



Project Name:		Boring Location: Delaware City Refinery
Location: Delaware City, DE	Project Number:	Drilling Company: ProSonic ()
Date Started: Unknown	Date Finished: 5/24/2007	Ground Elevation (ft/msl): 24.7
Drilling Method: Roto-Sonic	Sampling Method:	Total Depth (ft): 137.0'
State Permit Number: NA		Boring Diameter (in): "
		Water Level During Drilling (ft/bgs):
		Weather Conditions:
		Logged By: Stephen Zahniser

Depth (feet)	Blow Counts	Recovery (inches)	PID (ppm)	Sample ID	Sample Interval	USCS	Lithology	Lithologic Description	Remarks
0						ML		0' - 4' Dark yellowish brown (10YR 4/4) mottled with yellowish brown (10YR 5/6) and light yellowish brown (10YR 6/4) SILT, little to some clay, little mica, numerous rootlets, rootlets become few at 6' bgs	All PID readings taken at 6 intervals
1									
2									
3									All PID readings are 0.0 ppm unless noted otherwise
4						GW CL ML		4' - 4.2' Yellowish brown (10YR 5/7) COBBLE and coarse-grained rounded to well rounded GRAVEL	
5						ML CL		4.2' - 4.3' Yellowish brown (10yr 5/7) CLAY laminated 4.3' - 4.8' Pale brown (10YR 6/3) SILT, little mica, trace fine-grained sand	
6								4.8' - 5' Yellowish brown (10YR 5/6) SILT, trace fine-grained sand 5' - 6' Pink (10YR 7/3) mottled with brown (7.5YR 5/4) CLAY	
7						CL		6' - 7' No Lithology 7' - 8.6' Brownish yellow (10YR 6/8) laminated with light gray (10YR 7/2) CLAY, trace to little fine-grained sand	
8									
9						ML		8.6' - 9.5' Yellowish brown (10YR 5/4) mottled with brownish yellow (10YR 6/8) SILT, little fine-grained sand, trace mica	
10						ML		9.5' - 20.8' SILT and fine-grained SAND, trace coarse-grained sand, increase in silt with depth	
11									
12									
13									
14									
15									



Depth (feet)	Blow Counts	Recovery (inches)	PID (ppm)	Sample ID	Sample Interval	USCS	Lithology	Lithologic Description	Remarks
15									
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21						ML		20.8' - 37' Greenish black (GLEY 1 2.5/10Y) SILT, little fine-grained sand, little to some mica, moderately cohesive	
22									
23									
24									
25									
26									
27								26.4' increase in silt some mica, less cohesive	
28									
29									
30									
31									
32									
33									



Depth (feet)	Blow Counts	Recovery (inches)	PID (ppm)	Sample ID	Sample Interval	USCS	Lithology	Lithologic Description	Remarks
33									
34									
35									
36									
37						ML		37' - 46' Very dark greenish gray (GLEY 1 3/10Y) SILT, trace fine-grained sand, micaceous, minor glauconite	Quaternary - Merchantville Contact (37.0')
38									
39									
40									
41									
42									
43									
44									
45									
46						CL		46' - 95.4' Very dark greenish gray (GLEY 1 3/10Y) silty CLAY, glauconite lenses, micaceous, trace coarse-grained rounded sand	
47									
48									
49									
50									
51									



Depth (feet)	Blow Counts	Recovery (inches)	PID (ppm)	Sample ID	Sample Interval	USCS	Lithology	Lithologic Description	Remarks
52								52' Very dark greenish gray (GLEYS 1 3/10Y) silty CLAY, glauconite lenses, micaceous, trace coarse-grained rounded sand	
53									
54									
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Depth (feet)	Blow Counts	Recovery (inches)	PID (ppm)	Sample ID	Sample Interval	USCS	Lithology	Lithologic Description	Remarks
70								70' Very dark greenish gray (GLEYS 1 3/10Y) silty CLAY, glauconite lenses, micaceous, trace coarse-grained rounded sand	
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87									



Depth (feet)	Blow Counts	Recovery (inches)	PID (ppm)	Sample ID	Sample Interval	USCS	Lithology	Lithologic Description	Remarks
88									
89								88.7' abundant glauconite lenses, little mica and sands (trace fossils/burrows) at 88.8'-90.5' bgs	
90									
91									
92									
93									
94									
95									
96						CL		95.4' - 110.8' Silty CLAY, trace fine-grained sand, micaceous, glauconite lenses	
97									
98									
99									
100									
101									
102									
103									
104									
105									



Depth (feet)	Blow Counts	Recovery (inches)	PID (ppm)	Sample ID	Sample Interval	USCS	Lithology	Lithologic Description	Remarks
106									
107									
108									
109									
110									
111						SP		110.8' - 119.3' Light gray (10YR 7/1) fine-grained rounded SAND, sorted	Merchantville - Potomac Contact (110.8')
112									
113									
114								114.5' very pale brown (10YR 7/4)	
115									
116									
117									
118								117.8' reddish yellow (7.5YR 8/6)	
119									
120						CH SP		119.3' - 119.45' Light gray (10YR 7/1) CLAY, plastic 119.4' - 121.1' Yellow (10YR 8/6) fine-grained rounded SAND, sorted	
121						CH SP ML		120.6' - 120.75' Light gray (10YR 7/1) CLAY, plastic 120.75' - 121.1' Yellow (10YR 7/8) fine-grained rounded SAND, sorted	
122						SC		121.1' - 121.8' Yellow (10YR 7/8) SAND, SILT and seams of CLAY 121.8' - 123.6' Very pale brown (10YR 8/2) clayey SAND	
123									



Depth (feet)	Blow Counts	Recovery (inches)	PID (ppm)	Sample ID	Sample Interval	USCS	Lithology	Lithologic Description	Remarks
124						CH		123.6' - 127.7' Pinkish white (2.5YR 8/2) CLAY, hard plastic, laminates	
125									
126									
127									
128						SP		127.7' - 128.5' Very pale brown (10YR 8/2) fine-grained subrounded SAND, sorted	
129						CH		128.5' - 129.5' Very pale brown (10YR 8/2) CLAY, stiff plastic, trace silt	
130						CH		129.5' - 131.7' Very pale brown (10YR 8/2) mottled with dark reddish brown (2.5YR 3/4) CLAY, little silt, hard	
131									
132						ML CH		131.7' - 131.9' Very pale brown (10YR 8/2) SILT some clay, hard	
133						CH		131.9' - 132.9' Very pale brown (10YR 8/2) CLAY, stiff, hard, plastic 132.7' reddish black (2.5YR 2.5/1)	
134						SP- SM CL		132.9' - 133.5' Very pale brown (10YR 8/2) mottled with dark reddish brown (2.5YR 3/4) at top CLAY, little silt	
135								133.5' - 133.9' Very pale brown (10YR 8/2) mottled with reddish yellow (7.5YR 8/6) very fine-grained silty SAND, trace to little	
136						ML		133.9' - 136' Very pale brown (10YR 8/2) mottled with reddish yellow (7.5YR 8/6) CLAY, trace silt	
137						CH		136' - 136.8' Very pale brown (10YR 8/2) mottled with reddish yellow (7.5YR 8/6) SILT, little very fine-grained sand	
138								136.8' - 137' Very pale brown (10YR 8/2) CLAY, plastic, stiff	
139								137' End of Boring	
140									
141									