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CNC CHARLESTON
5090.3a

WELL INSTALLATION LOGS CHARLESTON NAVAL BASE CONTAINER TERMINAL PHASE
1 UPLAND SITE PREPARATION CNC CHARLESTON SC
02/05/2009
F&ME CONSULTANTS

F&ME CONSULTANTS

GEOTECHNICAL • ENVIRONMENTAL • MATERIALS

February 05, 2009

Ms. Jan T. Cooke, Hydrogeologist
SCDHEC – Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

RE: Well Installation Logs
Charleston Naval Base Container Terminal
Phase 1 – Upland Site Preparation
Site ID #: 04105 Approval #: 3522 Date of Issuance: 20 January 2009
F&ME Project: G4679.010

Dear Ms. Cooke:

F&ME has completed installation of one (1) groundwater observation well at the above referenced project. This well was installed to a depth of approximately fourteen (14) feet below the existing ground surface and will be monitored for groundwater elevation only during placement and consolidation of embankment surcharge for a proposed new roadway. The well was installed by a Well Driller registered in South Carolina. The well log and well development record are attached for your information.

Once this portion of construction has been completed, F&ME will request to abandon this well. The well will then be abandoned in accordance with SCDHEC requirements.

If you have any questions concerning this well log or require additional information, please contact me.

Respectfully Submitted,

F&ME Consultants



James R. Nehez, III, P.E.
Vice President

RECEIVED

FEB 12 2009

LAND REVITALIZATION
DIVISION - BLWM

COLUMBIA OFFICE
3112 Devine Street
Columbia, SC 29205
ph (803) 254-4540
fx (803) 254-4542

MYRTLE BEACH OFFICE
1903 Legion Street
Myrtle Beach, SC 29577
ph (843) 626-9253
fx (843) 448-0681



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INSTRUCTIONS
Water Well Record

This form is to be completed by an SC Certified Water Well Driller within thirty days of completion of the well. One copy is to be submitted to SCDHEC, another is intended for the well owner, and the final copy is for the well driller. In most cases, well location, owner, driller and other administrative information can be obtained from the Notice of Intent form. If additional comments are necessary, attach those on a separate sheet.

1. Include the name and present mailing address and telephone number of the well owner. This can be a tract owner or developer in the case of a new subdivision.
2. Indicate the exact number, street, city, zip, and county for the location of the well. If the street address is not available, attach a sketch map for general location and include lot number if it is in a new subdivision. "Same as 1" can be indicated if that is the case.
3. For public water supply, indicate system name and number.
4. Check appropriate box; for abandoned well, note grout depths. For the driller's log, describe the formation, indicate the thickness and complete the depth to the bottom of the stratum.
5. Insert any comments.
6. Check the box indicating the drilling method.
7. Insert the eight-digit number assigned when the Notice of Intent was submitted for a residential or irrigation well. This space can also be used for the SCDHEC site identification number.
8. Check box indicating use.
9. Indicate the total depth in the space provided; fill in the requested dates.
10. Check appropriate boxes and complete the information requested for the casing.
11. Complete the information requested for the screen; check the appropriate box.
12. Measure the static water level 24 hours after well completion and provide the measurement in the space.
13. Provide pumping level, time, and rates in the appropriate spaces.
14. Indicate whether these analyses were run.
15. Provide the requested information on filter pack.
16. Check the appropriate boxes and provide the type and depth of the grout.
17. Complete the requested information concerning the nearest source of possible contamination.
18. If installed, provide the information requested concerning the pump.
19. Print name, SC certification number, address and business or mobile (or both) telephone number and fax number for the well driller.
20. The well driller installing the well signs and dates the form. If the driller is Level D, provide the supervising driller's name.

The completed Form 1903 should be submitted to the SCDHEC, Bureau of Water, Private Well Program, 2600 Bull Street, Columbia, SC 29201-1708.

WELL DEVELOPMENT RECORD

F&ME CONSULTANTS

Well #: R-GOW62
 Date: 2/3/2009
 Field Personnel: Rebecca Campbell/Jim Nehez
 Job Title: CIFRT201B - Phase I Upland Site Prep
 Job #: G4679.010
 Weather Conditions: clear
 Ambient Air Temperature: 45 °F

Well Diameter: 2 in
0.1667 ft
 Conversion factor (c) $[3.14159 \times (d/2)^2] \times 7.48$
 c (gal/ft) = 0.163

pH Meter serial #: 14230
 Conductivity Meter serial #: 14230
 Development Method: Bailing
 Equipment Used: 36" Disposable Polyethylene Bailer
Aqua Bailers model # PY16x36SCDW

1 Casing Volume: 2.29 gal
 3 Casing Volumes: 6.89 gal
 (standard purge volume)
 Length of Water Column 10.85 ft

Volume of Water Purged: 6 gal
 Volume of Sediment Removed: 0 ft³
 Description of Sediment Removed:

Grey silty sand

Prior to Development

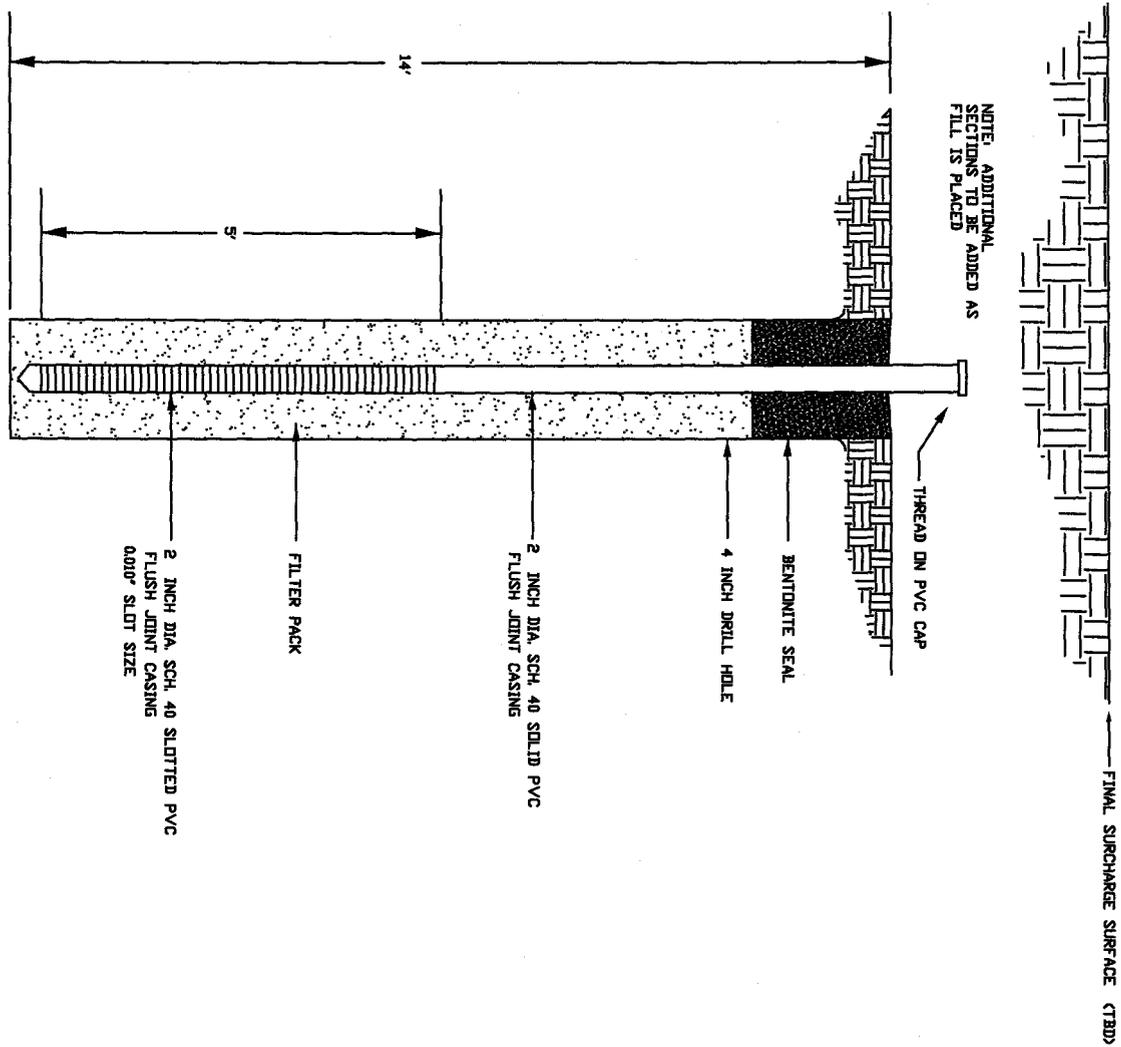
Date: 3-Feb
 Total Well Depth*: 15.45 ft
 Depth to Ground Water: 4.60 ft
 Elevation of Ground Water: 10.90

After Development

Date: 3-Feb
 Total Well Depth*: 15.45 ft
 Depth to Ground Water: 4.55 ft
 Elevation of Ground Water: 10.95

*well depths variable due to addition of casing as fill material is placed

| | | | | | | |
|--------------------------------|------|------|-------|-------|--|--|
| Volume Purged (gal) | | 2 | 2 | 2 | | |
| Time (military) | 1215 | 1218 | 1223 | 1236 | | |
| pH (su) | | 6.15 | 5.78 | | | |
| Specific Conditions (umhos/cm) | | | 15.64 | 17.08 | | |
| Water Temp (°F) | | 60.8 | 60.4 | 61.1 | | |
| Turbidity | 3-4 | 3 | 3 | | | |



R-GOW62
DRAWING NUMBER:

F&ME CONSULTANTS
PROJECT NUMBER:

G4679.00

VW PIEZOMETER SCHEMATIC (VWP62 b)

CIFCRT201B - PHASE 1 UPLAND SITE PREPARATION

SOUTH CAROLINA PORTS AUTHORITY
CHARLESTON COUNTY, SOUTH CAROLINA

F&ME
CONSULTANTS

GEOTECHNICAL - ENVIRONMENTAL - MATERIALS
COLUMBIA, SOUTH CAROLINA

ORIGINAL:
05 FEBRUARY 2009

REVISIONS:

1

2

3

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SCALE:
NONE

DRWN BY: JFH
CHKD BY:
APPR BY:

NOTES: