

C1 5124

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

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER: Grayson Homes, STREET OR RFD: Union Chapel Rd, TOWN: Woodbine, SUBDIVISION: Belle Haven Est, SECTION: , LOT: 19

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Soil, Brown shale, Gray Rock, Water at 240', well #1 (cased hole that collapsed), 300-40 Drill cuttings, 40-0 cement.

GROUTING RECORD: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL: CEMENT (CM), BENTONITE CLAY (BC), NO. OF BAGS: 12, NO. OF POUNDS: 200, GALLONS OF WATER: 12, DEPTH OF GROUT SEAL: 40 ft.

CASING RECORD: MAIN CASING TYPE: PL (6 inch diameter), Total depth of main casing: 40 ft.

OTHER CASING (if used) table with columns: diameter inch, depth (feet) from, to.

SCREEN RECORD: screen type or open hole: PL (Plastic), insert appropriate code below.

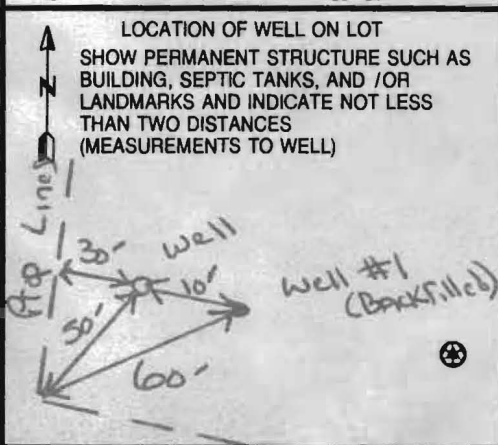
DEPTH (nearest ft.) table with columns: 1-11, 13-17, 19-23, 25-29, 31-35, 37-41, 43-47, 49-53. Includes handwritten 'Hole 40 300'.

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

PUMPING TEST: HOURS PUMPED: 3, PUMPING RATE: 13.63 gal. per min., METHOD USED TO MEASURE PUMPING RATE: Submersible, WATER LEVEL: 44 ft. before, 56 ft. when pumping, TYPE OF PUMP USED: S (submersible).

PUMP INSTALLED: DRILLER INSTALLED PUMP: YES, TYPE OF PUMP INSTALLED: S (submersible), CAPACITY: GALLONS PER MINUTE: 31-35, PUMP HORSE POWER: 37-41, PUMP COLUMN LENGTH: 43-47, CASING HEIGHT: + above, - below.



NUMBER OF UNSUCCESSFUL WELLS: 1, WELL HYDROFRACTURED: Y, DRILLERS LIC. NO.: M 5 D 162, DRILLERS SIGNATURE: Deirdre Hale, LIC. NO.: A W D 766, SITE SUPERVISOR: (signature)

C1 8618

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

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

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER A516057

ST/CO USE ONLY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE RECEIVED MM DD YY

04 09 2007

22 300 26 (TO NEAREST FOOT)

140 - 95 - 0672

OWNER Bentley first name BENTLEY last name STREET OR RFD Belle Harbor Est. TOWN Woodbine SUBDIVISION SECTION LOT 19

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. Rows: Soil (0-10), Brown Shale (10-30), Gray Rock (30-175), Hard Gray Rock (175-300).

water at 175' & 240'

Handwritten notes: 60 ÷ 6 = 10 ÷ 3.5 = 2.8

Large handwritten circle with text: Well Sealed

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 10 NO. OF POUNDS 150

GALLONS OF WATER 60

DEPTH OF GROUT SEAL (to nearest foot)

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

CASING RECORD

ST [X] CO [] PL [X] OT []

MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 35

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

SCREEN RECORD screen type or open hole insert appropriate code below [ST] [BR] [HO] [PL] [OT]

C2 DEPTH (nearest ft.)

HO 35 300

EACH CASING 8 9 11 15 17 21 23 24 26 30 32 36 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 88

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

C3

PUMPING TEST

HOURS PUMPED (nearest hour) 3

PUMPING RATE (gal. per min.) 17.64

METHOD USED TO MEASURE PUMPING RATE Submersible

WATER LEVEL (distance from land surface)

BEFORE PUMPING 40 ft.

