

643-4131 - Marty

643-4200

220 East Ryan Road
Oak Creek, WI 53154-4533
414-768-7144
FAX: 414-768-7158

November 14, 2003

Don Fritzke
N103 W17108
Wild Rose Lane
Germantown
53022

Project Reference #7029
FID #241170270
BRRS #02-41-278106

Ms. Gina Keenan
Wisconsin Department of Natural Resources - Southeast Region
2300 N. Dr. ML King Drive
P.O. Box 12436
Milwaukee, WI 53212-0436

Re: **WORK PLAN ADDENDUM**

Fritzke Colony Dry Cleaner Property
10003 West Carmen Avenue
Milwaukee, Wisconsin

Dear Ms. Keenan:

In compliance with NR 169.21 (2)(e), this letter has been prepared as an addendum to the Wisconsin Department of Natural Resources (WDNR) approved Sigma Environmental Services, Inc. (Sigma) January 31, 2002, work plan for subsurface investigation work for the Fritzke Colony Dry Cleaner Property. As outlined in the approved work plan, Sigma has implemented and completed the installation and sampling of test soil borings and groundwater monitoring wells at the above referenced site.

On September 8, 2003, Sigma supervised the advancement of eight Geoprobe soil borings at the site. Selected soil samples were submitted to the project laboratory for Volatile Organic Compound (VOC) analysis. Based on a review of the soil analytical results, chlorinated hydrocarbons were detected in soil samples from five locations (GP-4, GP-6, GP-8, GP-9 and GP-10). Based on a review of the soil analytical data, the extent of chlorinated impacts is not defined horizontally or vertically to the north of the site building.

On September 9, 2003, groundwater samples were collected from the site monitoring wells and submitted to the project laboratory for VOC analysis. The depth to groundwater in the monitoring wells was approximately 34 feet bgs. The groundwater flow direction observed during the event was to the southeast. A review of the groundwater analytical results indicates that no VOCs were detected in the groundwater samples at concentrations that exceed the laboratory method detection limit.



Wisconsin Department of Natural Resources

Based on a review of the site environmental data generated to date, and our meeting on October 14, 2003, Sigma recommends the installation of three additional Geoprobe soil borings at the site to further delineate the extent of chlorinated impacts to soil to the north of the site building in the area of monitoring well MW-1. The soil borings will be advanced to a depth of approximately 12 feet bgs.

Two soil samples from each soil boring (6 samples total) collected during soil boring advancement will be submitted for EPA Method 8021 VOC analysis. All site data generated will be included in a comprehensive site investigation report.

A summary of site data including a map of the current site layout, proposed boring locations, groundwater flow direction, soil quality and tables presenting soil and groundwater quality data generated to date are presented as Attachment 1.

Presented as Attachment 2 to this letter for WDNR approval is a breakout of anticipated additional project costs. It is recommended due to the elevated concentration of detected compounds and the pending sale of the property, that the proposed activities be implemented as soon as possible.

Upon your review of the attached information should you have any questions, please contact our office at (414) 768-7144.

Respectfully submitted,

SIGMA ENVIRONMENTAL SERVICES, INC.



