Phase II Environmental Site Investigation Report

CSX (Former Penn 200 Yard) Site
Buffalo, New York

October 2006

0116-001-100

Prepared For:

Buffalo Urban Development Corporation

Prepared By:

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PHASE II ENVIRONMENTAL SITE INVESTIGATION REPORT

CSX "FORMER PENN 200 YARD" SITE
BUFFALO, NEW YORK

October 2006 0116-001-100

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1.0 INTRODUCTION

1.1 Background and Site Description

Benchmark Environmental Engineering and Science, PLLC, (Benchmark) performed a Phase II Environmental Site Investigation for an approximate 38-acre site located on Fuhrmann Boulevard, Buffalo, New York. (Site)(see Figure 1). The property, herein referred to as the CSX Site, is located in a vacant former railroad corridor and is generally covered with slag and gravel, which was apparently utilized as railroad ballast. The remainder of the Site is generally covered with vegetation. The investigation was performed on behalf of Buffalo Urban Development Corporation (BUDC). This investigation included a subsurface soil and groundwater investigation.

The primary purpose of this investigation was to investigate potential environmental concerns identified in a Phase I Environmental Site Assessment (ESA) dated August 2006, which was prepared by Benchmark for BUDC. Additionally, this investigation was completed to evaluate the potential eligibility of the Site for inclusion in the New York State (NYS) Environmental Restoration Program (ERP).

2.0 METHODS OF INVESTIGATION

2.1 Soil Boring and Soil Sampling

The soil boring and sampling program, conducted on September 18th and 19th, 2006 consisted of advancing direct-push (Geoprobe®) boreholes designated as CSX-SB-1 through CSX-SB-27, DAR-SB-8 and DAR-SB-9/MW-5 at the locations identified on Figures 2 and 3. Boreholes were advanced to depths ranging from approximately 8 feet below ground surface (fbgs) to 16 fbgs.

All direct-push boreholes were advanced using 1.5-inch diameter samplers 4-feet in length. Continuous 4-foot sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples by Benchmark's environmental scientist. Benchmark personnel scanned each 4-foot core for total volatile organic vapors with a Mini Rae 2000 Photoionization Detector (PID) equipped with a 10.6 eV lamp and noted visual and/or olfactory observations. The PID is capable of detecting the presence of contaminants that emit volatile organic compounds such as petroleum products and solvents with ionization potentials less than 10.6 eV. Based on the field observations and/or PID measurements, soils were collected from soil borings CSX-SB-1, CSX-SB-5, CSX-SB-7, CSX-SB-10 and DAR SB-9/MW-5.

During the site investigation, field observations from soil boring CSX-SB-10 indicated evidence of apparent petroleum impact at that location. As such, a supplemental investigation consisting of 16 additional borings (CSX-SB-12 through CSX-SB-27) proximate to CSX-SB-10/MW-4 was conducted on October 4, 2006 (see Figure 3). Boreholes were advanced to approximately 12 fbgs in a similar manner to the previous borings completed on-Site. All field observations including lithology, depths and PID scan results at each boring location are provided in Appendix A.

2.2 Monitoring Well Installation and Groundwater Sampling

Following borehole advancement described above, five new monitoring wells were installed at the site (see Figure 2). Well construction diagrams are provided in the soil boring log sheets (Appendix A). The wells were constructed via installation of a one-inch diameter Schedule 40 PVC well in each borehole. Well screens, machine slotted to a 0.010-inch slot

size and measuring 5-feet in length were installed across the water table in each borehole location. The wells were allowed to stabilize a minimum of 24 hours prior to groundwater sample collection. Groundwater grab samples were collected from each well, utilizing dedicated 0.5" polyethylene bailers. Water quality field collection logs are included in Appendix B.

2.3 Monitoring Well Survey

Following monitoring well installation, Benchmark personnel surveyed each well using an arbitrary reference elevation of 100.00 feet above mean sea level (fmsl) to estimate groundwater flow direction. The reference top of riser elevations, as well as groundwater elevations, obtained from each monitoring well during the investigation is summarized in Table 1. A groundwater isopotential map is presented as Figure 4.

3.0 INVESTIGATION FINDINGS

Site investigation soil and groundwater sample results are presented in Tables 2 and 3, respectively. Each compound that was analyzed and detected above the laboratory reporting limit is listed on the table with its associated result to provide a complete data summary. For comparison purposes, Table 2 presents soil cleanup objectives (SCOs) for each of the detected parameters as published in NYSDEC draft Part 375 Remedial Program Soil Cleanup Objectives (SCOs) for unrestricted use, commercial use and industrial use. Table 3 presents NYSDEC Class "GA" Groundwater Quality Standards (GWQS) for each of the detected parameters as published in NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998). A copy of the laboratory analytical data package is included in Appendix C. Analytical results for soil and groundwater samples are discussed below.

3.1 Soil

Soil samples collected from borings CSX-SB-1, CSX-SB-5, CSX-SB-7 indicated concentrations of VOC analytes below the NYSDEC SCOs for unrestricted use. The soil sample collected from boring CSX-SB-10 indicated concentration of one VOC analyte (i.e., acetone) in slight exceedance of NYSDEC SCOs for unrestricted use, but below the

commercial SCO for acetone (it should be noted, however, that this sample was qualified on the basis of laboratory blank contamination, may be positively biased).

There were no exceedances of unrestricted SCOs for SVOCs in any of the soil samples collected.

There were elevated metals detected in exceedance of unrestricted SCOs at soil boring CSX-SB-5 (mercury) and CSX-SB-10 (copper and manganese). However, these analytes were detected below commercial SCOs.

During the fieldwork, visual and olfactory observations of the soil column within CSX-SB-10 indicated apparent petroleum contamination in that area. Sixteen additional borings were advanced in the area of CSX-SB-10 to visually inspect the surrounding soil and delineate the impact. The extent of petroleum impact based on the field observations is shown on Figure 3. Analytical results of CSX-SB-10 did not exhibit exceedances of SCOs of analytes typically associated with petroleum. As such, the apparent petroleum impact is likely highly weathered.

3.2 Groundwater

Discrete groundwater grab samples were collected from the monitoring wells designated CSX-SB-1/MW-1, CSX-SB-5/MW-2, CSX-SB-7/MW-3, CSX-SB-10/MW-4 and DAR-SB-9/MW-5. There were no VOC analytes detected above NYSDEC GWQS. Several metal analytes were detected above GWQS. One additional groundwater sample was collected from CSX-SB-10/MW-4 and filtered prior to sampling to evaluate the effects of elevated turbidity noted in the original groundwater sample from this location. The groundwater data summary is presented in Table 3.

3.3 Site Hydrogeology

The geology at the site is generally described as non-native slag fill materials overlying silty clay. The fill materials consist of light gray to dark gray slag at depths ranging from 0.5 to 10 fbgs. Native materials, consisting of silty clay with traces of fine sand and gravel, were encountered ranging from approximately 0.5 fbgs to approximately 16 fbgs. Bedrock was not encountered during the investigation.

Groundwater was encountered between approximately 1 and 4 fbgs. Groundwater elevations on-Site ranged from 96.53 feet above mean sea level (fmsl) at CSX-SB-1/MW-1 to 98.98 fmsl at CSX-SB-10/MW-4 (relative to a common site datum of 100.00). Based on

the groundwater gauging data, including groundwater data collected from the adjacent Herbert F. Darling (Darling) site, groundwater appears to generally flow toward the Union Ship Canal located west and south of the Site. Groundwater gauging also indicates that the wetland areas on the Darling site influence groundwater flow toward the northwest. A groundwater isopotential map, showing estimated groundwater flow direction is shown on Figure 4.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this soil and groundwater investigation, Benchmark offers the following conclusions and recommendations:

- Slag fill materials cover the majority of the site and range in depth from 0.5 fbgs to 10 fbgs. Native soils beneath the slag are generally described as silty clay with trace sand and gravel to depths up to 16 fbgs.
- Groundwater was encountered on-Site ranging from approximately 1 to 4 fbgs. Groundwater appears to flow toward in a west and southwest direction toward the Union Ship Canal.
- There was visual and olfactory evidence of petroleum impact within subsurface soil in the southern end of the Site proximate CSX-SB-10. The source of the impact is unknown. However, that portion of the Site is located adjacent to the former Hanna Furnace Corporation, a former steel manufacturing facility.
- There are elevated concentrations of metals in groundwater on-Site. It appears that high turbidity positively biases groundwater concentrations. However, one filtered sample still exhibited metal concentrations for some parameters above applicable GWQS. These findings are consistent with analytical data reviewed for the Buffalo Lakeside Commerce Park Parcel 4 site, which is located adjacent to the subject property, and are attributable to the presence of slag fill across the site.
- Elevated pH values of 11.02 and 11.47 were noted in groundwater from CSX-SB-1/MW-1 and DAR-SB-9/MW-5, respectively. These findings are also consistent with data reviewed for the Buffalo Lakeside Commerce Park Parcel 4 site.

Additional investigation and/or remediation may be required during site redevelopment to address the apparent petroleum-impacted soil on the southern end of the Site and to fully characterize the extent of metals within groundwater. The magnitude of an additional investigation and/or remedial program can be determined upon election to remediate the site within the NYS ERP.

It appears that the site would be eligible for the NYS ERP, based on the following:

- Assuming that BUDC or a related entity purchases the site, the site would be owned by an eligible municipality (as defined in 6 NYCRR Part 375-4), which is not responsible for contamination at the site;
- The purpose for entering the ERP is to investigate and/or remediate hazardous substances or petroleum products on the property; and,
- The site is not a listed Class 1 or Class 2 site in the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of Buffalo Urban Development Corporation. The contents of this report are limited to information available at the time of the site investigation activities and to data referenced herein, and assume all referenced historic information sources to be true and accurate. The findings herein may be relied upon only at the discretion of Buffalo Urban Development Corporation. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering & Science, PLLC.

TABLES

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TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS

CSX Site
Buffalo, New York

Location	Reference Point	Ref. Point Elevation [1] (fmsl)	Water Depth Below Ref. Pt. (feet)	Water Table Elevation [1] (fmsl)
CSX SB-1/MW-1	TOR	100.28	3.75	96.53
CSX SB-5/MW-2	GS[2]	98.54	NA	NA
CSX SB-7/MW-3	TOR	103.54	4.92	98.62
CSX SB-10/MW-4	TOR	104.55	5.57	98.98
DAR SB-9/MW-5	TOR	101.47	4.42	97.05

Notes:

1. Elevations based on a benchmark established on-site, using an assumed datum of 100.00 fmsl.
2. The riser pipe was broken off at the time of the survey. Due to heavy rains, the ground surface had water cover. This elevation was not used to develop the isopotential map.
3. TOR = top of riser.
4. fmsl = feet above mean sea level.
5. fbgs = feet below ground surface.
6. GS = ground surface.

