

C1 7000 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER 13 A518599

ST/CO USE ONLY DATE Received

DATE WELL COMPLETED 4 16 07

Depth of Well 400 5/21/07

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-0724

OWNER Peddicord David STREET OR RFD Sheppard Manor Drive TOWN Ellicott City

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Brown sandstone, Gray Limestone, Dry holes, cement cuttings.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (N) TYPE OF GROUTING MATERIAL (C) (B) NO. OF BAGS 20 NO. OF POUNDS 1800

CASING RECORD

MAIN CASING TYPE PL Nominal diameter 06 Total depth 30

OTHER CASING (if used) diameter depth (feet)

SCREEN RECORD

screen type or open hole (S) (B) (H) (P) (O)

NUMBER OF UNSUCCESSFUL WELLS: 2

WELL HYDROFRACTURED (Y) (N)

- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION"

DRILLERS LIC. NO.: M SD 009 DRILLERS SIGNATURE

LIC. NO.: D

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

DEPTH (nearest ft.)

Table with columns: T, A, C, S, R, E, N and depth values (8, 11, 15, 17, 21, 23, 24, 26, 30, 32, 36, 38, 39, 41, 45, 47, 51)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

TELESCOPE CASING LOG INDICATOR OTHER DATA

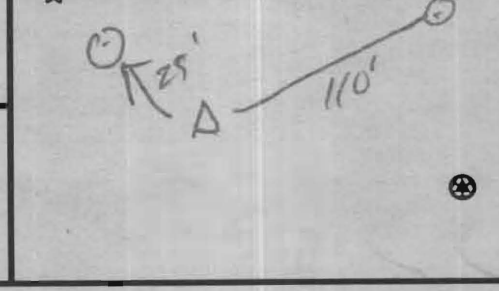
PUMPING TEST

HOURS PUMPED (nearest hour) 06 PUMPING RATE (gal. per min.) 187 METHOD USED TO MEASURE PUMPING RATE 1966

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES) (NO) TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29

LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



B 1 5818

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 526205 please type

STATE PERMIT NUMBER

40-95-0724 fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

Williamsburg Group LLC 5485 Harpers Farm Rd Columbia, Md 21044

B 3

LOCATION OF WELL

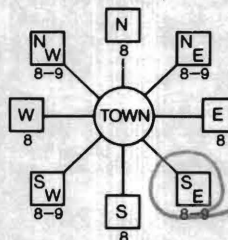
Howard Sheppard Manor West Friendship 5 M I

DRILLER INFORMATION

Allen Compton MS D 009 Fogles Well Drilling 580 obrecht RD 1-23-07

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Sheppard Manor Drive 190 FT ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) DISTANCE FROM ROAD ENTER FT OR MI TAX MAP: 29 BLK: 1 PARCEL 268

B 2

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 500

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION (circled) FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) INDUSTRIAL, COMMERCIAL, DEWATERING PUBLIC WATER SUPPLY WELL TEST, OBSERVATION, MONITORING GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard 13 A518599 COUNTY NAME COUNTY NO. STATE SIGNATURE DATE ISSUED 2/29/2007 CO SIGNATURE EXP. DATE 2/28/2008 NORTH GRID 515 EAST GRID 818

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary) CABLE REVERSE-ROTary DRIVE-POINT

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL (circled) THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS THIS WELL WILL DEEPEM AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE)

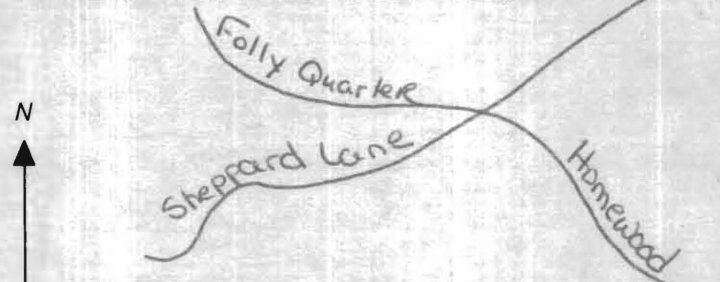
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER 1. 2. 3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 8108 N 5105

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROX. PERMIT NUMBER H02005G007

PERMIT No. H0-95-0724

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

Wells Must Be Drilled Per Approved Shared Septic Plan Health Dept. Must Get Water Sample During Yield Test