Martin D. Nessman, PG
Project Hydrogeologist



Randy E. Boness, P.G.
Senior Scientist

attachments

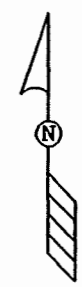
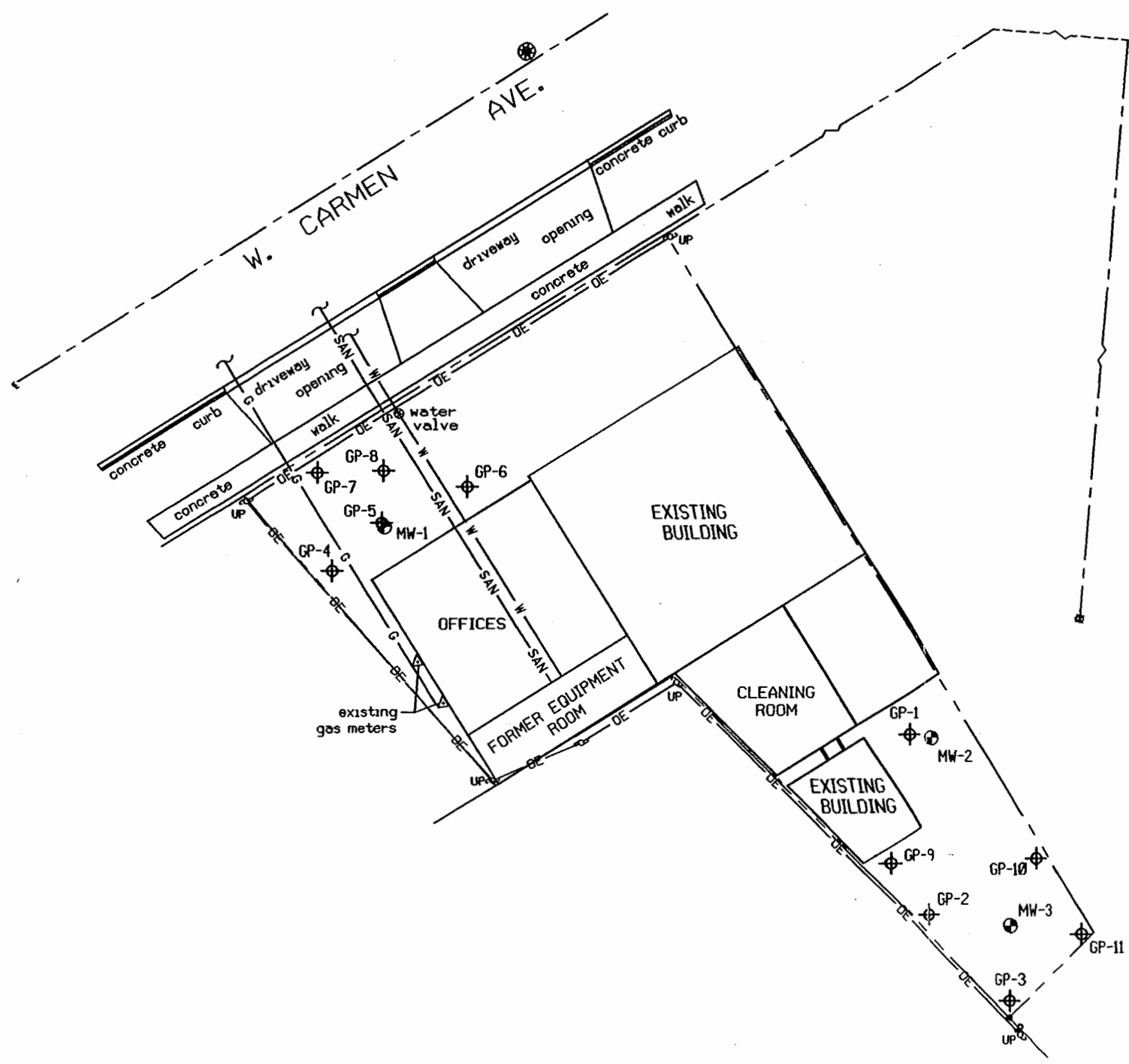
cc: Mr. Don Fritzke

ATTACHMENT 1

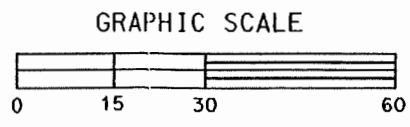
Table 1
Soil Quality Results - Geoprobe Borings
(Detected Compounds Only)
Fritzke Colony Dry Cleaners
10003 W. Carmen Avenue
Milwaukee, WI

