

C1 (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER A520449-A

ST/CO USE ONLY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE Received MM/DD/YY 11/06/07

MM/DD/YY 10/30/2007

22 200 26 (TO NEAREST FOOT)

HO-95-1314

OWNER Demmitt Richard STREET OR RFD All Daughters Lane TOWN Fulton SUBDIVISION Richard Estates SECTION LOT 7

WELL LOG

Not required for driven wells

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (N) TYPE OF GROUTING MATERIAL (C) (M) (B) (C) NO. OF BAGS 16 NO. OF POUNDS 1504 GALLONS OF WATER 96 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 42 ft.

C3

PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 20 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 24 ft. WHEN PUMPING 36 ft. TYPE OF PUMP USED (for test) S submersible

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. Rows: Sand (0-45), Gray Micaceous (45-200)

CASING RECORD (S) (T) (C) (O) (P) (L) (O) (T) MAIN CASING TYPE (S) Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 48

OTHER CASING (if used) diameter inch depth (feet) from to

SCREEN RECORD (S) (T) (B) (R) (H) (O) (P) (L) (O) (T) screen type or open hole (S) (T) (B) (R) (H) (O) (P) (L) (O) (T)

PUMP INSTALLED

DRILLER INSTALLED PUMP 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 (nearest foot) 1

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (Y) (N)

CIRCLE APPROPRIATE LETTER 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 28.04.04 "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 024 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 M S D 024

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

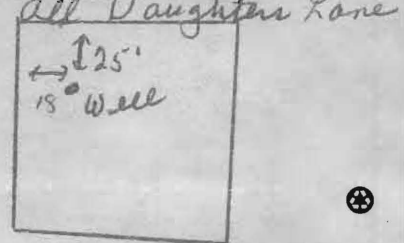
Table with columns: E A C H S R E E N, DEPTH (nearest ft.), DIAMETER OF SCREEN (NEAREST INCH) 56 60

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

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 1039

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 527836

STATE PERMIT NUMBER

HD-95-1314 fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

Demmitt Richard Last Name Owner First Name

P.O. Box 228 Street or RFD

Clarksville Md 21029 Town State Zip

B 3

LOCATION OF WELL

Howard 8 COUNTY 21

Orchard Estates 23 SUBDIVISION 42

SECTION 44 46 LOT 7 48 50

Fulton 52 NEAREST TOWN 71

MILES FROM TOWN (enter 0 if in town) 2 M I 73 76 77 78

DRILLER INFORMATION

Joseph L Mayne MS D 024 Driller's Name License No.

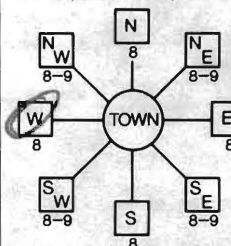
Joseph L Mayne Well Drilling Firm Name

5512 Ridge Rd Mt. Airy Md 21771 Address

Joseph L Mayne 9-27-07 Signature Date

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



all Daughters Lane 11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH SOUTH WEST EAST DISTANCE FROM ROAD 40 FT ENTER FT OR MI TAX MAP: 40 BLK: 19 PARCEL 178

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 (D)
Farming (Livestock Watering & Agricultural Irrigation) (F)
Industrial, Commercial, Dewatering (I)
Public Water Supply Well (P)
Test, Observation, Monitoring (T)
Geo-Thermal (G)

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Health AS20449-A COUNTY NAME COUNTY NO. STATE SIGNATURE DATE ISSUED 10/11/07 CO SIGNATURE EXP. DATE 10/11/08 NORTH GRID 489 000 EAST GRID 816 000

APPROXIMATE DEPTH OF WELL 300 FEET APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

METHOD OF DRILLING (circle one)

