Cleveland Innerbelt Project

CUY-71/90-16.79/14.90

PID 77510

APPENDIX EC-48

Phase II ESA Reports

(Hazardous Waste/ESA)

State of Ohio
Department of Transportation

Revision Date: January 17, 2007

PHASE II ENVIRONMENTAL SITE ASSESSMENT

INNERBELT STUDY
CLEVELAND, OHIO

CUY-CLEVELAND INNERBELT CORRIDOR
PID NO. 77510

Prepared for

The Ohio Department of Transportation
District 12
5500 Transportation Boulevard
Garfield Heights, Ohio 44125

January 17, 2007

URS

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Project No. 15016633

6.14 SITE 27 – MERIDIAN PROPERTIES/INDEPENDENT TOWEL

According to the Cleveland City Directories, the site was listed as Independent Towel Company from 1954 through 1994. The site was listed as Thrifty Car Rental in the 1999 Directory. The site was identified as a LUST, RCRA-SQG and UST site in the EDR Report.

According to the Cleveland Fire Prevention Bureau files, the site was occupied by the Independent Towel Supply Company in March 1940. A 10,000-gallon gasoline UST reportedly was installed at the site in October 1957. A Fire Inspection Report, dated September 26, 1972, indicated there was a 20,000-gallon gasoline UST located near the southeast corner of the building. A 12,000-gallon #2 fuel oil UST was installed at the site in April 1979. A 10,000-gallon liquefied petroleum gas AST reportedly was installed at the site in August 1982. A 1,000-gallon propane AST reportedly was installed in June 1984. A Permit was issued in March 1986 for a 10,000-gallon gasoline UST and a 55-gallon drum of motor oil. A report dated October 8, 1986 indicated a 12,000-gallon #2 fuel oil UST was improperly abandoned. On January 5, 1987, the aforementioned improperly abandoned UST was removed from the site, under the supervision of the Bureau.

A Permit was issued in March 1994 for the removal of 10,000-gallon gasoline UST. According to the BUSTR files, in March 1994 a 10,000-gallon gasoline UST was removed from the site. A Closure Report reportedly was not submitted to the agency. BUSTR requested information from Meridian Partners to complete the closure requirements; subsequently, BUSTR issued a "No Response Received" letter in November 2001.

At the time of the URS Phase I reconnaissance, the site was occupied by a Thrifty Car Rental and a four-story brick building. According to personnel at the Car Rental, Thrifty has operated at this portion of the site for approximately 10 years. The service area has been utilized to wash automobiles; no automobile maintenance is conducted on the site. The four-story building formerly was utilized by the Independent Towel Company; however, it reportedly has been vacant for approximately 10 years. A pad-mounted transformer was observed on the side of the building. No surface staining, stressed vegetation and/or the handling and storage of hazardous materials were observed on the site.

6.14.1 Field Activities

A total of four monitoring wells were proposed for Site 27. Groundwater was encountered in all soil borings during field activities and monitoring wells were installed. At the time of groundwater sampling, MW03 and MW04 were dry and no groundwater samples could be obtained. Four soil and two groundwater samples were collected and analyzed for VOCs, SVOCs, TPH and RCRA Metals. A duplicate soil sample was collected from 27-MW01-1820. A Sample Location Map is included as **Figure 6-14A**.

6.14.2 Site-Specific Geology/Hydrogeology

Soils at Site 27 consisted primarily of sand with minor amounts of silty clay and clay. Bedrock was not encountered in any of the soil borings, which were advanced to 28 feet bgs.

Groundwater elevations were measured at Site 27 on August 9, 2006. Monitoring wells (MW03 and MW04) were dry. Localized groundwater flow across Site 27 is likely influenced by both natural features and urban development, including paved surfaces, buildings, and underground utilities. The general flow direction at Site 27 is to the north-northeast, towards Lake Erie.

6.14.3 Geophysical Survey

The geophysical survey at Site 27 included the east and south sides of the property. The survey was entirely over asphalt pavement; however, portions of the pavement were inaccessible due to debris piles. The survey was conducted in a north-south direction to maximize the density of measurement along the earth's total magnetic field. This survey orientation provides the greatest sensitivity to buried ferrous objects such as steel underground storage tanks.

The survey identified four areas of anomalously high magnetic gradients. These areas are shown on **Figure 6-14B** as anomalies A through D as described below:

A. Anomalous gradients were observed along the retaining wall. These were assumed to be related to construction debris underlying the pavement since its location would be inconsistent with a potential UST.

B. High gradients were observed along a fence that limited access to a transformer bank. It is assumed that the high gradient was due to the presence of the fence and transformers.

C. An anomaly was observed adjacent to the building that was assumed to be related to a debris pile.

D. Two areas of high gradients, an intense northern anomaly and a more subtle southern anomaly. These patterns are characteristic of a small, shallow, steel UST.

Based on the results of the geophysical survey, two areas were identified that exhibit a characteristic magnetic gradient of USTs.

6.14.4 Soil Analytical Results

Toluene (0.37 ug/kg) was the only VOC detected in soils submitted from Site 27. All other VOCs were below the detection limits.

A total of eight SVOCs were detected in sample 27-MW02-1012 submitted from Site 27. Concentrations of benzo(a)anthracene (42 ug/kg), benzo(a)pyrene (23 ug/kg), benzo(b)fluoranthene (42 ug/kg), benzo(k)fluoranthene (24 ug/kg), chrysene (36 ug/kg), fluoranthene (59 ug/kg), phenanthrene (42 ug/kg), and pyrene (63 ug/kg) were detected in the soil sample submitted.

Diesel range total petroleum hydrocarbons were detected in the soil samples from Site 27. No concentrations of the light or heavy petroleum fraction were detected in the soil samples submitted from Site 27. Concentrations of the middle petroleum fraction ranged from 18 mg/kg to 22 mg/kg.

Six of the eight RCRA Metals were detected in the samples submitted from Site 27. Arsenic, ranging from 6.0 mg/kg to 8.3 mg/kg, was detected in all samples submitted. Barium, ranging from 10.1 mg/kg to 26.7 mg/kg, was detected in all samples submitted. Cadmium, 0.054 mg/kg to 0.28 mg/kg, was detected in the samples submitted. Chromium, ranging from 5.4 mg/kg to 6.4 mg/kg, was detected in the samples submitted. Lead, ranging from 4.6 mg/kg to 17.4 mg/kg, was detected in the samples submitted. Mercury, 0.12 mg/kg, was detected in the sample submitted from 27-MW02-1012.

The analytical results are presented in **Table 6-14A**.

6.14.5 Groundwater Analytical Results

Toluene (0.17 ug/L) was detected in a groundwater sample collected from Site 27. All other VOCs were below the detection limits.

No SVOCs were detected in the groundwater samples submitted from Site 27.

Seven RCRA metals were detected in the samples submitted from Site 27. Arsenic, ranging from 7.5 ug/L to 64.7 ug/L, was detected in the samples submitted. Barium, ranging from 116 ug/L to 356 ug/L, was detected in the samples submitted. Cadmium, 1.1 ug/L, was detected in sample 27-MW01. Chromium, ranging from 9.1 ug/L to 36.3 ug/L, was detected in the samples submitted. Lead, ranging from 8.2 ug/L to 44.2 ug/L, was detected in the samples submitted. Selenium, 2.7 ug/L, was detected in sample 27-MW02. Mercury, 0.18 ug/L, was detected in sample 27-MW01.

The analytical results are presented in **Table 6-13B**.

