

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:

DIVISION OF MINERAL RESOURCES

OFFICE ADDRESS:

B 3667

JAMES L. CALVER, COMMISSIONER

McCormick Road

Charlottesville, VA 22903

WATER WELL COMPLETION REPORT

Charlottesville, Virginia

OWNER: G. C. Dawson Mailing Address: Remo, VA

TENANT: Pine Crest Acres Mailing Address: "

DRILLER: Douglas & Dickinson, Inc. Mailing Address: Box 498, Warsaw, Virginia

WELL LOCATION: County Northumberland Approx. 1 1/2 ~~xxx~~ miles north (direction) of Remo and 100 feet ~~xxxx~~ east (direction) of St. Rd. 667

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

DATE STARTED: April, 1968 DATE COMPLETED: May 15, 1968

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 658 feet

WATER LEVEL: Stands 28 feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method _____
Drawdown 37 feet
Rate 40 gal. per min.
Duration _____ hrs., _____ min.

HOLE SIZE: 6 inches from 0 to 147 feet
3 7/8 inches from 147 to 658 feet
_____ inches from _____ to _____ feet
SCREEN SIZE: 2 inches from 617 to 637 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet
CASE SIZE: 4 inches from 0 to 147 feet
2 inches from 147 to 617 feet
2 inches from 637 to 658 feet

WATER ZONES: from 617 to 637 feet
from _____ to _____ feet
from _____ to _____ feet

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

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 _____
Capacity 40 gal. per min
Depth of intake _____ feet

DRILL CUTTINGS SAVED: Yes 62 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: _____

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

INTERVAL SHEET

Page 1 of 1 Well Repository No: C-145 3062
 Date rec'd: 5/11/70 ; processed 1/25/71 Sample Interval; from 0 to: 656'
 PROPERTY: G. C. Dawson Number of samples: 62
 (Pine Crest Acres)
 COMPANY: Douglas & Dickinson, Inc. Total Depth: 658'
 COUNTY: Northumberland (Remo) Oil or Gas: Water: x Exploratory:

From-To	From-To	From-To	From-To
0 - 10	254 - 261	518 - 529	-
10 - 21	261 - 275	529 - 539	-
21 - 31	275 - 285	539 - 550	-
31 - 42	285 - 296	550 - 560	-
42 - 52	296 - 306	560 - 571	-
52 - 63	306 - 317	571 - 582	-
63 - 73	317 - 327	582 - 593	-
73 - 84	327 - 338	593 - 603	-
84 - 94	338 - 348	603 - 614	-
94 - 105	348 - 359	614 - 624	-
105 - 115	359 - 370	624 - 635	-
115 - 126	370 - 380	635 - 645	-
126 - 137	380 - 391	645 - 656	-
137 - 148	391 - 402	-	-
-	402 - 412	-	-
149 - 159	412 - 423	-	-
159 - 170	423 - 433	-	-
170 - 180	433 - 444	-	-
180 - 191	444 - 454	-	-
191 - 201	454 - 465	-	-
201 - 212	465 - 476	-	-
212 - 222	476 - 487	-	-
222 - 233	487 - 497	-	-
233 - 243	497 - 508	-	-
243 - 254	508 - 518	-	-

Unwashed only

Owner: G. E. Lawson
Driller: Douglas & Dickinson
County: Northumberland

W# 3062
C# 145
Total Depth: 656'
Quad: Reedville
Elev: 20'

Depth
(feet)

WELL LOG

- 0-10 Sand - moderate yellowish brown (10yr 5/4); very sparse clay; medium to granule, subangular, poorly sorted.
- 10-31 Sand - moderate yellow orange (10yr 7/6); sparse clay in clasts; medium to granule, subangular, poorly sorted; 20-30' - 2% glauconite.
- 31-42 Sand - light olive gray (5y 5/2); moderate clay; medium to granule, subangular, poorly sorted; 2% ? Glauconite; 30% shell fragments large.
- 42-126 Clay - light olive gray (5y 5/1); abundant sand; fine with some coarse grains, subangular; well sorted; few to 3% shell fragments at intervals 63-126; 42-63 - 8% shell fragments; few to 1% glauconite at 63-115'; 1% mica at 94-105.
- 126-170 Clay - light olive gray (5y 6/1); abundant sand; fine with some coarse, subangular, well sorted; few glauconite grains; few shell fragments.
- 170-191 Clay - light olive gray (5y 5/2); abundant sand; fine with some coarse, subangular, moderate sorting.
- 191-264 Clay - light olive gray (5y 6/1); abundant sand, fine with some coarse grains, subangular, well sorted; few shell fragments, 212-264; 1% shell fragments at 191-201; few phosphatic fragments at 243-264.
- 264-275 Clay - light olive gray (5y 6/1); abundant sand, fine to coarse, subangular, poorly sorted; few glauconite grains; few shell fragments; Forams - Robulus; Diatoms; echinoid spines; *2 types clay in this interval-fine, kaolinitic, lighter gray, with Diatoms and Darker sandier, with no Diatoms.
- 275-285 Clay - light olive gray (5y 7/1); moderate sand; fine to coarse, subangular, poorly sorted; Kaolinitic clay; few shell fragments; Diatoms abundant.
- 285-327 Clay, Kaolinitic - light olive gray (5y 7/1); moderate sand, very fine with few larger grains, subangular, well sorted; abundant diatoms; echinoid spines; 296-327 - few glauconite; 285-306 - mica.
- 327-338 Clay - light olive gray (5y 7/1); Kaolinic clay; moderate sand; very fine with few larger grains, subangular, well sorted, Forams - Robulus (L); Diatoms; few shell fragments; some iron staining in layers.

