

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

INTERVAL SHEET

Page 1 of 1

Well Repository No.: W- 7356

Date rec'd: Date Processed: 4/22/57

Sample Interval: from 0 to 680'

PROPERTY: James City Service Authority
 PW 3 @ W-38

Number of samples: 55

COMPANY: Sydnor Hydrodynamics Inc.

Total Depth: 836'

COUNTY: James City

Oil or Gas: Water: Exploratory:

| From-To | From-To | From-To | From-To | From-To |
|----------|----------|---------|---------|---------|
| 0 - 10 | 50 - 60 | - | - | - |
| - | 60 - 70 | - | - | - |
| - | 70 - 80 | - | - | - |
| 30 - 40 | 80 - 90 | - | - | - |
| 40 - 50 | 90 - 400 | - | - | - |
| 50 - 60 | 400 - 10 | - | - | - |
| 60 - 70 | 10 - 20 | - | - | - |
| 70 - 80 | 20 - 30 | - | - | - |
| 80 - 90 | 30 - 40 | - | - | - |
| 90 - 100 | 40 - 50 | - | - | - |
| 100 - 10 | 50 - 60 | - | - | - |
| - | 60 - 70 | - | - | - |
| 20 - 30 | 70 - 80 | - | - | - |
| 30 - 40 | 80 - 90 | - | - | - |
| 40 - 50 | 90 - 500 | - | - | - |
| 50 - 60 | - | - | - | - |
| - | 510 - 20 | - | - | - |
| - | 20 - 30 | - | - | - |
| 80 - 90 | 30 - 40 | - | - | - |
| - | 40 - 50 | - | - | - |
| - | 50 - 60 | - | - | - |
| 210 - 20 | 60 - 70 | - | - | - |
| 20 - 30 | 70 - 80 | - | - | - |
| 30 - 40 | 80 - 90 | - | - | - |
| - | 90 - 600 | - | - | - |
| 50 - 60 | 600 - 10 | - | - | - |
| - | 10 - 20 | - | - | - |
| - | 20 - 30 | - | - | - |
| - | 30 - 40 | - | - | - |
| - | 40 - 50 | - | - | - |
| 300 - 10 | 50 - 60 | - | - | - |
| 10 - 20 | 60 - 70 | - | - | - |
| 20 - 30 | 70 - 80 | - | - | - |
| 30 - 40 | - | - | - | - |
| 40 - 50 | - | - | - | - |

11 new washed only.

COMMONWEALTH OF VIRGINIA
WATER WELL COMPLETION REPORT

W-7356

BWCM No. _____

State Water Control Board
P. O. Box 11143
2111 North Hamilton St.
Richmond, Va. 23230

(Certification of Completion/County Permit)

JCSA # PW3 @ W-38
USGS # 56G65
DEQ # 147-262

County/City JAMES CITY COUNTY

County/City Stamp

- Virginia Plane Coordinates
N _____
E _____
Latitude & Longitude
N _____
W _____
- Topo. Map No. _____
- Elevation _____ ft.
- Formation _____
- Lithology _____
- River Basin _____
- Province _____
- Type Logs _____
- Cuttings _____
- Water Analysis _____
- Aquifer Test _____

• Owner JAMES CITY SERVICE AUTHORITY

• Well Designation or Number PW3 @ W-38
Address 101 East Mounts May Road
Williamsburg, VA 23187-8785
Phone (804) 253-6850

• Drilling Contractor Sydnor Hydrodynamics, Inc.
Address 2111 Magnolia Street
Richmond, VA 23223
Phone (804) 643-2725

SWCB Permit _____
County Permit _____

Certification of inspecting official:
This well does _____ does not _____
meet code/low requirements.
S. _____
Date _____

For Office Use

Tax Map I.D. No. _____
Subdivision _____
Section _____
Block _____
Lot _____
Class Well I _____, IIA _____
IIB _____, IIIA _____, IIIB _____
IIIC _____, IIID _____, IIIE _____

WELL LOCATION: 188 (feet/miles North direction) of Nina Lane
and 1,450 feet/miles West (direction) of U.S. Rt. 60
(If possible please include map showing location marked)

Date started 3/25/96 • Date completed 5/9/96 Type rig MUD ROTARY

1. WELL DATA: New Reworked _____ Deepened _____

- Total depth 836 ft
- Depth to bedrock _____ ft
- Hole size (Also include reamed zones)
 - 32 inches from 0 to 109 ft
 - 22 inches from 109 to 836 ft
 - _____ inches from _____ to _____ ft
- Casing size (I.D. and material)
 - 13.894 inches from +2 to 531 ft
Material PVC SDR 17 Certa-Lok Well Casing
Wt. per foot 29.94 or wall thickness .941 in.
 - 9.334 inches from 531 to 816 ft
Material PVC SDR 17 Certa-Lok Well Casing
Wt. per foot 13.70 or wall thickness .632 in.
 - _____ inches from _____ to _____ ft
Material _____
Wt. per foot _____ or wall thickness _____ in.
- Screen size and mesh for each zone (where applicable)
 - 10 inches from 575.5 to 596 ft
 - Mesh size .030 Type 304 Stainless Steel
 - 10 inches from 624.5 to 666 ft
 - Mesh size .030 Type 304 Stainless Steel
 - 10 inches from 673.5 to 710 ft
 - Mesh size .030 Type 304 Stainless Steel
 - 10 inches from 721.5 to 737 ft
 - Mesh size .030 Type 304 Stainless Steel
 - 10 inches from 744.5 to 796 ft
 - Mesh size .030 Type 304 Stainless Steel
- Gravel pack
 - From 536 to 836 ft.
 - From _____ to _____ ft.
- Grout
 - From 0 to 536 ft., Type Neat Cement
 - From _____ to _____ ft., Type _____