6.14.6 Comparison Standards

The analytical results were compared to the OEPAs VAP Generic Direct-Contact Standards for Commercial and Industrial Land Use (VAP, 2002a), the Construction and Excavation Worker Activities Category (VAP, 2002b), the Generic Unrestricted Potable Use Standards Based on MCLs or Other Regulatory Established Criteria (VAP, 2002c), the Risk-Derived Generic Unrestricted Potable Use Standards (VAP, 2002d), and the BUSTR Closure Action Levels. The VAP and BUSTR standards are included on **Tables 6-14A** and **6-14B**.

There were no VOCs, SVOCs, TPH, or RCRA metals detected in any of the soil samples from Site 27, which exceeded the OEPA VAP standards for commercial and industrial land use, the construction and excavation worker activities category, or the BUSTR closure action levels.

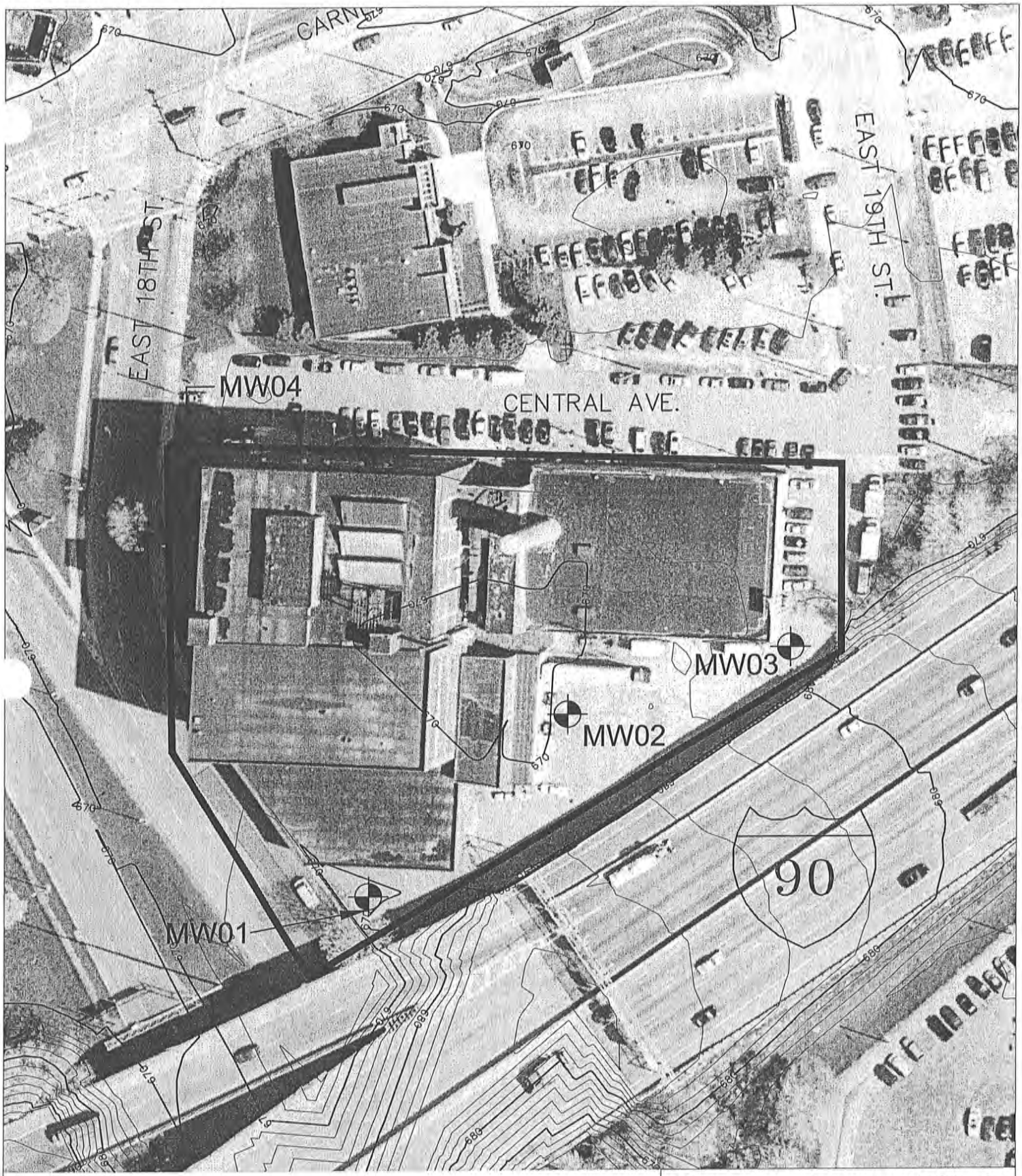
Seven metals were detected in the groundwater samples (**Table 6-14B**). Arsenic and lead were the only metals detected above UPUS. Arsenic was detected at 64.7 ug/L and lead was detected at 44.2 ug/L in sample 27-MW01 (UPUS is 50 ug/L and 15 ug/L, respectfully).

6.14.7 Conclusions

Based on the results of the geophysical survey, two areas were identified that exhibit a characteristic magnetic gradient of USTs.

Based on the analytical results, the groundwater at Site 27 may require special disposal and/or worker protection protocols (plan note) during construction activities.

FIGURES



LEGEND

Monitoring Well

0 75
SCALE 1" = 75'

Cleveland Innerbelt Study

Cleveland, Ohio

Figure 6-14A

Sample Location Map, Site #27
1802 Central Avenue

URS

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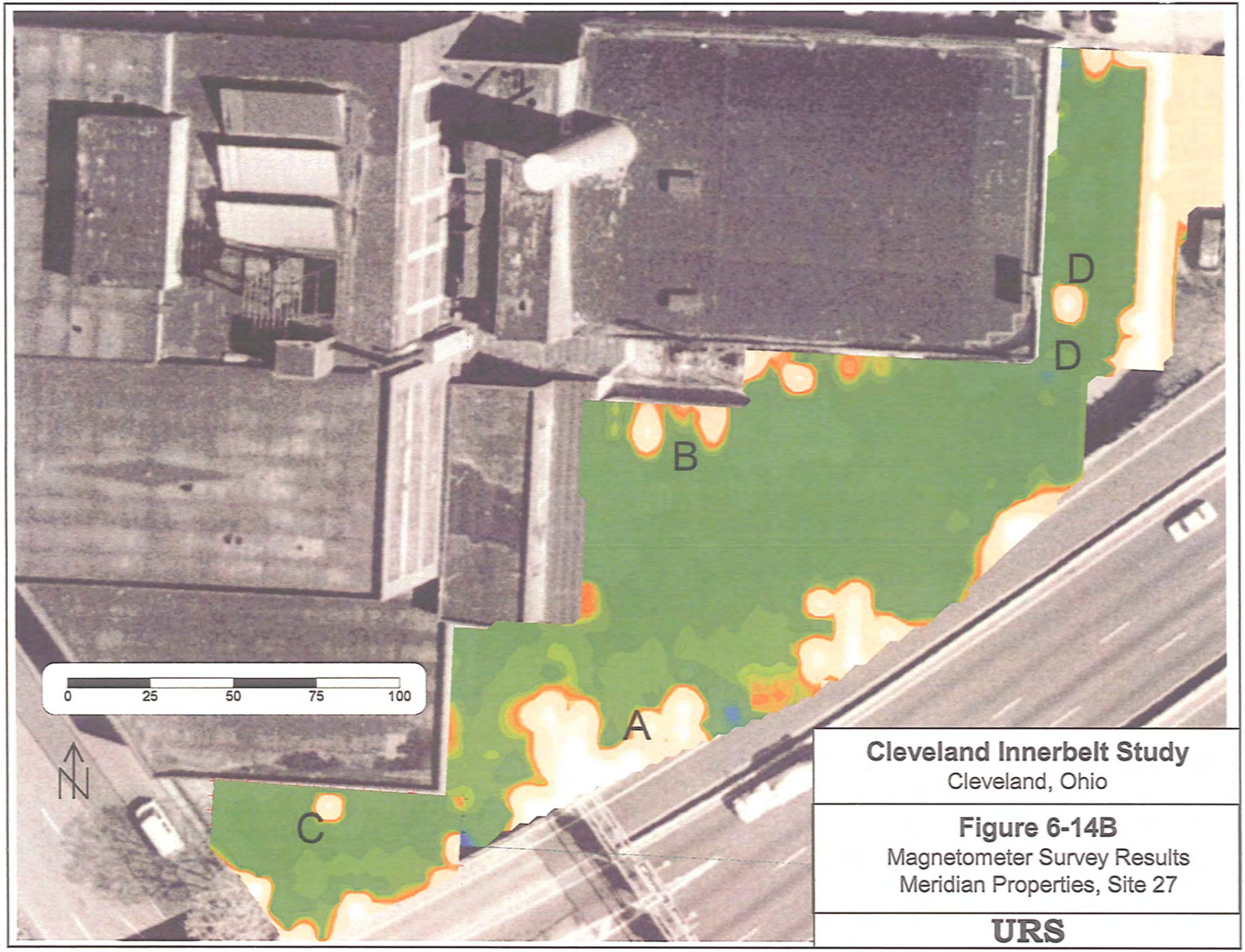

