

Tables

TABLE 1
PHASE II ESA
WELL CONSTRUCTION DETATILS
BORDEAUX TRACT
WILMINGTON, NORTH CAROLINA

MONITOR WELL I.D.	DATE INSTALLED	SCREENED INTERVAL (feet BGS)	SANDPACK INTERVAL (feet BGS)	BENTONITE GROUT INTERVAL (feet BGS)	WELL CASING DIAMETER (inches)	GAUGING DATE	TOC ELEVATION (feet above msl)	DEPTH TO WATER (feet BGS)
MW-1	7/18/05	2-12	1-12	0.5-1	2	7/19/05	not measured	2.15
MW-2	7/18/05	2-12	1-12	0.5-1	2	7/19/05	not measured	2.71
MW-3	7/18/05	2-12	1-12	0.5-1	2	7/19/05	not measured	2.09
MW-4	7/18/05	2-12	1-12	0.5-1	2	7/19/05	not measured	2.01
MW-5	7/18/05	2-12	1-12	0.5-1	2	7/19/05	not measured	2.73
MW-6	7/19/05	2-12	1-12	0.5-1	2	7/19/05	not measured	2.24
MW-7	7/19/05	2-12	1-12	0.5-1	2	7/19/05	not measured	3.32
MW-8	7/19/05	2-12	1-12	0.5-1	2	7/19/05	not measured	2.94
MW-9	7/19/05	2-12	1-12	0.5-1	2	7/19/05	not measured	3.56
MW-10	7/19/05	2-12	1-12	0.5-1	2	7/19/05	not measured	3.16

Notes: BGS = Below ground surface

TABLE 2A
SOIL ANALYTICAL RESULTS
BORDEAUX TRACT
WILMINGTON, NORTH CAROLINA

Sample Location	Sample Date	Sample Depth (feet)	EPA 3550 VOC (mg/Kg)	EPA 5030 VOC (mg/Kg)	EPA 9071 Oil & Grease (mg/Kg)
MW-1	7/18/05	1	BQL	BQL	190
MW-2	7/18/05	1	BQL	BQL	170
MW-3	7/18/05	1	BQL	BQL	620
MW-4	7/18/05	1	BQL	BQL	71
MW-5	7/18/05	1	BQL	BQL	190
MW-6	7/19/05	1	BQL	BQL	450
MW-7	7/19/05	2.5	1909*	107	326,200
MW-8	7/19/05	1	42.6*	BQL	660
MW-9	7/19/05	1	BQL	BQL	380
MW-10	7/19/05	1	BQL	BQL	60
TPH Action Levels			40	10	250

Notes:

Only those detected compounds are shown in table

BQL = Below Quantitation Limits

mg/Kg = milligrams per kilogram (parts per million)

Analyses shown in bold exceed Soil-to-Groundwater

* = GC pattern consistent with higher boiling hydrocarbons

TPH Action Levels are reported from The NC DENR Aquifer Protection Division date July 2000 as reported in the Groundwater Section Guidelines For The Investigation and Remediation of Soil and Groundwater.

**TABLE 2B
SOIL ANALYTICAL RESULTS
BORDEAUX TRACT
WILMINGTON, NORTH CAROLINA**

Sample Location	Sample Date	Sample Depth (feet)	8 RCRA Metals (mg/Kg)							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
MW-1	7/18/05	1	<0.108	168	0.101	1.81	21.9	0.0566	<0.108	<0.108
MW-2	7/18/05	1	<0.106	2.34	0.022	0.46	2.4	0.0109	<0.106	<0.106
MW-3	7/18/05	1	<0.116	40.7	0.314	3.67	180	0.1109	<0.116	<0.116
MW-4	7/18/05	1	<0.113	3.04	0.149	7.09	8.6	0.0063	<0.113	0.113
MW-5	7/18/05	1	<0.103	135	1.08	26.6	174	0.2585	<0.103	0.739
MW-6	7/19/05	1	<0.108	3.55	0.14	3.44	9.57	0.015	<0.108	<0.108
MW-7	7/19/05	2.5	<0.113	11.2	0.078	0.942	11.9	<0.006	<0.113	<0.113
MW-8	7/19/05	1	<0.119	4.18	0.102	6.43	6.06	0.0103	<0.119	<0.119
MW-9	7/19/05	1	<0.102	5.24	0.009	1.28	11.7	0.0198	<0.102	<0.102
MW-10	7/19/05	1	<0.102	4.74	0.149	16.9	30.4	0.0325	0.117	<0.102
SS-1	7/19/05	0.5	<0.101	10.2	0.602	16.7	103	0.0345	0.108	<0.101
SS-2	7/19/05	0.5	<0.103	14.5	1.08	20.8	120	0.0253	<0.103	<0.103
SS-3	7/19/05	0.5	<0.101	10.1	0.755	22.2	108	0.0199	<0.101	<0.101
Soil-to-Groundwater			NS	848	NS	27	270	NS	NS	0.23
Industrial/Commercial Soil Cleanup Levels			NS	28,626	NS	1226	400	NS	NS	2044
IHSB Soil Remediation Goals			4.4		7.4	30*	400	4.6	78	78

