

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:

DIVISION OF MINERAL RESOURCES

OFFICE ADDRESS:

Box 3667
Charlottesville, VA 22903

JAMES L. CALVER, COMMISSIONER

McCormick Road
Charlottesville, Virginia

WATER WELL COMPLETION REPORT

Hopewell Waste Water Treatment Plant

OWNER: Geo. Hyman Const. Co. Mailing Address: P. O. Box 307, Hopewell, VA. 23860

TENANT: _____ Mailing Address: _____

DRILLER: John Mitchell Mailing Address: 2111 Magnolia Street
Richmond, VA. 23223
above SL

WELL LOCATION: County Prince George Approx. 30 ^{feet} ~~XXXXX~~ 1900' NE Rt. 10 (direction) of
1500' NW Baily's ck and .2 ^{feet} miles East (direction) of Continental Can Rd.

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

DATE STARTED: 8-22-77 DATE COMPLETED: 8-31-77

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 210 feet

WATER LEVEL: Stands 27 feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Airlift
Drawdown 185 feet
Rate 100 gal. per min.
Duration 1 hrs., _____ min.

HOLE SIZE: 9-7/8 inches from 0 to 210 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

WATER ZONES: from 147 to 156 feet
from 182 to 187 feet
from _____ to _____ feet

SCREEN SIZE: 4 inches from 148 to 156 feet
4 inches from 182 to 187 feet
_____ inches from _____ to _____ feet

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

CASE SIZE: 4 inches from +2 to 148 feet
4 inches from 156 to 182 feet
4 inches from 187 to 192 feet

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

GROUTING: Method _____
Material _____ Depth 50 feet

WATER ANALYSIS AVAILABLE: Yes _____ No _____

PUMP: Type _____
Capacity _____ gal per min
Depth of intake _____ feet

DRILL CUTTINGS SAVED: 21 Yes X 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: Sydnor Hydrodynamics 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	10	Gray and yellow sandy clay	
10	20	Gray sand	
20	40	Brown clay, sand and gravel	
40	45	Gray clay	
45	60	Brown sand	
60	80	Hard shale, gravel and blue clay	
80	120	Gray sand and hard gray clay	
120	140	Hard gray clay and gravel	
140	210	Sand, gravel with some gray clay - Drills hard.	

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

INTERVAL SHEET

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Well Repository No: W#: 4958
C#: 207

Date rec'd: 11/18/77 Date Processed: 1/6/78

Sample Interval: from:0 to:210

PROPERTY: Hopewell Waste Water Treatment Plant

Number of samples: 21

COMPANY: Sydnor Hydrodynamics

Total Depth: 210'

COUNTY: Prince George (Hopewell)

Oil or Gas: Water Exploratory:

From-To	From-To	From-To	From-To
0 - 10	-	-	-
10 - 20	-	-	-
20 - 30	-	-	-
30 - 40	-	-	-
40 - 50	-	-	-
50 - 60	-	-	-
60 - 70	-	-	-
70 - 80	-	-	-
80 - 90	-	-	-
90 - 100	-	-	-
100 - 110	-	-	-
110 - 120	-	-	-
120 - 130	-	-	-
130 - 140	-	-	-
140 - 150	-	-	-
150 - 160	-	-	-
160 - 170	-	-	-
170 - 180	-	-	-
180 - 190	-	-	-
190 - 200	-	-	-
200 - 210	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Washed and unwashed.

OWNER: Hopewell Waste Water
Treatment Plant
DRILLER: Sydnor Hydrodynamics
COUNTY: Prince George (Hopewell)

W#: 4958
C#: 207
TOTAL DEPTH: 210'
QUAD.: Hopewell

GEOLOGIC LOG

Depth
(feet)

- 0-10 Clay — light yellowish gray; moderate sand; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite.
- 10-20 Sand — pale yellow; slightly clayey; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; 3% opaques, few grains of glauconite.
- 20-30 Sand — light grayish orange; slightly clayey; medium to coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; 2% opaques; muscovite.
- 30-40 Sand — yellowish gray; slightly clayey; very coarse grained to granular, few pebbles; subrounded; moderately well sorted; quartz; feldspar; few opaques.
- 40-50 Sand — light olive gray, dark yellowish orange; slightly clayey; coarse to very coarse grained, few granules; subangular to subrounded; moderately well sorted; quartz; feldspar; few opaques; few black phosphatic fragments.
- 50-60 As above plus few grains of glauconite.
- 60-70 Sand — light olive gray; slightly clayey; coarse to very coarse grained, 15% granules; subrounded; moderately sorted; quartz; feldspar; few black phosphatic fragments; glauconite.
- 70-80 Clay and sand — dusky yellow; abundant clay; moderate sand; coarse grained to granular, some angular pebbles; subrounded; moderately sorted; quartz; feldspar; few grains of glauconite.
- 80-90 Sand — off white; slightly clayey; coarse to very coarse grained; subrounded; well sorted; quartz; feldspar.
- 90-100 As above except 5% granules, few pebbles.
- 100-110 Sand — off white; very coarse grained to granular; subrounded; well sorted; quartz; feldspar.
- 110-120 As above except coarse grained to granular; moderately well sorted.

Depth
(feet)

- 120-130 Gravel — off white; slightly clayey (clasts); some coarse grained sand; subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite.
- 130-140 Sand and clay — light olive gray; moderate clay; abundant sand; coarse grained to granular, some medium grains, few pebbles; subrounded; moderately sorted; quartz; feldspar.
- 140-150 Sand — light olive gray abundant clay; medium grained to granular, 15% pebbles, subrounded; poorly sorted; quartz; feldspar; muscovite.
- 150-160 Sand — off white; slightly clayey; very coarse grained to granular, some pebbles; subrounded; moderately well sorted; quartz; feldspar.
- 160-170 As above except coarse grained to granular, some pebbles; moderately sorted.
- 170-180 Sand and gravel — off white; slightly clayey; coarse grained to gravel; angular to subrounded; moderately sorted; quartz; feldspar.
- 180-190 Gravel — off white; slightly clayey; some coarse grained, subrounded sand; angular to subrounded; moderately sorted; quartz; feldspar.
- 190-200 No sample.
- 200-210 Granules — off white; slightly clayey; abundant coarse to very coarse grained sand, 5% pebbles, subrounded; moderately sorted; quartz; feldspar.

Logged by: Michael T. Currie

GEOLOGIC SUMMARY

<u>Depth</u> <u>(feet)</u>	<u>Thickness</u> <u>(feet)</u>	<u>Rock Unit</u>	<u>Time</u> <u>Rock Unit</u>
0-40	40	Moorings "Unit"	Pleistocene
40-80	40	Calvert Formation	Miocene-Eocene
80-210	130+	Patuxent Formation	Cretaceous