W-3068
C-140

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:
B 3667
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES

JAMES L. CALVER, COMMISSIONER

WATER WELL COMPLETION REPORT

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

OWNER: Sydnor Hydrodynamics, Inc. Mailing Address: P. O. Box 1476, Richmond, VA 23212

TENANT: Ranier Estates Subdivision Mailing Address:

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: P. O. Box 1476, Richmond, VA 23212

WELL LOCATION: County Hanover Approx. 2/3 miles southwest (direction) of Studley and 100 feet west (direction) of St. Rd. 615

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

DATE STARTED: May 21, 1971 DATE COMPLETED: June 1970

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 452 feet

WATER LEVEL: Stands 142 1/2 feet below surface OR

has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Submersible

Drawdown 52 1/2 feet

Rate 100 gal. per min.

Duration 8 hrs., 0 min.

WATER ZONES: from 355 to 365 feet

from 392 to 422 feet

from _____ to _____ feet

WATER: Color clear Taste _____

Odor none Temp. _____ °F

WELL TO SUPPLY: (check one) Home _____

Farm _____ Town _____ School _____

Industry _____ Other Subdivision

WATER ANALYSIS AVAILABLE: Yes _____ No X

DRILL CUTTINGS SAVED: Yes 45 No _____

HOLE SIZE: 12 inches from 0 to 452 feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

SCREEN SIZE: 6 inches from 355 to 365 feet

6 inches from 392 to 422 feet

_____ inches from _____ to _____ feet

CASE SIZE: 6 inches from +2 to 355 feet

6 inches from 365 to 392 feet

6 inches from 422 to 426 feet

GROUTING: Method Pressure

Material cement & water Depth 50 feet

PUMP: Type Sumo (test), 10 HP

Capacity _____ gal. per min

Depth of intake 299 feet

(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: Electric log by driller

(LOG OF WELL) OVER

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

INTERVAL SHEET

C-140

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Well Repository No: 3068

Date rec'd: 8/17/70 ; processed 1/27/71

Sample Interval; from 0 to: 450'

PROPERTY: Sydnor Hydrodynamics (Ranier Estates)

Number of samples: 45

COMPANY: Sydnor Hydrodynamics, Inc.

Total Depth: 452'

COUNTY: Hanover (Studley)

Oil or Gas: Water: xExploratory:

From-To	From-To	From-To	From-To
0 - 10	250 - 260	-	-
10 - 20	260 - 270	-	-
20 - 30	270 - 280	-	-
30 - 40	280 - 290	-	-
40 - 50	290 - 300	-	-
50 - 60	300 - 310	-	-
60 - 70	310 - 320	-	-
70 - 80	320 - 330	-	-
80 - 90	330 - 340	-	-
90 - 100	340 - 350	-	-
100 - 110	350 - 360	-	-
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	-	-	-
210 - 220	-	-	-
220 - 230	-	-	-
230 - 240	-	-	-
240 - 250	-	-	-

All intervals have both washed and unwashed samples

OWNER: Sydnor Hydrodynamics
(Rainer Estates)
DRILLER: Sydnor Hydrodynamics
COUNTY: Hanover

W#: 3068
C#: 140
TOTAL DEPTH: 452'
QUAD: Studley

GEOLOGIC LOG

Depth (feet)	
0 - 10	Sand -- light brown; moderate clay; medium to coarse grained, some fine grains, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; few opaques.
10 - 20	Sand -- light brown; slightly clayey; coarse to very coarse grained, 10% granules; subangular to subrounded; moderately sorted; quartz; feldspar.
20 - 30	Granules -- pale yellowish orange; slightly clayey (clasts); some coarse to very coarse grained sand, 5% pebbles; subrounded; moderately well sorted; quartz; feldspar.
30 - 40	Sand -- dark yellowish orange; abundant clay; medium grained to granular, some pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; 10% ferricrete; some muscovite; few opaques.
40 - 50	Gravel -- grayish orange; moderate clay - dark yellowish orange, olive light gray; moderate sand; fine to medium grained; subangular to subrounded; moderately sorted; quartz; feldspar; few flakes of muscovite.
50 - 60	Sand -- olive light gray; abundant clay; fine grained; subangular to subrounded; well sorted; quartz; few grains of fledspar; few black phosphatic fragments; few flakes of muscovite; glauconite.
60 - 70	Sand -- olive light gray; moderate clay; very fine to fine grained; subangular to subrounded; well sorted; quartz; some black phosphatic material; muscovite; few grains of feldspar; glauconite.
70 - 80	As above plus few fragments of ferricrete.
80 - 90	As above plus 3% shell fragments; no ferricrete.
90 - 100	Sand -- olive light gray; abundant clay; fine to medium grained, some coarse grains; subangular to subrounded; moderately sorted; quartz; 3% shell fragments; 2% black phosphatic material; few flakes of muscovite.
100 - 110	Sand -- olive light gray; slightly clayey; medium to coarse grained; subrounded to rounded; moderately well sorted; quartz; 7% black phosphatic material; some shell fragments; few grains of feldspar; garnet.
110 - 120	As above except 2% black phosphatic material; few shell fragments; no feldspar.

