

C1 8636

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) A516057

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" HO-95-0644

OWNER Bentley John and George STREET OR RFD Sweetbay Street TOWN Woodbine SUBDIVISION Belle Haven Estates SECTION LOT 36

WELL LOG

Not required for driven wells

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) YES Y NO N TYPE OF GROUTING MATERIAL (Circle one) CEMENT C M BENTONITE CLAY B C NO. OF BAGS 18 NO. OF POUNDS 1800 GALLONS OF WATER 108 DEPTH OF GROUT SEAL (to nearest foot) from 0 to 63 ft.

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 13.63 METHOD USED TO MEASURE PUMPING RATE Submersible WATER LEVEL (distance from land surface) BEFORE PUMPING 20 ft. WHEN PUMPING 35 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: Soil (0-15), Brown Shale (15-28), Soft Brown Shale (28-60), Gray Rock (60-300). Water at 115' & 240'.

CASING RECORD

casings types insert appropriate code below MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) 4 Total depth of main casing (nearest foot) 65

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

SCREEN RECORD

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

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES Y NO 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 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. MSD 162

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. AW D 766

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

DEPTH (nearest ft.) table with columns 1-21 and rows E A C H S C R E E S L O T S I Z E 1 2 3 DIAMETER OF SCREEN 56 (NEAREST INCH) 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

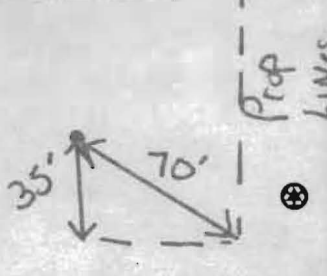
PUMP INSTALLED DRILLER INSTALLED PUMP YES NO

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) LAND SURFACE below 1 (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)



B 1 9183

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 526193 please type

STATE PERMIT NUMBER

40-95-0644 fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

Grayson Homes 15 Last Name Owner First Name 34

9025 Chevrolet Drive 36 Street or RFD 55

Ellicott City MD 21043 57 Town 70 State 72 Zip 76

DRILLER INFORMATION

Michael D. Isom MS D 162 76 Driller's Name License No. 81

G. Edgar Harr Sons' Corp. Firm Name

12047 Falls Road, Cockeysville 21030 Address

Signature Date 12/26/06

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 5 8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 750 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
I INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
T TEST, OBSERVATION, MONITORING
G GEO-THERMAL

APPROXIMATE DEPTH OF WELL 300 24 28 FEET

APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH

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 DEEPENEWED WELLS (CIRCLE APPROPRIATE BOX)

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

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENEWED (IF AVAILABLE) 41 52

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

APPROP. PERMIT NUMBER H020070002

PERMIT No. H0-95-0644

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET, IF NEEDED

Well to be Drilled Per Plan P-06-03 Signed on 8/21/2006

B 3 LOCATION OF WELL

Howard 8 COUNTY 21

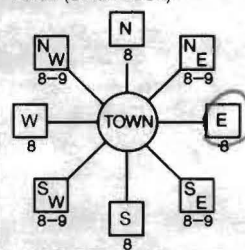
Belle Haven Est 23 SUBDIVISION 42

SECTION 44 46 LOT 36 48 50

Woodbine 52 NEAREST TOWN 71

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

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Sweetbay Street Union Chapel Road 11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

45 34 37 WEST EAST SOUTH

DISTANCE FROM ROAD ENTER FT OR MI 38 39

TAX MAP: 14 BLK: 20 PARCEL 66

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard 13 A516057 COUNTY NAME COUNTY NO.

STATE SIGNATURE INSERT S

DATE ISSUED 2/13/2007 Brian Baker 2/13/2008 41

43 MM DD YY 48 CO SIGNATURE EXP. DATE

NORTH GRID 530 000 EAST GRID 788 000 50 55 57 63

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

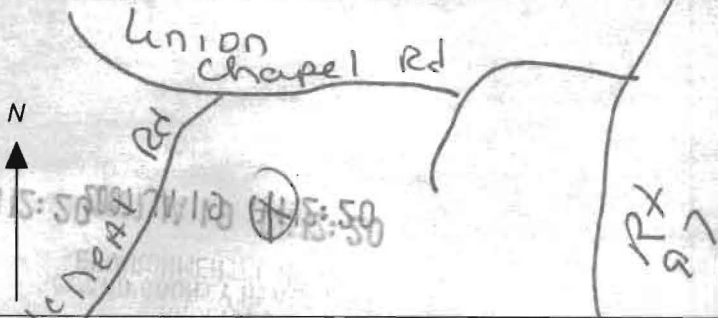
- 1. well
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 7808

N 530

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



HARR WELL DRILLING

12047 FALLS ROAD
COCKEYSVILLE, MD 21030
410-252-4588

HOWARD COUNTY WELL YIELD TEST REPORT

Date Test Performed: 6-06-07
Address: Sweetbay Street
Owner Name: Grayson Homes
Well Depth: 300 Ft

Permit Number: HO-95-0644
Subdivision: Belle Haven Est L#36
Election District:
Static Water Level: 20 Ft

Time	Water Level	PSI Existing Pump	Pumping Rate Seconds to fill 5gallon bucket	Calculated Flow-Gallons Per Minute
0830	20 ft		22 sec	13.63
0845	35		22	13.63
0900	35		22	13.63
0915	35		22	13.63
0930	35		22	13.63
0945	35		22	13.63
1000	35		22	13.63
1015	35		22	13.63
1030	35		22	13.63
1045	35		22	13.63
1100	35		22	13.63
1115	35		22	13.63
1130	35		22	13.63