WHEN PUMPING 42 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 YES [X] 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

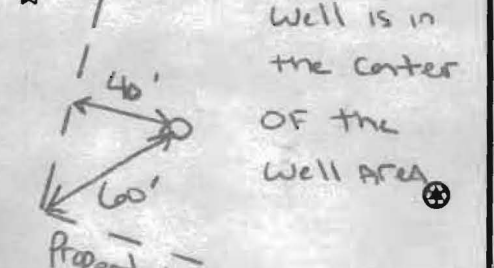
CASING HEIGHT (circle appropriate box and enter casing height)

[+] above LAND SURFACE

[-] below (nearest foot) 1

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 9168

SEQUENCE NO. (MDE USE ONLY)

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

STATE PERMIT NUMBER

40-95-0672 fill in this form completely

Date Received (APA) 1/19/07

OWNER INFORMATION

Grayson Homes, 9025 Chevrolet Drive, Ellicott City MD 21043

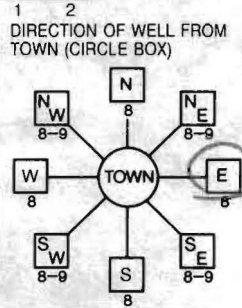
B 3 LOCATION OF WELL

Howard COUNTY, Belle Haven Est SUBDIVISION, SECTION 44 46, LOT 19 48 50, Woodbine NEAREST TOWN, MILES FROM TOWN 2

DRILLER INFORMATION

Michael D. Isom M S D 162, G. Edgar Harr Sons' Corp., 12047 Falls Road, Cockeysville 21030, 12/26/06

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Union Chapel road NEAR WHAT ROAD, ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX), DISTANCE FROM ROAD 40 FT, TAX MAP: 14 BLK: 20 PARCEL 66

B 2 WELL INFORMATION

APPROX. PUMPING RATE 5 GAL. PER MIN., AVERAGE DAILY QUANTITY NEEDED 750 GAL. PER DAY

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- Domestic Potable Supply & Residential Irrigation (circled), Farming, Industrial, Public Water Supply Well, Test, Observation, Monitoring, Geo-Thermal

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME, STATE SIGNATURE, DATE ISSUED 2/23/07, CO SIGNATURE, NORTH GRID 530 000, EAST GRID 0786 000

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

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED, AIR-ROTARY, CABLE, DRIVE-POINT

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

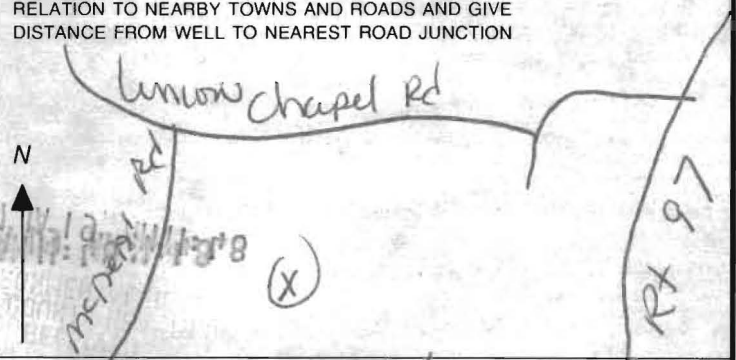
- THIS WELL WILL NOT REPLACE AN EXISTING WELL (circled), THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED, THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS, THIS WELL WILL DEEPEMED AN EXISTING WELL

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 7806, 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



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

APPROX. PERMIT NUMBER Ho 2007-G002, PERMIT No. Ho-95-0672

SPECIAL CONDITIONS

Drill well per P Plan signed 8/2/06

HARR WELL DRILLING

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

HOWARD COUNTY YIELD TEST REPORT

Date Test Performed: 4-6-07
Address: Union Chapel Road
Owner Name: Grayson Home
Well Depth: 300 Ft

Permit Number: HO-95-0672
Subdivision: Belle Haven Est L#19
Election District:
Static Water Level: 40 Ft

Time	Water Level	PSI Existing Pump	Pumping Rate Seconds to fill 5gallon bucket	Calculated Flow-Gallons Per Minute
1130	40 ft		17 sec	17.64
1145	42		17	17.64
1200	42		17	17.64
1215	42		17	17.64
1230	42		17	17.64
1245	42		17	17.64
1300	42		17	17.64
1315	42		17	17.64
1330	42		17	17.64
1345	42		17	17.64
1400	42		17	17.64
1415	42		17	17.64
1430	42		17	17.64

2007 APR 16

HARR WELL DRILLING

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

HOWARD COUNTY WELL YIELD TEST REPORT

Date Test Performed: 6-25-07

Permit Number: HO-95-0672

Address: Union Chapel Rd

Subdivision: Belle Haven Est lot 19

Owner Name: Grayson Homes

Election District:

Well Depth: 300 Ft

Static Water Level: 44 Ft

Time	Water Level	PSI Existing Pump	Pumping Rate Seconds to fill 5gallon bucket	Calculated Flow-Gallons Per Minute
1200	44 ft		22 sec	13.63 gpm
1215	56		22	13.63
1230	56		22	13.63
1245	56		22	13.63
1300	56		22	13.63
1315	56		22	13.63
1330	56		22	13.63
1345	56		22	13.63
1400	56		22	13.63
1415	56		22	13.63
1430	56		22	13.63
1445	56		22	13.63
1500	56		22	13.63
1515	56		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 O
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 #: 240-882-7662
Subdivision: Belle Haven Lot #: 19 Well Tag #: HO-95-0672
Site Address: 2819 Bridalwreath CT
Woodbine MD 21797