Depth (feet)	
120 - 130	As above plus some feldspar.
130 - 140	As above plus few grains of glauconite.
140 - 150	Sand -- olive gray; slightly clayey; fine to medium grained, few granules; subangular to rounded; moderately well sorted; quartz; 40% glauconite; few shell fragments; muscovite.
150 - 160	As above except olive light gray; some shell fragments.
160 - 170	Sand -- olive light gray; slightly clayey; fine to medium grained, some coarse grains, some granules, 5% pebbles; subangular to rounded; moderately sorted; quartz; 30% glauconite; 3% black phosphatic material; 3% shell fragments; some muscovite; forams rare (inc. Robulus).
170 - 180	Sand -- olive light gray; moderate clay; fine to medium grained, few granules; subangular to rounded; moderately well sorted; quartz; 15% glauconite; 5% shell fragments; some muscovite; few black phosphatic fragments; few echinoid spines; few grains of pyrite.
180 - 190	Sand -- olive light gray; moderate clay; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 25% glauconite; 2% muscovite; some shell fragments; forams (inc. Robulus); few grains of pyrite.
190 - 200	Sand -- olive light gray; moderate clay - olive light gray, light gray; fine to medium grained, few granules; subangular to rounded; moderately well sorted; quartz; 15% glauconite; 3% shell fragments; some muscovite; few grains of feldspar.
200 - 210	As above except 10% glauconite.
210 - 220	Sand -- olive light gray; moderate clay - olive light gray, moderate orange pink, light gray; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 10% glauconite; 5% shell fragments; few flakes of muscovite; forams (inc. Nodosaria and Robulus).
220 - 230	As above except forams rare (inc Nodosaria).
230 - 240	As above except 20% glauconite; 10% shell fragments; no forams.
240 - 250	Sand and coquina- light olive gray; slightly clayey; fine to medium grained; subangular to rounded; moderately well sorted; 40% limestone and shell fragments; quartz; 30% glauconite; few flakes of muscovite.
250 - 260	Sand -- salt and pepper; coarse to very coarse grained, some medium grains; angular to rounded; moderately well sorted; quartz; 15% glauconite; 3% shell fragments; some fledspar; few flakes of muscovite.

Depth (feet)	
260 - 270	Sand - white; coarse to very coarse grained, some granules; subrounded; moderately well sorted; quartz; feldspar; 3% glauconite; some garnet; few shell fragments.
270 - 280	Sand -- white; coarse to very coarse grained, 10% granules; subrounded; moderately sorted; quartz; feldspar; 5% glauconite; few grains of garnet.
280 - 290	Sand and granules -- white; coarse to very coarse grained, 50% granules; subrounded; moderately sorted; quartz; feldspar; 2% glauconite; few flakes of muscovite.
290 - 300	As above except 40% granules.
300 - 310	Granules - off white; moderate sand; coarse to very coarse grained; subangular to subrounded; well sorted; quartz; feldspar; few grains of glauconite; muscovite.
310 - 320	As above.
320 - 330	As above plus some pebbles.
330 - 340	Sand and granules - off white; slightly clayey; medium to very coarse grained, some pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; few flakes of muscovite.
340 - 350	As above except sand; 20% granules, few grains of glauconite.
350 - 360	Sand -- off white; slightly clayey; medium to very coarse grained, 3% granules; subangular to subrounded; moderately sorted; quartz; feldspar; few grains of glauconite; muscovite.
360 - 370	Sand -- off white; slightly clayey; coarse to very coarse grained, some medium grains, few granules; subangular to subrounded; moderately sorted; quartz; feldspar; 2% glauconite; few flakes of muscovite.
370 - 380	Sand -- off white; slightly clayey; coarse grained, 3% granules; subrounded; moderately well sorted; quartz; feldspar; few flakes of muscovite.
380 - 390	Sand -- off white; slightly clayey; coarse graind, some fine grains, 7% granules; subangular to subrounded; moderately sorted; quartz; feldspar; few grains of glauconite; garnet; muscovite.
390 - 400	As above except no garnet.
400 - 410	Sand -- off white; coarse to very coarse grained, 10% granules; subrounded; moderately sorted; quartz; feldspar; some glauconite; few flakes of muscovite.
410 - 420	As above except slightly clayey.
420 - 430	Sand -- off white; slightly clayey; coarse grained to granular; subrounded;

Depth
(feet)

moderately sorted; quartz; feldspar; few grains of glauconite; muscovite.

430 - 440 Granules -- off white; moderate very coarse grained sand; subrounded; moderately well sorted; quartz; feldspar; few flakes of muscovite; glauconite.

440 - 450 Sand -- off white; slightly clayey; coarse to very coarse grained, 15% granules; subrounded; moderately sorted; quartz; feldspar.

450 - 452 No sample.

Logged by Michael T. Currie
Jan.19, 1979