-d8	*8020500*			ug/kg wet					*101*		*91-106*			
Surrogate: 4-Bromofluorobenzene	*8020500*			ug/kg wet					*98*		*89-110*			
Benzene	8020562		2500.0	ug/kg wet	N/A	N/A	2300		92		64-124			
Bromobenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2460		98		70-130			
Bromochloromethane	8020562		2500.0	ug/kg wet	N/A	N/A	2410		96		70-130			
Bromodichloromethane	8020562		2500.0	ug/kg wet	N/A	N/A	2430		97		70-130			
Bromoform	8020562		2500.0	ug/kg wet	N/A	N/A	2600		104		70-130			
Bromomethane	8020562		2500.0	ug/kg wet	N/A	N/A	2460		98		70-130			
n-Butylbenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2320		93		70-130			
sec-Butylbenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2300		92		70-130			
tert-Butylbenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2330		93		70-130			
Carbon Tetrachloride	8020562		2500.0	ug/kg wet	N/A	N/A	2310		92		70-130			
Chlorobenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2340		93		80-123			
Chlorodibromomethane	8020562		2500.0	ug/kg wet	N/A	N/A	2650		106		70-130			
Chloroethane	8020562		2500.0	ug/kg wet	N/A	N/A	2380		95		70-130			

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
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Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
Chloroform	8020562		2500.0	ug/kg wet	N/A	N/A	2300		92		70-130			
Chloromethane	8020562		2500.0	ug/kg wet	N/A	N/A	2620		105		70-130			
2-Chlorotoluene	8020562		2500.0	ug/kg wet	N/A	N/A	2380		95		70-130			
4-Chlorotoluene	8020562		2500.0	ug/kg wet	N/A	N/A	2390		95		70-130			
1,2-Dibromo-3-chloropropane	8020562		2500.0	ug/kg wet	N/A	N/A	2670		107		70-130			
1,2-Dibromoethane (EDB)	8020562		2500.0	ug/kg wet	N/A	N/A	2480		99		70-130			
Dibromomethane	8020562		2500.0	ug/kg wet	N/A	N/A	2430		97		70-130			
1,2-Dichlorobenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2410		96		70-130			
1,3-Dichlorobenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2390		96		70-130			
1,4-Dichlorobenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2360		95		70-130			
Dichlorodifluoromethane	8020562		2500.0	ug/kg wet	N/A	N/A	2580		103		70-130			
1,1-Dichloroethane	8020562		2500.0	ug/kg wet	N/A	N/A	2380		95		70-130			
1,2-Dichloroethane	8020562		2500.0	ug/kg wet	N/A	N/A	2310		93		70-130			
1,1-Dichloroethene	8020562		2500.0	ug/kg wet	N/A	N/A	2580		103		43-141			
cis-1,2-Dichloroethene	8020562		2500.0	ug/kg wet	N/A	N/A	2440		97		70-130			
trans-1,2-Dichloroethene	8020562		2500.0	ug/kg wet	N/A	N/A	2610		105		70-130			
1,2-Dichloropropane	8020562		2500.0	ug/kg wet	N/A	N/A	2340		93		70-130			
1,3-Dichloropropane	8020562		2500.0	ug/kg wet	N/A	N/A	2480		99		70-130			
2,2-Dichloropropane	8020562		2500.0	ug/kg wet	N/A	N/A	2290		92		70-130			
1,1-Dichloropropene	8020562		2500.0	ug/kg wet	N/A	N/A	2370		95		70-130			
cis-1,3-Dichloropropene	8020562		2500.0	ug/kg wet	N/A	N/A	2470		99		70-130			
trans-1,3-Dichloropropene	8020562		2500.0	ug/kg wet	N/A	N/A	2520		101		70-130			
Ethylbenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2310		92		79-122			
Hexachlorobutadiene	8020562		2500.0	ug/kg wet	N/A	N/A	2250		90		70-130			
Isopropylbenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2300		92		70-130			
p-Isopropyltoluene	8020562		2500.0	ug/kg wet	N/A	N/A	2330		93		70-130			
Methylene Chloride	8020562		2500.0	ug/kg wet	N/A	N/A	2350		94		70-130			
Methyl tert-Butyl Ether	8020562		2406.2	ug/kg wet	N/A	N/A	2540		106		55-137			
Naphthalene	8020562		2500.0	ug/kg wet	N/A	N/A	2630		105		70-130			
n-Propylbenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2340		94		70-130			
Styrene	8020562		2500.0	ug/kg wet	N/A	N/A	2300		92		70-130			
1,1,1,2-Tetrachloroethane	8020562		2500.0	ug/kg wet	N/A	N/A	2460		99		70-130			
1,1,2,2-Tetrachloroethane	8020562		2500.0	ug/kg wet	N/A	N/A	2570		103		70-130			
Tetrachloroethene	8020562		2500.0	ug/kg wet	N/A	N/A	2300		92		70-130			
Toluene	8020562		2500.0	ug/kg wet	N/A	N/A	2300		92		78-120			
1,2,3-Trichlorobenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2520		101		70-130			
1,2,4-Trichlorobenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2560		102		70-130			
1,1,1-Trichloroethane	8020562		2500.0	ug/kg wet	N/A	N/A	2280		91		70-130			
1,1,2-Trichloroethane	8020562		2500.0	ug/kg wet	N/A	N/A	2480		99		70-130			
Trichloroethene	8020562		2500.0	ug/kg wet	N/A	N/A	2320		93		78-124			
Trichlorofluoromethane	8020562		2500.0	ug/kg wet	N/A	N/A	2170		87		70-130			
1,2,3-Trichloropropane	8020562		2500.0	ug/kg wet	N/A	N/A	2360		94		70-130			
1,2,4-Trimethylbenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2390		96		75-128			
1,3,5-Trimethylbenzene	8020562		2500.0	ug/kg wet	N/A	N/A	2370		95		76-127			
Vinyl chloride	8020562		2500.0	ug/kg wet	N/A	N/A	2290		91		70-130			

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LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
Xylenes, total	8020562		7500.0	ug/kg wet	N/A	N/A	7030		94		79-122			
Surrogate: Dibromofluoromethane	*8020562*			ug/kg wet					*99*		*82-112*			
Surrogate: Toluene-d8	*8020562*			ug/kg wet					*102*		*91-106*			
Surrogate: 4-Bromofluorobenzene	*8020562*			ug/kg wet					*100*		*89-110*			
PNAs by SW8310														
Acenaphthene	8020499		400.00	ug/kg wet	N/A	50	403		101		72-114			
Acenaphthylene	8020499		800.00	ug/kg wet	N/A	85	732		91		74-117			
Anthracene	8020499		40.000	ug/kg wet	N/A	5.0	42.1		105		67-124			
Benzo (a) anthracene	8020499		40.000	ug/kg wet	N/A	5.0	39.4		99		76-119			
Benzo (b) fluoranthene	8020499		80.000	ug/kg wet	N/A	5.0	91.7		115		87-132			
Benzo (k) fluoranthene	8020499		40.000	ug/kg wet	N/A	5.0	47.5		119		86-132			
Benzo (a) pyrene	8020499		40.000	ug/kg wet	N/A	5.0	36.5		91		62-125			
Benzo (g,h,i) perylene	8020499		80.000	ug/kg wet	N/A	5.0	88.3		110		80-128			
Chrysene	8020499		40.000	ug/kg wet	N/A	5.0	40.2		101		80-121			
Dibenzo (a,h) anthracene	8020499		80.000	ug/kg wet	N/A	7.5	89.0		111		87-128			
Fluoranthene	8020499		80.000	ug/kg wet	N/A	10	89.2		112		78-129			
Fluorene	8020499		80.000	ug/kg wet	N/A	10	86.3		108		64-122			
Indeno (1,2,3-cd) pyrene	8020499		40.000	ug/kg wet	N/A	5.0	46.3		116		80-125			
1-Methylnaphthalene	8020499		400.00	ug/kg wet	N/A	30	404		101		72-115			
2-Methylnaphthalene	8020499		400.00	ug/kg wet	N/A	25	395		99		59-114			
Naphthalene	8020499		400.00	ug/kg wet	N/A	30	438		109		72-111			
Phenanthrene	8020499		40.000	ug/kg wet	N/A	5.0	46.5		116		78-132			
Pyrene	8020499		40.000	ug/kg wet	N/A	5.0	40.9		102		75-122			
Surrogate: 2-Fluorobiphenyl	*8020499*			ug/kg wet					*93*		*61-115*			
Semivolatile Organics by GC/MS														
Acenaphthene	8020961		3.33	mg/kg wet	N/A	0.330	2.65		80		55-120			
Acenaphthylene	8020961		3.33	mg/kg wet	N/A	0.330	2.75		82		45-130			
Anthracene	8020961		3.33	mg/kg wet	N/A	0.330	2.97		89		60-130			
Benzidine	8020961		3.33	mg/kg wet	N/A	3.30	3.32		99		35-130			
Benzo (a) anthracene	8020961		3.33	mg/kg wet	N/A	0.330	2.89		87		60-140			
Benzo (b) fluoranthene	8020961		3.33	mg/kg wet	N/A	0.330	2.99		90		60-135			
Benzo (k) fluoranthene	8020961		3.33	mg/kg wet	N/A	0.330	2.83		85		55-135			
Benzo (a) pyrene	8020961		3.33	mg/kg wet	N/A	0.330	2.91		87		60-135			
Benzo (g,h,i) perylene	8020961		3.33	mg/kg wet	N/A	0.330	2.94		88		60-130			
Benzyl alcohol	8020961		3.33	mg/kg wet	N/A	0.330	2.41		72		35-120			
Butyl benzyl phthalate	8020961		3.33	mg/kg wet	N/A	0.330	2.95		89		55-140			
Bis(2-chloroethyl)ether	8020961		3.33	mg/kg wet	N/A	0.330	2.32		70		35-105			
Bis(2-chloroethoxy)methane	8020961		3.33	mg/kg wet	N/A	0.330	2.52		76		40-105			
Bis(2-ethylhexyl)phthalate	8020961		3.33	mg/kg wet	N/A	0.330	2.93		88		55-140			
Bis(2-chloroisopropyl) ether	8020961		3.33	mg/kg wet	N/A	0.330	2.29		69		35-105			
4-Bromophenyl phenyl ether	8020961		3.33	mg/kg wet	N/A	0.330	3.07		92		60-135			
Carbazole	8020961		3.33	mg/kg wet	N/A	0.330	3.02		91		50-145			
4-Chloroaniline	8020961		3.33	mg/kg wet	N/A	0.330	2.52		76		35-120			
2-Chloronaphthalene	8020961		3.33	mg/kg wet	N/A	0.330	2.63		79		55-115			

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Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Semivolatile Organics by GC/MS														
4-Chlorophenyl phenyl ether	8020961		3.33	mg/kg wet	N/A	0.330	2.88		87		60-130			
Chrysene	8020961		3.33	mg/kg wet	N/A	0.330	2.92		87		60-140			
Dibenzo (a,h) anthracene	8020961		3.33	mg/kg wet	N/A	0.330	2.95		89		60-135			
Dibenzofuran	8020961		3.33	mg/kg wet	N/A	0.330	2.88		86		60-135			
Di-n-butyl phthalate	8020961		3.33	mg/kg wet	N/A	0.330	3.06		92		60-135			
1,2-Dichlorobenzene	8020961		3.33	mg/kg wet	N/A	0.330	2.27		68		40-100			
1,3-Dichlorobenzene	8020961		3.33	mg/kg wet	N/A	0.330	2.30		69		35-100			
1,4-Dichlorobenzene	8020961		3.33	mg/kg wet	N/A	0.330	2.32		70		35-100			
3,3'-Dichlorobenzidine	8020961		3.33	mg/kg wet	N/A	0.330	3.11		93		60-140			
Diethyl phthalate	8020961		3.33	mg/kg wet	N/A	0.330	2.90		87		60-140			
1,2-Diphenylhydrazine	8020961		3.33	mg/kg wet	N/A	0.330	2.60		78		45-130			
Dimethyl phthalate	8020961		3.33	mg/kg wet	N/A	0.330	2.89		87		60-130			
2,4-Dinitrotoluene	8020961		3.33	mg/kg wet	N/A	0.330	3.05		92		65-140			
2,6-Dinitrotoluene	8020961		3.33	mg/kg wet	N/A	0.330	3.04		91		65-140			
Di-n-octyl phthalate	8020961		3.33	mg/kg wet	N/A	0.330	2.97		89		50-145			
Fluoranthene	8020961		3.33	mg/kg wet	N/A	0.330	2.91		87		60-135			
Fluorene	8020961		3.33	mg/kg wet	N/A	0.330	2.72		82		60-125			
Hexachlorobenzene	8020961		3.33	mg/kg wet	N/A	0.330	3.06		92		65-140			
Hexachlorobutadiene	8020961		3.33	mg/kg wet	N/A	0.330	2.48		74		35-110			
Hexachlorocyclopentadiene	8020961		3.33	mg/kg wet	N/A	0.660	2.36		71		20-115			
Hexachloroethane	8020961		3.33	mg/kg wet	N/A	0.330	2.33		70		35-105			
Indeno (1,2,3-cd) pyrene	8020961		3.33	mg/kg wet	N/A	0.330	2.96		89		60-135			
Isophorone	8020961		3.33	mg/kg wet	N/A	0.330	2.63		79		45-120			
1-Methylnaphthalene	8020961		1.67	mg/kg wet	N/A	0.330	1.31		78		35-130			
2-Methylnaphthalene	8020961		3.33	mg/kg wet	N/A	0.330	2.59		78		45-110			
Naphthalene	8020961		3.33	mg/kg wet	N/A	0.330	2.40		72		40-100			
2-Nitroaniline	8020961		3.33	mg/kg wet	N/A	0.330	2.72		82		50-145			
3-Nitroaniline	8020961		3.33	mg/kg wet	N/A	0.330	2.92		88		50-145			
4-Nitroaniline	8020961		3.33	mg/kg wet	N/A	0.330	2.80		84		50-145			
Nitrobenzene	8020961		3.33	mg/kg wet	N/A	0.330	2.48		74		40-105			
N-Nitrosodimethylamine	8020961		3.33	mg/kg wet	N/A	0.330	2.26		68		35-105			
N-Nitrosodiphenylamine	8020961		3.33	mg/kg wet	N/A	0.330	3.01		90		50-130			
N-Nitrosodi-n-propylamine	8020961		3.33	mg/kg wet	N/A	0.330	2.39		72		45-115			
N-Nitrosodi-n-butylamine	8020961		3.33	mg/kg wet	N/A	0.330	2.75		82		50-115			
N-Nitrosodiethylamine	8020961		3.33	mg/kg wet	N/A	0.330	2.38		72		35-105			
N-Nitrosopyrrolidine	8020961		3.33	mg/kg wet	N/A	0.330	2.55		76		45-120			
Phenanthrene	8020961		3.33	mg/kg wet	N/A	0.330	2.92		88		60-130			
Pyrene	8020961		3.33	mg/kg wet	N/A	0.330	2.88		86		55-135			
Pyridine	8020961		3.33	mg/kg wet	N/A	0.330	1.92		57		25-90			
Pentachlorobenzene	8020961		3.33	mg/kg wet	N/A	0.330	2.91		87		60-130			
1,2,4,5-Tetrachlorobenzene	8020961		3.33	mg/kg wet	N/A	0.330	2.66		80		45-110			
1,2,4-Trichlorobenzene	8020961		3.33	mg/kg wet	N/A	0.330	2.46		74		40-105			
Benzoic acid	8020961		3.33	mg/kg wet	N/A	0.660	0.315		9		10-75			L1
4-Chloro-3-methylphenol	8020961		3.33	mg/kg wet	N/A	0.330	2.70		81		55-115			
2-Chlorophenol	8020961		3.33	mg/kg wet	N/A	0.330	2.29		69		45-100			

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Semivolatile Organics by GC/MS														
Cresol(s)	8020961		6.67	mg/kg wet	N/A	0.330	4.65		70		45-110			
2,4-Dichlorophenol	8020961		3.33	mg/kg wet	N/A	0.330	2.55		77		50-105			
2,4-Dimethylphenol	8020961		3.33	mg/kg wet	N/A	0.330	2.16		65		45-100			
2,4-Dinitrophenol	8020961		3.33	mg/kg wet	N/A	0.330	0.985		30		10-100			
2,5-Dinitrophenol	8020961		3.33	mg/kg wet	N/A	0.330	2.39		72		10-100			
4,6-Dinitro-2-methylphenol	8020961		3.33	mg/kg wet	N/A	0.330	2.40		72		15-110			
2-Methylphenol (o-Cresol)	8020961		3.33	mg/kg wet	N/A	0.330	2.29		69		45-105			
4-Methylphenol (p-Cresol)	8020961		3.33	mg/kg wet	N/A	0.330	2.36		71		50-105			
2-Nitrophenol	8020961		3.33	mg/kg wet	N/A	0.330	2.46		74		45-100			
4-Nitrophenol	8020961		3.33	mg/kg wet	N/A	0.330	2.80		84		50-145			
Pentachlorophenol	8020961		3.33	mg/kg wet	N/A	0.330	2.52		76		25-120			
Phenol	8020961		3.33	mg/kg wet	N/A	0.330	2.27		68		45-100			
2,4,5-Trichlorophenol	8020961		3.33	mg/kg wet	N/A	0.330	2.78		83		65-125			
2,4,6-Trichlorophenol	8020961		3.33	mg/kg wet	N/A	0.330	2.86		86		60-120			
Surrogate: Nitrobenzene-d5	*8020961*			mg/kg wet					*73*		*40-100*			
Surrogate: 2-Fluorobiphenyl	*8020961*			mg/kg wet					*81*		*55-115*			
Surrogate: Terphenyl-d14	*8020961*			mg/kg wet					*90*		*65-140*			
Surrogate: Phenol-d6	*8020961*			mg/kg wet					*70*		*45-105*			
Surrogate: 2-Fluorophenol	*8020961*			mg/kg wet					*67*		*40-95*			
Surrogate: 2,4,6-Tribromophenol	*8020961*			mg/kg wet					*93*		*55-150*			
Polychlorinated Biphenyls by EPA Method 8082														
PCB-1221	8020909		0.167	mg/kg wet	N/A	0.0500	0.101		61		41-131			
Surrogate: Decachlorobiphenyl	*8020909*			mg/kg wet					*95*		*59-140*			
Surrogate: Tetrachloro-meta-xylene	*8020909*			mg/kg wet					*82*		*46-136*			

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MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
General Chemistry Parameters														
QC Source Sample: WRB0772-01														
Chloride	8030053	57.6	609.03	mg/kg dry	N/A	30	588	767	87	117	75-125	27	20	R2
Metals														
QC Source Sample: WRB0649-09														
Arsenic	8020504	8.32	56.885	mg/kg dry	N/A	1.6	59.1	55.1	89	82	67-127	7	21	
Barium	8020504	31.9	28.442	mg/kg dry	N/A	0.13	54.5	53.9	79	77	57-124	1	32	
Cadmium	8020504	<0.10	28.442	mg/kg dry	N/A	0.11	21.7	20.8	76	73	65-118	4	18	
Chromium	8020504	10.5	28.442	mg/kg dry	N/A	0.20	33.5	32.6	81	78	63-122	3	21	
Lead	8020504	4.61	56.885	mg/kg dry	N/A	1.4	49.3	47.2	79	75	67-120	4	18	
Selenium	8020504	<4.0	113.77	mg/kg dry	N/A	4.6	95.1	90.1	84	79	63-120	5	21	
Silver	8020504	0.151	28.442	mg/kg dry	N/A	0.13	24.8	23.4	86	82	65-121	6	30	
QC Source Sample: WRB0772-04														
Mercury	8020571	0.0118	0.3184 1	mg/kg dry	N/A	0.013	0.270	0.272	81	82	56-140	1	24	
QC Source Sample: WRB0772-10														
Arsenic	8030022	17.1	62.071	mg/kg dry	N/A	1.7	70.3	74.4	86	92	67-127	6	21	
Barium	8030022	58.3	31.036	mg/kg dry	N/A	0.14	76.5	97.3	59	126	57-124	24	32	
Cadmium	8030022	0.927	31.036	mg/kg dry	N/A	0.12	23.7	24.1	73	75	65-118	2	18	
Chromium	8030022	4.31	31.036	mg/kg dry	N/A	0.22	29.9	32.3	82	90	63-122	8	21	
Lead	8030022	67.7	62.071	mg/kg dry	N/A	1.5	113	126	74	94	67-120	11	18	
Selenium	8030022	<4.0	124.14	mg/kg dry	N/A	5.0	107	99.4	87	80	63-120	8	21	
Silver	8030022	0.0860	31.036	mg/kg dry	N/A	0.14	27.9	26.3	89	84	65-121	6	30	
PNAs by SW8310														
QC Source Sample: WRB0718-01														
Acenaphthene	8020499	0.00	460.27	ug/kg dry	N/A	58	346	403	75	88	62-127	15	37	
Acenaphthylene	8020499	0.00	920.55	ug/kg dry	N/A	98	696	750	76	81	68-122	7	29	
Anthracene	8020499	0.00	46.027	ug/kg dry	N/A	5.8	44.1	45.4	96	99	50-138	3	26	
Benzo (a) anthracene	8020499	0.00	46.027	ug/kg dry	N/A	5.8	41.3	43.1	90	94	45-153	4	40	
Benzo (b) fluoranthene	8020499	0.00	92.055	ug/kg dry	N/A	5.8	92.1	97.5	100	106	69-149	6	23	
Benzo (k) fluoranthene	8020499	0.00	46.027	ug/kg dry	N/A	5.8	51.5	53.7	112	117	66-153	4	26	
Benzo (a) pyrene	8020499	0.00	46.027	ug/kg dry	N/A	5.8	43.5	43.1	95	94	39-147	1	36	
Benzo (g,h,i) perylene	8020499	0.00	92.055	ug/kg dry	N/A	5.8	90.9	96.5	99	105	63-152	6	27	
Chrysene	8020499	0.00	46.027	ug/kg dry	N/A	5.8	40.2	43.4	87	94	53-149	8	41	
Dibenzo (a,h) anthracene	8020499	0.00	92.055	ug/kg dry	N/A	8.6	89.8	95.9	98	104	81-134	7	20	
Fluoranthene	8020499	0.00	92.055	ug/kg dry	N/A	12	91.4	97.3	99	106	62-143	6	21	
Fluorene	8020499	0.00	92.055	ug/kg dry	N/A	12	72.0	86.1	78	94	51-133	18	38	
Indeno (1,2,3-cd) pyrene	8020499	0.00	46.027	ug/kg dry	N/A	5.8	51.4	50.4	112	110	55-151	2	30	
1-Methylnaphthalene	8020499	0.00	460.27	ug/kg dry	N/A	35	359	396	78	86	64-126	10	33	
2-Methylnaphthalene	8020499	0.00	460.27	ug/kg dry	N/A	29	287	368	62	80	44-131	25	42	
Naphthalene	8020499	0.00	460.27	ug/kg dry	N/A	35	430	459	93	100	60-125	7	30	
Phenanthrene	8020499	0.00	46.027	ug/kg dry	N/A	5.8	47.0	50.5	102	110	57-155	7	28	
Pyrene	8020499	0.00	46.027	ug/kg dry	N/A	5.8	43.5	43.8	95	95	47-147	1	38	
Surrogate: 2-Fluorobiphenyl	*8020499*			ug/kg dry					*86*	*99*	*55-120*			
Semivolatile Organics by GC/MS														
QC Source Sample: WRB0772-01														
Acenaphthene	8020961	2.88	4.01	mg/kg dry	N/A	2.01	5.46	5.03	64	53	35-130	8	40	
Acenaphthylene	8020961	0.970	4.01	mg/kg dry	N/A	2.01	4.63	4.39	91	85	35-130	5	40	
Anthracene	8020961	6.37	4.01	mg/kg dry	N/A	2.01	21.8	19.6	386	326	35-130	11	40	M1

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Received: 02/26/08
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MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Semivolatile Organics by GC/MS														
QC Source Sample: WRB0772-01														
Benzidine	8020961	<3.30	4.01	mg/kg dry	N/A	20.1	0.467	0.627	12	16	20-115	29	40	M1
Benzo (a) anthracene	8020961	16.4	4.01	mg/kg dry	N/A	2.01	14.5	14.4	-48	-49	40-135	1	40	M1
Benzo (b) fluoranthene	8020961	12.3	4.01	mg/kg dry	N/A	2.01	11.4	12.0	-24	-7	35-130	6	40	M1
Benzo (k) fluoranthene	8020961	12.7	4.01	mg/kg dry	N/A	2.01	11.9	11.8	-21	-23	25-120	1	40	M1
Benzo (a) pyrene	8020961	15.9	4.01	mg/kg dry	N/A	2.01	13.8	14.1	-51	-43	30-125	2	40	M1
Benzo (g,h,i) perylene	8020961	10.1	4.01	mg/kg dry	N/A	2.01	10.6	10.7	13	15	30-125	1	40	M1
Benzyl alcohol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.38	3.11	84	77	40-120	8	40	
Butyl benzyl phthalate	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.82	3.54	95	87	35-130	8	40	
Bis(2-chloroethyl)ether	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.44	3.24	86	80	25-120	6	40	
Bis(2-chloroethoxy)methane	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.61	3.46	90	86	25-120	4	40	
Bis(2-ethylhexyl)phthalate	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.84	3.80	96	94	35-130	1	40	
Bis(2-chloroisopropyl) ether	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.34	3.26	83	81	30-115	2	40	
4-Bromophenyl phenyl ether	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	4.13	3.96	103	98	40-130	4	40	
Carbazole	8020961	2.23	4.01	mg/kg dry	N/A	2.01	5.18	4.98	74	68	40-135	4	40	
4-Chloroaniline	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.19	3.03	80	75	25-120	5	40	
2-Chloronaphthalene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.80	3.81	95	94	35-120	0	40	
4-Chlorophenyl phenyl ether	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.81	3.53	95	87	40-125	8	35	
Chrysene	8020961	17.6	4.01	mg/kg dry	N/A	2.01	14.7	14.7	-71	-70	40-135	0	40	M1
Dibenzo (a,h) anthracene	8020961	3.22	4.01	mg/kg dry	N/A	2.01	5.37	5.70	54	61	30-125	6	40	
Dibenzofuran	8020961	1.87	4.01	mg/kg dry	N/A	2.01	5.08	4.63	80	68	35-130	9	40	
Di-n-butyl phthalate	8020961	0.655	4.01	mg/kg dry	N/A	2.01	4.42	4.34	94	91	40-130	2	40	
1,2-Dichlorobenzene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.29	3.14	82	78	25-110	5	40	
1,3-Dichlorobenzene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.37	2.95	84	73	20-110	13	40	
1,4-Dichlorobenzene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.13	3.11	78	77	20-110	1	40	
3,3'-Dichlorobenzidine	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	2.78	2.91	69	72	40-135	5	35	
Diethyl phthalate	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.72	3.61	93	89	45-130	3	40	
1,2-Diphenylhydrazine	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.25		81		30-125			
Dimethyl phthalate	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.80	3.48	95	86	50-130	9	35	
2,4-Dinitrotoluene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.73	3.66	93	90	40-135	2	40	
2,6-Dinitrotoluene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.73	3.70	93	92	40-135	1	40	
Di-n-octyl phthalate	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.47	3.45	87	85	35-130	1	40	
Fluoranthene	8020961	41.8	4.01	mg/kg dry	N/A	2.01	30.3		-288		40-135			M1
Fluorene	8020961	2.96	4.01	mg/kg dry	N/A	2.01	5.32	4.80	59	46	40-130	10	40	
Hexachlorobenzene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.95	3.79	98	94	40-135	4	40	
Hexachlorobutadiene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.54	3.37	88	83	20-110	5	40	
Hexachlorocyclopentadiene	8020961	<0.66	4.01	mg/kg dry	N/A	4.02	1.11	0.850	28	21	10-95	27	40	
Hexachloroethane	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.42	3.18	85	79	15-110	7	40	
Indeno (1,2,3-cd) pyrene	8020961	8.92	4.01	mg/kg dry	N/A	2.01	9.84	10.2	23	31	30-125	3	40	M1
Isophorone	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.52	3.34	88	83	40-115	5	40	
1-Methylnaphthalene	8020961	1.08	2.00	mg/kg dry	N/A	2.01	2.39		65		35-130			
2-Methylnaphthalene	8020961	1.26	4.01	mg/kg dry	N/A	2.01	4.23	3.95	74	67	30-120	7	40	
Naphthalene	8020961	2.88	4.01	mg/kg dry	N/A	2.01	4.38	3.87	37	25	30-115	12	40	M1
2-Nitroaniline	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.55	3.44	89	85	45-135	3	40	
3-Nitroaniline	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.39	3.33	85	82	40-135	2	40	
4-Nitroaniline	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.36	3.13	84	77	40-135	7	40	