2. WATER DATA • Water temperature _____ OF
- Static water level (unpumped level measured) 174.93 ft
 - Stabilized measured pumping water level 240.055 ft
 - Stabilized yield 1500 gpm after 48 hours
 - Natural Flow Yes _____ No flow rate _____ gpm
 - Comment on quality _____

3. WATER ZONES: From 575.5 to 596
From 624.5 To 666 From 673.5 To 710
From 721.5 To 737 From 744.5 To 796

4. USE DATA:
- Type of use Drinking Livestock Watering _____
Irrigation _____ Food processing _____ Household _____
Manufacturing _____ Fire safety _____ Cleaning _____
Recreation _____ Aesthetic _____ Cooling or heating _____
Injection _____ Other _____
- Type of facility Domestic _____, Public water supply
Public institution _____, Farm _____, Industry _____
Commercial _____, Other _____

5. PUMP DATA: Type n/a • Rated H.P. _____
• Intake depth _____ • Capacity _____ at _____ head

6. WELLHEAD: Type well seal PVC cap
Pressure tank _____ gal., Loc. _____
Sample tap _____, Measurement port 1-1/2" SS Tube
Well vent _____, Pressure relief valve _____
Gate valve _____, Check valve (when required) _____
Electrical disconnect switch on power supply _____

7. DISINFECTION: Well disinfected yes _____ no _____
Date 5/23/96, Disinfectant used Chlorine Bleach
Amount 30 gal., Hours used 48 hours

8. ABANDONMENT (where applicable) • yes _____ no _____
Casing pulled yes _____ no _____ not applicable _____
Plugging grout From _____ to _____ material _____

**JAMES CITY SERVICE AUTHORITY
PRODUCTION WELL 3 @ W-38
USGS# 56G65**

| DEPTH (FEET) | | FORMATION DESCRIPTION (GRANITE LIMESTONE, SAND, GRAVEL, ETC.) |
|--------------|-----|--|
| FROM | TO | |
| 0 | 40 | Sandy Clay |
| 40 | 50 | Sand & Clay |
| 50 | 80 | Shells |
| 80 | 110 | Green Clay and Shell |
| 110 | 120 | Shell Rock |
| 120 | 130 | Shells & Green Clay |
| 130 | 150 | Green Clay & Shells |
| 150 | 170 | Shells |
| 170 | 200 | Green Clay |
| 200 | 230 | Shell Rock & Sand |
| 230 | 250 | Fine Rock & Sand |
| 250 | 260 | Fine Sand |
| 260 | 270 | Hard Rock |
| 270 | 280 | Rock |
| 280 | 300 | Black Sand |
| 300 | 330 | Red & Gray Clay |
| 330 | 350 | Black Sand |
| 350 | 370 | Black Sand & Shell Rock |
| 370 | 410 | Sandy Green Clay |
| 410 | 460 | Fine Sand |
| 460 | 465 | Clay |
| 465 | 468 | Fine - Med White Sand |
| 468 | 472 | Fine - Med Sand Trace Gray Clay |
| 472 | 475 | Fine to Coarse Sand with Shells |
| 475 | 505 | Fine to Coarse Sand with Shells |
| 505 | 517 | F - C Sand Green |
| 517 | 525 | F - C Sand with Lt & Dark Gray Clay with Shells |
| 525 | 550 | Brown & Green Clay |
| 550 | 567 | Brown & Green Clay, Some Shells |
| 567 | 582 | Green Clay Sandy |
| 582 | 595 | Green, Gray Sandy Clay w/Lignite |
| 595 | 600 | Green Sandy Clay Coarse Sand & Some Lignite |
| 600 | 606 | F - C Sand |
| 606 | 607 | Shell Rock & Cobbles |
| 607 | 619 | Sand Small Streaks, Green Sandy Clay |
| 619 | 621 | Shell Rock & Cobbles |
| 621 | 625 | F - C Sand Trace Green & Brown Sandy Clay |
| 625 | 666 | Coarse Sand |
| 666 | 675 | Green Sand |
| 675 | 696 | Coarse Sand |
| 696 | 700 | Green Sand - F - M Lens, Green Sandy Clay |
| 700 | 712 | Green Sandy Clay |
| 712 | 737 | F - M Sand Some Coarse |
| 737 | 740 | Clay, Sandy Green |
| 740 | 760 | Sand F - C |
| 760 | 773 | F - C Sand Trace Green Sandy Clay |
| 773 | 776 | Green Sandy Clay |
| 776 | 788 | Coarse Sand |
| 788 | 792 | Green Sandy Clay |
| 792 | 797 | Coarse Sand Lens Green Sandy Clay |
| 797 | 823 | Hard Clay Green |
| 823 | 838 | Green Sandy Clay w/Streaks Fine Sand |