

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W#: 4060
C#: 217

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: County of Henrico Mailing Address: Box 27032 Richmond, VA 23261

TENANT: Thompson site production well Mailing Address: _____

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: P.O. Box 27186 Richmond, VA 23261

WELL LOCATION: County Henrico Approx. 325 ^{feet}~~miles~~ East (direction) of
Memorial Drive and 550 ^{feet}~~miles~~ South (direction) of U. S. Hwy. 60

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

DATE STARTED: 7/16/73 DATE COMPLETED: 10/23/73

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 610 feet

WATER LEVEL: Stands 170 feet below surface OR

has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method pump

Drawdown 79' 4" feet

Rate 700 gal. per min.

Duration 61 hrs., 30 min.

HOLE SIZE: 25 inches from 0 to 70 feet

19 inches from 70 to 600 feet

9 7/8 inches from 600 to 610 feet

SCREEN SIZE: 8 inches from 362 to 380 feet

395 406

_____ inches from 423 to 444 feet

490 514

_____ inches from 522 to 534 feet

550 560

572 580

CASE SIZE: 10 inches from 42 to 362 feet

8 inches ~~xxxx~~ Spacers between feet

Screens from

~~xxxxxxxxxxxxxxxx~~ 380 to 595 feet

WATER ZONES: from _____ to _____ feet

from Same as to Screens feet

from _____ to _____ feet

WATER: Color _____ Taste _____

Odor _____ Temp. _____ °F

GROUTING: Method Pressure

Material Cement & Water Depth 70 feet

WELL TO SUPPLY: (check one) Home _____

Farm _____ Town _____ School _____

Industry _____ Other Subdivision

PUMP: Type _____

Capacity _____ gal per min

Depth of intake _____ feet

WATER ANALYSIS AVAILABLE: Yes X No _____

DRILL CUTTINGS SAVED: 61 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: Gravel-packed 70-590'

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

INTERVAL SHEET

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Well Repository No: W#: 4060
C#: 217

Date rec'd: 1/17/74 Date Processed: 11/18/74 Sample Interval: from:/to:/

PROPERTY: County of Henrico
(Thompson Site Prod. Well)

0 608
Number of samples: 61

COMPANY: Sydnor

Total Depth: 610'

COUNTY: Henrico (Seven Pines)

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
0 - 10	250 - 260	500 - 510	-
10 - 20	260 - 270	510 - 520	-
20 - 30	270 - 280	520 - 530	-
30 - 40	280 - 290	530 - 540	-
40 - 50	290 - 300	540 - 550	-
50 - 60	300 - 310	550 - 560	-
60 - 70	310 - 320	560 - 570	-
70 - 80	320 - 330	570 - 580	-
80 - 90	330 - 340	580 - 590	-
90 - 100	340 - 350	590 - 600	-
100 - 110	350 - 360	600 - 608	-
110 - 120	360 - 370	-	-
120 - 130	370 - 380	-	-
130 - 140	380 - 390	-	-
140 - 150	390 - 400	-	-
150 - 160	400 - 410	-	-
160 - 170	410 - 420	-	-
170 - 180	420 - 430	-	-
180 - 190	430 - 440	-	-
190 - 200	440 - 450	-	-
200 - 210	450 - 460	-	-
210 - 220	460 - 470	-	-
220 - 230	470 - 480	-	-
230 - 240	480 - 490	-	-
240 - 250	490 - 500	-	-

Unwashed only

OWNER: County of Henrico
(Thompson Site Prod. Well)
DRILLER: Sydnor
COUNTY: Henrico (Seven Pines)

W#: 4060
C#: 217
TOTAL DEPTH: 608'
QUAD.: Seven Pines

GEOLOGIC LOG

Depth
(feet)