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Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Semivolatile Organics by GC/MS														
QC Source Sample: WRB0772-01														
Nitrobenzene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.47	3.28	87	81	30-115	5	40	
N-Nitrosodimethylamine	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.13	2.66	78	66	35-110	16	40	
N-Nitrosodiphenylamine	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	4.27	4.10	107	101	30-125	4	40	
N-Nitrosodi-n-propylamine	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.47	3.33	87	82	35-120	4	40	
N-Nitrosodi-n-butylamine	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.67		92		35-115			
N-Nitrosodiethylamine	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.20		80		35-110			
N-Nitrosopyrrolidine	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.51		88		40-115			
Pyrene	8020961	27.0	4.01	mg/kg dry	N/A	2.01	29.2	2.02E8	55	)000000(	40-135	200	40	
Pyridine	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	2.62	2.44	65	60	25-105	7	40	
Pentachlorobenzene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	4.00		100		35-130			
1,2,4,5-Tetrachlorobenzene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.73		93		30-110			
1,2,4-Trichlorobenzene	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.64	3.49	91	86	25-115	4	40	
Benzoic acid	8020961	<0.66	4.01	mg/kg dry	N/A	4.02	0.176	0.215	4	5	10-30	20	40	M1
4-Chloro-3-methylphenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.54	3.42	88	85	50-125	3	40	
2-Chlorophenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.37	3.05	84	75	35-115	10	40	
Cresol(s)	8020961	<0.33	8.01	mg/kg dry	N/A	2.01	6.99	6.72	87	83	45-115	4	40	
2,4-Dichlorophenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.68	3.51	92	87	35-115	5	40	
2,4-Dimethylphenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.34	3.38	83	84	40-110	1	40	
2,4-Dinitrophenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	0.348	<2.01	9		10-75		40	M1,R
2,5-Dinitrophenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	1.58		39		10-75			
4,6-Dinitro-2-methylphenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	1.82	0.987	45	24	10-105	59	40	R
2-Methylphenol (o-Cresol)	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.46	3.14	86	78	40-115	10	40	
4-Methylphenol (p-Cresol)	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.53	3.57	88	88	45-115	1	35	
2-Nitrophenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.48	3.21	87	79	25-120	8	40	
4-Nitrophenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	2.75	2.50	69	62	25-120	10	40	
Pentachlorophenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	1.94	2.33	48	58	10-95	18	40	
Phenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.36	3.17	84	78	40-115	6	35	
2,4,5-Trichlorophenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.73	3.48	93	86	35-130	7	40	
2,4,6-Trichlorophenol	8020961	<0.33	4.01	mg/kg dry	N/A	2.01	3.82	3.74	95	92	30-125	2	40	
Surrogate: Nitrobenzene-d5	*8020961*			mg/kg dry					*80*	*77*	*35-115*			
Surrogate: 2-Fluorobiphenyl	*8020961*			mg/kg dry					*92*	*87*	*30-125*			
Surrogate: Terphenyl-d14	*8020961*			mg/kg dry					*90*	*86*	*40-135*			
Surrogate: Phenol-d6	*8020961*			mg/kg dry					*83*	*75*	*45-120*			
Surrogate: 2-Fluorophenol	*8020961*			mg/kg dry					*74*	*68*	*30-110*			
Surrogate: 2,4,6-Tribromophenol	*8020961*			mg/kg dry					*85*	*85*	*40-135*			
Polychlorinated Biphenyls by EPA Method 8082														
QC Source Sample: CRB0987-01														
PCB-1221	8020909	<0.050	0.192	mg/kg dry	N/A	0.0578	0.107	0.102	56	54	36-126	5	20	M1
Surrogate: Decachlorobiphenyl	*8020909*			mg/kg dry					*93*	*97*	*59-140*			
Surrogate: Tetrachloro-meta-xylene	*8020909*			mg/kg dry					*85*	*75*	*46-136*			

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0772
Project: 10813 City of Milwaukee
Project Number: 10813 - 1027 N. Edison Street

Received: 02/26/08
Reported: 03/06/08 15:22

CERTIFICATION SUMMARY

TestAmerica Watertown

Method	Matrix	Nelac	Wisconsin
EPA 245.5	Solid/Soil		X
SW 5035	Solid/Soil	X	X
SW 6010B	Solid/Soil	X	X
SW 8260B	Solid/Soil	X	X
SW 8310	Solid/Soil	X	X
SW 9251	Solid/Soil		X

Subcontracted Laboratories

TestAmerica Analytical - Cedar Falls NELAC Cert #000668, Wisconsin Cert #999917270, Illinois Cert #000668, Minnesota Cert #019-999-319, Iowa Cert #007
704 Enterprise Drive - Cedar Falls, IA 50613

Method Performed: SM 2540 G
Samples: WRB0772-01, WRB0772-02, WRB0772-03, WRB0772-04, WRB0772-05, WRB0772-06, WRB0772-07, WRB0772-08, WRB0772-09, WRB0772-10, WRB0772-11, WRB0772-12

Method Performed: SW 8082
Samples: WRB0772-01, WRB0772-02, WRB0772-02RE1, WRB0772-03, WRB0772-04, WRB0772-05, WRB0772-06, WRB0772-07, WRB0772-08, WRB0772-08RE1, WRB0772-09, WRB0772-10, WRB0772-11, WRB0772-12

Method Performed: SW 8270C
Samples: WRB0772-01, WRB0772-03, WRB0772-05, WRB0772-07, WRB0772-09, WRB0772-11

DATA QUALIFIERS AND DEFINITIONS

C9	Calibration Verification recovery was outside the method control limits for this analyte. The LCS for this analyte met CCV acceptance criteria, and was used to validate the batch.
L1	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was outside control limits.
M1	The MS and/or MSD were outside control limits.
R	Sample duplicate RPD exceeded the laboratory control limit.
R2	The RPD exceeded the acceptance limit.
RL1	Reporting limit raised due to sample matrix effects.
Z3	The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
ZX	Due to sample matrix effects, the surrogate recovery was outside the control limits.

ADDITIONAL COMMENTS

Results are reported on a wet weight basis unless otherwise noted.

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

WRB0772

1 of 2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Watertown Division
602 Commerce Drive
Watertown, WI 53094

Phone 920-261-1660 or 800-833-7036
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: 1300 W. Canal St.
City/State/Zip Code: Milwaukee / WI / 53233
Project Manager: Steve Meer
Telephone Number: 414-643-4124
Fax: 414-643-4210
Sampler Name: (Print Name) Steve Meer
Sampler Signature: [signature]

Project Name: 1027 N. Edison St.
Project #: 10813
Site/Location ID: _____
State: WI
Report To: Steve Meer
Invoice To: Same
Quote #: _____
PO#: _____

E-mail address: _____

TAT
X Standard
___ Rush (surcharges may apply)
Date Needed: _____
Fax Results: Y N
E-mail: 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	SVOC	PAH	RCRA Metals	PCBS	Chloride					REMARKS
01	GP-1 2-4	2/25	9:15	G		S					1	3		X	X		X	X	X					
02	GP-1 6-8	2/25	9:45	G		S					1	3		X		X	X	X	X					
03	GP-2 2-4	2/25	10:30	G		S					1	3		X	X	[illegible]	X	X	X					
04	GP-2 10-12	2/25	11:00	G		S					1	3		X		X	X	X	X					
05	GP-3 2-4	2/25	12:00	G		S					1	3		X	X	[illegible]	X	X	X					
06	GP-3 6-8	2/25	12:30	G		S					1	3		X		X	X	X	X					
07	GP-4 0-2	2/25	13:00	G		S					1	3		X	X		X	X	X					
08	GP-4 4-8	2/25	13:30	G		S					1	3		X		X	X	X	X					
09	GP-5 2-4	2/25	14:00	G		S					1	3		X	X		X	X	X					
10	GP-5 6-8	2/25	14:30	G		S					1	3		X		X	X	X	X					

Special Instructions:

LABORATORY COMMENTS:
Init Lab Temp: On Ice
Rec Lab Temp:
Custody Seals: Y N N/A
Bottles Supplied by TestAmerica: Y N
Method of Shipment: TA

Relinquished By: [signature]	Date: 2/26	Time: 9:30	Received By: Roy Wright	Date: 2/26/08	Time: 11:15
Relinquished By: Roy Wright	Date: 2/26/08	Time: [illegible]	Received By: Tim Spaude	Date: 2/26/08	Time: 15:27
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAL-0020 (1207)

2/26/08

WRBD 772 2 of 2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Watertown Division
602 Commerce Drive
Watertown, WI 53094

Phone 920-261-1660 or 800-833-7036
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: 1300 W. Canal St.
City/State/Zip Code: Milwaukee/WI/53233
Project Manager: Steve Meer
Telephone Number: 414-643-4124
Fax: 414-643-4210
Sampler Name: (Print Name) Steve Meer
Sampler Signature: [signature]

Project Name: 1027 N. Edison St.
Project #: 10813
Site/Location ID: _____
State: WI
Report To: Steve Meer
Invoice To: Same
Quote #: _____
PO#: _____

E-mail address: _____

TAT
X Standard
___ Rush (surcharges may apply)
Date Needed: _____
Fax Results: Y N
E-mail: 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)	HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	VOC	SVOC	PAH	RCRA metals	PCBs	Chloride					REMARKS
11-	GP-6 0-2	2/25	1500	G		S					1	3		X	X		X	X	X					
12-	GP-6 6-8	2/25	1530	G		S					1	3		X		X	X	X	X					

Special Instructions:

LABORATORY COMMENTS:
Init Lab Temp: On Ice
Rec Lab Temp:
Custody Seals: Y N N/A
Bottles Supplied by TestAmerica: Y N
Method of Shipment:

Relinquished By: [signature]	Date: 2/26	Time: 9:30	Received By: Roy Wright	Date: 2/26/08	Time: 11:15
Relinquished By: Roy Wright	Date: 2/26/08	Time: 1410	Received By: T Sparacle	Date: 2/26/08	Time: 15:27
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAL-0020 (1207)

R 2/26/08

ATTACHMENT E

Groundwater Laboratory Analytical Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
602 Commerce Drive Watertown, WI 53094 * 800-833-7036 * Fax 920-261-8120

March 12, 2008

RECEIVED
MAR 17 2008

Client:	SIGMA ENVIRONMENTAL SERV. - Milwaukee 1300 West Canal Street Milwaukee, WI 53233	Work Order: Project Name: Project Number:	WRB0904 10813 City of Milwaukee 10813
Attn:	Mr. Steve Meer	Date Received:	02/29/08

An executed copy of the chain of custody is also included as an addendum to this report.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-833-7036

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
TW-1	WRB0904-01	02/28/08 12:00
TW-2	WRB0904-02	02/28/08 15:00
TW-3	WRB0904-03	02/28/08 13:00
TW-4	WRB0904-04	02/28/08 14:00
TW-5	WRB0904-05	02/28/08 16:00
Dup	WRB0904-06	02/28/08
Equip	WRB0904-07	02/28/08
Trip Blank	WRB0904-08	02/28/08
TW-5	WRB0904-09	02/28/08 13:30

SW 8082, SW 8270C analysis performed at Lab ID: 999917270

Samples were received into laboratory on ice.

Wisconsin Certification Number: 128053530

The Chain of Custody, 1 page, is included and is an integral part of this report.

Unless subcontracted, volatiles analyses (including VOC, PVOC, GRO, BTEX, and TPH gasoline) performed by TestAmerica Watertown at 1101 Industrial Drive, Units 9&10. All other analyses performed at the address shown in the heading of this report.

Approved By:

Brian DeJong

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

ANALYTICAL REPORT

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0904-01 (TW-1 - Ground Water)							**Sampled: 02/28/08 12:00**			
General Chemistry Parameters										
Chloride	**200**		mg/L	10	33	10	03/04/08 17:03	pxm	8030054	EPA 325.2
Metals Dissolved										
Arsenic	**1.2**		ug/L	0.070	0.23	1	03/10/08 10:16	gaf	8030078	SW 6020A
Barium	**69**		ug/L	0.060	0.20	1	03/10/08 10:16	gaf	8030078	SW 6020A
Cadmium	**0.050**		ug/L	0.010	0.033	1	03/10/08 10:16	gaf	8030078	SW 6020A
Chromium	**3.6**		ug/L	0.070	0.23	1	03/10/08 10:16	gaf	8030078	SW 6020A
Lead	**0.24**		ug/L	0.040	0.13	1	03/10/08 10:16	gaf	8030078	SW 6020A
Mercury	**0.000086**	B, Ja	mg/L	0.000065	0.00022	1	03/04/08 13:33	jej	8030027	EPA 245.1
Selenium	**0.85**		ug/L	0.17	0.57	1	03/10/08 10:16	gaf	8030078	SW 6020A
Silver	**0.030**	Ja	ug/L	0.020	0.067	1	03/10/08 10:16	gaf	8030078	SW 6020A
VOCs by SW8260B										
Benzene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Bromobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Bromochloromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
Bromodichloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Bromoform	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Bromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
n-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
sec-Butylbenzene	**0.46**	Ja	ug/L	0.25	0.83	1	03/08/08 05:50	mae	8030142	SW 8260B
tert-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Carbon Tetrachloride	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
Chlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Chlorodibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Chloroethane	<1.0		ug/L	1.0	3.3	1	03/08/08 05:50	mae	8030142	SW 8260B
Chloroform	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Chloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
2-Chlorotoluene	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
4-Chlorotoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
1,2-Dibromo-3-chloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,2-Dibromoethane (EDB)	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Dibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
1,2-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
1,3-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
1,4-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Dichlorodifluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,1-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,2-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,1-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
cis-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
trans-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,3-Dichloropropane	<0.25		ug/L	0.25	0.83	1	03/08/08 05:50	mae	8030142	SW 8260B
2,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,1-Dichloropropene	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
cis-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
trans-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
2,3-Dichloropropene	<0.25		ug/L	0.25	0.83	1	03/08/08 05:50	mae	8030142	SW 8260B
Isopropyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
Ethylbenzene	**1.6**	Ja	ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
Hexachlorobutadiene	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-01 (TW-1 - Ground Water) - cont. **Sampled: 02/28/08 12:00**

VOCs by SW8260B - cont.

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Isopropylbenzene	**0.49**	Ja	ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
p-Isopropyltoluene	**0.42**	Ja	ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Methylene Chloride	<1.0		ug/L	1.0	3.3	1	03/08/08 05:50	mae	8030142	SW 8260B
Methyl tert-Butyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
Naphthalene	**9.2**		ug/L	0.25	0.83	1	03/08/08 05:50	mae	8030142	SW 8260B
n-Propylbenzene	**0.85**	Ja	ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
Styrene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
1,1,1,2-Tetrachloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 05:50	mae	8030142	SW 8260B
1,1,2,2-Tetrachloroethane	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Tetrachloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
Toluene	**1.9**		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
1,2,3-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 05:50	mae	8030142	SW 8260B
1,2,4-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 05:50	mae	8030142	SW 8260B
1,1,1-Trichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,1,2-Trichloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 05:50	mae	8030142	SW 8260B
Trichloroethene	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Trichlorofluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,2,3-Trichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
1,2,4-Trimethylbenzene	**9.0**		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
1,3,5-Trimethylbenzene	**1.7**		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Vinyl chloride	<0.20		ug/L	0.20	0.67	1	03/08/08 05:50	mae	8030142	SW 8260B
Xylenes, Total	**9.5**		ug/L	0.50	1.7	1	03/08/08 05:50	mae	8030142	SW 8260B
Surr: Dibromofluoromethane (89-119%)	*103 %*									
Surr: Toluene-d8 (91-109%)	*95 %*									
Surr: 4-Bromofluorobenzene (89-114%)	*99 %*									

Semivolatile Organics by GC/MS

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Acenaphthene	<1.89		ug/L	1.89	6.29	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Acenaphthylene	<1.41		ug/L	1.41	4.70	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Anthracene	**1.70**	J	ug/L	1.15	3.83	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Benzidine	<33.0	CIN	ug/L	33.0	110	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Benzo (a) anthracene	<1.10		ug/L	1.10	3.66	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Benzo (b) fluoranthene	<1.90		ug/L	1.90	6.33	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Benzo (k) fluoranthene	<2.12		ug/L	2.12	7.06	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Benzo (a) pyrene	<1.93		ug/L	1.93	6.43	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Benzo (g,h,i) perylene	<2.03		ug/L	2.03	6.76	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Benzyl alcohol	<1.26		ug/L	1.26	4.20	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Butyl benzyl phthalate	<1.54		ug/L	1.54	5.13	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Bis(2-chloroethyl)ether	<1.50		ug/L	1.50	5.00	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Bis(2-chloroethoxy)methane	<1.52		ug/L	1.52	5.06	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Bis(2-ethylhexyl)phthalate	<1.60		ug/L	1.60	5.33	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Bis(2-chloroisopropyl) ether	<1.33		ug/L	1.33	4.43	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
4-Bromophenyl phenyl ether	<1.96		ug/L	1.96	6.53	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Carbazole	<1.42		ug/L	1.42	4.73	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
4-Chloroaniline	<1.23		ug/L	1.23	4.10	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2-Chloronaphthalene	<1.79		ug/L	1.79	5.96	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
4-Chlorophenyl phenyl ether	<2.08		ug/L	2.08	6.93	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Chrysene	<1.33		ug/L	1.33	4.43	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Dibenzo (a,h) anthracene	<2.20		ug/L	2.20	7.33	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Dibenzofuran	<1.64		ug/L	1.64	5.46	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Di-n-butyl phthalate	<1.55		ug/L	1.55	5.16	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
1,2-Dichlorobenzene	<1.40		ug/L	1.40	4.66	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
1,3-Dichlorobenzene	<1.50		ug/L	1.50	5.00	1.04	03/11/08 17:15	dmd	8030105	SW 8270C

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-01 (TW-1 - Ground Water) - cont. **Sampled: 02/28/08 12:00**

Semivolatile Organics by GC/MS - cont.

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
1,4-Dichlorobenzene	<1.59		ug/L	1.59	5.29	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
3,3'-Dichlorobenzidine	<1.74		ug/L	1.74	5.79	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Diethyl phthalate	<1.34		ug/L	1.34	4.46	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Dimethyl phthalate	**3.23**	J	ug/L	1.55	5.16	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2,4-Dinitrotoluene	<1.32		ug/L	1.32	4.40	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2,6-Dinitrotoluene	<1.93		ug/L	1.93	6.43	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Di-n-octyl phthalate	<1.78	C	ug/L	1.78	5.93	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Fluoranthene	<1.27		ug/L	1.27	4.23	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Fluorene	<1.56		ug/L	1.56	5.19	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Hexachlorobenzene	<2.01		ug/L	2.01	6.69	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Hexachlorobutadiene	<1.94		ug/L	1.94	6.46	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Hexachlorocyclopentadiene	<1.09		ug/L	1.09	3.63	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Hexachloroethane	<1.38		ug/L	1.38	4.60	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Indeno (1,2,3-cd) pyrene	<1.62		ug/L	1.62	5.39	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Isophorone	<1.49		ug/L	1.49	4.96	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2-Methylnaphthalene	**7.37**	J	ug/L	1.50	5.00	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Naphthalene	**5.13**	J	ug/L	1.49	4.96	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2-Nitroaniline	<1.54		ug/L	1.54	5.13	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
3-Nitroaniline	<1.68		ug/L	1.68	5.59	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
4-Nitroaniline	<1.86		ug/L	1.86	6.19	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Nitrobenzene	<1.52		ug/L	1.52	5.06	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
N-Nitrosodimethylamine	<0.892	ICV2	ug/L	0.892	2.97	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
N-Nitrosodiphenylamine	<1.82		ug/L	1.82	6.06	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
N-Nitrosodi-n-propylamine	<1.95		ug/L	1.95	6.49	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Phenanthrene	<1.37		ug/L	1.37	4.56	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Pyrene	<1.28		ug/L	1.28	4.26	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Pyridine	**5.28**	J	ug/L	0.670	2.23	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
1,2,4-Trichlorobenzene	<1.65		ug/L	1.65	5.49	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Benzoic acid	<13.0		ug/L	13.0	43.3	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
4-Chloro-3-methylphenol	<1.45		ug/L	1.45	4.83	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2-Chlorophenol	<1.38		ug/L	1.38	4.60	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Cresol(s)	<1.22		ug/L	1.22	4.06	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2,4-Dichlorophenol	<1.72		ug/L	1.72	5.73	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2,4-Dimethylphenol	**0.899**	J	ug/L	0.899	2.99	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2,4-Dinitrophenol	<1.25		ug/L	1.25	4.16	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
4,6-Dinitro-2-methylphenol	<1.64		ug/L	1.64	5.46	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2-Methylphenol (o-Cresol)	<1.22		ug/L	1.22	4.06	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
4-Methylphenol (p-Cresol)	<1.05		ug/L	1.05	3.50	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2-Nitrophenol	<1.65		ug/L	1.65	5.49	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
4-Nitrophenol	<0.834		ug/L	0.834	2.78	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Pentachlorophenol	<1.22		ug/L	1.22	4.06	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Phenol	<0.730		ug/L	0.730	2.43	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2,4,5-Trichlorophenol	<1.78		ug/L	1.78	5.93	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
2,4,6-Trichlorophenol	<1.84		ug/L	1.84	6.13	1.04	03/11/08 17:15	dmd	8030105	SW 8270C
Surr: Nitrobenzene-d5 (15-110%)	*82 %*									
Surr: 2-Fluorobiphenyl (15-110%)	*89 %*									
Surr: Terphenyl-d14 (20-115%)	*98 %*									
Surr: Phenol-d6 (10-75%)	*13 %*									
Surr: 2-Fluorophenol (10-85%)	*24 %*									
Surr: 2,4,6-Tribromophenol (35-130%)	*77 %*									
Polychlorinated Biphenyls by EPA Method 8082										
PCB-1016	<0.140		ug/L	0.140	0.466	1.03	03/05/08 13:40	slt	8030063	SW 8082

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0904-01 (TW-1 - Ground Water) - cont.							**Sampled: 02/28/08 12:00**			
Polychlorinated Biphenyls by EPA Method 8082 - cont.										
PCB-1221	<0.490		ug/L	0.490	1.63	1.03	03/05/08 13:40	slt	8030063	SW 8082
PCB-1232	<0.120		ug/L	0.120	0.400	1.03	03/05/08 13:40	slt	8030063	SW 8082
PCB-1242	<0.160		ug/L	0.160	0.533	1.03	03/05/08 13:40	slt	8030063	SW 8082
PCB-1248	<0.120		ug/L	0.120	0.400	1.03	03/05/08 13:40	slt	8030063	SW 8082
PCB-1254	<0.0440		ug/L	0.0440	0.147	1.03	03/05/08 13:40	slt	8030063	SW 8082
PCB-1260	<0.0750		ug/L	0.0750	0.250	1.03	03/05/08 13:40	slt	8030063	SW 8082
PCB-1268	<0.0680		ug/L	0.0680	0.226	1.03	03/05/08 13:40	slt	8030063	SW 8082
Surr: Decachlorobiphenyl (10-100%)	*63 %*									
Surr: Tetrachloro-meta-xylene (22-112%)	*73 %*									
Sample ID: WRB0904-02 (TW-2 - Ground Water)							**Sampled: 02/28/08 15:00**			
General Chemistry Parameters										
Chloride	**350**		mg/L	10	33	10	03/04/08 17:03	pxm	8030054	EPA 325.2
Metals Dissolved										
Arsenic	**1.6**		ug/L	0.14	0.47	2	03/10/08 10:16	gaf	8030078	SW 6020A
Barium	**140**		ug/L	0.12	0.40	2	03/10/08 10:16	gaf	8030078	SW 6020A
Cadmium	**0.020**	Ja	ug/L	0.020	0.067	2	03/10/08 10:16	gaf	8030078	SW 6020A
Chromium	**20**		ug/L	0.14	0.47	2	03/10/08 10:16	gaf	8030078	SW 6020A
Lead	**0.42**		ug/L	0.080	0.27	2	03/10/08 10:16	gaf	8030078	SW 6020A
Mercury	**0.000089**	B, Ja	mg/L	0.000065	0.00022	1	03/04/08 13:33	jej	8030027	EPA 245.1
Selenium	**1.5**		ug/L	0.34	1.1	2	03/10/08 10:16	gaf	8030078	SW 6020A
Silver	**0.10**	Ja	ug/L	0.040	0.13	2	03/10/08 10:16	gaf	8030078	SW 6020A
VOCs by SW8260B										
Benzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Bromobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Bromochloromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
Bromodichloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Bromoform	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Bromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
n-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
sec-Butylbenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 06:16	mae	8030142	SW 8260B
tert-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Carbon Tetrachloride	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
Chlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Chlorodibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Chloroethane	<1.0		ug/L	1.0	3.3	1	03/08/08 06:16	mae	8030142	SW 8260B
Chloroform	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Chloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
2-Chlorotoluene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
4-Chlorotoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
1,2-Dibromo-3-chloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
1,2-Dibromoethane (EDB)	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Dibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
1,2-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
1,3-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
1,4-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Dichlorodifluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
1,1-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
1,2-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
1,1-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
cis-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
trans-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-02 (TW-2 - Ground Water) - cont. **Sampled: 02/28/08 15:00**

VOCs by SW8260B - cont.

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
1,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
1,3-Dichloropropane	<0.25		ug/L	0.25	0.83	1	03/08/08 06:16	mae	8030142	SW 8260B
2,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
1,1-Dichloropropene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
cis-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
trans-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
2,3-Dichloropropene	<0.25		ug/L	0.25	0.83	1	03/08/08 06:16	mae	8030142	SW 8260B
Isopropyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
Ethylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
Hexachlorobutadiene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
Isopropylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
p-Isopropyltoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Methylene Chloride	<1.0		ug/L	1.0	3.3	1	03/08/08 06:16	mae	8030142	SW 8260B
Methyl tert-Butyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
Naphthalene	**0.35**	Ja	ug/L	0.25	0.83	1	03/08/08 06:16	mae	8030142	SW 8260B
n-Propylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
Styrene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
1,1,1,2-Tetrachloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 06:16	mae	8030142	SW 8260B
1,1,2,2-Tetrachloroethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Tetrachloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
Toluene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
1,2,3-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 06:16	mae	8030142	SW 8260B
1,2,4-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 06:16	mae	8030142	SW 8260B
1,1,1-Trichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
1,1,2-Trichloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 06:16	mae	8030142	SW 8260B
Trichloroethene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Trichlorofluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
1,2,3-Trichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
1,2,4-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
1,3,5-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Vinyl chloride	<0.20		ug/L	0.20	0.67	1	03/08/08 06:16	mae	8030142	SW 8260B
Xylenes, Total	<0.50		ug/L	0.50	1.7	1	03/08/08 06:16	mae	8030142	SW 8260B
Surr: Dibromofluoromethane (89-119%)	*97 %*									
Surr: Toluene-d8 (91-109%)	*97 %*									
Surr: 4-Bromofluorobenzene (89-114%)	*98 %*									

Semivolatile Organics by GC/MS

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Acenaphthene	<2.10		ug/L	2.10	6.99	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Acenaphthylene	<1.57		ug/L	1.57	5.22	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Anthracene	<1.28		ug/L	1.28	4.26	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Benzidine	<36.7	CIN	ug/L	36.7	122	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Benzo (a) anthracene	<1.22		ug/L	1.22	4.07	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Benzo (b) fluoranthene	<2.11		ug/L	2.11	7.03	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Benzo (k) fluoranthene	<2.36		ug/L	2.36	7.84	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Benzo (a) pyrene	<2.14		ug/L	2.14	7.14	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Benzo (g,h,i) perylene	<2.26		ug/L	2.26	7.51	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Benzyl alcohol	<1.40		ug/L	1.40	4.66	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Butyl benzyl phthalate	<1.71		ug/L	1.71	5.70	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Bis(2-chloroethyl)ether	<1.67		ug/L	1.67	5.55	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Bis(2-chloroethoxy)methane	<1.69		ug/L	1.69	5.62	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Bis(2-ethylhexyl)phthalate	<1.78		ug/L	1.78	5.92	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Bis(2-chloroisopropyl) ether	<1.48		ug/L	1.48	4.92	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
4-Bromophenyl phenyl ether	<2.18		ug/L	2.18	7.25	1.11	03/11/08 17:50	dmd	8030105	SW 8270C

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-02 (TW-2 - Ground Water) - cont. **Sampled: 02/28/08 15:00**

Semivolatile Organics by GC/MS - cont.