Notes:

Only those detected compounds are shown in table

BQL = Below Quantitation Limits

mg/Kg = milligrams per kilogram (parts per million)

ug/Kg = micrograms per kilogram (parts per billion)

NS = No Standard

Soil-to-Groundwater levels and Industrial/Commercial Soil Cleanup Levels are reported from The NC DENR Division of Waste Management, Guidelines For Assessment and Corrective Action, dated July 1, 2001.

Inactive Hazardous Sites Branch Soil Remediation Goals, August 2004. These levels are set as goals and are subject to change.

Analyses shown in bold exceed IHSB Soil Remediation Goals

* = ChromiumVi Compounds (more stringent)

TABLE 3A
GROUNDWATER ANALYTICAL RESULTS
BORDEAUX TRACT
WILMINGTON, NORTH CAROLINA

Sample Location	Sample Date	EPA 8260 VOC (ug/L)						EPA 8270 SVOC (ug/L)	EPA 8081 Pesticides (ug/L)	EPA 8151 Herbicides (ug/L)
		Benzene	Ethylbenzene	p-Isopropyltoluene	Naphthalene	Toluene	Total Xylene			
MW-1	7/20/05	BQL	BQL	9.12	BQL	BQL	BQL	BQL	BQL	BQL
MW-2	7/20/05	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
MW-3	7/20/05	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
MW-4	7/20/05	BQL	BQL	65.2	BQL	7.47	BQL	BQL	BQL	BQL
MW-5	7/20/05	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
MW-6	7/20/05	BQL	BQL	7.24	BQL	BQL	BQL	BQL	BQL	BQL
MW-7	7/20/05	5.48	4.40	219	2.00	76.0	6.32	BQL	BQL	BQL
MW-8	7/20/05	BQL	3.68	1050	BQL	476	BQL	BQL	BQL	BQL
MW-9	7/20/05	BQL	BQL	BQL	BQL	1.22	BQL	BQL	BQL	BQL
MW-10	7/20/05	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
NC 2L Standard		1	29	NS	21	1,000	530	NA	NA	NA

Notes:

Only those detected compounds are shown in table
 BQL = Below Quantitation Limits
 ug/L = micrograms per liter (parts per billion)

Analyses shown in bold exceed NC 2L standards
 NA = Non Applicable
 NS = No Standard

NC 2L Standard = Title 15A of the North Carolina Administrative Code, Chapter 2, Subchapter 2L (15 NCAC 02L .0202) groundwater standards.

TABLE 3B
GROUNDWATER ANALYTICAL RESULTS
BORDEAUX TRACT
WILMINGTON, NORTH CAROLINA

Sample Location	Sample Date	EPA Method 3030C for Extracted RCRA Metals (ug/l)						
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium
MW-1	7/20/05	<5	169	<1	<5	<5	<0.2	<5
MW-2	7/20/05	<5	146	<1	<5	18	<0.2	<5
MW-3	7/20/05	<5	498	<1	<5	<5	<0.2	<5
MW-4	7/20/05	<5	116	<1	<5	<5	<0.2	<5
MW-5	7/20/05	<5	492	<1	<5	<5	<0.2	<5
MW-6	7/20/05	<5	196	<1	<5	20	<0.2	<5
MW-7	7/20/05	<5	368	2	18	15	<0.2	<5
MW-8	7/20/05	<5	602	<1	<5	<5	<0.2	<5
MW-9	7/20/05	<5	341	<1	<5	<5	<0.2	<5
MW-10	7/20/05	<5	329	<1	<5	<5	<0.2	<5
NC 2L Standard		10	2,000	5	50	15	1	50
								18

Notes:

Only those detected compounds are shown in table

BQL = Below Quantitation Limits

ug/L = micrograms per liter (parts per billion)

Analyses shown in bold exceed NC 2L standards

-- not analyzed

NC 2L Standard = Title 15A of the North Carolina Administrative Code,

Chapter 2, Subchapter 2L (15 NCAC 02L .0202) ground water standards.