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TABLE 2

SOIL ANALYTICAL DATA SUMMARY

Phase II Investigation
CSX (former Penn 200 Yard)
BUDC

PARAMETER[1]	Sample Location				SCO UNRESTRICTED USE [2]	SCO RESTRICTED-COMMERCIAL[2]	SCO RESTRICTED-INDUSTRIAL [2]
	CSX SB - 1 (2 - 4)	CSX SB - 5 (1 - 3)	CSX SB - 7 (6 - 8)	CSX SB - 10 (4 - 6)			
TCL VOCs (mg/Kg)							
Acetone	ND	ND	0.028 BJ	**0.053 B**	**0.05**	**500**	**1000**
2 - Butanone (MEK)	ND	ND	0.007 J	0.008 J	**0.12**	**500**	**1000**
Carbon Disufide	0.003 J	ND	ND	0.005 J	**NA**	**NA**	**NA**
Cyclohexane	ND	ND	ND	0.004 J	**NA**	**NA**	**NA**
2 - Hexanone (MBK)	ND	ND	ND	0.29	**NA**	**NA**	**NA**
Methylene Chloride	0.003 BJ	0.002 BJ	0.002 BJ	0.002 BJ	**0.05**	**500**	**1000**
Methylcyclohexane	ND	ND	ND	0.012	**NA**	**NA**	**NA**
Total VOCs (mg/kg)	***0.01***	***0.00***	***0.04***	***0.37***	**NA**	**NA**	**NA**
TCL SVOCs (BN's only) (mg/Kg)							
Acenaphthene	ND	ND	ND	1.6	**20**	**500**	**1000**
Acenaphthylene	ND	0.033 J	ND	ND	**100**	**500**	**1000**
Anthracene	ND	0.081 J	ND	0.91	**100**	**500**	**1000**
Benzo (a) anthracene	ND	0.25 J	0.03 J	0.21 J	**1**	**5.6**	**11**
Benzo (a) pyrene	ND	0.31 J	ND	0.15 J	**1**	**1**	**1.1**
Benzo (b) fluoranthene	ND	0.48 J	ND	0.3 J	**1**	**5.6**	**11**
Benzo (ghi) perylene	ND	0.25 J	ND	0.078 J	**100**	**500**	**1000**
Benzo (k) fluoranthene	ND	0.12 J	ND	0.088 J	**0.8**	**56**	**110**
Bis(2 - ethylhexyl) phthalate	0.1 J	ND	0.073 J	0.26 J	**NA**	**NA**	**NA**
Chrysene	ND	0.32 J	0.027 J	0.28 J	**1**	**56**	**110**
Dibenzo (a,h) anthracene	ND	0.071 J	ND	0.04 J	**0.33**	**0.56**	**1.1**
Dibenzofuran	ND	0.04 J	ND	ND	**NA**	**NA**	**NA**
Di - n - octyl phthalate	ND	ND	ND	0.13 J	**NA**	**NA**	**NA**
Fluoranthene	ND	0.37 J	ND	1	**100**	**500**	**1000**
Fluorene	ND	ND	ND	1.4	**30**	**500**	**1000**
Indeno (1,2,3 - cd) pyrene	ND	0.2 J	ND	0.069 J	**0.5**	**5.6**	**11**
2 - Methylnaphthalene	ND	0.098 J	ND	0.42 J	**NA**	**NA**	**NA**
Naphthalene	ND	0.061 J	ND	0.57	**12**	**500**	**1000**
Phenanthrene	ND	0.28 J	ND	3.6	**100**	**500**	**1000**
Pyrene	ND	0.31 J	ND	0.81	**100**	**500**	**1000**
Total SVOCs (mg/kg)	***0.00***	***1.32***	***0.00***	***7.87***	**NA**	**NA**	**NA**
TAL Metals (mg/Kg)							
Aluminum	21000	2630	6410	15400	**NA**	**NA**	**NA**
Arsenic	3.8	6.8	3	8.5	**13**	**16**	**16**
Barium	254	25.9	61	193	**350**	**400**	**10000**
Beryllium	4.1	0.25	0.38	2.7	**7.2**	**590**	**2700**
Cadmium	ND	0.51	0.31	0.86	**2.5**	**9.3**	**60**
Calcium	252000	106000	88700	97100	**NA**	**NA**	**NA**
Chromium	0.89	7.8	10.4	16.4	**30**	**1500**	**6800**
Cobalt	ND	3.7	5.4	3.8	**NA**	**NA**	**NA**
Copper	ND	25.6	13.4	**90.1**	**50**	**270**	**10000**
Iron	5630	17400	12100	36700	**NA**	**NA**	**NA**
Lead	ND	43.1	7.6	60.7	**63**	**1000**	**3900**
Magnesium	4060	16900	22600	5520	**NA**	**NA**	**NA**
Manganese	800	319	332	**2650**	**1600**	**10000**	**10000**
Mercury	ND	**0.78**	ND	0.036	**0.18**	**2.8**	**5.7**
Nickel	0.86	10.3	14.2	14.7	**30**	**310**	**10000**
Potassium	574	531	1640	1070	**NA**	**NA**	**NA**
Sodium	534	ND	ND	398	**NA**	**NA**	**NA**
Vanadium	3.7	9.6	14.1	7.3	**NA**	**NA**	**NA**
Zinc	ND	87.6	42.8	106	**109**	**10000**	**10000**
PCB Aroclor (mg/Kg)							
Aroclor 1254	ND	ND	ND	0.038	**0.1**	**1**	**25**
Aroclor 1260	ND	ND	ND	0.025 J	**0.1**	**1**	**25**

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Soil Cleanup Objectives (SCOs) per June 2006 NYSDEC draft Part 375

Definitions:

ND = Parameter not detected above laboratory detection limit.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
B = Value is between the IDL and the CRDL.
* = Indicates analysis is not within quality control limits.

BOLD = Analytical result exceeds Unrestricted SCO.

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TABLE 3

GROUNDWATER ANALYTICAL DATA SUMMARY

Phase II Investigation
CSX (Former Penn 200 Yard)
BUDC

Parameter [1]	Monitoring Well Location						GWQS/GV [3]
	CSX SB-1/MW-1	CSX SB-5/MW-2	CSX SB-7/MW-3	CSX SB-10/MW-4	CSX SB-10/MW-4 [2]	DAR SB-9/MW-5	
TCL VOCs (ug/L)							
Acetone	6.1 J	ND	ND	4 J	NS	ND	**50***
Methylene chloride	ND	ND	4.2 J	ND	NS	ND	**5**
Metals (ug/L)							
Aluminum	165000	121000	23600	39400	ND	86000	**NA**
Antimony	ND	120	ND	76	ND	ND	**NA**
Arsenic	**120**	**220**	**26**	**88**	ND	ND	**25**
Barium	**3200**	**2100**	340	920	230	180	**1000**
Beryllium	**28**	**8.3**	ND	**5.8**	ND	ND	**3**
Cadmium	5	**10**	1.8	4.5	ND	ND	**5**
Calcium	1750000	419000	262000	265000	500	251000	**NA**
Chromium	**160**	**390**	33	**130**	ND	5.7	**50**
Cobalt	47	100	14	40	4	ND	**NA**
Copper	**370**	**2000**	120	**820**	ND	ND	**200**
Iron	**288000**	**375000**	**43700**	**308000**	**1,600**	**6200**	**300**
Lead	**1000**	**9100**	**460**	**1600**	ND	**39**	**25**
Magnesium	**92400**	**92300**	**50300**	**49400**	**55,700**	1200	**35000**
Manganese	**12400**	**6600**	**2300**	**7200**	460	**440**	**300**
Mercury	**0.73**	**12**	**1.6**	**1**	ND	ND	**0.7**
Nickel	**120**	**300**	45	**140**	ND	ND	**100**
Potassium	28600	28100	31700	17800	**18,600**	13500	**NA**
Selenium	**95**	**24**	ND	**22**	**15**	ND	**10**
Sodium	**25200**	6000	19800	**22100**	**21,100**	3800	**20000**
Vanadium	160	280	41	83	ND	9.3	**NA**
Zinc	**2300**	**4600**	920	1900	ND	38	**2000**
Water Quality Parameters							
pH	11.02	7.08	7.40	7.01	7.04	11.47	**NA**

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Filtered metal sample.
3. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.

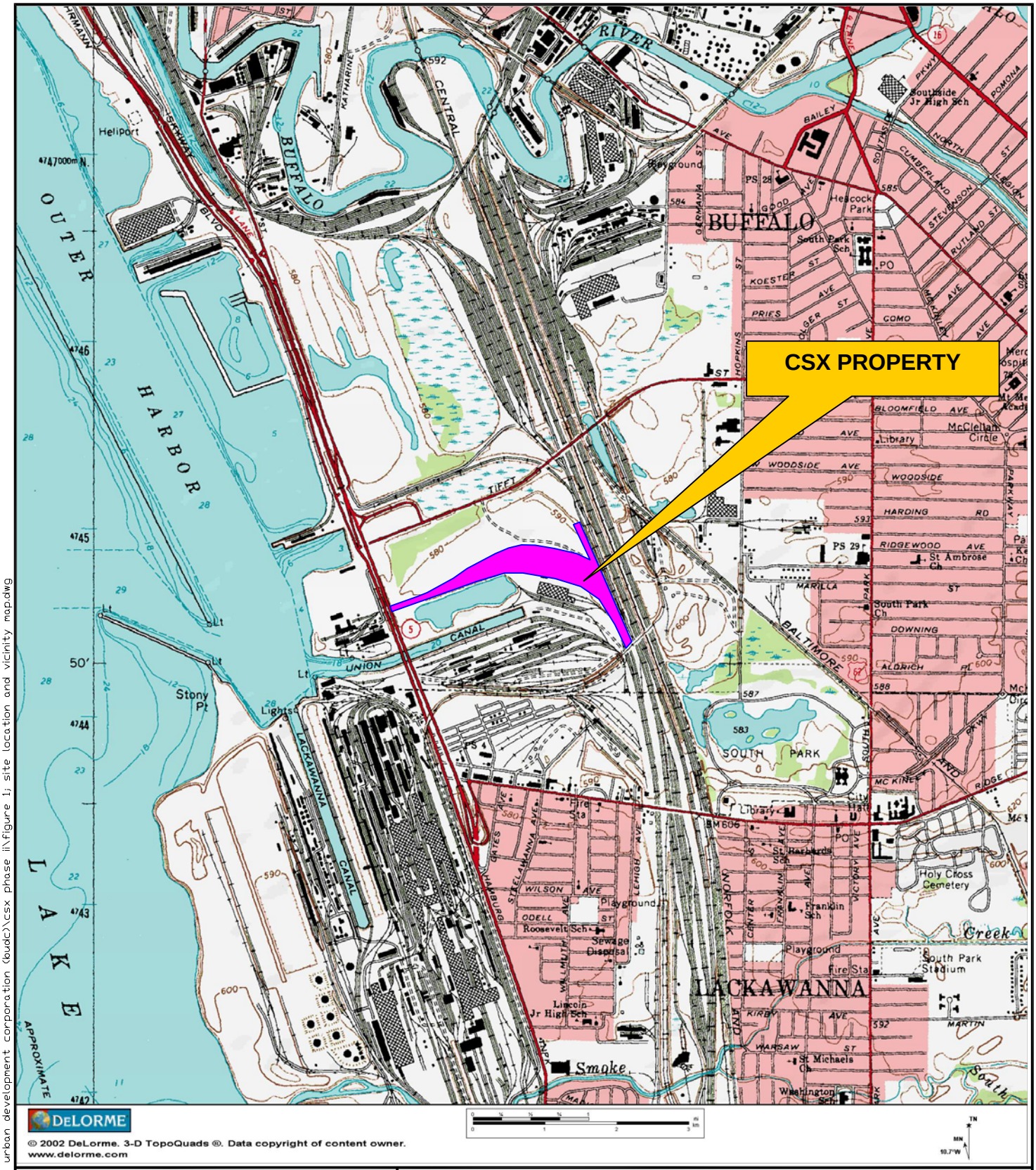
Definitions:

J = Estimated value; result is less than the sample quantitation limit but greater than zero.
ND = parameter not detected above laboratory detection limit.
NA = Not Applicable.
NS= Not sampled for that parameter.

BOLD = Analytical result exceeds individual GWQS/GV.

FIGURES

FIGURE 1



FILEPATH:g:\cad\benchmark\buffalo urban development corporation (budc)\csx phase ii\figure 1; site location and vicinity map.dwg

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SITE LOCATION AND VICINITY MAP

PHASE II SITE INVESTIGATION

CSX PROPERTY
BUFFALO, NEW YORK

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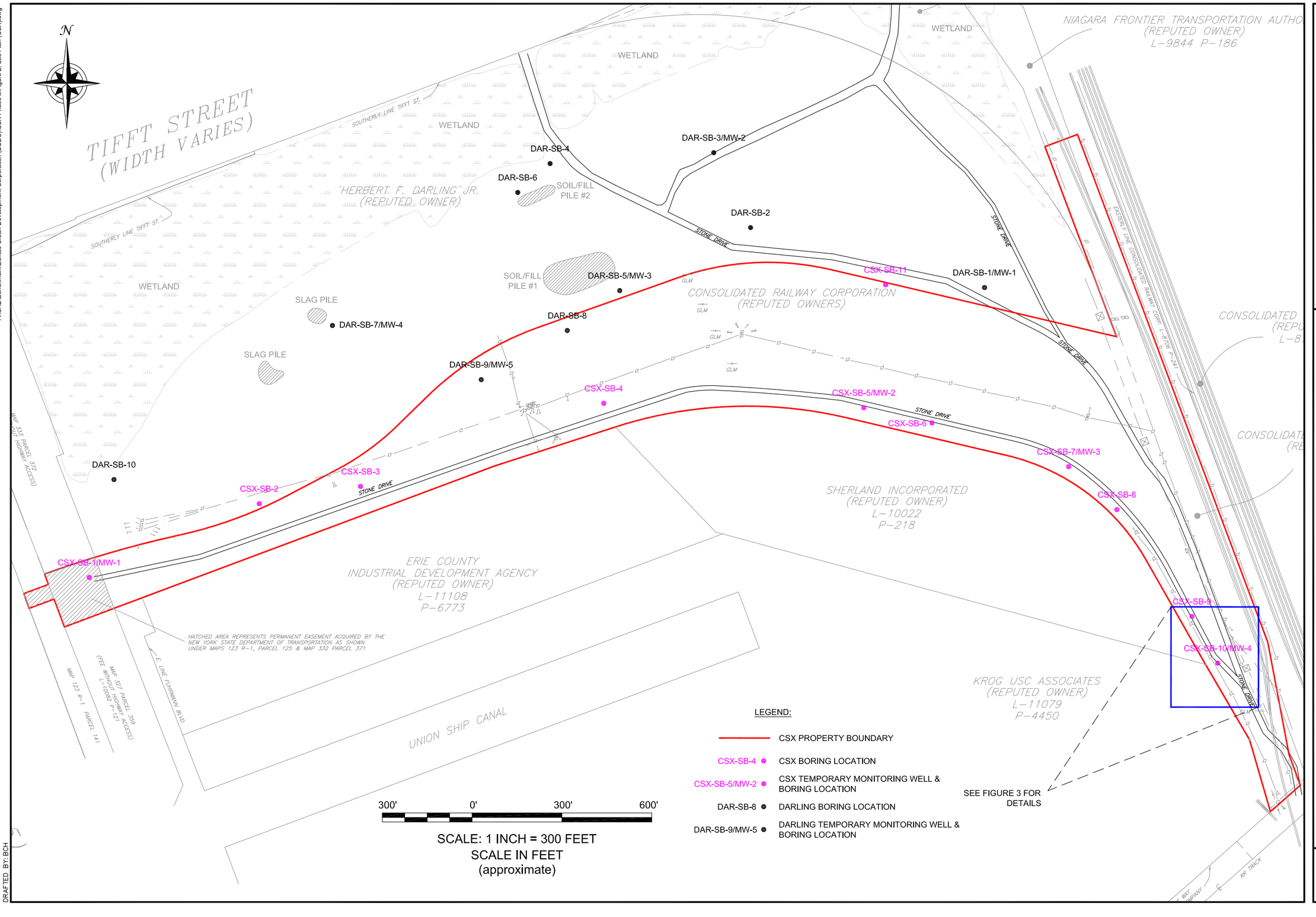
BUFFALO URBAN DEVELOPMENT CORPORATION (BUDC)

F:\CAD\Benchmark\Buffalo Urban Development Corporation (BUDC)\CSX Phase II\Figure 2; Site Plan (CSX).dwg



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SITE PLAN

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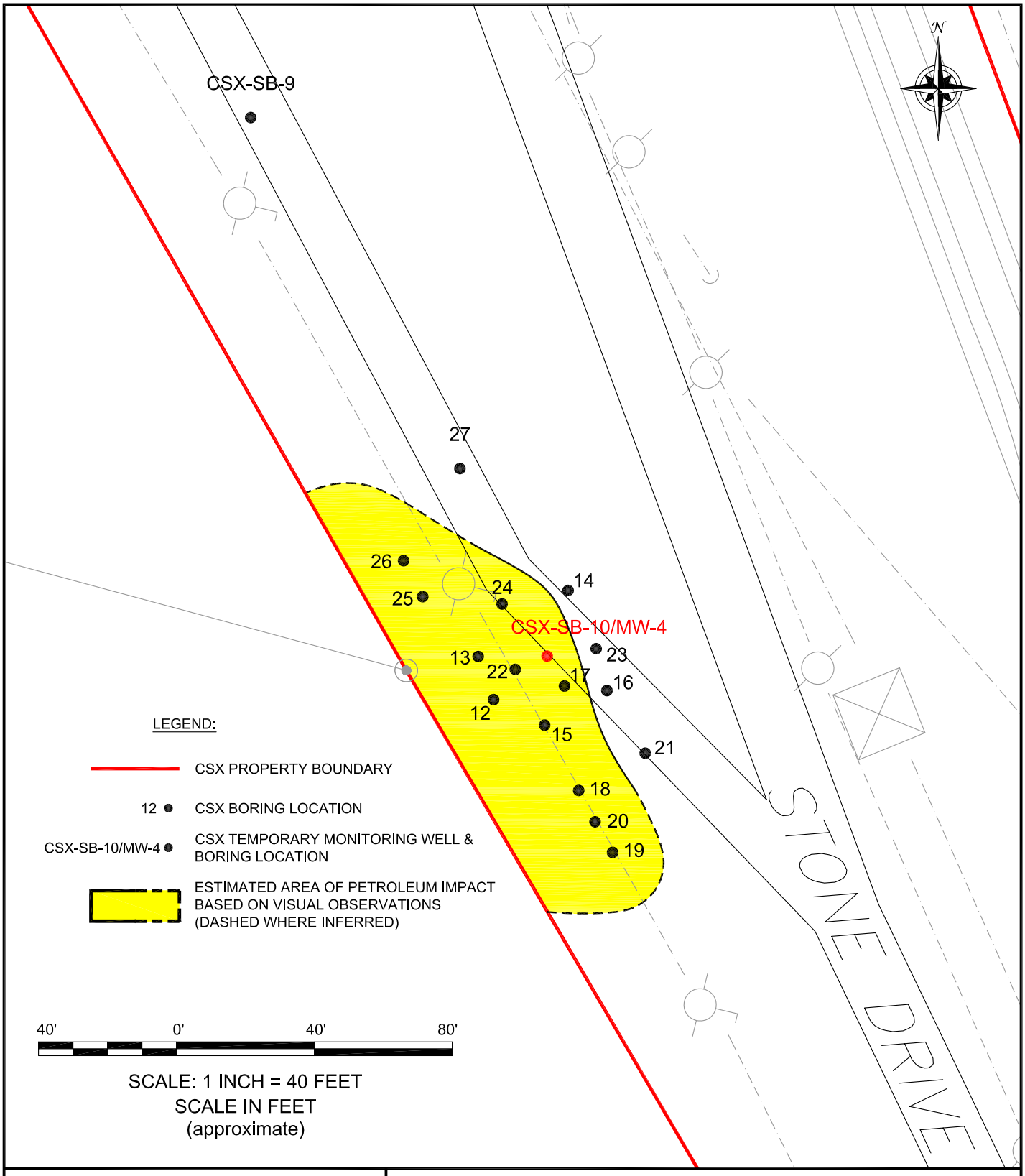
FIGURE 2

FIGURE 3

F:\CAD\Benchmark\Buffalo Urban Development Corporation (BUDC)\CSX Phase II\Figure 3; Area Proximate to Boring CSX-SB-10 (CSX).dwg



