

2" well essentially fine to medium sand 0-25'



DUFFIELD ASSOCIATES
Consultants in the Geosciences

OBSERVATION WELL OB-1

Qh14-04

Permit No : 212418

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The Landings at Pepper Creek
Hydrogeological Evaluation
Dagsboro, DE
6143.YC

Date Started : December 2, 2005
Date Completed : December 2, 2005
Logged by : JSD
Weather : Sunny, Windy, 40's
Driller/Agency : G Truver Sr./Walton Corp

Drilling Equipment : ATV-mounted CME 55
Drilling Methods : 4.25" H.S.A.
Surface Elevation : 19.0 feet
Northing : 63,562 U.S. Meters DE SPC NAD 83
Easting : 218,319 U.S. Meters DE SPC NAD 83

Depth in feet	Surf. Elev. 19.0 ft	GRAPHIC	USCS	USDA	Sample Condition	Water Levels	SAMPLES	Sample Number	Blows per 6 inches	Recovery (ft)	Well Construction Details	WATER LEVEL	Observation Well 212418
					<input checked="" type="checkbox"/> Remitted	<input checked="" type="checkbox"/> During Drilling							
DESCRIPTION													
0													
18.7								1A	1-1-1-2	1.8			
								1B					
2								2	1-2-2-2	1.5	2" Schedule 40 PVC Solid Well Casing		
4			SP	S				3	2-3-3-3	1.4			
6								4	3-3-4-4	1.9	Cement/Bentonite Grout		
8								5A	3-4-5-7	1.7			
10.5			SM	LS/SL				5B					
10.2			SP-SM	LS/S				5C					
10								6A	7-5-6-6	2.0			
8.7			SM	SL				6B					
8.2			SP-SM	LS/S				6C					
12								7	3-6-7-7	1.7			
14			SP-SM	LS/S									6.0

NOTES:

1. Test boring terminated at 25.0 feet +/- below existing ground surface (b.e.g.s.).
2. Some topsoil removed for previous clearing.
3. Wet-on-spoon at 18.5 feet +/-; water level within the augers at 17.9 feet +/- with the bottom of the augers at 18.0 feet +/- b.e.g.s.
4. Observation Well MW-1 (DNREC ID 212418) installed upon completion.
5. Auger boring performed in general accordance with ASTM D 1452.
6. Split-barrel sampling performed in general accordance with the Method for Penetrative Test and Split-Barrel Sampling (ASTM D 1586).
7. Soil descriptions performed in general accordance with ASTM D 2488, the Practice for Description and Identification of Soils (Visual-Manual Procedure).



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Depth in feet	Surf. Elev. 19.0 ft	GRAPHIC	USCS	USDA	DESCRIPTION	SAMPLES	Sample Number	Blows per 6 inches	Recovery (ft)	Well Construction Details	WATER LEVEL	Observation Well 212418
14	5.0		SP-SM	LS/S	5Y 7/2 light gray, 5Y 7/4 pale yellow, 2.5Y 6/8 olive yellow medium to coarse SAND, little fine sand, trace silt (damp).		8A	4-4-4-4	1.8	Sand Pack - #2 well sand		
16	3.9		SP-SM	LS/S	5Y 7/3 pale yellow fine to medium SAND, trace to little coarse sand, trace granules, trace to no silt (dry to damp).		8B					
16	3.0		SC-SM	LS	5Y 8/1 white fine SAND, some medium sand, trace to little silt/clay (2.5Y 6/8 olive yellow, 2.5Y 7/4 pale yellow staining from 16.3 to 17.0 feet +/-) (dry to damp from 16.0 to 16.5 feet +/-) (wet to saturated from 16.5 to 18.0 feet +/-).		9	3-2-2-2	1.8			
18	1.0		SP-SM	S/LS	5Y 7/3 pale yellow fine to medium SAND, trace coarse sand, trace silt (saturated) (lense of little granules from 18.2 to 18.3 feet +/-) (lense of 10YR 8/8 yellow coarse sand, little medium sand from 18.5 to 18.6 feet +/-).		10A	2-4-5-4	1.8			
20	-0.3		SM	LS/SL	5Y 8/2 pale yellow very fine to fine SAND, trace to little silt (coarsening down to fine to medium sand).		10B					
20	-1.0		SP-SM	LS/S	5Y 8/3 pale yellow medium to coarse SAND, trace fine sand, trace silt (saturated) (lense of 2.5Y 8/8 yellow coarse sand from 21.1 to 21.2 feet +/-).		11A	2-5-10-10	2.0	2" Schedule 40 PVC Screened Well Casing - 0.020 slot		
22	-2.2		SM	LS	5Y 7/3 pale yellow fine to medium SAND, trace to little very fine sand, trace silt (trace to little coarse sand in shoe).		11B					
22			SM	LS	5Y 7/3 pale yellow fine to medium SAND, trace to little silt, trace coarse sand, trace very fine sand (saturated) (lense of 10YR 8/8 yellow, 10YR 4/6 dark yellowish brown coarse sand, trace clay from 22.7 to 23.0 feet +/-).		12	2-4-5	1.7			
24	-4.5		SP-SM	LS/S	5Y 8/2 pale yellow fine to coarse SAND, trace silt, trace granules/pebbles (saturated) (lense of trace to little clay from 23.9 to 24.0 feet +/-) (lense of coarse sand from 24.3 to 24.5 feet +/-).		13	2-5-9	1.7			
24	-6.0											

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