C 1 | 7226 | SEQUENCE NO. (MDE USE ONLY)

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

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

ST/CO USE ONLY
DATE Received MM DD YY
8 13

DATE WELL COMPLETED MM 9 DD 15 YY 07
15 20

Depth of Well 22 325 26 (TO NEAREST FOOT)

2/15/08 DLS KW

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO 95-1214
28 29 30 31 32 33 34 35 36 37

OWNER (last name) Keckley CO. (first name)
STREET OR RFD Woodstock rd TOWN Woodstock
SUBDIVISION Myrtue PROJECTION LOT 18

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	FEET TO	check if water bearing
Brown Shale	0	34	
Gray Limestone	34	325	✓
Dryhole	0	400	

NUMBER OF UNSUCCESSFUL WELLS: 1

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.: M S D 009

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: __ __ D __ __ __

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

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes [Y] no [N] (44 44)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT [CM] BENTONITE CLAY [BC] (45 46)

NO. OF BAGS 14 NO. OF POUNDS 1396 (45 46)

GALLONS OF WATER 84

DEPTH OF GROUT SEAL (to nearest foot)
from 0 (48 TOP 52) ft. to 37 (54 BOTTOM 58) ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

[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 (60 61)	06 (63 64)	40 (66 70)

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	depth (feet) to

SCREEN RECORD
screen type or open hole insert appropriate code below

[ST] STEEL [BR] BRASS BRONZE [HO] OPEN HOLE [PL] PLASTIC [OT] OTHER

C 2 (1 2)

DEPTH (nearest ft.)

EACH SCREEN		from	to
1	HO (8 9)	40 (11 15)	325 (17 21)
2	(23 24)	(26 30)	(32 36)
3	(38 39)	(41 45)	(47 51)

SLOT SIZE 1 ____ 2 ____ 3 ____

DIAMETER OF SCREEN ____ (56 60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 ____ (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 (1 2)

PUMPING TEST
HOURS PUMPED (nearest hour) 03 (8 9)

PUMPING RATE (gal. per min.) 6. (11 15)

METHOD USED TO MEASURE PUMPING RATE Eyel.

WATER LEVEL (distance from land surface)

BEFORE PUMPING 41 (17 20) ft.

WHEN PUMPING 110 (22 25) ft.

TYPE OF PUMP USED (for test)
- [A] air (27)
- [P] piston (27)
- [T] turbine (27)
- [C] centrifugal (27)
- [R] rotary (27)
- [O] other (describe below) (27)
- [J] jet (27)
- [S] submersible (27)

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. ____ (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 (48) LAND SURFACE
- [−] below (49)

01 (50 51) (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

NO survey status

DENV-CR00

COUNTY

EMERGENCY/TEMP NO. IF ANY

B 1 | 4351 | SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

please type

526657

STATE PERMIT NUMBER: HO-95-1214

fill in this form completely

Date Received (APA): 4/19/07

OWNER INFORMATION

Last Name / Owner: Keelly Company

First Name:

Street or RFD: P.O. Box 528

Town: Timonium | State: Md | Zip: 21094

DRILLER INFORMATION

Driller's Name: Allen Compton | License No.: MS D 009

Firm Name: Fogles Well Drilling

Address: 580 Dorecht Rd

Signature: [signature] | Date: 4-14-07

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.): 5

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): 500

USE FOR WATER (CIRCLE APPROPRIATE BOX)

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

APPROXIMATE DEPTH OF WELL: 300 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 DEEPENED 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 DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

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

APPROP. PERMIT NUMBER: HO2006GEL8

PERMIT No.: HO-95-1214

B 3 LOCATION OF WELL

COUNTY: Howard

SUBDIVISION: Myrtue Property

SECTION: | LOT: 18

NEAREST TOWN: Woodstock

MILES FROM TOWN (enter 0 if in town): 2 MI

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

NW 8-9 | N 8 | NE 8-9

W 8 | TOWN | E 8

SW 8-9 | S 8 | SE 8-9

NEAR WHAT ROAD: Woodstock rd.

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

NORTH (N) | WEST (W) 32 (E) EAST | (S) SOUTH

DISTANCE FROM ROAD: FT

ENTER FT OR MI

TAX MAP: 10 BLK: 24 PARCEL 225

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

COUNTY NAME: Howard (13) | COUNTY NO.: A 518006-M

STATE SIGNATURE: | INSERT S

DATE ISSUED: 8/13/07 | CO SIGNATURE: [signature] | EXP. DATE: 8/13/08

NORTH GRID: 540 000 | EAST GRID: 0837 000

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

1.