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AREA PROXIMATE TO BORING CSX-SB-10

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CSX PROPERTY
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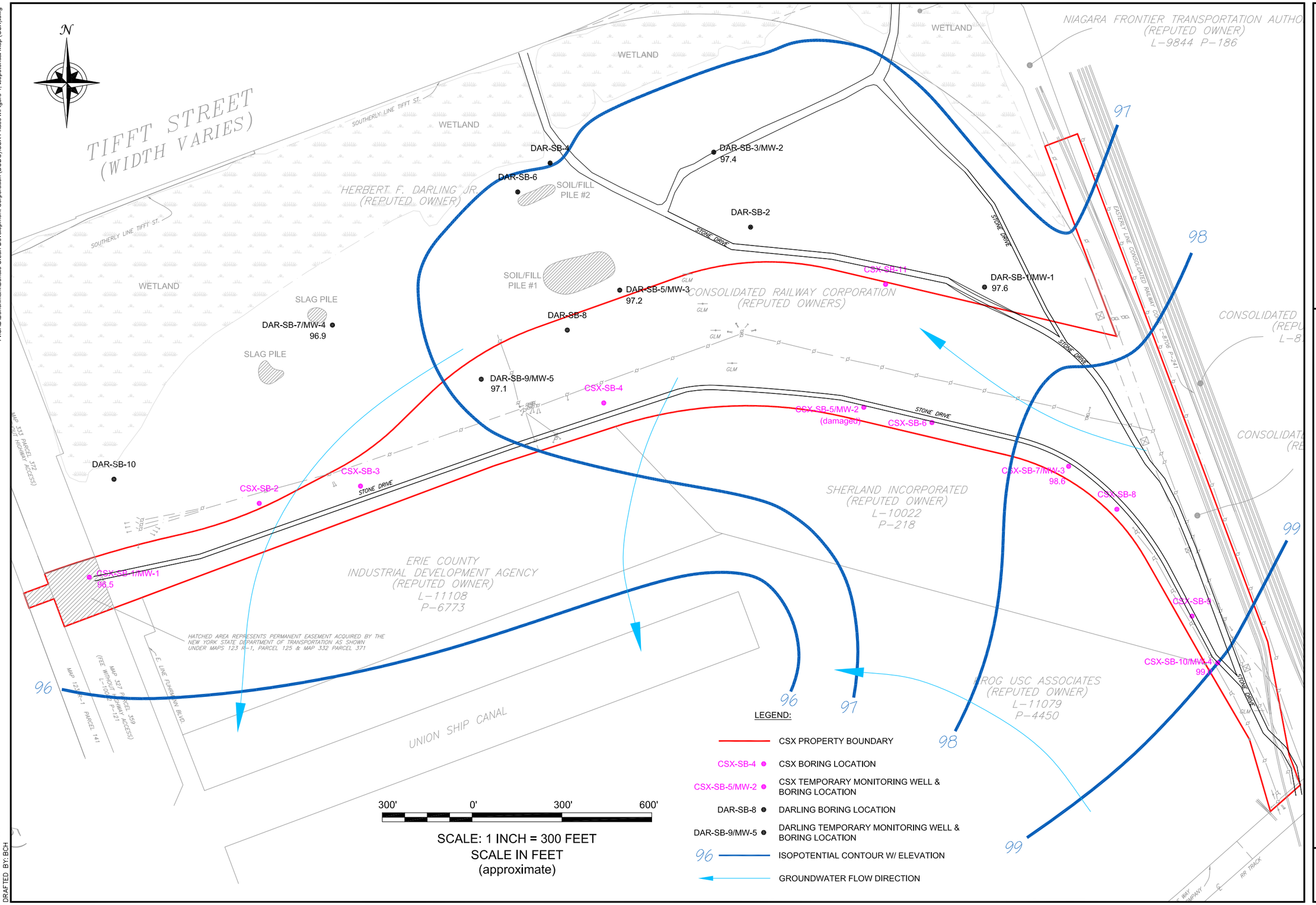
F:\CAD\Benchmark\Buffalo Urban Development Corporation (BUDC)\CSX Phase II\Figure 4: Isopotential Map (CSX).dwg



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ISOPOTENTIAL MAP

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FIGURE 4

APPENDIX A

FIELD BOREHOLE LOGS

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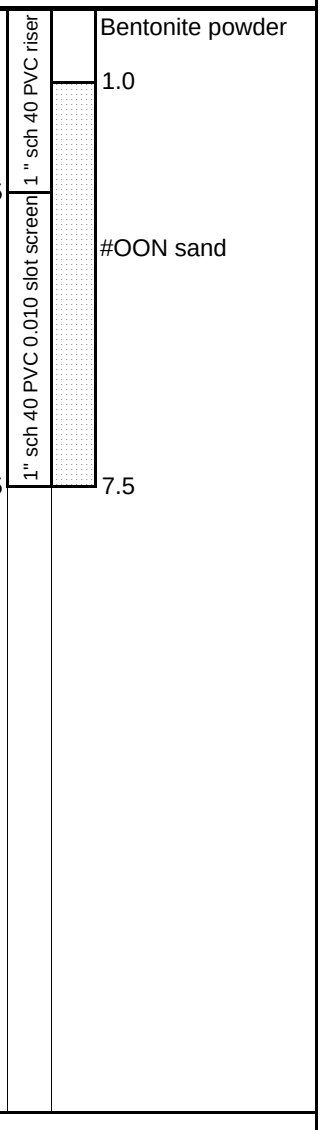
FIELD GEOPROBE BOREHOLE \ TEMPORARY WELL INSTALLATION LOG

PROJECT: CSX Property Phase II		**Log of Temp. Well No.: SB - 1/MW- 1**	
BORING LOCATION: CSX SB -1/MW - 1		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Trec Environmental		DATE STARTED: 09/19/06	DATE FINISHED: 09/19/06
DRILLING METHOD: Direct Push		TOTAL DEPTH: 7.5 fbgs	SCREEN INTERVAL: 7.5 - 2.5
DRILLING EQUIPMENT: Truck mounted geoprobe		DEPTH TO WATER: FIRST: 3.75	COMPL.: 3.75
SAMPLING METHOD: geoprobe		LOGGED BY: TAB	CASING: 1" sch 40 PVC ~ 5.0'
DRILLER / HELPER: Jim		RESPONSIBLE PROFESSIONAL: TAB	REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lenses, massive), Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	C1		3.0	0.0		SOIL/FILL Brown, moist to wet, silt with	
						some fine sand and trace fine and coarse sand and gravel, loose	
						blocky, old rail road bedding material.	
2		Y				As Above but wet and dark brown.	
						Light grey wet slag.	
4							
	C2		2.2	0.0			
6						Light grey wet slag.	
8							
	C3		2.5	0.0		Light grey wet slag.	
						Dark brown to black, wet, silty organic soil with trace clay,	
10						and few fine sand, soft, w/ rootlets and wood fibers.	
						Medium grey moist clayey silt w trace fine sand, medium dense	
						slightly laminated with rootlets	
12						Dark brown, wet, silty organic soil with low plasticity fines,	
						and few fine sand, soft, w/ rootlets and wood fibers.	
14						EOB @ 12.0 fbgs	
16							
18							



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

FIELD GEOPROBE BOREHOLE

PROJECT: CSX Property Phase II	**BOREHOLE: CSX SB - 2**
BORING LOCATION: CSX Property	ELEVATION AND DATUM:
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 09/18/06 / DATE FINISHED: 09/18/06
DRILLING METHOD: Direct Push	TOTAL DEPTH: 16.0 fbgs / SCREEN INTERVAL: NA
DRILLING EQUIPMENT: Truck mounted geoprobe	DEPTH TO WATER: FIRST: ~ 2.0 COMPL.: NA / CASING: NA
SAMPLING METHOD: geoprobe	LOGGED BY: TAB
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: TAB / REG. NO.

Depth (fbgs)	Sample No.	Sample	Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		3.0	0.0		Soil/fill light brown, moist, silt with some fine sand, loose, blocky, with rootlets at top.	
2						Medium grey wet slag.	
4	C2		2.9	0.0		Medium grey wet slag.	
6							
8	C3		2.6	0.0		Medium grey wet slag.	
10						Red brown, moist, silty organic soil with few fine sands, dense, with rootlets and wood chips	
12	C4		1.3			Med grey, moist to wet, silty clay with few fine sands, laminated,	
14						Sandier towards the top, rapid dialatency at top, with orange staining.	
16							
18						EOB @ 16.0 fbg	

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FIELD GEOPROBE BOREHOLE

PROJECT: CSX Property Phase II	**BOREHOLE: CSX SB - 3**		
BORING LOCATION: CSX Property	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 09/18/06	DATE FINISHED: 09/18/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: NA	
DRILLING EQUIPMENT: Truck mounted geoprobe	DEPTH TO WATER: FIRST: ~ 1.0	COMPL.: NA	CASING: NA
SAMPLING METHOD: geoprobe	LOGGED BY: TAB		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: TAB		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		2.3	0.0		Soil/fill Dark brown, moist to wet, sandy silt w few coarse grained sand, dense, loose when disturbed.	
2						As above but dark grey and wet with railroad tie at bottom	
4	C2		2.3	0.0			
6						Medium grey/white wet slag.	
8	C3		2.6	0.0		Medium grey/white wet slag.	
10						Red brown/ dark brown, black toward top, moist, silty organic soil with trace fine sand, with rootlets and wood chips.	
12						EOB @ 12.0 fbg	
14							
16							
18							

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FIELD GEOPROBE BOREHOLE

PROJECT: CSX Property Phase II	**BOREHOLE: CSX SB - 4**		
BORING LOCATION: CSX Property	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 09/18/06	DATE FINISHED: 09/18/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: NA	
DRILLING EQUIPMENT: Truck mounted geoprobe	DEPTH TO WATER: FIRST: ~ 0.5	COMPL.: NA	CASING: NA
SAMPLING METHOD: geoprobe	LOGGED BY: TAB		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: TAB		REG. NO.