- 0- 10 Clay — light brown; moderate sand; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar.
- 10- 20 Sand — grayish orange; slightly clayey; coarse grained to gravel (15%); subrounded; poorly sorted; quartz; feldspar; few grains of glauconite.
- 20- 30 Sand — grayish orange; slightly stained; slightly clayey; coarse to very coarse grained, some granules; subrounded; moderately well sorted; quartz; feldspar.
- 30- 40 Sand — dark yellowish orange; heavily stained; coarse grained, some medium grains; subrounded; well sorted; quartz; feldspar; few grains of glauconite; few opaques.
- 40- 50 Sand and clay — grayish orange; moderate clay; abundant sand; medium to coarse grained, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar.
- 50- 60 Granules and sand — olive light gray; slightly clayey-olive light gray, dark yellowish orange; fine to medium grained, 40% granules; subangular to subrounded; poorly sorted; quartz; few grains of feldspar; muscovite.
- 60- 70 Sand — light olive gray; abundant clay; fine to coarse grained, some granules, 7% angular pebbles; angular to subrounded; poorly sorted; quartz; few grains of feldspar; glauconite; muscovite.
- 70- 80 As above except clay and sand; abundant clay; moderate sand.
- 80- 90 As above except 20% angular pebbles.
- 90-100 Sand — olive light gray; moderate clay; fine to coarse grained, some pebbles; subangular to rounded; moderately sorted; quartz; 30% glauconite; some black phosphatic material; muscovite.
- 100-110 As above plus some shell fragments; few grains of feldspar.

Depth
(feet)

- 110-120 Sand— olive light gray; moderate clay; medium to coarse grained, 10% granules, 7% angular pebbles; subangular to rounded; poorly sorted; quartz; 35% glauconite; some shell fragments; some black phosphatic material; muscovite; forams (inc. Globulina and Buccella).
- 120-130 Gravel — multicolored; moderate clay-olive light gray; moderate sand; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; glauconite 50% of sand sized fraction; 3% black phosphatic material; few shell fragments; muscovite.
- 130-140 Gravel — multicolored; slightly clayey; slightly sandy; medium grained; subangular to rounded; well sorted; quartz; glauconite 60% of sand sized fraction; few flakes of muscovite.
- 140-150 Clay — olive light gray, white; moderate sand; medium grained; subrounded to rounded; well sorted; glauconite 65% of sand sized fraction; quartz; some shell fragments; muscovite.
- 150-160 Clay — moderate orange pink; slightly sandy; medium grained, few pebbles; subrounded to rounded; poorly sorted; quartz; glauconite 60% of sand sized fraction; muscovite; few shell fragments.
- 160-170 Sand — olive light gray; moderate clay-olive light gray, moderate orange pink, white; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 35% glauconite; some shell fragments; few black phosphatic fragments; muscovite.
- 170-180 Sand — olive light gray; fine grained; subangular to rounded; well sorted; quartz; 35% glauconite; 2% muscovite; some shell fragments.
- 180-190 As above except fine to medium grained; moderately well sorted.
- 190-200 Clay — medium light gray, moderate orange pink, white; moderate sand; medium to coarse grained, some granules, some pebbles; subrounded to rounded; poorly sorted; quartz; glauconite 40% of sand sized fraction; some shell fragments; muscovite.
- 200-210 Gravel — olive light gray; slightly clayey-olive light gray, moderate orange pink, very light gray; some medium to coarse grained sand; angular to subrounded; moderately sorted; quartz; some glauconite; few shell fragments; muscovite.
- 210-220 Sand and gravel — light olive gray; slightly clayey; coarse grained to granular (20%), 50% pebbles; subrounded; poorly sorted; quartz; feldspar; 2% glauconite; muscovite; few black phosphatic fragments.
- 220-230 Gravel — off white; slightly clayey (clasts)-olive light gray, light gray, yellowish gray; moderate coarse to very coarse grained sand, 15% granules; angular to subrounded; moderately sorted; quartz; feldspar; few shell fragments.

Depth
(feet)

- 230-240 Sand and granules — off white; slightly clayey; coarse to very coarse grained, 40% granules, 15% pebbles; subrounded; poorly sorted; quartz; feldspar; 2% glauconite; some shell fragments; few black phosphatic fragments.
- 240-250 Granules — off white; slightly clayey-dark yellowish orange, light olive gray; moderate coarse to very coarse grained sand, 10% pebbles; subrounded; moderately sorted; quartz; feldspar; some glauconite; few shell fragments; few black phosphatic fragments; few grains of garnet.
- 250-260 As above except 20% angular to subrounded pebbles; no black phosphatic material.
- 260-270 Sand and gravel:— off white; coarse grained to granular, 30% gravel; subrounded; poorly sorted; quartz; feldspar; some glauconite; few shell fragments.
- 270-280 As above except 35% gravel.
- 280-290 As above except no shell fragments; few grains of glauconite.
- 290-300 As above.
- 300-310 Granules and gravel — off white; slightly clayey; abundant very coarse grained sand; angular to subrounded; poorly sorted; quartz; feldspar; some glauconite; few shell fragments; muscovite.
- 310-320 Gravel — off white; slightly clayey; abundant very coarse grained to granular sand; angular to subrounded; moderately sorted; quartz; feldspar; some glauconite.
- 320-330 Sand and gravel — off white; slightly clayey; coarse grained to granular, 40% pebbles; subrounded; poorly sorted; quartz; feldspar; some glauconite; muscovite; few shell fragments.
- 330-340 Granules and gravel — off white; moderate very coarse grained sand; subrounded; moderately well sorted; quartz; feldspar; few grains of garnet; glauconite.
- 340-350 As above except slightly clayey; abundant sand.
- 350-360 As above.
- 360-370 As above except some glauconite; no garnet.
- 370-380 Sand — off white; slightly clayey; coarse grained to granular, some pebbles; subrounded; moderately sorted; quartz; feldspar; 2% glauconite; some shell fragments; muscovite.

