

Consultants in the Geosciences

TEST BORING OW-3

Permit No : 209181

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Observation and Monitoring Well Installation Review

Wastewater Treatment Facility

At Stonewater Creek

Fairmount, Sussex County, Delaware

Date Started Date Completed

: June 30, 2005 : June 30, 2005

Drilling Methods

: ATV-mounted CME-55

: JPC

Surface Elevation

Drilling Equipment

: 4.25" H.S.A. : 23.4 feet

Weather

Logged by

: Foggy to Sunny

Northing

: 238,432 U.S. Feet DE SPC NAD 83

| 1 | | P | roject No.: | 5708.YD | Di | riiler/Agency | : J. Foley/Walton Corp | ooration | Ea | sting | : 713 | 3,866 U.Ş. Feet DE | SPC | NAD | 83 |
|----------|---------------------------|-------------|---|---------|---|---|---|--|-------------------|--|------------------|--|--------------|----------|----------------|
| ín | Surf. Elev. 23.4 ft | GRAPHIC | uscs | USDA | Sample Condition Remolded | DESCR | Water Levels During Drilling 7/7/12005 | SAMPLES | Sample Number | Blows per 6 inches | Recovery (ft) | Well Construction Details | WATER LEVEL | W 209 | Surf. Elev. |
| 2 | | SM SP-SM | APPARENT FILL: dimedium sand, little ti (damp). LS Dark grayish brown silt, trace coarse san Light brown, yellowis medium SAND, trace trace pebbles (damp depth). SM LS/S SAME (silty sand let and spacd .2 to .4 fe observed at 6.3 feet | | wn fine to mesand (damp wish brown race to little mp) (silt confidence) feet apart) eet). | vn, grayish brown fine to silt, trace coarse sand nedium SAND, little to some p). n, reddish brown fine to e silt, trace silty sand lenses, ontent decreasing with proximately .08 feet thick t) (pebbles and granules brown fine to medium | | 1 3-3-4-3 1B 3-3-4-5 2 3-3-4-5 3 6-7-5-7 | 2.0 1.7 1.7 | Bentonite Plug - 3/8" granular bentonite 2" Schedule 40 PVC Well — Casing Sand Pack #2 well sand Top of Screen— | | | 17.4 15.6 | | |
| 10 12 14 | 9.2 | | SW-SM | | coarse SAND and to little fine to me sorted) (saturated | d GRANUL dium sand i d). | yellow coarse to very ES, trace to little silt, tra (moderately to poorly ace to little silt (well sorte | $\bot \triangle$ | 5A 5B | 4-5-6-8 | 1.6 | 2" Schedule 40 PVC Screened Casing - 0.020" slot | V | | |

NOTES:

- NOTES:
 Observation Well OW-3 (DNREC ID 209181) installed upon completion.
 Wet-on-spoon encountered at 8.3 feet +/-; water level observed at 9.0 feet +/-; bottom of augers at 8.0 feet +/- b.e.g.s.
 EZ Mud used to wash out soils from the augers for samples 6 through 7.
 Auger boring performed in general accordance with ASTM D 1452.
 Sampling performed in general accordance with the Method for Penetrative Test

- and Split-Barrel Sampling (ASTM D 1586).
- Soil descriptions performed in general accordance with ASTM D 2488, the Practice for Description and Identification of Soils (Visual-Manual Procedure).
 Grain size scale utilized for soil descriptions based on a hybrid of the Udden-Wentworth Scale described in Delaware Geological Survey Open File Report 34 "Methodology for Mapping Groundwater Recharge in Delaware's Coastal Plain."



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Easting

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| Project No.: 5708.YD | | | roject No.: | 5708.YD | Driller/Agency : J. Foley/Walton Corporation | | | n Easting | | : 713,866 U.S. Feet DE | | 7 | |
|--|---------------------------|---------|-------------|---------|--|--|---------|------------------|---------|------------------------|--|-------------|-------------------------------|
| | | | | | Sample Condition Remolded | Water Levels Ouring Drilling | | | | | | | Observation Well 209181 |
| in | Surf. Elev. 23.4 ft | GRAPHIC | nscs | USDA | DESC | ▼ 7/7/2005 RIPTION | SAMPLES | Sample Number | | Recovery (ft) | Well Construction Details | WATER LEVEL | Surf. Elev. 23.4 ft |
| 16- - | -1.6 | | SP-SM | S | | very coarse SAND and , trace medium sand, trace loderately sorted) (saturated). um to coarse SAND, trace to | | 6 | 3-3-5-4 | 1.3 | Bottom of Screen Bottom of Borehole - Property 8" distributed at 25 feet below existing ground surface. | | 1.0 |

NOTES:

- Observation Well OW-3 (DNREC ID 209181) installed upon completion.

 Wet-on-spoon encountered at 8.3 feet +/-; water level observed at 9.0 feet +/-; Vive-on-spoon encountered at 3.5 feet +/-, water level observed at 3.5 feet +/-, be.g.s.

 EZ Mud used to wash out soils from the augers for samples 6 through 7.

 Auger boring performed in general accordance with ASTM D 1452.

 Sampling performed in general accordance with the Method for Penetrative Test
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