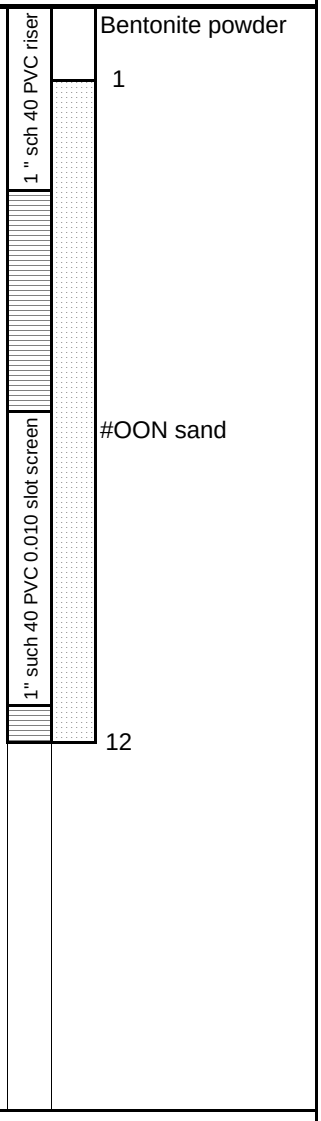
Depth (fbgs)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		2.1	0.0		Soil/fill Dark brown/red brown, moist to wet, sandy silt,	
						with few coarse grained sand and gravel, dense,	
						loose when disturbed.	
2						Medium brown, moist, clayey silt, with trace fine sand, slow	
						dilatency, laminated, with brown silty organic soil layers.	
4	C2		2.5	0.0			
						Medium brown, moist, clayey silt, with trace fine sand, slow	
6						dilatency, laminated, with brown silty organic soil layers.	
8						EOB @ 8.0 fbg	
10							
12							
14							
16							
18							

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

FIELD GEOPROBE BOREHOLE \ TEMPORARY WELL INSTALLATION LOG

PROJECT: CSX Property Phase II		**Log of Temp. Well No.: SB - 5/MW- 2**	
BORING LOCATION: CSX SB - 5/MW - 2		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Trec Environmental		DATE STARTED: 09/18/06	DATE FINISHED: 09/18/06
DRILLING METHOD: Direct Push		TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: 12.0 - 2.0
DRILLING EQUIPMENT: Truck mounted geoprobe		DEPTH TO WATER: FIRST: 3.42 / COMPL.: 3.42	CASING: 1" sch 40 PVC ~ 5.0'
SAMPLING METHOD: geoprobe		LOGGED BY: TAB	
DRILLER / HELPER: Jim		RESPONSIBLE PROFESSIONAL: TAB	REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1	y	2.6	0.0		Soil/fill, light brown/black, moist to wet, sandy silt, with coarse grained gravel and slag pieces, dense, loose when disturbed.	
2						Medium grey, moist, clayey silt, with trace fine sand, laminated, stiff, with rootlets,	
4	C2		2.7	0.0		Medium grey, moist, clayey silt, with trace fine sand, laminated, stiff, with rootlets, with organic silty soil lenses and wood fibers	
6							
8	C3		1.2	0.0		Medium grey, moist, clayey silt, with trace fine sand, laminated, stiff, with rootlets,	
10							
12							
14						EOB @ 12.0 fbg	
16							
18							



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FIELD GEOPROBE BOREHOLE

PROJECT: CSX Property Phase II	**BOREHOLE: CSX SB - 6**		
BORING LOCATION: CSX property	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 09/18/06	DATE FINISHED: 09/18/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: NA	
DRILLING EQUIPMENT: Truck mounted geoprobe	DEPTH TO WATER: FIRST: ~1.0	COMPL.:NA	CASING: NA
SAMPLING METHOD: geoprobe	LOGGED BY: TAB		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: TAB		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		2.3	0.0		Soil/fill, Dark brown/black, moist, sandy silt, with coarse grained sand and gravel and slag pieces with some cinders, dense, loose when disturbed.	
2						Medium grey, wet, clayey silt, with trace fine sand and gravel, medium soft, wood fragments.	
4	C2		3.4	0.0		Brown, wet, clayey silt, with trace fine sand and gravel, soft, wood chips.	
6						Medium grey, wet, clayey silt, with trace fine sand and gravel, laminated, medium soft, wood chips.	
8						Dark brown, moist, organic silty soil with few fine sand, with rootlets.	
10	C3		3.9	0.0		Brown, wet, clayey silt, with trace fine sand and gravel, laminated, soft, wood chips.	
12						Medium grey, wet, clayey silt, with trace fine sand and gravel, laminated, medium soft, wood chips.	
14						EOB @ 12.0 fbg	
16							
18							

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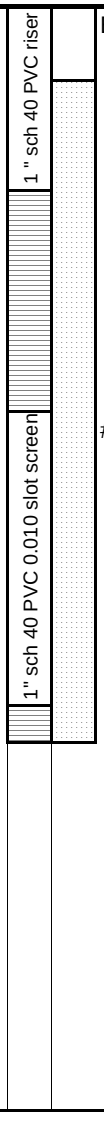
FIELD GEOPROBE BOREHOLE \ TEMPORARY WELL INSTALLATION LOG

PROJECT: CSX Property Phase II	**Log of Temp. Well No.: SB - 7/MW- 3**		
BORING LOCATION: CSX SB - 7/MW - 3	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 09/18/06	DATE FINISHED: 09/18/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: 12.0 - 2.0	
DRILLING EQUIPMENT: Truck mounted geoprobe	DEPTH TO WATER: FIRST: 3.42	COMPL.: 3.42	CASING: 1" sch 40 PVC ~ 5.0'
SAMPLING METHOD: geoprobe	LOGGED BY: TAB		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: TAB	REG. NO.	

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		2.5	0.0		Soil/fill, dark brown, moist to wet, sandy silt, with coarse grained gravel and slag pieces, dense, loose when disturbed.	Bentonite powder
2						Medium grey, moist, clayey silt, with trace fine sand, laminated, stiff, with rootlets and orange modeling.	1
4	C2		4.0	0.0		Medium grey, moist, clayey silt, with trace fine sand, laminated, stiff, with rootlets and orange modeling.	2
6		y					#OON sand
8	C3		4.0	0.0		Medium grey, moist, clayey silt, with trace fine sand, laminated, stiff, with rootlets and orange mottling.	
10						Dark brown, organic silty soil with some sand, medium dense, with rootlets.	
12						Medium grey, moist, clayey silt, with trace fine sand, laminated, stiff, with rootlets and orange mottling.	12
14						EOB @ 12.0 fbg	
16							
18							



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FIELD GEOPROBE BOREHOLE

PROJECT: CSX Property Phase II	**BOREHOLE: CSX SB - 8**		
BORING LOCATION: CSX property	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 09/18/06	DATE FINISHED: 09/18/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: NA	
DRILLING EQUIPMENT: Truck mounted geoprobe	DEPTH TO WATER: FIRST: ~3.0	COMPL.:NA	CASING: NA
SAMPLING METHOD: geoprobe	LOGGED BY: TAB		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: TAB		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		2.8	0.0		Soil/fill, Dark brown/black, moist, sandy silt, dense, loose when disturbed, with some cinders and slag pieces.	
2						Medium grey, wet, clayey silt, with trace fine sand, stiff, with orange mottling, and lenses of brown organic silty soil.	
4	C2		3.0	0.0		Medium grey, wet, clayey silt, with trace fine sand, stiff, with lenses of brown organic silty soil.	
6							
8	C3		4.0	0.0		Red brown, moist, silty clay, with trace fine sand, massive, with medium brown sand veins.	
10							
12							
14						EOB @ 12.0 fbg	
16							
18							

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FIELD GEOPROBE BOREHOLE

PROJECT: CSX Property Phase II	**BOREHOLE: CSX SB - 9**		
BORING LOCATION: CSX property	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 09/18/06	DATE FINISHED: 09/18/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: NA	
DRILLING EQUIPMENT: Truck mounted geoprobe	DEPTH TO WATER: FIRST: ~3.0	COMPL.:NA	CASING: NA
SAMPLING METHOD: geoprobe	LOGGED BY: TAB		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: TAB		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		2.6	0.0			
2						Soil/fill, Dark brown/black, moist, sandy silt, dense, loose when disturbed, with some cinders, slag, and orange brick pieces.	
4	C2		2.8	0.0		Soil/fill, Dark brown/black, moist, sandy silt, dense, loose when disturbed, with some cinders, slag, and orange brick pieces.	
6						Medium grey, wet, clayey silt with trace fine sand, laminated, with orange mottling, with dark brown organic silty soil lenses that have wood chips and rootlets.	
8	C3		4.0	0.0		Dark brown, wet, organic silty soil with some fine sand, medium dense, with rootlets	
10						Medium grey, wet, silty clay, with some sand, with some iron staining.	
12						Medium grey, wet, clayey silt with trace fine sand, laminated, with orange mottling, with dark brown organic silty soil lenses that have wood chips and rootlets.	
14						EOB @ 12.0 fbg	
16							
18							

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FIELD GEOPROBE BOREHOLE \ TEMPORARY WELL INSTALLATION LOG

PROJECT: CSX Property Phase II		**Log of Temp. Well No.: SB -10/MW- 4**	
BORING LOCATION: CSX SB - 10/MW - 4		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Trec Environmental		DATE STARTED: 09/18/06	DATE FINISHED: 09/18/06
DRILLING METHOD: Direct Push		TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: 12.0 - 2.0
DRILLING EQUIPMENT: Truck mounted geoprobe		DEPTH TO WATER: FIRST: 5.57 COMPL.: 5.57	CASING: 1" sch 40 PVC ~ 5.0'
SAMPLING METHOD: geoprobe		LOGGED BY: TAB	
DRILLER / HELPER: Jim		RESPONSIBLE PROFESSIONAL: TAB	REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		3.9	0.0		Soil/fill, dark brown, moist to wet, sandy silt, with coarse	Bentonite powder
						grained sand and gravel, with slag pieces, dense, loose	1
2						when disturbed, slight organic odor slight sheen.	2
4	C2	Y	1.5	15.2		Soil/fill, dark brown, moist to wet, sandy silt, with coarse	
						grained sand and gravel, with slag pieces, dense, loose	
6						when disturbed, with rail road tie, slight organic odor slight sheen.	#OON sand
8	C3		3.0	0.0		As above.	
						Medium grey, wet, clayey silt with some fine sand, orange and	
10						black mottling, with lamination at bottom	
12							12
						EOB @ 12.0 fbg	
14							
16							
18							

1" sch 40 PVC riser

1" sch 40 PVC 0.010 slot screen

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

FIELD GEOPROBE BOREHOLE

PROJECT: CSX Property Phase II	**BOREHOLE: CSX SB - 11**		
BORING LOCATION: CSX property	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 09/18/06	DATE FINISHED: 09/18/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 16.0 fbgs	SCREEN INTERVAL: NA	
DRILLING EQUIPMENT: Truck mounted geoprobe	DEPTH TO WATER: FIRST: ~3.5	COMPL.:NA	CASING: NA
SAMPLING METHOD: geoprobe	LOGGED BY: TAB		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: TAB		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		3.2	0.0		Soil/fill , dark brown, moist, sandy silt, with pieces of slag and rootlets at the top.	
2						Blue/grey to white wet slag.	
4	C2		3.0	0.0			
6						Blue/grey to white wet slag.	
8	C3		2.3	0.0			
10						Blue/grey to white wet slag.	
12	C4			0.0			
14						Sampler was not retrieved.	
16						EOB @ 16.0 fbg	
18							

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-12**		
BORING LOCATION: CSX-SB-12	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST: COMPL.:	CASING:	
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM	REG. NO.	