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Carbazole	<1.58		ug/L	1.58	5.25	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
4-Chloroaniline	<1.37		ug/L	1.37	4.55	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2-Chloronaphthalene	<1.99		ug/L	1.99	6.62	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
4-Chlorophenyl phenyl ether	<2.31		ug/L	2.31	7.70	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Chrysene	<1.48		ug/L	1.48	4.92	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Dibenzo (a,h) anthracene	<2.44		ug/L	2.44	8.14	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Dibenzofuran	<1.82		ug/L	1.82	6.07	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Di-n-butyl phthalate	<1.72		ug/L	1.72	5.74	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
1,2-Dichlorobenzene	<1.56		ug/L	1.56	5.18	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
1,3-Dichlorobenzene	<1.67		ug/L	1.67	5.55	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
1,4-Dichlorobenzene	<1.77		ug/L	1.77	5.88	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
3,3'-Dichlorobenzidine	<1.93		ug/L	1.93	6.44	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Diethyl phthalate	<1.49		ug/L	1.49	4.96	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Dimethyl phthalate	<1.72		ug/L	1.72	5.74	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2,4-Dinitrotoluene	<1.47		ug/L	1.47	4.88	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2,6-Dinitrotoluene	<2.14		ug/L	2.14	7.14	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Di-n-octyl phthalate	<1.98	C	ug/L	1.98	6.59	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Fluoranthene	<1.41		ug/L	1.41	4.70	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Fluorene	<1.73		ug/L	1.73	5.77	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Hexachlorobenzene	<2.23		ug/L	2.23	7.44	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Hexachlorobutadiene	<2.16		ug/L	2.16	7.18	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Hexachlorocyclopentadiene	<1.21		ug/L	1.21	4.03	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Hexachloroethane	<1.53		ug/L	1.53	5.11	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Indeno (1,2,3-cd) pyrene	<1.80		ug/L	1.80	5.99	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Isophorone	<1.66		ug/L	1.66	5.51	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2-Methylnaphthalene	<1.67		ug/L	1.67	5.55	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Naphthalene	<1.66		ug/L	1.66	5.51	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2-Nitroaniline	<1.71		ug/L	1.71	5.70	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
3-Nitroaniline	<1.87		ug/L	1.87	6.22	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
4-Nitroaniline	<2.07		ug/L	2.07	6.88	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Nitrobenzene	<1.69		ug/L	1.69	5.62	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
N-Nitrosodimethylamine	<0.991	ICV2	ug/L	0.991	3.30	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
N-Nitrosodiphenylamine	<2.02		ug/L	2.02	6.73	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
N-Nitrosodi-n-propylamine	<2.17		ug/L	2.17	7.22	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Phenanthrene	<1.52		ug/L	1.52	5.07	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Pyrene	<1.42		ug/L	1.42	4.74	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Pyridine	<0.744		ug/L	0.744	2.48	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
1,2,4-Trichlorobenzene	<1.83		ug/L	1.83	6.10	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Benzoic acid	<14.4		ug/L	14.4	48.1	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
4-Chloro-3-methylphenol	<1.61		ug/L	1.61	5.36	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2-Chlorophenol	<1.53		ug/L	1.53	5.11	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Cresol(s)	<1.36		ug/L	1.36	4.51	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2,4-Dichlorophenol	<1.91		ug/L	1.91	6.36	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2,4-Dimethylphenol	<0.999		ug/L	0.999	3.33	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2,4-Dinitrophenol	<1.39		ug/L	1.39	4.62	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
4,6-Dinitro-2-methylphenol	<1.82		ug/L	1.82	6.07	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2-Methylphenol (o-Cresol)	<1.36		ug/L	1.36	4.51	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
4-Methylphenol (p-Cresol)	<1.17		ug/L	1.17	3.88	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2-Nitrophenol	<1.83		ug/L	1.83	6.10	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
4-Nitrophenol	<0.927		ug/L	0.927	3.09	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Pentachlorophenol	<1.36		ug/L	1.36	4.51	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Phenol	<0.811		ug/L	0.811	2.70	1.11	03/11/08 17:50	dmd	8030105	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0904-02 (TW-2 - Ground Water) - cont.							**Sampled: 02/28/08 15:00**			
Semivolatile Organics by GC/MS - cont.										
2,4,5-Trichlorophenol	<1.98		ug/L	1.98	6.59	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
2,4,6-Trichlorophenol	<2.04		ug/L	2.04	6.81	1.11	03/11/08 17:50	dmd	8030105	SW 8270C
Surr: Nitrobenzene-d5 (15-110%)	*53 %*									
Surr: 2-Fluorobiphenyl (15-110%)	*54 %*									
Surr: Terphenyl-d14 (20-115%)	*46 %*									
Surr: Phenol-d6 (10-75%)	*22 %*									
Surr: 2-Fluorophenol (10-85%)	*36 %*									
Surr: 2,4,6-Tribromophenol (35-130%)	*60 %*									
Polychlorinated Biphenyls by EPA Method 8082										
PCB-1016	<0.140		ug/L	0.140	0.466	1.09	03/05/08 13:51	slt	8030063	SW 8082
PCB-1221	<0.490		ug/L	0.490	1.63	1.09	03/05/08 13:51	slt	8030063	SW 8082
PCB-1232	<0.120		ug/L	0.120	0.400	1.09	03/05/08 13:51	slt	8030063	SW 8082
PCB-1242	<0.160		ug/L	0.160	0.533	1.09	03/05/08 13:51	slt	8030063	SW 8082
PCB-1248	<0.120		ug/L	0.120	0.400	1.09	03/05/08 13:51	slt	8030063	SW 8082
PCB-1254	<0.0440		ug/L	0.0440	0.147	1.09	03/05/08 13:51	slt	8030063	SW 8082
PCB-1260	<0.0750		ug/L	0.0750	0.250	1.09	03/05/08 13:51	slt	8030063	SW 8082
PCB-1268	<0.0680		ug/L	0.0680	0.226	1.09	03/05/08 13:51	slt	8030063	SW 8082
Surr: Decachlorobiphenyl (10-100%)	*44 %*									
Surr: Tetrachloro-meta-xylene (22-112%)	*69 %*									
Sample ID: WRB0904-03 (TW-3 - Ground Water)							**Sampled: 02/28/08 13:00**			
General Chemistry Parameters										
Chloride	**130**		mg/L	10	33	10	03/04/08 17:03	pxm	8030054	EPA 325.2
Metals Dissolved										
Arsenic	**0.34**		ug/L	0.070	0.23	1	03/10/08 10:16	gaf	8030078	SW 6020A
Barium	**120**		ug/L	0.30	1.0	5	03/10/08 10:16	gaf	8030078	SW 6020A
Cadmium	<0.010		ug/L	0.010	0.033	1	03/10/08 10:16	gaf	8030078	SW 6020A
Chromium	**9.3**		ug/L	0.070	0.23	1	03/10/08 10:16	gaf	8030078	SW 6020A
Lead	**0.040**	Ja	ug/L	0.040	0.13	1	03/10/08 10:16	gaf	8030078	SW 6020A
Mercury	**0.000082**	B, Ja	mg/L	0.000065	0.00022	1	03/04/08 13:33	jej	8030027	EPA 245.1
Selenium	**1.1**		ug/L	0.17	0.57	1	03/10/08 10:16	gaf	8030078	SW 6020A
Silver	<0.020		ug/L	0.020	0.067	1	03/10/08 10:16	gaf	8030078	SW 6020A
VOCs by SW8260B										
Benzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Bromobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Bromochloromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
Bromodichloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Bromoform	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Bromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
n-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
sec-Butylbenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 06:43	mae	8030142	SW 8260B
tert-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Carbon Tetrachloride	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
Chlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Chlorodibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Chloroethane	<1.0		ug/L	1.0	3.3	1	03/08/08 06:43	mae	8030142	SW 8260B
Chloroform	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Chloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
2-Chlorotoluene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
4-Chlorotoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
1,2-Dibromo-3-chloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,2-Dibromoethane (EDB)	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-03 (TW-3 - Ground Water) - cont. **Sampled: 02/28/08 13:00**

VOCs by SW8260B - cont.

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Dibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
1,2-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
1,3-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
1,4-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Dichlorodifluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,1-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,2-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,1-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
cis-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
trans-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,3-Dichloropropane	<0.25		ug/L	0.25	0.83	1	03/08/08 06:43	mae	8030142	SW 8260B
2,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,1-Dichloropropene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
cis-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
trans-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
2,3-Dichloropropene	<0.25		ug/L	0.25	0.83	1	03/08/08 06:43	mae	8030142	SW 8260B
Isopropyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
Ethylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
Hexachlorobutadiene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
Isopropylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
p-Isopropyltoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Methylene Chloride	<1.0		ug/L	1.0	3.3	1	03/08/08 06:43	mae	8030142	SW 8260B
Methyl tert-Butyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
Naphthalene	<0.25		ug/L	0.25	0.83	1	03/08/08 06:43	mae	8030142	SW 8260B
n-Propylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
Styrene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
1,1,1,2-Tetrachloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 06:43	mae	8030142	SW 8260B
1,1,2,2-Tetrachloroethane	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Tetrachloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
Toluene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
1,2,3-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 06:43	mae	8030142	SW 8260B
1,2,4-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 06:43	mae	8030142	SW 8260B
1,1,1-Trichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,1,2-Trichloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 06:43	mae	8030142	SW 8260B
Trichloroethene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Trichlorofluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,2,3-Trichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
1,2,4-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
1,3,5-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Vinyl chloride	<0.20		ug/L	0.20	0.67	1	03/08/08 06:43	mae	8030142	SW 8260B
Xylenes, Total	<0.50		ug/L	0.50	1.7	1	03/08/08 06:43	mae	8030142	SW 8260B
Surr: Dibromofluoromethane (89-119%)	*96 %*									
Surr: Toluene-d8 (91-109%)	*100 %*									
Surr: 4-Bromofluorobenzene (89-114%)	*102 %*									

Semivolatile Organics by GC/MS

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Acenaphthene	<1.89		ug/L	1.89	6.29	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Acenaphthylene	<1.41		ug/L	1.41	4.70	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Anthracene	<1.15		ug/L	1.15	3.83	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Benzidine	<33.0	CIN	ug/L	33.0	110	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Benzo (a) anthracene	<1.10		ug/L	1.10	3.66	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Benzo (b) fluoranthene	<1.90		ug/L	1.90	6.33	1.05	03/11/08 18:24	dmd	8030105	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-03 (TW-3 - Ground Water) - cont. **Sampled: 02/28/08 13:00**

Semivolatile Organics by GC/MS - cont.

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Benzo (k) fluoranthene	<2.12		ug/L	2.12	7.06	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Benzo (a) pyrene	<1.93		ug/L	1.93	6.43	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Benzo (g,h,i) perylene	<2.03		ug/L	2.03	6.76	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Benzyl alcohol	<1.26		ug/L	1.26	4.20	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Butyl benzyl phthalate	<1.54		ug/L	1.54	5.13	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Bis(2-chloroethyl)ether	<1.50		ug/L	1.50	5.00	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Bis(2-chloroethoxy)methane	<1.52		ug/L	1.52	5.06	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Bis(2-ethylhexyl)phthalate	<1.60		ug/L	1.60	5.33	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Bis(2-chloroisopropyl) ether	<1.33		ug/L	1.33	4.43	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
4-Bromophenyl phenyl ether	<1.96		ug/L	1.96	6.53	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Carbazole	<1.42		ug/L	1.42	4.73	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
4-Chloroaniline	<1.23		ug/L	1.23	4.10	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2-Chloronaphthalene	<1.79		ug/L	1.79	5.96	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
4-Chlorophenyl phenyl ether	<2.08		ug/L	2.08	6.93	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Chrysene	<1.33		ug/L	1.33	4.43	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Dibenzo (a,h) anthracene	<2.20		ug/L	2.20	7.33	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Dibenzofuran	<1.64		ug/L	1.64	5.46	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Di-n-butyl phthalate	<1.55		ug/L	1.55	5.16	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
1,2-Dichlorobenzene	<1.40		ug/L	1.40	4.66	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
1,3-Dichlorobenzene	<1.50		ug/L	1.50	5.00	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
1,4-Dichlorobenzene	<1.59		ug/L	1.59	5.29	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
3,3'-Dichlorobenzidine	<1.74		ug/L	1.74	5.79	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Diethyl phthalate	<1.34		ug/L	1.34	4.46	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Dimethyl phthalate	<1.55		ug/L	1.55	5.16	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2,4-Dinitrotoluene	<1.32		ug/L	1.32	4.40	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2,6-Dinitrotoluene	<1.93		ug/L	1.93	6.43	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Di-n-octyl phthalate	<1.78	C	ug/L	1.78	5.93	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Fluoranthene	<1.27		ug/L	1.27	4.23	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Fluorene	<1.56		ug/L	1.56	5.19	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Hexachlorobenzene	<2.01		ug/L	2.01	6.69	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Hexachlorobutadiene	<1.94		ug/L	1.94	6.46	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Hexachlorocyclopentadiene	<1.09		ug/L	1.09	3.63	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Hexachloroethane	<1.38		ug/L	1.38	4.60	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Indeno (1,2,3-cd) pyrene	<1.62		ug/L	1.62	5.39	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Isophorone	<1.49		ug/L	1.49	4.96	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2-Methylnaphthalene	<1.50		ug/L	1.50	5.00	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Naphthalene	<1.49		ug/L	1.49	4.96	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2-Nitroaniline	<1.54		ug/L	1.54	5.13	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
3-Nitroaniline	<1.68		ug/L	1.68	5.59	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
4-Nitroaniline	<1.86		ug/L	1.86	6.19	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Nitrobenzene	<1.52		ug/L	1.52	5.06	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
N-Nitrosodimethylamine	<0.892	ICV2	ug/L	0.892	2.97	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
N-Nitrosodiphenylamine	<1.82		ug/L	1.82	6.06	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
N-Nitrosodi-n-propylamine	<1.95		ug/L	1.95	6.49	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Phenanthrene	<1.37		ug/L	1.37	4.56	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Pyrene	<1.28		ug/L	1.28	4.26	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Pyridine	<0.670		ug/L	0.670	2.23	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
1,2,4-Trichlorobenzene	<1.65		ug/L	1.65	5.49	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Benzoic acid	<13.0		ug/L	13.0	43.3	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
4-Chloro-3-methylphenol	<1.45		ug/L	1.45	4.83	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2-Chlorophenol	<1.38		ug/L	1.38	4.60	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Cresol(s)	<1.22		ug/L	1.22	4.06	1.05	03/11/08 18:24	dmd	8030105	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0904-03 (TW-3 - Ground Water) - cont.							**Sampled: 02/28/08 13:00**			
Semivolatile Organics by GC/MS - cont.										
2,4-Dichlorophenol	<1.72		ug/L	1.72	5.73	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2,4-Dimethylphenol	<0.899		ug/L	0.899	2.99	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2,4-Dinitrophenol	<1.25		ug/L	1.25	4.16	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
4,6-Dinitro-2-methylphenol	<1.64		ug/L	1.64	5.46	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2-Methylphenol (o-Cresol)	<1.22		ug/L	1.22	4.06	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
4-Methylphenol (p-Cresol)	<1.05		ug/L	1.05	3.50	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2-Nitrophenol	<1.65		ug/L	1.65	5.49	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
4-Nitrophenol	<0.834		ug/L	0.834	2.78	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Pentachlorophenol	<1.22		ug/L	1.22	4.06	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Phenol	<0.730		ug/L	0.730	2.43	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2,4,5-Trichlorophenol	<1.78		ug/L	1.78	5.93	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
2,4,6-Trichlorophenol	<1.84		ug/L	1.84	6.13	1.05	03/11/08 18:24	dmd	8030105	SW 8270C
Surr: Nitrobenzene-d5 (15-110%)	*77 %*									
Surr: 2-Fluorobiphenyl (15-110%)	*83 %*									
Surr: Terphenyl-d14 (20-115%)	*119 %*	*ZX*								
Surr: Phenol-d6 (10-75%)	*26 %*									
Surr: 2-Fluorophenol (10-85%)	*43 %*									
Surr: 2,4,6-Tribromophenol (35-130%)	*94 %*									
Polychlorinated Biphenyls by EPA Method 8082										
PCB-1016	<0.140		ug/L	0.140	0.466	1.02	03/05/08 14:02	slt	8030063	SW 8082
PCB-1221	<0.490		ug/L	0.490	1.63	1.02	03/05/08 14:02	slt	8030063	SW 8082
PCB-1232	<0.120		ug/L	0.120	0.400	1.02	03/05/08 14:02	slt	8030063	SW 8082
PCB-1242	<0.160		ug/L	0.160	0.533	1.02	03/05/08 14:02	slt	8030063	SW 8082
PCB-1248	<0.120		ug/L	0.120	0.400	1.02	03/05/08 14:02	slt	8030063	SW 8082
PCB-1254	<0.0440		ug/L	0.0440	0.147	1.02	03/05/08 14:02	slt	8030063	SW 8082
PCB-1260	<0.0750		ug/L	0.0750	0.250	1.02	03/05/08 14:02	slt	8030063	SW 8082
PCB-1268	<0.0680		ug/L	0.0680	0.226	1.02	03/05/08 14:02	slt	8030063	SW 8082
Surr: Decachlorobiphenyl (10-100%)	*47 %*									
Surr: Tetrachloro-meta-xylene (22-112%)	*76 %*									

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0904-04 (TW-4 - Ground Water)							**Sampled: 02/28/08 14:00**			
General Chemistry Parameters										
Chloride	**100**		mg/L	10	33	10	03/04/08 17:03	pxm	8030054	EPA 325.2
Metals Dissolved										
Arsenic	**3.0**		ug/L	0.070	0.23	1	03/10/08 10:16	gaf	8030078	SW 6020A
Barium	**89**		ug/L	0.30	1.0	5	03/10/08 10:16	gaf	8030078	SW 6020A
Cadmium	**0.020**	Ja	ug/L	0.010	0.033	1	03/10/08 10:16	gaf	8030078	SW 6020A
Chromium	**3.2**		ug/L	0.070	0.23	1	03/10/08 10:16	gaf	8030078	SW 6020A
Lead	**0.080**	Ja	ug/L	0.040	0.13	1	03/10/08 10:16	gaf	8030078	SW 6020A
Mercury	**0.000082**	B, Ja	mg/L	0.000065	0.00022	1	03/04/08 13:33	jej	8030027	EPA 245.1
Selenium	**4.3**		ug/L	0.17	0.57	1	03/10/08 10:16	gaf	8030078	SW 6020A
Silver	**0.020**	Ja	ug/L	0.020	0.067	1	03/10/08 10:16	gaf	8030078	SW 6020A
VOCs by SW8260B										
Benzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Bromobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Bromochloromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
Bromodichloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Bromoform	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Bromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
n-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
sec-Butylbenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:01	mae	8030142	SW 8260B
tert-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Carbon Tetrachloride	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
Chlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Chlorodibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Chloroethane	<1.0		ug/L	1.0	3.3	1	03/08/08 08:01	mae	8030142	SW 8260B
Chloroform	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Chloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
2-Chlorotoluene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
4-Chlorotoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
1,2-Dibromo-3-chloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,2-Dibromoethane (EDB)	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Dibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
1,2-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
1,3-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
1,4-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Dichlorodifluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,1-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,2-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,1-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
cis-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
trans-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,3-Dichloropropane	<0.25		ug/L	0.25	0.83	1	03/08/08 08:01	mae	8030142	SW 8260B
2,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,1-Dichloropropene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
cis-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
trans-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
2,3-Dichloropropene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:01	mae	8030142	SW 8260B
Isopropyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
Ethylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
Hexachlorobutadiene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
Isopropylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
p-Isopropyltoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-04 (TW-4 - Ground Water) - cont. **Sampled: 02/28/08 14:00**

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
VOCs by SW8260B - cont.										
Methylene Chloride	<1.0		ug/L	1.0	3.3	1	03/08/08 08:01	mae	8030142	SW 8260B
Methyl tert-Butyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
Naphthalene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:01	mae	8030142	SW 8260B
n-Propylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
Styrene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
1,1,1,2-Tetrachloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 08:01	mae	8030142	SW 8260B
1,1,2,2-Tetrachloroethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Tetrachloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
Toluene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
1,2,3-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:01	mae	8030142	SW 8260B
1,2,4-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:01	mae	8030142	SW 8260B
1,1,1-Trichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,1,2-Trichloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 08:01	mae	8030142	SW 8260B
Trichloroethene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Trichlorofluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,2,3-Trichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
1,2,4-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
1,3,5-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Vinyl chloride	<0.20		ug/L	0.20	0.67	1	03/08/08 08:01	mae	8030142	SW 8260B
Xylenes, Total	<0.50		ug/L	0.50	1.7	1	03/08/08 08:01	mae	8030142	SW 8260B
Surr: Dibromofluoromethane (89-119%)	*98 %*									
Surr: Toluene-d8 (91-109%)	*100 %*									
Surr: 4-Bromofluorobenzene (89-114%)	*96 %*									
Semivolatile Organics by GC/MS										
Acenaphthene	<1.89		ug/L	1.89	6.29	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Acenaphthylene	<1.41		ug/L	1.41	4.70	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Anthracene	<1.15		ug/L	1.15	3.83	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Benzidine	<33.0		ug/L	33.0	110	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Benzo (a) anthracene	<1.10		ug/L	1.10	3.66	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Benzo (b) fluoranthene	<1.90		ug/L	1.90	6.33	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Benzo (k) fluoranthene	<2.12		ug/L	2.12	7.06	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Benzo (a) pyrene	<1.93		ug/L	1.93	6.43	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Benzo (g,h,i) perylene	<2.03		ug/L	2.03	6.76	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Benzyl alcohol	<1.26		ug/L	1.26	4.20	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Butyl benzyl phthalate	<1.54		ug/L	1.54	5.13	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Bis(2-chloroethyl)ether	<1.50		ug/L	1.50	5.00	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Bis(2-chloroethoxy)methane	<1.52		ug/L	1.52	5.06	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Bis(2-ethylhexyl)phthalate	<1.60		ug/L	1.60	5.33	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Bis(2-chloroisopropyl) ether	<1.33		ug/L	1.33	4.43	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
4-Bromophenyl phenyl ether	<1.96		ug/L	1.96	6.53	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Carbazole	<1.42		ug/L	1.42	4.73	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
4-Chloroaniline	<1.23		ug/L	1.23	4.10	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2-Chloronaphthalene	<1.79		ug/L	1.79	5.96	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
4-Chlorophenyl phenyl ether	<2.08		ug/L	2.08	6.93	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Chrysene	<1.33		ug/L	1.33	4.43	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Dibenzo (a,h) anthracene	<2.20		ug/L	2.20	7.33	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Dibenzofuran	<1.64		ug/L	1.64	5.46	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Di-n-butyl phthalate	<1.55		ug/L	1.55	5.16	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
1,2-Dichlorobenzene	<1.40		ug/L	1.40	4.66	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
1,3-Dichlorobenzene	<1.50		ug/L	1.50	5.00	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
1,4-Dichlorobenzene	<1.59		ug/L	1.59	5.29	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
3,3'-Dichlorobenzidine	<1.74		ug/L	1.74	5.79	1.08	03/12/08 10:49	dmd	8030105	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-04 (TW-4 - Ground Water) - cont. **Sampled: 02/28/08 14:00**

Semivolatile Organics by GC/MS - cont.

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Diethyl phthalate	<1.34		ug/L	1.34	4.46	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Dimethyl phthalate	<1.55		ug/L	1.55	5.16	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2,4-Dinitrotoluene	<1.32		ug/L	1.32	4.40	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2,6-Dinitrotoluene	<1.93		ug/L	1.93	6.43	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Di-n-octyl phthalate	<1.78	C	ug/L	1.78	5.93	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Fluoranthene	<1.27		ug/L	1.27	4.23	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Fluorene	<1.56		ug/L	1.56	5.19	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Hexachlorobenzene	<2.01		ug/L	2.01	6.69	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Hexachlorobutadiene	<1.94		ug/L	1.94	6.46	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Hexachlorocyclopentadiene	<1.09		ug/L	1.09	3.63	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Hexachloroethane	<1.38		ug/L	1.38	4.60	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Indeno (1,2,3-cd) pyrene	<1.62		ug/L	1.62	5.39	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Isophorone	<1.49		ug/L	1.49	4.96	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2-Methylnaphthalene	<1.50		ug/L	1.50	5.00	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Naphthalene	<1.49		ug/L	1.49	4.96	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2-Nitroaniline	<1.54		ug/L	1.54	5.13	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
3-Nitroaniline	<1.68		ug/L	1.68	5.59	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
4-Nitroaniline	<1.86		ug/L	1.86	6.19	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Nitrobenzene	<1.52		ug/L	1.52	5.06	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
N-Nitrosodimethylamine	<0.892		ug/L	0.892	2.97	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
N-Nitrosodiphenylamine	<1.82		ug/L	1.82	6.06	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
N-Nitrosodi-n-propylamine	<1.95		ug/L	1.95	6.49	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Phenanthrene	<1.37		ug/L	1.37	4.56	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Pyrene	<1.28		ug/L	1.28	4.26	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Pyridine	<0.670		ug/L	0.670	2.23	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
1,2,4-Trichlorobenzene	<1.65		ug/L	1.65	5.49	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Benzoic acid	<13.0		ug/L	13.0	43.3	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
4-Chloro-3-methylphenol	<1.45		ug/L	1.45	4.83	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2-Chlorophenol	<1.38		ug/L	1.38	4.60	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Cresol(s)	<1.22		ug/L	1.22	4.06	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2,4-Dichlorophenol	<1.72		ug/L	1.72	5.73	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2,4-Dimethylphenol	<0.899		ug/L	0.899	2.99	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2,4-Dinitrophenol	<1.25		ug/L	1.25	4.16	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
4,6-Dinitro-2-methylphenol	<1.64		ug/L	1.64	5.46	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2-Methylphenol (o-Cresol)	<1.22		ug/L	1.22	4.06	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
4-Methylphenol (p-Cresol)	<1.05		ug/L	1.05	3.50	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2-Nitrophenol	<1.65		ug/L	1.65	5.49	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
4-Nitrophenol	<0.834		ug/L	0.834	2.78	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Pentachlorophenol	<1.22		ug/L	1.22	4.06	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Phenol	<0.730		ug/L	0.730	2.43	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2,4,5-Trichlorophenol	<1.78		ug/L	1.78	5.93	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
2,4,6-Trichlorophenol	<1.84		ug/L	1.84	6.13	1.08	03/12/08 10:49	dmd	8030105	SW 8270C
Surr: Nitrobenzene-d5 (15-110%)	*60 %*									
Surr: 2-Fluorobiphenyl (15-110%)	*64 %*									
Surr: Terphenyl-d14 (20-115%)	*83 %*									
Surr: Phenol-d6 (10-75%)	*20 %*									
Surr: 2-Fluorophenol (10-85%)	*32 %*									
Surr: 2,4,6-Tribromophenol (35-130%)	*61 %*									

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	<0.140		ug/L	0.140	0.466	1.04	03/05/08 14:12	slt	8030063	SW 8082
PCB-1221	<0.490		ug/L	0.490	1.63	1.04	03/05/08 14:12	slt	8030063	SW 8082
PCB-1232	<0.120		ug/L	0.120	0.400	1.04	03/05/08 14:12	slt	8030063	SW 8082

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0904-04 (TW-4 - Ground Water) - cont.							**Sampled: 02/28/08 14:00**			
Polychlorinated Biphenyls by EPA Method 8082 - cont.										
PCB-1242	<0.160		ug/L	0.160	0.533	1.04	03/05/08 14:12	slt	8030063	SW 8082
PCB-1248	<0.120		ug/L	0.120	0.400	1.04	03/05/08 14:12	slt	8030063	SW 8082
PCB-1254	<0.0440		ug/L	0.0440	0.147	1.04	03/05/08 14:12	slt	8030063	SW 8082
PCB-1260	<0.0750		ug/L	0.0750	0.250	1.04	03/05/08 14:12	slt	8030063	SW 8082
PCB-1268	<0.0680		ug/L	0.0680	0.226	1.04	03/05/08 14:12	slt	8030063	SW 8082
Surr: Decachlorobiphenyl (10-100%)	*69 %*									
Surr: Tetrachloro-meta-xylene (22-112%)	*76 %*									
Sample ID: WRB0904-05 (TW-5 - Ground Water)							**Sampled: 02/28/08 16:00**			
General Chemistry Parameters										
Chloride	**77**		mg/L	10	33	10	03/04/08 17:03	pxm	8030054	EPA 325.2
Metals Dissolved										
Arsenic	**4.7**		ug/L	0.070	0.23	1	03/10/08 10:16	gaf	8030078	SW 6020A
Barium	**98**		ug/L	0.30	1.0	5	03/10/08 10:16	gaf	8030078	SW 6020A
Cadmium	**0.040**		ug/L	0.010	0.033	1	03/10/08 10:16	gaf	8030078	SW 6020A
Chromium	**6.5**		ug/L	0.070	0.23	1	03/10/08 10:16	gaf	8030078	SW 6020A
Lead	**0.36**		ug/L	0.040	0.13	1	03/10/08 10:16	gaf	8030078	SW 6020A
Mercury	**0.000078**	B, Ja	mg/L	0.000065	0.00022	1	03/04/08 13:33	jej	8030027	EPA 245.1
Selenium	**78**		ug/L	0.17	0.57	1	03/10/08 10:16	gaf	8030078	SW 6020A
Silver	**0.020**	Ja	ug/L	0.020	0.067	1	03/10/08 10:16	gaf	8030078	SW 6020A
VOCs by SW8260B										
Benzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Bromobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Bromochloromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
Bromodichloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Bromoform	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Bromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
n-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
sec-Butylbenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 07:35	mae	8030142	SW 8260B
tert-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Carbon Tetrachloride	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
Chlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Chlorodibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Chloroethane	<1.0		ug/L	1.0	3.3	1	03/08/08 07:35	mae	8030142	SW 8260B
Chloroform	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Chloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
2-Chlorotoluene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
4-Chlorotoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
1,2-Dibromo-3-chloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,2-Dibromoethane (EDB)	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Dibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
1,2-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
1,3-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
1,4-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Dichlorodifluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,1-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,2-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,1-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
cis-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
trans-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,3-Dichloropropane	<0.25		ug/L	0.25	0.83	1	03/08/08 07:35	mae	8030142	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-05 (TW-5 - Ground Water) - cont. **Sampled: 02/28/08 16:00**

VOCs by SW8260B - cont.