Depth
(feet)

- 380-390 Granules — off white; slightly clayey; abundant coarse to very coarse grained sand, 20% pebbles; subrounded; poorly sorted; quartz; feldspar; few grains of glauconite; few shell fragments.
- 390-400 Sand — off white; moderate clay (some clasts); coarse grained to gravel, some medium grains; subrounded; poorly sorted; quartz; feldspar; some glauconite.
- 400-410 Sand and gravel — off white; slightly clayey; coarse grained to granular, 50% pebbles; angular to subrounded; poorly sorted; quartz; feldspar; some glauconite.
- 410-420 Sand — off white; coarse grained to gravel (20%); subrounded; poorly sorted; quartz (some moderately stained); feldspar; some glauconite.
- 420-430 As above except 35% pebbles; few grains of garnet.
- 430-440 Sand — off white; coarse grained to granular, 10% pebbles; subrounded; moderately sorted; quartz; feldspar; some glauconite; few grains of garnet.
- 440-450 As above except 7% angular pebbles.
- 450-460 Sand and gravel — off white; coarse grained to granular, 60% pebbles; angular to subrounded; poorly sorted; quartz; feldspar; some glauconite; some garnet.
- 460-470 Sand — light olive gray; slightly clayey; coarse to very coarse grained, some medium grains, some granules, 3% pebbles; subrounded; moderately sorted; quartz; feldspar; 3% glauconite; few grains of garnet.
- 470-480 Sand — light olive gray; slightly clayey-light reddish brown (clasts), light olive gray; coarse grained to gravel (30%); subrounded; poorly sorted; quartz; feldspar; some glauconite; few grains of garnet.
- 480-490 Sand — off white; coarse to very coarse grained, some medium grains, some granules; subrounded; moderately sorted; quartz; feldspar; some glauconite.
- 490-500 As above except slightly clayey; few shell fragments.
- 500-510 Sand — light gray; moderate clay; coarse grained to granular; subrounded; moderately well sorted; quartz; feldspar; some glauconite; few grains of garnet.
- 510-520 Sand — off white; coarse grained to granular, few pebbles; subrounded; moderately sorted; quartz; feldspar; some glauconite.

Depth
(feet)

- 520-530 As above except 5% pebbles; few grains of garnet.
- 530-540 Sand — off white; coarse to very coarse grained, some medium grains, 10% granules, few pebbles; subrounded; poorly sorted; quartz; feldspar; few grains of glauconite.
- 540-550 As above except 5% angular pebbles; some garnet.
- 550-560 Sand — off white; medium grained to granular, 5% angular pebbles; angular to subrounded; poorly sorted; quartz; feldspar; some glauconite; few grains of garnet.
- 560-570 As above except slightly clayey (some clasts).
- 570-580 As above.
- 580-590 As above except 15% pebbles.
- 590-600 Sand — off white; medium to very coarse grained, 10% granules, 7% pebbles; subrounded; poorly sorted; quartz; feldspar; some glauconite; few grains of garnet.
- 600-608 As above except slightly clayey; 15% granules.

*Note: All samples are unwashed.

Logged by: Michael T. Currie

OWNER: County of Henrico
Thompson Side Prod.

W# 4060

-6- Do Not Type

GEOLOGIC SUMMARY

<u>Depth</u> (feet)	<u>Thickness</u> (feet)	<u>Rock Unit</u>	<u>Time</u> <u>Rock Unit</u>
0-60	60	Columbia Group	Pleistocene
60-90	30	Yorktown Formation	Pliocene-Miocene
90-140	50	Nanjemo Formation	Eocene
140-160	20	Marlboro Clay	Eocene
160-210	50	Mattaponi Formation	Eocene-Cretaceous
210-608	398	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
November 30, 1978