

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

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: Walt Robbins Mailing Address: 6121 Lincolnia Road Alexandria, VA 22312

TENANT: Tides on Chesapeake Mailing Address: \_\_\_\_\_

DRILLER: Douglas Drilling Company Mailing Address: Warsaw, Virginia 22572

WELL LOCATION: County Northumberland Approx: 1.1 ~~mi~~ <sup>mi</sup> NE (direction) of  
Intersection of Rt. 644 & Rt. 651 and 1000 ~~ft~~ <sup>ft</sup> south (direction) of Smith Point Light

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

DATE STARTED: 10/3/77 DATE COMPLETED: 10/7/77

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 834 feet

WATER LEVEL: Stands 11 feet below surface OR  
has NATURAL flow of \_\_\_\_\_ gallons per minute

YIELD TEST: Method Air lift HOLE SIZE: 11 inches from 0 to 250 feet

Drawdown 61 feet 3-7/8 inches from 252 to 778 feet

Rate 52 gal. per min. \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

Duration 48 hrs., \_\_\_\_\_ min. SCREEN SIZE: \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

WATER ZONES: from 778 to 798 feet 2 inches from 778 to 798 feet

from \_\_\_\_\_ to \_\_\_\_\_ feet \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

from \_\_\_\_\_ to \_\_\_\_\_ feet CASE SIZE: 4 inches from 0 to 252 feet

WATER: Color \_\_\_\_\_ Taste \_\_\_\_\_ Standard (Minimum) \_\_\_\_\_

Odor \_\_\_\_\_ Temp. \_\_\_\_\_ °F Schedule 2 inches from 252 to 778 feet

WELL TO SUPPLY: (check one) Home \_\_\_\_\_ GROUTING: Method Tremmie Pipe

Farm \_\_\_\_\_ Town \_\_\_\_\_ School \_\_\_\_\_ Material Neat Cement Depth 100 feet

Industry \_\_\_\_\_ Other Subdivision PUMP: Type Not Yet installed

WATER ANALYSIS AVAILABLE: Yes \_\_\_\_\_ No XX Capacity \_\_\_\_\_ gal per min

DRILL CUTTINGS SAVED: Yes XX No \_\_\_\_\_ Depth of intake \_\_\_\_\_ 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: This is a Class II Type B Well of material & construction as per specifications of Virginia Health Department publication "Drilled Wells for Public Water Supply" dated 9 Feb. 1970.

Drill Cutting Samples delivered to VSWCB. Copies of this report delivered to VSWCB, Virginia Health Dept. Bureau of Sanitary Engineering, and to Owner.

# 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	5	Med. and coarse white sand	
5	21	Fine and coarse gravel; white sand; varying degrees of coarseness; some bits of gray clay	
21	31	Fine gravel; sandy gray clay	
31	294	Gray clay; creamy shell; mixtures of black and white sand of varying degrees of coarseness; black sand; lots of creamy shell	
399	409	Less shell; mostly fine black sand; some gray sand	
409	420	Some gray sand; gray-green clay; shell (creamy)	
420	430	Crusty cutting; black and gray sand, varying degrees of coarseness	
430	441	Black and gray sand, varying degrees of coarseness; gray shell; light gray clay	
441	483	Fine and Med. gray sand; sandy gray clay	
483	493	Sandy gray clay; coarse black sand; fine gravel	
493	546	Sandy gray clay; fine and coarse gravel; bits of creamy shell; coarse black sand	
546	588	Fine black sand; fine and coarse gravel; sandy grain sand	
588	609	Gray clay; fine and med. black sand; fine and med. gray sand	
609	651	Varying degrees of black sand, gray sand, creamy shell, gray and green clay	
651	661	Med-Coarse gray sand; gray clay; some black sand	
661	693	Gray sand (minimal); gray clay with green specks; some black sand	
693	756	Gray, red, white, and brown clay; black sand; fine gray sand	
756	777	Gray, white, red, and brown clay-very sandy; increasing amounts of gray sand (varying degrees of coarseness) and decreasing amounts of black sand	
777	808	Coarse gray sand; little bits of multi-colored sand	
808	834	Increasing amounts of clay; decreasing amounts of gray sand	

