

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:
B 3667
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES
JAMES L. CALVER, COMMISSIONER
WATER WELL COMPLETION REPORT

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

OWNER: Tidewater Construction Corporation Mailing Address: _____

TENANT: _____ Mailing Address: _____

DRILLER: R. L. Magette Company Mailing Address: Smithfield, Va.

WELL LOCATION: County Surry Approx. _____ feet miles _____ (direction) of
Hog Island VEP Station and _____ feet miles _____ (direction) of

(GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.)

DATE STARTED: 3-30-70 DATE COMPLETED: 4-4-70

TYPE OF DRILL RIG USED: Hydraulic Rotary TOTAL DEPTH 415 feet

WATER LEVEL: Stands 67 feet below surface OR " " " " " "
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Pump
Drawdown 3 feet
Rate 20 gal. per min.
Duration 48 hrs., 0 min.

HOLE SIZE: 10 inches from 0 to 50 feet
6 inches from 50 to 415 feet

WATER ZONES: from 405 to 415 feet
from _____ to _____ feet
from _____ to _____ feet

SCREEN SIZE: 4 inches from 405 to 415 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

WATER: Color _____ Taste _____
Odor _____ Temp. _____ °F

CASE SIZE: 4 inches from 0 to 405 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

WELL TO SUPPLY: (check one) Home _____
Farm _____ Town _____ School _____
Industry X Other _____

GROUTING: Method Pressure
Material Cement Depth 50 feet

WATER ANALYSIS AVAILABLE: Yes _____ No _____

PUMP: Type Deming 60 cycle Sub.
Capacity 1 1/2 HP gal per min
Depth of intake 105 feet

DRILL CUTTINGS SAVED: Yes X No _____

(DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT INTERVALS. THESE SAMPLES MAY BE SHIPPED TO THIS OFFICE EXPRESS COLLECT. SAMPLE BAGS ARE FURNISHED FREE OF CHARGE UPON REQUEST.)

REMARKS: _____

LOG

FURNISHED BY: _____ DATE: _____

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO		
0	20	Light brown & blue clay	
20	40	Gray clay & shell	
40	60	" " "	
60	80	Blue clay	
80	100	Blue clay w/shell	
100	120	" " "	
120	140	" " "	
140	160	" " "	
160	180	" " "	
180	200	" " "	
200	220	Hard zone (no sample)	
220	240	Blue clay	
240	260	Fine black sand w/some gravel Drilling mud to heavy (no sample)	
260	280	Drilling mud to heavy (no sample)	
280	300	Ditto	
300	320	Ditto	
320	340	Multi colored clay	
340	360	Ditto	
360	380	Medium sand	
380	400	Ditto	
400	415	Coarse sand	

VIRGINIA DIVISION OF MINERAL RESOURCES
 Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

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Date rec'd: 4/20/70 Date Processed: 4/21/70

PROPERTY: Tidewater Const. Co. (Veeco)

COMPANY: Magette

COUNTY: Surry (Hog Island)

Well Repository No: W-2799

C- 132

Sample Interval: from: to:
 20 415'

Number of samples: 16

Total Depth: 415'

Oil or Gas: Water X Exploratory:

From-To	From-To	From-To	From-To
- 20	-	-	-
- 40	-	-	-
- 60	-	-	-
- 80	-	-	-
- 100	-	-	-
- 120	-	-	-
- 140	-	-	-
- 160	-	-	-
- 180	-	-	-
- 200	-	-	-
- 240	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
- 340	-	-	-
- 360	-	-	-
- 380	-	-	-
- 400	-	-	-
- 415	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All intervals have both washed and unwashed samples.