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>FLINT and KELLING</u>	Make: <u>BOSTART</u>	Two piece watertight cap: <input checked="" type="checkbox"/>
Model #: <u>4F10607-305</u>	Model#: <u>P10055</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>17.6</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: _____ (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

Piping to house

Type: polyethylene
PSI: 200 (160 psi min)
Depth of supply line: 36" (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration:
Length of sleeve(5' minimum from foundation): 10'+
Sleeve sealed properly:

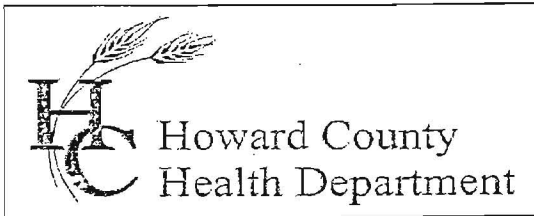
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: Shawn Miller date: 1-27-14

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

Date Insp. Requested: 1/30/14 Date Insp. Approved: 1/30/14 Inspector: (KW)
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 OK
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

OK
AG
4/29/14



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

Expiration Date – October 25, 2014

April 25, 2014

K. Hovnanian Homes
1802 Brightseat Road
Landover, MD 20785

**RE: Belle Haven Estates
2819 Bridal Wreath Court
Building Permit: B13001143
Well Permit: HO-95-0672**

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 **April 11, 2014**. Final approval of the well line connection to the dwelling was granted on **January 30, 2014**. The well construction was completed on **June 26, 2007**. Water samples were collected on **April 21, 2014**.

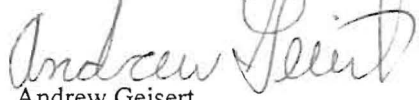
The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-95-0672. 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 laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:

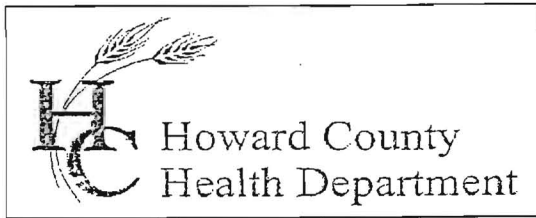
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,



Andrew Geisert
Environmental Sanitarian
Well & Septic Program

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



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

Expiration Date – October 25, 2014

April 25, 2014

K. Hovnanian Homes
1802 Brightseat Road
Landover, MD 20785

**RE: Belle Haven Estates
2819 Bridal Wreath Court
Building Permit: B13001143
Well Permit: HO-95-0672**

Dear Homeowner:

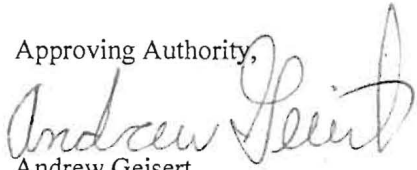
This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **April 11, 2014**. Final approval of the well line connection to the dwelling was granted on **January 30, 2014**. The well construction was completed on **June 26, 2007**. Water samples were collected on **April 21, 2014**.

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. 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-95-0672. 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.**

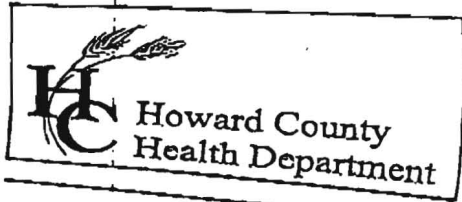
Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,



Andrew Geisert
Environmental Sanitarian
Well & Septic Program

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



7178 Columbia Gateway Drive, Columbia, MD 21046
 (410) 313-2640 Fax (410) 313-2640
 TDD (410) 313-2323 Toll Free 1-866-313-2640
 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:	lots	
Belle Haven Estates	1-46	Union Chapel Road
Subdivision/Property Name	Lot#	Road Name

The well site has been staked by DMW, Inc 410-296-3333
 (professional land surveyor or company employing professional land surveyors)
 on 12/29/06 (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

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 #: 93858 Account #: 3192
Reference: Belle Haven Lot 19 Company: Northern Virginia Drilling
Location: 2819 Bridalwreath Court Requested By: Dick Trelease
Woodbine, MD 21797 Source: Well Water
Date/ Time Collected: 4/21/2014 1036 Site: First Floor Bathroom Sink
Date/Time Rec'd: 4/21/2014 1214 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 5.3
Collected By: R. Ott 4269RO Well #: HO-95-0672