Cleveland Innerbelt Study
Cleveland, Ohio

Figure 6-14B
Magnetometer Survey Results
Meridian Properties, Site 27

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TABLES

Table 6-14A
Summary of Detected Chemicals in Soil
Site 27 - Meridian Properties / Independent Towel
ODOT Innerbelt Study
Cleveland, Ohio

	PARAMETER	UNITS	VAP Commercial/ Industrial Standard[1]	VAP Construction Worker Standard[2]	BUSTR Closure Action Level	27-MW01-1820 07/20/2006	27-MW01-1820D 07/20/2006	27-MW02-1012 07/19/2006	27-MW03-1012 07/20/2006	27-MW04-0406 07/20/2006
VOCs	Toluene	ug/kg	520,000	520,000	49,100	5.3 U	5.3 U	5.4 U	0.37 J	5.4 U
SVOCs	Benzo(a)anthracene	ug/kg	63,000	810,000	11,000	350 U	350 U	42 J	380 U	350 U
	Benzo(a)pyrene	ug/kg	6,300	81,000	1,100	350 U	350 U	23 J	380 U	350 U
	Benzo(b)fluoranthene	ug/kg	63,000	810,000	11,000	350 U	350 U	42 J	380 U	350 U
	Benzo(k)fluoranthene	ug/kg	630,000	8,100,000	110,000	350 U	350 U	24 J	380 U	350 U
	Chrysene	ug/kg	6,700,000	41,000,000	1,100,000	350 U	350 U	36 J	380 U	350 U
	Fluoranthene	ug/kg	33,000,000	170,000,000	--	350 U	350 U	59 J	380 U	350 U
	Phenanthrene	ug/kg	--	--	--	350 U	350 U	42 J	380 U	350 U
	Pyrene	ug/kg	25,000,000	130,000,000	--	350 U	350 U	63 J	380 U	350 U
TPH	C20-C34	mg/kg	--	--	5,000	19	22	18	19	2.5 U
METALS	Arsenic	mg/kg	80	210	--	6.6	6.0	7.1	6.6	8.3
	Barium	mg/kg	200,000	45,000	--	10.7 J	10.1 J	26.7	19.3 J	13.6 J
	Cadmium	mg/kg	770	420	--	0.21 U	0.21 U	0.054 J	0.28	0.21 U
	Chromium	mg/kg	8,900	2,000	--	5.7	5.5	6.4	5.4	5.4
	Lead	mg/kg	--	--	--	17.4 J	5.5 J	11.3 J	6.5 J	4.6 J
	Mercury	mg/kg	300	84	--	0.11 U	0.11 U	0.12	0.12 U	0.11 U

-- = Standard not available

U = The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

(1) VAP Generic Direct Contact Soil Standard, Commercial/ Industrial Land Use

(2) VAP Generic Direct Contact Soil Standard, Construction and Excavation Activities

Table 6-14B
Summary of Detected Chemicals in Water
Site 27 - Meridian Properties / Independent Towel
ODOT Innerbelt Study
Cleveland, Ohio

	PARAMETER	UNITS	VAP UPUS / RDUPUS(1)	BUSTR Closure Action Level	27-MW01 08/11/2006	27-MW02 08/11/2006
VOCs	Toluene	ug/L	1000	1000	**0.17 J**	1.0 UJ
METALS	Arsenic	ug/L	50	--	**64.7**	**7.5 J**
	Barium	ug/L	2000	--	**356**	**116**
	Cadmium	ug/L	5	--	**1.1 J**	2.0 U
	Chromium	ug/L	100	--	**36.6**	**9.1**
	Lead	ug/L	15	--	**44.2**	**8.2**
	Selenium	ug/L	50	--	5.0 U	**2.7 J**
	Mercury	ug/L	2	--	**0.18 J**	0.20 U

-- = Standard not available

U = The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

(1) VAP Unrestricted Potable Use and Risk-Derived Unrestricted Potable Use Standards

BORING LOGS

Project: ODOT - Innerbelt Corridor
Project Location: Site 27
Project Number: 15016633

Log of Boring 27-MW01

Sheet 1 of 1

Date(s) Drilled	7/20/06	Logged By	J. Kaminski	Checked By	M. Wolff
Drilling Method & Drill Bit size/type	Hollow Stem Auger 4-1/4" ID HSA	Hammer Data	140# auto hammer	Total Depth of Borehole	26.0´ bgs
Drill Rig Type	CME-55	Drilling Contractor	HAD, Inc.	Approximate Ground Elevation	670'
Location	See Site Map	Sampling Method(s)	2" Split Spoon	Borehole Completion	Set monitoring well
Groundwater Level and Date Measured	650.21 on 8/9/06				

Elevation feet	Depth, feet	SAMPLES Type Number	Sampling Resistance Blows/6"	Recovery, inches	PID, OVA, ppm	Graphic Log	MATERIAL DESCRIPTION	Well Installation Schematic	FIELD NOTES AND WELL DETAILS
670	0	0002		0.0			ASPHALT		Begin Drilling on 7/20/06
		0204	2 4 4 4	16.0	2.1		Loose, dry, brown, fine SAND with gravel, Brick		2" Schedule 40 PVC
665	5	0406	3 3 3 3	24.0	3.9		Loose, dry, brown, fine SAND no gravel, Brick		Bentonite Pellets
		0608	2 3 3 4	18.0	4.6		Loose, dry, brown, fine to medium SAND no gravel, Brick		
		0810	1 2 3 3	24.0	3.7		Loose, moist, brown, fine to medium SAND no gravel, Brick		
660	10	1012	1 1 2 5	19.0	5.1		Loose, wet, brown, fine to medium SAND with gravel, Brick Stiff, moist, brown, silty CLAY		
		1214	2 8 8 9	14.0	26.5		Loose, dry, brown, fine to medium SAND		
655	15	1416	2 6 9 13	24.0	802				
		1618	2 7 10 9	24.0	532		Loose, moist, brown, fine to coarse SAND		Sample submitted for lab analysis 27-MW01-1820
		1820	2 8 11 8	24.0	1019				
650	20	2022	2 4 5 5	12.0	NA		Loose, wet, brown, fine to coarse SAND		
		2226					Augered down to 26' bgs		Filter Sand #7
645	25								Slotted Pipe #10 PVC (0.010)
							End of Boring at 26' bgs Installed Monitoring Well		End Drilling on 7/20/06
640	30								

