COMMONWEALTH OF VIRGINIA

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

AAILING ADDRESS:

l. Jottesville, VA 22903

3667

DIVISION OF MINERAL RESOURCES

JAMES L. CALVER, COMMISSIONER

OFFICE ADDRESS:

McCormick Road Charlottesville, Virginia

WATER WELL COMPLETION REPORT of soles are thed at 15th & Elm St. OWNER: Bogese Construction Co., Inc. Mailing Address: Hopewell, Va. 23860 Beechwood Manor #2 ____ Mailing Address:_ 16815 Happy Hill Rd. DRILLER: J. J. Mitchell, Jr. Mailing Address Colonial Heights, VA. 23834 K9XX 4 miles East WELL LOCATION: County Prince George Approx. (direction) of Dark gray dirt feet Hopewell at Rt. 10 ___(direction) ofand Beaver Castle Rd. __ and ___ _ miles __ Sec. 7, Blk. 3, Lot 8A. (GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.) DATE COMPLETED Feb. 1975 DATE STARTED: Jan. 1975 HTG GTEV ATOTELL fragments TYPE OF DRILL RIG USED: Cable tool 318 feet Dark gray dirt-small gravel surface OR Levery net a year Stands 67 feet below WATER LEVEL: ____ gallon's perwoninuteus 10 has NATURAL flow of_ YIELD TEST: Method pumped HOLE SIZE: 12 inches from 0 to 50 feet daiyarg-feverp 3 bns2 50 to 318 Drawdown 180 feet feet to Beachwood Manor Rate 171 gal. per min. SCREEN SIZE: 5 inches from 297 to 307 feet Duration 24 hrs., ____min. WATER ZONES: from 276 to 286 feet 5 inches from 276 to 286 feet from 297 to 307 feet ___inches from ____to___ CASE SIZE: 6 inches from 0 to 276 feet from _____feet 5 inches from 286 to 297 feet WATER: Color_____Taste__ _________°F Odor____ ____inches from _____to____feet GROUTING: Method _____ WELL TO SUPPLY: (check one) Home __ Material _____ Depth 50 feet Farm _____ Town ____ School ___ Industry____Other_Subdivision PUMP: Type _____ WATER ANALYSIS AVAILABLE Yes _____No ____ Capacity_____gal. per min DRILL CUTTINGS SAVED: 32 Yes X No____ Depth of intake ____ (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.) ARKS:_

FURNISHED BY:

COMMONWEALT DOJE VIRGINIA

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT _DATE:_

FROM TO 10 Gray to tan dirt 10 Gray to tan gravel 10 Gray to tan gravel 10 Gray to brownish dirt 10 Gray t	(fee	THESTIGNET	TYPE OF ROCK OR SOIL PENETS	RATED REMARKS
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200 8 318	190 0	200	Dark gray dirt	WELD TEST Method pumped
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from 10 feet CASE SIZE; 6 inches from 0 to 2 9 feet CATER; CASE SIZE; 6 inches from 20 to 2 9 feet CASE CASE CASE CASE CASE CASE CASE CASE	abeve	1' blank	5 mones from 25	VATER ZONES: Non ZZZ TO TELEVIEW
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VIRGINIA DIVISION OF MINERAL RESOURCES Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

Page 1 of 1 Well Repository No: W-4351

C- 184

Date rec'd: 4/28/75 Date Processed: 2/6/76 Sample Interval: from:0to:318'

PROPERTY: Bogese Construction Co. Number of samples: 32

(Subdivision)

COMPANY: Mitchell Total Depth: 318'

COUNTY: Prince George (Hopewell) Oil or Gas: Water:XExploratory:

From-To	From-To	From-To	From-To
0 _ 10 10 _ 20 20 _ 30 30 _ 40 40 _ 50	250 _ 260 260 _ 270 270 _ 280 280 _ 290 290 _ 300	-	
50 _ 60 50 _ 70 70 _ 80 80 _ 90 90 _ 100	300 _ 31 0 310 _ 318 - -	-	- - - - -
100_ 110 110_ 120 120_ 130 130_ 140 140_ 150	- - - -	- - - -	- - - -
150_ 160 160_ 170 170_ 180 180_ 190 190_ 200	- - - -	- - - -	-
200 = 210 210	- - - -	- - - -	-

Both washed and unwashed samples.

OWNER: Bogese Const. Co.

(Subdivision)

DRILLER: Mitchell

COUNTY: Prince George (Hopewell)

fragments.