2.

3.

9/11/07 Sample collected @ yield (FW)

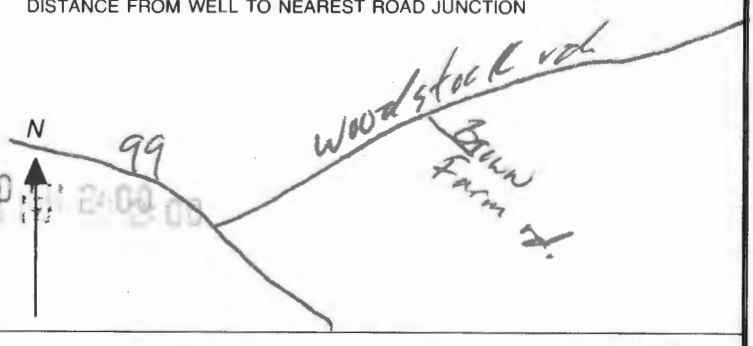
WRITE THE BOX NUMBER FROM THE MAP HERE

E 8307

N 540

000 000

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 REVERSE SIDE IF NEEDED: NEED RADIUM SAMPLE PER HEALTH DEPT

DENV-Permit 97

② COUNTY

Yield Test Data Sheet

County File # _____

District 2

MD Well Permit #. HO-95-1214

Date of Test: 9-11-07

Subdivision Name: Myrtue PRO

Section _____ Lot # 18

Street Address: Woodstock rd.

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

Distance from MP to ground surface 1 ft.

Well Depth 325' ft.

Well Driller: Fogle's Well Drilling

Must be submitted with the State of Maryland Well Completion Report

Submit to:

NOTES:

Pump Start Time	Static Water level:	Pumping Rate	Calculated Flow (gallons per minute)
8:00	41 ft.	( ) Time to fill 1 / gal. bucket ( ) Flow meter reading (if used)	15

	TIME	WATER LEVEL BELOW M.P.		
Water level and pumping rate must be recorded every 15 minutes				
1	8:00	41 ft.	4	15 GPM
2	8:15	110 ft.	10	6 GPM
3	8:30	110 ft.	10	6 GPM
4	8:45	110 ft.	10	6 GPM
5	9:00	110 ft.	10	6 GPM
6	9:15	110 ft.	10	6 GPM
7	9:30	110 ft.	10	6 GPM
8	9:45	110 ft.	10	6 GPM
9	10:00	110 ft.	10	6 GPM
10	10:15	110 ft.	10	6 GPM
11	10:30	110 ft.	10	6 GPM
12	10:45	110 ft.	10	6 GPM
13	11:00	110 ft.	10	6 GPM
14	11:15	110 ft.	10	6 GPM
15		ft.		GPM
16		ft.		GPM
17		ft.		GPM
18		ft.		GPM
19		ft.		GPM
20		ft.		GPM
21		ft.		GPM
22		ft.		GPM
23		ft.		GPM
24		ft.		GPM
25		ft.		GPM
26		ft.		GPM
27		ft.		GPM
28		ft.		GPM
29		ft.		GPM
30		ft.		GPM

Page _____ of _____ Review _____

Date _____

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-1214

Location of property (road) Davis Branch Rd.

Subdivision Mayfair Loop. Lot 18 Block ____ Plat ____ Sec. ____

Well Driller Fogel's Owner Keeley Company

Depth of well _____

Distance of measuring point (M.P.) above ground _____

Static water level (S.W.L.) below M.P. _____

I. High rate pumping -- reservoir drawdown

Time pump started _____ Pumping rate _____

Total time _____ to reach pumping water level _____ ft. below M.P.

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

TIME (in 15 minute intervals	WATER LEVEL below M.P.	PUMPING RATE time to fill 5 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)

HD-224

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648

<u>Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping</u>

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: Barlow Well Drilling Telephone #: 410-838-6910
Address: 522 Underwood Lane
Bel Air MD 21014

(Must circle one) Licensed Plumber ~~Licensed Well Driller~~ (circled) Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): Michael Isom License# MSD 162

***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: Keystone Homes Telephone #: 410-838-6910
Subdivision: Myrtue Property Lot #: 18 Well Tag #: HO-95-1214
Site Address: 1921 Davis Branch Rd
Woodstock MD 21163