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
2,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,1-Dichloropropene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
cis-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
trans-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
2,3-Dichloropropene	<0.25		ug/L	0.25	0.83	1	03/08/08 07:35	mae	8030142	SW 8260B
Isopropyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
Ethylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
Hexachlorobutadiene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
Isopropylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
p-Isopropyltoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Methylene Chloride	<1.0		ug/L	1.0	3.3	1	03/08/08 07:35	mae	8030142	SW 8260B
Methyl tert-Butyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
Naphthalene	**0.72**	Ja	ug/L	0.25	0.83	1	03/08/08 07:35	mae	8030142	SW 8260B
n-Propylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
Styrene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
1,1,1,2-Tetrachloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 07:35	mae	8030142	SW 8260B
1,1,2,2-Tetrachloroethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Tetrachloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
Toluene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
1,2,3-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 07:35	mae	8030142	SW 8260B
1,2,4-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 07:35	mae	8030142	SW 8260B
1,1,1-Trichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,1,2-Trichloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 07:35	mae	8030142	SW 8260B
Trichloroethene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Trichlorofluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,2,3-Trichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
1,2,4-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
1,3,5-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Vinyl chloride	<0.20		ug/L	0.20	0.67	1	03/08/08 07:35	mae	8030142	SW 8260B
Xylenes, Total	<0.50		ug/L	0.50	1.7	1	03/08/08 07:35	mae	8030142	SW 8260B
Surr: Dibromofluoromethane (89-119%)	*94 %*									
Surr: Toluene-d8 (91-109%)	*101 %*									
Surr: 4-Bromofluorobenzene (89-114%)	*98 %*									

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-06 (Dup - Ground Water) **Sampled: 02/28/08**

VOCs by SW8260B

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Benzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Bromobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Bromochloromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
Bromodichloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Bromoform	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Bromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
n-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
sec-Butylbenzene	**0.47**	Ja	ug/L	0.25	0.83	1	03/08/08 07:09	mae	8030142	SW 8260B
tert-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Carbon Tetrachloride	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
Chlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Chlorodibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Chloroethane	<1.0		ug/L	1.0	3.3	1	03/08/08 07:09	mae	8030142	SW 8260B
Chloroform	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Chloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
2-Chlorotoluene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
4-Chlorotoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
1,2-Dibromo-3-chloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,2-Dibromoethane (EDB)	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Dibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
1,2-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
1,3-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
1,4-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Dichlorodifluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,1-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,2-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,1-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
cis-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
trans-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,3-Dichloropropane	<0.25		ug/L	0.25	0.83	1	03/08/08 07:09	mae	8030142	SW 8260B
2,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,1-Dichloropropene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
cis-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
trans-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
2,3-Dichloropropene	<0.25		ug/L	0.25	0.83	1	03/08/08 07:09	mae	8030142	SW 8260B
Isopropyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
Ethylbenzene	**1.7**		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
Hexachlorobutadiene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
Isopropylbenzene	**0.49**	Ja	ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
p-Isopropyltoluene	**0.43**	Ja	ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Methylene Chloride	<1.0		ug/L	1.0	3.3	1	03/08/08 07:09	mae	8030142	SW 8260B
Methyl tert-Butyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
Naphthalene	**9.5**		ug/L	0.25	0.83	1	03/08/08 07:09	mae	8030142	SW 8260B
n-Propylbenzene	**0.84**	Ja	ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
Styrene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
1,1,1,2-Tetrachloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 07:09	mae	8030142	SW 8260B
1,1,2,2-Tetrachloroethane	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Tetrachloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
Toluene	**1.9**		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
1,2,3-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 07:09	mae	8030142	SW 8260B
1,2,4-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 07:09	mae	8030142	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0904-06 (Dup - Ground Water) - cont.							**Sampled: 02/28/08**			
VOCs by SW8260B - cont.										
1,1,1-Trichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,1,2-Trichloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 07:09	mae	8030142	SW 8260B
Trichloroethene	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Trichlorofluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,2,3-Trichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
1,2,4-Trimethylbenzene	**8.6**		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
1,3,5-Trimethylbenzene	**1.6**		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Vinyl chloride	<0.20		ug/L	0.20	0.67	1	03/08/08 07:09	mae	8030142	SW 8260B
Xylenes, Total	**9.9**		ug/L	0.50	1.7	1	03/08/08 07:09	mae	8030142	SW 8260B
Surr: Dibromofluoromethane (89-119%)	*97 %*									
Surr: Toluene-d8 (91-109%)	*99 %*									
Surr: 4-Bromofluorobenzene (89-114%)	*97 %*									
Sample ID: WRB0904-07 (Equip - Ground Water)							**Sampled: 02/28/08**			
VOCs by SW8260B										
Benzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Bromobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Bromochloromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
Bromodichloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Bromoform	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Bromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
n-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
sec-Butylbenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 14:21	mae	8030173	SW 8260B
tert-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Carbon Tetrachloride	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
Chlorobenzene	**0.29**	Ja	ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Chlorodibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Chloroethane	<1.0		ug/L	1.0	3.3	1	03/08/08 14:21	mae	8030173	SW 8260B
Chloroform	**0.23**	Ja	ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Chloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
2-Chlorotoluene	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
4-Chlorotoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
1,2-Dibromo-3-chloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,2-Dibromoethane (EDB)	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Dibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
1,2-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
1,3-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
1,4-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Dichlorodifluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,1-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,2-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,1-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
cis-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
trans-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,3-Dichloropropane	<0.25		ug/L	0.25	0.83	1	03/08/08 14:21	mae	8030173	SW 8260B
2,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,1-Dichloropropene	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
cis-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
trans-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
2,3-Dichloropropene	<0.25		ug/L	0.25	0.83	1	03/08/08 14:21	mae	8030173	SW 8260B
Isopropyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0904-07 (Equip - Ground Water) - cont.							**Sampled: 02/28/08**			
VOCs by SW8260B - cont.										
Ethylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
Hexachlorobutadiene	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
Isopropylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
p-Isopropyltoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Methylene Chloride	<1.0		ug/L	1.0	3.3	1	03/08/08 14:21	mae	8030173	SW 8260B
Methyl tert-Butyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
Naphthalene	<0.25		ug/L	0.25	0.83	1	03/08/08 14:21	mae	8030173	SW 8260B
n-Propylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
Styrene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
1,1,1,2-Tetrachloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 14:21	mae	8030173	SW 8260B
1,1,2,2-Tetrachloroethane	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Tetrachloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
Toluene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
1,2,3-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 14:21	mae	8030173	SW 8260B
1,2,4-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 14:21	mae	8030173	SW 8260B
1,1,1-Trichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,1,2-Trichloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 14:21	mae	8030173	SW 8260B
Trichloroethene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Trichlorofluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,2,3-Trichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
1,2,4-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
1,3,5-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Vinyl chloride	<0.20		ug/L	0.20	0.67	1	03/08/08 14:21	mae	8030173	SW 8260B
Xylenes, Total	<0.50		ug/L	0.50	1.7	1	03/08/08 14:21	mae	8030173	SW 8260B
Surr: Dibromofluoromethane (89-119%)	*101 %*									
Surr: Toluene-d8 (91-109%)	*101 %*									
Surr: 4-Bromofluorobenzene (89-114%)	*102 %*									
Sample ID: WRB0904-08 (Trip Blank - Ground Water)							**Sampled: 02/28/08**			
VOCs by SW8260B										
Benzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Bromobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Bromochloromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
Bromodichloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Bromoform	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Bromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
n-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
sec-Butylbenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:28	mae	8030142	SW 8260B
tert-Butylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Carbon Tetrachloride	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
Chlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Chlorodibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Chloroethane	<1.0		ug/L	1.0	3.3	1	03/08/08 08:28	mae	8030142	SW 8260B
Chloroform	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Chloromethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
2-Chlorotoluene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
4-Chlorotoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
1,2-Dibromo-3-chloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,2-Dibromoethane (EDB)	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Dibromomethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
1,2-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
1,3-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-08 (Trip Blank - Ground Water) - cont. **Sampled: 02/28/08**

VOCs by SW8260B - cont.

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
1,4-Dichlorobenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Dichlorodifluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,1-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,2-Dichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,1-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
cis-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
trans-1,2-Dichloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,3-Dichloropropane	<0.25		ug/L	0.25	0.83	1	03/08/08 08:28	mae	8030142	SW 8260B
2,2-Dichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,1-Dichloropropene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
cis-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
trans-1,3-Dichloropropene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
2,3-Dichloropropene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:28	mae	8030142	SW 8260B
Isopropyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
Ethylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
Hexachlorobutadiene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
Isopropylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
p-Isopropyltoluene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Methylene Chloride	<1.0		ug/L	1.0	3.3	1	03/08/08 08:28	mae	8030142	SW 8260B
Methyl tert-Butyl Ether	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
Naphthalene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:28	mae	8030142	SW 8260B
n-Propylbenzene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
Styrene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
1,1,1,2-Tetrachloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 08:28	mae	8030142	SW 8260B
1,1,2,2-Tetrachloroethane	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Tetrachloroethene	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
Toluene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
1,2,3-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:28	mae	8030142	SW 8260B
1,2,4-Trichlorobenzene	<0.25		ug/L	0.25	0.83	1	03/08/08 08:28	mae	8030142	SW 8260B
1,1,1-Trichloroethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,1,2-Trichloroethane	<0.25		ug/L	0.25	0.83	1	03/08/08 08:28	mae	8030142	SW 8260B
Trichloroethene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Trichlorofluoromethane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,2,3-Trichloropropane	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
1,2,4-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
1,3,5-Trimethylbenzene	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Vinyl chloride	<0.20		ug/L	0.20	0.67	1	03/08/08 08:28	mae	8030142	SW 8260B
Xylenes, Total	<0.50		ug/L	0.50	1.7	1	03/08/08 08:28	mae	8030142	SW 8260B
Surr: Dibromofluoromethane (89-119%)	*97 %*									
Surr: Toluene-d8 (91-109%)	*96 %*									
Surr: 4-Bromofluorobenzene (89-114%)	*95 %*									

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Sample ID: WRB0904-09 (TW-5 - Ground Water) **Sampled: 02/28/08 13:30**

Semivolatile Organics by GC/MS

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Acenaphthene	<2.12		ug/L	2.12	7.07	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Acenaphthylene	<1.58		ug/L	1.58	5.28	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Anthracene	<1.29		ug/L	1.29	4.30	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Benzidine	<37.1	CIN	ug/L	37.1	123	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Benzo (a) anthracene	**1.49**	J	ug/L	1.24	4.12	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Benzo (b) fluoranthene	<2.13		ug/L	2.13	7.11	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Benzo (k) fluoranthene	<2.38		ug/L	2.38	7.93	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Benzo (a) pyrene	<2.17		ug/L	2.17	7.22	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Benzo (g,h,i) perylene	<2.28		ug/L	2.28	7.60	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Benzyl alcohol	<1.42		ug/L	1.42	4.71	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Butyl benzyl phthalate	<1.73		ug/L	1.73	5.76	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Bis(2-chloroethyl)ether	<1.69		ug/L	1.69	5.61	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Bis(2-chloroethoxy)methane	<1.71		ug/L	1.71	5.69	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Bis(2-ethylhexyl)phthalate	<1.80		ug/L	1.80	5.99	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Bis(2-chloroisopropyl) ether	<1.49		ug/L	1.49	4.98	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
4-Bromophenyl phenyl ether	<2.20		ug/L	2.20	7.33	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Carbazole	<1.60		ug/L	1.60	5.31	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
4-Chloroaniline	<1.38		ug/L	1.38	4.60	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2-Chloronaphthalene	<2.01		ug/L	2.01	6.70	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
4-Chlorophenyl phenyl ether	<2.34		ug/L	2.34	7.78	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Chrysene	**1.50**	J	ug/L	1.49	4.98	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Dibenzo (a,h) anthracene	<2.47		ug/L	2.47	8.23	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Dibenzofuran	<1.84		ug/L	1.84	6.14	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Di-n-butyl phthalate	<1.74		ug/L	1.74	5.80	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
1,2-Dichlorobenzene	<1.57		ug/L	1.57	5.24	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
1,3-Dichlorobenzene	<1.69		ug/L	1.69	5.61	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
1,4-Dichlorobenzene	<1.79		ug/L	1.79	5.95	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
3,3'-Dichlorobenzidine	<1.96		ug/L	1.96	6.51	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Diethyl phthalate	<1.51		ug/L	1.51	5.01	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Dimethyl phthalate	<1.74		ug/L	1.74	5.80	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2,4-Dinitrotoluene	<1.48		ug/L	1.48	4.94	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2,6-Dinitrotoluene	<2.17		ug/L	2.17	7.22	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Di-n-octyl phthalate	<2.00	C	ug/L	2.00	6.66	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Fluoranthene	**3.51**	J	ug/L	1.43	4.75	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Fluorene	<1.75		ug/L	1.75	5.84	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Hexachlorobenzene	<2.26		ug/L	2.26	7.52	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Hexachlorobutadiene	<2.18		ug/L	2.18	7.26	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Hexachlorocyclopentadiene	<1.22		ug/L	1.22	4.08	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Hexachloroethane	<1.55		ug/L	1.55	5.16	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Indeno (1,2,3-cd) pyrene	<1.82		ug/L	1.82	6.06	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Isophorone	<1.67		ug/L	1.67	5.57	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2-Methylnaphthalene	<1.69		ug/L	1.69	5.61	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Naphthalene	<1.67		ug/L	1.67	5.57	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2-Nitroaniline	<1.73		ug/L	1.73	5.76	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
3-Nitroaniline	<1.89		ug/L	1.89	6.29	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
4-Nitroaniline	<2.09		ug/L	2.09	6.96	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Nitrobenzene	<1.71		ug/L	1.71	5.69	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
N-Nitrosodimethylamine	<1.00	ICV2	ug/L	1.00	3.34	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
N-Nitrosodiphenylamine	<2.04		ug/L	2.04	6.81	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
N-Nitrosodi-n-propylamine	<2.19		ug/L	2.19	7.30	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Phenanthrene	**3.32**	J	ug/L	1.54	5.13	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Pyrene	**3.34**	J	ug/L	1.44	4.79	1.12	03/11/08 19:33	dmd	8030105	SW 8270C

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

Analyte	Sample Result	Data Qualifiers	Units	MDL	LOQ	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: WRB0904-09 (TW-5 - Ground Water) - cont.							**Sampled: 02/28/08 13:30**			
Semivolatile Organics by GC/MS - cont.										
Pyridine	<0.753		ug/L	0.753	2.51	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
1,2,4-Trichlorobenzene	<1.85		ug/L	1.85	6.17	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Benzoic acid	<14.6		ug/L	14.6	48.6	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
4-Chloro-3-methylphenol	<1.63		ug/L	1.63	5.43	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2-Chlorophenol	<1.55		ug/L	1.55	5.16	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Cresol(s)	<1.37		ug/L	1.37	4.56	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2,4-Dichlorophenol	<1.93		ug/L	1.93	6.44	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2,4-Dimethylphenol	<1.01		ug/L	1.01	3.36	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2,4-Dinitrophenol	<1.40		ug/L	1.40	4.68	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
4,6-Dinitro-2-methylphenol	<1.84		ug/L	1.84	6.14	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2-Methylphenol (o-Cresol)	<1.37		ug/L	1.37	4.56	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
4-Methylphenol (p-Cresol)	<1.18		ug/L	1.18	3.93	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2-Nitrophenol	<1.85		ug/L	1.85	6.17	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
4-Nitrophenol	<0.937		ug/L	0.937	3.12	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Pentachlorophenol	<1.37		ug/L	1.37	4.56	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Phenol	<0.820		ug/L	0.820	2.73	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2,4,5-Trichlorophenol	<2.00		ug/L	2.00	6.66	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
2,4,6-Trichlorophenol	<2.07		ug/L	2.07	6.88	1.12	03/11/08 19:33	dmd	8030105	SW 8270C
Surr: Nitrobenzene-d5 (15-110%)	*74 %*									
Surr: 2-Fluorobiphenyl (15-110%)	*90 %*									
Surr: Terphenyl-d14 (20-115%)	*110 %*									
Surr: Phenol-d6 (10-75%)	*28 %*									
Surr: 2-Fluorophenol (10-85%)	*44 %*									
Surr: 2,4,6-Tribromophenol (35-130%)	*95 %*									
Polychlorinated Biphenyls by EPA Method 8082										
PCB-1016	<0.159		ug/L	0.159	0.530	1.14	03/05/08 14:23	slt	8030063	SW 8082
PCB-1221	<0.557		ug/L	0.557	1.85	1.14	03/05/08 14:23	slt	8030063	SW 8082
PCB-1232	<0.136		ug/L	0.136	0.454	1.14	03/05/08 14:23	slt	8030063	SW 8082
PCB-1242	<0.182		ug/L	0.182	0.605	1.14	03/05/08 14:23	slt	8030063	SW 8082
PCB-1248	<0.136		ug/L	0.136	0.454	1.14	03/05/08 14:23	slt	8030063	SW 8082
PCB-1254	<0.0500		ug/L	0.0500	0.166	1.14	03/05/08 14:23	slt	8030063	SW 8082
PCB-1260	<0.0852		ug/L	0.0852	0.284	1.14	03/05/08 14:23	slt	8030063	SW 8082
PCB-1268	<0.0773		ug/L	0.0773	0.257	1.14	03/05/08 14:23	slt	8030063	SW 8082
Surr: Decachlorobiphenyl (10-100%)	*70 %*									
Surr: Tetrachloro-meta-xylene (22-112%)	*82 %*									

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
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Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polychlorinated Biphenyls by EPA Method 8082							
SW 8082	8030063	WRB0904-01	970	5	03/04/08 14:00	AM	SW 3510C GC
SW 8082	8030063	WRB0904-02	920	5	03/04/08 14:00	AM	SW 3510C GC
SW 8082	8030063	WRB0904-03	980	5	03/04/08 14:00	AM	SW 3510C GC
SW 8082	8030063	WRB0904-04	960	5	03/04/08 14:00	AM	SW 3510C GC
SW 8082	8030063	WRB0904-09	880	5	03/04/08 14:00	AM	SW 3510C GC
Semivolatile Organics by GC/MS							
SW 8270C	8030105	WRB0904-01	960	1	03/05/08 10:21	AM	SW 3510C_MS
SW 8270C	8030105	WRB0904-02	900	1	03/05/08 10:21	AM	SW 3510C_MS
SW 8270C	8030105	WRB0904-03	950	1	03/05/08 10:21	AM	SW 3510C_MS
SW 8270C	8030105	WRB0904-04	930	1	03/05/08 10:21	AM	SW 3510C_MS
SW 8270C	8030105	WRB0904-09	890	1	03/05/08 10:21	AM	SW 3510C_MS

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
General Chemistry Parameters														
Chloride	8030054			mg/L	1.0	3.3	<1.0							
Metals Dissolved														
Mercury	8030027			mg/L	0.000065	0.00023	0.0000780							Ja
VOCs by SW8260B														
Benzene	8030142			ug/L	0.20	0.67	<0.20							
Bromobenzene	8030142			ug/L	0.20	0.67	<0.20							
Bromochloromethane	8030142			ug/L	0.50	1.7	<0.50							
Bromodichloromethane	8030142			ug/L	0.20	0.67	<0.20							
Bromoform	8030142			ug/L	0.20	0.67	<0.20							
Bromomethane	8030142			ug/L	0.20	0.67	<0.20							
n-Butylbenzene	8030142			ug/L	0.20	0.67	<0.20							
sec-Butylbenzene	8030142			ug/L	0.25	0.83	<0.25							
tert-Butylbenzene	8030142			ug/L	0.20	0.67	<0.20							
Carbon Tetrachloride	8030142			ug/L	0.50	1.7	<0.50							
Chlorobenzene	8030142			ug/L	0.20	0.67	<0.20							
Chlorodibromomethane	8030142			ug/L	0.20	0.67	<0.20							
Chloroethane	8030142			ug/L	1.0	3.3	<1.0							
Chloroform	8030142			ug/L	0.20	0.67	<0.20							
Chloromethane	8030142			ug/L	0.20	0.67	<0.20							
2-Chlorotoluene	8030142			ug/L	0.50	1.7	<0.50							
4-Chlorotoluene	8030142			ug/L	0.20	0.67	<0.20							
1,2-Dibromo-3-chloropropane	8030142			ug/L	0.50	1.7	<0.50							
1,2-Dibromoethane (EDB)	8030142			ug/L	0.20	0.67	<0.20							
Dibromomethane	8030142			ug/L	0.20	0.67	<0.20							
1,2-Dichlorobenzene	8030142			ug/L	0.20	0.67	<0.20							
1,3-Dichlorobenzene	8030142			ug/L	0.20	0.67	<0.20							
1,4-Dichlorobenzene	8030142			ug/L	0.20	0.67	<0.20							
Dichlorodifluoromethane	8030142			ug/L	0.50	1.7	<0.50							
1,1-Dichloroethane	8030142			ug/L	0.50	1.7	<0.50							
1,2-Dichloroethane	8030142			ug/L	0.50	1.7	<0.50							
1,1-Dichloroethene	8030142			ug/L	0.50	1.7	<0.50							
cis-1,2-Dichloroethene	8030142			ug/L	0.50	1.7	<0.50							
trans-1,2-Dichloroethene	8030142			ug/L	0.50	1.7	<0.50							
1,2-Dichloropropane	8030142			ug/L	0.50	1.7	<0.50							
1,3-Dichloropropane	8030142			ug/L	0.25	0.83	<0.25							
2,2-Dichloropropane	8030142			ug/L	0.50	1.7	<0.50							
1,1-Dichloropropene	8030142			ug/L	0.50	1.7	<0.50							
cis-1,3-Dichloropropene	8030142			ug/L	0.20	0.67	<0.20							
trans-1,3-Dichloropropene	8030142			ug/L	0.20	0.67	<0.20							
2,3-Dichloropropene	8030142			ug/L	0.25	0.83	<0.25							
Isopropyl Ether	8030142			ug/L	0.50	1.7	<0.50							
Ethylbenzene	8030142			ug/L	0.50	1.7	<0.50							
Hexachlorobutadiene	8030142			ug/L	0.50	1.7	<0.50							
Isopropylbenzene	8030142			ug/L	0.20	0.67	<0.20							

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Project: 10813 City of Milwaukee
Project Number: 10813

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Reported: 03/12/08 14:26

LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
p-Isopropyltoluene	8030142			ug/L	0.20	0.67	<0.20							
Methylene Chloride	8030142			ug/L	1.0	3.3	<1.0							
Methyl tert-Butyl Ether	8030142			ug/L	0.50	1.7	<0.50							
Naphthalene	8030142			ug/L	0.25	0.83	<0.25							
n-Propylbenzene	8030142			ug/L	0.50	1.7	<0.50							
Styrene	8030142			ug/L	0.20	0.67	<0.20							
1,1,1,2-Tetrachloroethane	8030142			ug/L	0.25	0.83	<0.25							
1,1,2,2-Tetrachloroethane	8030142			ug/L	0.20	0.67	<0.20							
Tetrachloroethene	8030142			ug/L	0.50	1.7	<0.50							
Toluene	8030142			ug/L	0.20	0.67	<0.20							
1,2,3-Trichlorobenzene	8030142			ug/L	0.25	0.83	<0.25							
1,2,4-Trichlorobenzene	8030142			ug/L	0.25	0.83	<0.25							
1,1,1-Trichloroethane	8030142			ug/L	0.50	1.7	<0.50							
1,1,2-Trichloroethane	8030142			ug/L	0.25	0.83	<0.25							
Trichloroethene	8030142			ug/L	0.20	0.67	<0.20							
Trichlorofluoromethane	8030142			ug/L	0.50	1.7	<0.50							
1,2,3-Trichloropropane	8030142			ug/L	0.50	1.7	<0.50							
1,2,4-Trimethylbenzene	8030142			ug/L	0.20	0.67	<0.20							
1,3,5-Trimethylbenzene	8030142			ug/L	0.20	0.67	<0.20							
Vinyl chloride	8030142			ug/L	0.20	0.67	<0.20							
Xylenes, Total	8030142			ug/L	0.50	1.7	<0.50							
Surrogate: Dibromofluoromethane	*8030142*			ug/L					*99*		*89-119*			
Surrogate: Toluene-d8	*8030142*			ug/L					*99*		*91-109*			
Surrogate: 4-Bromofluorobenzene	*8030142*			ug/L					*99*		*89-114*			
Benzene	8030173			ug/L	0.20	0.67	<0.20							
Bromobenzene	8030173			ug/L	0.20	0.67	<0.20							
Bromochloromethane	8030173			ug/L	0.50	1.7	<0.50							
Bromodichloromethane	8030173			ug/L	0.20	0.67	<0.20							
Bromoform	8030173			ug/L	0.20	0.67	<0.20							
Bromomethane	8030173			ug/L	0.20	0.67	<0.20							
2-Butanone (MEK)	8030173			ug/L	0.50	1.7	<0.50							
n-Butylbenzene	8030173			ug/L	0.20	0.67	<0.20							
sec-Butylbenzene	8030173			ug/L	0.25	0.83	<0.25							
tert-Butylbenzene	8030173			ug/L	0.20	0.67	<0.20							
Carbon Tetrachloride	8030173			ug/L	0.50	1.7	<0.50							
Chlorobenzene	8030173			ug/L	0.20	0.67	<0.20							
Chlorodibromomethane	8030173			ug/L	0.20	0.67	<0.20							
Chloroethane	8030173			ug/L	1.0	3.3	<1.0							
Chloroform	8030173			ug/L	0.20	0.67	<0.20							
Chloromethane	8030173			ug/L	0.20	0.67	<0.20							
2-Chlorotoluene	8030173			ug/L	0.50	1.7	<0.50							
4-Chlorotoluene	8030173			ug/L	0.20	0.67	<0.20							
1,2-Dibromo-3-chloropropane	8030173			ug/L	0.50	1.7	<0.50							
1,2-Dibromoethane (EDB)	8030173			ug/L	0.20	0.67	<0.20							

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LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
Dibromomethane	8030173			ug/L	0.20	0.67	<0.20							
1,2-Dichlorobenzene	8030173			ug/L	0.20	0.67	<0.20							
1,3-Dichlorobenzene	8030173			ug/L	0.20	0.67	<0.20							
1,4-Dichlorobenzene	8030173			ug/L	0.20	0.67	<0.20							
Dichlorodifluoromethane	8030173			ug/L	0.50	1.7	<0.50							
1,1-Dichloroethane	8030173			ug/L	0.50	1.7	<0.50							
1,2-Dichloroethane	8030173			ug/L	0.50	1.7	<0.50							
1,1-Dichloroethene	8030173			ug/L	0.50	1.7	<0.50							
cis-1,2-Dichloroethene	8030173			ug/L	0.50	1.7	<0.50							
trans-1,2-Dichloroethene	8030173			ug/L	0.50	1.7	<0.50							
1,2-Dichloropropane	8030173			ug/L	0.50	1.7	<0.50							
1,3-Dichloropropane	8030173			ug/L	0.25	0.83	<0.25							
2,2-Dichloropropane	8030173			ug/L	0.50	1.7	<0.50							
1,1-Dichloropropene	8030173			ug/L	0.50	1.7	<0.50							
cis-1,3-Dichloropropene	8030173			ug/L	0.20	0.67	<0.20							
trans-1,3-Dichloropropene	8030173			ug/L	0.20	0.67	<0.20							
2,3-Dichloropropene	8030173			ug/L	0.25	0.83	<0.25							
Isopropyl Ether	8030173			ug/L	0.50	1.7	<0.50							
Ethylbenzene	8030173			ug/L	0.50	1.7	<0.50							
Hexachlorobutadiene	8030173			ug/L	0.50	1.7	<0.50							
Isopropylbenzene	8030173			ug/L	0.20	0.67	<0.20							
p-Isopropyltoluene	8030173			ug/L	0.20	0.67	<0.20							
Methylene Chloride	8030173			ug/L	1.0	3.3	<1.0							
Methyl tert-Butyl Ether	8030173			ug/L	0.50	1.7	<0.50							
Naphthalene	8030173			ug/L	0.25	0.83	<0.25							
n-Propylbenzene	8030173			ug/L	0.50	1.7	<0.50							
Styrene	8030173			ug/L	0.20	0.67	<0.20							
1,1,1,2-Tetrachloroethane	8030173			ug/L	0.25	0.83	<0.25							
1,1,2,2-Tetrachloroethane	8030173			ug/L	0.20	0.67	<0.20							
Tetrachloroethene	8030173			ug/L	0.50	1.7	<0.50							
Toluene	8030173			ug/L	0.20	0.67	<0.20							
1,2,3-Trichlorobenzene	8030173			ug/L	0.25	0.83	<0.25							
1,2,4-Trichlorobenzene	8030173			ug/L	0.25	0.83	<0.25							
1,1,1-Trichloroethane	8030173			ug/L	0.50	1.7	<0.50							
1,1,2-Trichloroethane	8030173			ug/L	0.25	0.83	<0.25							
Trichloroethene	8030173			ug/L	0.20	0.67	<0.20							
Trichlorofluoromethane	8030173			ug/L	0.50	1.7	<0.50							
1,2,3-Trichloropropane	8030173			ug/L	0.50	1.7	<0.50							
1,2,4-Trimethylbenzene	8030173			ug/L	0.20	0.67	<0.20							
1,3,5-Trimethylbenzene	8030173			ug/L	0.20	0.67	<0.20							
Vinyl chloride	8030173			ug/L	0.20	0.67	<0.20							
Xylenes, Total	8030173			ug/L	0.50	1.7	<0.50							
Surrogate: Dibromofluoromethane	*8030173*			ug/L					*98*		*89-119*			
Surrogate: Toluene-d8	*8030173*			ug/L					*101*		*91-109*			
Surrogate: 4-Bromofluorobenzene	*8030173*			ug/L					*103*		*89-114*			

