

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: Douglas & Dickinson, Inc. Mailing Address: Box 498 Warsaw, Va. 22572

TENANT: Indian Creek System #3 Mailing Address: _____

DRILLER: Douglas Drilling Co., Inc. Mailing Address: Box 498 Warsaw, Va. 22572

WELL LOCATION: County Northumberland Approx. 780 ^{feet}/_{miles} West (direction) of _____
intersection of Rt. 1112 & 1110 at Indian ^{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: _____ DATE COMPLETED: April 11, 1977

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 631 feet

WATER LEVEL: Stands 33 feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Air Lift
Drawdown 85 feet
Rate 64 gal. per min.
Duration 48 hrs., _____ min.

HOLE SIZE: 3/4 inches from 0 to 231 feet
4 inches from 231 to 631 feet
_____ inches from _____ to _____ feet

WATER ZONES: from 604 to 625 feet
from _____ to _____ feet
from _____ to _____ feet

SCREEN SIZE: _____ inches from _____ to _____ feet
20G 2 604 625
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

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

CASE SIZE: _____ inches from _____ to _____ feet
Schedule 40
Galvan. 40 inches from 0 to 231 feet
T & C ?2 inches from 231 to 604 feet

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

GROUTING: Method _____
Material _____ Depth _____ feet

WATER ANALYSIS AVAILABLE: Yes _____ No _____

PUMP: Type submersible
Capacity 60 gal per min
Depth of intake 168 feet

DRILL CUTTINGS SAVED: Yes _____ 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	approx. 31'	tan, varying % fine, medium, and coarse sand	
31	approx. 347'	grey, fine sand w/clay binder, varying % shell	
347	approx. 400'	grey, fine and med. sand, creamy shell, clay binder	
400	approx. 444'	grey, fine, med, coarse sand, creamy shell, varying % clay binder	
444	approx. 475'	grey, fine sand w/clay binder shell	
475	approx. 496'	grey black, fine sand, shell	
496	approx. 579'	black/grey, fine, med, coarse sand, varying % of shell and clay binder	
579	approx. 600'	grey/black, fine med. sand	
600	approx. 621'	grey coarse sand	
621	approx. 631'	tan/grey/black med and coarse sand small % clay	

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

INTERVAL SHEET

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Well Repository No.: W- 4939
 C- 163

Date rec'd: 8/29/77 Date Processed: 11/30/77

Sample Interval: from 0 to: 631

PROPERTY: Indian Creek System #3

Number of samples: 60

COMPANY: Douglas Drilling Co.

Total Depth: 631

COUNTY: Northumberland (Byrdton)

Oil or Gas: Water: X Exploratory:

From-To	From-To	From-To	From-To	From-To
0-10	316-326	-	-	-
10-21	326-337	-	-	-
21-31	337-347	-	-	-
31-42	347-358	-	-	-
42-52	358-368	-	-	-
52-63	368-379	-	-	-
63-73	379-389	-	-	-
73-84	389-400	-	-	-
84-94	400-410	-	-	-
94-105	410-422	-	-	-
105-115	422-433	-	-	-
115-126	433-444	-	-	-
126-136	444-454	-	-	-
136-147	454-465	-	-	-
147-157	465-475	-	-	-
157-168	475-486	-	-	-
168-178	486-496	-	-	-
178-189	496-506	-	-	-
189-199	506-516	-	-	-
199-210	516-527	-	-	-
210-220	527-537	-	-	-
220-231	537-548	-	-	-
231-241	548-558	-	-	-
241-252	558-569	-	-	-
252-262	569-579	-	-	-
262-274	579-590	-	-	-
274-284	590-600	-	-	-
284-295	600-610	-	-	-
295-305	610-621	-	-	-
305-316	621-631	-	-	-

washed and unwashed samples

OWNER: Indian Creek System
DRILLER: Douglas
COUNTY: Northumberland (Byrdton)

W# 4939
C# 163
Total Depth: 631'
Quad: Fleets Bay
Elev: 12'

Depth
(feet)

WELL LOG

- 0-10 Gravel - pale yellowish brown (10yr 6/2); moderate clay; fine to pebble, subangular and round, poorly sorted; few glauconite; 20% shell fragments - Mulina Congesta.
- 10-31 Gravel - yellowish brown (5Y 7/2); moderate clay in large clasts; fine to pebbles, (more pebbles at 10-21 and fine at 20-31'), subangular and round, poorly sorted; 3 - 10% glauconite; 10% shell fragments at 10-21' and 1% at 21-31' - Nuculaproxima, Nuculana Acuta, Mulina Congesta.
- 31-42 Clay - yellowish brown (5y 7/2); abundant sand; fine to granular, subangular, poor sorting; few glauconite; 1% shell fragments.
- 42-73 Sand - light olive gray (5y 5/2); abundant clay; fine to coarse, mostly medium, subangular, well sorted; 10% glauconite, with 30% at 63-73'; 5% shell fragments at 42-52' and 10% at 52-73'; mica.
- 73-94 Sand, Shell Gravel - light and dark gray; 50% shell fragments; moderate clay; medium, subangular, well sorted; 30% glauconite; mica.
- 94-115 Sand - light and dark gray; 50% shell fragments; abundant clay; medium to very coarse, subangular, moderate sorting; 30% glauconite/phosphate fragments.
- 115-132 Sand - light and dark gray; moderate clay 115-126'; abundant clay 126-132'; fine to coarse, mostly medium, subangular, moderately well sorted; 10% fine phosphate fragments; 40% shell fragments; mica.
- 136-231 Clay - light olive gray (5y 6/1); abundant sand; fine with some larger grains, subangular with some rounded, well sorted; 10% fine phosphate fragments; shell fragments decreasing from 40% at 136-147' to 20% at 147-157', 30% at 157-178', 15% at 189-199', 5% from 199 to 231'; shells - Dentalium, Turritella, Pectens.
- 231-252 Clay - dark yellowish brown (10yr 4/2); abundant sand; fine, subangular, well sorted; 10+% fine glauconite/phosphate fragments; 5% shell fragments; mica; small rock fragments.