FIELD DATA SHEET  
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-0724  
 Location of property (road) Sheppard Manor Drive  
 Subdivision Sheppard Manor Lot 2 Block \_\_\_\_\_ Plat \_\_\_\_\_ Sec. \_\_\_\_\_  
 Well Driller Compton/Fogles Owner David Peddicord

Depth of well 400'  
 Distance of measuring point (M.P.) above ground 2'  
 Static water level (S.W.L.) below M.P. 12'

I. High rate pumping -- reservoir drawdown

Time pump started 11:00 Pumping rate 20  
 Total time 15 min to reach pumping water level 124' ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes

TIME (in 15 minute intervals)	WATER LEVEL below M.P.	PUMPING RATE time to fill 5( gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
11:00	12	3		20
11:15	124	35		1.7
11:30	124	35		1.7
11:45	124	35		1.7
12:00	124	35		1.7
12:15	124	35		1.7
12:30	124	35		1.7
12:45	124	35		1.7
1:00	124	35		1.7
1:15	124	35		1.7
1:30	124	35		1.7
1:45	124	35		1.7
2:00	124	35		1.7
2:15	124	35		1.7
2:30	124	35		1.7
2:45	124	35		1.7
3:00	124	35		1.7
3:15	124	35		1.7
3:30	124	35		1.7
3:45	124	35		1.7
4:00	124	35		1.7
4:15	124	35		1.7
4:30	124	35		1.7
4:45	124	35		1.7
HD-224 5:00	124	35		1.7
5:15	124	35		1.7

**HOWARD COUNTY HEALTH DEPARTMENT  
BUREAU OF ENVIRONMENTAL HEALTH  
WELL & SEPTIC PROGRAM  
TEL: (410)313-1771 FAX: (410)313-2648**

**Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping**

**NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.**

Company Name: Fogles Well Drilling, LLC Telephone #: 443-609-4145  
Address: P.O. Box 203  
Leesdune, md 21747

(Must circle one) Licensed Plumber  Licensed Well Driller Licensed Well Pump Installer  
License # and name of individual responsible for the field installation:  
Name (Print): Allen Compton License# MSD 009

\*A licensed individual must perform the actual installation. Apprentices must be under the supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.

Name of Property Owner: Williamsburg Group Telephone #: 410-997-8800  
Subdivision: Sheppard Manor Lot #: 2 Well Tag #: HO-95-0924  
Site Address: 4607 Sheppard Manor Dr

<b><u>Submersible Pump Data</u></b>	<b><u>Pitless Adapter</u></b>	<b><u>Well Cap and Electric Conduit</u></b>
Make: <u>Grundfos</u>	Make: <u>Grundfos</u>	Two piece watertight cap: <u>yes</u>
Model #: <u>1550E15-290</u>	Model #: <u>N/A</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity: <u>15</u> GPM	Depth: <u>36</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>1.3</u> GPM	NSF/WSC approved: <u>yes</u>	Conduit min 18" B.G.: <u>yes</u>
Depth of well encountered at time of pump installation: <u>400</u> (feet)		Conduit secured to well cap: <u>yes</u>
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4		
Torque arrestors, Cable guards, or other acceptable method used- Must circle one		
Safety rope, if used, attached to brass rope adapter or other acceptable method <u>inside of well casing N/A</u>		

<b><u>Piping to house</u></b>	<b><u>House Connection</u></b>
Type: <u>1" Black Plastic</u>	PVC sleeve to undisturbed soil at wall penetration: <u>yes</u>
PSI: <u>160</u> (160 psi min)	Length of sleeve (5' minimum from foundation): <u>5'</u>
Depth of supply line: <u>42"</u> (36" min)	Sleeve sealed properly: <u>yes</u>

