

C1 5414

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 A534497

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

ST/CO USE ONLY DATE Received MM 12 DD 05 YR 13

DATE WELL COMPLETED MM 10 DD 11 YR 20

Depth of Well 22 400 26 12/7/2011 (TO NEAREST FOOT) O.K. RB

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-2190

OWNER Williams Barnsley STREET OR RFD Greenberry Lane TOWN Clarksville SUBDIVISION Williams Property SECTION LOT 1

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 (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Includes handwritten entries: Brown shale, Gray slate, 0 54, 54 40.

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) YES Y NO N TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 45 46 16 NO. OF POUNDS 45 48 1304 GALLONS OF WATER 96 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 37 ft.

CASING RECORD

casings types insert appropriate code below: ST STEEL, CO CONCRETE, PL PLASTIC, OT OTHER. MAIN CASING TYPE: PL Nominal diameter top (main) casing (nearest inch): 06 Total depth of main casing (nearest foot): 60

OTHER CASING (if used)

Table with columns: diameter inch, depth (feet) from, to. Includes handwritten entry: 60 61 63 64 66 70.

SCREEN RECORD

screen type or open hole (insert appropriate code below): ST STEEL, BR BRASS, HO OPEN HOLE, PL PLASTIC, OT OTHER.

C 2

DEPTH (nearest ft.)

Table with columns: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 15, 17, 21, 23, 24, 26, 30, 32, 36, 38, 39, 41, 45, 47, 51. Includes handwritten entries: HO 60 400.

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

70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 6/8 9 PUMPING RATE (gal. per min.) 2.11 15 METHOD USED TO MEASURE PUMPING RATE 1 gal WATER LEVEL (distance from land surface) BEFORE PUMPING 29 17 20 ft. WHEN PUMPING 270 22 25 ft. TYPE OF PUMP USED (for test) A air, P piston, T turbine, C centrifugal, R rotary, O other, 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, - below LAND SURFACE 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) N 39° 14. 119 W 076° 58. 374

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES Y NO 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 MS D 409 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 6132

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 535917

STATE PERMIT NUMBER

HO-95-2190 fill in this form completely

Date Received (APA) 07 27 11

OWNER INFORMATION

Williams, Barnsteyn 13050 Greenberry Lane Clarksville md. 21029

B 3 LOCATION OF WELL

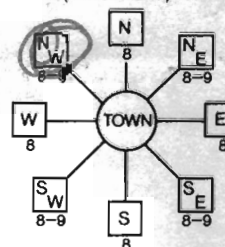
Howard COUNTY Williams Property Clarksville NEAREST TOWN 2.7 MILES FROM TOWN

DRILLER INFORMATION

Allen Compton M S D 009 Fugles Well Drilling, LLC P.O. Box 202 Woodbine, md 21797

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Greenberry Lane NEAR WHAT ROAD ON WHICH SIDE OF ROAD DISTANCE FROM ROAD 120 FT TAX MAP: 0028 BLK: 0009 PARCEL 0413

B 2 WELL INFORMATION APPROX. PUMPING RATE 5 GAL. PER MIN. AVERAGE DAILY QUANTITY NEEDED 500 GAL. PER DAY

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) A534497 COUNTY NAME COUNTY NO. STATE SIGNATURE DATE ISSUED 8/13/2012 Brian Baker 8/13/2012

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) AIR-ROTary (circled) AIR-PERcussion CABLE JETTED ROTARY (Hydraulic Rotary) Drive-POINT other

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) 41 52

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

APPROX. PERMIT NUMBER G PERMIT No. HO-95-2190

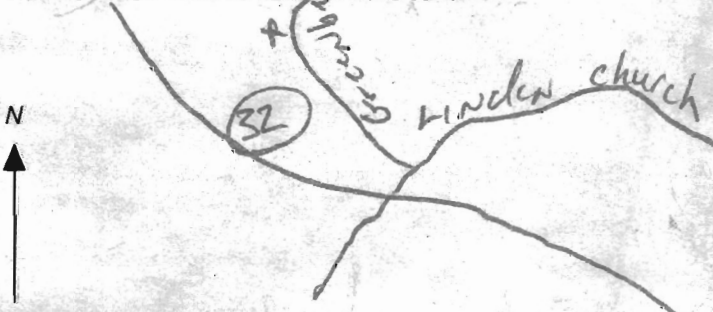
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER 1. 2. 3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 800 N 500

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



SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

Yield Test Data Sheet

County File # A534495

District _____

MD Well Permit #: Hb-95-2190

Date of Test: 10-7-11

Subdivision Name: Williams Property

Section _____ Lot # 1

Street Address: Greenberry Lane

Measuring Point (MP) Description: Top of casing
(for ex. "Top of casing")

Distance from MP to ground surface 1 ft.