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LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
Semivolatile Organics by GC/MS														
Acenaphthene	8030105			ug/L	1.89	10.0	<1.89							
Acenaphthylene	8030105			ug/L	1.41	10.0	<1.41							
Anthracene	8030105			ug/L	1.15	10.0	<1.15							
Benzidine	8030105			ug/L	33.0	100	<33.0							
Benzo (a) anthracene	8030105			ug/L	1.10	10.0	<1.10							
Benzo (b) fluoranthene	8030105			ug/L	1.90	10.0	<1.90							
Benzo (k) fluoranthene	8030105			ug/L	2.12	10.0	<2.12							
Benzo (a) pyrene	8030105			ug/L	1.93	10.0	<1.93							
Benzo (g,h,i) perylene	8030105			ug/L	2.03	10.0	<2.03							
Benzyl alcohol	8030105			ug/L	1.26	10.0	<1.26							
Butyl benzyl phthalate	8030105			ug/L	1.54	10.0	<1.54							
Bis(2-chloroethyl)ether	8030105			ug/L	1.50	10.0	<1.50							
Bis(2-chloroethoxy)methane	8030105			ug/L	1.52	10.0	<1.52							
Bis(2-ethylhexyl)phthalate	8030105			ug/L	1.60	10.0	<1.60							
Bis(2-chloroisopropyl) ether	8030105			ug/L	1.33	10.0	<1.33							
4-Bromophenyl phenyl ether	8030105			ug/L	1.96	10.0	<1.96							
Carbazole	8030105			ug/L	1.42	10.0	<1.42							
4-Chloroaniline	8030105			ug/L	1.23	10.0	<1.23							
2-Chloronaphthalene	8030105			ug/L	1.79	10.0	<1.79							
4-Chlorophenyl phenyl ether	8030105			ug/L	2.08	10.0	<2.08							
Chrysene	8030105			ug/L	1.33	10.0	<1.33							
Dibenzo (a,h) anthracene	8030105			ug/L	2.20	10.0	<2.20							
Dibenzofuran	8030105			ug/L	1.64	10.0	<1.64							
Di-n-butyl phthalate	8030105			ug/L	1.55	10.0	<1.55							
1,2-Dichlorobenzene	8030105			ug/L	1.40	10.0	<1.40							
1,3-Dichlorobenzene	8030105			ug/L	1.50	10.0	<1.50							
1,4-Dichlorobenzene	8030105			ug/L	1.59	10.0	<1.59							
3,3'-Dichlorobenzidine	8030105			ug/L	1.74	50.0	<1.74							
Diethyl phthalate	8030105			ug/L	1.34	10.0	<1.34							
Dimethyl phthalate	8030105			ug/L	1.55	10.0	<1.55							
2,4-Dinitrotoluene	8030105			ug/L	1.32	10.0	<1.32							
2,6-Dinitrotoluene	8030105			ug/L	1.93	10.0	<1.93							
Di-n-octyl phthalate	8030105			ug/L	1.78	10.0	<1.78							
Fluoranthene	8030105			ug/L	1.27	10.0	<1.27							
Fluorene	8030105			ug/L	1.56	10.0	<1.56							
Hexachlorobenzene	8030105			ug/L	2.01	10.0	<2.01							
Hexachlorobutadiene	8030105			ug/L	1.94	10.0	<1.94							
Hexachlorocyclopentadiene	8030105			ug/L	1.09	20.0	<1.09							
Hexachloroethane	8030105			ug/L	1.38	10.0	<1.38							
Indeno (1,2,3-cd) pyrene	8030105			ug/L	1.62	10.0	<1.62							
Isophorone	8030105			ug/L	1.49	10.0	<1.49							
2-Methylnaphthalene	8030105			ug/L	1.50	10.0	<1.50							
Naphthalene	8030105			ug/L	1.49	10.0	<1.49							
2-Nitroaniline	8030105			ug/L	1.54	10.0	<1.54							

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LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Semivolatile Organics by GC/MS														
3-Nitroaniline	8030105			ug/L	1.68	10.0	<1.68							
4-Nitroaniline	8030105			ug/L	1.86	10.0	<1.86							
Nitrobenzene	8030105			ug/L	1.52	10.0	<1.52							
N-Nitrosodimethylamine	8030105			ug/L	0.892	10.0	<0.892							
N-Nitrosodiphenylamine	8030105			ug/L	1.82	10.0	<1.82							
N-Nitrosodi-n-propylamine	8030105			ug/L	1.95	10.0	<1.95							
Phenanthrene	8030105			ug/L	1.37	10.0	<1.37							
Pyrene	8030105			ug/L	1.28	10.0	<1.28							
Pyridine	8030105			ug/L	0.670	10.0	<0.670							
1,2,4-Trichlorobenzene	8030105			ug/L	1.65	10.0	<1.65							
Benzoic acid	8030105			ug/L	13.0	100	<13.0							
4-Chloro-3-methylphenol	8030105			ug/L	1.45	10.0	<1.45							
2-Chlorophenol	8030105			ug/L	1.38	10.0	<1.38							
Cresol(s)	8030105			ug/L	1.22	10.0	<1.22							
2,4-Dichlorophenol	8030105			ug/L	1.72	10.0	<1.72							
2,4-Dimethylphenol	8030105			ug/L	0.899	10.0	<0.899							
2,4-Dinitrophenol	8030105			ug/L	1.25	20.0	<1.25							
4,6-Dinitro-2-methylphenol	8030105			ug/L	1.64	10.0	<1.64							
2-Methylphenol (o-Cresol)	8030105			ug/L	1.22	10.0	<1.22							
4-Methylphenol (p-Cresol)	8030105			ug/L	1.05	10.0	<1.05							
2-Nitrophenol	8030105			ug/L	1.65	10.0	<1.65							
4-Nitrophenol	8030105			ug/L	0.834	10.0	<0.834							
Pentachlorophenol	8030105			ug/L	1.22	10.0	<1.22							
Phenol	8030105			ug/L	0.730	10.0	<0.730							
2,4,5-Trichlorophenol	8030105			ug/L	1.78	10.0	<1.78							
2,4,6-Trichlorophenol	8030105			ug/L	1.84	10.0	<1.84							
Surrogate: Nitrobenzene-d5	*8030105*			ug/L					*71*		*15-110*			
Surrogate: 2-Fluorobiphenyl	*8030105*			ug/L					*68*		*15-110*			
Surrogate: Terphenyl-d14	*8030105*			ug/L					*90*		*20-115*			
Surrogate: Phenol-d6	*8030105*			ug/L					*1*		*10-75*			Z6
Surrogate: 2-Fluorophenol	*8030105*			ug/L					*36*		*10-85*			
Surrogate: 2,4,6-Tribromophenol	*8030105*			ug/L					*83*		*35-130*			
Polychlorinated Biphenyls by EPA Method 8082														
PCB-1016	8030063			ug/L	0.140	0.800	<0.140							
PCB-1221	8030063			ug/L	0.490	0.800	<0.490							
PCB-1232	8030063			ug/L	0.120	0.800	<0.120							
PCB-1242	8030063			ug/L	0.160	0.800	<0.160							
PCB-1248	8030063			ug/L	0.120	0.800	<0.120							
PCB-1254	8030063			ug/L	0.0440	0.800	<0.0440							
PCB-1260	8030063			ug/L	0.0750	0.800	<0.0750							
PCB-1268	8030063			ug/L	0.0680	0.800	<0.0680							
Surrogate: Decachlorobiphenyl	*8030063*			ug/L					*24*		*10-100*			
Surrogate: Tetrachloro-meta-xylene	*8030063*			ug/L					*71*		*22-112*			

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

CCV QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
Benzene	8C07003		50.000	ug/L	N/A	N/A	49.2		98		80-120			
Bromobenzene	8C07003		50.000	ug/L	N/A	N/A	50.9		102		80-120			
Bromochloromethane	8C07003		50.000	ug/L	N/A	N/A	47.2		94		80-120			
Bromodichloromethane	8C07003		50.000	ug/L	N/A	N/A	50.1		100		80-120			
Bromoform	8C07003		50.000	ug/L	N/A	N/A	51.4		103		80-120			
Bromomethane	8C07003		50.000	ug/L	N/A	N/A	41.2		82		80-120			
n-Butylbenzene	8C07003		50.000	ug/L	N/A	N/A	48.2		96		80-120			
sec-Butylbenzene	8C07003		50.000	ug/L	N/A	N/A	47.4		95		80-120			
tert-Butylbenzene	8C07003		50.000	ug/L	N/A	N/A	47.0		94		80-120			
Carbon Tetrachloride	8C07003		50.000	ug/L	N/A	N/A	47.9		96		80-120			
Chlorobenzene	8C07003		50.000	ug/L	N/A	N/A	48.3		97		80-120			
Chlorodibromomethane	8C07003		50.000	ug/L	N/A	N/A	50.3		101		80-120			
Chloroethane	8C07003		50.000	ug/L	N/A	N/A	60.2		120		80-120			
Chloroform	8C07003		50.000	ug/L	N/A	N/A	49.3		99		80-120			
Chloromethane	8C07003		50.000	ug/L	N/A	N/A	47.6		95		80-120			
2-Chlorotoluene	8C07003		50.000	ug/L	N/A	N/A	51.6		103		80-120			
4-Chlorotoluene	8C07003		50.000	ug/L	N/A	N/A	51.8		104		80-120			
1,2-Dibromo-3-chloropropane	8C07003		50.000	ug/L	N/A	N/A	48.8		98		80-120			
1,2-Dibromoethane (EDB)	8C07003		50.000	ug/L	N/A	N/A	49.6		99		80-120			
Dibromomethane	8C07003		50.000	ug/L	N/A	N/A	48.4		97		80-120			
1,2-Dichlorobenzene	8C07003		50.000	ug/L	N/A	N/A	47.1		94		80-120			
1,3-Dichlorobenzene	8C07003		50.000	ug/L	N/A	N/A	45.8		92		80-120			
1,4-Dichlorobenzene	8C07003		50.000	ug/L	N/A	N/A	46.0		92		80-120			
Dichlorodifluoromethane	8C07003		50.000	ug/L	N/A	N/A	42.6		85		80-120			
1,1-Dichloroethane	8C07003		50.000	ug/L	N/A	N/A	50.2		100		80-120			
1,2-Dichloroethane	8C07003		50.000	ug/L	N/A	N/A	49.5		99		80-120			
1,1-Dichloroethene	8C07003		50.000	ug/L	N/A	N/A	48.0		96		80-120			
cis-1,2-Dichloroethene	8C07003		50.000	ug/L	N/A	N/A	49.9		100		80-120			
trans-1,2-Dichloroethene	8C07003		50.000	ug/L	N/A	N/A	46.1		92		80-120			
1,2-Dichloropropane	8C07003		50.000	ug/L	N/A	N/A	50.0		100		80-120			
1,3-Dichloropropane	8C07003		50.000	ug/L	N/A	N/A	50.5		101		80-120			
2,2-Dichloropropane	8C07003		50.000	ug/L	N/A	N/A	45.4		91		80-120			
1,1-Dichloropropene	8C07003		50.000	ug/L	N/A	N/A	48.6		97		80-120			
cis-1,3-Dichloropropene	8C07003		50.000	ug/L	N/A	N/A	48.9		98		80-120			
trans-1,3-Dichloropropene	8C07003		50.000	ug/L	N/A	N/A	48.6		97		80-120			
2,3-Dichloropropene	8C07003		50.000	ug/L	N/A	N/A	49.7		99		80-120			
Isopropyl Ether	8C07003		50.000	ug/L	N/A	N/A	50.9		102		80-120			
Ethylbenzene	8C07003		50.000	ug/L	N/A	N/A	47.5		95		80-120			
Hexachlorobutadiene	8C07003		50.000	ug/L	N/A	N/A	48.5		97		80-120			
Isopropylbenzene	8C07003		50.000	ug/L	N/A	N/A	50.1		100		80-120			
p-Isopropyltoluene	8C07003		50.000	ug/L	N/A	N/A	53.2		106		80-120			
Methylene Chloride	8C07003		50.000	ug/L	N/A	N/A	48.6		97		80-120			
Methyl tert-Butyl Ether	8C07003		50.000	ug/L	N/A	N/A	50.2		100		80-120			
Naphthalene	8C07003		50.000	ug/L	N/A	N/A	50.6		101		80-120			
n-Propylbenzene	8C07003		50.000	ug/L	N/A	N/A	53.0		106		80-120			

SIGMA ENVIRONMENTAL SERV. - Milwaukee
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Work Order: WRB0904
Project: 10813 City of Milwaukee
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Received: 02/29/08
Reported: 03/12/08 14:26

CCV QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
Styrene	8C07003		50.000	ug/L	N/A	N/A	50.6		101		80-120			
1,1,1,2-Tetrachloroethane	8C07003		50.000	ug/L	N/A	N/A	49.7		99		80-120			
1,1,2,2-Tetrachloroethane	8C07003		50.000	ug/L	N/A	N/A	52.1		104		80-120			
Tetrachloroethene	8C07003		50.000	ug/L	N/A	N/A	47.6		95		80-120			
Toluene	8C07003		50.000	ug/L	N/A	N/A	49.6		99		80-120			
1,2,3-Trichlorobenzene	8C07003		50.000	ug/L	N/A	N/A	48.2		96		80-120			
1,2,4-Trichlorobenzene	8C07003		50.000	ug/L	N/A	N/A	47.7		95		80-120			
1,1,1-Trichloroethane	8C07003		50.000	ug/L	N/A	N/A	48.3		97		80-120			
1,1,2-Trichloroethane	8C07003		50.000	ug/L	N/A	N/A	49.6		99		80-120			
Trichloroethene	8C07003		50.000	ug/L	N/A	N/A	48.8		98		80-120			
Trichlorofluoromethane	8C07003		50.000	ug/L	N/A	N/A	45.2		90		80-120			
1,2,3-Trichloropropane	8C07003		50.000	ug/L	N/A	N/A	51.7		103		80-120			
1,2,4-Trimethylbenzene	8C07003		50.000	ug/L	N/A	N/A	51.7		103		80-120			
1,3,5-Trimethylbenzene	8C07003		50.000	ug/L	N/A	N/A	51.7		103		80-120			
Vinyl chloride	8C07003		50.000	ug/L	N/A	N/A	47.3		95		80-120			
Xylenes, Total	8C07003		150.00	ug/L	N/A	N/A	150		100		80-120			
Surrogate: Dibromofluoromethane	*8C07003*			ug/L					*100*		*80-120*			
Surrogate: Toluene-d8	*8C07003*			ug/L					*101*		*80-120*			
Surrogate: 4-Bromofluorobenzene	*8C07003*			ug/L					*105*		*80-120*			
Benzene	8C08002		50.000	ug/L	N/A	N/A	47.2		94		80-120			
Bromobenzene	8C08002		50.000	ug/L	N/A	N/A	48.5		97		80-120			
Bromochloromethane	8C08002		50.000	ug/L	N/A	N/A	48.5		97		80-120			
Bromodichloromethane	8C08002		50.000	ug/L	N/A	N/A	48.1		96		80-120			
Bromoform	8C08002		50.000	ug/L	N/A	N/A	49.3		99		80-120			
Bromomethane	8C08002		50.000	ug/L	N/A	N/A	48.1		96		80-120			
2-Butanone (MEK)	8C08002		50.000	ug/L	N/A	N/A	48.9		98		80-120			
n-Butylbenzene	8C08002		50.000	ug/L	N/A	N/A	48.1		96		80-120			
sec-Butylbenzene	8C08002		50.000	ug/L	N/A	N/A	48.0		96		80-120			
tert-Butylbenzene	8C08002		50.000	ug/L	N/A	N/A	48.2		96		80-120			
Carbon Tetrachloride	8C08002		50.000	ug/L	N/A	N/A	48.4		97		80-120			
Chlorobenzene	8C08002		50.000	ug/L	N/A	N/A	48.1		96		80-120			
Chlorodibromomethane	8C08002		50.000	ug/L	N/A	N/A	48.8		98		80-120			
Chloroethane	8C08002		50.000	ug/L	N/A	N/A	43.2		86		80-120			
Chloroform	8C08002		50.000	ug/L	N/A	N/A	47.4		95		80-120			
Chloromethane	8C08002		50.000	ug/L	N/A	N/A	41.3		83		80-120			
2-Chlorotoluene	8C08002		50.000	ug/L	N/A	N/A	49.1		98		80-120			
4-Chlorotoluene	8C08002		50.000	ug/L	N/A	N/A	48.2		96		80-120			
1,2-Dibromo-3-chloropropane	8C08002		50.000	ug/L	N/A	N/A	48.6		97		80-120			
1,2-Dibromoethane (EDB)	8C08002		50.000	ug/L	N/A	N/A	48.2		96		80-120			
Dibromomethane	8C08002		50.000	ug/L	N/A	N/A	48.2		96		80-120			
1,2-Dichlorobenzene	8C08002		50.000	ug/L	N/A	N/A	48.5		97		80-120			
1,3-Dichlorobenzene	8C08002		50.000	ug/L	N/A	N/A	47.8		96		80-120			
1,4-Dichlorobenzene	8C08002		50.000	ug/L	N/A	N/A	47.7		95		80-120			
Dichlorodifluoromethane	8C08002		50.000	ug/L	N/A	N/A	47.1		94		80-120			

SIGMA ENVIRONMENTAL SERV. - Milwaukee
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Received: 02/29/08
Reported: 03/12/08 14:26

CCV QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
1,1-Dichloroethane	8C08002		50.000	ug/L	N/A	N/A	46.6		93		80-120			
1,2-Dichloroethane	8C08002		50.000	ug/L	N/A	N/A	48.0		96		80-120			
1,1-Dichloroethene	8C08002		50.000	ug/L	N/A	N/A	47.6		95		80-120			
cis-1,2-Dichloroethene	8C08002		50.000	ug/L	N/A	N/A	47.7		95		80-120			
trans-1,2-Dichloroethene	8C08002		50.000	ug/L	N/A	N/A	47.6		95		80-120			
1,2-Dichloropropane	8C08002		50.000	ug/L	N/A	N/A	46.8		94		80-120			
1,3-Dichloropropane	8C08002		50.000	ug/L	N/A	N/A	48.2		96		80-120			
2,2-Dichloropropane	8C08002		50.000	ug/L	N/A	N/A	48.2		96		80-120			
1,1-Dichloropropene	8C08002		50.000	ug/L	N/A	N/A	47.0		94		80-120			
cis-1,3-Dichloropropene	8C08002		50.000	ug/L	N/A	N/A	48.4		97		80-120			
trans-1,3-Dichloropropene	8C08002		50.000	ug/L	N/A	N/A	49.1		98		80-120			
2,3-Dichloropropene	8C08002		50.000	ug/L	N/A	N/A	48.0		96		80-120			
Isopropyl Ether	8C08002		50.000	ug/L	N/A	N/A	46.5		93		80-120			
Ethylbenzene	8C08002		50.000	ug/L	N/A	N/A	48.0		96		80-120			
Hexachlorobutadiene	8C08002		50.000	ug/L	N/A	N/A	47.2		94		80-120			
Isopropylbenzene	8C08002		50.000	ug/L	N/A	N/A	48.1		96		80-120			
p-Isopropyltoluene	8C08002		50.000	ug/L	N/A	N/A	48.0		96		80-120			
Methylene Chloride	8C08002		50.000	ug/L	N/A	N/A	48.6		97		80-120			
Methyl tert-Butyl Ether	8C08002		50.000	ug/L	N/A	N/A	48.6		97		80-120			
Naphthalene	8C08002		50.000	ug/L	N/A	N/A	48.5		97		80-120			
n-Propylbenzene	8C08002		50.000	ug/L	N/A	N/A	48.3		97		80-120			
Styrene	8C08002		50.000	ug/L	N/A	N/A	47.9		96		80-120			
1,1,1,2-Tetrachloroethane	8C08002		50.000	ug/L	N/A	N/A	49.2		98		80-120			
1,1,2,2-Tetrachloroethane	8C08002		50.000	ug/L	N/A	N/A	47.8		96		80-120			
Tetrachloroethene	8C08002		50.000	ug/L	N/A	N/A	47.5		95		80-120			
Toluene	8C08002		50.000	ug/L	N/A	N/A	47.5		95		80-120			
1,2,3-Trichlorobenzene	8C08002		50.000	ug/L	N/A	N/A	48.4		97		80-120			
1,2,4-Trichlorobenzene	8C08002		50.000	ug/L	N/A	N/A	48.2		96		80-120			
1,1,1-Trichloroethane	8C08002		50.000	ug/L	N/A	N/A	47.8		96		80-120			
1,1,2-Trichloroethane	8C08002		50.000	ug/L	N/A	N/A	48.7		97		80-120			
Trichloroethene	8C08002		50.000	ug/L	N/A	N/A	48.7		97		80-120			
Trichlorofluoromethane	8C08002		50.000	ug/L	N/A	N/A	46.9		94		80-120			
1,2,3-Trichloropropane	8C08002		50.000	ug/L	N/A	N/A	47.5		95		80-120			
1,2,4-Trimethylbenzene	8C08002		50.000	ug/L	N/A	N/A	47.9		96		80-120			
1,3,5-Trimethylbenzene	8C08002		50.000	ug/L	N/A	N/A	48.1		96		80-120			
Vinyl chloride	8C08002		50.000	ug/L	N/A	N/A	34.4		69		80-120			
Xylenes, Total	8C08002		150.00	ug/L	N/A	N/A	144		96		80-120			
Surrogate: Dibromofluoromethane	*8C08002*			ug/L					*100*		*80-120*			
Surrogate: Toluene-d8	*8C08002*			ug/L					*100*		*80-120*			
Surrogate: 4-Bromofluorobenzene	*8C08002*			ug/L					*101*		*80-120*			

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
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Work Order: WRB0904
Project: 10813 City of Milwaukee
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Received: 02/29/08
Reported: 03/12/08 14:26

LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Metals Dissolved														
Mercury	8030027		0.0025 000	mg/L	0.000065	0.00023	0.00242		97		79-128			B
Semivolatile Organics by GC/MS														
Acenaphthene	8030105		100	ug/L	1.89	10.0	67.1	64.9	67	65	45-120	3	35	
Acenaphthylene	8030105		100	ug/L	1.41	10.0	43.1	47.7	43	48	45-115	10	35	L1
Anthracene	8030105		100	ug/L	1.15	10.0	77.1	76.1	77	76	50-125	1	35	
Benzidine	8030105		100	ug/L	33.0	100	<33.0	<33.0			5-95		35	CIN,L1
Benzo (a) anthracene	8030105		100	ug/L	1.10	10.0	80.1	76.9	80	77	50-130	4	35	
Benzo (b) fluoranthene	8030105		100	ug/L	1.90	10.0	83.3	77.2	83	77	50-130	8	35	
Benzo (k) fluoranthene	8030105		100	ug/L	2.12	10.0	84.0	78.2	84	78	50-130	7	35	
Benzo (a) pyrene	8030105		100	ug/L	1.93	10.0	72.5	68.6	72	69	45-125	6	35	
Benzo (g,h,i) perylene	8030105		100	ug/L	2.03	10.0	78.7	74.7	79	75	55-125	5	35	
Benzyl alcohol	8030105		100	ug/L	1.26	10.0	60.0	64.8	60	65	35-100	8	35	
Butyl benzyl phthalate	8030105		100	ug/L	1.54	10.0	93.6	94.2	94	94	45-140	1	35	
Bis(2-chloroethyl)ether	8030105		100	ug/L	1.50	10.0	70.0	72.0	70	72	40-110	3	30	
Bis(2-chloroethoxy)methane	8030105		100	ug/L	1.52	10.0	69.6	69.7	70	70	40-110	0	30	
Bis(2-ethylhexyl)phthalate	8030105		100	ug/L	1.60	10.0	94.0	94.6	94	95	45-140	1	35	
Bis(2-chloroisopropyl) ether	8030105		100	ug/L	1.33	10.0	68.6	69.2	69	69	40-110	1	30	
4-Bromophenyl phenyl ether	8030105		100	ug/L	1.96	10.0	75.9	80.3	76	80	55-130	6	35	
Carbazole	8030105		100	ug/L	1.42	10.0	61.0	62.4	61	62	40-135	2	35	
4-Chloroaniline	8030105		100	ug/L	1.23	10.0	1.79	2.01	2	2	15-110	12	35	L1,J
2-Chloronaphthalene	8030105		100	ug/L	1.79	10.0	69.7	67.3	70	67	40-120	3	35	
4-Chlorophenyl phenyl ether	8030105		100	ug/L	2.08	10.0	80.7	76.6	81	77	50-125	5	35	
Chrysene	8030105		100	ug/L	1.33	10.0	78.5	74.8	78	75	50-130	5	35	
Dibenzo (a,h) anthracene	8030105		100	ug/L	2.20	10.0	80.1	76.0	80	76	55-130	5	30	
Dibenzofuran	8030105		100	ug/L	1.64	10.0	80.2	77.8	80	78	45-130	3	30	
Di-n-butyl phthalate	8030105		100	ug/L	1.55	10.0	84.7	84.3	85	84	50-135	1	35	
1,2-Dichlorobenzene	8030105		100	ug/L	1.40	10.0	55.6	60.4	56	60	35-105	8	30	
1,3-Dichlorobenzene	8030105		100	ug/L	1.50	10.0	53.5	57.9	53	58	35-105	8	35	
1,4-Dichlorobenzene	8030105		100	ug/L	1.59	10.0	53.4	58.9	53	59	35-105	10	35	
3,3'-Dichlorobenzidine	8030105		100	ug/L	1.74	50.0	7.07	6.46	7	6	25-120	9	35	L1,J
Diethyl phthalate	8030105		100	ug/L	1.34	10.0	86.1	82.5	86	82	45-135	4	35	
Dimethyl phthalate	8030105		100	ug/L	1.55	10.0	81.3	78.2	81	78	50-130	4	35	
2,4-Dinitrotoluene	8030105		100	ug/L	1.32	10.0	88.4	83.4	88	83	55-135	6	35	
2,6-Dinitrotoluene	8030105		100	ug/L	1.93	10.0	85.9	80.7	86	81	55-135	6	35	
Di-n-octyl phthalate	8030105		100	ug/L	1.78	10.0	111	101	111	101	45-140	10	35	
Fluoranthene	8030105		100	ug/L	1.27	10.0	81.0	75.1	81	75	50-130	8	35	
Fluorene	8030105		100	ug/L	1.56	10.0	78.4	73.3	78	73	50-125	7	35	
Hexachlorobenzene	8030105		100	ug/L	2.01	10.0	79.9	80.0	80	80	55-135	0	35	
Hexachlorobutadiene	8030105		100	ug/L	1.94	10.0	45.9	49.7	46	50	35-100	8	35	
Hexachlorocyclopentadiene	8030105		100	ug/L	1.09	20.0	55.1	58.8	55	59	25-110	7	35	
Hexachloroethane	8030105		100	ug/L	1.38	10.0	46.7	53.8	47	54	30-110	14	35	
Indeno (1,2,3-cd) pyrene	8030105		100	ug/L	1.62	10.0	80.1	75.1	80	75	50-130	6	30	
Isophorone	8030105		100	ug/L	1.49	10.0	71.6	70.8	72	71	40-115	1	30	
2-Methylnaphthalene	8030105		100	ug/L	1.50	10.0	66.2	66.2	66	66	40-110	0	35	