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
0	S1		3.4	98.5 ppm (max.)		- dark brown, moist to wet, sandy silt, with coarse	0-1.0 fbgs - 17.8 ppm
						grained sand; organic odor with oily-sheen.	1.0-2.0 fbgs - 49.8 ppm
							2.0-3.0 fbgs - 98.5 ppm
2							3.0-4.0 fbgs - 54.1 ppm
4	S2		4.0	23.2 ppm (max.)			4.0-5.0 fbgs - 22.6 ppm
						Soil/fill, dark brown, wet, sandy silt, with coarse	5.0-6.0 fbgs - 23.2 ppm
6						grained sand, with some wood debris; slight organic odor, sheen	6.0-7.0 fbgs - 19.2 ppm
							7.0-8.0 fbgs- 18.8 ppm
8	S3		4.0	11.3 ppm (max)		8.0 - 10.5 fbgs - As above	8.0-9.0 fbgs - 11.3 ppm
							9.0-10.0 fbgs - 9.1 ppm
10						10.5 - 12.0 fbgs - Medium grey, wet, clayey silt with some fine	10.0-11.0 fbgs - 4.3 ppm
						sand, and orange mottling; slight oily-sheen	11.0-12.0 fbgs - 3.8 ppm
12							

SURFACE ELEVATION (FMSL):

USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive), Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-13**		
BORING LOCATION: CSX-SB-13	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		3.2	52.7 ppm (max.)		0.0-0.5 fbgs - Slag-fill,sandy silt	0-1.0 fbgs - 18.1 ppm
							1.0-2.0 fbgs - 52.7 ppm
						0.5-4.0 fbgs	2.0-3.0 fbgs - 34.1 ppm
2						- dark brown, wet, sandy silt, with fine to coarse grained	3.0-4.0 fbgs - 13.3 ppm
						sand; slight organic odor, oily-sheen.	
4	S2		4.0	10.6 ppm (max.)		4.0-6.0 fbgs	4.0-5.0 fbgs - 10.6 ppm
						- dark brown, moist to wet, sandy silt, with fine to coarse	5.0-6.0 fbgs - 6.9 ppm
6						grained sand; slight organic odor, sheen	6.0-7.0 fbgs - 4.3 ppm
							7.0-8.0 fbgs - 4.2 ppm
						6.0-8.0 fbgs	
8						- medium grey, moist, clayey silt, with fine grained sand	
	S3		4.0	6.0 ppm (max)			8.0-9.0 fbgs - 6.0 ppm
						8.0 - 9.0 fbgs -	9.0-10.0 fbgs - 4.3 ppm
10						-dark brown, moist to wet, sandy silt with fine sand, slight sheen	10.0-11.0 fbgs - 3.9 ppm
							11.0-12.0 fbgs - 2.2 ppm
						9.0-11.0 fbgs	
12						- medium grey, wet, clayey silt, with fine to course	
						grained sand, some orange mottling	
						11.0-12.0 fbgs	
						- brown/orange, wet, fine to course sand	
							- Refusal @ ~ 5.0 fbgs - moved
							north 1ft. for 4.0 - 12.0 sample
							- 38.1 ppm @ 5.0 fbgs on
							refusal sample

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-14**		
BORING LOCATION: CSX-SB-14	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		3.0	2.4 ppm (max.)		0.0-0.5 fbgs - gravel/slag-fill	0-1.0 fbgs - 2.4 ppm
							1.0-2.0 fbgs - 2.2 ppm
						0.5-4.0 fbgs	2.0-3.0 fbgs - 2.2 ppm
2						- dark brown, moist, sandy silt, with fine to coarse grained sand	3.0-4.0 fbgs - 2.1 ppm
4	S2		2.2	2.0 ppm (max.)		- brown to grey, moist to wet, sandy silt, with fine grained sand	4.0-6.0 fbgs - 2.0 ppm
							6.0-8.0 fbgs - 2.0 ppm
6							
8	S3		4.0	1.8 ppm (max)		- medium grey, wet, clayey silt, with fine sand	8.0-9.0 fbgs - 1.8 ppm
							9.0-10.0 fbgs - 1.6 ppm
10							10.0-11.0 fbgs - 1.6 ppm
							11.0-12.0 fbgs - 1.6 ppm
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-15**		
BORING LOCATION: CSX-SB-15	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 6.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		3.0	16.1 ppm (max.)		0.0-0.5 fbgs - Slag-fill,sandy silt	0-1.0 fbgs - 4.5 ppm
							1.0-2.0 fbgs - 8.8 ppm
						0.5-4.0 fbgs	2.0-3.0 fbgs - 16.1 ppm
2						- dark brown, wet, sandy silt, with fine to coarse grained sand;	3.0-4.0 fbgs - 9.4 ppm
						slight organic odor, slight sheen.	
						- oily-product observed at ~ 3.0 fbgs	
4							
	S2		2 (4.0 - 6.0 fbgs)	27.2 ppm (max.)		4.0-6.0 fbgs	4.0-5.0 fbgs - 27.2 ppm
						- dark brown, moist to wet, sandy silt, with fine to coarse grained sand;	5.0-6.0 fbgs - 21.6 ppm
6						organic odor and oily-sheen	
8						- Refusal @ 6.0 fbgs - evidence of wood debris/railroad tie	
						- Second refusal @ 7.0 fbgs - after shifting 1 ft west	
10						evidence of wood debris/railroad tie	
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-16**		
BORING LOCATION: CSX-SB-16	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		3.0	0.9 ppm (max.)		0.0-4.0 fbgs -	0.0-1.0 fbgs - 0.9 ppm
						- dark brown, moist, sandy silt, with fine to coarse grained	1.0-2.0 fbgs - 0.6 ppm
						sand and some gravel	2.0-3.0 fbgs - 0.7 ppm
2							3.0-4.0 fbgs - 0.5 ppm
4	S2		2.5	0.6 ppm (max.)		- grey, wet, sandy silt, with fine grained sand	4.0-6.0 fbgs - 0.6 ppm
							6.0-8.0 fbgs - 0.2 ppm
6							
8	S3		4.0	0.2 ppm (max)		- medium grey, wet, clayey silt, with fine sand	8.0-9.0 fbgs -0.2 ppm
							9.0-10.0 fbgs - 0.0 ppm
10							10.0-11.0 fbgs - 0.0 ppm
							11.0-12.0 fbgs - 0.0 ppm
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-17**		
BORING LOCATION: CSX-SB-17	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		3.0	1.2 ppm (max.)		0.0-4.0 fbgs - Soil/fill, dark brown, moist, sandy silt, with fine to coarse grained sand and some gravel; coke/coal fines (~2.0 fbgs)	0.0-1.0 fbgs - 1.0 ppm 1.0-2.0 fbgs - 0.7 ppm 2.0-3.0 fbgs - 1.2 ppm 3.0-4.0 fbgs - 1.2 ppm
2							
4	S2		2.0	0.4 ppm (max.)		Soil/fill, as above, with wood debris; slight sheen	4.0-6.0 fbgs - 0.4 ppm 6.0-8.0 fbgs - .0.1 ppm
6							
8	S3		2.5	0.1 ppm (max)		- brown to grey, wet, clayey silt, with some fine sand	8.0-10.0 fbgs -0.1 ppm 10.0-12.0 fbgs - 0.0 ppm
10							
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-18**		
BORING LOCATION: CSX-SB-18	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 6.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		3.5	38.7 ppm (max.)		0.0-4.0 fbgs - dark brown, moist, sandy silt, with fine to coarse grained sand; slight organic odor when disturbed, slight sheen.	0.0-1.0 fbgs - 0.0 ppm 1.0-2.0 fbgs - 1.3 ppm 2.0-3.0 fbgs - 23.5 ppm 3.0-4.0 fbgs - 38.7 ppm
2							
4	S2		2 (4.0 - 6.0 fbgs)	27.2 ppm (max.)		4.0-6.0 fbgs - dark black/brown, moist to wet, sandy silt, with fine to coarse grained sand; organic odor and oily-sheen	4.0-5.0 fbgs - 53.8 ppm 5.0-6.0 fbgs - 61.7 ppm
6							
8						- Refusal @ 6.0 fbgs - evidence of wood debris/railroad tie	
10						- Second refusal @ 6.5 fbgs - after shifting 1 ft west evidence of wood debris/railroad tie - 62.4 ppm	
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-19**		
BORING LOCATION: CSX-SB-19	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		2.7	0.7 ppm (max.)		0.0-4.0 fbgs - Soil/fill, dark brown, moist, sandy silt, with fine to coarse grained sand; little coal/coke fines	0.0-1.0 fbgs - 0.2 ppm 1.0-2.0 fbgs - 0.2 ppm 2.0-3.0 fbgs - 0.7 ppm 3.0-4.0 fbgs - 0.2 ppm
4	S2		4.0	0.2 ppm (max.)		- dark brown to grey, wet, sandy silt, with fine grained sand	4.0-5.0 fbgs - 0.2 ppm 5.0-6.0 fbgs - 0.2 ppm 6.0-7.0 fbgs - 0.0 ppm 7.0-8.0 fbgs - 0.0 ppm
8	S3		4.0	0.1 ppm (max)		as above --Driller noted oily-sheen on GW	8.0-9.0 fbgs -0.0 ppm 9.0-10.0 fbgs - 0.1 ppm 10.0-11.0 fbgs - 0.0 ppm 11.0-12.0 fbgs - 0.0 ppm
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-20**		
BORING LOCATION: CSX-SB-20	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		2.7	0.1 ppm (max.)		0.0-4.0 fbgs - Soil/fill, dark brown, moist, sandy silt, with fine to coarse grained sand; little wood debris	0.0-1.0 fbgs - 0.1 ppm 1.0-2.0 fbgs - 0.0 ppm 2.0-3.0 fbgs - 0.0 ppm 3.0-4.0 fbgs - 0.0 ppm
2							
4	S2		2.5	0.0 ppm (max.)		- dark brown to grey, wet, sandy silt, with fine grained sand	4.0-8.0 fbgs - 0.0 ppm
6							
8	S3		3.5	0.0 ppm (max)		As above	8.0-12.0 fbgs -0.0 ppm
10							
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-21**		
BORING LOCATION: CSX-SB-21	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		3.0	0.4 ppm (max.)		0.0-4.0 fbgs -	0.0-1.0 fbgs - 0.4 ppm
						Soil/fill, dark brown, moist, sandy silt, with fine grained sand	1.0-2.0 fbgs - 0.2 ppm
2						some coal/coke fines	2.0-3.0 fbgs - 0.0 ppm
							3.0-4.0 fbgs - 0.0 ppm
4	S2		1.5	0.0 ppm (max.)		Soil/fill, as above	4.0-8.0 fbgs - 0.0 ppm
6							
8	S3		2.0	0.0 ppm (max)		- grey, wet, silty clay, with some fine sand	8.0-12.0 fbgs - 0.0 ppm
10							
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-22**		
BORING LOCATION: CSX-SB-22	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						SURFACE ELEVATION (FMSL):	
0	S1		2.5	0.0 ppm (max.)		0.0-4.0 fbgs -	0.0-1.0 fbgs - 0.0 ppm
						- dark brown, moist, sandy silt, with fine grained sand	1.0-2.0 fbgs - 0.0 ppm
2							2.0-3.0 fbgs - 0.0 ppm
							3.0-4.0 fbgs - 0.0 ppm
4	S2		1.5	28.8 ppm (max.)		- dark brown, wet, sandy silt, with fine grained sand	4.0-6.0 fbgs - 28.8 ppm
						oily-sheen and organic odors	6.0-8.0 fbgs - 21.7 ppm
6							
8	S3		4.0	9.8 ppm (max)		- as above, with course sand; slight odor when disturbed;	8.0-9.0 fbgs - 9.8 ppm
						slight sheen on GW (emulsified)	9.0-10.0 fbgs - 6.7 ppm
10							10.0-11.0 fbgs - 7.2 ppm
							11.0-12.0 fbgs - 4.1 ppm
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-23**		
BORING LOCATION: CSX-SB-23	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		3.0	0.2 ppm (max.)		0.0-4.0 fbgs -	0.0-1.0 fbgs - 0.2 ppm
						- brown to lt. grey, moist, sandy silt, with fine to course	1.0-2.0 fbgs - 0.0 ppm
						grained sand	2.0-3.0 fbgs - 0.0 ppm
2							3.0-4.0 fbgs - 0.0 ppm
4	S2		1.7	0.1 ppm (max.)		As above	4.0-8.0 fbgs - 0.1 ppm
6							
8	S3		4.0	0.0 ppm (max)		- grey, wet, sandy silt, with some fine sand	8.0-12.0 fbgs - 0.0 ppm
10							
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-24**		
BORING LOCATION: CSX-SB-24	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		3.0	36.2 ppm (max.)		0.0-4.0 fbgs -	0.0-1.0 fbgs - 0.0 ppm
						- dark brown, moist, sandy silt, with fine to course grained sand;	1.0-2.0 fbgs - 21.2 ppm
						odor when disturbed	2.0-3.0 fbgs - 36.2 ppm
2							3.0-4.0 fbgs - 12.7 ppm
4	S2		1.5	15.2 ppm (max.)		- dark brown, wet, sandy silt, with some fine to course grained sand;	4.0-6.0 - 15.2 ppm
						oily-sheen and organic odors	6.0-8.0 - 13.8 ppm
6							
8	S3		3.0	8.7 ppm (max)		8.0-9.0 fbgs	8.0-9.0 fbgs - 8.7 ppm
						- as above, with course sand; slight odor when disturbed;	9.0-10.0 fbgs - 5.3 ppm
10						oily sheen; oily product present (NAPL)	10.0-11.0 fbgs - 4.8 ppm
							11.0-12.0 fbgs - 3.9 ppm
12						9.0-12.0 fbgs - grey, wet, silty clay, with little fine sand	