Report: 1_ODOT_WELLS; File: ODOT.GPJ; 12/14/2006 27-MW01

URS

Project: ODOT - Innerbelt Corridor
Project Location: Site 27
Project Number: 15016633

Log of Boring 27-MW02

Sheet 1 of 1

Date(s) Drilled	7/20/06	Logged By	J. Kaminski	Checked By	M. Wolff
Drilling Method & Drill Bit size/type	Hollow Stem Auger 4-1/4" ID HSA	Hammer Data	140# auto hammer	Total Depth of Borehole	28.0´ bgs
Drill Rig Type	CME-55	Drilling Contractor	HAD, Inc.	Approximate Ground Elevation	669'
Location	See Site Map	Sampling Method(s)	2" Split Spoon	Borehole Completion	Set monitoring well
Groundwater Level and Date Measured	650.13 on 8/9/06				

Elevation feet	Depth, feet	SAMPLES Type Number	Sampling Resistance Blows/6"	Recovery, inches	PID, OVA, ppm	Graphic Log	MATERIAL DESCRIPTION	Well Installation Schematic	FIELD NOTES AND WELL DETAILS
	0	0002		0.0			ASPHALT Asphalt and base		Begin Drilling on 7/20/06
							Loose, dry, black and brown, SAND trace gravel, trace Brick		
		0204	5 8 10 11	11.0	2.7				2" Schedule 40 PVC
665									Bentonite Pellets
	5	0406	1 2 5 6	7.0	1.7				
		0608	2 5 5 8	14.0	2.8				
							Medium dense, moist, brown, poorly graded, SAND trace fine gravel, trace silt		
660		0810	3 6 6 9	20.0	3.2		Medium dense, moist, brown, poorly graded, SAND with fine to medium gravel, trace silt		
	10	1012	4 5 3 5	24.0	3.3				Sample submitted for lab analysis 27-MW02-1012
		1214	3 4 5 7	24.0	2.4				
655							Hard, dry, gray, silty CLAY		
							Loose, moist, brown, well graded, fine and coarse SAND		
	15	1416	1 1 1 2	12.0	2.9		Loose, very moist, brown, well graded, coarse SAND		
							Loose, dry, brown, well graded, coarse SAND		
		1618	1 2 5 10	10.0	2.8				
650		1820	1 2 5 8	17.0	2.7		Loose, moist, brown, well graded, coarse SAND		
	20	2022	2 4 7 2	1.3	1.3				
		2224	2 4 4 8	24.0	NA		Loose, wet, brown, well graded, coarse SAND with clay		
645									
	25	2426	2 5 7 9	24.0	NA		Loose, wet, brown, well graded, fine to medium SAND no clay		Filter Sand #7
		2628	5 6 9 15	24.0	NA		Loose, wet, brown, well graded, fine SAND no clay		Slotted Pipe #10 PVC (0.010)
640							**End of Boring at 28' bgs Installed Monitoring Well**		End Drilling on 7/20/06 1410
	30								

Report: 1_ODOT_WELLS; File: ODOT.GPJ; 12/14/2006 27-MW02

URS

Project: ODOT - Innerbelt Corridor Project Location: Site 27 Project Number: 15016633	**Log of Boring 27-MW03** Sheet 1 of 1

Date(s) Drilled	7/20/06	Logged By	J. Kaminski	Checked By	M. Wolff
Drilling Method & Drill Bit size/type	Hollow Stem Auger 4-1/4" ID HSA	Hammer Data	140# auto hammer	Total Depth of Borehole	18.0' bgs
Drill Rig Type	CME-55	Drilling Contractor	HAD, Inc.	Approximate Ground Elevation	672'
Location	See Site Map	Sampling Method(s)	2" Split Spoon	Borehole Completion	Set monitoring well
Groundwater Level and Date Measured	Well dry on 8/9/06				

Elevation feet	Depth, feet	SAMPLES: Type Number	SAMPLES: Sampling Resistance Blows/6"	SAMPLES: Recovery, inches	SAMPLES: PID, OVA, ppm	Graphic Log	MATERIAL DESCRIPTION	Well Installation Schematic	FIELD NOTES AND WELL DETAILS
	0	0002					ASPHALT		Begin Drilling on 7/20/06
							Loose, dry, brown, fine SAND		
670	2	0204	4 6 6 9	12.0	3.1				2" Schedule 40 PVC
	4	0406	1 1 WOH WOH	10.0	3.0				Bentonite Pellets
	6	0608	WOH WOH 1 1	1.0	NA				
665							Loose, wet, brown, coarse SAND		
	8	0810	1 2 2 3	20.0	2.9		Loose, reddish brown, silty SAND trace organics, trace, iron oxide staining Loose, dry, light brown, fine SAND		
	10	1012	1 2 2 2	22.0	3.2		Loose, moist, light brown, fine SAND trace gravel, trace, iron oxide staining		Sample submitted for lab analysis 27-MW03-1012
660	12	1214	1 1 2 1	12.0	NA		Loose, saturated, dark brown, coarse SAND		
	14	1416	1 1 1 3	19.0	NA		Soft, wet, brown, CLAY Loose, saturated, dark brown, coarse SAND trace gravel		Filter Sand #7 Slotted Pipe #10 PVC (0.010)
655	16	1618	1 1 1 1	18.0	NA				
	18						End of Boring at 18' bgs Installed Monitoring Well		End Drilling on 7/20/06
	20								

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Report: 1_ODOT_WELLS; File: ODOT.GPJ; 12/14/2006 27-MW03

Project: ODOT - Innerbelt Corridor Project Location: Site 27 Project Number: 15016633	**Log of Boring 27-MW04** Sheet 1 of 1

Date(s) Drilled: 7/20/06	Logged By: J. Kaminski	Checked By: M. Wolff
Drilling Method & Drill Bit size/type: Hollow Stem Auger 4-1/4" ID HSA	Hammer Data: 140# auto hammer	Total Depth of Borehole: 16.0´ bgs
Drill Rig Type: CME-55	Drilling Contractor: HAD, Inc.	Approximate Ground Elevation: 672'
Location: See Site Map	Sampling Method(s): 2" Split Spoon	Borehole Completion: Set monitoring well
Groundwater Level and Date Measured: Well dry on 8/9/06		