Boring ID		GP-4	GP-4	GP-5	GP-5	GP-6	GP-6	GP-7	GP-7	GP-8	GP-8	GP-9	GP-9	GP-10	GP-10	GP-11	GP-11	NR 720 RCL	NR 746 Table 1	NR 746 Table 2
Depth (feet bgs)		2-4	6-8	2-4	6-8	2-4	6-8	2-4	6-8	2-4	6-8	2-4	6-8	2-4	6-8	2-4	6-8			
Date	Units	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003	09/08/2003			
Volatile Organic Compounds																				
n-Butylbenzene	µg/kg	<25	<25	<25	<25	<25	<25	<25	<25	<25	63.6	<25	<25	<25	<25	<25	<25	---	---	---
Tetrachloroethene	µg/kg	<25	1,660	8,610	52,300	385	1,480	<25	<25	1,080	<25	<25	<25	61.1	7,220	<25	<25	---	---	---
Trichloroethene	µg/kg	<25	<25	<25	93.1	<25	287	<25	<25	<25	<25	<25	<25	<25	1,680	<25	<25	---	---	---
cis-1,2-Dichloroethene	µg/kg	<25	<25	<25	<25	<25	44.3	<25	<25	<25	<25	40.8	<25	49.7	173	<25	<25	---	---	---

KEY:
 µg/kg micrograms per kilogram
 --- No standard established
BOLD Analyte detected above laboratory detection limit.
 NR 720 RCL Chapter NR 720 Generic Residual Contaminant Limit
 NR 746 Table 1 Chapter NR 746 Table 1, Indicators of Residual Petroleum Products.
 NR 746 Table 2 Chapter NR 746 Table 2, Protection of Human Health from Direct Contact with Contaminated Soil.

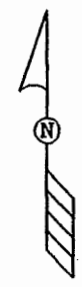
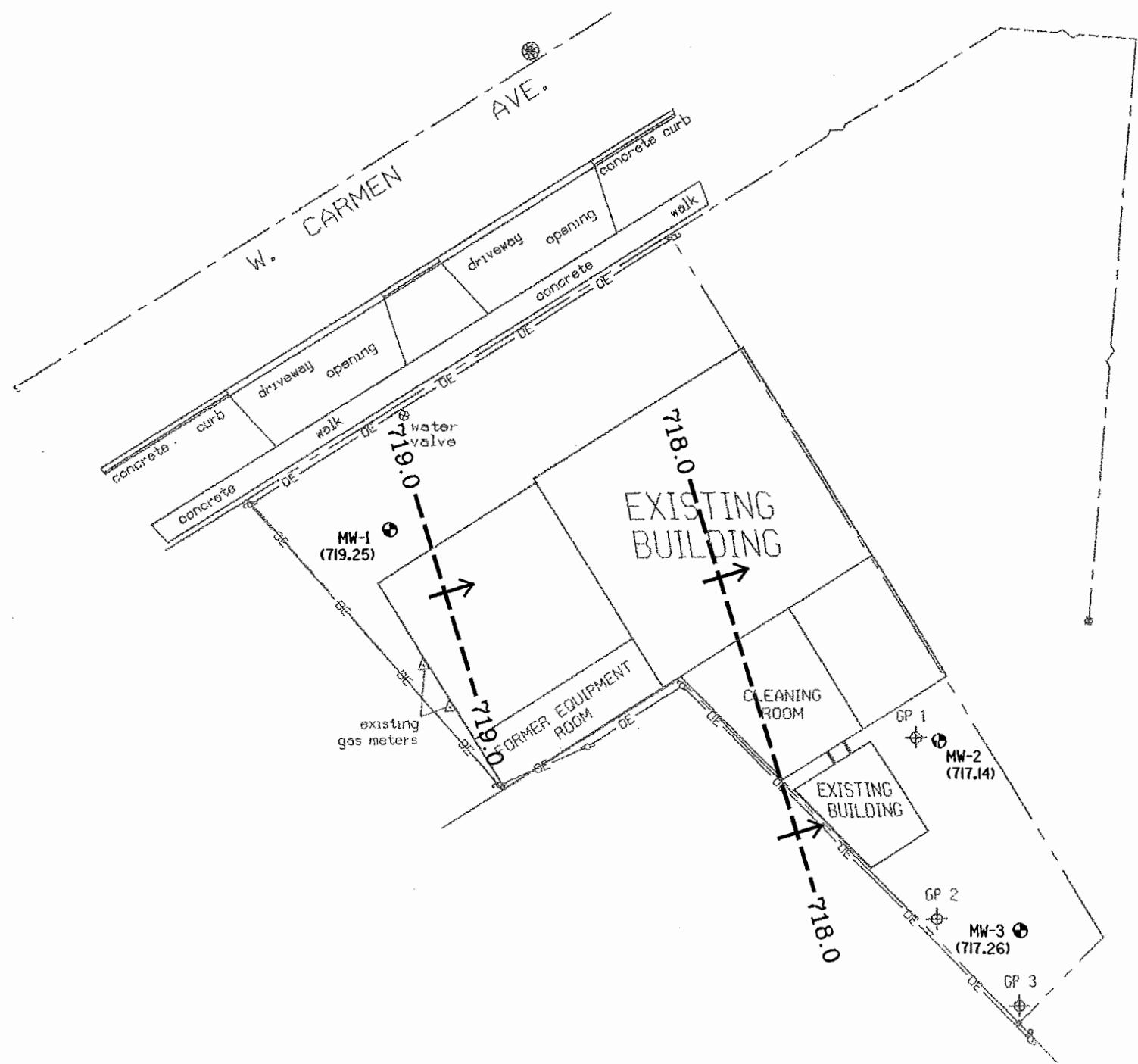


