

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W-3807
C-154

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: Douglas and Dickinson, Incorporated Box 498
Mailing Address: Warsaw, Virginia 22572

TENANT: Wicomico Ridge Subdivision Mailing Address: _____

DRILLER: Douglas and Dickinson, Incorporated Mailing Address: Same as above
(Douglas Drilling Company, Inc.)

WELL LOCATION: County Northumberland Approx. 5/10 miles north (direction) of
Route 360 on Route 646 and 300 ^{feet}/_{miles} east (direction) of Route 646

(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: November 7, 1972

TYPE OF DRILL RIG USED: rotary TOTAL DEPTH 723 feet

WATER LEVEL: Stands 88 feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method air/test pump
Drawdown 37/37 feet
Rate 40/40 gal. per min.
Duration 3 hrs., _____ min. /72 hrs.

HOLE SIZE: 6 inches from 0 to 252 feet
3 7/8 inches from 252 to 723 feet
_____ inches from _____ to _____ feet

WATER ZONES: from 695 to 715 feet
from _____ to _____ feet
from _____ to _____ feet

SCREEN SIZE: _____ inches from _____ to _____ feet
#2 2 inches from 695 to 715 feet
_____ inches from _____ to _____ feet

WATER: Color clear Taste none
Odor none Temp. - °F

CASE SIZE: 4 inches from 0 to 252 feet
WEIGHT: 2 inches from 252 to 695 feet
Standard
Schedule 40 2 inches from 715 to 723 feet
Galvanized

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

GROUTING: Method _____
Material _____ Depth _____ feet

WATER ANALYSIS AVAILABLE: Yes _____ No x

PUMP: Type submersible
Capacity 30 gal. per min
Depth of intake 147 feet

DRILL CUTTINGS SAVED: Yes x 68 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: Construction: This is a Class II Well.

Drill cutting samples picked up by Division of Mineral Resources 02/20/73. (RHD)

FURNISHED BY: Douglas Drilling Company, Inc.

DATE: November 7, 1972

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)		REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO			
0	approx.	100	Fine and coarse sand with some gravel and clay	
100	approx.	390	Fine sand with clay binder	
390	approx.	420	Fine sand with shell and clay binder	
420	approx.	440	Coarse sand with shell and some clay - water	
440	approx.	700	Fine sand with clay binder	
700	approx.	723	Coarse sand - water, screens	
Drill cutting samples picked up by Division of Mineral Resources 02/20/73. (RHD)				

Owner: Wilcomico Ridge Subdiv.
Driller: Douglas Drilling
County: Northumberland

W# 3807
C# 154
Total Depth - 723'
Quad - Burgess
Elev - 82'

<u>Depth (feet)</u>		<u>Well Log</u>
0-10	Sand	Dark yellowish orange (10YR 6/6); medium to very coarse, subangular, moderate sorting; 1% glauconite.
10-31	Sand	Dark yellowish orange (10YR 6/6); very sparse clay; medium to very coarse with some pebbles and large granules, subangular, poorly sorted; rare phosphatic/fragments glauconite; garnet.
31-63	Sand	Dark yellowish orange (10YR 6/6); medium to granule, subangular, moderate sorting; rare phosphate/glauconite fragments; iron oxide fragment.
63-85	Sand	Dark grayish orange (10YR 6/4); medium to very coarse, subangular, well sorted; few agate fragments.
85-96	Gravel	Mixed; sparse clay in pellets; very fine to pebble, subangular to subrounded, poorly iron sorted oxide fragments.
95-106	Gravel	Pale yellow brown (10YR 6/2); abundant clay; very fine to pebble, subangular to subrounded, poorly sorted; iron oxide fragments.
106-127	Clay	Pale yellow brown (10YR 6/2); abundant sand; very fine to very coarse, subangular, poorly sorted; diatoms; feldspar; 3% mica-muscovite and illite fuschite.
127-149	Clay	Light olive gray (5Y 5/2); abundant sand; very fine to very coarse and pebble, subangular; illite diatoms; very rare shell fragments; limonite clasts; mica.
149-159	Gravel	Light olive gray (5Y 5/2); very sparse clay; fine to granule with some pebbles, subangular and rounded, poorly sorted; very rare shell fragments; iron oxide fragments; mica.
159-170	Sand	Light olive gray (5Y 5/2); sparse clay; fine to granule with pebbles, subangular and rounded, poorly sorted; very rare shell fragments; iron oxide fragments; mica.
170-201	Clay	Light olive gray (5Y 6/1); moderate sand; fine to granule with pebbles, subangular, poorly sorted; few shell fragments; mica.
201-212	Clay	Light olive gray (5Y 6/1); abundant sand; fine to granules, subangular, poorly sorted; mica.