(Use additional forms if necessary)

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

INTERVAL SHEET

Page 1 of 1  
 Date rec'd: 11/18/77 Date Processed: 1/6/78  
 PROPERTY: Walter Robbins  
 Tides on Chesapeake  
 COMPANY: Douglas Drilling Co.  
 COUNTY: Northumberland (Smith Point)

C-167  
 Well Repository No.: W- 4956  
 Sample Interval: from 0 to: 834  
 Number of samples: 79  
 Total Depth: 834'  
 Oil or Gas: Water: XX Exploratory:

From-To	From-To	From-To	From-To	From-To
0-10	316-326	631-642	-	-
10-21	326-337	642-652	-	-
21-31	337-347	652-663	-	-
31-42	347-358	663-673	-	-
42-52	358-368	673-684	-	-
52-63	368-379	-	-	-
63-73	379-389	693-703	-	-
73-84	389-400	703-714	-	-
84-94	400-410	714-724	-	-
94-105	410-421	724-735	-	-
105-115	421-431	735-745	-	-
115-126	431-442	745-756	-	-
126-136	442-452	756-766	-	-
137-147	452-463	766-777	-	-
147-158	463-473	777-787	-	-
158-168	473-484	787-798	-	-
168-179	484-494	798-808	-	-
179-190	494-505	808-819	-	-
190-200	505-515	819-829	-	-
200-211	515-526	829-840	-	-
211-221	526-537	-	-	-
221-232	537-547	-	-	-
232-242	547-558	-	-	-
242-253	558-568	-	-	-
253-263	568-579	-	-	-
263-274	579-589	-	-	-
274-284	589-600	-	-	-
284-295	600-610	-	-	-
295-305	610-621	-	-	-
305-316	621-631	-	-	-

Washed and unwashed samples

Owner: Walter Robbins  
Driller: Douglas  
County: Northumberland

W# 4956  
C# 167  
Total Depth: 834'  
Quad: Burgess  
Elev: 6'

Depth  
(feet)

WELL LOG

0-30 Gravel - mixed colors; medium to pebble, angular to rounded, poorly sorted.

31-52 Clay - light olive gray (5Y 6/1); abundant gravel; medium to pebble, angular to rounded, poorly sorted; 5-2% large shell fragments - oyster.

52-63 Clay - light olive gray (5Y 6/1); abundant sand; medium to granule, subangular, moderate sorting; 2% shell fragments.

63-73 Clay - pale yellowish brown (10YR 6/2); abundant sand; medium to granule, subangular, moderate sorting; 3% shell fragments; mica.

73-94 Clay - light olive gray (5Y 6/1); abundant sand; medium to rounded granules, subangular, poorly sorted; 10-20% large shell fragments - Turritella, oyster; mica.

94-105 Clay - light olive gray (5Y 5/2); abundant sand; some reddish clay clasts; medium to rounded pebble, subangular, poorly sorted; few grains of glauconite; 25% large shell fragments; mica.

105-147 Sand - light olive gray (5Y 6/1); abundant clay; medium to granular, subangular, moderate sorting; 10% fine shell fragments; brown stains on some clay clasts.

147-190 Clay - light olive gray (5Y 6/1); abundant sand; fine to granule, subangular, moderate sorting; 1% fine shell fragments - 147-168' - Turritella, Dentalium.

190-274 Sand - light olive gray (5Y 6/1); abundant clay; fine to granule, rounded pebbles at 211-221', subangular, moderate sorting; alternating 8% and 3% fine shell fragments; chela of crab - 211-221'; forams - Robulus - 242-253'.

274-305 Clay - yellowish gray (5Y 6/2); abundant sand; fine, granular, subangular, well sorted; very sparse diatoms; forams - Robulus; echinoderm spines at 284-305'.