OWNER: Tidewater Construction Co.
DRILLER: Magette
COUNTY: Surry (Hog Island)

W#: 2799
C#: 132
TOTAL DEPTH: 415'

GEOLOGIC LOG

Depth
(feet)

- 0-20 Clay — grayish orange; moderate sand; medium grained; subangular to subrounded; moderately well sorted; quartz; feldspar; ferruginous; few grains of glauconite; few opaques; black phosphatic material.
- 20-40 Clay — light olive gray; silty; sandy; fine grained, few pebbles; subangular to subrounded; well sorted; quartz; few shell fragments; black phosphatic material; few opaques; muscovite; forams (inc. Bulimina, Nonion, and Textularia); bone fragments; ostracode; spines rare.
- 40-60 Clay — light olive gray; abundant sand; fine to medium grained, few granules; subangular to subrounded; moderately sorted; quartz; black phosphatic material; some vivianite (bladed and balls); few opaques; shell fragments; few grains of glauconite.
- 60-80 Clay — yellowish gray; sandy; fine to medium grained, few pebbles; subangular to subrounded; moderately sorted; quartz; black phosphatic material; some vivianite (bladed and balls); forams (inc. Nonion, and Bulimina); glauconite.
- 80-100 Clay — yellowish gray; sandy; fine to medium grained, pebbles; subangular to subrounded; poorly sorted; quartz; black phosphatic material; vivianite; forams (inc. Nonion, Textularia, and Bulimina); glauconite.
- 100-120 Clay — yellowish gray; sandy; fine to medium grained; subangular to subrounded; moderately sorted; quartz; black phosphatic material; forams (inc. Bulimina, Nonion, Textularia, Siphogenerina, Uvigerina, and Buccella); shell fragments; glauconite, spines; vivianite.
- 120-140 Clay — yellowish gray; sandy; fine to medium grained, pebbles; subangular to subrounded; moderately sorted; quartz; black phosphatic material; shell fragments; forams (inc. Bulimina, Textularia, and Nonion); spines; glauconite; ostracodes; vivianite.
- 140-160 Clay — yellowish gray; minor pinkish clay; sandy; fine to medium grained, granules, pebbles; subangular to subrounded; moderately sorted; quartz; shell fragments; glauconite; forams (inc. Nonion, Bulimina, Buccella, Quinqueloculina, Textularia, and Robulus); ostracodes; shark's tooth.

Depth
(feet)

- 160-180 Clay — yellowish gray; sandy; medium grained, few granules, few pebbles; subangular to subrounded; moderately well sorted; quartz; shell fragments inc. gastropod; black phosphatic material; muscovite; forams (inc. Nonion, Bulimina, Siphogenerina and Textularia); ostracodes; teeth; glauconite; spines.
- 180-200 Clay — yellowish gray; sandy; fine to medium grained, granules, pebbles; subangular to subrounded; moderately sorted; quartz; black phosphatic material; muscovite; shell fragments; forams (inc. Nonion, Bulimina, and Textularia) bone fragments; glauconite.
- 200-220 No sample.
- 220-240 Clay — yellowish gray; sandy; medium grained, pebbles; subangular to subrounded; moderately sorted; quartz; shell fragments; black phosphatic material; forams (inc. Nonion, Bulimina, and Textularia); spines.
- 240-320 No sample.
- 320-340 Clay — yellowish gray; sandy; fine to medium grained, few granules, pebbles; subangular to subrounded; moderately sorted; quartz; shell fragments; black phosphatic material; some muscovite; forams (inc. Nonion, Bulimina, and Textularia); glauconite; ostracode; vivianite.
- 340-360 Clay — yellowish gray with pale yellowish orange blebs; sandy; medium grained, granules, pebble; subangular to subrounded; moderately well sorted; quartz; glauconite; shell fragments; forams (inc. Nonion, Bulimina, Textularia, Buccella, and Siphogenerina); black phosphatic material.
- 360-380 Sand — light gray; slightly clayey; medium to very coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; some glauconite; few grains of garnet; sandy limestone fragment.
- 380-400 Sand — light gray; moderate clay; medium to very coarse grained, subangular to subrounded; moderately sorted; quartz; feldspar; glauconite; garnet; muscovite.
- 400-415 Sand — light gray; moderate clay; medium to coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; glauconite; garnet; sandy limestone fragment.

Vivianite verified by X-ray diffraction occurs as bladed matrix and finer grained bluish balls.

GEOLOGIC SUMMARY

<u>Depth (feet)</u>	<u>Thickness (feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
0-20	20	alluvium & Norfolk For.	Recent-Pleistocene
20-240 ⁺	220 ⁺	Calvert Formation	Miocene-Eocene
240-320	80	No Sample	
320 ⁺ -415	95 ⁺	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
July 7, 1978