W-4207
C-115

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS: B[illegible] 3667, C[illegible]lottesville, 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 27181 Richmond, VA 23261

TENANT: West Irvington Well #2 Mailing Address:

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: P.O. Box 27181 Richmond, VA 23261

WELL LOCATION: County Lancaster Approx. 120 ~~miles~~ feet southeast (direction) of Intersection of Rt. 634 and .2 ~~miles~~ southwest (direction) of Rt. 634 & 672

(GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.) Well #2 is 10' North of Well #1

DATE STARTED: 1/11/74 DATE COMPLETED: 2/22/74

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 675 feet

WATER LEVEL: Stands 49 feet below surface OR has NATURAL flow of ____ gallons per minute.

YIELD TEST: Method Submersible
Drawdown 89 feet
Rate 295 gal. per min.
Duration 24 hrs., ____ min.

WATER ZONES: from 555 to 570 feet
from 612 to 632 feet
from ____ to ____ feet

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

WELL TO SUPPLY: (check one) Home ____
Farm ____ Town X School ____
Industry ____ Other ____

WATER ANALYSIS AVAILABLE: Yes X (68) No ____

DRILL CUTTINGS SAVED: Yes X No ____

HOLE SIZE: 23 inches from 0 to 100 feet
17¼ inches from 100 to 650 feet
9-7/8 inches from 650 to 675 feet

SCREEN SIZE: 6 inches from 555 to 570 feet
6 inches from 612 to 632 feet
____ inches from ____ to ____ feet

CASE SIZE: 10 inches from +2 to 355 feet
6 inches from 355 to 555 feet; 570 to 612 feet
6 inches from 632 to 638 feet

GROUTING: Method Pressure
Material Cement-Water Depth 100 feet

PUMP: Type ____
Capacity ____ gal. per min
Depth of intake ____ 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:

(LOG OF WELL) OVER

LOG

FURNISHED BY: _____ DATE: _____

DEPTH (feet) FROM	DEPTH (feet) TO	TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
0	10	Top soil - clay.	
10	15	Yellow sand.	
15	20	Clay	
20	30	Clay, streaks of rock.	
30	120	Mixed clay and shells.	
120	150	Sand, clay and shells.	
150	160	Hard clay and shells.	
160	190	Clay and shells.	
190	200	Fine sand, clay and shells.	
200	230	Clay and shells.	
230	240	Fine sand, clay and shells.	
240	250	Clay and shells.	
250	310	Green clay and shells.	
310	320	Clay, shells with streaks of sand.	
320	330	Sand, shells and clay.	
330	340	Coarse sand, clay and shells.	
340	350	Clay and shells.	
350	360	Sand, shells, some clay.	
360	370	Sand, clay, shells.	
370	380	Clay, shells.	
380	390	Clay, streaks of sand, shells.	
390	400	Shell rock and sand.	
400	470	Sand, clay and shells.	
470	480	Clay, shells with streaks of fine black sand.	
480	500	Clay, shells, black sand.	
500	530	Gray clay and shells.	
530	560	Mixed brown clay.	
560	570	Gray clay and sand.	
570	580	Sand, clay and shells.	
580	600	Mixed brown clay.	
600	630	Mixed brown clay and shells.	
630	640	Coarse sand - some clay.	
640	660	Mixed brown clay.	
660	675	Mixed brown and yellow clay.	

(Use additional forms if necessary)

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

INTERVAL SHEET

Page 1 of 1

Well Repository No.: C-115 W- 4207

Date rec'd: 4/26/74 **Date Processed:** 7/8/75

Sample Interval: from 0 to: 670

PROPERTY: Sydnor (West Irvington #2)

Number of samples: 67

COMPANY: Sydnor Hydrodynamics

Total Depth: 675'

COUNTY: Lancaster (Irvington)

Oil or Gas: Water: X Exploratory:

From-To	From-To	From-To	From-To	From-To
0-10	300-310	600-610	-	-
10-20	310-320	610-620	-	-
20-30	320-330	620-630	-	-
30-40	330-340	630-640	-	-
40-50	340-350	640-650	-	-
50-60	350-360	650-660	-	-
60-70	360-370	660-670	-	-
70-80	370-380	-	-	-
80-90	380-390	-	-	-
90-100	390-400	-	-	-
100-110	400-410	-	-	-
110-120	410-420	-	-	-
120-130	420-430	-	-	-
130-140	430-440	-	-	-
140-150	440-450	-	-	-
150-160	450-460	-	-	-
160-170	460-470	-	-	-
170-180	470-480	-	-	-
180-190	480-490	-	-	-
190-200	490-500	-	-	-
200-210	500-510	-	-	-
210-220	510-520	-	-	-
220-230	520-530	-	-	-
230-240	530-540	-	-	-
240-250	540-550	-	-	-
250-260	550-560	-	-	-
260-270	560-570	-	-	-
270-280	570-580	-	-	-
280-290	580-590	-	-	-
290-300	590-600	-	-	-

All have washed and unwashed samples.

OWNER: Sydnor
DRILLER: Sydnor
COUNTY: Lancaster (Irvington)

W # 4207
C # 115
TOTAL DEPTH - 670'
QUAD - Irvington
ELEV - 151?