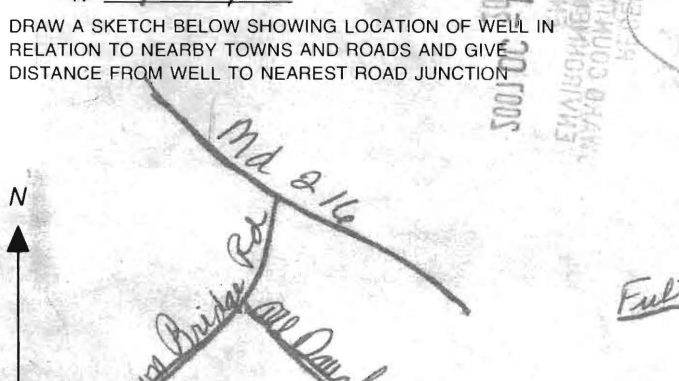
- BORED (or Augered) JETTED Jetted & DRIVEN AIR-ROTary AIR-PERcussion ROTARY (Hydraulic Rotary) CABLE REVerse-ROTary DRive-POINT other

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL (N)
THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED (Y)
THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS (S)
THIS WELL WILL DEEPEMED AN EXISTING WELL (D)

Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER G PERMIT No. HD-95-1314

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER 1. well WRITE THE BOX NUMBER FROM THE MAP HERE E 816 N 489



SPECIAL CONDITIONS Random sample needed for field test

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 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: NATIONAL WATER SVC Telephone #: 301-854-1333
Address: P.O. Box 138
Ashton, MD 20861

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): DAVID RYCKE License# PI 0145

*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: Mitchell & Best Telephone #: 301-252-0126
Subdivision: OBB Lot #: _____ Well Tag #: HO-95-1314V
Site Address: 12406 ALL DAUGHTER'S LA
FULTON, MD

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Schaeffer</u>	Make: <u>CAMPBELL</u>	Two piece watertight cap: <input checked="" type="checkbox"/>
Model #: _____	Model#: <u>PA 500</u>	Screened, vented well cap: <input checked="" type="checkbox"/>
Pump Capacity <u>10</u> GPM	Depth: <u>48"</u> (36" min)	Cap secured to casing: <input checked="" type="checkbox"/>
Well Yield: <u>20</u> GPM	NSF approved: <input checked="" type="checkbox"/>	Conduit min 18" B.G.: <input checked="" type="checkbox"/>
Depth of well encountered at time of pump installation: <u>200</u> (feet)		Conduit secured to well cap: <input checked="" type="checkbox"/>

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors or Cable guards are required - Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt _____

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>poly</u>	PVC sleeved to undisturbed soil at wall penetration: <u>YES</u>
PSI: <u>200</u> (160 psi min)	Approximate length of sleeve: <u>5'</u>
Depth of supply line: <u>4'</u> (36" min)	Sleeve caulked and 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.

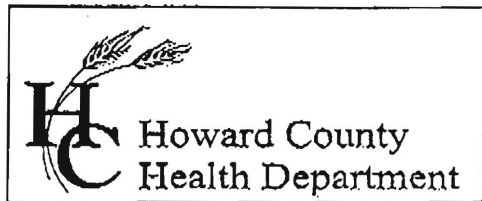
Signature of company representative responsible for installation _____ date 4/9/18

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

Date Insp. Requested: 4/19/18 Date Insp. Approved: 4/19/18 SC

Inspection Data: Pitless adapter and 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 installed inside of well 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"/>

sleeve under driveway



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

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:

Well Site Location: *Parcel A*
Orchard Est - 1, 2, 3, 4 all Daughters Lane
 Subdivision/Property Name Lot# Road Name

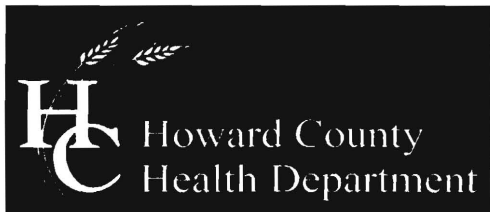
The well site has been staked by Patten Harris Rust + Ass -
 (professional land surveyor or company employing professional land surveyors)
 on Sept 2007 (date) and does not require a site inspection.

