

C1 7007 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

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

COUNTY NUMBER 13 A518599

1 2 3 6
(THIS NUMBER IS TO BE PUNCHED
IN COLS. 3-6 ON ALL CARDS)

ST/CO USE ONLY
DATE Received
MM DD YY

DATE WELL COMPLETED

Depth of Well

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
H0-95-0731

OWNER

STREET OR RFD

TOWN

SUBDIVISION

SECTION

LOT

WELL LOG

Not required for driven wells

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

DESCRIPTION (Use
additional sheets if needed)

FEET

FROM

TO

check
if water
bearing

Brown
shale

0 70

Gray
limestone

70 400

check
if water
bearing

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

yes no
Y N
44 44

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM

BENTONITE CLAY BC

NO. OF BAGS 24

NO. OF POUNDS 2256

GALLONS OF WATER 144

DEPTH OF GROUT SEAL (to nearest foot)

from 0 ft. to 72 ft.
48 TOP 52 ft. to 54 BOTTOM 58 ft.
(enter 0 if from surface)

casing
types
insert
appropriate
code
below

CASING RECORD

ST
STEEL

CO
CONCRETE

PL
PLASTIC

OT
OTHER

MAIN
CASING
TYPE

Nominal diameter
top (main) casing
(nearest inch)

Total depth
of main casing
(nearest foot)

PL

06

80

E
A
C
H
C
A
S
I
N
G

OTHER CASING (if used)

diameter

depth (feet)

from to

screen type
or open hole
(insert
appropriate
code
below)

SCREEN RECORD

ST
STEEL

BR
BRASS

HO
OPEN

PL
BRONZE

OT
HOLE

PL
PLASTIC

OT
OTHER

C 2

DEPTH (nearest ft.)

1 2 80 400

E 1 8 9 11 15 17 21

A 2 23 24 26 30 32 36

S 3 38 39 41 45 47 51

R 38 39 41 45 47 51

E 38 39 41 45 47 51

N 38 39 41 45 47 51

SLOT SIZE 1 2 3

DIAMETER OF SCREEN (NEAREST INCH)

56 60

from to

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

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST

HOURS PUMPED (nearest hour) 03

PUMPING RATE (gal. per min.) 4

METHOD USED TO MEASURE PUMPING RATE 19AL

WATER LEVEL (distance from land surface)

BEFORE PUMPING 64 ft.

WHEN PUMPING 116 ft.

TYPE OF PUMP USED (for test)

A air P piston T turbine

C centrifugal R rotary O other (describe below)

J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES OR NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

+ above LAND SURFACE

- below 01 (nearest foot)

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)

50' 300'

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes no Y N

CIRCLE APPROPRIATE LETTER

- 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" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 M S D 009

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 D

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

B 1	5824	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 526205 please type	STATE PERMIT NUMBER <u>HO-95-0731</u> fill in this form completely
Date Received (APA)		OWNER INFORMATION		
8 MM DD YY 13		15 Last Name <u>Williamsburg Group LLC</u> Owner First Name <u>MS D 009</u> 34		
36 Street or RFD <u>5485 Harpers Farm Rd</u> 55		57 Town <u>Columbia, md</u> 70 State <u>21044</u> 72 Zip <u>76</u>		
DRILLER INFORMATION				
Driller's Name <u>Allen Compton</u> 76		MS D 009 License No. 81		
Firm Name <u>Fogles Well Drilling</u>		Address <u>580 obrecht RD</u>		
Signature <u>[Signature]</u> 1-23-07		Date		
WELL INFORMATION				
APPROX. PUMPING RATE (GAL. PER MIN.) <u>5</u>		8 12		
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) <u>500</u>		14 20		
USE FOR WATER (CIRCLE APPROPRIATE BOX)				
<input checked="" type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> PUBLIC WATER SUPPLY WELL <input type="checkbox"/> TEST, OBSERVATION, MONITORING <input type="checkbox"/> GEO-THERMAL				
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL				
COUNTY NAME <u>Howard</u> COUNTY NO. <u>(13) A518599</u> STATE SIGNATURE _____ INSERT S → _____ DATE ISSUED <u>2/29/2007</u> CO SIGNATURE <u>Brian Baker</u> EXP. DATE <u>2/29/2008</u> 43 MM DD YY 48 NORTH GRID <u>514</u> 000 EAST GRID <u>819</u> 000 50 55 57 63				
APPROXIMATE DEPTH OF WELL <u>300</u> FEET		SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X		
APPROXIMATE DIAMETER OF WELL <u>6</u> INCH		SOURCES OF DRILLING WATER		
METHOD OF DRILLING (circle one)		WRITE THE BOX NUMBER FROM THE MAP HERE		
BORED (or Augered) <u>AIR-ROTary</u> JETTED <u>ROTARY</u> Jetted & DRIVEN 30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVerse-ROTary Drive-POINT other _____		E <u>819</u> N <u>514</u>		
REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)		DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION		
<input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="checkbox"/> THIS WELL WILL DEEPEIN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 _____ 52		Folly Quarter Sheppard Lane Homewood		
Not to be filled in by driller (MDE OR COUNTY USE ONLY)				
APPROP. PERMIT NUMBER <u>HO2005G007</u>				
PERMIT No. <u>HO-95-0731</u>				
SPECIAL CONDITIONS <u>Wells Must Be Drilled Per Approved Shared Septic Plan</u>				
NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED. <u>Health Dept. Must Collect Water Sample During Yield Test</u>				