Submersible Pump Data	Pitless Adapter	Well Cap and Electric Conduit
Make: Goulds	Make: BII	Two piece watertight cap: ✓
Model #: 7CS07422	Model#: P100	Screened, vented well cap: ✓
Pump Capacity 7 GPM	Depth: 36 (36" min)	Cap secured to casing: ✓
Well Yield: 6 GPM	NSF approved: yes	Conduit min 18" B.G.: ✓
Depth of well encountered at time of pump installation: 325 (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 or Cable guards are required – Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt ____

Piping to house	House Connection
Type: Poly	PVC sleeved to undisturbed soil at wall penetration: ✓
PSI: 200 (160 psi min)	Approximate length of sleeve: 6 Feet
Depth of supply line: 36 (36" min)	Sleeve caulked 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, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

[signature] 2/22/23
Signature of company representative responsible for installation date

<u>For Health Department Use Only – Not to be completed by Installer</u>

Date Insp. Requested: 2/22/2023 Date Insp. Approved: 2/23/2023

Inspection Data:
- Pitless adapter and 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 installed inside of well 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 ✓

HD-215(Rev. 8/00)

Found nearby well that wasn't abandoned

HOWARD COUNTY
HEALTH DEPARTMENT

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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – December 18, 2023

June 28, 2023

Homeowner
1921 Davis Branch Road
Woodstock, MD 21163

RE: Marriotts Ridge, Lot 18
1921 Davis Branch Road
Building Permit: B22001010
Well Permit: HO-95-1214

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 **6/5/2023.** Final approval of the well line connection to the dwelling was granted on **2/23/2023.** The well construction was completed on **9/15/2007.** Water samples were collected on **6/2/2023, 6/26/2023.**

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 **6/2/2023`**. Results showed a Gross Alpha level of **2.8** ± 1.4 **pCi/L** and **Gross Beta** level of **4.0 ± 1.4 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-95-1214. 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.**

HOWARD COUNTY
HEALTH DEPARTMENT

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 Environments website which elaborates in further detail operation and maintenance of your Septic System.

Approving Authority,

Kevin M Wolf, L.E.H.S., REHS/R.S., Supervisor
Groundwater Management Section
Well & Septic Program

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

Howard County
Health Department

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

ATTENTION WELL DRILLERS!!!

When submitting a well application for a new or replacement well, please indicate one of the following:

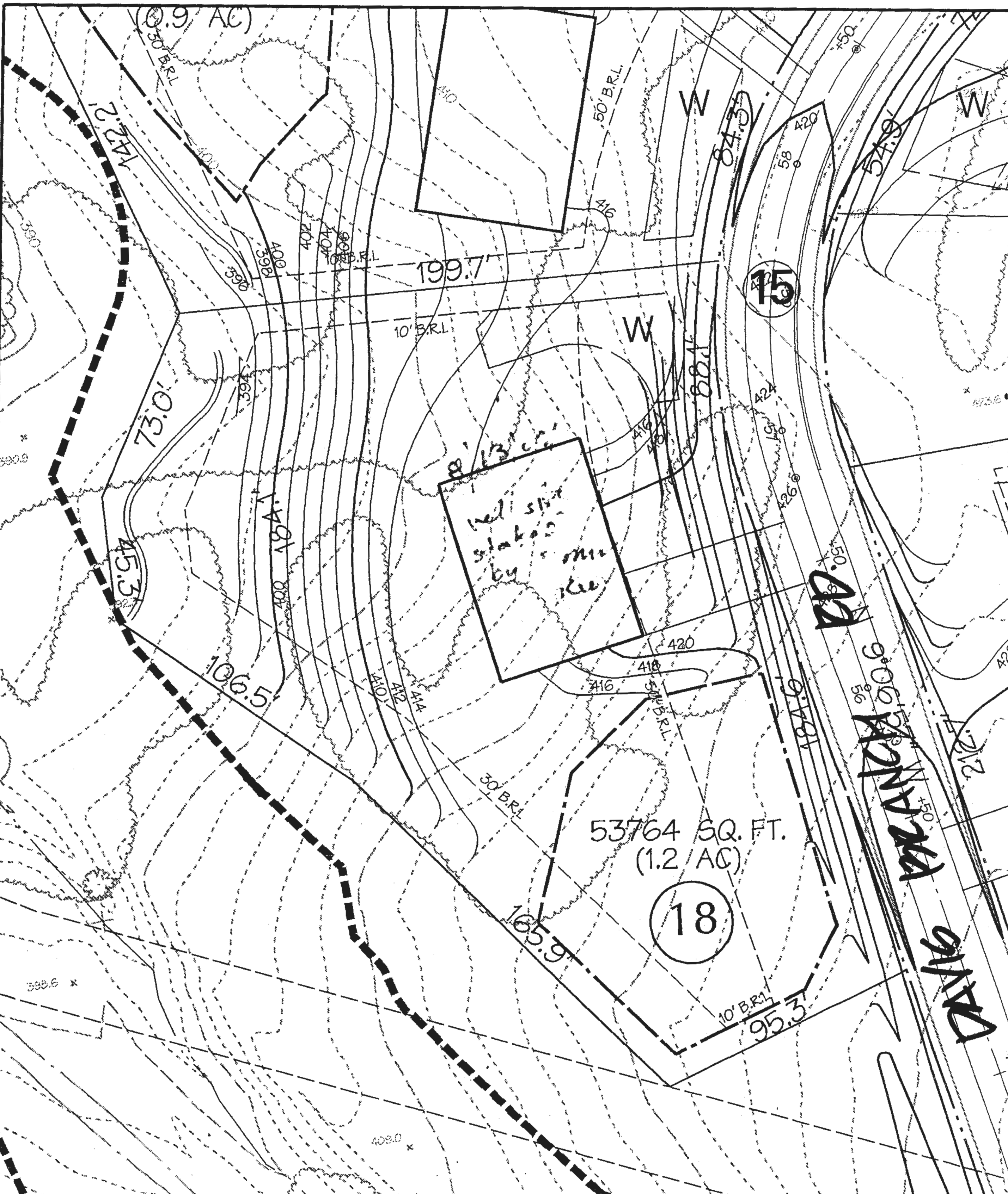
- ☑ The well site has been staked by Daft-McCune Walker on ____________ and is ready for site inspection.
- ☐ ____________ will call the Health Department for a time to meet in the field to verify a well location.
- ☐ Site plan for new well is attached to well permit application.