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

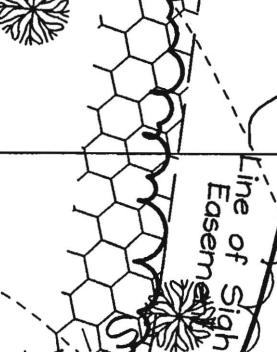
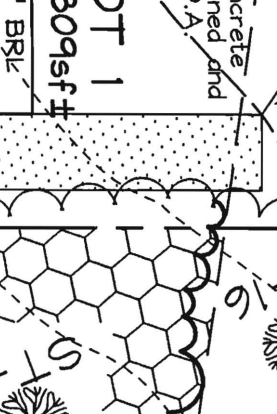
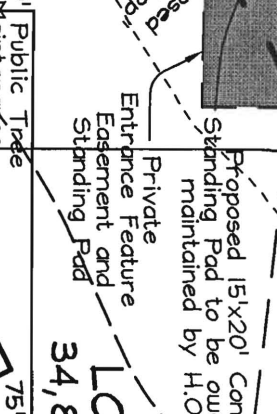
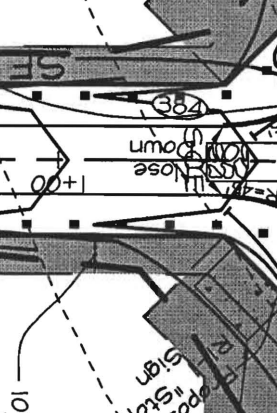
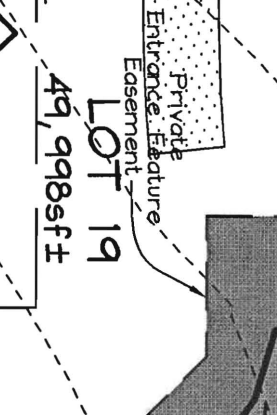
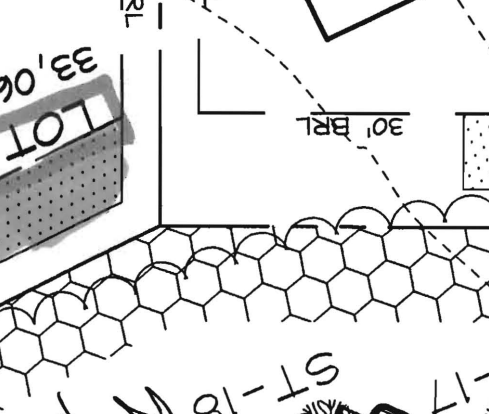
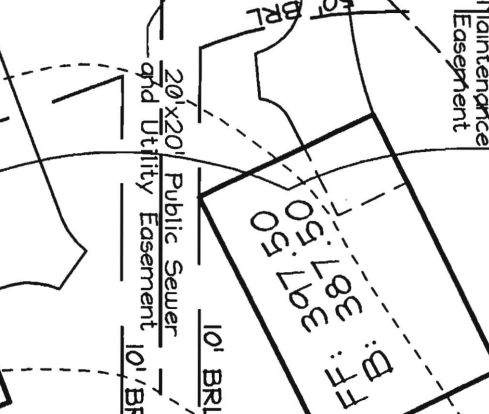
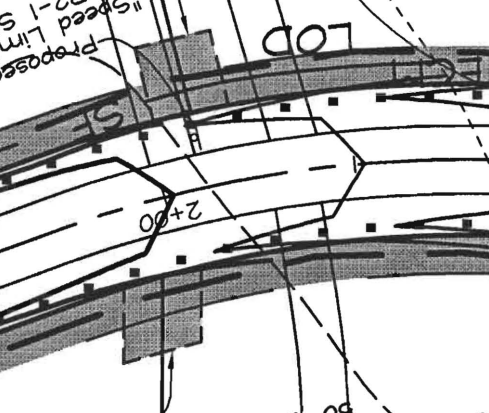
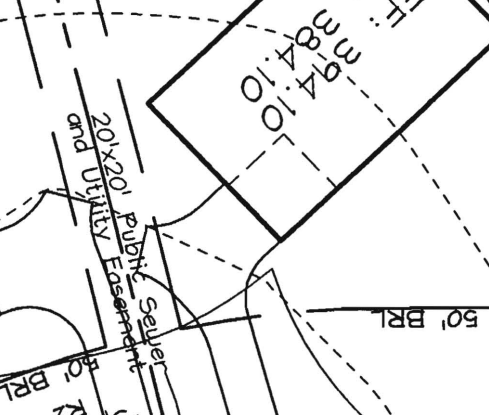