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: Northern Virginia Drilling Telephone #: 703-361-6859
Address: 11356 Industrial Rd. N
Manassas VA 20109

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

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

Name (Print): Shawn Miller License# MSD216

*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: K. Hovnanian Homes Telephone #: 240-882-7062
Subdivision: Belle Haven ESTS Lot #: 36 Well Tag #: EO 95-0644
Site Address: 15250 Sweetbay ST
Woodbine, MD 21797

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Flint and Walling</u>	Make: <u>Boshart</u>	Two piece watertight cap: <input checked="" type="checkbox"/>
Model #: <u>4F10507</u>	Model#: <u>210255</u>	Screened, vented well cap: <input checked="" type="checkbox"/>
Pump Capacity: <u>10</u> GPM	Depth: <u>36"</u> (36" min)	Cap secured to casing: <input checked="" type="checkbox"/>
Well Yield: <u>13.6</u> GPM	NSF/WSC approved: <input type="checkbox"/>	Conduit min 18" B.G.: <input checked="" type="checkbox"/>
Depth of well encountered at time of pump installation: <u>300</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, 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

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>Polyethylene</u>	PVC sleeve to undisturbed soil at wall penetration: <input checked="" type="checkbox"/>
PSI: <u>200</u> (160 psi min)	Length of sleeve(s' minimum from foundation): <u>5'</u>
Depth of supply line: <u>36"</u> (36" min)	Sleeve sealed properly: <input checked="" type="checkbox"/>

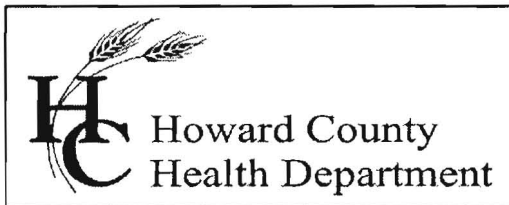
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation

Signature of company representative responsible for installation: Shawn Miller date: 12-2-15

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

Date Insp. Requested: _____ Date Insp. Approved: 12/16/2015 Inspector: 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"/>



Bureau of Environmental Health

8930 Stanford Blvd., Columbia, MD 21045
Main: 410-313-1771 | Fax: 410-313-2648
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
PERMANENT DEVIATION FOR NITRATES

Expiration Date – AUGUST 23, 2016

February 23, 2016

Homeowner
15250 Sweetbay Street
Woodbine, MD 21797

RE: Belle Haven Est., Lot 36
15250 Sweetbay Street
Building Permit: B14002096
Well Permit: HO-95-0644

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 **2/8/2016**. Final approval of the well line connection to the dwelling was granted on **12/16/2015**. The well construction was completed on **6/7/2007**. Water samples were collected on **1/27/2016 & 2/11/2016**.

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 untreated water sample collected on **1/27/2016** indicated a nitrate level of **11.7 mg/L**. **This exceeds the maximum contaminant limit of 10 mg/L set forth in COMAR 26.04.04.09**. After installation of a nitrate removal device (kitchen tap reverse osmosis system), a post-treatment water sample was collected on **2/11/2016** and indicated a nitrate level of **1.76 mg/L**.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the nitrate removal system effectively maintains a nitrate-nitrogen contaminant level of **10 mg/L or less**.

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.
2. It is recommended that a Maryland certified water laboratory certified for nitrates analysis perform a yearly nitrate analysis.

3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.**

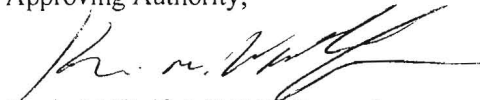
This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-95-0644. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

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 Maryland 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" which illustrates a better understanding for your Best Available Technology (BAT). You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your BAT.

Approving Authority,


Kevin M Wolf, L.E.H.S., Supervisor
Groundwater Management Section
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 #: 105330 Account #: 3192
Reference: Belle Haven Lot 36 Company: Northern Virginia Drilling
Location: 15250 Sweetbay Street Requested By: Dick Trelease
Woodbine, MD 21797 Source: Well Water
Date/ Time Collected: 1/27/2016 0813 Site: Pressure Tank
Date/Time Rec'd: 1/27/2016 1214 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 5.7
Collected By: J. Yeager 6176JY Well #: HO-95-0644

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	1/28/2016 / 1000 / BCD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	1/28/2016 / 1000 / BCD
Nitrate	11.7	mg/L	10	601	1/28/2016 / 1400 / BCD
Turbidity	0.38	NTU	<10	SM18 2130B	1/28/2016 / 1000 / BCD
Sand	NS	mg/L	5	Visual/Gravimetric	1/28/2016 / 1000 / BCD

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 pH & Chlorine level tested on site
- 8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : B14002098

Date Reported: 1/29/2016

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 #: 105590 Account #: 3192
Reference: Belle Haven Lot 36 Company: Northern Virginia Drilling
Location: 15250 Sweetbay Street Requested By: Dick Trelease
Woodbine, MD 21797 Source: Well Water
Date/ Time Collected: 2/11/2016 0936 Site: R/O Tap
Date/Time Rec'd: 2/11/2016 1209 Treatment: Reverse Osmosis/Neutralizer/Softener
Chlorine ppm: Free: ND Total: ND pH: 7.0
Collected By: J. Yeager 6176JY Well #: HO-95-0644

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Nitrate	1.76	mg/L	10	601	2/12/2016 / 0950 / CRS

OK
✓

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 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 pH & Chlorine level tested on site
- 5 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : B14002098

Date Reported: 2/12/2016