LEGEND	
GP	= GEOPROBE BORING LOCATION
MW	= MONITORING WELL LOCATION
UP	= UTILITY POLE
— DE —	= OVERHEAD UTILITY LINE
— G —	= UNDERGROUND GAS LINE
— SAN —	= UNDERGROUND SANITARY SEWER LINE
— W —	= UNDERGROUND WATER LINE
- - -	= PROPERTY LINE

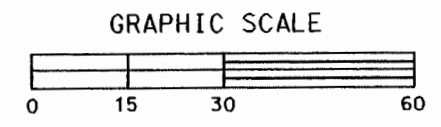


NOTE:
MAP BASED ON SURVEY PERFORMED ON 7-22-02, BY SURVEYING ASSOCIATES, INC.

FRITZKE PROPERTY MILWAUKEE, WI			
DATE: 1-17-03	DR. BY: BEB	DR. # 7029-002	
SITE PLAN MAP			SCALE: 1" = 30'
			FIGURE 2



LEGEND	
	= GEOPROBE BORING LOCATION
	= MONITORING WELL LOCATION
	= OVERHEAD UTILITY LINE
	= GROUNDWATER CONTOUR LINE, CONTOUR INTERVAL = 1.0'
	() = STATIC GROUNDWATER LEVEL (9-9-03)
	= GROUNDWATER FLOW DIRECTION



NOTE:
MAP BASED ON SURVEY PERFORMED ON 7-22-02, BY SURVEYING ASSOCIATES, INC.

FRITZKE PROPERTY MILWAUKEE, WI			ENVIRONMENTAL SERVICES INC.
DATE: 9-12-03	DR. BY: BEB	DR.# 7029-007	SCALE: 1" = 30'
GROUNDWATER CONTOUR MAP (9-9-03)			FIGURE 3