Elevation feet	Depth, feet	SAMPLES: Type Number	SAMPLES: Sampling Resistance Blows/6"	SAMPLES: Recovery, inches	SAMPLES: PID, OVA, ppm	Graphic Log	MATERIAL DESCRIPTION	Well Installation Schematic	FIELD NOTES AND WELL DETAILS
	0						ASPHALT		Begin Drilling on 7/20/06
							Dense, dry, black and brown, sandy GRAVEL with construction debris, with, Slag		
670	2	0204	9 12 4 4	18.0	NA		Dense, moist, light brown, fine SAND trace clay		Bentonite Pellets 2" Schedule 40 PVC
	4	0406	3 4 5 4	24.0	3.4		Loose, dry, brown, fine to medium SAND		Sample submitted for lab analysis 27-MW04-0406
	6	0608	4 5 4 3	14.0	3.1		Trace gravel		
665	8	0810	1 4 4 3	22.0	2.8				
	10	1012	1 1 2 2	24.0	NA		Becomes wet		
660	12	1214	1 1 2 2	12.0	NA		Loose, saturated, brown, coarse SAND with gravel, trace silt		Filter Sand #7
	14	1416	1 1 3 5	23.0	NA				Slotted Pipe #10 PVC (0.010)
	16						**End of Boring at 16' bgs Installed Monitoring Well**		End Drilling on 7/20/06
655	18								
	20								

Report: 1_ODOT_WELLS; File: ODOT.GPJ; 12/14/2006 27-MW04

URS

DATA ASSESSMENT REPORT

Data Assessment Report
ODOT Innerbelt Study
Site 27 – Meridian Properties / Independent Towel

Reviewer: P. Schuler
Date: November 14, 2006

Five soil samples, two groundwater samples, two equipment blanks, and one trip blank were collected at the Meridian Properties / Independent Towel site in Cleveland, Ohio, from July 17 through August 11, 2006. The samples were submitted to Severn Trent Laboratories, Inc. in North Canton, Ohio, for analysis of the parameters listed in Table 1.

Table 1
Sample and Analysis Summary

Laboratory ID	Sample ID	Sample Date	Matrix	Requested Analyses[1]				
				VOC	SV	TPH	Met	CN
A6G210339001	27-MW02-1012	07/19/2006	Soil	X	X	X	X	
A6G210339002	27-MW01-1820	07/20/2006	Soil	X	X	X	X	
A6G210339003	27-MW01-1820D	07/20/2006	Soil	X	X	X	X	
A6G210339004	27-MW03-1012	07/20/2006	Soil	X	X	X	X	
A6G210339005	TB-071906	07/20/2006	Trip Blank	X				
A6G210339006	27-MW04-0406	07/20/2006	Soil	X	X	X	X	
A6G210339007	EB-27-MW04	07/20/2006	Equip. Blank	X	X	X	X	X
A6H120105001	27-MW01	08/11/2006	Groundwater	X	X		X	
A6H120105002	27-MW02	08/11/2006	Groundwater	X	X		X	
A6H120105003	EB-81106	08/11/2006	Equip. Blank	X	X		X	

(1) VOC = Volatile Organic Compounds [SW-846 Method 8260B]
SVOC = Semivolatile Organic Compounds [SW-846 Method 8270C]
TPH = Total Petroleum Hydrocarbons (Gasoline and Diesel Range Organics) [SW-846 Method 8015A/B]
Met = RCRA Metals [SW-846 Methods 6010B/6020/7470A/7471A]
CN = Total Cyanide [SW-846 Method 9012A]

(2) Samples 27-MW01-1820 and 27-MW01-1820-D are field duplicates.

A standard review for analytical data quality was performed by URS Corporation (URS) for the above referenced samples. A standard review includes assessment of supporting quality control (QC) parameters such as associated laboratory control sample (LCS) recoveries, laboratory and field blank results, surrogate recoveries, internal standard responses, matrix spike/matrix spike duplicate recoveries, field duplicate results, detection limits, and holding times. A standard review does not include examination of the raw data or reconstruction of the analytical results. The significant findings (findings that resulted in qualification of data or otherwise affected data quality) were as follows:

- Positive detections for acetone in all soil samples, for methylene chloride in samples 27-MW01-1820 and 27-MW03-1012, for bis(2-ethylhexyl)phthalate in samples 27-MW02-1012, 27-MW01-1820, 27-MW01-1820D, 27-MW04-0406, 27-MW01, and 27-MW02,

and for C_{10}-C_{20} diesel range organics in samples 27-MW02-1012, 27-MW01-1820, 27-MW01-1820D, and 27-MW03-1012 were qualified as nondetect ("U") due to the presence of these analytes in the associated method blanks, trip blanks, and/or equipment blanks at similar concentrations.

- The positive detection for C10-C20 diesel range organics in equipment blank EB-27-MW04 was qualified as estimated due to a high recovery in the associated LCS.
- The lead results for field duplicates 27-MW01-1820 and 27-MW01-1820D were qualified as estimated ("J") due to poor precision between the reported concentrations.
- The lead results for all soil samples were qualified as estimated due to a serial dilution percent difference exceeding 10% in sample 27-MW02-1012.
- The lab reported results below their reporting limit but above the method detection limit (MDL) with a qualifier ("J" for organics, and "B" for inorganics), in accordance with USEPA Contract Laboratory Program (CLP) conventions. During the data assessment, organic "J" qualifiers were retained with the numeric results. The inorganic "B" qualifiers were changed to "J" qualifiers for the sake of consistency throughout the package.
- All soil analytical results were reported on a dry weight (moisture-corrected) basis.

No other significant findings were identified and all data are considered usable. The analytical results, with qualifiers, are summarized in Tables 2-1 through 2-7.

Table 2-1
Analytical Data Summary
Site 27 Soil Volatiles
ODOT Innerbelt Study

PARAMETER	UNITS	A6G210339001 27-MW02-1012 07/19/2006	A6G210339002 27-MW01-1820 07/20/2006	A6G210339003 27-MW01-1820D 07/20/2006	A6G210339004 27-MW03-1012 07/20/2006	A6G210339006 27-MW04-0406 07/20/2006
1,1,1-Trichloroethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,1,2,2-Tetrachloroethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,1,2-Trichloroethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,1-Dichloroethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,1-Dichloroethene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,2,4-Trichlorobenzene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,2-Dibromo-3-chloropropane	ug/kg	11 U	11 U	11 U	12 U	11 U
1,2-Dibromoethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,2-Dichlorobenzene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,2-Dichloroethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,2-Dichloropropane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,3-Dichlorobenzene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
1,4-Dichlorobenzene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
2-Butanone	ug/kg	22 U	21 U	21 U	23 U	21 U
2-Hexanone	ug/kg	22 U	21 U	21 U	23 U	21 U
4-Methyl-2-pentanone	ug/kg	22 U	21 U	21 U	23 U	21 U
Acetone	ug/kg	22 U	21 U	21 U	23 U	21 U
Benzene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Bromodichloromethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Bromoform	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Bromomethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Carbon disulfide	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Carbon tetrachloride	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Chlorobenzene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Chloroethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Chloroform	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Chloromethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
cis-1,2-Dichloroethene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
cis-1,3-Dichloropropene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Cyclohexane	ug/kg	11 U	11 U	11 U	12 U	11 U
Dibromochloromethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Dichlorodifluoromethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Ethylbenzene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Isopropylbenzene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Methyl acetate	ug/kg	11 U	11 U	11 U	12 U	11 U
Methyl tert-butyl ether	ug/kg	22 U	21 U	21 U	23 U	21 U
Methylcyclohexane	ug/kg	11 U	11 U	11 U	12 U	11 U
Methylene chloride	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Styrene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Tetrachloroethene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Toluene	ug/kg	5.4 U	5.3 U	5.3 U	**0.37 J**	5.4 U
trans-1,2-Dichloroethene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
trans-1,3-Dichloropropene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Trichloroethene	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Trichlorofluoromethane	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Vinyl chloride	ug/kg	5.4 U	5.3 U	5.3 U	5.8 U	5.4 U
Xylenes (total)	ug/kg	11 U	11 U	11 U	12 U	11 U