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W# 4956

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Depth  
(feet)

- 305-368 Clay - yellowish gray (5Y 6/2); abundant sand; fine, granules, subangular, moderate sorting; very few shell fragments at 305-316'; diatoms; forams - Nodosaria - 305-316'; echinoderm spines at 316-326'; forams again at 358-368' - Robulus, Siphogenerina; some (5Y 5/2) clay clasts.
- 368-379 Clay - light olive gray (5Y 5/2); abundant sand; fine to granule, subangular, poorly sorted; forams - Robulus, Siphogenerina, Planularia, Nonion, Discorbis.
- 379-400 Sand - light olive gray (5Y 6/1); 50% shell fragments; moderate clay; medium to granule, angular to subangular, poorly sorted; few glauconite; tooth.
- 400-420 Sand - light olive gray (5Y 6/1); sparse to moderate clay; medium to granule, angular to subangular, poorly sorted; 25-30% shell fragments.
- 421-442 Sand - light olive gray (5Y 6/1); 50% shell fragments; sparse clay; medium to granule, angular to subangular, poor sorting; 10% fine glauconite in some limestone clasts.
- 442-452 Sand - light olive gray (5Y 6/1); sparse clay; medium to very coarse, subangular, moderate sorting; 10% fine glauconite; 40% shell fragments; forams.
- 452-484 Sand, Glauconitic - light olive gray (5Y 6/1 and at 463-473, 5Y 5/2); abundant clay; 50% glauconite; medium to very coarse, subangular, moderate sorting; 40+% fine shell fragments; forams - 10% at 452-463; ostracods.
- 484-494 Gravel, Glauconitic - light and dark green; 90% glauconite, medium and green - dark green; sparse clay; sparse sand; medium to very coarse, subangular, poor sorting; 15% fine shell fragments; forams.
- 494-505 Gravel, Glauconitic - light and dark green; 50% glauconitic; very sparse clay; very sparse calcium carbonate powder; medium to pebble, subangular and rounded, poorly sorted; 10% fine shell fragments.
- 505-526 Sand, Glauconitic - light and dark green; 50% glauconite; very sparse clay; medium to granule, subangular, poorly sorted; rare shell fragments.

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Depth  
(feet)

- 526-568 Sand, Glauconitic - light and dark green; 90% glauconite; sparse clay - moderate at 547-568'; ~~sparse sand at 526-547';~~ medium to granule, subangular, poorly sorted; rare shell fragments; forams - 526-547'; ostracod at 547-558'.
- 568-620 Clay, Glauconitic - light and dark green; 50% glauconite; abundant sand - 568-589' and 610-620', moderate from 589-610'; medium to granule, subangular and rounded, poorly sorted; madreporite at 568-578'; rare shell fragments at 610-620'; forams and ostracods in clay clasts; mica - 579-610'.
- 620-631 Gravel, Shell, Glauconitic - light and dark green; 60% glauconite; sparse clay; sparse sand; medium to granule, subangular, poor sorting; 30% shell fragments; large orange fragments.
- 631-642 Sand, Glauconite - light and dark green - 60% glauconite; moderate clay; fine to granule, subangular, poor sorting; 5% shell fragments; feldspar; garnet.
- 642-703 Sand, Glauconitic - light and dark green; 50% glauconite; abundant clay; fine to granule, subangular, poorly sorted; rare to very rare shell fragments; feldspar; garnet; mica from 652-703; at 693-703' - some finely ground shell fragments/forams in a few clay clasts.
- 684-693 No Sample.
- 703-714 Clay, Glauconite - grayish yellow (5Y 7/2); 50% glauconite; abundant sand; fine to granule, subangular, poorly sorted; some red clay clasts; some light and dark gray clay; forams; mica.
- 714-776 Sand, Glauconitic - light and dark brown; 50% glauconite; clay - sparse at 714-735' and abundant at 735-776'; rose, red, yellow, white clays at 756-766'; fine to very coarse, subangular, moderately sorted; very rare shell fragments; mica; feldspar at 735-745'.
- 777-834 Sand - light olive gray (5Y 6/1); sparse clay - very sparse at 777-787'; very fine to very coarse with granules at 787-798', subangular and angular, moderate sorting; few glauconite grains; feldspar - 808-834'; garnet at 829-834'; some clay clasts with shell fragments/forams - probably contamination from other levels.

Logged by: J. K. Polzin  
September 26/29, 1980