GP-8		
DEPTH	2'-4'	6'-8'
CIS-1,2-DCE	<25	<25
TRANS-1,2-DCE	<25	<25
PCE	1,080	<25
TCE	<25	<25
n-BUTYLBENZENE	<25	63.8

GP-6		
DEPTH	2'-4'	6'-8'
CIS-1,2-DCE	<25	44.3
TRANS-1,2-DCE	<25	<25
PCE	385	1,480
TCE	<25	287

GP-7		
DEPTH	2'-4'	6'-8'
CIS-1,2-DCE	<25	<25
TRANS-1,2-DCE	<25	<25
PCE	<25	<25
TCE	<25	<25

GP-5		
DEPTH	2'-4'	6'-8'
CIS-1,2-DCE	<25	<25
TRANS-1,2-DCE	<25	<25
PCE	8,610	52,300
TCE	<25	93.1

MW-1		
DEPTH	5'-7'	13'-15'
CIS-1,2-DCE	<130	<25
TRANS-1,2-DCE	<130	<25
PCE	30,000	<25

GP-4		
DEPTH	2'-4'	6'-8'
CIS-1,2-DCE	<25	<25
TRANS-1,2-DCE	<25	<25
PCE	<25	1,660
TCE	<25	<25

GP-9		
DEPTH	2'-4'	6'-8'
CIS-1,2-DCE	40.8	<25
TRANS-1,2-DCE	<25	<25
PCE	<25	<25
TCE	<25	<25

GP-2		
DEPTH	2'-4'	
CIS-1,2-DCE	453	
TRANS-1,2-DCE	109	
PCE	<25	

GP-3		
DEPTH	2'-4'	
CIS-1,2-DCE	<25	
TRANS-1,2-DCE	<25	
PCE	<25	

GP-11		
DEPTH	2'-4'	6'-8'
CIS-1,2-DCE	<25	<25
TRANS-1,2-DCE	<25	<25
PCE	<25	<25
TCE	<25	<25

GP-1		
DEPTH	2'-4'	14'-16'
CIS-1,2-DCE	<25	<25
TRANS-1,2-DCE	<25	<25
PCE	<25	<25

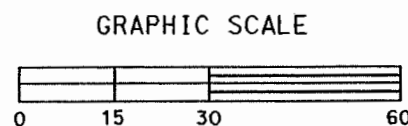
MW-2		
DEPTH	7'-9'	17'-19'
CIS-1,2-DCE	42	<25
TRANS-1,2-DCE	<25	<25
PCE	<25	<25

GP-10		
DEPTH	2'-4'	6'-8'
CIS-1,2-DCE	49.7	173
TRANS-1,2-DCE	<25	<25
PCE	61.1	7,220
TCE	<25	1,680

MW-3		
DEPTH	3'-5'	10'-12'
CIS-1,2-DCE	2,000	<25
TRANS-1,2-DCE	110	<25
PCE	130	<25

ANALYTICAL KEY	
DCE	= DICHLOROETHENE
PCE	= TETRACHLOROETHENE
TCE	= TRICHLOROETHENE
ALL CONCENTRATIONS EXPRESSED IN MICROGRAMS PER KILOGRAM (ug/kg)	