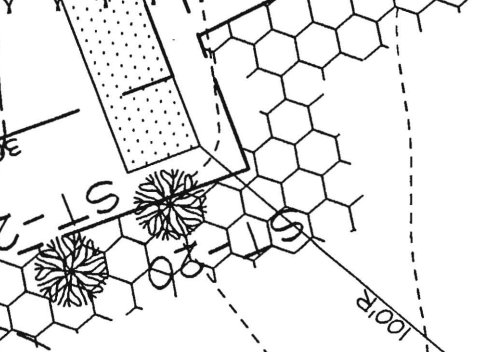
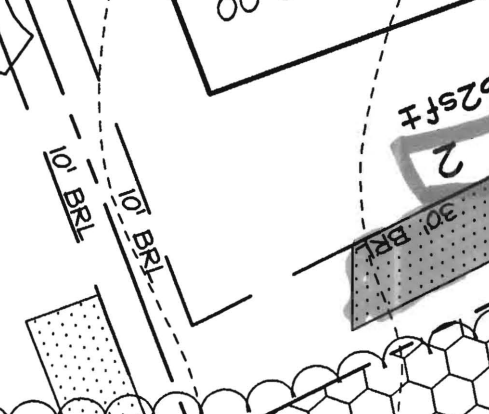
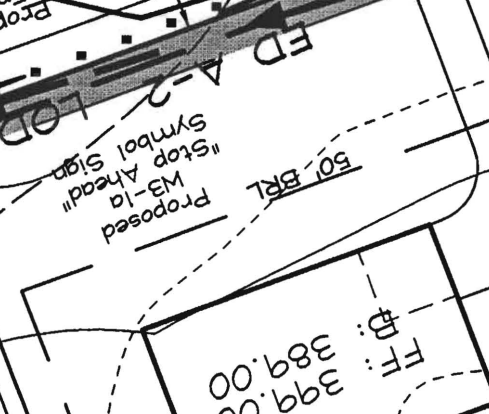
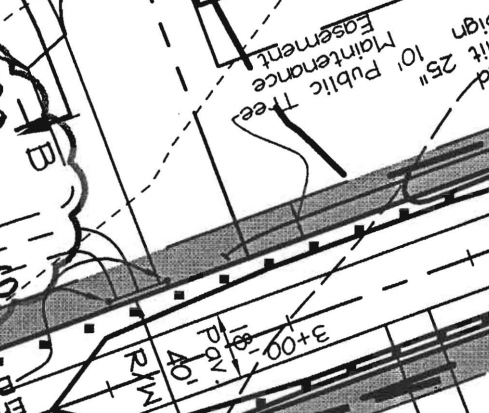
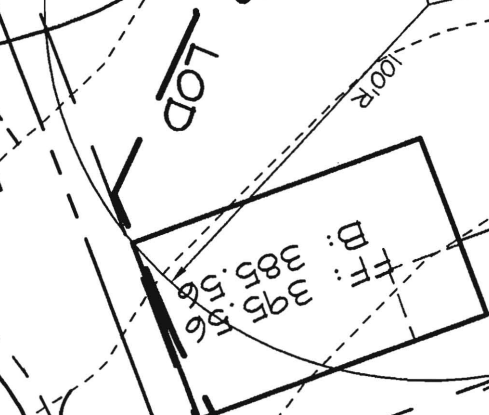
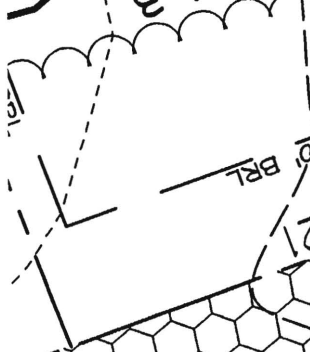
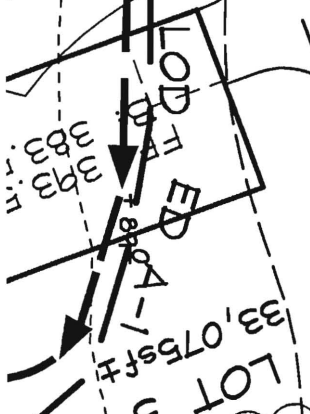
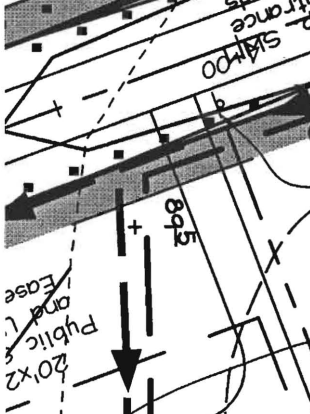
Signature of company representative responsible for installation: Allen Compton date: 9/16/10