Well Permit No. HO - 95-0731
Location of property (road) Sheppard Manor Drive
Subdivision Sheppard Manor Lot 9 Block Plat Sec.
Well Driller Compton / Eagles Owner David Peddicord

I. High rate pumping -- reservoir drawdown

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

[illegible]

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2643

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 (NPS) 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 Telephone #: 410-795-5670
Address: 6008 Woodbine Rd
Woodbine Md 21797

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the installation:

Name (Print): Allen Compton License #: MSD 009

*A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.

Name of Property Owner: Sheppard's Manor Telephone #: _____
Subdivision: Sheppard's Manor Lot #: 9 Well Tag #: HO-950731
Site Address: 4635 Sheppard's Manor Dr.

Submersible Pump Data

Make: Grundfos

Model #: 1530R15-200

Pump Capacity: 15 GPM

Well Yield: 15 GPM

Depth of well encountered at time of pump installation: 400 (feet)

If pump rapidly exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Torque arrestors or Cable guides are required -- Must circle one

Safety rope, if used, attached to inside of well casing with eye bolt N/A

Pitless Adapter

Make: Camco

Model #: 31

Depth: 31 inches

NSF approved: yes

Well Cap and Electric Conduit

Two piece watertight cap: yes

Scored, sealed well cap: yes

Cap secured to casing: yes

Conduit min 1/2" B.O.: yes

Conduit secured to well cap: yes

Piping to house

Type: PVC

PSI: 160 (160 psi)

House Connection

PVC size to undisturbed soil at wall penetration: 405

Approximate length of sleeve (5 foot minimum): 5

Depth of supply line: 4236 (min)

Sleeve installed and sealed properly: yes

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

Signature of company representative responsible for installation: Allen Compton

date: 9/26/08

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

Date Insp. Requested: 9/16/08

Date Insp. Approved: 9/16/08 BT

Inspection Data: Pitless adapter and water supply line at least 16" below grade

Two piece cap installed and attached to casing securely

Elect. conduit extends at least 18" below grade/attached to cap properly

Safety rope installed inside of well casing

Correct Weir Tip attached properly and casing 8" above finished grade

Water supply line sleeved adequately at house connection

Adequate ground observed below pitless adapter

LOT 2
LOST WOODS ESTATES
PLAT #11418
ZONED: RC-DEO

CHB2

204.07'

LOT 9.
47,179 sq ft

CHA

ST-A2
FF:

~~Existing Structures~~
~~(to be Removed)~~

LOT 10
46,774sq ft

Proposed
Septic Easement
10,942sf

17
2/28/07
Well Site
Staked by FSH.
(20)

NON-BUILDABLE
PRESERVATION
PARCEL B

PARCEL B
Area this sheet 0.213 ac. ±
Total area 4.780 ac. ±

LB

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 Columbia Gateway Drive Columbia, Maryland 21046-2132
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

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

November 20, 2008

Williamsburg Group LLC
5485 Harpers Farm Road, #200
Columbia, MD 21044

FAX SENT VIA FACSIMILE 410-997-4358

RE: Sheppard Manor, Lot 9
4635 Sheppard Manor Drive
Ellicott City, MD 21042
BP# B07003568
Well Tag #: HO-95-0731

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 11/17/2008. Final approval of the well line connection to the dwelling was approved on 09/16/2008.**

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.

Gross Alpha and Beta samples were also collected on 03/29/2007. Both findings were below the maximum limit suggested by the EPA. At the time of the testing and with respect to these parameters, the future well water supply appears safe for all uses. No addition testing **for these parameters** will be required to secure the future Use and Occupancy.

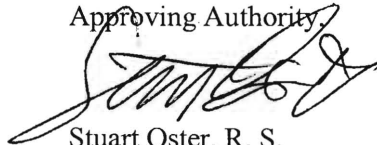
INTERIM CERTIFICATE OF POTABILITY

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-95-0731. 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: 11/12/2008
Date of Samples for Gross Alpha & Gross Beta: 03/29/2007
Date of Well Completion: 03/27/2007

Approving Authority

A handwritten signature in black ink, appearing to read 'Stuart Oster', written over the printed name.

Stuart Oster, R. S.
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1473 Old Tappetown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

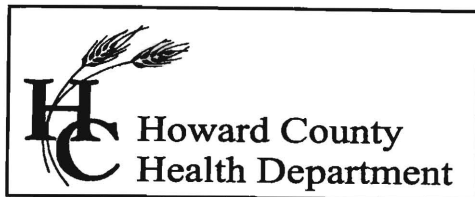
Laboratory ID #:	69491	Account #:	4470
Reference:	Williamsburg Group Lot 9	Company:	Williamsburg Group LLC
Location:	4635 Sheppard Manor Drive Ellicott City, MD 21042	Requested By:	Chip Lundy/ Bob Corbett
Date/ Time Collected:	11/12/2008 0950	Source:	Well Water
Date/Time Rec'd:	11/12/2008 1303	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	J. Yeager 6176JY	pH:	6.5
		Well #:	HO-95-0731

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	11/13/2008 / 0800 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	11/13/2008 / 0800 / CCH
Nitrate	<1.0	mg/L	10	601	11/12/2008 / 1530 / CCH/CWM
Turbidity	1.98	NTU	<10	SM18 2130B	11/12/2008 / 1414 / CCH
Sand	NS	mg/L	5	Visual/Gravimet	11/12/2008 / 1415 / CCH

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 tested on-site

Reason for Test : Use & Occupancy**Building Permit # :** 07003568**Date Reported:** 11/13/2008



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website: www.hchealth.org

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#9
Well Tag: HO-95-0731

To Whom It May Concern:

A sample was collected from a yield test on March 29, 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 $-.03 \pm 0.4$ picocuries/liter (pCi/L); while the **Gross Beta** level was 3.0 ± 0.9 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:

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: H0-95-0731 No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Sheppard Manor Lot 9 County: Howard

Sample Source: Sheppard Manor Dr. Location: H0-95-0731
(well no., lab sink, sample tap, etc.)

County: ☐ ☒ Plant No. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

CHECK (one per box)

Drinking Water ☒
Landfill ☐
Stream ☐
Other ☐

Community ☐
Non-community ☐
Private ☐
Other ☐

Source (raw water) ☒
Distribution (treated) ☐
MCL ☐

Emergency ☐
Routine ☒
Recheck ☐
Special ☐

Collector: K. Wolf

Telephone No: 410-313-2645

Date Collected: 3 / 29 / 07

Time Collected: 10:15 a.m. 11:15 p.m.

Nitric Acid Preserved: Yes ☒ No ☐

Iced: Yes ☐ No ☒

Submitters Code: ☐ ☐ Federal Project: ☐ Field Data: _____

Remarks: Sample taken @ yield test pH _____ Chlorine _____

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>703229-001</u>	<u>0.03 ± 0.4</u>	<u>4/4/07</u>
✓	Gross Beta	4100		<u>3.0 ± 0.9</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: _____