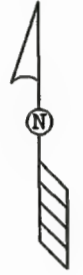
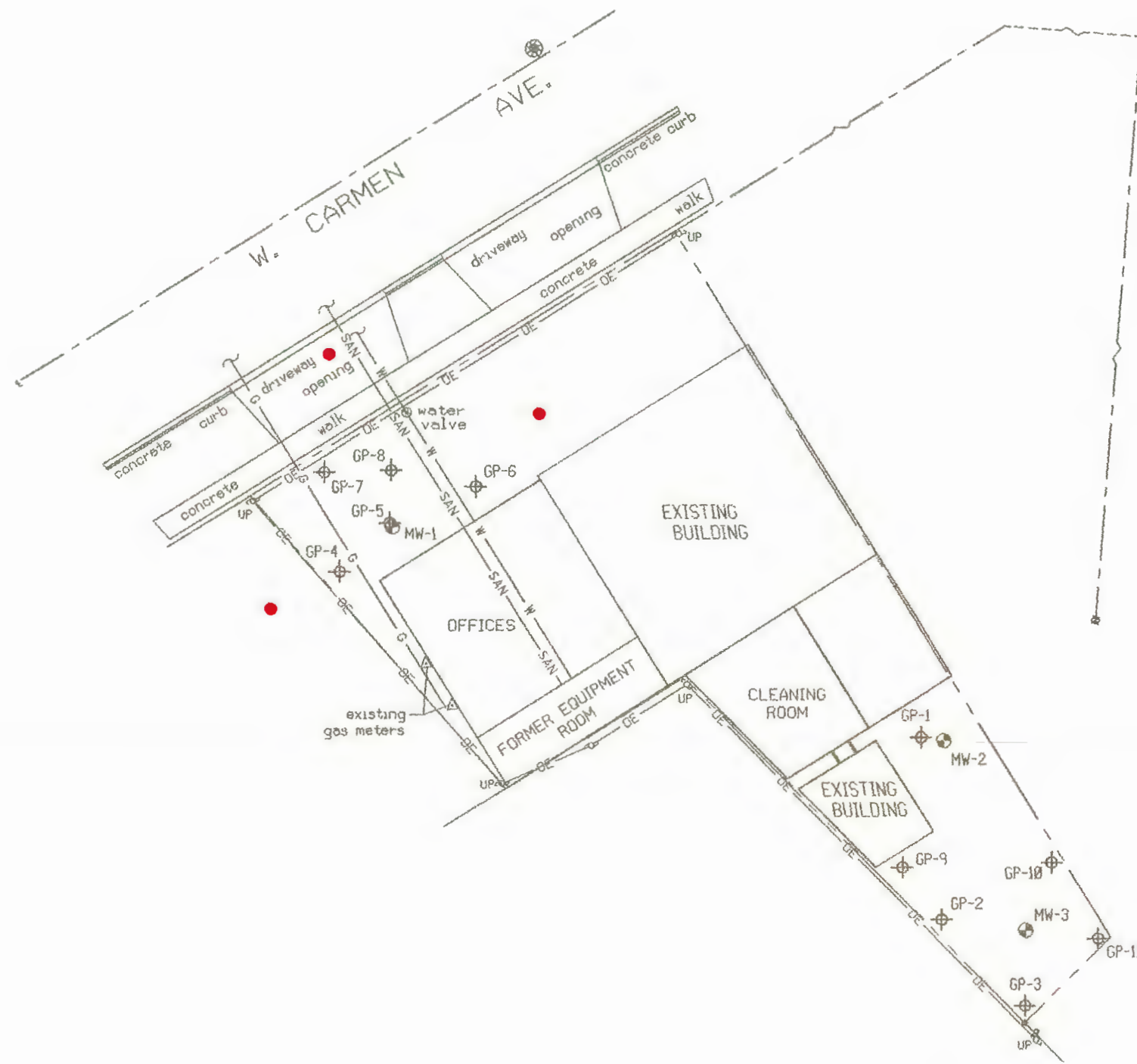
LEGEND	
GP ⊕	= GEOPROBE BORING LOCATION
MW ⊕	= MONITORING WELL LOCATION
UP ⊕	= UTILITY POLE
— OE —	= OVERHEAD UTILITY LINE
— G —	= UNDERGROUND GAS LINE
— SAN —	= UNDERGROUND SANITARY SEWER LINE
— W —	= UNDERGROUND WATER LINE
---	= PROPERTY LINE



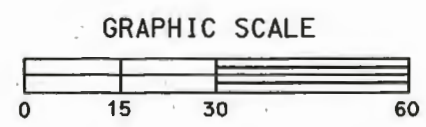
NOTE:
MAP BASED ON SURVEY PERFORMED ON 7-22-02, BY SURVEYING ASSOCIATES, INC.

FRITZKE PROPERTY MILWAUKEE, WI			
DATE: 9-30-03	DR. BY: BEB	DR.# 7029-005	
SOIL QUALITY MAP			FIGURE 4

ATTACHMENT 2



LEGEND	
●	= PROPOSED SOIL BORING LOCATION
GP	= GEOPROBE BORING LOCATION
MW	= MONITORING WELL LOCATION
UP	= UTILITY POLE
— OE —	= OVERHEAD UTILITY LINE
— G —	= UNDERGROUND GAS LINE
— SAN —	= UNDERGROUND SANITARY SEWER LINE
— W —	= UNDERGROUND WATER LINE
- - -	= PROPERTY LINE



NOTE:
MAP BASED ON SURVEY PERFORMED ON 7-22-02, BY SURVEYING ASSOCIATES, INC.