**For Health Department Use Only - Not to be completed by Installer**

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: \_\_\_\_\_ Inspector: 7/21/2010 BB

Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade	<input checked="" type="checkbox"/>
Two piece cap installed and attached to casing securely	<input checked="" type="checkbox"/>
Elec. conduit extends at least 18" below grade/attached to cap properly	<input checked="" type="checkbox"/>
Safety rope not outside of well cap/casing	<input checked="" type="checkbox"/>
Correct well tag attached properly and casing 8" above finished grade	<input checked="" type="checkbox"/>
Water supply line sleeved adequately at house connection	<input checked="" type="checkbox"/>
Adequate grout observed below pitless adapter	<input checked="" type="checkbox"/>

NON-BUILDABLE PRESERVATION



Will site stake by FSH. 2/28/07



Line of Sight Easement

Penny E. Borenstein, M.D., M.P.H., Health Officer

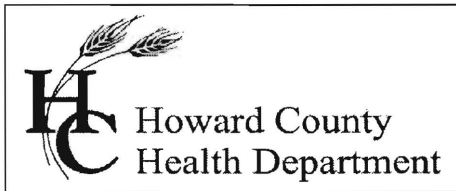
## ATTENTION WELL DRILLERS!!!

When submitting a well application for a new or replacement well, please indicate one of the following:

- The well site has been staked by FSH Associates on 1-26-07 and is ready for site inspection.
- \_\_\_\_\_ will call the Health Department for a time to meet in the field to verify a well location.
- Site plan for new well is attached to well permit application.

Please attach this sheet when submitting your green application. This should help improve communication allowing a more timely service for our citizens.

KN



Bureau of Environmental Health  
7178 Gateway Drive Columbia, MD 21046  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: [www.hchealth.org](http://www.hchealth.org)

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*Peter Beilenson, M.D., M.P.H., Health Officer*

November 23, 2010

Homeowner  
4607 Sheppard Manor Drive  
Ellicott City, MD 21042

RE: Sheppard Manor, Lot 2  
4607 Sheppard Manor Drive  
BP #:B09001831  
Well Permit # HO-95-0724

Dear Sir:

This is to advise you that the septic system for the above referenced property has been installed and inspected. **Final approval of the septic system was granted on 11/18/2010.**  
**Final approval of the well line connection to the dwelling was approved on 07/21/2010**

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. The water sample results were found to be in compliance with COMAR water quality standards.

Enclosed with this certificate, are copies of the septic permit and the as-built, along with important information regarding the use and maintenance of your septic system. Please read through carefully and thoroughly. Any questions regarding your well and/or septic, please call this office for guidance 410-313-1771.

### **INTERIM CERTIFICATE OF POTABILITY**

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-0724. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. Based upon satisfactory investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

This certificate may become final upon completion of the second bacteriological test, which is to be taken by the county health department within six months of receipt of this letter. **Please contact (410) 313-1773 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.**

Date of Water Samples: 11/15/2010  
Date of Well Completion: 04/16/2007

Approving Authority,



Brian Baker, R. S.  
Environmental Sanitarian  
Well & Septic Program

cc: Building Inspector's Office  
Community Health Services  
File

**FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.**

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

**REPORT OF ANALYSIS**

Laboratory ID #:	77550	Account #:	4470
Reference:	Sheppard Manor Lot 2	Company:	Williamsburg Group LLC
Location:	4607 Sheppard Manor Drive Ellicott City, MD 21042	Requested By:	Chip Lundy/ Bob Corbett
Date/ Time Collected:	11/15/2010 1000	Source:	Well Water
Date/Time Rec'd:	11/15/2010 1201	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	J.Yeager 6176JY	pH:	7.2
		Well #:	HO-95-0724

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	11/16/2010 / 0815 / KME
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	11/16/2010 / 0815 / KME
Nitrate	2.75	mg/L	10	601	11/15/2010 / 1515 / CCH
Turbidity	0.94	NTU	<10	SM18 2130B	11/15/2010 / 1340 / KME
Sand	NS	mg/L	5	Visual/Gravimetric	11/15/2010 / 1342 / KME

**NOTES**

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 Visual well check: Sealed, vented cap
- 8 pH and Chlorine level tested on site