<u>Depth</u> <u>(feet)</u>	
338-348	Clay - light olive gray (5y 7/1); Kaolin clay; moderate sand; very fine to coarse, subangular, moderate to well sorted; Forams, Diatoms; few shell fragments; echinoid spines.
348-359	Clay - light olive gray (3y 7/1); Kaolin clay; moderate sand; very fine to coarse subangular, well sorted; very few glauconite; Forams - <u>Siphogenerina</u> ; Diatoms; Echinoderm spines.
359-370	Clay - light olive gray (5y 7/1); Kaolinic clay; moderate sand; very fine to coarse, subangular, moderate to well sorted; very few glauconite; Forams - <u>Siphogenerina</u> ; Diatoms; Echinoid spines.
370-380	Sand - light olive gray (5y 5/1); moderate clay; coarse to granule, subangular moderately well sorted; 1% glauconite; 10% shell fragments, finely ground; Forams - <u>Robulus</u> .
380-391	Clay - light olive gray (5y 6/1); abundant sand; coarse some granules, subangular, moderately well sorted; few shell fragments; Forams - <u>Robulus</u> .
391-402	Sand - light olive gray (5y 6/1); moderate clay; coarse some very coarse, subangular, well sorted; few shell fragments; Forams - <u>Robulus</u> .
402-412	Clay - light olive gray (5y 6/1); abundant sand; coarse some very coarse, subangular, well sorted; few shell fragments, Forams.
412-423	Sand - light olive gray (5y 6/1); moderate clay; coarse some very coarse, subangular, well sorted; few shell fragments, Forams.
423-433	Sand - pale yellowish brown (10yr 5/2) with some clay, grayish orange (10yr 6/4); abundant clay; medium to very coarse, subangular, moderate sorting; few phosphate fragments.
433-465	Sand - pale yellowish brown (10yr 5/2) with some clay grayish orange (10yr 6/4); moderate clay; medium to granule, subangular, moderate sorting; 20% glauconite; few shell fragments; Forams. 454-465 10% glauconite; siphogenerina at 444-454.
465-487	Sand, Glauconitic - light olive gray (5y 5/1) 50% glauconite, medium grained, dark green to black; moderate clay; coarse, subangular, moderate sorting; few shell fragments; ostracods*; 1% Forams - <u>Siphogenerina</u> , <u>Quinqueloculina</u> , <u>Globigerina</u> , <u>Nonion</u> , <u>Robulus</u> , <u>Cibicides</u> , <u>Bulmina</u> , <u>Bolivina</u> .

<u>Depth</u> <u>(feet)</u>	
487-508	Sand - Glauconitic - light olive gray (5y 5/1); 50% glauconite, medium grained, dark green; sparse clay; medium to granule, subangular, poorly sorted; diatoms, forams - <u>Guttulina</u> .
508-518	Sand - light olive gray (5y 5/1); sparse clay; medium to granule, subangular, poorly sorted; 40% glauconite.
518-550	Sand, Glauconitic - light olive gray (5y 5/1); 50% glauconite, medium grained, dark green, moderate clay, some dark yellowish orange; fine to very coarse, subangular, poorly sorted; few shell fragments; forams - <u>Nodosaria</u> .
550-571	Sand, Glauconitic - light olive gray (5y 5/1) 80% glauconite medium grained, dark green; moderate clay; fine to very coarse, subangular, poorly sorted; Forams - <u>Robulus</u> 560-571 60% glauconite.
571-593	Clay - light olive gray (5y 6/1); abundant sand; fine to very coarse, subangular, poorly sorted; 30%? glauconite, in clasts; forams; 582-593 15% glauconite in clasts.
593-624	Sand, Glauconite - light and dark gray; 95%+ glauconite medium grained, dark green; very sparse clay; very sparse sand, medium to very coarse, subangular, poorly sorted; 25% shell fragments; forams - <u>Nodosaria</u> ; 603-614 sparse clay/sand and 30% shell fragments. 614-624 sparse clay/sand and no shell fragments.
624-645	Sand - light olive gray (5y 6/1); very sparse clay; coarse to granule, subangular, well sorted; few glauconite; 635-645 very sparse clay in clasts and 8% glauconite.
645-656	Sand - light olive gray (5y 6/1); sparse clay in clasts; medium to very coarse, subangular, moderate sorting; few glauconite; garnet.

Logged by: Joan K. Polzin
August 1980

OWNER: G. C. Dawson (Pine Crest Acres)
DRILLER: Douglas & Dickinson, Inc.
COUNTY: Northumberland (Remo)

VDMR # 3062
WWCR # 145
TOTAL DEPTH: 658'

GEOLOGIC SUMMARY

<u>Depth (feet)</u>	<u>Rock Unit</u>	<u>Age</u>
0-31	Columbia Group	Pleistocene
31-145	Yorktown and St. Marys formations	Late Miocene
145-435	Calvert Formation	Miocene
435-515	Nanjemoy Formation	Middle Eocene
515-656	Mattaponi Formation	Paleocene-Late Cretaceous
656-658	No sample	—

Virginia Division of Mineral Resources
Robert H. Teifke - Geologist
February 5, 1971

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ELEV: ~20'

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—	<i>gray clayey silt-sand w/ some shell</i>
— 145-212'	<i>tough gray clay</i>
212-370'	<i>pale-green silty clay over pale muddy clay</i>
— 370-435'	<i>Q sands w/ a little P₂O₅</i>
— 495-515'	<i>abundant well-rounded coarse sand → fine gravel, mostly Q</i>
515-571'	<i>Q-glauc. sands</i>
571-593'	<i>v. tough tan clay</i>
593-624'	<i>med.-green glauc. w/ yellowish shell frags.</i>
624-658'	<i>Sands: Q > glauc. = F (early K?)</i>

Elev ~20'