Depth
(feet)

212-298	Clay	Light olive gray (5Y 5/2); abundant sand, fine to coarse, subangular and angular, poorly sorted; very rare to 1% glauconite; phosphate fragments and nodules at 255-275'; very rare to 5% shell fragments at 255-298'; 255-298' - forams, - <u>Uvigerina</u> ; mica.
298-383	Clay	Light olive gray (5Y 5/2); sparse ^{sand} fine to coarse, subangular, poorly sorted; diatoms, abundant clasts at 372-382'; echinoderm spines at 329-350' and 372-383'; forams- <u>Textularia</u> , <u>Robulus</u> ; moderate sand, at 372-383' and plant debris.
383-425	Sand	Light olive gray (5Y 5/2); abundant clay, at 404-425' moderate clay in clasts in L.O.G. (5Y 6/1); fine to coarse, subangular, poorly sorted; 1% phosphate fragments at 383-393', 3% clasts at 404-425'; forams; shell fragments-5% at 393-404', 35% at 404-414', 20% at 414-425'.
425-447	Sand	Light olive gray (5Y 5/2); sparse clay; fine to coarse, subangular, poorly sorted; 3% phosphate fragments; 3% shell fragments; forams.
447-457	Sand	Olive gray (3Y 4/1); 50% glauconite; moderate clay; fine to granule, subangular, poorly sorted; 3% shell fragments; echinoderm spines; forams- <u>Cibicides</u> .
457-478	Sand, Glauconitic-Moderate olive brown (5Y 4/4); 60% to 50% glauconite; moderate clay; fine to granule, subangular, very poorly sorted; glauconite is olive, brown and green; 1% to 10% shell fragments; echinoderm spines; forams; CaCO ₃ powder.	
478-499	Sand, Glauconitic-Light olive gray; (5Y 5/2); sparse clay; fine to granule, subangular to subrounded, poorly sorted; sparse CA CO ₃ powder; 40% glauconite, at 478-489' and 30% at 489-499'; 10% shell fragments; forams-nodosaria; clasts of CaCO ₃ with glauconite.	
499-510	Sand, Glauconitic-Light olive gray (5Y 5/2); 50% glauconite; sparse clay (light brown clasts); fine to granule, subangular to subrounded, poorly sorted; clasts of Ca calcium CO ₃ with glauconite; 3% shell fragments; forams.	
510-532	Sand, Glauconitic-Olive gray (5Y 3/2); 80% glauconitic, sparse ^{quartz} sand and clay; fine to granule with some pebbles, subangular and rounded, poorly sorted; 3% shell fragments; forams.	

Depth
(feet)

- 532-553 Sand, Glauconitic-Olive black (5Y 2/1); 90% glauconite^e-green^e, medium grained; sparse clay; sparse coquina fragments; fine to granule, subangular, few grains of sand; forams. ^{quartz}
- 553-574 Sand, Glauconite-Dark greenish gray (5GY 4/1); 90+% glauconite; sparse clay; fine to very coarse, subangular to subrounded, poorly sorted; very rare shell fragments; forams - Robulus; quartz crystal.
- 574-596 Sand, Glauconitic-Greenish black (5GY 2/1); 95+% glauconite; moderate clay; moderate depositional CaCO₃/glauconite; very sparse sand; fine to very coarse with some pebbles, subangular to rounded, poorly sorted; very rare shell fragments; forams - Nodosaria.
- 596-617 Clay, Glauconitic-Light and dark gray; 60% glauconite; moderate sand; fine to very coarse with some granules, subangular to rounded, poorly sorted; very rare shell fragments; forams - Nodosaria.
- 617-627 Sand, Glauconitic-Light and dark gray; 80% glauconite^e; sparse clay/CaCO₃ clasts; fine to very coarse with some granules, subrounded to rounded, poorly sorted; very rare shell fragments; forams.
- 627-638 Clay, Glauconitic-Light and dark gray; 60% glauconite; moderate sand; fine to very coarse with some granules, rounded to subangular, poorly sorted; very rare shell fragments; forams.
- 638-659 Sand, Glauconitic-Light and dark gray; 80% glauconite; very sparse to moderate clay with some CaCO₃ at 638-648'; fine to very coarse with some granules, subangular to rounded, poorly sorted; 30% shell fragments at 648-659'.
- 659-670 Sand, Glauconite-Light and dark gray; 60% glauconite; moderate clay/depositional CaCO₃; fine to very coarse with some granules, subangular to rounded, poorly sorted; 30% shell fragments.
- 670-681 Sand, Glauconitic-Light and dark gray; 60% glauconite; abundant clay; fine to very coarse with some granules, subangular to rounded, poorly sorted; 10% shell fragments.

Owner: Wilcomico Ridge Subdiv.

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C# 154

Depth
(feet)

- | | |
|---------|--|
| 681-691 | Sand, Glauconitic-Light and dark gray; 50% glauconite; moderate assorted colored clay clasts; fine to granule, angular to subangular, poorly sorted; forams <u>Nodosaria</u> ; garnet. |
| 691-702 | Sand Light and dark gray; sparse clay; fine to granule, angular to subangular, poorly sorted; 20% glauconite foram- <u>Marginulina</u> ; garnet. |
| 702-723 | Sand Light olive gray (4Y 6/1); sparse clay at 712-733'; fine to granule, angular to subangular, moderate sorting; 3%-15% glauconite; garnet. |

Logged by: J. K. Polzin
Aug. 25/26, 1980