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	4/22/2014 / 0800 / LLO
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	4/22/2014 / 0800 / LLO
Nitrate	7.44	mg/L	10	601	4/22/2014 / 1500 / BCD
Turbidity	1.45	NTU	<10	SM18 2130B	4/22/2014 / 0840 / JKW
Sand	NS	mg/L	5	Visual/Gravimetric	4/22/2014 / 0840 / JKW

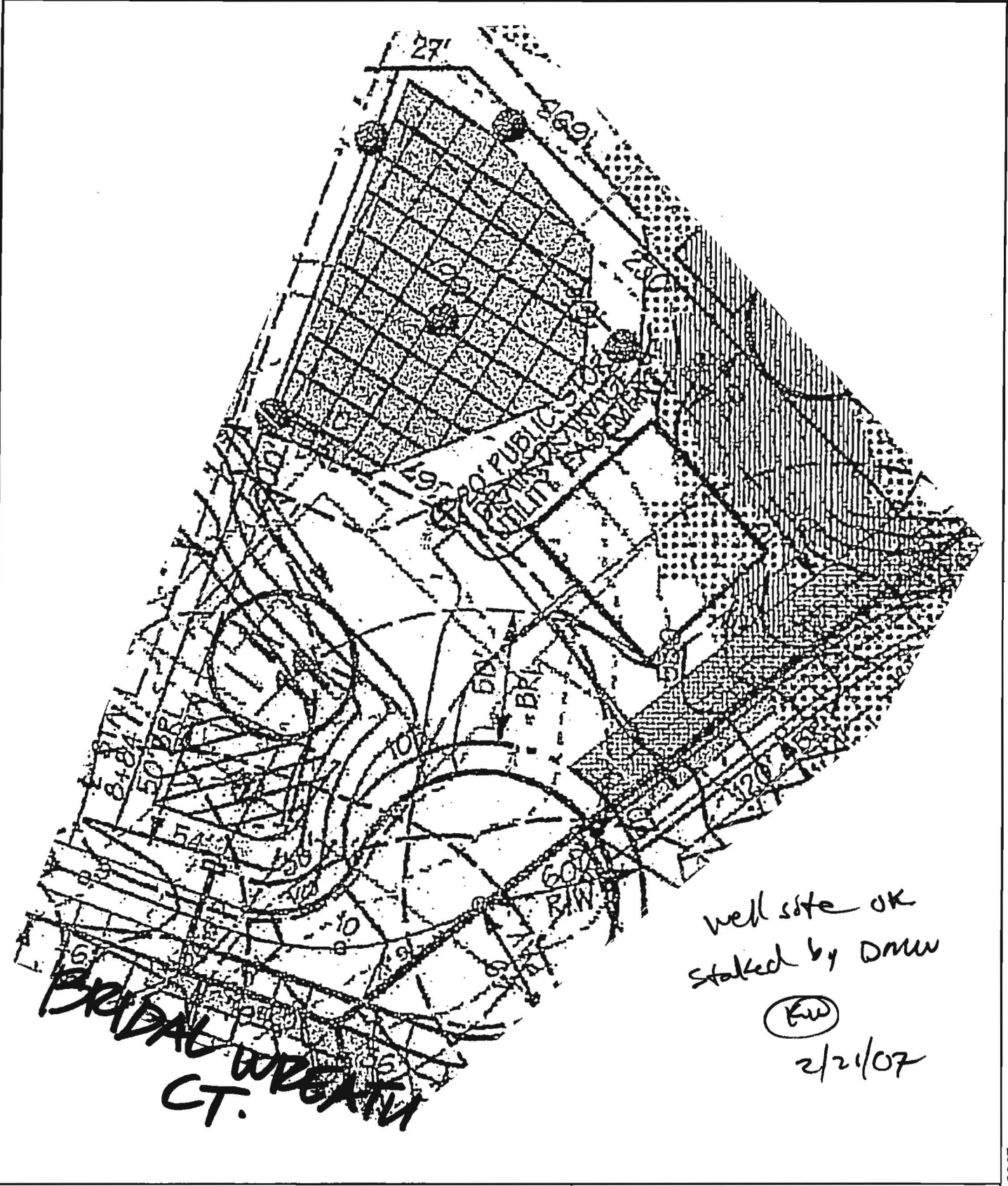
OK
AF
4/25/14

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 # : B13001143

Date Reported: 4/22/2014



BELLE HAVEN ESTATES

LOT 19

DMW

Daft-McCune-Walker, Inc.

200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4705

A Team of Land Planners,
 Landscape Architects,
 Engineers, Surveyors &
 Environmental Professionals

Job No. 01067	Scale: 1"=50'	Date: 12/6/06	Drawn By: MDT
---------------	---------------	---------------	---------------

N:\01067\01067\Final\Lot Wells\FINAL\Lot19.dgn