

Date Start/Finish: 5/17/2010
Drilling Company: Boart Longyear
Driller's Name: Rodney (Bear) Parr
Drilling Method: Rotosonic
Sampling Method: 10 ft by 4 in (ID) Core Barrel
Rig Type: Track-mounted Rotosonic

Northing: 215860.80
Easting: 690125.06
Casing Elevation: 26.07 ft msl
Borehole Depth: 227 ft bgs
Surface Elevation: 26.32 ft msl
Descriptions By: David Heuer

Well/Boring ID: MW-12D
Client: Public Well TCE Site
Location: WB Atkins Memorial Park, Millsboro, DE

DRAFT

DEPTH	ELEVATION	PID (ppm)	Recovery (feet)	Geologic Column	Stratigraphic Description	Well/Boring Construction
25		0 - 7 ft	100		Hand cleared location to 5 ft bgs - Brown-light brown Silty VF SAND	
5			Light gray-tan-orange Silty VF SAND, little to trace Clay, slightly cohesive			
20			Light brown-tan-light gray-orange Silty (20 to 30%) VF-F SAND, little to trace M-C Sand and F-M Gravel, subrounded, silt seem (6" thick) at 12 ft bgs			
10		7 - 17 ft	100		Light gray-tan-orange Silty (20 to 30%) VF-F SAND, trace M-C Sand and F Gravel	
15					Light gray-tan-orange Silty (20 to 30%) VF-F SAND, trace M-C Sand and F Gravel	
20		17 - 27 ft	100		Tan-orange Silty VF-M SAND, little to trace C Sand and F Gravel	
5					Tan-orange Silty VF-C SAND and F-M GRAVEL, trace C Gravel, sub angular to round	
25					Tan-orange Silty VF-M SAND, trace C Sand and F Gravel	
0					Tan-orange Silty VF-M SAND, little to trace C Sand and F Gravel, Sand (F-C) and	
30		27 - 37 ft	100		Tan-orange Silty VF-C SAND and F-M GRAVEL, trace C Gravel, sub angular to round	
-5					Tan-orange Silty VF-M SAND, trace C Sand and F Gravel	
35					Tan-orange Silty VF-M SAND, little to trace C Sand and F Gravel, Sand (F-C) and	
-10						

Remarks: Water levels measured on 5/21/10: MW-12S - 17.60 ft bgs; MW-12M - 13.28 ft bgs; MW-12D - 11.10 ft bgs.



Date Start/Finish: 5/17/2010
Drilling Company: Boart Longyear
Driller's Name: Rodney (Bear) Parr
Drilling Method: Rotosonic
Sampling Method: 10 ft by 4 in (ID) Core Barrel
Rig Type: Track-mounted Rotosonic

Northing: 215860.80
Easting: 690125.06
Casing Elevation: 26.07 ft msl
Borehole Depth: 227 ft bgs
Surface Elevation: 26.32 ft msl
Descriptions By: David Heuer

Well/Boring ID: MW-12D
Client: Public Well TCE Site
Location: WB Atkins Memorial Park, Millsboro, DE

DRAFT

DEPTH	ELEVATION	PID (ppm)	Recovery (feet)	Geologic Column	Stratigraphic Description	Well/Boring Construction
40	-15	37 - 47 ft	100	[Orange pattern]	Gravel (F-M) lens (4" thick) at 38 ft bgs	[Grey pattern]
					Tan (trace orange color) Silty VF SAND	
					Tan-orange Silty VF-M SAND, little to trace C Sand and F-M Gravel	
45	-20	47 - 57 ft	100	[Orange pattern]	Tan-orange Silty VF-F SAND, little M-C Sand and F Gravel	
					Tan-orange Silty VF-F SAND, little M-C Sand and F Gravel	
					Orange Silty VF-F SAND, trace M-C Sand and Cobble	
					Light orange Silty (25 to 35%) VF SAND, trace F Sand	
50	-25	57 - 67 ft	100	[Orange pattern]	Orange Silty VF-F SAND, trace M-C Sand and Cobble	
					Light orange Silty VF-F SAND, trace M-C Sand and F Gravel	
					Orange Silty (15 to 25%) VF-C SAND, little F-M Gravel	
55	-30	67 - 77 ft	100	[Orange pattern]	Orange Silty VF-F SAND, trace M-C Sand and Cobble	
					Light orange Silty VF-F SAND, trace M-C Sand and F Gravel	
					Orange Silty (15 to 25%) VF-C SAND, little F-M Gravel	
60	-35				Orange Silty VF-C SAND and F-C GRAVEL, little Cobble	
65	-40					
70	-45					
75						

Remarks: Water levels measured on 5/21/10: MW-12S - 17.60 ft bgs; MW-12M - 13.28 ft bgs; MW-12D - 11.10 ft bgs.



Date Start/Finish: 5/17/2010
Drilling Company: Boart Longyear
Driller's Name: Rodney (Bear) Parr
Drilling Method: Rotosonic
Sampling Method: 10 ft by 4 in (ID) Core Barrel
Rig Type: Track-mounted Rotosonic

Northing: 215860.80
Easting: 690125.06
Casing Elevation: 26.07 ft msl

Borehole Depth: 227 ft bgs
Surface Elevation: 26.32 ft msl

Descriptions By: David Heuer

Well/Boring ID: MW-12D

Client: Public Well TCE Site

Location: WB Atkins Memorial Park, Millsboro, DE

DRAFT

DEPTH	ELEVATION	PID (ppm)	Recovery (feet)	Geologic Column	Stratigraphic Description	Well/Boring Construction
-50						
-80					Light orange Silty VF SAND	
-55		77 - 87 ft	100		Light orange-orange Silty VF-M SAND, little C Sand and F Gravel	
-85						
-60						
-90						
-65		87 - 97 ft	100			
-95					Light brown to dark brown VF-C SAND and F GRAVEL	
-70					Gray VF Sandy SILT to Silty VF SAND with rounded F Gravel (quartz) and black lignite and brown wood	
-100					Gray to dark gray VF Sandy SILT/Silty VF SAND, trace to little Clay, Clayey Silt lens (1 ft thick) at 98 ft bgs	
-75		97 - 107 ft	100			
-105					Gray Clayey SILT, stiff, moist	
-80						
-110					Gray VF Sandy SILT	
-85		107 - 117 ft	100		Dark gray-black CLAY and SILT with white shells	
					Gray Clayey SILT, stiff, moist, VF Sandy SILT at bottom 4" of interval	

MW-12S well screen 85 to 95 ft bgs. Well installed next to MW-12D by mud rotary method.