80-90

W#: 4351 C#: 184

TOTAL DEPTH: 318'

GEOLOGIC LOG

Depth (feet)	
0-10	Sand — pale yellowish brown; moderate clay; medium grained, some fine grains, some coarse grains; subangular to subrounded; moderately well sorted; quartz; some feldspar; some opaques.
10-20	Sand — dark yellowish orange; slightly stained; slightly clayey; fine to medium grained, some granules, few pebbles; subangular to subrounded; moderately well sorted; quartz; feldspar; 2% opaques; muscovite.
20-30	Sand — grayish orange; abundant clay; very fine to fine grained, some medium grains, some coarse grains, few granules; subangular to subrounded; moderately sorted; quartz; 3% shell fragments; 2% black phosphatic material; spines; some glauconite.
30-40	Sand — dark grayish green; moderate clay; very fine to fine grained; subangular to rounded; moderately well sorted; 60% glauconite; quartz; 3% shell fragments; ostracodes; foram; bone fragment.
40-50	Sand — olive light gray; abundant clay; fine to medium grained some coarse grains; subangular to rounded; moderately sorted; 40% glauconite; quartz; 25% shell fragments; forams very abundant (inc. <u>Buccella</u> , <u>Robulus</u> , <u>Dentalina</u> , <u>Textularia</u> , <u>Nonion</u> , and <u>Guttulina</u>); spines.
50-60	Clay and sand — grayish olive; abundant clay; moderate sand; medium grained; rounded; well sorted; glauconite 80% of sand sized fraction; quartz; 3% shell fragments; spines; pyrite; ostracodes; forams (inc. Robulus); muscovite.
60-70	Clay — olive light gray; slightly sandy; fine to medium grained; rounded; moderately well sorted; muscovite; glauconite; some quartz; some shell fragments; ostracode.
70-80	Clay — moderate orange pink, light gray; slightly sandy; fine to medium grained; subrounded to rounded; moderately well sorted; glauconite 85% of sand sized fraction; quartz; few black phosphatic

Clay — olive light gray; slightly sandy; fine to medium grained; rounded; moderately well sorted; glauconite 90% of sand sized

fraction; muscovite; quartz; forams rare (inc. Robulus).

Depth (feet)

- 90-100 Sand dark grayish green; abundant clay; medium grained; rounded; well sorted; 90% glauconite; 5% shell fragments inc. gastropod; quartz; muscovite.
- 100-110 Sand olive light gray; moderate clay; very fine to medium grained; subangular to rounded; moderately well sorted; 50% glauconite; quartz; 20% shell fragments.
- 110-120 Clay and sand olive light gray; abundant clay-gray, moderate orange pink; moderate sand; fine to medium grained; rounded; moderately well sorted; glauconite 70% of sand sized fraction; quartz; 3% shell fragments; forams (inc. Robulus).
- 120-130 Clay olive light gray, light gray, moderate orange pink; abundant sand; fine to medium grained; subangular to rounded; moderately well sorted; glauconite 60% of sand sized fraction; quartz; some shell fragments; forams (inc. Robulus).
- 130-140 Clay light olive gray; moderate sand; fine to coarse grained; subrounded to rounded; moderately sorted; glauconite 70% of sand sized fraction; quartz; 20% shell fragments; muscovite.
- 140-150 Clay olive light gray; slightly sandy; moderate gravel; medium grained to gravel; subrounded; poorly sorted; quartz; some glauconite; few grains of feldspar; pyrite.
- 150-160 Sand white; coarse to very coarse grained, some granules; subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite.
- 160-170 As above except coarse grained to granular, 5% pebbles; moderately sorted.
- 170-180 Sand white; coarse to very coarse grained, some medium grains, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; some glauconite; pyrite.
- 180-190 Clay light brown, grayish yellow; moderate sand; medium grained to granular, few pebbles; subangular to subrounded; poorly sorted; quartz; feldspar.
- 190-200 Clay medium gray; moderate sand; very coarse grained to granular; subrounded; moderately well sorted; quartz; feldspar.
- 200-210 Sand white; medium to coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; feldspar.

OWNER: Bogese Const. Co. (Subdivision)

Depth (<u>feet</u>)	
210-220	Sand — white; fine to coarse grained, few granules, few pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; 3% glauconite; few grains of garnet.
220-230	Sand — white; medium to very coarse grained, 10% granules; subangular to subrounded; moderately sorted; quartz; feldspar.
230-240	As above plus few pebbles.
240-250	Sand — white; coarse grained to granular; subrounded; moderately well sorted; quartz; feldspar.
250-260	As above plus few pebbles.
260-270	Sand — white; medium to very coarse grained; subrounded; moderately sorted; quartz; feldspar; few grains of glauconite.
270-280	Sand — white; coarse grained to granular, some medium grains, some pebbles; subrounded; moderately sorted; quartz; feldspar; few grains of garnet.
280-290	As above except no pebbles.
290-300	As above except some garnet.
300-310	Sand — white; coarse grained to granular, 5% pebbles; subrounded; moderately sorted; quartz; feldspar; few grains of garnet.
310-318	As above except 7% pebbles.

Logged by: Michael T. Currie

-4- W#: 4351

GEOLOGIC SUMMARY

Depth (feet)	Thickness (feet)	Rock Unit	Time Rock Unit
0-20	20	Bacons Castle Formation	Pleistocene
20-30	10	Calvert Formation	Miocene-Eocene
30-90	60	Nanjemoy Formation	Eocene
90-150	60	Mattaponi Formation	Eocene-Cretaceous
150-318	168+	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES David A. Hubbard, Jr. Geologist, Jr. August 16, 1978