Appendix A
Soil Boring Logs

Soil Boring Logs
Bordeaux Tract
Wilmington, North Carolina
July 2005

MW-1

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	25.0	6" surficial w/ organics then 0.5-1.5' soft, tan, non-plastic, non-cohesive, medium grained quartz sand w/ minor iron staining, 1.5-2.0' soft, gray, non-plastic, non-cohesive, medium grained quartz sand, moderate moisture content, no odor or staining. Sample at 1.0' for 3550, 5030, 9071.
2-4	MC	N/A	11.0	Soft, gray, non-plastic, non-cohesive medium grained quartz sand, moderate to high moisture content, slight petroleum odor or stain.
4-6	MC	N/A	28.0	Soft, gray, non-plastic, non-cohesive medium grained quartz sand, moderate to high moisture content, slight petroleum odor or stain.
8-10	MC	N/A	N/A	No recovery.
10-12	MC	N/A	N/A	No recovery.
				TD=12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings

MW-2

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	5.0	Soft-tan, non-plastic, non-cohesive, medium grained quartz sand, moderate moisture content, no odor or staining. Sample at 1.0' for 3550, 5030, 9071.
2-4	MC	N/A	3.0	Soft-tan, non-plastic, non-cohesive, medium grained quartz sand, moderate moisture content, no odor or staining.
4-6	MC	N/A	3.50	Soft-tan, non-plastic, non-cohesive, medium grained quartz sand, no odor or staining, high moisture content, no odor or staining.
8-10	MC	N/A	5.0	Soft gray, non-plastic, non cohesive, medium quartz sand, high moisture content, no odor or staining.
10-12	MC	N/A	N/A	No recovery.
				TD =12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings

Soil Boring Logs
Bordeaux Tract
Wilmington, North Carolina
July 2005

MW-3

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	3.0	Dark gray, soft, non-plastic, non-cohesive, fine to medium grained quartz sand (fill) some organic & misc. debris included, moderate moisture content, no odor or stain. Sample at 1.0' for 3550, 5030, 9071.
2-4	MC	N/A	3.0	Gray, soft, non-plastic, non-cohesive, medium grained quartz sand, high moisture content, no odor or staining.
4-6	MC	N/A	4.0	Dark gray, soft, non-plastic, non-cohesive, medium grained quartz sand, very high moisture content, no odor or staining.
6-8	MC	N/A	4.0	Dark gray, soft, non-plastic, non-cohesive, medium grained quartz sand, high moisture content, no odor or staining.
8-10	MC	N/A	3.0	Dark gray, soft, non-plastic, non-cohesive, medium grained quartz sand, high moisture content, no odor or staining.
10-12	MC	N/A	N/A	No recovery.
				TD = 12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings

MW-4

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	3.50	Tan, non-plastic, non-cohesive, medium to coarse grained quartz sand (fill), low to moderate moisture content no odor or staining. Sample at 1.0' for 3550, 5030, 9071.
2-4	MC	N/A	2.5	Gray 2-3', then dark gray 3-4', medium to coarse grained quartz sand, high moisture content, no odor or staining.
4-6	MC	N/A	2.0	Gray, non-plastic, non-cohesive, medium to coarse grained quartz sand, high moisture content, no odor or stain.
6-8	MC	N/A	2.0	Gray, non-plastic, non-cohesive, medium to coarse grained quartz sand, high moisture content, no odor or stain.
8-10	MC	N/A	3.5	Dark brown, high organic content (roots), clay with minor sand, high moisture content, no odor or staining.
10-12	MC	N/A	N/A	No recovery.
				TD = 12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings

Soil Boring Logs
Bordeaux Tract
Wilmington, North Carolina
July 2005

MW-5

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	4.0	Brown, non-plastic, non-cohesive, medium quartz sand fill material, moderate moisture content, no odor or staining. Sample at 1.0' for 3550, 5030, 9071.
2-4	MC	N/A	3.0	Brown, non-plastic, non-cohesive, medium quartz sand fill material, no odor or staining high moisture content.
4-6	MC	N/A	3.5	Brown, non-plastic, non-cohesive, medium quartz sand fill material, no odor or staining high moisture content.
6-8	MC	N/A	N/A	No recovery.
8-10	MC	N/A	N/A	No recovery.
10-12	MC	N/A	N/A	No recovery.
				TD = 12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings

MW-6

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	12.0	Tan, non-cohesive, non-plastic, fine grained sand with pebbles, low moisture content, no odor or staining. Sample = 3550, 5030, 9071, 8 RCRA metals
2-4	MC	N/A	22.0	Tan crush and run, non-cohesive, non-plastic, fine coarse grained quartz, sand with pebbles, moderate-high moisture content, petroleum odor-no staining.
4-6	MC	N/A	11.0	Grayish tan, non-cohesive, non-plastic, fine coarse grained quartz sand, high moisture content slight petroleum odor, no staining.
6-8	MC	N/A	5.0	Maroon to dark gray, non-cohesive, non-plastic, medium-coarse sand, high moisture content, slight petroleum odor, no staining.
8-10	MC	N/A	9.0	Dark brown to black, organic rich, semi-cohesive, semi-plastic clay, moderate moisture content, no odor or stain.
10-12	MC	N/A	N/A	No recovery.
				TD = 12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings

Soil Boring Logs
Bordeaux Tract
Wilmington, North Carolina
July 2005

MW-7

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	2.0	Dark brown, fill, non-cohesive, non-plastic, fine-coarse grained sand low moisture content, no odor or staining.
2-4	MC	N/A	40.0	Yellowish and black fill material consisting mainly of organic debris with a minor non-cohesive, non-plastic, clay, silt and sand fraction, moderate moisture content, chemical odor, no staining. Sample for 3550, 5030, 9071, 8 RCRA metals.
4-6	MC	N/A	3.0	Dark gray fill material, non-cohesive, non-plastic, fine-medium grained sand, high moisture content, no odor or stain.
6-8	MC	N/A	4.0	Dark gray fill material, non-cohesive, non-plastic, fine-medium grained sand, high moisture content, no odor or stain.
8-10	MC	N/A	2.0	Dark brown, organic rich clay, high moisture content, no odor or staining.
10-12	MC	N/A	N/A	No recovery.
				TD = 12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings

MW-8

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	2.0	Gray, non-plastic, non-cohesive, fill material, medium grained quartz sand, low moisture content, no odor or staining. Sample collected for 3550, 5030, 9071, 8 RCRA metals.
2-4	MC	N/A	3.0	Dark gray, fill material, non-cohesive, non-plastic, fine-medium grained sand, moderate-high moisture content, no odor or staining.
4-6	MC	N/A	70.0	Yellowish and black fill material consisting mainly of organic debris with a minor non-cohesive, non-plastic, clay, silt and sand fraction, high moisture content, chemical odor, no staining.
6-8	MC	N/A	N/A	Large root, no recovery.
8-10	MC	N/A	N/A	No recovery.
10-12	MC	N/A	N/A	No recovery.
				TD = 12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings

Soil Boring Logs
Bordeaux Tract
Wilmington, North Carolina
July 2005

MW-9

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	2.0	Tan, fill material, non-plastic, non-cohesive, medium grained quartz sand, low moisture content, no odor or staining. Sample collected for 3550,5030, 9071, 8 RCRA metals
2-4	MC	N/A	2.0	Tan, fill material, non-plastic, non-cohesive, medium grained quartz sand, low moisture content, no odor or staining.
4-6	MC	N/A	1.0	Dark gray, non-plastic, non-cohesive, fine-medium grained quartz sand high moisture content, no odor or staining.
6-8	MC	N/A	N/A	No recovery due to shallow water table.
8-10	MC	N/A	N/A	No recovery.
10-12	MC	N/A	N/A	No recovery.
				TD = 12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings

MW-10

Interval (feet)	Sample type/ number	Blow count per 6-inches	PID (ppm)	Description
0-2	MC	N/A	2.0	Tan, fill material, non-plastic, non-cohesive, medium grained quartz sand, low moisture content, no odor or staining. Sample collected for 3550,5030, 9071, 8 RCRA metals
2-4	MC	N/A	2.0	Tan, fill material, non-plastic, non-cohesive, medium grained quartz sand, low moisture content, no odor or staining.
4-6	MC	N/A	1.0	Tan, fill material, non-plastic, non-cohesive, medium grained quartz sand, low moisture content, no odor or staining.
6-8	MC	N/A	1.0	Tan, fill material, non-plastic, non-cohesive, medium grained quartz sand, low moisture content, no odor or staining.
8-10	MC	N/A	N/A	No recovery.
10-12	MC	N/A	N/A	No recovery.
				TD = 12.0'

Notes: ppm = parts per million
VOC = Volatile organic compound
S = split spoon sample

AS = auger sample
MC = Geoprobe macro core
DC = drill cuttings