DEPTH (FEET)			WELL LOG
0-10	Sand	-	grayish orange (10YR 6/4); abundant clay; very fine to very coarse, subangular, poor sorting; ochre.
10-20	Sand	-	pale grayish orange (10YR 8/4); very fine to very coarse, subangular, moderately sorted; feldspar.
20-40	Sand	-	light olive gray (5Y 5/2); abundant clay; fine to coarse, subangular, moderately sorted; ochre.
40-50	Sand	-	light olive gray (5Y 5/1); abundant clay; fine to medium, subangular, moderately sorted; 8% very fine shell fragments; 1% forams, Nonion; ostracods.
50-80	Sand, Shelly	-	light and dark gray; 50-90% shell fragments- Turritella, Mulinia, Arca, Polinices; fine to coarse, subangular, poor to moderate sorting; 10% fine glauconite at 60-80'.
80-140	Sand	-	light olive gray (5Y 5/1); abundant clay; very fine to granule, subangular, moderately sorted; 10-20% fine glauconite at 90-140'; 10-35% shell fragments - Dentalium; echinoid spines at 100-120'; iron oxide stains and fragments at 120-140'.
140-150	Gravel	-	light and dark brown; fine to granule, subangular, poor sorting; 30% very fine glauconite; 30% shell fragments; ochre.
150-170	Sand	-	light olive gray (5Y 6/1); abundant clay; fine to granule, subangular, poor sorting; 10% shell fragments.
170-180	Sand	-	light and dark gray; abundant clay; fine to pebble, subangular, poor sorting; 10% glauconite; 40% shell fragments.

DEPTH (FEET)			WELL LOG
180-200	Sand	-	light olive gray (5Y 5/2); abundant clay; fine to granule, subangular and subrounded, poor to moderate sorting; 20-25% fine glauconite; 5-30% shell fragments; ochre at 190-200'.
200-220	Sand	-	light olive gray (5Y 5/2); abundant clay; calcium carbonate at 210-220'; very fine to granule, subangular and subrounded, moderate to well sorted; 10% phosphate fragments; 5-10% shell fragments; ochre, jaw bone and teeth at 200-210'; forams - Nonion, Robulus.
220-310	Sand	-	light olive gray (5Y 5/2); moderate clay; calcium carbonate at 220-230'; very fine to pebble, subangular and subrounded, poor to well sorted; 10-15% glauconite at 230-290'; few to 10% shell fragments; diatoms and forams - Nonion and Siphogenerina at 260-310'; mica at 280-310'.
310-390	Sand	-	light olive gray (5Y 6/1); sparse clay; very fine to very coarse; subrounded, poor to moderate sorting; 3-40% shell fragments, oyster; forams - Robulus, Quinqueloculina, Nonion, Nodosaria, Lagena, Guttulina, Siphogenerina, Cibicides, Discorbis, Globigerina, Bulimina, Globulina; 3-10% phosphate fragments at 330-390'; shark tooth at 350-360'; jaw bone and tooth at 360-370'; ostracod and spines at 380-390'.
390-400	Sand	-	light and dark gray; moderate coquina fragments; fine to very coarse, subrounded, poor sorting; 20% glauconite; 40% shell fragments.
400-420	Sand	-	light and dark brown; broken coquina; fine to very coarse, subangular and subrounded, poor sorting; 40% glauconite; 20-40% shell fragments; forams.
420-440	Sand, glauconitic	-	light and dark brown; moderate clay; 60% glauconite; fine to very coarse, subrounded, poor sorting; 5-20% fine shell fragments; forams - Robulus, Siphogenerina; mica at 430-440'.

DEPTH (FEET)			WELL LOG
440-480	Sand, glauconitic	-	light and dark green; 80% glauconite; sparse clay; very fine to very coarse, subrounded, poor sorting; forams; 1% shell fragments.
480-500	Sand, Glauconitic	-	dark greenish gray (5GY 4/1); 80% glauconite; moderate clay; very fine to very coarse, subrounded, poor sorting; 1% shell fragments; forams - Nodosaria.
500-550	Sand	-	light olive gray (5Y 6/1); abundant clay; very fine to medium, subrounded, poor sorting; 30-50% glauconite; 1% shell fragments; forams; mica at 510-550'.
550-560	Sand	-	moderate yellowish gray (5Y 6/2); moderate clay; very fine to pebble, angular, subangular, and subrounded, poor sorting; 20% glauconite; feldspar; fine mica.
560-580	Sand	-	light olive gray (5Y 6/1); fine to granule, subangular to subrounded, poor sorting; 15% glauconite; rose quartz; feldspar; mica.
580-610	Sand	-	pale yellowish brown (10YR 6/2); abundant clay; fine to granule, subangular to subrounded, poor sorting; 20% glauconite; feldspar.
610-630	Sand	-	light olive gray (5Y 6/2); sparse clay; fine to coarse; subangular and subrounded, moderately sorted; 10% glauconite; mica; feldspar at 620-630'.
630-640	Gravel	-	light olive gray (5Y 6/2); very fine to granule, subrounded to rounded, poor sorting; 5% glauconite; feldspar; mica.
640-650	Sand	-	light olive gray (5Y 6/2); moderate clay; very fine to granule; subrounded to rounded, moderately sorted; 10% glauconite; feldspar; mica.
650-670	Sand	-	pale yellowish brown (10YR 6/2); abundant clay; very fine to granule, subrounded to rounded, moderately sorted; 20% glauconite and few fine shell fragments at 650-660'; feldspar; mica.

Logged by:
J. K. Polzin
Jan. 26, 1981