U =The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

Table 2-1
Analytical Data Summary
Site 27 Soil Volatiles
ODOT Innerbelt Study

PARAMETER	UNITS	A6G210339005 TB-071906 07/20/2006	A6G210339007 EB-27-MW04 07/20/2006
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	ug/L	2.0 U	2.0 U
1,2-Dibromoethane	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone	ug/L	10 U	10 U
2-Hexanone	ug/L	10 U	10 U
4-Methyl-2-pentanone	ug/L	10 U	10 U
Acetone	ug/L	**1.1 J**	10 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane	ug/L	1.0 U	1.0 U
Carbon disulfide	ug/L	1.0 U	1.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	1.0 U	1.0 U
Chloroform	ug/L	1.0 U	1.0 U
Chloromethane	ug/L	1.0 U	**0.16 J**
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U
Cyclohexane	ug/L	1.0 U	1.0 U
Dibromochloromethane	ug/L	1.0 U	1.0 U
Dichlorodifluoromethane	ug/L	1.0 U	1.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U
Isopropylbenzene	ug/L	1.0 U	1.0 U
Methyl acetate	ug/L	10 U	10 U
Methyl tert-butyl ether	ug/L	5.0 U	5.0 U
Methylcyclohexane	ug/L	1.0 U	1.0 U
Methylene chloride	ug/L	**0.47 J**	1.0 U
Styrene	ug/L	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U
Toluene	ug/L	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U
Trichloroethene	ug/L	1.0 U	1.0 U
Trichlorofluoromethane	ug/L	1.0 U	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U
Xylenes (total)	ug/L	2.0 U	2.0 U

U =The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

Table 2-2
Analytical Data Summary
Site 27 Soil Semivolatiles
ODOT Innerbelt Study

PARAMETER	UNITS	A6G210339001 27-MW02-1012 07/19/2006	A6G210339002 27-MW01-1820 07/20/2006	A6G210339003 27-MW01-1820D 07/20/2006	A6G210339004 27-MW03-1012 07/20/2006	A6G210339006 27-MW04-0406 07/20/2006
1,1'-Biphenyl	ug/kg	360 U	350 U	350 U	380 U	350 U
2,2'-oxybis(1-Chloropropane)	ug/kg	360 U	350 U	350 U	380 U	350 U
2,4,5-Trichlorophenol	ug/kg	360 U	350 U	350 U	380 U	350 U
2,4,6-Trichlorophenol	ug/kg	360 U	350 U	350 U	380 U	350 U
2,4-Dichlorophenol	ug/kg	360 U	350 U	350 U	380 U	350 U
2,4-Dimethylphenol	ug/kg	360 U	350 U	350 U	380 U	350 U
2,4-Dinitrophenol	ug/kg	360 U	350 U	350 U	380 U	350 U
2,4-Dinitrotoluene	ug/kg	360 U	350 U	350 U	380 U	350 U
2,6-Dinitrotoluene	ug/kg	360 U	350 U	350 U	380 U	350 U
2-Chloronaphthalene	ug/kg	360 U	350 U	350 U	380 U	350 U
2-Chlorophenol	ug/kg	360 U	350 U	350 U	380 U	350 U
2-Methylnaphthalene	ug/kg	360 U	350 U	350 U	380 U	350 U
2-Methylphenol	ug/kg	360 U	350 U	350 U	380 U	350 U
2-Nitroaniline	ug/kg	360 U	350 U	350 U	380 U	350 U
2-Nitrophenol	ug/kg	360 U	350 U	350 U	380 U	350 U
3,3'-Dichlorobenzidine	ug/kg	360 U	350 U	350 U	380 U	350 U
3-Nitroaniline	ug/kg	360 U	350 U	350 U	380 U	350 U
4,6-Dinitro-2-methylphenol	ug/kg	360 U	350 U	350 U	380 U	350 U
4-Bromophenyl phenyl ether	ug/kg	360 U	350 U	350 U	380 U	350 U
4-Chloro-3-methylphenol	ug/kg	360 U	350 U	350 U	380 U	350 U
4-Chloroaniline	ug/kg	360 U	350 U	350 U	380 U	350 U
4-Chlorophenyl phenyl ether	ug/kg	360 U	350 U	350 U	380 U	350 U
4-Methylphenol	ug/kg	360 U	350 U	350 U	380 U	350 U
4-Nitroaniline	ug/kg	360 U	350 U	350 U	380 U	350 U
4-Nitrophenol	ug/kg	360 U	350 U	350 U	380 U	350 U
Acenaphthene	ug/kg	360 U	350 U	350 U	380 U	350 U
Acenaphthylene	ug/kg	360 U	350 U	350 U	380 U	350 U
Acetophenone	ug/kg	72 U	71 U	71 U	78 U	71 U
Anthracene	ug/kg	360 U	350 U	350 U	380 U	350 U
Atrazine	ug/kg	360 U	350 U	350 U	380 U	350 U
Benzaldehyde	ug/kg	360 U	350 U	350 U	380 U	350 U
Benzo(a)anthracene	ug/kg	**42 J**	350 U	350 U	380 U	350 U
Benzo(a)pyrene	ug/kg	**23 J**	350 U	350 U	380 U	350 U
Benzo(b)fluoranthene	ug/kg	**42 J**	350 U	350 U	380 U	350 U
Benzo(ghi)perylene	ug/kg	360 U	350 U	350 U	380 U	350 U
Benzo(k)fluoranthene	ug/kg	**24 J**	350 U	350 U	380 U	350 U
bis(2-Chloroethoxy)methane	ug/kg	360 U	350 U	350 U	380 U	350 U
bis(2-Chloroethyl) ether	ug/kg	360 U	350 U	350 U	380 U	350 U
bis(2-Ethylhexyl) phthalate	ug/kg	360 U	350 U	350 U	380 U	350 U
Butyl benzyl phthalate	ug/kg	360 U	350 U	350 U	380 U	350 U
Caprolactam	ug/kg	360 U	350 U	350 U	380 U	350 U
Carbazole	ug/kg	360 U	350 U	350 U	380 U	350 U
Chrysene	ug/kg	**36 J**	350 U	350 U	380 U	350 U
Dibenz(a,h)anthracene	ug/kg	360 U	350 U	350 U	380 U	350 U
Dibenzofuran	ug/kg	360 U	350 U	350 U	380 U	350 U
Diethyl phthalate	ug/kg	360 U	350 U	350 U	380 U	350 U
Dimethyl phthalate	ug/kg	360 U	350 U	350 U	380 U	350 U
Di-n-butyl phthalate	ug/kg	360 U	350 U	350 U	380 U	350 U
Di-n-octyl phthalate	ug/kg	360 U	350 U	350 U	380 U	350 U
Fluoranthene	ug/kg	**59 J**	350 U	350 U	380 U	350 U
Fluorene	ug/kg	360 U	350 U	350 U	380 U	350 U

Table 2-2
Analytical Data Summary
Site 27 Soil Semivolatiles
ODOT Innerbelt Study

PARAMETER	UNITS	A6G210339001 27-MW02-1012 07/19/2006	A6G210339002 27-MW01-1820 07/20/2006	A6G210339003 27-MW01-1820D 07/20/2006	A6G210339004 27-MW03-1012 07/20/2006	A6G210339006 27-MW04-0406 07/20/2006
Hexachlorobenzene	ug/kg	360 U	350 U	350 U	380 U	350 U
Hexachlorobutadiene	ug/kg	360 U	350 U	350 U	380 U	350 U
Hexachlorocyclopentadiene	ug/kg	360 U	350 U	350 U	380 U	350 U
Hexachloroethane	ug/kg	360 U	350 U	350 U	380 U	350 U
Indeno(1,2,3-cd)pyrene	ug/kg	360 U	350 U	350 U	380 U	350 U
Isophorone	ug/kg	360 U	350 U	350 U	380 U	350 U
Naphthalene	ug/kg	360 U	350 U	350 U	380 U	350 U
Nitrobenzene	ug/kg	360 U	350 U	350 U	380 U	350 U
N-Nitrosodi-n-propylamine	ug/kg	360 U	350 U	350 U	380 U	350 U
N-Nitrosodiphenylamine	ug/kg	360 U	350 U	350 U	380 U	350 U
Pentachlorophenol	ug/kg	360 U	350 U	350 U	380 U	350 U
Phenanthrene	ug/kg	**42 J**	350 U	350 U	380 U	350 U
Phenol	ug/kg	360 U	350 U	350 U	380 U	350 U
Pyrene	ug/kg	**63 J**	350 U	350 U	380 U	350 U

U =The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

Table 2-2
Analytical Data Summary
Site 27 Soil Semivolatiles
ODOT Innerbelt Study

PARAMETER	UNITS	A6G210339007 EB-27-MW04 07/20/2006 ug/L
1,1'-Biphenyl	ug/L	1.0 U
2,2'-oxybis(1-Chloropropane)	ug/L	1.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U
2,4-Dichlorophenol	ug/L	2.0 U
2,4-Dimethylphenol	ug/L	2.0 U
2,4-Dinitrophenol	ug/L	5.0 U
2,4-Dinitrotoluene	ug/L	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U
2-Chloronaphthalene	ug/L	1.0 U
2-Chlorophenol	ug/L	1.0 U
2-Methylnaphthalene	ug/L	0.20 U
2-Methylphenol	ug/L	1.0 U
2-Nitroaniline	ug/L	2.0 U
2-Nitrophenol	ug/L	2.0 U
3,3'-Dichlorobenzidine	ug/L	5.0 U
3-Nitroaniline	ug/L	2.0 U
4,6-Dinitro-2-methylphenol	ug/L	5.0 U
4-Bromophenyl phenyl ether	ug/L	2.0 U
4-Chloro-3-methylphenol	ug/L	2.0 U
4-Chloroaniline	ug/L	2.0 U
4-Chlorophenyl phenyl ether	ug/L	2.0 U
4-Methylphenol	ug/L	1.0 U
4-Nitroaniline	ug/L	2.0 U
4-Nitrophenol	ug/L	5.0 U
Acenaphthene	ug/L	0.20 U
Acenaphthylene	ug/L	0.20 U
Acetophenone	ug/L	1.0 U
Anthracene	ug/L	0.20 U
Atrazine	ug/L	1.0 U
Benzaldehyde	ug/L	1.0 U
Benzo(a)anthracene	ug/L	0.20 U
Benzo(a)pyrene	ug/L	0.20 U
Benzo(b)fluoranthene	ug/L	0.20 U
Benzo(ghi)perylene	ug/L	0.20 U
Benzo(k)fluoranthene	ug/L	0.20 U
bis(2-Chloroethoxy)methane	ug/L	1.0 U
bis(2-Chloroethyl) ether	ug/L	1.0 U
bis(2-Ethylhexyl) phthalate	ug/L	**1.1**
Butyl benzyl phthalate	ug/L	1.0 U
Caprolactam	ug/L	**0.80 J**
Carbazole	ug/L	1.0 U
Chrysene	ug/L	0.20 U
Dibenz(a,h)anthracene	ug/L	0.20 U
Dibenzofuran	ug/L	1.0 U
Diethyl phthalate	ug/L	1.0 U
Dimethyl phthalate	ug/L	1.0 U
Di-n-butyl phthalate	ug/L	1.0 U
Di-n-octyl phthalate	ug/L	1.0 U
Fluoranthene	ug/L	0.20 U
Fluorene	ug/L	0.20 U

Table 2-2
Analytical Data Summary
Site 27 Soil Semivolatiles
ODOT Innerbelt Study

PARAMETER	UNITS	A6G210339007 EB-27-MW04 07/20/2006 ug/L
Hexachlorobenzene	ug/L	0.20 U
Hexachlorobutadiene	ug/L	1.0 U
Hexachlorocyclopentadiene	ug/L	10 U
Hexachloroethane	ug/L	1.0 U
Indeno(1,2,3-cd)pyrene	ug/L	0.20 U
Isophorone	ug/L	1.0 U
Naphthalene	ug/L	0.20 U
Nitrobenzene	ug/L	1.0 U
N-Nitrosodi-n-propylamine	ug/L	1.0 U
N-Nitrosodiphenylamine	ug/L	1.0 U
Pentachlorophenol	ug/L	5.0 U
Phenanthrene	ug/L	0.20 U
Phenol	ug/L	1.0 U
Pyrene	ug/L	0.20 U

U =The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

Table 2-3
Analytical Data Summary
Site 27 Soil TPH
ODOT Innerbelt Study

PARAMETER	UNITS	A6G210339001 27-MW02-1012 07/19/2006	A6G210339002 27-MW01-1820 07/20/2006	A6G210339003 27-MW01-1820D 07/20/2006	A6G210339004 27-MW03-1012 07/20/2006	A6G210339006 27-MW04-0406 07/20/2006
Gasoline Range Organics (C6-C12)	ug/kg	110 U	110 U	110 U	120 U	110 U
C10-C20	mg/kg	2.2 U	8.3 U	9.1 U	2.4 U	2.1 U
C20-C34	mg/kg	**18**	**19**	**22**	**19**	2.5 U

PARAMETER	UNITS	A6G210339007 EB-27-MW04 07/20/2006
Gasoline Range Organics (C6-C12)	ug/L	50 U
C10-C20	ug/L	**250 J**
C20-C34	ug/L	100 U

U =The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

Table 2-4
Analytical Data Summary
Site 27 Soil Metals
ODOT Innerbelt Study

PARAMETER	UNITS	A6G210339001 27-MW02-1012 07/19/2006	A6G210339002 27-MW01-1820 07/20/2006	A6G210339003 27-MW01-1820D 07/20/2006	A6G210339004 27-MW03-1012 07/20/2006	A6G210339006 27-MW04-0406 07/20/2006
Percent Solids	%	92.1	94.3	93.8	85.8	93.4
Arsenic	mg/kg	7.1	6.6	6.0	6.6	8.3
Barium	mg/kg	26.7	10.7 J	10.1 J	19.3 J	13.6 J
Cadmium	mg/kg	0.054 J	0.21 U	0.21 U	0.28	0.21 U
Chromium	mg/kg	6.4	5.7	5.5	5.4	5.4
Lead	mg/kg	11.3 J	17.4 J	5.5 J	6.5 J	4.6 J
Selenium	mg/kg	0.54 U	0.53 U	0.53 U	0.58 U	0.54 U
Silver	mg/kg	0.54 U	0.53 U	0.53 U	0.58 U	0.54 U
Mercury	mg/kg	0.12	0.11 U	0.11 U	0.12 U	0.11 U

