

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W-4282  
C-90

MAILING ADDRESS:  
Box 3667  
Charlottesville, VA 22903

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

OFFICE ADDRESS:  
McCormick Road  
Charlottesville, Virginia

OWNER: Fetterolf Brothers Mailing Address: Syringa, Virginia 23165

TENANT: Westmoreland Sub. Mailing Address: \_\_\_\_\_

DRILLER: Fetterolf Brothers Mailing Address: Same

WELL LOCATION: County King and Queen Approx. 1 ~~feet~~ miles northeast (direction) of  
Shacklefords and 1000 ~~feet~~ miles west (direction) of Route 608

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

DATE STARTED: \_\_\_\_\_ DATE COMPLETED: March, 1974

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 305' feet

WATER LEVEL: Stands 105 feet below surface OR  
has NATURAL flow of \_\_\_\_\_ gallons per minute.

YIELD TEST: Method Air lift & submersible pump  
Drawdown 35 feet  
Rate 75 gal. per min.  
Duration 24 hrs., \_\_\_\_\_ min.

HOLE SIZE: 11 inches from 0 to 100 feet  
6 1/2 inches from 100 to 285 feet  
3 1/8 inches from 285 to 305 feet

WATER ZONES: from 285 to 305 feet  
from \_\_\_\_\_ to \_\_\_\_\_ feet  
from \_\_\_\_\_ to \_\_\_\_\_ feet

SCREEN SIZE: \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

WATER: Color clear Taste \_\_\_\_\_  
Odor none Temp. 65 °F

CASE SIZE: 4 inches from 0 to 285 feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

WELL TO SUPPLY: (check one) Home \_\_\_\_\_  
Farm \_\_\_\_\_ Town \_\_\_\_\_ School \_\_\_\_\_  
Industry \_\_\_\_\_ Other Subdivision

GROUTING: Method Slush pump  
Material cement & water Depth 100 feet

WATER ANALYSIS AVAILABLE: Yes  No \_\_\_\_\_

DRILL CUTTINGS SAVED: Yes 30 No \_\_\_\_\_

PUMP: Type Submersible  
Capacity 35 gal. per min.  
Depth of intake 168 feet

(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: Fetterolf Brothers

DATE: March 14, 1974

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO		
0	55	Sand and clay layers	
55	90	Sand and shells	
90	240	Blue clay and shell streaks	
240	285	Sand and shells with some rock	
285	305	Limestone	

(Use additional forms if necessary)

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

INTERVAL SHEET

C-90

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Well Repository No.: W-4282

Date rec'd: 1/3/75 Date Processed: 1/7/76

Sample Interval: from 0 to: 310'

PROPERTY: Westmoreland Sub.

Number of samples: 31

COMPANY: Fetterolf Brothers

Total Depth: 305'

COUNTY: King and Queen

Oil or Gas: Water: x Exploratory:

From-To	From-To	From-To	From-To	From-To
0 - 10	-	-	-	-
10 - 20	-	-	-	-
20 - 30	-	-	-	-
30 - 40	-	-	-	-
40 - 50	-	-	-	-
50 - 60	-	-	-	-
60 - 70	-	-	-	-
70 - 80	-	-	-	-
80 - 90	-	-	-	-
90 - 100	-	-	-	-
100 - 10	-	-	-	-
10 - 20	-	-	-	-
20 - 30	-	-	-	-
30 - 40	-	-	-	-
40 - 50	-	-	-	-
50 - 60	-	-	-	-
60 - 70	-	-	-	-
70 - 80	-	-	-	-
80 - 90	-	-	-	-
90 - 200	-	-	-	-
200 - 10	-	-	-	-
10 - 20	-	-	-	-
20 - 30	-	-	-	-
30 - 40	-	-	-	-
40 - 50	-	-	-	-
50 - 60	-	-	-	-
60 - 70	-	-	-	-
70 - 80	-	-	-	-
80 - 90	-	-	-	-
90 - 300	-	-	-	-
300 - 05	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Both washed and unwashed samples.