FRITZKE PROPERTY MILWAUKEE, WI			
DATE: 10-17-03	DR. BY: BEB	DR.# 7029-008	SCALE: 1" = 30'
PROPOSED SOIL BORING LOCATION MAP			FIGURE 1

ATTACHMENT 2

**COST ESTIMATE
SITE INVESTIGATION ADDENDUM ACTIVITIES
CDC, INC.
10003 WEST CARMEN AVENUE
MILWAUKEE, WISCONSIN
Project Reference #7029**

<u>TASK 1: GEOPROBE SOIL BORING INSTALLATION (Sigma)</u>	
(Includes all oversight activities associated with the advancement of three Geoprobe soil borings).	
○ Mobilization/Demobilization, 1 trip.....	\$ 23
○ Project Hydrogeologist, 4 hrs @ \$85/hr	\$ 340
○ Staff Hydrogeologist, 6 hrs @ \$75/hr	\$ 450
○ Senior Project Manager, 2 hrs @ \$100/hr.....	\$ 200
○ Equipment: FID/PID 1 days @ \$70/day.....	\$ 70
Subtotal	\$ 1,013
<u>COMMODITY SERVICES</u>	
<u>Drilling Services</u>	
○ Installation of three soil borings to a depth of 12 feet bgs	\$ 500
Subtotal	\$ 500
<u>LABORATORY SERVICES (Estimated)</u>	
(Includes laboratory analysis of 6 soil samples).	
○ Soil: VOC, 6 samples @ \$55/sample.....	\$ 330
Subtotal	\$ 330
TOTAL TASK 1:	\$ 1,843
TOTAL ESTIMATED COST	\$ 1,843

Table 3
Groundwater Analytical Results
Fritzke Colony Dry Cleaners
10003 W. Carmen Avenue
Milwaukee, WI

Monitoring Well #		MW-1			MW-2			MW-3			NR 140	NR 140
Date	Units	07/01/2002	10/02/2002	09/09/2003	07/01/2002	10/02/2002	09/09/2003	07/01/2002	10/02/2002	09/09/2003	ES	PAL
Volatile Organic Compounds												
Benzene	µg/l	<0.48	<0.25	<0.50	<0.48	<0.25	<0.50	<0.48	<0.25	<0.50	5	0.5
Ethylbenzene	µg/l	<0.43	<0.53	<0.50	<0.43	<0.53	<0.50	<0.43	<0.53	<0.50	700	140
Toluene	µg/l	<0.47	<0.84	<0.50	<0.47	<0.84	<0.50	<0.47	<0.84	<0.50	1,000	68.6
Xylenes	µg/l	<1.4	<1.83	<0.50	<1.4	<1.83	<0.50	<1.4	<1.83	<0.50	10,000	1000
cis-1,2-Dichloroethene	µg/l	<0.73	<0.81	<0.50	<0.73	<0.81	<0.50	<0.73	<0.81	<0.50	70	7
trans-1,2-Dichloroethene	µg/l	<0.79	<0.80	<0.50	<0.79	<0.80	<0.50	<0.79	<0.80	<0.50	100	20
Tetrachloroethene	µg/l	<0.57	<0.63	<0.50	<0.57	<0.63	<0.50	<0.57	<0.63	<0.50	5	0.5
Groundwater Field Parameters												
Dissolved Oxygen	mg/L	0.18	NA	0.23	0.23	NA	0.27	0.32	NA	0.3	NS	NS
Redox	mV	-201.4	231.2	-77.6	-176.7	281.7	-43.4	67.5	301.2	36.1	NS	NS
pH	--	7	7	7	7	7	7	7	7	7	NS	NS
Ferrous Iron	mg/L	0	0	0	0	0	0	0	0	0	NS	NS
KEY:	µg/l	micrograms per liter										
	NR 140	Wisconsin Administrative Code, Section NR 140										
	ES	Enforcement Standard										
	PAL	Preventive Action Limit										
	NA	Not Analyzed										
	mg/l	milligrams per liter										
	mV	millivolts										
	--	unitless										
	° C	degrees Celsius										