

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:
3667
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES
JAMES L. CALVER, COMMISSIONER
WATER WELL COMPLETION REPORT

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

1221 E. Broad Street
Richmond, VA. 23219

OWNER: Va. Dept. of Highways & Transportation Mailing Address: _____

TENANT: West-Bound Lane Rest Area Mailing Address: _____

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

WELL LOCATION: County New Kent Approx. 440 ^{feet}~~xxxx~~ N (direction) of

West Bound Lane I-64 and 800 ^{feet}~~xxxx~~ W (direction) of Rest Area Exit

One mile west of Rt. 608
(GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.)

DATE STARTED: July 7, 1975 DATE COMPLETED: August 8, 1975

TYPE OF DRILL RIG USED: Mud rotary TOTAL DEPTH 401 feet

WATER LEVEL: Stands 91 feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Submersible pump
Drawdown 19 feet
Rate 50 gal. per min.
Duration 48 hrs., _____ min.

HOLE SIZE: 12 1/4 inches from 0 to 401 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

WATER ZONES: from _____ to _____ feet
from _____ to _____ feet
from _____ to _____ feet

SCREEN SIZE: 6 inches from 275 to 280 feet
6 inches from 348 to 353 feet
6 inches from 389 to 394 feet

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

CASE SIZE: 6 inches from +2 to 399 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

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

GROUTING: Method _____
Material _____ Depth 50 feet

WATER ANALYSIS AVAILABLE: Yes X No _____

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

DRILL CUTTINGS SAVED: 40 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: Gamma Log & resistivity

LOG

FURNISHED BY: Earl Sealy, Jr.

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	12	Yellow sandy clay	
12	18	Yellow and gray sand	
18	40	Small gravel and sand mix	
40	70	Yellow and gray sandy clay	
70	89	Gray clay	
89	95	Rock, shells and sharkteeth	
95	100	Green clay	
100	145	Rock, shells, and green and gray mix with black sand	
145	175	Gray sandy clay, black clay and black sand mix	
175	190	Red and dark clay mix with sand	
190	295	Black sand clay and shells, black sand	
245	280	Light gray sandy clay and some black sand and black sandy clay	
280	290	Sand	
290	310	Tough brown and gray clay mix	
310	327	Brown and gray clay mix	
327	355	Coarse sand and gravel mix	
355	400	Gray sand and clay mix	
400	401	Tough clay	

(Use additional forms if necessary)

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

INTERVAL SHEET

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Well Repository No: W#: 4432

Date rec'd: 9/22/75 Date Processed: 7/26/76

C#: 82
Sample Interval: from:0 to:401

PROPERTY: Va. Dept. of Highways & Transportation
#1

Number of samples: 40

COMPANY: Sydnor Hydrodynamics

Total Depth: 401'

COUNTY: New Kent (Providence Forge)

Oil or Gas: WaterX Exploratory:

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 - 401	-	-
150- 160	-	-	-
160- 170	-	-	-
170- 180	-	-	-
180- 190	-	-	-
190- 200	-	-	-
200- 210	-	-	-
210- 220	-	-	-
220- 230	-	-	-
230- 240	-	-	-
240- 250	-	-	-

Unwashed samples only

OWNER: Va. Dept. of Highways and
Transportation
DRILLER: Sydnor
COUNTY: New Kent (I-64 rest area)

W#: 4432
C#: 82
TOTAL DEPTH: 401'
QUAD.: Providence Forge

GEOLOGIC LOG

Depth
(feet)

- 0-10 Sand — grayish orange; moderate clay; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; some glauconite; few opaques.
- 10-20 Sand — pale yellowish orange; slightly clayey; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; feldspar; some opaques; few grains of glauconite.
- 20-30 As above except few opaques.
- 30-40 Sand — very pale yellowish orange; slightly clayey; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; feldspar; some opaques.
- 40-50 Sand — pale yellowish orange; fine to medium grained (some moderately stained grains); subangular to subrounded; moderately well sorted; quartz; feldspar; some opaques.
- 50-60 As above except very pale yellowish orange; few grains of glauconite.
- 60-70 As above except pale yellowish orange; slightly clayey.
- 70-80 Sand — grayish orange; slightly clayey-grayish orange, olive light gray; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; some black phosphatic material; few shell fragments; few grains of glauconite; few bone fragments.
- 80-90 Sand — light olive gray; slightly clayey-olive light gray, dark yellowish orange; fine to medium grained, some coarse grains; subangular to subrounded; moderately sorted; quartz; 2% shell fragments; 2% black phosphatic material; few bone fragments.
- 90-100 Sand — olive light gray; slightly clayey; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; 30% sandy limestone and shell fragments; some black phosphatic material; some glauconite (green, black); few bone fragments; pyrite. C.M.S.
68.
- 100-110 As above except 10% glauconite; forams (inc. Buccella and Cibicides ?). DOMESTIC
GR.

Depth
(feet)

- 110-120 Coquina — olive light gray; slightly clayey; abundant sand; fine to medium grained; subangular to subrounded; moderately well sorted; 75% sandy limestone and shell fragments; quartz; 10% glauconite; few black phosphatic fragments; muscovite; forams (inc. Buccella and Textularia).
- 120-130 As above except 55% sandy limestone and shell fragments; forams (inc. Buccella, Bulimina, and Guttulina ?); bone fragment.
- 130-140 Sand and coquina — olive light gray; slightly clayey; medium to coarse grained, some fine grains; subangular to subrounded; moderately well sorted; quartz; 40% sandy limestone and shell fragments; 12% glauconite; ostracodes; forams (inc. Textularia, Bolivina, and Pyrulina).
- 140-150 Sand — olive light gray; slightly clayey; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; 15% glauconite; 5% sandy limestone fragments; few shell fragments; muscovite; forams scarce (inc. Robulus and Buccella).
- 150-160 Sand and coquina — olive light gray; slightly clayey; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; 45% sandy limestone and shell fragments; 7% glauconite; forams (inc. Buccella, Robulus, and Quinqueloculina); ostracodes; few black phosphatic fragments; pyrite.
- 160-170 Sand — olive light gray; moderate clay; fine to coarse grained; subangular to rounded; moderately sorted; quartz; 15% glauconite; 5% sandy limestone and shell fragments; muscovite; few spines; foram.
- 170-180 Sand — light olive gray; slightly clayey; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; 12% glauconite; 3% sandy limestone and shell fragments; muscovite.
- 180-190 Clay — olive light gray, light orange pink, very light gray (some clasts); moderate sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; glauconite 10% of sand sized fraction; some shell fragments; forams rare (inc. Buccella).
- 190-200 Sand — olive gray; moderate clay; medium grained; subangular to rounded; well sorted; 60% glauconite; quartz; some shell fragments; muscovite; forams rare (inc. Robulus).
- 200-210 As above plus some moderate orange pink clay clasts; no Robulus.

Depth
(feet)

- 210-220 As 200-210 plus forams (inc. Discorbis and Globulina; few spines.
- 220-230 Sand — olive gray; moderate clay; fine to medium grained, some coarse grains; subangular to rounded; moderately sorted; 50% glauconite; quartz; some muscovite; forams (inc. Buccella, Pyrulina, and Dentalina).
- 230-240 As above except forams rare (inc. Nodosaria).
- 240-250 As above except 45% glauconite; forams (inc. Marginulina and Robulus).
- 250-260 Sand — olive gray; slightly clayey; fine to medium grained, few granules; subangular to rounded; moderately well sorted; quartz; 40% glauconite; few shell fragments; muscovite.
- 260-270 Sand — salt and pepper; medium grained to granular; subrounded to rounded; moderately sorted; quartz; 30% glauconite; feldspar; few shell fragments; few sandy limestone fragments.
- 270-280 Sand — salt and pepper; medium to coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; 12% glauconite; muscovite; pyrite.
- 280-290 Sand — salt and pepper; medium grained to granular, some pebbles; subrounded to rounded; poorly sorted; quartz; feldspar; 20% glauconite; some sandy limestone and shell fragments; few grains of garnet; pyrite.
- 290-300 Sand — light olive gray; abundant clay—light olive gray, light brown, white; medium to coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; 10% glauconite; few shell fragments; muscovite.
- 300-310 As above except moderate clay; 12% glauconite.
- 310-320 Sand — light olive gray; slightly clayey; medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; feldspar; 5% glauconite; some muscovite; few shell fragments.
- 320-330 Sand — light olive gray; slightly clayey; medium grained to granular; subangular to subrounded; moderately sorted; quartz; feldspar; 15% glauconite; few shell fragments; few sandy limestone fragments; muscovite.
- 330-340 Sand — light olive gray; slightly clayey; medium to very coarse grained, some granules; subrounded; moderately sorted; quartz; feldspar; 15% glauconite; some shell fragments; muscovite.
- 340-350 As above plus few pebbles; 10% glauconite.

Depth
(feet)

- 350-360 Sand — light olive gray; slightly clayey; medium to very coarse grained, some fine grains, some granules, some pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; 10% glauconite; some shell fragments; muscovite.
- 360-370 As above plus forms rare (inc. Buccella).
- 370-380 As above plus few grains of garnet; few black phosphatic fragments.
- 380-390 Sand — salt and pepper; medium to coarse grained, some fine grains, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; 7% glauconite; few grains of garnet; few shell fragments.
- 390-400 Sand — light olive gray; moderate clay; medium to very coarse grained, some granules, few pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; 7% glauconite; few shell fragments; muscovite.
- 400-401 No Sample.

Note: All samples are unwashed.

Logged by: Michael T. Currie