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
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Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Semivolatile Organics by GC/MS														
Naphthalene	8030105		100	ug/L	1.49	10.0	61.0	63.1	61	63	40-105	3	35	
2-Nitroaniline	8030105		100	ug/L	1.54	10.0	73.9	69.7	74	70	45-135	6	30	
3-Nitroaniline	8030105		100	ug/L	1.68	10.0	8.59	17.4	9	17	40-135	68	35	L1,J,R
4-Nitroaniline	8030105		100	ug/L	1.86	10.0	28.6	34.1	29	34	40-135	17	35	L1
Nitrobenzene	8030105		100	ug/L	1.52	10.0	71.1	70.8	71	71	40-110	1	30	
N-Nitrosodimethylamine	8030105		100	ug/L	0.892	10.0	46.1	48.8	46	49	25-75	6	35	ICV2
N-Nitrosodiphenylamine	8030105		100	ug/L	1.82	10.0	64.6	67.1	65	67	35-130	4	35	
N-Nitrosodi-n-propylamine	8030105		100	ug/L	1.95	10.0	70.1	72.5	70	73	40-115	3	30	
Phenanthrene	8030105		100	ug/L	1.37	10.0	78.1	75.8	78	76	50-125	3	35	
Pyrene	8030105		100	ug/L	1.28	10.0	89.7	89.2	90	89	50-130	1	35	
Pyridine	8030105		100	ug/L	0.670	10.0	38.3	44.6	38	45	20-70	15	35	
1,2,4-Trichlorobenzene	8030105		100	ug/L	1.65	10.0	59.2	60.1	59	60	35-110	1	35	
Benzoic acid	8030105		100	ug/L	13.0	100	<13.0	<13.0			10-50		35	L1
4-Chloro-3-methylphenol	8030105		100	ug/L	1.45	10.0	67.1	65.0	67	65	40-115	3	35	
2-Chlorophenol	8030105		100	ug/L	1.38	10.0	56.4	59.2	56	59	40-105	5	35	
Cresol(s)	8030105		200	ug/L	1.22	10.0	83.6	87.1	42	44	30-85	4	35	
2,4-Dichlorophenol	8030105		100	ug/L	1.72	10.0	66.8	66.5	67	66	40-110	1	35	
2,4-Dimethylphenol	8030105		100	ug/L	0.899	10.0	14.3	14.8	14	15	20-95	4	35	L1
2,4-Dinitrophenol	8030105		100	ug/L	1.25	20.0	50.3	43.3	50	43	25-120	15	35	
4,6-Dinitro-2-methylphenol	8030105		100	ug/L	1.64	10.0	68.8	67.4	69	67	40-135	2	35	
2-Methylphenol (o-Cresol)	8030105		100	ug/L	1.22	10.0	41.3	42.2	41	42	30-95	2	35	
4-Methylphenol (p-Cresol)	8030105		100	ug/L	1.05	10.0	42.3	44.9	42	45	30-90	6	35	
2-Nitrophenol	8030105		100	ug/L	1.65	10.0	69.0	69.7	69	70	45-110	1	35	
4-Nitrophenol	8030105		100	ug/L	0.834	10.0	33.4	29.7	33	30	15-65	12	35	
Pentachlorophenol	8030105		100	ug/L	1.22	10.0	59.1	51.9	59	52	35-130	13	35	
Phenol	8030105		100	ug/L	0.730	10.0	25.8	25.1	26	25	15-50	3	35	
2,4,5-Trichlorophenol	8030105		100	ug/L	1.78	10.0	71.1	68.8	71	69	50-125	3	35	
2,4,6-Trichlorophenol	8030105		100	ug/L	1.84	10.0	70.6	66.7	71	67	45-125	6	35	
Surrogate: Nitrobenzene-d5	*8030105*			ug/L					*67*	*66*	*40-110*			
Surrogate: 2-Fluorobiphenyl	*8030105*			ug/L					*70*	*66*	*40-110*			
Surrogate: Terphenyl-d14	*8030105*			ug/L					*92*	*93*	*45-115*			
Surrogate: Phenol-d6	*8030105*			ug/L					*25*	*25*	*10-75*			
Surrogate: 2-Fluorophenol	*8030105*			ug/L					*38*	*37*	*20-65*			
Surrogate: 2,4,6-Tribromophenol	*8030105*			ug/L					*81*	*77*	*45-130*			
Polychlorinated Biphenyls by EPA Method 8082														
PCB-1242	8030063		5.00	ug/L	0.160	0.800	2.89		58		20-110			
Surrogate: Decachlorobiphenyl	*8030063*			ug/L					*25*		*10-100*			
Surrogate: Tetrachloro-meta-xylene	*8030063*			ug/L					*70*		*22-112*			

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

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Work Order: WRB0904
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MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
General Chemistry Parameters														
QC Source Sample: WRB0817-01														
Chloride	8030054	6.35	200.00	mg/L	10	33	282	261	138	127	64-132	8	19	M11
Metals Dissolved														
QC Source Sample: WRB0893-01														
Mercury	8030027	0.000086	0.0025 000	mg/L	0.000065	0.00023	0.00279	0.00273	108	106	67-141	2	13	B
QC Source Sample: WRB0893-03														
Arsenic	8030078	1.10	50.000	ug/L	0.070	0.22	58.0	58.1	114	114	75-125	0	20	
Cadmium	8030078	0.0300	50.000	ug/L	0.010	0.032	53.3	53.9	106	108	65-118	1	18	
Chromium	8030078	4.20	50.000	ug/L	0.070	0.22	48.5	48.4	89	88	75-125	0	20	
Lead	8030078	0.0400	50.000	ug/L	0.040	0.13	45.1	44.2	90	88	75-125	2	20	
Selenium	8030078	0.320	50.000	ug/L	0.17	0.54	52.9	54.0	105	107	70-123	2	20	
Silver	8030078	<0.020	50.000	ug/L	0.020	0.064	48.6	49.4	97	99	70-124	2	20	
VOCs by SW8260B														
QC Source Sample: WRB0904-01														
Benzene	8030142	<0.20	50.000	ug/L	0.20	0.67	50.0	47.2	100	94	80-121	6	11	
Bromobenzene	8030142	<0.20	50.000	ug/L	0.20	0.67	51.7	53.0	103	106	70-130	3	20	
Bromochloromethane	8030142	<0.50	50.000	ug/L	0.50	1.7	48.9	48.5	98	97	70-130	1	20	
Bromodichloromethane	8030142	<0.20	50.000	ug/L	0.20	0.67	50.7	51.3	101	103	70-130	1	20	
Bromoform	8030142	<0.20	50.000	ug/L	0.20	0.67	51.8	52.5	104	105	70-130	1	20	
Bromomethane	8030142	<0.20	50.000	ug/L	0.20	0.67	40.4	35.8	81	72	70-130	12	20	
n-Butylbenzene	8030142	<0.20	50.000	ug/L	0.20	0.67	56.1	54.7	112	109	70-130	3	20	
sec-Butylbenzene	8030142	0.460	50.000	ug/L	0.25	0.83	53.2	51.9	105	103	70-130	2	20	
tert-Butylbenzene	8030142	<0.20	50.000	ug/L	0.20	0.67	52.2	50.7	104	101	70-130	3	20	
Carbon Tetrachloride	8030142	<0.50	50.000	ug/L	0.50	1.7	49.7	46.0	99	92	70-130	8	20	
Chlorobenzene	8030142	<0.20	50.000	ug/L	0.20	0.67	48.9	47.9	98	96	85-116	2	9	
Chlorodibromomethane	8030142	<0.20	50.000	ug/L	0.20	0.67	51.4	52.1	103	104	70-130	1	20	
Chloroethane	8030142	<1.0	50.000	ug/L	1.0	3.3	63.5	59.1	127	118	70-130	7	20	
Chloroform	8030142	<0.20	50.000	ug/L	0.20	0.67	50.0	47.6	100	95	70-130	5	20	
Chloromethane	8030142	<0.20	50.000	ug/L	0.20	0.67	46.6	43.6	93	87	70-130	7	20	
2-Chlorotoluene	8030142	<0.50	50.000	ug/L	0.50	1.7	51.2	49.9	102	100	70-130	3	20	
4-Chlorotoluene	8030142	<0.20	50.000	ug/L	0.20	0.67	51.5	47.0	103	94	70-130	9	20	
1,2-Dibromo-3-chloropropane	8030142	<0.50	50.000	ug/L	0.50	1.7	59.9	66.2	120	132	70-130	10	20	M11
1,2-Dibromoethane (EDB)	8030142	<0.20	50.000	ug/L	0.20	0.67	50.5	51.1	101	102	70-130	1	20	
Dibromomethane	8030142	<0.20	50.000	ug/L	0.20	0.67	49.1	52.4	98	105	70-130	6	20	
1,2-Dichlorobenzene	8030142	<0.20	50.000	ug/L	0.20	0.67	51.8	50.4	104	101	70-130	3	20	
1,3-Dichlorobenzene	8030142	<0.20	50.000	ug/L	0.20	0.67	49.7	50.7	99	101	70-130	2	20	
1,4-Dichlorobenzene	8030142	<0.20	50.000	ug/L	0.20	0.67	48.3	47.2	97	94	70-130	2	20	
Dichlorodifluoromethane	8030142	<0.50	50.000	ug/L	0.50	1.7	41.6	38.0	83	76	70-130	9	20	
1,1-Dichloroethane	8030142	<0.50	50.000	ug/L	0.50	1.7	49.2	46.1	98	92	70-130	7	20	
1,2-Dichloroethane	8030142	<0.50	50.000	ug/L	0.50	1.7	49.2	44.5	98	89	70-130	10	20	
1,1-Dichloroethene	8030142	<0.50	50.000	ug/L	0.50	1.7	49.4	43.8	99	88	72-131	12	17	
cis-1,2-Dichloroethene	8030142	<0.50	50.000	ug/L	0.50	1.7	49.5	48.6	99	97	70-130	2	20	
trans-1,2-Dichloroethene	8030142	<0.50	50.000	ug/L	0.50	1.7	47.8	44.4	96	89	70-130	7	20	
1,2-Dichloropropane	8030142	<0.50	50.000	ug/L	0.50	1.7	51.2	51.9	102	104	70-130	1	20	
1,3-Dichloropropane	8030142	<0.25	50.000	ug/L	0.25	0.83	50.2	51.6	100	103	70-130	3	20	
2,2-Dichloropropane	8030142	<0.50	50.000	ug/L	0.50	1.7	44.4	41.7	89	83	70-130	6	20	
1,1-Dichloropropene	8030142	<0.50	50.000	ug/L	0.50	1.7	50.6	46.8	101	94	70-130	8	20	

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Reported: 03/12/08 14:26

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
QC Source Sample: WRB0904-01														
cis-1,3-Dichloropropene	8030142	<0.20	50.000	ug/L	0.20	0.67	49.6	49.6	99	99	70-130	0	20	
trans-1,3-Dichloropropene	8030142	<0.20	50.000	ug/L	0.20	0.67	49.1	50.4	98	101	70-130	3	20	
Isopropyl Ether	8030142	<0.50	50.000	ug/L	0.50	1.7	50.6	48.1	101	96	68-128	5	16	
Ethylbenzene	8030142	1.60	50.000	ug/L	0.50	1.7	51.3	51.1	99	99	83-118	0	13	
Hexachlorobutadiene	8030142	<0.50	50.000	ug/L	0.50	1.7	53.5	55.3	107	111	70-130	3	20	
Isopropylbenzene	8030142	0.490	50.000	ug/L	0.20	0.67	49.8	50.1	99	99	70-130	1	20	
p-Isopropyltoluene	8030142	0.420	50.000	ug/L	0.20	0.67	53.6	51.4	106	102	70-130	4	20	
Methylene Chloride	8030142	<1.0	50.000	ug/L	1.0	3.3	50.7	47.5	101	95	70-130	6	20	
Methyl tert-Butyl Ether	8030142	<0.50	50.000	ug/L	0.50	1.7	50.8	47.8	102	96	71-127	6	22	
Naphthalene	8030142	9.16	50.000	ug/L	0.25	0.83	58.2	55.7	98	93	70-130	4	20	
n-Propylbenzene	8030142	0.850	50.000	ug/L	0.50	1.7	54.6	52.8	108	104	70-130	4	20	
Styrene	8030142	<0.20	50.000	ug/L	0.20	0.67	49.1	51.1	98	102	70-130	4	20	
1,1,1,2-Tetrachloroethane	8030142	<0.25	50.000	ug/L	0.25	0.83	51.0	50.4	102	101	70-130	1	20	
1,1,2,2-Tetrachloroethane	8030142	<0.20	50.000	ug/L	0.20	0.67	52.5	52.3	105	105	70-130	1	20	
Tetrachloroethene	8030142	<0.50	50.000	ug/L	0.50	1.7	48.7	47.9	97	96	70-130	2	20	
Toluene	8030142	1.89	50.000	ug/L	0.20	0.67	52.8	51.8	102	100	82-116	2	11	
1,2,3-Trichlorobenzene	8030142	<0.25	50.000	ug/L	0.25	0.83	51.9	51.3	104	103	70-130	1	20	
1,2,4-Trichlorobenzene	8030142	<0.25	50.000	ug/L	0.25	0.83	50.9	49.5	102	99	70-130	3	20	
1,1,1-Trichloroethane	8030142	<0.50	50.000	ug/L	0.50	1.7	49.3	47.9	99	96	70-130	3	20	
1,1,2-Trichloroethane	8030142	<0.25	50.000	ug/L	0.25	0.83	50.6	51.4	101	103	70-130	2	20	
Trichloroethene	8030142	<0.20	50.000	ug/L	0.20	0.67	49.3	50.9	99	102	80-117	3	13	
Trichlorofluoromethane	8030142	<0.50	50.000	ug/L	0.50	1.7	46.2	43.2	92	86	70-130	7	20	
1,2,3-Trichloropropane	8030142	<0.50	50.000	ug/L	0.50	1.7	52.2	51.4	104	103	70-130	2	20	
1,2,4-Trimethylbenzene	8030142	9.01	50.000	ug/L	0.20	0.67	60.2	56.9	102	96	80-122	6	14	
1,3,5-Trimethylbenzene	8030142	1.68	50.000	ug/L	0.20	0.67	52.4	50.4	101	97	83-122	4	12	
Vinyl chloride	8030142	<0.20	50.000	ug/L	0.20	0.67	47.2	44.7	94	89	70-130	6	20	
Xylenes, Total	8030142	9.52	150.00	ug/L	0.50	1.7	152	159	95	100	84-119	4	12	
Surrogate: Dibromofluoromethane	*8030142*			ug/L					*97*	*96*	*89-119*			
Surrogate: Toluene-d8	*8030142*			ug/L					*104*	*100*	*91-109*			
Surrogate: 4-Bromofluorobenzene	*8030142*			ug/L					*102*	*102*	*89-114*			
QC Source Sample: WRB0904-07														
Benzene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.9	52.1	102	104	80-121	2	11	
Bromobenzene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.2	51.4	100	103	70-130	2	20	
Bromochloromethane	8030173	<0.50	50.000	ug/L	0.50	1.7	51.3	53.4	103	107	70-130	4	20	
Bromodichloromethane	8030173	<0.20	50.000	ug/L	0.20	0.67	50.4	52.2	101	104	70-130	4	20	
Bromoform	8030173	<0.20	50.000	ug/L	0.20	0.67	51.0	52.3	102	105	70-130	3	20	
Bromomethane	8030173	<0.20	50.000	ug/L	0.20	0.67	59.6	56.4	119	113	70-130	6	20	
n-Butylbenzene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.4	51.6	101	103	70-130	2	20	
sec-Butylbenzene	8030173	<0.25	50.000	ug/L	0.25	0.83	50.5	51.1	101	102	70-130	1	20	
tert-Butylbenzene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.2	50.8	100	102	70-130	1	20	
Carbon Tetrachloride	8030173	<0.50	50.000	ug/L	0.50	1.7	51.8	53.0	104	106	70-130	2	20	
Chlorobenzene	8030173	0.290	50.000	ug/L	0.20	0.67	50.3	51.6	100	103	85-116	3	9	
Chlorodibromomethane	8030173	<0.20	50.000	ug/L	0.20	0.67	50.4	52.7	101	105	70-130	5	20	
Chloroethane	8030173	<1.0	50.000	ug/L	1.0	3.3	54.4	55.4	109	111	70-130	2	20	
Chloroform	8030173	0.230	50.000	ug/L	0.20	0.67	50.3	52.0	100	103	70-130	3	20	

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MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
QC Source Sample: WRB0904-07														
Chloromethane	8030173	<0.20	50.000	ug/L	0.20	0.67	57.6	60.0	115	120	70-130	4	20	
2-Chlorotoluene	8030173	<0.50	50.000	ug/L	0.50	1.7	47.4	53.2	95	106	70-130	12	20	
4-Chlorotoluene	8030173	<0.20	50.000	ug/L	0.20	0.67	47.4	49.8	95	100	70-130	5	20	
1,2-Dibromo-3-chloropropane	8030173	<0.50	50.000	ug/L	0.50	1.7	50.5	51.9	101	104	70-130	3	20	
1,2-Dibromoethane (EDB)	8030173	<0.20	50.000	ug/L	0.20	0.67	49.9	51.2	100	102	70-130	3	20	
Dibromomethane	8030173	<0.20	50.000	ug/L	0.20	0.67	49.6	51.9	99	104	70-130	4	20	
1,2-Dichlorobenzene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.8	52.1	102	104	70-130	3	20	
1,3-Dichlorobenzene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.8	51.5	102	103	70-130	1	20	
1,4-Dichlorobenzene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.4	51.3	101	103	70-130	2	20	
Dichlorodifluoromethane	8030173	<0.50	50.000	ug/L	0.50	1.7	52.9	52.9	106	106	70-130	0	20	
1,1-Dichloroethane	8030173	<0.50	50.000	ug/L	0.50	1.7	50.4	51.8	101	104	70-130	3	20	
1,2-Dichloroethane	8030173	<0.50	50.000	ug/L	0.50	1.7	51.3	53.3	103	107	70-130	4	20	
1,1-Dichloroethene	8030173	<0.50	50.000	ug/L	0.50	1.7	53.8	54.2	108	108	72-131	1	17	
cis-1,2-Dichloroethene	8030173	<0.50	50.000	ug/L	0.50	1.7	137	142	273	284	70-130	4	20	
trans-1,2-Dichloroethene	8030173	<0.50	50.000	ug/L	0.50	1.7	51.0	53.1	102	106	70-130	4	20	
1,2-Dichloropropane	8030173	<0.50	50.000	ug/L	0.50	1.7	48.9	50.8	98	102	70-130	4	20	
1,3-Dichloropropane	8030173	<0.25	50.000	ug/L	0.25	0.83	49.9	52.0	100	104	70-130	4	20	
2,2-Dichloropropane	8030173	<0.50	50.000	ug/L	0.50	1.7	52.8	53.4	106	107	70-130	1	20	
1,1-Dichloropropene	8030173	<0.50	50.000	ug/L	0.50	1.7	50.7	51.7	101	103	70-130	2	20	
cis-1,3-Dichloropropene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.0	51.6	100	103	70-130	3	20	
trans-1,3-Dichloropropene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.3	51.8	101	104	70-130	3	20	
Isopropyl Ether	8030173	<0.50	50.000	ug/L	0.50	1.7	51.0	53.0	102	106	68-128	4	16	
Ethylbenzene	8030173	<0.50	50.000	ug/L	0.50	1.7	52.8	52.3	106	105	83-118	1	13	
Hexachlorobutadiene	8030173	<0.50	50.000	ug/L	0.50	1.7	48.7	49.8	97	100	70-130	2	20	
Isopropylbenzene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.0	50.6	100	101	70-130	1	20	
p-Isopropyltoluene	8030173	<0.20	50.000	ug/L	0.20	0.67	48.8	50.5	98	101	70-130	3	20	
Methylene Chloride	8030173	<1.0	50.000	ug/L	1.0	3.3	50.1	51.6	100	103	70-130	3	20	
Methyl tert-Butyl Ether	8030173	<0.50	50.000	ug/L	0.50	1.7	52.1	54.4	104	109	71-127	4	22	
Naphthalene	8030173	<0.25	50.000	ug/L	0.25	0.83	43.2	47.6	86	95	70-130	10	20	
n-Propylbenzene	8030173	<0.50	50.000	ug/L	0.50	1.7	50.5	51.2	101	102	70-130	1	20	
Styrene	8030173	<0.20	50.000	ug/L	0.20	0.67	49.8	50.9	100	102	70-130	2	20	
1,1,1,2-Tetrachloroethane	8030173	<0.25	50.000	ug/L	0.25	0.83	50.8	52.3	102	105	70-130	3	20	
1,1,2,2-Tetrachloroethane	8030173	<0.20	50.000	ug/L	0.20	0.67	50.0	51.1	100	102	70-130	2	20	
Tetrachloroethene	8030173	<0.50	50.000	ug/L	0.50	1.7	50.2	51.4	100	103	70-130	2	20	
Toluene	8030173	<0.20	50.000	ug/L	0.20	0.67	50.2	51.1	100	102	82-116	2	11	
1,2,3-Trichlorobenzene	8030173	<0.25	50.000	ug/L	0.25	0.83	45.7	49.8	91	100	70-130	9	20	
1,2,4-Trichlorobenzene	8030173	<0.25	50.000	ug/L	0.25	0.83	46.6	50.8	93	102	70-130	9	20	
1,1,1-Trichloroethane	8030173	<0.50	50.000	ug/L	0.50	1.7	51.4	53.0	103	106	70-130	3	20	
1,1,2-Trichloroethane	8030173	<0.25	50.000	ug/L	0.25	0.83	50.7	52.5	101	105	70-130	4	20	
Trichloroethene	8030173	<0.20	50.000	ug/L	0.20	0.67	53.6	55.0	107	110	80-117	3	13	
Trichlorofluoromethane	8030173	<0.50	50.000	ug/L	0.50	1.7	54.0	54.7	108	109	70-130	1	20	
1,2,3-Trichloropropane	8030173	<0.50	50.000	ug/L	0.50	1.7	49.4	51.4	99	103	70-130	4	20	
1,2,4-Trimethylbenzene	8030173	<0.20	50.000	ug/L	0.20	0.67	48.4	50.6	97	101	80-122	5	14	
1,3,5-Trimethylbenzene	8030173	<0.20	50.000	ug/L	0.20	0.67	49.2	50.9	98	102	83-122	3	12	
Vinyl chloride	8030173	<0.20	50.000	ug/L	0.20	0.67	49.1	50.0	98	100	70-130	2	20	

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee
1300 West Canal Street
Milwaukee, WI 53233
Mr. Steve Meer

Work Order: WRB0904
Project: 10813 City of Milwaukee
Project Number: 10813

Received: 02/29/08
Reported: 03/12/08 14:26

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
VOCs by SW8260B														
QC Source Sample: WRB0904-07														
Xylenes, Total	8030173	<0.50	150.00	ug/L	0.50	1.7	148	153	99	102	84-119	3	12	
Surrogate: Dibromofluoromethane	*8030173*			ug/L					*102*	*102*	*89-119*			
Surrogate: Toluene-d8	*8030173*			ug/L					*100*	*99*	*91-109*			
Surrogate: 4-Bromofluorobenzene	*8030173*			ug/L					*100*	*99*	*89-114*			
Polychlorinated Biphenyls by EPA Method 8082														
QC Source Sample: CRC0035-01														
PCB-1242	8030063	<0.16	5.26	ug/L	0.160	0.800	4.89	7.66	93	150	20-110	44	20	R9
Surrogate: Decachlorobiphenyl	*8030063*			ug/L					*39*	*28*	*10-100*			
Surrogate: Tetrachloro-meta-xylene	*8030063*			ug/L					*67*	*55*	*22-112*			

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

SIGMA ENVIRONMENTAL SERV. - Milwaukee 1300 West Canal Street Milwaukee, WI 53233 Mr. Steve Meer	Work Order: WRB0904 Project: 10813 City of Milwaukee Project Number: 10813	Received: 02/29/08 Reported: 03/12/08 14:26

CERTIFICATION SUMMARY

TestAmerica Watertown

Method	Matrix	Nelac	Wisconsin
EPA 245.1	Water - NonPotable	X	X
EPA 325.2	Water - NonPotable	X	X
SW 6020A	Water - NonPotable		
SW 8260B	Water - NonPotable	X	X

Subcontracted Laboratories

TestAmerica Analytical - Cedar Falls NELAC Cert #000668, Wisconsin Cert #999917270, Illinois Cert #000668, Minnesota Cert #019-999-319, Iowa Cert #007
704 Enterprise Drive - Cedar Falls, IA 50613
Method Performed: SW 8082
Samples: WRB0904-01, WRB0904-02, WRB0904-03, WRB0904-04, WRB0904-09

Method Performed: SW 8270C
Samples: WRB0904-01, WRB0904-02, WRB0904-03, WRB0904-04, WRB0904-09

DATA QUALIFIERS AND DEFINITIONS

B	Analyte was detected in the associated Method Blank.
C	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
CIN	The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria specified in EPA methods 8260B/8270C.
ICV2	ICV recovery was outside control limits.
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
Ja	Results reported between the Method Detection Limit (MDL) and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ.
L1	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was outside control limits.
M11	The MS and/or MSD were above the acceptance limits. See calibration verification (CCV)
R	Sample duplicate RPD exceeded the laboratory control limit.
R9	Sample RPD exceeded the laboratory control limit.
Z6	Surrogate recovery was outside control limits.
ZX	Due to sample matrix effects, the surrogate recovery was outside the control limits.

ADDITIONAL COMMENTS

TestAmerica Watertown
Brian DeJong For Warren L. Topel
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Watertown Division
602 Commerce Drive
Watertown, WI 53094

Phone 920-261-1660 or 800-833-7036
Fax 920-261-8120

WRB0904

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: Sigma Env. Client #: _____
Address: 1300 W. Canal St.
City/State/Zip Code: Milw. WI 53233
Project Manager: Steve Meer
Telephone Number: 414-643-4200 Fax: _____
Sampler Name: (Print Name) David Dailey
Sampler Signature: David Dailey

Project Name: City of Milwaukee
Project #: 10813
Site/Location ID: 1027 N. Edison St. State: WI
Report To: Steve Meer
Invoice To: _____
Quote #: _____ PO#: _____

E-mail address: _____

TAT
X Standard
___ Rush (surcharges may apply)
Date Needed: _____
Fax Results: Y N
E-mail: 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)	HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	VOC	SVOC	PCB's	RCRA metals	Chloride						REMARKS
01	TW-1	2-28-08	12:00	G		GW	1	3				5		X	X	X	X	X						
02	TW-2		3:00	G		GW	1	3				5		X	X	X	X	X						
03	TW-3		1:00	G		GW	1	3				5		X	X	X	X	X						
04	TW-4		2:00	G		GW	1	3				5		X	X	X	X	X						
05	TW-5		4:00	G		GW	1	3				[illegible]		X	[illegible]	[illegible]	X	X						
06	Dup.			G		GW		3						X										
07	Equip			-		W		2						X										
08	Trip			-		W		1						X										
09	TW-5	2-28-08	1:30	G		GW						2			X	X								

Special Instructions:
** only the HNO_3 is filtered

Relinquished By: David Dailey	Date: 2-28-08	Time: 2:00 PM	Received By: Roy Wright	Date: 2/29/08	Time: 1200
Relinquished By: Roy Wright	Date: 2/29/08	Time: 1465	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: [illegible]	Date: 2/29/08	Time: 14:34

LABORATORY COMMENTS:
Init Lab Temp: Ice
Rec Lab Temp:
Custody Seals: Y N N/A
Bottles Supplied by TestAmerica: Y N
Method of Shipment: [illegible]

TAL-0020 (1207)

A 2/29/08

ATTACHMENT F

GESTRA's Geotechnical Report

GESTRA

Geotechnical Engineering Report
Highland Riverwalk Development
Milwaukee, WI

GESTRA Project No. 08012-10
March 19, 2008

Geotechnical Engineering Report
Highland Riverwalk Development
Milwaukee, WI
GESTRA Project No. 08012-10
March 19, 2008

Table of Contents

	Page
Executive Summary	3
1.0 Introduction	4
1.1 Project Information	4
2.0 Scope of Work	4
3.0 Exploration Results	5
3.1 Surface Conditions	5
3.2 Site Exploration	5
3.3 Subsurface Soil Profile	5
3.4 Soil Parameters	8
3.5 Groundwater Observations	8
4.0 Analysis and Recommendations	9
4.1 Site Preparation	9
4.2 Foundation Recommendations	9
4.2.1 Discussion	9
4.2.2 Driven Steel Pile Foundation	10
4.3 Floor Slab on Grade	11
4.4 Below Grade Walls	11
4.5 Seismic Site Classification	12
4.6 Temporary Soil Retention System	12
4.7 Engineered Fill	12
5.0 Exploration and Testing Procedures	13
5.1 Layout and Elevation	13
5.2 Field Testing	13
5.3 Laboratory Testing Procedures	13
Standard of Care	15
Appendix I Borehole Layout Plan, Boring Logs and Lab Test Results	
Appendix II Nomenclature	

Executive Summary

This executive summary is a brief description of the geotechnical engineering investigation for the proposed Highland Riverwalk project in Milwaukee, WI and should be read in conjunction with the main report for proper interpretation. The scope of the site exploration work included five standard penetration test (SPT) boreholes.

The proposed site for the development is located at 1027 N. Edison Street, and bounded by N. Edison Street to the east and Milwaukee River to the west. Currently, a seven story mixed use building has been proposed. The building will have a below grade parking structure, at grade restaurant, and above grade office and condominiums.

The majority of the site is covered with a concrete slab. Several borings were completed outside of the slab areas and show sand and gravel fill or topsoil at the surface. Fill material was observed at all the borehole locations, overlying Milwaukee River marsh deposit (Estuarine), sandy organic silt. Alluvial silty sand with gravel was observed below the marsh deposit followed by the lacustrine sand/silty sand/silt to the extent of the boreholes. At one bore hole location (B-1), glacially consolidated silty clay soil was observed between the alluvial soil and lacustrine soil.

The site contains an average of 10 feet of clayey and sandy fill material. Foundry sand, wood, organic and bricks were also observed in the fill material. Due to the proposed full basement, a majority of the existing fill material will be removed from the building footprint area. However, fill material will still be present at the design subgrade level. The existing fill materials, being highly variable, if left in place in the building footprint area, may settle below the basement floor slab. Unfortunately, due to the presence of highly compressible organic silt soil immediately below the fill material, removing the fill in its entirety may not reduce the risk of slab settlement significantly. In our opinion the extent of site improvement work should compare cost of improvement against expected performance and the planned slab loading. There is risk associated with placement of slabs on the existing fill both from differential settlement and poor subgrade performance. However, if settlement risk is not acceptable slab on grade should be eliminated and the basement floor slab should be structurally supported on the foundation system. If slab on grade is preferred, then to reduce the risk of slab settlement, the site should be prepared following recommendations presented in section 4.1 and 4.3. In addition, due to the observed high water level, the basement floor slab elevation must be at -1.0 feet (Milwaukee City datum) or higher.