Remarks: Water levels measured on 5/21/10: MW-12S - 17.60 ft bgs; MW-12M - 13.28 ft bgs; MW-12D - 11.10 ft bgs.



Date Start/Finish: 5/17/2010
Drilling Company: Boart Longyear
Driller's Name: Rodney (Bear) Parr
Drilling Method: Rotosonic
Sampling Method: 10 ft by 4 in (ID) Core Barrel
Rig Type: Track-mounted Rotosonic

Northing: 215860.80
Easting: 690125.06
Casing Elevation: 26.07 ft msl
Borehole Depth: 227 ft bgs
Surface Elevation: 26.32 ft msl
Descriptions By: David Heuer

Well/Boring ID: MW-12D
Client: Public Well TCE Site
Location: WB Atkins Memorial Park, Millsboro, DE
DRAFT

DEPTH	ELEVATION	PID (ppm)	Recovery (feet)	Geologic Column	Stratigraphic Description	Well/Boring Construction
115	-90					
120	-95	117 - 127 ft	100		Gray VF SAND and SILT, trace Clay, cohesive, semi-stiff, wet	
125	-100				Gray-dark gray Silty (20 to 30%) VF SAND, little F Sand, loose, wet	
130	-105	127 - 137 ft	100		Gray Silty VF-M SAND, little C Sand and F-M Gravel and sand concretions (gravel size)	
135	-110				Gray Clayey SILT, trace VF Sand, stiff, moist	
140	-115	137 - 147 ft	100		Gray-dark gray Silty (25 to 35%) VF SAND, wet, loose	
145	-120				Gray CLAY and SILT, stiff, moist	
150	-125				Light gray Silty VF SAND, loose, wet	
					Gray Silty CLAY, very stiff, medium-low moisture	

MW-12M well screen 127 to 132 ft bgs. Well installed next to MW-12D by mud rotary method.

Remarks: Water levels measured on 5/21/10: MW-12S - 17.60 ft bgs; MW-12M - 13.28 ft bgs; MW-12D - 11.10 ft bgs.



Date Start/Finish: 5/17/2010
Drilling Company: Boart Longyear
Driller's Name: Rodney (Bear) Parr
Drilling Method: Rotosonic
Sampling Method: 10 ft by 4 in (ID) Core Barrel
Rig Type: Track-mounted Rotosonic

Northing: 215860.80
Easting: 690125.06
Casing Elevation: 26.07 ft msl

Borehole Depth: 227 ft bgs
Surface Elevation: 26.32 ft msl

Descriptions By: David Heuer

Well/Boring ID: MW-12D

Client: Public Well TCE Site

Location: WB Atkins Memorial Park, Millsboro, DE

DRAFT

DEPTH	ELEVATION	PID (ppm)	Recovery (feet)	Geologic Column	Stratigraphic Description	Well/Boring Construction
		147 - 157 ft	100			
155	-130				Gray-dark gray Silty VF SAND, loose, wet, wood fragments at 154 ft bgs	
160	-135	157 - 167 ft	100		Gray-light gray Silty (15 to 25%) VF SAND, wet, loose	
165	-140				Gray-light gray Silty (15 to 25%) VF SAND, wet, loose, Clayey Silt seem (4" thick) near bottom of interval	
170	-145	167 - 177 ft	100			
175	-150				Light gray VF SAND, 2" thick silt seem near bottom of interval	
180	-155	177 - 187 ft	100			
185	-160				Light gray VF SAND	

Remarks: Water levels measured on 5/21/10: MW-12S - 17.60 ft bgs; MW-12M - 13.28 ft bgs; MW-12D - 11.10 ft bgs.



Date Start/Finish: 5/17/2010
Drilling Company: Boart Longyear
Driller's Name: Rodney (Bear) Parr
Drilling Method: Rotosonic
Sampling Method: 10 ft by 4 in (ID) Core Barrel
Rig Type: Track-mounted Rotosonic

Northing: 215860.80
Easting: 690125.06
Casing Elevation: 26.07 ft msl
Borehole Depth: 227 ft bgs
Surface Elevation: 26.32 ft msl
Descriptions By: David Heuer

Well/Boring ID: MW-12D
Client: Public Well TCE Site
Location: WB Atkins Memorial Park, Millsboro, DE
DRAFT

DEPTH	ELEVATION	PID (ppm)	Recovery (feet)	Geologic Column	Stratigraphic Description	Well/Boring Construction
190	-165	187 - 197 ft	100	Geologic Column		<p>MW-12D well screen 210 to 220 ft bgs.</p>
195	-170					
200	-175	197 - 207 ft	100			
205	-180					
210	-185	207 - 217 ft	100			
215	-190					
220	-195	217 - 227 ft	100			
225	-200					



Remarks: Water levels measured on 5/21/10: MW-12S - 17.60 ft bgs; MW-12M - 13.28 ft bgs; MW-12D - 11.10 ft bgs.