Fetterolf Brothers  
OWNER : (Westmoreland Sub.)  
DRILLER: Fetterolf Brothers  
COUNTY : King and Queen

W# : 4282  
C# : 90  
TOTAL DEPTH: 305'  
QUAD : Shacklefords

GEOLOGIC LOG

Depth  
(feet)

- 0-10 Sand- light grayish orange; slightly stained; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; some opaques; few flakes of muscovite.
- 10-20 Sand and shell fragments- yellowish gray; medium grained, some coarse grains; subangular to subrounded; well sorted; quartz; 40% shell fragments; 3% glauconite; few black phosphatic fragments; few echinoid spines.
- 20-30 Shell fragments and sand- yellowish gray; medium to coarse grained, some granules; subangular to subrounded; moderately well sorted; 65% shell fragments; quartz; 2% glauconite; few black phosphatic fragments.
- 30-40 Sand- light olive gray; slightly clayey; moderate silt; fine grained, some medium grains; subangular to subrounded; well sorted; quartz; 5% shell fragments; some glauconite; few flakes of muscovite.
- 40-50 Sand- light olive gray; slightly silty; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 2% shell fragments; 2% glauconite; few flakes of muscovite.
- 50-60 Shell fragments and sand- light olive gray; medium grained; subangular to subrounded; well sorted; 65% shell fragments; quartz; some black phosphatic material; few echinoid spines; glauconite.
- 60-70 Shell fragments- off white; slightly sandy; fine to medium grained; subangular to subrounded; moderately well sorted; 90% shell fragments; quartz; some glauconite; few black phosphatic fragments; muscovite.
- 70-80 Shell fragments and sand- light olive gray; slightly silty; fine to medium grained; subangular to subrounded; moderately well sorted; 60% shell fragments; quartz; 2% glauconite; few flakes of muscovite; few black phosphatic fragments.
- 80-90 As above except 40% shell fragments.
- 90-100 As above except fine grained; well sorted; 30% shell fragments.

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Depth  
(feet)

- 100-110 Sand- light olive gray; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 25% shell fragments; 3% glauconite; few black phosphatic fragments; muscovite.
- 110-120 As above plus moderate silt; some glauconite.
- 120-130 Sand- light olive gray; moderate silt; fine grained; subangular to subrounded; well sorted; quartz; 5% iron-stained shell fragments; some glauconite; few flakes of muscovite.
- 130-140 Clay- light olive gray; moderate sand; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; some shell fragments; glauconite.
- 140-150 As above except 3% shell fragments; few flakes of muscovite.
- 150-160 Sand and clay- light olive gray; moderate silt; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 10% shell fragments; some glauconite.
- 160-170 Clay- light olive gray; some quartz sand; few flakes of muscovite.
- 170-180 Clay- light olive gray; slightly sandy; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; 5% iron-stained shell fragments; few grains of glauconite.
- 180-190 Sand- olive light gray; abundant clay; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; some shell fragments; few grains of glauconite; few black phosphatic fragments.
- 190-200 As above except slightly clayey; abundant silt.
- 200-210 Sand- olive light gray; moderate clay; moderate silt; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; 3% shell fragments; few black phosphatic fragments; muscovite; glauconite; vivianite.
- 210-220 Sand- light olive gray; slightly clayey; slightly silty; coarse grained, some medium grains, some granules; subangular to subrounded; moderately well sorted; quartz; 7% shell fragments; some black phosphatic material; glauconite; few gypsum crystals.
- 220-230 As above except 5% shell fragments.

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Depth  
(feet)

- 230-240 Sand- olive light gray; coarse grained, some medium grains; subangular to subrounded; moderately well sorted; quartz; 3% shell fragments; some black phosphatic material; few grains of glauconite; ostracode.
- 240-250 As above except 5% shell fragments; no ostracode.
- 250-260 Sand- light olive gray; slightly clayey; moderate silt; medium to coarse grained, few granules; subangular to subrounded; moderately well sorted; quartz; 15% limestone and shell fragments; 3% glauconite; some black phosphatic material; few echinoid spines; forams (inc. Siphogenerina, Buccella, Guttulina, and Bolivina).
- 260-270 As above except forams (inc. Buccella, Nonion, Bolivina, Bulimina, and Dentalina).
- 270-280 Sand- light olive gray; slightly silty; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; 5% glauconite; 3% limestone and shell fragments; few black phosphatic fragments; few echinoid spines; pyrite; gypsum; forams (inc. Buccella, Nonion, and Bulimina).
- 280-290 Sand- light olive gray; slightly clayey; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; 30% limestone, sandy limestone, and shell fragments; 5% glauconite; some pyrite; few black phosphatic fragments; gypsum; forams scarce (inc. Buccella).
- 290-300 Coquina- light olive brown; moderate sand; medium to very coarse grained; subrounded to rounded; moderately sorted; 85% sandy limestone and shell fragments; glauconite 60% of sand fraction; quartz; some muscovite.
- 300-305 Coquina and sand- yellowish gray; medium grained to granular; subrounded to rounded; poorly sorted; 60% limestone, sandy limestone, and shell fragments; quartz; 15% glauconite; few flakes of muscovite.

Logged by: Michael Currie  
July 31, 1979