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 3/11/05

Richard Demmitt



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(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 29, 2007

Mr. Richard Demitt
P.O. Box 228
Clarksville, MD 21029

RE: Orchard Estates, Lot #7
Well Tag: HO-95-1314

To Whom It May Concern:

A sample was collected from a yield test October 30, 2007 and submitted to the Department of Health and Mental Hygiene 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 9.0 ± 2.0 picocuries/liter (pCi/L); while the **Gross Beta** level was 6.0 ± 2.0 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, Director
Bureau of Environmental Health

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

Send Report To:
Bart Nixon

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
RADIATION LABORATORY

Unvised

201 W. Preston Street, Baltimore, Maryland 21201
John M. DeBoy, Dr. P.H., Director

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: HO-95-1314 No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Orchards Est. - Lot 7 County: Howard

Sample Source: All Droughted Ln. Location: HO-95-1314
(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: 10/30/2007

Time Collected: 10:30 a.m. _____ p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code:

Federal Project:

Field Data: _____

Remarks: Sample collected @ field test pH _____ Chlorine _____

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000			
✓	Gross Beta	4100			
	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: _____

9106 Philadelphia Road
Suite 108-B
Rosedale, MD 21237



**HOME LAND
ENVIRONMENTAL
HEALTH LABS**
"Healthy Homes Start Here"

State Certified
Water Quality
Laboratory #353

Property Information	Customer Information
Property Address: 12406 All Daughters Lane Lot 7 Highland, MD 20777 Well Tag Number: HO-95-1314	Name: Well Water Solutions Phone Number: (410) 935-7185 Email: jemoseman@wellwatersolutions.net

Field Data		
Date & Time Sampled: 6/21/2018 1:30PM Date & Time Received: 6/22/2018 10:49AM Sampled By: Janet Walker Sampler ID: 9006JW Sample Location: Hallway bathroom sink	pH: 6.0 Chlorine Residual: 0.0 Clarity: Clear Sand: None Preservation: Cool, 4°C	Well Type: Not noted Well Height: Not noted Cap Type: Not noted Casing: Not noted Conduit: Not noted
Water Conditioning: Sediment Filter ✓ Note: First Test – No Treatment ✓		

Parameter	Method	Result	Pass/Fail	Units	MCL	RL	Analyst	Date of Analysis
Total Coliform	Colitag	Absent	Pass	Per/100mL	Present	1.0	KMB	6/23/2018
<i>E. Coli</i>	Colitag	Absent	Pass	Per/100mL	Present	1.0	KMB	6/23/2018
Nitrate-Nitrite	EPA 353.2	4.7	Pass	mg/L	10.0	0.5	KMB	6/22/2018
Turbidity	EPA 180.1	0.63	Pass	NTU	10.0	0.5	KMB	6/22/2018

Approved By: Kevin Barnaba Kevin Barnaba, Lab Director

Report Date: 6/23/2018

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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – January 16, 2019

July 16, 2018

Homeowner
12406 All Daughters Lane
Highland, MD 20777

RE: Orchard Estates, Lot 7
12406 All Daughters Lane
Building Permit: B18000037
Well Permit: HO-95-1314

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 **4/20/2018**. Final approval of the well line connection to the dwelling was granted on **4/19/2018**. The well construction was completed on **10/30/2007**. Water samples were collected on **6/21/2018**.

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 **10/30/2007**. Results showed a Gross Alpha level of **9.0 ± 2.0 pCi/L** and **Gross Beta** level of **6.0 ± 2.0 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-95-1314. 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.**



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

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

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>

In closing, please refer to our "Homeowner Fact Sheet" for understanding your onsite sewage disposal system. You will also find a link to Maryland Department of the Environment website which elaborates in further detail operation and maintenance of your Septic System.

Approving Authority,

Robert Bricker, REHS/RS, L.E.H.S.
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
File