PARAMETER	UNITS	A6G210339007 EB-27-MW04 07/20/2006
Percent Solids	%	10.0 U
Arsenic	ug/L	100 U
Barium	ug/L	2.0 U
Cadmium	ug/L	5.0 U
Chromium	ug/L	3.0 U
Lead	ug/L	5.0 U
Selenium	ug/L	5.0 U
Silver	ug/L	0.20 U
Mercury	ug/L	0.010 U

U =The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

Table 2-5
Analytical Data Summary
Site 27 Water Volatiles
ODOT Innerbelt Study

PARAMETER	UNITS	A6H120105001 27-MW01 08/11/2006	A6H120105002 27-MW02 08/11/2006	A6H120105003 EB-81106 08/11/2006
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	ug/L	2.0 U	2.0 U	2.0 U
1,2-Dibromoethane	ug/L	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U
2-Butanone	ug/L	10 U	10 U	10 U
2-Hexanone	ug/L	10 U	10 U	10 U
4-Methyl-2-pentanone	ug/L	10 U	10 U	10 U
Acetone	ug/L	10 U	10 U	10 U
Benzene	ug/L	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U	1.0 U
Bromomethane	ug/L	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U
Chloroform	ug/L	1.0 U	1.0 U	1.0 U
Chloromethane	ug/L	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	ug/L	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U
Isopropylbenzene	ug/L	1.0 U	1.0 U	1.0 U
Methyl acetate	ug/L	10 U	10 U	10 U
Methyl tert-butyl ether	ug/L	5.0 U	5.0 U	5.0 U
Methylcyclohexane	ug/L	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	1.0 U	1.0 U	1.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U
Toluene	ug/L	0.17 J	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	ug/L	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	2.0 U	2.0 U	2.0 U

U =The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

Table 2-6
Analytical Data Summary
Site 27 Water Semivolatiles
ODOT Innerbelt Study

PARAMETER	UNITS	A6H120105001 27-MW01 08/11/2006	A6H120105002 27-MW02 08/11/2006	A6H120105003 EB-81106 08/11/2006
1,1'-Biphenyl	ug/L	1.0 U	1.0 U	1.0 U
2,2'-oxybis(1-Chloropropane)	ug/L	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	ug/L	2.0 U	2.0 U	2.0 U
2,4-Dinitrophenol	ug/L	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	ug/L	1.0 U	1.0 U	1.0 U
2-Chlorophenol	ug/L	1.0 U	1.0 U	1.0 U
2-Methylnaphthalene	ug/L	0.20 U	0.20 U	0.20 U
2-Methylphenol	ug/L	1.0 U	1.0 U	1.0 U
2-Nitroaniline	ug/L	2.0 U	2.0 U	2.0 U
2-Nitrophenol	ug/L	2.0 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	ug/L	5.0 U	5.0 U	5.0 U
3-Nitroaniline	ug/L	2.0 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	ug/L	5.0 U	5.0 U	5.0 U
4-Bromophenyl phenyl ether	ug/L	2.0 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	ug/L	2.0 U	2.0 U	2.0 U
4-Chloroaniline	ug/L	2.0 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	ug/L	2.0 U	2.0 U	2.0 U
4-Methylphenol	ug/L	1.0 U	1.0 U	1.0 U
4-Nitroaniline	ug/L	2.0 U	2.0 U	2.0 U
4-Nitrophenol	ug/L	5.0 U	5.0 U	5.0 U
Acenaphthene	ug/L	0.20 U	0.20 U	0.20 U
Acenaphthylene	ug/L	0.20 U	0.20 U	0.20 U
Acetophenone	ug/L	1.0 U	1.0 U	1.0 U
Anthracene	ug/L	0.20 U	0.20 U	0.20 U
Atrazine	ug/L	1.0 U	1.0 U	1.0 U
Benzaldehyde	ug/L	1.0 U	1.0 U	1.0 U
Benzo(a)anthracene	ug/L	0.20 U	0.20 U	0.20 U
Benzo(a)pyrene	ug/L	0.20 U	0.20 U	0.20 U
Benzo(b)fluoranthene	ug/L	0.20 U	0.20 U	0.20 U
Benzo(ghi)perylene	ug/L	0.20 U	0.20 U	0.20 U
Benzo(k)fluoranthene	ug/L	0.20 U	0.20 U	0.20 U
bis(2-Chloroethoxy)methane	ug/L	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	ug/L	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	ug/L	4.5 U	1.5 U	**1.8**
Butyl benzyl phthalate	ug/L	1.0 U	1.0 U	1.0 U
Caprolactam	ug/L	5.0 U	5.0 U	5.0 U
Carbazole	ug/L	1.0 U	1.0 U	1.0 U
Chrysene	ug/L	0.20 U	0.20 U	0.20 U
Dibenz(a,h)anthracene	ug/L	0.20 U	0.20 U	0.20 U
Dibenzofuran	ug/L	1.0 U	1.0 U	1.0 U
Diethyl phthalate	ug/L	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	ug/L	1.0 U	1.0 U	1.0 U
Di-n-butyl phthalate	ug/L	1.0 U	1.0 U	1.0 U
Di-n-octyl phthalate	ug/L	1.0 U	1.0 U	**0.94 J**
Fluoranthene	ug/L	0.20 U	0.20 U	0.20 U
Fluorene	ug/L	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	ug/L	0.20 U	0.20 U	0.20 U

Table 2-6
Analytical Data Summary
Site 27 Water Semivolatiles
ODOT Innerbelt Study

PARAMETER	UNITS	A6H120105001 27-MW01 08/11/2006	A6H120105002 27-MW02 08/11/2006	A6H120105003 EB-81106 08/11/2006
Hexachlorobutadiene	ug/L	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U
Hexachloroethane	ug/L	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	ug/L	0.20 U	0.20 U	0.20 U
Isophorone	ug/L	1.0 U	1.0 U	1.0 U
Naphthalene	ug/L	0.20 U	0.20 U	0.20 U
Nitrobenzene	ug/L	1.0 U	1.0 U	1.0 U
N-Nitrosodi-n-propylamine	ug/L	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	ug/L	1.0 U	1.0 U	1.0 U
Pentachlorophenol	ug/L	5.0 U	5.0 U	5.0 U
Phenanthrene	ug/L	0.20 U	0.20 U	0.20 U
Phenol	ug/L	1.0 U	1.0 U	1.0 U
Pyrene	ug/L	0.20 U	0.20 U	0.20 U

U =The analyte was analyzed for, but was not detected. Value shown is the reporting limit.
J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.

Table 2-7
Analytical Data Summary
Site 27 Water Metals
ODOT Innerbelt Study

PARAMETER	UNITS	A6H120105001 27-MW01 08/11/2006	A6H120105002 27-MW02 08/11/2006	A6H120105003 EB-81106 08/11/2006
Arsenic	ug/L	**64.7**	**7.5 J**	10.0 U
Barium	ug/L	**356**	**116**	100 U
Cadmium	ug/L	**1.1 J**	2.0 U	2.0 U
Chromium	ug/L	**36.6**	**9.1**	5.0 U
Lead	ug/L	**44.2**	**8.2**	3.0 U
Selenium	ug/L	5.0 U	**2.7 J**	5.0 U
Silver	ug/L	5.0 U	5.0 U	5.0 U
Mercury	ug/L	**0.18 J**	0.20 U	0.20 U

U =The analyte was analyzed for, but was not detected. Value shown is the reporting limit.

J = Estimated concentration because the result was below the sample reporting limit or quality control criteria were not met.