OWNER: Indian Creek System -2-

W# 4939
C# 163
Total Depth: 631'

Depth
(feet)

- 252-337 Clay - yellowish gray (5y 7/2); abundant sand; fine to coarse, subangular, well sorted; few glauconite with 5% at 295-316'; Diatoms; Forams from 263' onward - Bolivina; very rare shell fragments.
- 337-358 Sand - light olive gray (5y 5/1); moderate clay; fine to very coarse, subangular, poorly sorted; few glauconite; shell fragments - 10% at 337-347' and 3% - 347-358'; Forams - Robulus, Siphogenerina, Garnet.
- 358-379 Sand - light olive gray (5y 5/1; with clasts of 4/1 at 360-379'); abundant clay; fine to very coarse, subangular and angular, poor sorting; few glauconite; Forams - Globigerina.
- 379-400 Sand - light olive gray (5y 5/1); moderate to sparse clay; fine to very coarse, subangular and angular, poor sorting; few glauconite at 379-389' and 20% at 389-400'; 5% shell fragments at 379-389' and few at 389-400'; Forams - Nodosaria; shark tooth; coral; bone fragment.
- 400-410 Sand - light olive gray (5y 5/1); sparse clay; medium to very coarse, subangular and angular, poorly sorted; 20% glauconite; rare shell fragments; Foram.
- 410-422 Sand, Glauconitic - light and dark gray; 50% glauconite; sparse clay; fine to granule, subangular, poorly sorted; 3% shell fragments; Forams - Amphimorphina.
- 422-433 Sand, Glauconitic - light and dark gray; 80% glauconite; sparse clay; fine to granule, subangular, poorly sorted; 8% shell fragments; Forams.
- 433-454 Sand, Glauconitic - light and dark gray; 50% glauconite; sparse clay; fine to granules, subangular, poorly sorted; few very fine shell fragments; Forams.
- 454-465 Gravel, Shell - light and dark gray; 50% glauconite; sparse clay; abundant sand; fine to granule, subangular, angular and rounded, poorly sorted; Forams - Robulus.
- 465-475 Sand, Glauconitic - light and dark gray; 50% glauconite; sparse clay; abundant limestone clasts; fine to very coarse, subangular, poorly sorted; Forams - Robulus; Garnet.

OWNER: Indian Creek System -3-

W# 4939

C# 163

Total Depth: 631'

Depth
(feet)

- 475-486 Sand, Glauconite - greenish black (5G 2/1); 85+% glauconite; sparse clay; ~~moderate sand~~ fine to very coarse, subangular and rounded, poorly sorted; Echinoderm spines.
- 486-496 Sand, Glauconitic - greenish black (5G 2/1); 75% glauconite; sparse clay; ~~moderate sand~~ fine-to very coarse, subangular, poorly sorted; Echinoderm spines.
- 496-506 Sand, Glauconitic - greenish black (5G 2/1); 90% glauconite; moderate clay; ~~moderate sand~~ fine to very coarse, subangular, poorly sorted; rare shell fragments; Echinoderm spines; Forams - Robulus, Nodosaria; Garnet.
- 506-516 Sand, Glauconitic - light and dark gray; 50% glauconite; moderate clay; fine to granule, subangular, poorly sorted; rare shell fragments; Echinoderm spines; Forams; Garnet.
- 516-527 Clay, Glauconitic - light and dark gray; 50% glauconite; moderately abundant sand; fine to medium, subangular, moderately sorted; rare shell fragments; Forams.
- 527-548 Clay - light olive gray (5y 6/1); abundant sand; fine to coarse, subangular, moderate sorting; 25% glauconite; forams.
- 548-558 Sand, Glauconitic - light and dark gray; 90% glauconite; sparse clay; fine to very coarse, subangular and angular, moderate sorting; 5% shell fragments; Bryozoa; Forams - Nodosaria.
- 558-569 Sand, Glauconite - light and dark gray; 80% glauconite; abundant clay; fine to very coarse, subangular and angular, moderate sorting; 3% shell fragments; Forams.
- 569-590 Sand, Glauconite - light and dark gray; 70 to 60% glauconite; moderate to sparse clay; fine to granule, subangular and angular, poorly sorted; 1% to few shell fragments; Forams; Feldspar at 579-590' and garnet at 569-579'.
- 590-631 Sand - light olive gray (5y 6/1); clay - sparse (590-600) to very sparse (600-10) to sparse (610-21) and abundant (621-31); medium to very coarse to granule from 600-610' onward; subangular to subrounded and to rounded from 600' onward; moderate sorting; 3% glauconite at 590-600' and rare after that; Forams; feldspar; garnet; mica at 621-31'.

Logged by: J. K. Polzin
Sept. 22, 1980