Due to the presence of fill material and low strength alluvial and marsh deposit, a shallow foundation system will not be appropriate for the new buildings. In our opinion a deep foundation system comprising of concrete filled driven steel pipe piles will likely be the most appropriate foundation system for the building. However, the highly variable soil conditions and the presence of granular soil that may contain aquifers and boulders will make the deep foundation construction challenging. Section 4.2 discusses in detail the recommended foundation systems.

Below grade wall for the lower level should be designed for the soil pressure at rest condition and surcharge loading during and after construction must be taken into consideration. Due to space limitations and deep excavation, a soil retention system will be required. Section 4.4 and 4.6 provide the recommendation for the below grade wall and a soil retention system.

Geotechnical Engineering Report
Highland Riverwalk Development
Milwaukee, WI
GESTRA Project No. 08012-10
March 19, 2008

1.0 INTRODUCTION

This report presents the results of the geotechnical exploration for the proposed Highland Riverwalk Development Project, in Milwaukee, WI. Authorization to perform this exploration was given by Mr. Stephen Meer of Sigma Environmental on February 20, 2008.

1.1 Project Description

The proposed site for the development is located at 1027 N. Edison Street, and bounded by N. Edison Street to the east and Milwaukee River to the west. The property is approximately 17,000 square feet in size. We understand that only the southern 9,000 square feet can be developed due to major below grade communication lines and a sidewalk providing access to the Highland Avenue pedestrian bridge,. The site was previously used as a lumber yard, coal yard, playground, parking lot, snow dump and second hand materials yard.

Currently a seven story mixed use building has been proposed. The building will have a below grade parking structure, at grade restaurant, and above grade office and condominiums. The building footprint will be approximately 9,000 square feet. It is our understanding that as a part of the development, the dock wall along the Milwaukee River will be reconstructed.

The engineering recommendations made in this report are based on our understanding of the project as described in the preceding paragraphs. The recommendations are valid for a specific set of project conditions. If the characteristics of the project change from those indicated in this section, it is necessary that we be notified so that we can determine whether the changes affect our recommendations.

2.0 SCOPE OF WORK

GESTRA Engineering, Inc. has performed the following services for the proposed Highland Riverwalk Development, in Milwaukee, WI:

A. Performed five (5) standard penetration borings (SPT), drilled to a depth between 60 feet and 90 feet, from the existing grade. A total of 380 feet of drilling were completed. GESTRA also completed a general site reconnaissance and abandonment of the borings per WDNR guidelines.

B. Completed an engineering report presenting the results of the field exploration and laboratory testing as well as providing recommendations pertaining to site preparation, suitable foundation type, allowable bearing capacity, lateral pressure on below grade structures, design parameters for temporary soil retention system, and seismic site classification.

3.0 EXPLORATION RESULTS

3.1 Surface Conditions

According to the drawings provided to us the project area is an average of 90 feet long from north to south and 110 feet wide from east to west. The ground surface is mostly covered with concrete and slopes down from east to west toward the Milwaukee River. Surface elevations at the boreholes varied between 5.6 feet at B-1 and 8.6 feet At B-4. The catch basin rim located at the northeast section of the property was used as a benchmark. The benchmark elevation, 8.63 City of Milwaukee datum, was obtained from the project survey drawing prepared by City of Milwaukee.

3.2 Site Explorations

Soil borings were completed by GESTRA Engineering, Inc. between February 26 and March 7, 2008. A total of five standard penetration soil borings to depths varying from 60 feet to 90 feet were completed. The test borings were located approximately as shown on the attached Borehole Layout Plan.

The soil borings were completed with a truck mounted CME 75 drill rig using continuous hollow stem augers. All the borings were performed using a mud rotary system. Soil samples were taken in accordance with ASTM: D1586-84. Representative portions of the samples were then returned to the laboratory for further examination and for verification of the field classification.

3.3 Subsurface Soil Profile

The results of the field and laboratory tests and observations are depicted on the individual boring logs included in Appendix I of this report. Soils were grouped together based on similar observed properties. Stratification lines were estimated by the reviewing engineer based on the available data and experience. The actual in-situ changes between layers may differ slightly and may be more gradual than depicted on the boring logs. Subsurface and groundwater conditions can vary between borehole locations and in areas not explored by GESTRA Engineering.

The majority of the site is covered with a concrete slab. Several borings were completed outside of the slab areas and show sand and gravel fill or topsoil at the surface. Fill material was observed at all the borehole locations, overlying Milwaukee River marsh deposit (Estuarine), sandy organic silt. Alluvial silty sand with gravel was observed below the marsh deposit followed by the lacustrine sand/silty sand/silt to the extent of the boreholes. At one bore hole location (B-1), glacial till silty clay soil was observed between the alluvial soil and lacustrine soil.

Fill thickness varied between 8 and 15 feet, but was mostly around 10 feet. Fill material was comprised of foundry sand, and sandy, silty and clayey materials mixed with organics, wood, limestone cobbles and brick.

Below the fill material, layers of estuarine (marsh), alluvial and lacustrine deposits of organic silt, silty sand, silty clay and/or sand/silt were observed at all the borehole locations. These soils were observed in a moist to water bearing (saturated) condition. The soil was in a very loose/soft to dense/stiff condition and the standard penetration number "N" varied between 0 and 50. The first soil layer below the fill, estuarine (marsh) deposit was primarily sandy organic silt that was in a very loose to loose state and extended up to 50 feet below the existing grade. Below the estuarine organic silt, generally the alluvium, silty sand with gravel, was in a loose to medium dense condition with N value of 15 or higher. Thickness of the alluvium was about 10 feet and extended to an average depth of 60 feet from the existing grade. The estuarine deposit and the alluvial deposit are the soils from the post glacial period.

Glacially consolidated soil observed below the post-glacial deposits were primarily consisted of layers of glacial till and lacustrine (silt and sand) soils. The glacial till is silty clay soil with trace sand and gravel and may contain cobbles and boulders. Glacial till was observed only in one bore hole (B-1), located immediately below the alluvial silty sand. The lacustrine soil was primarily silty sand and silt in a loose to very dense condition. The standard penetration number "N" of the glacial deposits varied between 8 and 60+ blows/foot.

The following paragraphs describe the generalized condition of the observed post-glacial and glacial soil types:

Estuarine (Marsh) Deposits: Estuarine deposit soils generally consist of very soft to stiff, dark gray to black in color, organic silt, organic clay, silty clay with some amounts of peat and non organic silty clay. Traces of roots, shells and organic fibers were also present. Layers and laminations of silty sand/sandy silt were observed at some locations. This soil is typically moderate to highly compressible and may contain methane gas, in trapped gas pockets in a gas form or dissolved in the water found in the granular lenses.

Alluvial Deposits: This soil type primarily consists of loose to dense, dark brown to gray, silty sand, sand, sand with gravel, and gravel with sand. At a majority of the locations where alluvial deposits were observed the alluvium was observed in a water bearing condition. Boulders do not typically occur within alluvial deposits except potentially at the base of the alluvial layer.

Glacial Till Deposits: Glacial till (till 2) deposits are primarily silty clay/clay with a trace of sand and gravel. The term till is used to describe soils of variable grain size which do not have evidence of stratification. The observed glacial till soil is commonly known as Till 2 that is one of the three principal glacial till units that have been recognized in central Milwaukee. Glacial till is typically over-consolidated with very low compressibility. This deposit typically includes occasional cobbles and may also include boulders.

Lacustrine Silt and Sand: The lacustrine silt and sandy soil is typically medium dense to extremely dense lake deposit soil that is cohesionless. These soils generally do not contain shells or organic debris.

Table 1 summarizes generalized characteristics of each type of soils that can be anticipated in the project area:

Table 1: Typical Soil Characteristics

Origin	Unit	Soil Composition	Density or Consistency	Typical Characteristics	Relative Permeability
Post-Glacial	Fill	Silty sand to silty clay with some sand and gravel pockets	Mostly loose/soft to occasional dense/hard	Variable in composition, may contain man-made debris, and waste, generally discontinuous	Variable from low to high (likely has perched water)
	Estuarine (Marsh)	Organic clay to organic silt to clayey silt with trace organics	Very soft to stiff	Relatively compressible, often contains methane gas	Low
	Alluvial	Silty sand, sand, and gravelly sand, may contain cobbles and boulders at interface with glacial deposits	Loose to very dense	Cohesionless-tends to "pipe" or flow with ground water inflows. Often contains pockets of methane gas	Medium to high
Glacial	Glacial Till (Till 2)	Silty clay to clayey silt with a trace of sand and gravel in matrix or pockets; scattered cobbles and boulders	Stiff to hard but typically very stiff	Cohesive, low compressibility, may contain pockets of sand and gravel and isolated cobbles and boulders, locally continuous	Very low to low
	Lacustrine Silt and Sand	Silt, sandy silt, silty sand and fine sand	Medium dense to extremely desne	Cohesionless-tends to "pipe" or flow with ground water inflows, tends to be continuous	Medium (typically an aquifer)

3.4 Soil Parameters

Soil parameters for the observed soil types are determined or estimated based on our experiences with Milwaukee soils and a report on Milwaukee area soils, "A Study of the Geotechnical Properties of Milwaukee Area Soils: Geologic Environment and Soil Properties" by Singh, et al. (1983). The following table lists the recommended soil parameters for permanent and temporary structural design and design of the dewatering systems (if required):

Table 2: Recommended Soil Parameters

Parameter	Fill (sandy)	Estuarine	Alluvium	Glacial Till	Lacustrine Silt and sand
Total Unit Weight, γ_t, (pcf)	130	100	130	135	135
Effective Angle of Friction (φ^o)	30	25	32	30	35
Undrained Shear Strength Su, (ksf)	-	0.5	-	3	-
At-Rest Earth Pressure K_0	0.5	0.5	0.5	0.8	0.8
Young's Modulus E (tsf)	Varies	150-250	400-800	350-550	600-1200
Moisture Content (%)	-	>30	-	11-17	-
Permeability, K (cm/sec)	$1x10^{-4}$ $1x10^{-2}$	$<1x10^{-4}$	$1x10^{-3}$ $1x10^{-2}$	$<1x10^{-4}$	$1x10^{-3}$ $5x10^{-3}$

3.5 Groundwater Observations

Groundwater measurements were taken by SIGMA Environmental on February 27, 2008 and by GESTRA on March 18, 2008, in five temporary monitoring wells installed in TW-1 thru TW-5. Monitoring well locations are shown in the borehole layout plan. The following table includes the observed water level depth and elevation:

Table 3: Groundwater Elevation

Monitoring Well	Ground Surface Elevation (ft)	Day of Drilling (2/27/08)		On 3/ 18/08	
		Depth (ft)	Elevation (ft)	Depth (ft)	Elevation (ft)
TW-1	5.7	10.2	-4.5	10.2	-4.5
TW-2	8.4	13.1	-4.7	13.0	-4.6
TW-3	5.6	9.8	-4.2	9.6	-4.4
TW-4	8.9	12.8	-3.9	13.2	-4.3
TW-5	6.2	9.4	-3.2	9.0	-2.8

4.0 ANALYSIS AND RECOMMENDATIONS

4.1 Site Preparation

The site for the proposed development contains an average of 10 feet of clayey and sandy fill material. Foundry sand, wood, organic and bricks were also observed in the fill material. The following table indicates the depth of observed fill material at the boring locations.

Table 4: Depth of Fill Material

Test Boring Location	Depth of Fill (feet)	Elevation of bottom of fill (ft)
B-1	10.5	-5.0
B-2	10.0	-2.0
B-3	13.5	-7.6
B-4	8.0	0.6
B-5	8.0	-3.6

Due to the proposed full basement, a majority of the existing fill material will be removed from the building footprint area. However, fill material will still be present at the design subgrade level. The existing fill materials, being highly variable, if left in place in the building footprint area, may settle below the basement floor slab. Unfortunately, removing the fill in its entirety may not reduce the risk of slab settlement significantly, due to the presence of highly compressible organic silt soil immediately below the fill material. In our opinion the extent of site improvement work should compare cost of improvement against expected performance and the planned slab loading. There is risk associated with placement of slabs on the existing fill both from differential settlement and poor subgrade performance. However, if settlement risk is not acceptable slab on grade should be eliminated and the basement floor slab should be structurally supported on the foundation system.

If slab on grade is preferred, then to reduce the risk of slab settlement and to provide a stable subgrade, at a minimum we recommend removing a minimum 2.5 feet of the existing fill material below the proposed bottom of parking level slab elevation. The area should be brought back to grade using a two foot layer of large (3"-5") single size stones capped with a well graded granular 6" slab base course material. The large stones must be placed over a geotextile fabric. In our opinion this will reduce the risk and impact of settlement.

After excavation the site should be compacted using a vibratory sheeps foot roller prior to placing any new fill material. All the excavations in the project area should be planned properly to avoid undermining existing foundations, sidewalks, and/or underground utilities.

Material removed from the project site should be disposed of following the recommendations of an experienced environmental engineer. A phase II environmental study is being completed concurrent with this geotechnical exploration and the report for the Phase II study will be submitted under a separate cover. Soil should not be stockpiled near or adjacent to the excavations.

4.2 Foundation Recommendations

4.2.1 Discussions

The subsoil at the project site is highly variable. We observed a non-uniform deposit of post-glacial and glacially consolidated soil. Based on the review of the test boring logs, laboratory observation, and project information; it is our opinion that the observed fill material and the low strength alluvial and estuarine (marsh deposit) are not suitable for support of the anticipated structural loads. In our opinion deep foundations will be required to support the new structures. We recommend considering a driven steel pile foundation.

4.2.2 Driven Steel Pile Foundation

In our opinion a driven steel pipe pile filled with concrete can be considered to support the building. However, the presence of cobbles and boulders in the glacial and post glacial soil may obstruct the driven piles from penetration. We recommend considering 10 ¾" outside diameter pipe pile and a minimum pile length of 65 feet from the pie cut off level. Pile points (cutting shoes) must be used to help overcome minor obstruction during pile penetration. The allowable axial capacity per pile is estimated as 50 tons for a 65 feet long pile, measured from the pile cutoff level. A safety factor of 3 was used to estimate the allowable bearing capacity. Caution must be taken not to overstress the pile during driving or damaging the pile heads. We recommend performing pile load test to ensure the capacity is being reached. A detailed pile load test programs can be developed if this foundation option is selected. Other driven pile type and/or sizes may also be considered.

4.3 Floor Slab on Grade

The project site should be prepared based on our recommendation presented in the Site Preparation section 4.1. Provided the slab subgrade recommendations are followed it is our opinion that a subgrade reaction modulus of 100 pounds per square inch per inch of deflection (pci), based on a 1-foot plate, may be used in the design of the floor slab on grade. We recommend that the floor slabs be suitably reinforced and designed to be separate from the foundation system in order to allow for separate movements of either.

The basement slab needs to consider the potential for high ground water at the site. The basement slab should have a top of slab elevation a minimum of 24-inches above the static and/or seasonal high water elevation. Alternatively the basement could be designed at a lower elevation provided the slab and walls are designed as a watertight system.

If the structure is not designed as a watertight system, we recommend that the basement floor slab should be placed at an elevation -1.0 feet (City of Milwaukee datum) or higher and under-slab drainage system be installed below the basement floor slab. Slab drains should consist of 4-inch-diameter, perforated PVC pipe that is surrounded by free-draining material, such as pea gravel. These drains should discharge into an appropriate collection and discharge point. Roof drains should not be connected to wall or slab drains.

4.4 Below Grade Walls

It is our understanding that the below grade wall for the lower level will be cast in place concrete walls and shall be designed as a restrained (rigid) wall. The below grade walls, when restrained in all directions, should be designed for soil pressure "at rest" condition. The design of the walls should include at least 2 feet wide clean granular backfill lined with a geotextile fabric directly adjacent to the wall. The granular backfill, open graded gravel with less than 10% passing #200 sieve, will allow water to infiltrate to the exterior (or interior in case of basement wall) drain tile system. The top of the granular backfill should be capped with at least 2 feet of compacted clay, graded for positive drainage away from the wall or capped with pavement. At rest earth pressure can be calculated based on equivalent fluid density. Equivalent fluid densities for at-rest earth pressure 65 pcf, may be used for design for a level backslope.

For walls below groundwater elevation (if designed as a water tight structure) an additional component of hydrostatic pressure needs to be considered. The equivalent fluid densities for at-rest earth pressure for that portion below the groundwater level should be increased to 95 pcf.

4.5 Seismic Site Classification

Site soils were assigned a site class in accordance with the International Building Code (IBC) classification system. Based on the definitions in IBC Table 1615.1.1, it is our opinion that the appropriate classification for the site is Class E.

Based on site class E, and mapped spectral response acceleration S_s and S_1 for Milwaukee, the site coefficient F_a and F_v from the Wisconsin Enrolled Commercial Building Code 2002 are 2.5 and 3.5, respectively.

4.6 Temporary Soil Retention System

Due to the proposed below grade parking structure, significant excavation is being planned for the project. The depth of excavation will likely not be more than 8 feet from the existing grade. Excavation must be sloped or braced according to the present OSHA guidelines for excavation in sandy fill material. Due to the space limitation, below grade excavation may require construction of a soil retention system. In our opinion a steel H-pile with timber lagging system can be considered. The soil retention system shall be designed by the

installation contractor, however the design must be reviewed by the project geotechnical engineer for completeness and adequacy. The soil parameters tabulated in Table 2 can be used to design the soil retention system. The presence, if any, of underground utilities and the sidewalks must be considered in the design of the temporary retention system.

4.7 Engineered Fill

As stated in the earlier sections of this report, well graded granular engineered fill should be used in all structural areas to bring areas to proper design grades unless other options have been presented. We recommend that engineered fill be unfrozen and free of organics, wood, and other construction debris.

We recommend that engineered fill be placed in lifts not exceeding 9 inches for clayey soils and 12 inches for granular soils and be compacted with proper compaction equipment depending on soil type. All fill should be compacted to 95% of the maximum dry density and at moisture content within 2 percent of optimum moisture content as determined by a modified proctor test (ASTM D 1557).

5.0 EXPLORATION AND TESTING PROCEDURES

5.1 Layout and Elevation Procedures

Five (5) soil borings were completed at the locations specified on the attached borehole layout plan. Locations and elevations of the borings were determined by GESTRA Engineering, Inc.

5.2 Field Testing Procedures

Boreholes were drilled using a truck mounted CME 75 drilling rig. The borehole was advanced by using hollow stem augers unless saturated sands sometimes referred to as "blowing sands" were encountered which required mud rotary drilling. The specific drilling method used including the depths, rig type, crew chief, and borehole abandonment are included on each of the individual boring logs as it may change for each hole.

The soil samples were obtained at a 2.5 feet interval to a depth of 15 and every 5 feet thereafter. Soil samples were taken following the "Standard Method for Penetration Test and Split-Barrel Sampling of Soils" (ASTM D1586) and/or "Standard Method for Thin-Walled Tube Sampling of Soils" (ASTM D1586). The soil sample was then placed in a jar and recorded for type, color, consistency, and moisture, sealed and then transported to the laboratory for further review and testing, if required.

5.3 Laboratory Testing Procedures

After completion of drilling operations, all of the samples retained in the field are then transported to our laboratory and classified by our geotechnical engineer using the Unified Soil Classification System. A chart describing the classification system used is included in the appendix of this report. The engineer then assigns a laboratory testing program suited to extract important index properties of the soil layers. These tests often include moisture and organic contents, dry density, Proctor, mechanical and hydrometer analysis, unconfined

compressive strength, and Atterberg Limits. Other less common tests performed on soil samples if the project requires it are consolidation, triaxial, and specific gravity. Brief descriptions of each these tests are shown below.

Moisture and Organic Content, and Dry Density (ASTM D4959 and D2974)

The moisture content of a soil is the percentage of the weight of water or "moisture" in a soil to the total weight of organics and dry soil together. This value is a valuable index property in clays and organic soils and is sometimes used in conjunction with other index properties to approximate settlement of a soil layer. Moisture contents have been known to vary in stiff clays from 10% to 18% and from 20% to 150% in soft clays. Peat, which is highly organic can have moisture contents in excess of 300%.

Similarly, the organic content of a soil is the percentage of the weight of organic matter compared to the weight of the dry soil only. The weight of the organic material in a soil is determined by placing the sample in a furnace and subjecting the soil to 440°C. At this temperature the organic material ignites and burns off. What is left is the dry soil matter. In topsoil, organic contents are usually between 5% and 20%, but in peat materials, organic contents may be as high as 75%.

Proctor Test (ASTM D698 and D1557)

A Standard Proctor or Modified Proctor test is completed in conjunction with a dry density test to determine the suitability of fill material on site or used for preliminary site information. The test is completed by compacting a soil sample in a mold of known volume at varying degrees of moisture content. By completing this test, a "compaction curve" will be generated showing dry densities achieved at varying moisture contents. The apex of this curve is known as the optimum moisture content and maximum dry density of the soil.

Mechanical Analysis and Hydrometer (ASTM C136 and D422)

This test is usually chosen by the geotechnical engineer when the percentage of material passing the #200 sieve or "fine content" is of particular importance. In general, the material is broken down into individual sizes and weighed to determine the percentage of the soil retained and passing a certain sieve size. In a geotechnical project, the fine content is correlated to the frost susceptibility of a soil and can provide us with important information pertaining to the stability of the soil during construction. In the case of aggregates, these values can be compared to state and municipal specifications to determine if the material is suitable for use as an engineered fill.

Unconfined Compressive Strength (ASTM D2166)

The unconfined compression test is performed by applying an axial load to a clayey soil at a specified rate until the sample deforms at least 15% of its original length or fails by fissure. The maximum load applied to the sample is then divided by the area of the sample to obtain the unconfined compressive strength of the soil. This value is usually used in calculating soil bearing capacity.

Atterberg Limits (ASTM D4318)

Three values are obtained by completing the Atterberg Limits: the liquid limit, plastic limit, and plasticity index. The liquid limit is performed by obtaining a clayey or silty specimen which has been dried and ground to pass through a #40 sieve and adding water to make a "mud". This mud is then placed in a liquid limit machine and subjected to blow counts which are recorded. The "moisture" of the mud is then varied 2 more times in order to chart the relationship between blow counts and moisture content. The moisture content of the soil at 25 blows is referred to as the "liquid limit" of the soil.

The plastic limit is performed by again using the same soil that has passed through #40 sieve and water has been added to it. However, the moisture content of this soil is kept lower than before. The soil will form a ball which is rolled into "worms" of soil. When cracking is observed in the skin of the worm at 1/8" diameter, the moisture content of the soil at this point is the "plastic limit". The plasticity index is the difference between the liquid limit and the plastic limit.

Standard of Care

Soil exploration work was limited to evaluating subsurface soil and groundwater conditions pertaining to the proposed project. GESTRA Engineering did not perform any environmental, chemical, or hydrogeologic testing as these were not part of our work scope.

This report should be made available in its entirety to bidding contractors for information purposes. The soil borings and site sketch should not be detached from this report. Report is not valid if used for purposes other than what is described in the report. All OSHA regulations such as those regarding proper sloping and temporary shoring of excavations should be followed during the entire construction process.

GESTRA has presented our professional opinions in this report in the form of recommendations. Our opinions are based on our understanding of current project information and related accepted engineering practices at the time of this report. Other than this, no warranty is implied or intended.

Sincerely,

GESTRA Engineering, Inc.

Report Prepared By:

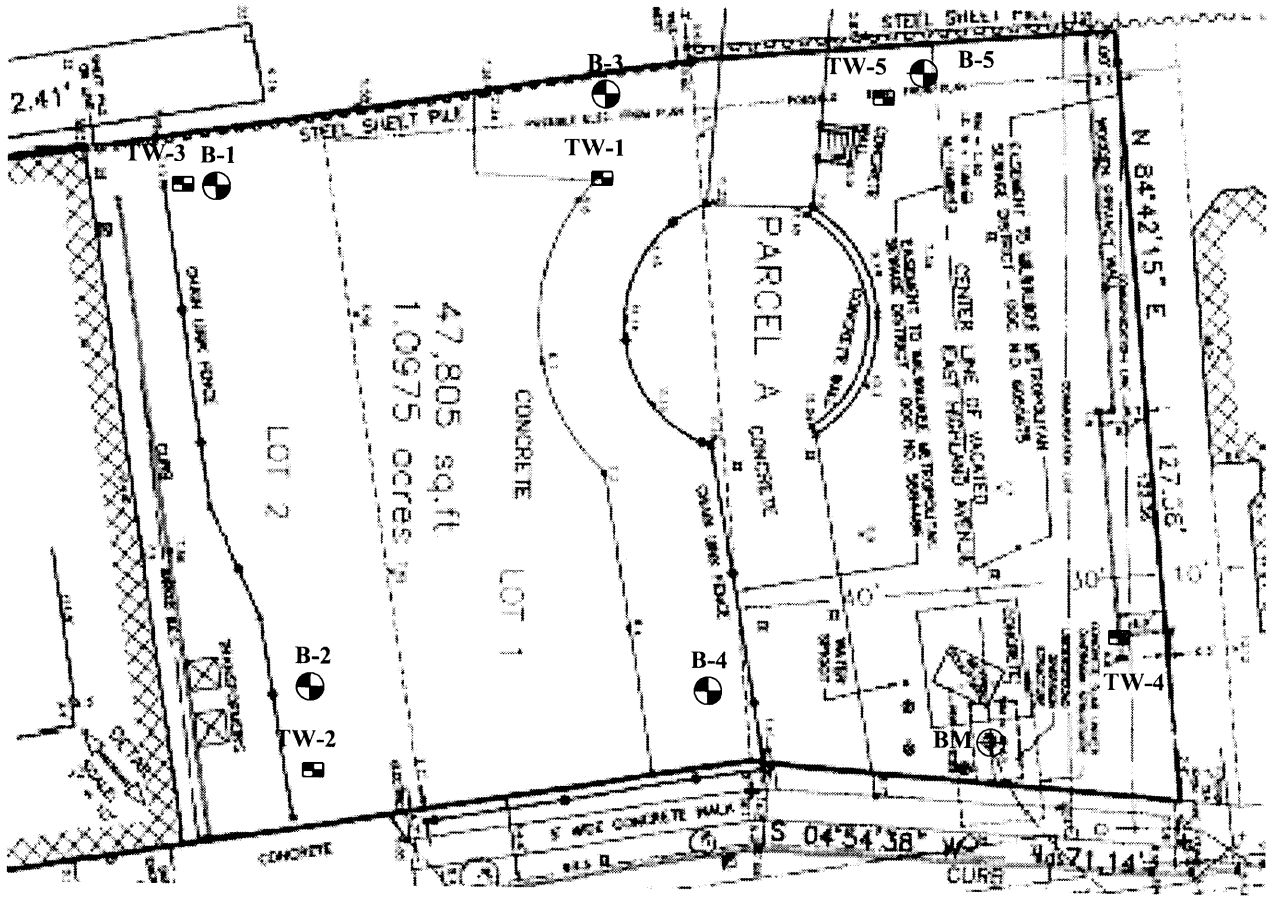
M. Masud Alam, P.E.
Principal Engineer

Report Reviewed By:

Doug Bath, P.E.
Senior Engineer

Appendix I

Borehole Layout Plan, Boring Logs and Lab Test Results



= TEST BORINGS PREFORMED BY GESTRA

= MONITORING WELLS INSTALLED BY SIGMA

Project Name & Location: **Highland Riverwalk** **1027 N. Edison St.** **Milwaukee, WI**	Project No.: 08012-10 Drawing No.: 1 of 1	Drawing Title: Borehole & Monitoring Well Layout Map Scale: Not to Scale	Approved by: MMA Checked by: MMA Drawn by: ESJ Date: March 17th, 2008	GESTRA **GESTRA Engineering, Inc.** 1626 W. Fond du Lac Avenue Milwaukee, WI-53205 Phone: 414-933-7444 Fax: 414-933-7844 www.gestrainc.com

GESTRA
1626 W. Fond Du Lac Avenue
Milwaukee, WI 53205
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SOIL BORING LOG

PROJECT NAME: Highland Riverwalk		DATE DRILLING STARTED: 2/28/2008	BORING NUMBER: B-1
PROJECT NUMBER: 080012-10		DATE DRILLING ENDED: 2/28/2008	DRILLING METHOD: 3 1/4" HSA / RWB
			DRILL RIG: CME 75
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: J. Martinez	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: M. Alam	EASTING	SURFACE ELEVATION: 5.55 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or Qp) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						CONCRETE WITH REBAR (6")								
SS - 1	12	2/3/3	6			FILL, clayey silt, trace organics, brown, moist								
SS - 2	11	3/6/34	40	5	0.6	FILL, sandy organic silt, trace gravel, black, moist Limestone cobble at 4.5'								
SS - 3	7	4/3/2	5											
SS - 4	6	10/4/3	7	10	-4.5	With wood fragements at 8.5'								
SS - 5	2	4/3/3	6			FILL, wood								
SS - 6	8	6/5/7	12	15	-9.5	FILL, sand, f/c, gray, moist								
						SANDY ORGANIC SILT, with shells and sand layers, dk. gray, moist, very loose to loose (Marsh Deposit)								RWB started at 15'
SS - 7	18	0/0/0	0	20	-14.5									
SS - 8	18	0/1/2	3	25	-19.5									Dd (pcf) = 63 Wd (pcf) = 104
							OH							
SS - 9	18	1/2/1	3	30	-24.5									
SS - 10	18	0/2/2	4	35	-29.5									Dd (pcf) = 72 Wd (pcf) = 112
SS - 11	18	1/1/3	4	40	-34.5									