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-25**		
BORING LOCATION: CSX-SB-25	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		2.5	36.3 ppm (max.)		0.0-4.0 fbgs -	0.0-1.0 fbgs - 0.7 ppm
						- dark brown, moist, sandy silt, with fine to course grained	1.0-2.0 fbgs - 13.2 ppm
						sand; oily-sheen with product (NAPL), odor when disturbed	2.0-3.0 fbgs - 21.6 ppm
2							3.0-4.0 fbgs - 36.3 ppm
4	S2		4.0	11.7 ppm (max.)		4.0-6.0 fbgs -	4.0-5.0 fbgs - 11.7 ppm
						- dark brown, wet, sandy silt, with some fine sand	5.0-6.0 fbgs - 7.9 ppm
6						slight oily-sheen	6.0-7.0 fbgs - 5.5 ppm
						6.0-8.0 fbgs -	7.0-8.0 fbgs - 2.1 ppm
8						- grey, wet, sandy clay, with some fine sand	
	S3		4.0	8.1 ppm (max)		8.0-12.0 fbgs	8.0-9.0 fbgs - 8.1 ppm
						- dark brown, wet, sandy silt, with some fine sand	9.0-10.0 fbgs - 5.1 ppm
10							10.0-11.0 fbgs - 2.8 ppm
							11.0-12.0 fbgs - 1.9 ppm
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-26**		
BORING LOCATION: CSX-SB-26	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, blocky, lensed, massive) Consistency/Density (Standard Penetration Test, SPT), Weathering/Fracturing, Odor, Fill Materials (if present), Other	
						SURFACE ELEVATION (FMSL):	
0	S1		4.0	28.2 ppm (max.)		0.0-4.0 fbgs -	0.0-1.0 fbgs - 2.1 ppm
						- dark brown, moist, sandy silt, with fine to course grained	1.0-2.0 fbgs - 28.2 ppm
						sand; odor when disturbed	2.0-3.0 fbgs - 21.7 ppm
2							3.0-4.0 fbgs - 17.3 ppm
4	S2		4.0	11.7 ppm (max.)		4.0-8.0 fbgs -	4.0-5.0 fbgs - 6.1 ppm
						- dark brown, wet, sandy silt, with some fine sand	5.0-6.0 fbgs - 8.7 ppm
6						slight oily-sheen, (NAPL)	6.0-7.0 fbgs - 3.1 ppm
							7.0-8.0 fbgs - 3.0 ppm
8	S3		4.0	11.1 ppm (max)		8.0-12.0 fbgs	8.0-9.0 fbgs - 8.3 ppm
						- brown, wet, sandy silt, with some fine sand	9.0-10.0 fbgs - 11.1 ppm
10						slight sheen on GW	10.0-11.0 fbgs - 4.8 ppm
							11.0-12.0 fbgs - 3.1 ppm
12							

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FIELD GEOPROBE BOREHOLE LOG

PROJECT: BUUFFALO URBAN DEVELOPMENT CORP.	**Log of Boring No.: CSX-SB-27**		
BORING LOCATION: CSX-SB-27	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 10/05/06	DATE FINISHED: 10/05/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL:	
DRILLING EQUIPMENT: Truck Mounted Geoprobe	DEPTH TO WATER: FIRST:	COMPL.:	CASING:
SAMPLING METHOD: Geoprobe	LOGGED BY: NTM		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: NTM		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	REMARKS
						SURFACE ELEVATION (FMSL):	
0	S1		2.5	0.7 ppm (max.)		0.0-4.0 fbgs - Soil/fill, dark brown, moist, sandy silt, with fine to course grained sand; little slag and coal/coke fines	0.0-1.0 fbgs - 0.7 ppm 1.0-2.0 fbgs - 0.1 ppm 2.0-3.0 fbgs - 0.0 ppm 3.0-4.0 fbgs - 0.0 ppm
4	S2		3.0	0.1 ppm (max.)		- brown, wet, sandy silt, with some fine sand	4.0-8.0 fbgs - 0.0 ppm
8	S3		4.0	0.0 ppm (max)		- grey, wet, silty clay	8.0-12.0 fbgs - 0.0 ppm
12							

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FIELD GEOPROBE BOREHOLE

PROJECT: Darling Property Phase II	**BOREHOLE: DAR SB - 8**		
BORING LOCATION: CSX property	ELEVATION AND DATUM:		
DRILLING CONTRACTOR: Trec Environmental	DATE STARTED: 09/19/06	DATE FINISHED: 09/19/06	
DRILLING METHOD: Direct Push	TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: NA	
DRILLING EQUIPMENT: Truck mounted geoprobe	DEPTH TO WATER: FIRST: ~4.5	COMPL.:NA	CASING: NA
SAMPLING METHOD: geoprobe	LOGGED BY: TAB		
DRILLER / HELPER: Jim	RESPONSIBLE PROFESSIONAL: TAB		REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						SURFACE ELEVATION (FMSL):	
0	C1		3.9	0.0		Soil/fill, red brown/dark brown, moist, sandy non-cohesive fines with some fine and coarse grained sand, with some cinders.	
2						Light grey, moist, slag.	
4	C2		3.1	0.0		Light grey, wet, slag.	
6							
8	C3		2.8	2.2		Light grey, wet, slag.	
10						Dark brown/black, wet, silty organic soil with some sand, medium dense, with some rootlets, slight sulfur odor.	
12						EOD @ 12.0 fbgs.	
14							
16							
18							

USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc

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FIELD GEOPROBE BOREHOLE \ TEMPORARY WELL INSTALLATION LOG

PROJECT: Darling Property Phase II		**Log of Temp. Well No.: SB - 9/MW- 5**	
BORING LOCATION: DAR SB -9/MW - 5		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Trec Environmental		DATE STARTED: 09/19/06	DATE FINISHED: 09/19/06
DRILLING METHOD: Direct Push		TOTAL DEPTH: 12.0 fbgs	SCREEN INTERVAL: 9.7 - 4.7
DRILLING EQUIPMENT: Truck mounted geoprobe		DEPTH TO WATER: FIRST: 4.42 / COMPL.: 4.42	CASING: 1" sch 40 PVC ~ 5.0'
SAMPLING METHOD: geoprobe		LOGGED BY: TAB	
DRILLER / HELPER: Jim		RESPONSIBLE PROFESSIONAL: TAB	REG. NO.