Well Depth 400 ft.

Well Driller: Allen Compton - Fogles

Must be submitted with the State of Maryland Well Completion Report

Submit to: _____

Pump Start Time	Static Water level _____ ft.	Pumping Rate () Time to fill _____ gal. bucket () Flow meter reading (if used)	Calculated Flow (gallons per minute)
<u>10:30</u>	<u>29</u>		<u>20</u>
TIME	WATER LEVEL BELOW M.P.		

Water level and pumping rate must be recorded every 15 minutes			
		<u>5906</u>	
1	<u>10:30</u>	<u>29</u> ft.	<u>20</u> <u>15</u> GPM
2	<u>10:45</u>	<u>188</u> ft.	<u>25</u> <u>12</u> GPM
3	<u>11:00</u>	<u>270</u> ft.	<u>1906</u> <u>30 sec.</u> <u>2</u> GPM
4	<u>11:15</u>	<u>270</u> ft.	<u>30</u> <u>2</u> GPM
5	<u>11:30</u>	<u>270</u> ft.	<u>30</u> <u>2</u> GPM
6	<u>11:45</u>	<u>269</u> ft.	<u>30</u> <u>2</u> GPM
7	<u>12:00</u>	<u>269</u> ft.	<u>30</u> <u>2</u> GPM
8	<u>12:15</u>	<u>269</u> ft.	<u>30</u> <u>2</u> GPM
9	<u>12:30</u>	<u>269</u> ft.	<u>30</u> <u>2</u> GPM
10	<u>12:45</u>	<u>268</u> ft.	<u>30</u> <u>2</u> GPM
11	<u>1:00</u>	<u>268</u> ft.	<u>30</u> <u>2</u> GPM
12	<u>1:15</u>	<u>268</u> ft.	<u>30</u> <u>2</u> GPM
13	<u>1:30</u>	<u>268</u> ft.	<u>30</u> <u>2</u> GPM
14	<u>1:45</u>	<u>268</u> ft.	<u>30</u> <u>2</u> GPM
15	<u>2:00</u>	<u>268</u> ft.	<u>30</u> <u>2</u> GPM
16	<u>2:15</u>	<u>267</u> ft.	<u>30</u> <u>2</u> GPM
17	<u>2:30</u>	<u>267</u> ft.	<u>30</u> <u>2</u> GPM
18	<u>2:45</u>	<u>267</u> ft.	<u>30</u> <u>2</u> GPM
19	<u>3:00</u>	<u>267</u> ft.	<u>30</u> <u>2</u> GPM
20	<u>3:15</u>	<u>267</u> ft.	<u>30</u> <u>2</u> GPM
21	<u>3:30</u>	<u>267</u> ft.	<u>30</u> <u>2</u> GPM
22	<u>3:45</u>	<u>267</u> ft.	<u>30</u> <u>2</u> GPM
23	<u>4:00</u>	<u>267</u> ft.	<u>30</u> <u>2</u> GPM
24	<u>4:15</u>	<u>266</u> ft.	<u>30</u> <u>2</u> GPM
25	<u>4:30</u>	<u>264</u> ft.	<u>30</u> <u>2</u> GPM
26	<u>4:45</u>	<u>266</u> ft.	<u>30</u> <u>2</u> GPM
27	<u>5:00</u>	<u>266</u> ft.	<u>30</u> <u>2</u> GPM
28		ft.	GPM
29		ft.	GPM
30		ft.	GPM

NOTES:

**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: _____ Telephone #: _____
Address: _____

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer

License # and name of individual responsible for the field installation:

Name (Print): _____ License# _____

***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: _____ Telephone #: _____
Subdivision: _____ Lot #: _____ Well Tag #: HO-95-2190
Site Address: 13075 Greenberry Ln

Submersible Pump Data

Make: _____
Model #: _____
Pump Capacity _____ GPM
Well Yield: _____ GPM

Pitless Adapter

Make: _____
Model#: _____
Depth: _____ (36" min)
NSF/WSC approved: _____

Well Cap and Electric Conduit

Two piece watertight cap: _____
Screened, vented well cap: _____
Cap secured to casing: _____
Conduit min 18" B.G.: _____

Depth of well encountered at time of pump installation: _____ (feet) Conduit secured to well cap: _____

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 inside of well casing

Piping to house

Type: _____
PSI: _____ (160 psi min)
Depth of supply line: _____ (36" min)