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.		CAVE DEPTH AT COMPLETION: N/A ft.	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: N/A ft.		CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET ☐ DRY ☐
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.		NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

SOIL BORING LOG

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PROJECT NAME: Highland Riverwalk		DATE DRILLING STARTED: 2/28/2008	BORING NUMBER: B-1
PROJECT NUMBER: 080012-10		DATE DRILLING ENDED: 2/28/2008	DRILLING METHOD: 3 1/4" HSA / RWB
			DRILL RIG: CME 75
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: J. Martinez	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: M. Alam	EASTING	SURFACE ELEVATION: 5.55 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or **Qp**) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						SANDY ORGANIC SILT, with shells and sand layers, dk. gray, moist, very loose to loose (Marsh Deposit)								
SS - 12	12	4/2/3	5	45	-39.5		OH							
						Very gravelly from 46' to 48'								
SS - 13	18	2/4/2	6	50	-44.5									
						SILTY SAND, with gravel, gray, moist, firm (Alluvial Deposit)								
						Very gravelly from 51' to 53'								
SS - 14		13/10/16	26	55	-49.5		SM							
						SILTY CLAY, some gravel, trace sand, alternating silty sand seams, gray, moist, stiff (Glacial Till)								
SS - 15	8	12/12/14	26	60	-54.5		CL-ML			1.75				
						SILTY SAND, gray, water bearing, firm to dense (Lacustrine Deposit)								
SS - 16	16	18/14/15	29	65	-59.5									
SS - 17	12	14/17/17	34	70	-64.5		SM							
SS - 18	6	12/18/19	37	75	-69.5									
SS - 19	10	14/19/19	38	80	-74.5	EOB at 80'								

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.		CAVE DEPTH AT COMPLETION: N/A ft.	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: N/A ft.		CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET ☐ DRY ☐
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.		NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

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SOIL BORING LOG

PROJECT NAME: Highland Riverwalk		DATE DRILLING STARTED: 2/27/2008	BORING NUMBER: B-2
PROJECT NUMBER: 080012-10		DATE DRILLING ENDED: 2/27/2008	DRILLING METHOD: 3 1/4" HSA / RWB
			DRILL RIG: CME 75
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: E. Jeske	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: M. Alam	EASTING	SURFACE ELEVATION: 7.96 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or Qp) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						CONCRETE WITH REBAR (6")								
SS - 1	12	5/4/2	6			FILL, Foundary sand, with gravel, trace brick and glass, black								
SS - 2	11	1/1/1	2	5	3.0	FILL, silty sand, dk. gray to black, moist								
SS - 3	18	2/1/2	3			FILL, silt, with sand, trace gravel and red glass, gray, moist								
SS - 4	1	0/2/2	4	10	-2.0									
SS - 5	18	0/0/0	0			SANDY ORGANIC SILT, with shells and sand layers, dk. gray, moist, very loose to loose (Marsh Deposit)								
SS - 6	18	0/1/2	3	15	-7.0	Wet from 13.5' to 14.5'								RWB started at 15'
SS - 7	12	0/2/2	4	20	-12.0									
SS - 8	18	0/0/1	1	25	-17.0		OH							Dd (pcf) = 64 Wd (pcf) = 105
SS - 9	15	1/1/1	2	30	-22.0									
SS - 10	17	0/1/1	2	35	-27.0									
SS - 11	18	1/1/2	3	40	-32.0									

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.		CAVE DEPTH AT COMPLETION: N/A ft.	WET DRY
WATER LEVEL AT COMPLETION: N/A ft.		CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET DRY
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.		NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

SOIL BORING LOG

GESTRA
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Milwaukee, WI 53205
Ph: (414) 933-7444, Fx: (414) 933-7844

PROJECT NAME: Highland Riverwalk		DATE DRILLING STARTED: 2/27/2008	BORING NUMBER: B-2
PROJECT NUMBER: 080012-10		DATE DRILLING ENDED: 2/27/2008	DRILLING METHOD: 3 1/4" HSA / RWB
			DRILL RIG: CME 75
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: E. Jeske	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: M. Alam	EASTING	SURFACE ELEVATION: 7.96 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or Qp) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						SANDY ORGANIC SILT, with shells and sand layers, dk. gray, moist, very loose to loose (Marsh Deposit)	OH							
SS - 12	15	3/3/5	8	45	-37.0									
						SILTY SAND, f/c, with gravel, gray, water bearing, firm (Alluvial Deposit)	SM							
NR - 13	0	4/9/8	17	50	-42.0									
SS - 14	4	7/10/14	24	55	-47.0									
						SILTY SAND, f/m, gray, water bearing, loose to dense (Lacustrine Deposit)	SM							
SS - 15	13	13/17/18	35	60	-52.0									
SS - 16	11	4/4/4	8	65	-57.0									
SS - 17	12	3/4/5	9	70	-62.0	3"-6" Silt seam at 69'								
SS - 18	12	12/12/13	25	75	-67.0									
SS - 19	13	3/9/9	18	80	-72.0	EOB at 80'								

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.		CAVE DEPTH AT COMPLETION: N/A ft.	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: N/A ft.		CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET ☐ DRY ☐
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.		NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

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SOIL BORING LOG

PROJECT NAME: Highland Riverwalk	DATE DRILLING STARTED: 2/26/2008	BORING NUMBER: B-3	
PROJECT NUMBER: 080012-10	DATE DRILLING ENDED: 2/26/2008	DRILLING METHOD: 3 1/4" HSA / RWB	
		DRILL RIG: CME75	
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: E. Jeske	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: M. Alam	EASTING	SURFACE ELEVATION: 5.88 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or **Qp**) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						FILL, sand and gravel (9")								
SS - 1	15	5/6/5	11			FILL, Sandy Silty Clay, with gravel and foundary sand, traces of brick, brown to black, moist								
SS - 2	13	2/2/3	5	5	0.9									
SS - 3	4	3/3/3	6											
NR - 4	0	2/2/2	4	10	-4.1									
SS - 5	1.5	2/1/0	1			FILL, sand, with gravel and wood fragments, water bearing								
SS - 6	9	0/1/0	1	15	-9.1	SANDY ORGANIC SILT, with shells and sand layers, dk. gray, moist, very loose (Marsh Deposit)								RWB started at 15'
SS - 7	10	2/1/1	2	20	-14.1									
SS - 8	15	0/0/0	0	25	-19.1									
							OH							
SS - 9	18	0/0/0	0	30	-24.1									
SS - 10	18	0/0/0	0	35	-29.1									
SS - 11	15	1/2/2	4	40	-34.1									

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.	CAVE DEPTH AT COMPLETION: N/A ft.	WET DRY
WATER LEVEL AT COMPLETION: N/A ft.	CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET DRY
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.	NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

SOIL BORING LOG

GESTRA
1626 W. Fond Du Lac Avenue
Milwaukee, WI 53205
Ph: (414) 933-7444, Fx: (414) 933-7844

PROJECT NAME: Highland Riverwalk	DATE DRILLING STARTED: 2/26/2008	BORING NUMBER: B-3	
PROJECT NUMBER: 080012-10	DATE DRILLING ENDED: 2/26/2008	DRILLING METHOD: 3 1/4" HSA / RWB	
		DRILL RIG: CME75	
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: E. Jeske	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: M. Alam	EASTING	SURFACE ELEVATION: 5.88 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or Qp) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						SANDY ORGANIC SILT, with shells and sand layers, dk. gray, moist, very loose (Marsh Deposit)								
SS - 12	18	0/1/2	3	45	-39.1		OH							Dd (pcf) = 65 Wd (pcf) = 99
SS - 13	8	0/6/12	18	50	-44.1	SILTY SAND, with gravel, moist, loose to firm (Alluvial Deposit)								
SS - 14	12	11/13/9	22	55	-49.1		SM							
SS - 15	12	2/2/1	3	60	-54.1	Some clay at 58.5'								
						SILTY SAND, moist, firm (Lacustrine Deposit)								
SS - 16	12	6/5/6	11	65	-59.1	4" silt seam at 64.5'	SM							
SS - 17	7	14/11/11	22	70	-64.1	EOB @ 70'								
				75	-69.1									
				80	-74.1									

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.		CAVE DEPTH AT COMPLETION: N/A ft.	WET DRY
WATER LEVEL AT COMPLETION: N/A ft.		CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET DRY
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.		NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

SOIL BORING LOG

GESTRA
1626 W. Fond Du Lac Avenue
Milwaukee, WI 53205
Ph: (414) 933-7444, Fx: (414) 933-7844

PROJECT NAME: Highland Riverwalk	DATE DRILLING STARTED: 3/6/2008	BORING NUMBER: B-4	
PROJECT NUMBER: 080012-10	DATE DRILLING ENDED: 3/6/2008	DRILLING METHOD: 3 1/4" HSA / RWB	
		DRILL RIG: CME 75	
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: R. Downey-Filbrandt	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: M. Alam	EASTING	SURFACE ELEVATION: 8.55 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or Qp) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						FILL, large gravel, small cobble (8")								
						FILL, silty clay, with sand and gravel, black, moist								
SS - 1	10	5/4/3	7			FILL, foundary sand, with wood and brick, some clay, black, moist								
SS - 2	8	1/3/2	5	5	3.6									
						FILL, sandy organic clay, with sand lense, trace silt, dk. brown mottled brown, moist								
SS - 3	18	1/2/1	3											
						SANDY ORGANIC SILT, with shells and sand layers, dk. gray, moist to wet, very loose (Marsh Deposit)								
SS - 4	18	1/1/1	2	10	-1.5									
SS - 5	18	1/0/1	1											
SS - 6	10	1/2/1	3	15	-6.5									
SS - 7	15	1/1/1	2	20	-11.5									
SS - 8	18	1/2/1	3	25	-16.5		OH							
SS - 9	12	1/1/1	2	30	-21.5									RWB started at 30'
SS - 10	15	1/1/2	3	35	-26.5									
SS - 11	18	2/2/2	4	40	-31.5									Dd (pcf) = 70 Wd (pcf) = 110

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.		CAVE DEPTH AT COMPLETION: N/A ft.	WET ☐ DRY ☐
WATER LEVEL AT COMPLETION: N/A ft.		CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET ☐ DRY ☐
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.		NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

SOIL BORING LOG

GESTRA
1626 W. Fond Du Lac Avenue
Milwaukee, WI 53205
Ph: (414) 933-7444, Fx: (414) 933-7844

PROJECT NAME: Highland Riverwalk		DATE DRILLING STARTED: 3/6/2008	BORING NUMBER: B-4
PROJECT NUMBER: 080012-10		DATE DRILLING ENDED: 3/6/2008	DRILLING METHOD: 3 1/4" HSA / RWB
			DRILL RIG: CME 75
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: R. Downey-Filbrandt	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: M. Alam	EASTING	SURFACE ELEVATION: 8.55 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or Qp) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						SILTY SAND, f/m, gray, water bearing, loose (Alluvial Deposit)	OH							
SS - 12	8	3/4/5	9	45	-36.5		SP							
SS - 13	18	2/3/6	9	50	-41.5									
						Increase gravel content at 52'								
						SILTY SAND, f/c, gray, water bearing, very dense (Lacustrine Deposit)								
SS - 14	10	8/23/36	59	55	-46.5		SP							
SS - 15	8	26/31/36	67	60	-51.5	EOB at 60'								
				65	-56.5									
				70	-61.5									
				75	-66.5									
				80	-71.5									

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.		CAVE DEPTH AT COMPLETION: N/A ft.	WET DRY
WATER LEVEL AT COMPLETION: N/A ft.		CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET DRY
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.		NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

GESTRA
1626 W. Fond Du Lac Avenue
Milwaukee, WI 53205
Ph: (414) 933-7444, Fx: (414) 933-7844

SOIL BORING LOG

PROJECT NAME: Highland Riverwalk		DATE DRILLING STARTED: 3/7/2008	BORING NUMBER: B-5
PROJECT NUMBER: 080012-10		DATE DRILLING ENDED: 3/7/2008	DRILLING METHOD: 3 1/4" HSA / RWB
			DRILL RIG: CME 75
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: D. Diersen	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: E. Jeske	EASTING	SURFACE ELEVATION: 5.63 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or **Qp**) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						TOPSOIL, silty, some gravel, trace sand, dk. brown, moist								
SS - 1	11	4/5/7	12			FILL, silty sand, with gravel, abundance of brick								
SS - 2	15	3/2/3	5	5	0.6	FILL, sandy silty clay, some gravel, traces of brick and glass, mixed organics, black mottled dk. brown, moist								
SS - 3	3	2/1/1	2											
SS - 4	10	0/0/2	2	10	-4.4	SANDY ORGANIC SILT, with shells and sand layers, dk. gray, moist, very loose to loose (Marsh Deposit)								
SS - 5	5	0/0/1	1											
SS - 6	16	0/1/2	3	15	-9.4									
SS - 7	11	1/1/1	2	20	-14.4									
NR - 8	0	0/0/2	2	25	-19.4		OH							
SS - 9	18	0/0/1	1	30	-24.4									
SS - 10	10	0/1/1	2	35	-29.4									Dd (pcf) = 64 Wd (pcf) = 107
SS - 11	18	1/2/1	3	40	-34.4									

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.	CAVE DEPTH AT COMPLETION: N/A ft.	WET / DRY
WATER LEVEL AT COMPLETION: N/A ft.	CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET / DRY
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.	NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

SOIL BORING LOG

GESTRA
1626 W. Fond Du Lac Avenue
Milwaukee, WI 53205
Ph: (414) 933-7444, Fx: (414) 933-7844

PROJECT NAME: Highland Riverwalk		DATE DRILLING STARTED: 3/7/2008	BORING NUMBER: B-5
PROJECT NUMBER: 080012-10		DATE DRILLING ENDED: 3/7/2008	DRILLING METHOD: 3 1/4" HSA / RWB
			DRILL RIG: CME 75
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: D. Diersen	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: E. Jeske	EASTING	SURFACE ELEVATION: 5.63 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or **Qp**) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						SANDY ORGANIC SILT, with shells and sand layers, dk. gray, moist, very loose to loose (Marsh Deposit)								
SS - 12	13	1/3/3	6	45	-39.4		OH							
SS - 13	15	2/1/6	7	50	-44.4									
						SILTY SAND, with gravel and cobble, gray, moist, firm (Alluvial Deposit)								
SS - 14	18	10/9/7	16	55	-49.4		SM							
SS - 15	2	7/18/10	28	60	-54.4									
						SILTY SAND, gray, moist, loose (Lacustrine Deposit)								
SS - 16	18	7/5/3	8	65	-59.4									
SS - 17	18	1/5/4	9	70	-64.4		SM							
SS - 18	10	3/4/4	8	75	-69.4	Layers of clay at 74 ft								
						SILT, gray, moist, dense (Lacustrine Deposit)								
SS - 19	10	2/14/17	31	80	-74.4		ML							

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.		CAVE DEPTH AT COMPLETION: N/A ft.	WET DRY
WATER LEVEL AT COMPLETION: N/A ft.		CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs.	WET DRY
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.		NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.	

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

SOIL BORING LOG

GESTRA
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PROJECT NAME: Highland Riverwalk		DATE DRILLING STARTED: 3/7/2008	BORING NUMBER: B-5
PROJECT NUMBER: 080012-10		DATE DRILLING ENDED: 3/7/2008	DRILLING METHOD: 3 1/4" HSA / RWB
			DRILL RIG: CME 75
BORING DRILLED BY: FIRM: Gestra; CREW CHIEF: R. Downey-Filbrandt	FIELD LOG: D. Diersen	NORTHING	BOREHOLE DIAMETER: in.
	LAB LOG / QC: E. Jeske	EASTING	SURFACE ELEVATION: 5.63 ft.

Number and Type	Recovery (in)	Blow Counts	N - Value	Depth (ft)	Elevation	Soil Description and Geological Origin for Each Major Unit	USCS	Graphic	Well Diagram	Unconfined Comp. Strength (Qu or **Qp**) (tsf)	Liquid Limit	Plasticity Index	Moisture Content (%)	Comments
						SILT, gray, moist, dense (Lacustrine Deposit)								
SS - 20	18	12/15/18	33	85	-79.4		ML							
SS - 21	12	11/14/19	33	90	-84.4	EOB @ 90 ft								
				95	-89.4									
				100	-94.4									
				105	-99.4									
				110	-104.4									
				115	-109.4									
				120	-114.4									

WATER OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: N/A ft.	CAVE DEPTH AT COMPLETION: N/A ft. (WET / DRY)
WATER LEVEL AT COMPLETION: N/A ft.	CAVE DEPTH AFTER HOURS: N/A ft., 0 hrs. (WET / DRY)
WATER LEVEL AFTER HOURS: N/A ft., 0 hrs.	NOTE: Bolded Unconfined Compressive Strength values denote a Qp test.

NOTE: Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

GESTRA

GESTRA Engineering, Inc
1626 W. Fond du Lac Avenue
Milwaukee, WI 53205
Phone: (414) 933-7444; Fax: (414) 933-7844

Laboratory Test Results of Moisture Content, Organic Content, and Density of Soil

Project Name: Highland Riverwalk
Project Number: 08012-10
Project Location: Milwaukee
ASTM Designation: **D2216, D 2974**

Date: March 18, 2008
Report To: Sigma

Boring Number	B-1	B-2	B-1	B-5	B-4	B-3		
Sample Number	S-8	S-8	S-10	S-10	S-11	S-12		
Cup Number	34	S-2	S-5	1	27	S-7		
Sample Depth	23.5' - 25'	23.5' - 25'	33.5' - 35'	33.5' - 35'	38.5' - 40'	43.5' - 45'		
Weight of Cup (g)	15.78	16.64	17.07	15.73	15.58	16.91		
Weight of Wet Soil and Cup (g)	52.48	38.27	46.17	32.29	47.5	57.85		
Weight of Dry Soil and Cup (g)	38.19	29.79	35.7	25.58	35.82	43.72		
Weight of Soil and Cup After Burn (g)								
Moisture Content (%)	**64**	**64**	**56**	**68**	**58**	**53**		
Organic Content (%)								
Wet Density (pcf)	**104**	**105**	**112**	**107**	**110**	**99**		
Dry Density (pcf)	**63**	**64**	**72**	**64**	**70**	**65**		

Boring Number	B-1	B-2	B-1	B-5	B-4	B-3		
Sample Number	S-8	S-8	S-10	S-10	S-11	S-12		
Diameter 1 (in)	1.41	1.419	1.415	1.38	1.454	1.446		
Diameter 2 (in)	1.367	1.429	1.451	1.368	1.463	1.472		
Diameter 3 (in)	1.414	1.44	1.421	1.354	1.474	1.483		
Average Diameter (in)	1.397	1.429	1.429	1.367	1.464	1.467		
Height 1 (in)	2.824	2.776	2.856	2.78	2.621	2.796		
Height 2 (in)	2.882	2.799	2.864	2.784	2.633	2.793		
Height 3 (in)	2.883	2.804	2.838	2.772	2.605	2.797		
Average Height (in)	2.863	2.793	2.853	2.779	2.620	2.795		
Volume (ft^3)	0.003	0.003	0.003	0.002	0.003	0.003		
Weight (lbs)	0.264	0.272	0.296	0.252	0.28	0.27		

Appendix II

Nomenclature

GENERAL NOTES

DRILLING AND SAMPLING SYMBOLS

SYMBOL	DEFINATION
HSA	3 1/4" I.D. hollow Stem Auger
RWB	Rotary Wash Boring (Mud Drilling)
_FA	4", 6" or 10" Diameter Flight Auger
_HA	2", 4" or 6" Hand Auger
_DC	2 1/2", 4", 5" or 6" Steel Drive Casing
_RC	Size A, B, or N Rotary Casing
PD	Pipe Drill or Cleanout Tube
CS	Continuous Split Barrel Sampling
DM	Drill Mud
JW	Jetting Water
SB	2" O.D. Split Barrel Sample
_L	2 1/2" or 3 1/2" O.D. SB Liner Sample
_T	2" or 3" Thin Walled Tube Sample
3TP	3" Thin Walled Tube (Pitcher Sampler)
_TO	2" or 3" Thin Walled Tube (Osterberg Sampler)
W	Wash Sample
B	Bag Sample
P	Test Pit Sample
_Q	BQ, NQ, or PQ Wireline System
_X	AX, BX, or NX Double Tube Barrel
CR	Core Recovery – Percent
NSR	No Sample Recovered, classification based on action of drilling, equipment and/or material noted in drilling fluid or on sampling bit.
NMR	No Measurement Recorded, primarily due to presence of drilling or coring fluid.
▼	Water Level Symbol

TEST SYMBOLS

SYMBOL	DEFINATION
WC	Water Content - % of Dry Wt. – ASTM D 2216
OC	Organic Content - % of Dry Wt. – ASTM D 2974
DD	Dry Density – Pounds Per Cubic Foot
LL, PL	Liquid and Plastic Limit – ASTM D 4318

Additional Insertions in Last Column

Qu	Unconfined Comp. Strength -psf – ASTM D 2166
Pq	Penetrometer Reading – Tons/Square Foot
Ts	Torvane Reading – Tons/Square Foot
G	Specific Gravity – ASTM D 854
SL	Shrinkage Limits – ASTM D 427
OC	Organic Content – Combustion Method
SP	Swell Pressure - Tons/Square Foot
PS	Percent Swell
FS	Free Swell – Percent
pH	Hydrogen Ion Content. Meter Method
SC	Sulfate Content – Parts/ Million, same as mg/L
CC	Chloride Content - Parts/ Million, same as mg/L
C*	One Dimensional Consolidation – ASTM D 2453
Qc*	Triaxial Compression
D.S.*	Direct Shear – ASTM D 3080
K*	Coefficient of Permeability – cm/sec
D*	Dispersion test
DH*	Double Hydrometer – ASTM D 4221
MA*	Particle Size Analysis – ASTM D 422
R	Laboratory Receptivity, in ohm – cm – ASTM G 57
E*	Pressuremeter Deformation Modulus – TSF
PM*	Pressuremeter Test
VS*	Field Vane Shear – ASTM D 2573
IR*	Infiltrometer Test – ASTM D 3385
RQD	Rock Quality Designation – Percent

*See attached data sheet or graph

WATER LEVEL

Water levels shown on the boring logs are the levels measured in the borings at the time and under the conditions indicated. In sand, the indicated levels may be considered reliable ground water levels. In clay soil, it may not be possible to determine the ground water lev el within the normal time required for test borings, except where lenses or layer s of more pervious waterbearing soil are present. Even then, an extended period of time may be necessary to reach equilibrium. Therefore, the position of the water level symbol for cohesive or mixed texture soils may not indicate the true level of the ground water table. Perched water refers to water above an impervious layer, thus impeded in reaching the water table. The available water level information is given at the bottom of the log sheet.

DESCRIPTIVE TERMINOLOGY

DENSITY TERM	"N" VALUE
Very Loose	0-4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	Over 50

CONSISTENCY TERM	Qu /Pq VALUE (tsf)	"N" VALUE
Very Soft	<0.25	0-2
Soft	0.25 - 0.49	2-4
Medium Stiff	0.5 - 0.99	4-8
Stiff	1.0 - 1.99	8-16
Very Stiff	2.0 - 3.99	16-30
Hard	4.0+	Over 30

Lamination	Up to 1/2" thick stratum
Layer	1/2" to 6" thick stratum
Lens	1/2" to 6" discontinuous stratum
Varved	Alternating laminations
Dry	Powdery, no noticeable water
Moist	Below saturation
Wet	Saturated, above liquid limit
Water bearing	Pervious soil below water

Standard "N" Penetration: per ASTM D1586

Consistency term based in relative order on Qu result, Pq result, and lastly "N" value.

RELATIVE GRAVEL PROPORTIONS

CONDITION	TERM	RANGE
Coarse Grained Soils	trace of gravel	2-14%
	with gravel	15-49%
Fine Grained Soils		
15-29% + No. 200	trace of gravel	2-14%
15-29% + No. 200	with gravel	15-29%
30% + No. 200	trace of gravel	2-14%
30% + No. 200	with gravel	15-24%
30% + No. 200	gravelly	25-49%

RELATIVE SIZES

Boulder	Over 12"
Cobble	3" - 12"
Gravel	
Coarse	3/4" - 3"
Fine	#4 – 3/4"
Sand	
Coarse	#4 - #10
Medium	#10 - #40
Fine	#40- #200
Silt & Clay	- # 200, Based on Plasticity

SOILS CLASSIFICATION FOR ENGINEERING PURPOSES

ASTM Designation: D 2487 - 83

(Based on Unified Soil Classification System)

SOIL ENGINEERING

			Criteria for Assigning GroupSymbols and Group Names Using Laboratory Tests[A]	Soil Classification[B] Group Symble	Group Name
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels More than 50% coarse fraction retained on No. 4 sieve	Clean Gravels Less Than 5% fines [C]	Cu≥ 4 and 1≤ Cc ≤3[E]	GW	Well graded gravel [F]
			Cu< 4 and/or 1> Cc >3[E]	GP	Poorly graded gravel [F]
		Gravels with Fines more than 12% fines [C]	Fines Classify as ML or MH	GM	Silty gravel [F,G,H]
			Fines classify as CL or CH	GC	Clayey gravel [F,G,H]
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean sandss Less than 5% fines [D]	Cu≥ 6 and 1≤ Cc ≤3[E]	SW	Well graded sand [I]
			Cu< 6 and/or 1> Cc >3[E]	SP	Poorly graded sand [I]
		Sands with Fines more than 12% fines [D]	Fines Classify as ML or MH	SM	Silty sand [G,H,I]
			Fines classify as CL or CH	SC	Clayey sand [G,H,I]
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays Liquid Limit less than 50	inorganic	PI >7 and plots on or above " A" line	CL	Lean clay [K,L,M]
			PI<4 or plots below " A " line	ML	Silt [K,L,M]
		organic	Liquid limit - oven dried / Liquid limit - not dried < 0.75	OL	Organic clay [K,L,M,N] Organic Silt [K,L,M,O]
	Silts and Clays Liquid Limit 50 or more	inorganic	PI plots on or above " A " line	CH	Fat clay [K,L,M]
			PI plots below " A " line	MH	Elastic silt [K,L,M]
		Organic	Liquid limit - oven dried / Liquid limit - not dried < 0.75	OH	Organic clay [K,L,M,P] Organic Silt [K,L,M,Q]
Highly organic Soils			Primarily organic matter, dark in color, and organic odor	PT	Peat
Fibric Peat > 67% Fibers		Hemic Peat	33 % - 67 % Fibers	sapric	Peat < 33% Fibers

[A] Based on the material passing the 3-in (75- mm)sieve

[B] If field sample contained cobbles or boulders, or both. add with cobbles or boulders, or both to group name

[C] Gravels with 5 to 12 % fines require dual symbols:
GW - GM well-graded gravel with silt
GW - GC well-graded gravel with clay
GP - GM poorly-graded gravel with Silt
GP - GC poorly-graded gravel with clay

[D] Sands with 5 to 12 % fines require dual symbols:
SW -SM well-graded sand with silt
SW - SC well-graded sand with clay
SP - SM poorly-graded sand with Silt
SP - SC poorly-graded sand with clay

[E] $Cu = \frac{D_{60}}{D_{10}}$ $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ≥ 15% sand, add "with sand" to group name

[G] If fines classify as CL-ML, use dual symbol GC-GM. or SC-SM

[H] If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in hatched area, soil is a CL_ML silty clay
If soil contains 15 to 29% plus No. 200, add, "with sand" or " with gravel", whichever is predominent

[L] If soil contains ≥ 30% plus No.200, predominantly sand, add "sandy" to the group name

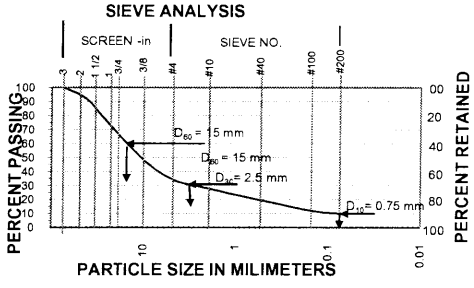
[M] If soil contains ≥ 30% plus No.200, predominantly gravel add "gravelly" to the group name

[N] PI ≥4 and plots on or above "A" Line

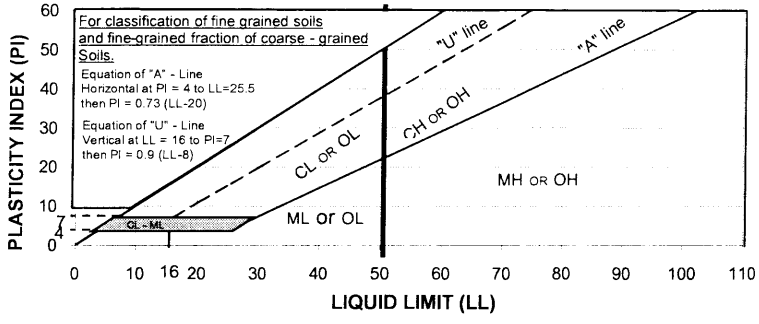
[O] PI < 4 or plots below "A" Line

[P] PI plots on or above "A" Line

[Q] PI plots below "A" Line



$Cu = \frac{D_{60}}{D_{10}} = \frac{15}{0.075} = 200$ $C_c = \frac{(D_{30})^2}{D_{60} X D_{10}} = \frac{(2.5)^2}{15X\ 0.075} = 5.6$



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