Depth (fbgs)	SAMPLES: Sample No.	Sample	Recovery (ft)	PID Scan (ppm)	PID HDSP (ppm)	SAMPLE DESCRIPTION	TEMPORARY WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
						USCS Classification: Color, Moisture Condition, Primary Soil Type, Secondary Soil Type (<5% Trace, 10-15% Little, 15-30% Few, 35-45% Some), Structure (varved, stratified, thinly bedded, bedded, thickly bedded, laminated, fissured, bloc	
						SURFACE ELEVATION (FMSL):	
0	C1		3.3	0.0		Carbon fines, black, moist, non-cohesive fines with some black coarse grained material.	Bentonite powder 1.0
2						Soil/fill, dark brown, moist, sandy silt with coarse grain sand and fine gravel, with yellow refractory brick.	
4						Light brown/grey, moist, slag.	#OON sand
	C2		2.1	0.0			
6						Light brown/grey, wet, slag.	
8	C3		2.1	0.0		Light brown/grey, wet, slag.	
10						Dark brown/black, wet, silty organic soil with some fine sand, medium dense, slight sulfur odor with rootlets.	
12							
14						EOB @ 12.0 fbgs	
16							
18							

4.7

9.7

1" Sch 40 PVC Riser

1" sch 40 PVC 0.010 slot screen

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APPENDIX B

WATER QUALITY FIELD COLLECTION LOGS

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PURGE & SAMPLE COLLECTION LOG

Project Name: CSX Property Phase II | WELL LOCATION **CSX SB - 1 (MW - 1)**

Project Number: 0116-001-100 | Sample Matrix: groundwater

Client: BUDC | Weather: Partly Cloudy, upper 50's wind 10 -15 out of we

WELL DATA:

DATE: 9/20/2006 | TIME: 1000

Casing Diameter (inches): 1 inch	Casing Material: PVC
Screened interval (fbTOR):	Screen Material: PVC
Static Water Level (fbTOR) 3.75	Bottom Depth (fbTOR):
Elevation Top of Well Riser (fmsl):	Ground Surface Elevation (fms grade
Elevation Top of Screen (fmsl):	Stick-up (feet):
Standing volume in gallons: 10.02 - 3.75 x .041 = 0.25 gal	
[(bottom depth - static water level) x vol calculation in table per well diameter]:	

Volume Calculation

Well Diameter	Volume gal/ft
1"	0.041
2"	0.163
3"	0.367
4"	0.653
5"	1.020
6"	1.469

SAMPLING DATA:

DATE: 9/20/2006 | START TIME: 1005 | END TIME: 1010

Method: Bailer	Was well sampled to dryness? yes no
Initial Water Level (fbTOR): 3.75	Was well sampled below top of sand pack? yes
Final Water Level (fbTOR): 3.75	Field Personnel: TAB

PHYSICAL & CHEMICAL DATA:

Appearance:	light brown sed
Color:	cloudy
Odor:	none
Sediment Present?	yes

WATER QUALITY MEASUREMENTS

pH (units)	TEMP. (^{o}C)	SC (uS)	TURB. (NTU)	DO (ppm)	ORP (mV)
11.26	19.1	1424	>1000	1.38	-279
11.02	18	1310	>1000	1.4	-220

REMARKS:

PREPARED BY: Thomas A. Beherendt

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PURGE & SAMPLE COLLECTION LOG

Project Name: CSX Property Phase II | WELL LOCATION **CSX SB - 5 (MW - 2)**

Project Number: 0116-001-100 | Sample Matrix: groundwater

Client: BUDC | Weather: Partly Cloudy, upper 50's wind 10 -15 out of we

WELL DATA:

DATE: 9/20/2006 TIME: 1025

Casing Diameter (inches): 1 inch	Casing Material: PVC
Screened interval (fbTOR):	Screen Material: PVC
Static Water Level (fbTOR) 3.42	Bottom Depth (fbTOR):
Elevation Top of Well Riser (fmsl):	Ground Surface Elevation (fms grade
Elevation Top of Screen (fmsl):	Stick-up (feet):
Standing volume in gallons: 13.95 - 3.42 x .041 = 0.43 gal	
[(bottom depth - static water level) x vol calculation in table per well diameter]:	

Volume Calculation

Well Diameter	Volume gal/ft
1"	0.041
2"	0.163
3"	0.367
4"	0.653
5"	1.020
6"	1.469

SAMPLING DATA:

DATE: 9/20/2006 | START TIME: 1030 | END TIME: 1055

Method: Bailer	Was well sampled to dryness? yes no
Initial Water Level (fbTOR): 3.42	Was well sampled below top of sand pack? yes
Final Water Level (fbTOR): 3.42	Field Personnel: TAB

PHYSICAL & CHEMICAL DATA:

Appearance: light brown sed

Color: cloudy

Odor: none

Sediment Present? yes

WATER QUALITY MEASUREMENTS

pH (units)	TEMP. (^{o}C)	SC (uS)	TURB. (NTU)	DO (ppm)	ORP (mV)
7.48	18.3	642.9	>1000	1.28	-72
7.08	17.5	640.3	>1000	1.32	24

REMARKS:

PREPARED BY: Thomas A. Beherendt

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PURGE & SAMPLE COLLECTION LOG

Project Name: CSX Property Phase II | WELL LOCATION **CSX SB - 7 (MW - 3)**

Project Number: 0116-001-100 | Sample Matrix: groundwater

Client: BUDC | Weather: Partly Cloudy, upper 50's wind 10 -15 out of we

WELL DATA:

DATE: 9/20/2006 TIME: 1100

Casing Diameter (inches): 1 inch	Casing Material: PVC
Screened interval (fbTOR):	Screen Material: PVC
Static Water Level (fbTOR) 4.92	Bottom Depth (fbTOR):
Elevation Top of Well Riser (fmsl):	Ground Surface Elevation (fms grade
Elevation Top of Screen (fmsl):	Stick-up (feet):
Standing volume in gallons: 14.76 - 4.92 x .041 = 0.40 gal	
[(bottom depth - static water level) x vol calculation in table per well diameter]:	

Volume Calculation

Well Diameter	Volume gal/ft
1"	0.041
2"	0.163
3"	0.367
4"	0.653
5"	1.020
6"	1.469

SAMPLING DATA:

DATE: 9/20/2006 | START TIME: 1105 | END TIME: 1110

Method: Bailer	Was well sampled to dryness? yes no
Initial Water Level (fbTOR): 4.92	Was well sampled below top of sand pack? yes
Final Water Level (fbTOR): 4.92	Field Personnel: TAB

PHYSICAL & CHEMICAL DATA:

Appearance: light brown sed

Color: cloudy

Odor: none

Sediment Present? yes

WATER QUALITY MEASUREMENTS

pH (units)	TEMP. (^{o}C)	SC (uS)	TURB. (NTU)	DO (ppm)	ORP (mV)
7.17	16.4	1328	>1000	1.14	43
7.40	15.5	1371	>1000	1.21	37

REMARKS:

PREPARED BY: Thomas A. Beherendt

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PURGE & SAMPLE COLLECTION LOG

Project Name: CSX Property Phase II | WELL LOCATION **CSX SB - 10 (MW - 4)**

Project Number: 0116-001-100 | Sample Matrix: groundwater

Client: BUDC | Weather: Partly Cloudy, upper 50's wind 10 -15 out of we

WELL DATA:

DATE: 9/20/2006 TIME: 1115

Casing Diameter (inches): 1 inch	Casing Material: PVC
Screened interval (fbTOR):	Screen Material: PVC
Static Water Level (fbTOR) 5.57	Bottom Depth (fbTOR):
Elevation Top of Well Riser (fmsl):	Ground Surface Elevation (fms grade
Elevation Top of Screen (fmsl):	Stick-up (feet):
Standing volume in gallons: 13.88 - 5.57 x .041 = 0.34 gal	
[(bottom depth - static water level) x vol calculation in table per well diameter]:	

Volume Calculation

Well Diameter	Volume gal/ft
1"	0.041
2"	0.163
3"	0.367
4"	0.653
5"	1.020
6"	1.469

SAMPLING DATA:

DATE: 9/20/2006 | START TIME: 1120 | END TIME: 1130

Method: Bailer	Was well sampled to dryness? yes no
Initial Water Level (fbTOR): 5.57	Was well sampled below top of sand pack? yes
Final Water Level (fbTOR): 5.57	Field Personnel: TAB

PHYSICAL & CHEMICAL DATA:

		WATER QUALITY MEASUREMENTS					
Appearance:	Black	pH	TEMP.	SC	TURB.	DO	ORP
Color:	cloudy	(units)	(^{o}C)	(uS)	(NTU)	(ppm)	(mV)
Odor:	Slight organic	7.20	15.8	869	>1000	0.68	-97
Sediment Present?	yes	7.01	17	910.5	>1000	0.65	-101

REMARKS:

PREPARED BY: Thomas A. Beherendt

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PURGE & SAMPLE COLLECTION LOG

Project Name: Darling Property Phase II | WELL LOCATION: **DAR SB - 9 (MW - 5)**

Project Number: 0116-001-100 | Sample Matrix: groundwater

Client: BUDC | Weather: Partly Cloudy, upper 50's wind 10 -15 out of we

WELL DATA:

DATE: 9/20/2006 TIME: 1435

Casing Diameter (inches): 1 inch	Casing Material: PVC
Screened interval (fbTOR):	Screen Material: PVC
Static Water Level (fbTOR) 4.42	Bottom Depth (fbTOR):
Elevation Top of Well Riser (fmsl):	Ground Surface Elevation (fms grade
Elevation Top of Screen (fmsl):	Stick-up (feet):
Standing volume in gallons: 10.04 - 3.91 x .041 = 0.25 gal	
[(bottom depth - static water level) x vol calculation in table per well diameter]:	

Volume Calculation

Well Diameter	Volume gal/ft
1"	0.041
2"	0.163
3"	0.367
4"	0.653
5"	1.020
6"	1.469

SAMPLING DATA:

DATE: 9/20/2006 START TIME: 1440 END TIME: 1450

Method: Bailer	Was well sampled to dryness? yes no
Initial Water Level (fbTOR): 4.42	Was well sampled below top of sand pack? yes
Final Water Level (fbTOR): 4.42	Field Personnel: TAB

PHYSICAL & CHEMICAL DATA:

Appearance: black sed

Color: cloudy

Odor: none

Sediment Present? yes

WATER QUALITY MEASUREMENTS					
pH (units)	TEMP. (^{o}C)	SC (uS)	TURB. (NTU)	DO (ppm)	ORP (mV)
11.37	16.0	1595	>1000	1.73	-200
11.47	15.9	1839	>1000	2.00	-215

REMARKS:

PREPARED BY: Thomas A. Beherendt

APPENDIX C

LABORATORY ANALYTICAL DATA SUMMARY PACKAGE

To be included in Final Report