House Connection

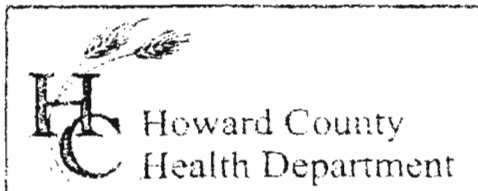
PVC sleeve to undisturbed soil at wall penetration: _____
Length of sleeve(5' minimum from foundation): _____
Sleeve sealed properly: _____

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 _____ date _____

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

Date Insp. Requested: _____ Date Insp. Approved: 8/15/2013 Inspector: (BIB)
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade
Two piece cap installed and attached to casing securely
Elec. conduit extends at least 18" below grade/attached to cap properly
Safety rope not outside of well cap/casing
Correct well tag attached properly and casing 8" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter



3525 H Ellicott Mills Drive, Ellicott City, MD 21043
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

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

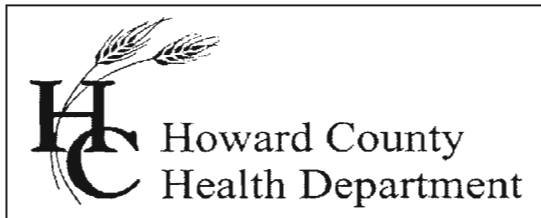
TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

- The well site has been staked by Mildenberg, Boender
(professional land surveyor or company employing professional land surveyors)
on 7-29-11 (date) and does not require a site inspection.
- The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

Revised 6/10/03



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
Main: 410-313-6300 | Fax: 410-313-6303
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – May 25, 2014

November 25, 2013

Homeowner
13075 Greenberry Lane
Clarksville, MD 21029

**RE: Williams Property, Parcel 403
13075 Greenberry Lane
Building Permit: B12001648
Well Permit: HO-95-2190**

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **9/3/2013**. Final approval of the well line connection to the dwelling was granted on **8/15/2013**. The well construction was completed on **10/17/2011**. Water samples were collected on **11/19/2013**.

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.

Gross Alpha and Beta samples were also collected on **11/19/2013**. Results showed a Gross Alpha level of **<1.1 ± 0.0 pCi/L** and **Gross Beta** level of **3.6 ± 0.0 pCi/L**. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the target level of 50pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year). At the time of testing and with respect to these parameters, the well water is safe for all uses.

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-95-2190. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the Annotated Code of Maryland, Environment Article, 9-1311, subject to a fine of up to \$500 or imprisonment not to exceed three months.**

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,

A handwritten signature in black ink, appearing to read "Heidi Scott". The signature is written in a cursive style with a large, stylized initial "H".

Heidi Scott, L.E.H.S.
Environmental Sanitarian
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
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 #: 92043 Account #: 5192
Reference: Williams Company: Birmingham Design
Location: 13075 Greenberry Lane Requested By: Vince Birmingham
Clarksville, MD 21029 Source: Well Water
Date/ Time Collected: 11/19/2013 1152 Site: Bathroom Tap
Date/Time Rec'd: 11/19/2013 1245 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.3
Collected By: J. Yeager 6176JY Well #: HO-95-2190

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	<1.1	pCi/L	15	900.0	11/21/2013 / 1321 / MJN
Gross Beta, Short Term	3.6	pCi/L	50	900.0	11/21/2013 / 1321 / MJN

Radium OK
11/25/13

NOTES

- 1 Gross Alpha Detection Limit: 1.1 pCi/L; Gross Beta Detection Limit: 1.4 pCi/L
- 2 pCi/L = picocuries per liter
- 3 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 4 Sub-contracted to Reference Lab #278
- 5 ND:None Detected
- 6 Visual well check: Sealed, vented cap
- 7 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy

Building Permit # : B12001648

Date Reported: 11/22/2013

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 #: 92042 Account #: 5192
Reference: Williams Company: Birmingham Design
Location: 13075 Greenberry Lane Requested By: Vince Birmingham
Clarksville, MD 21029 Source: Well Water
Date/ Time Collected: 11/19/2013 1152 Site: Bathroom Tap
Date/Time Rec'd: 11/19/2013 1253 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.3
Collected By: J. Yeager 6176JY Well #: HO-95-2190

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	✓ <1.0	MPN/ 100 ml	<1.0	SM18 9223	11/20/2013 / 1000 / LLO
Bacteria, E. coli, MPN	✓ <1.0	MPN/ 100 ml	<1.0	SM18 9223	11/20/2013 / 1000 / LLO
Nitrate	✓ 2.29	mg/L	10	601	11/19/2013 / 1315 / BCD
Turbidity	✓ 1.35	NTU	<10	SM18 2130B	11/19/2013 / 1315 / BCD
Sand	✓ NS	mg/L	5	Visual/Gravimetric	11/19/2013 / 1315 / BCD

Results OK
11/25/13 HS

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 & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B12001648

Date Reported: 11/20/2013