Reason for Test : Use & Occupancy  
 Building Permit # : B09001831

Date Reported: 11/16/2010

**FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.**

1413 Old Taintown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

**REPORT OF ANALYSIS**

Laboratory ID #:	79980	Account #:	4470
Reference:	Sheppard Manor Lot 2	Company:	Williamsburg Group LLC
Location:	4607 Sheppard Manor Drive Ellicott City, MD 21042	Requested By:	Chip Lundy/ Bob Corbett
Date/ Time Collected:	6/17/2011 1107	Source:	Well Water
Date/Time Rec'd:	6/17/2011 1239	Site:	<u>Powder Room Sink Tap</u>
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	J.Yeager 6176JY	pH:	7.0
		Well #:	HO-95-0724

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	6/18/2011 / 1000 / BCD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	6/18/2011 / 1000 / BCD

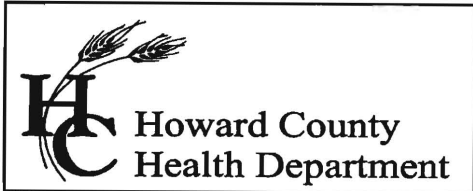
**NOTES**

- 1 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 Visual well check: Sealed, vented cap
- 5 pH and Chlorine level tested on site

Reason for Test : Client's Information

Date Reported: 6/20/2011

MD State Certification # 133



Bureau of Environmental Health  
7178 Columbia Gateway Drive, Columbia, MD 21046  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: www.hchealth.org

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Peter L. Beilenson, M.D., M.P.H., Health Officer

April 11, 2007

Williamsburg Group LLC  
5485 Harpers Farm Road  
Columbia, Maryland 21044

RE: Sheppard Manor, Lot#2  
Well Tag: HO-95-0724

To Whom It May Concern:

A sample was collected from a yield test on March 22, 2007 and submitted to GPL Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. In turn, this can provide information regarding naturally occurring radiation (i.e., Radionuclides) that may exist in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of  $4.5 \pm 1.3$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $7.3 \pm 1.3$  pCi/L. The **Gross Alpha** result was below its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below its target value of 50 pCi/L (roughly equivalent to the **annual dose rate of 4 millirems/year**).

At the time of testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing **for these parameters** will be required to secure the future Use & Occupancy. However, other standard (potability) testing will still be necessary.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions.

Sincerely,

Bert Nixon, Deputy Director  
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater  
✓ Well & Septic File

Send Report To:

Bert Allen

State of Maryland

DHMH - Laboratories Administration

Division of Environmental Chemistry

**RADIATION LABORATORY**

201 W. Preston Street, Baltimore, Maryland 21201

*John M. DeBoy, Dr. P.H., Director*

**LABORATORY ANALYSIS REQUEST**

Sample Bottle No. A: KWZSAA0724 No. B: \_\_\_\_\_ Field Blank Bottle No. A: \_\_\_\_\_ No. B: \_\_\_\_\_

Plant/Site Name: Sheppard Manor Lot 2 County: Howard

Sample Source: Sheppard Manor Dr. Location: HO-95-0724  
(well no., lab sink, sample tap, etc.)

County:   Plant No.

CHECK (one per box)

Drinking Water <input checked="" type="checkbox"/>	Community <input type="checkbox"/>	Source (raw water) <input checked="" type="checkbox"/>	Emergency <input type="checkbox"/>
Landfill <input type="checkbox"/>	Non-community <input type="checkbox"/>	Distribution (treated) <input type="checkbox"/>	Routine <input type="checkbox"/>
Stream <input type="checkbox"/>	Private <input type="checkbox"/>	MCL <input type="checkbox"/>	Recheck <input type="checkbox"/>
Other <input type="checkbox"/>	Other <input type="checkbox"/>		Special <input type="checkbox"/>

Collector: K. Wolf Telephone No: 410-313-2645

Date Collected: 3/22/07 Time Collected: \_\_\_\_\_ a.m. 12 p.m.

Nitric Acid Preserved: Yes  No  Iced: Yes  No

Submitters Code:   Federal Project:  Field Data: \_\_\_\_\_ pH \_\_\_\_\_ Chlorine \_\_\_\_\_

Remarks: Sample collected during yield test.

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>703162-004</u>	<u>4.5 ± 1.3</u>	<u>3/27/07</u>
✓	Gross Beta	4100		<u>7.3 ± 1.3</u>	
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank A	4004			
	Field Blank B	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Supervisor: \_\_\_\_\_