Please attach this sheet when submitting your green application. This should help improve communication allowing a more timely service for our citizens.

KN Engineer stated well [illegible] Staked on [illegible]

Martin Prof. Lot [illegible]

Well by Foste's.
No well tag. Needs to be abandoned



MYRTUE PROPERTY LOT 18				**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. 02033	Scale: 1"=50'	Date: 04/16/07	Drawn By: MDT		

Mon Apr 16 17:17:48 2007

N:\02033\Lot Wells\Lot18.DGN

HOME LAND
LABS

1220 East Joppa Road #C505
Towson, MD 21286
Phone 443.505.8375
lab@homelandhealthyhomes.com
State Certified Water Quality Lab 365

108 Old Solomons Island Road, Suite I2
Annapolis, MD 21401
Phone 443.505.8375
lab@homelandhealthyhomes.com
State Certified Water Quality Lab 106

3430 Rockefeller Court
Waldorf, MD 20602
Phone 443.505.8375
lab@homelandhealthyhomes.com
State Certified Water Quality Lab 139

Certificate of Analysis

Report Date: 06/28/2023

Client: Barlow Well Drilling
Property Address: 1921 Davis Branch
Woodstock, MD 21163
Report No: 240951
Sample Time: 06/26/2023 14:00
Date & Time Received: 06/26/2023 15:15
Sampled By: Michael Isom 1113MI
Field Preservation: Ice
Sample Point(s): Powder Room
Water Conditioning Appears to be: Acid Neutralizer, Water Softener

Field Chlorine: 0.00
Field pH: Not Noted
Well Type: Drilled
Well Height: 12"
Cap Type: 2-Piece PVC
Casing: PVC
Conduit: PVC
Clarity: Clear
Sand: None Observed
Well Tag Number: HO-95-1214

This report is the sole property of Barlow Well Drilling. Any questions about the report MUST be directed to Barlow Well Drilling at (410) 838-6910. Home Land Labs is not at liberty to discuss this report without written consent from Barlow Well Drilling.

Primary Contaminants

Parameter	Method	Result	Pass/Fail	Units	MCL	RL	Analyst	Date of Analysis
Turbidity	EPA 180.1	0.7	Pass	NTU	10.0	0.5	D J - 365	06/27/2023

Secondary Contaminants

Parameter	Method	Result	Acceptable/High	Units	SMCL	RL	Analyst	Date of Analysis
Iron, Total	H 8008	Not Detected	Acceptable	mg/L	0.30	0.05	D J - 365	06/27/2023

Approved By: Denise Junis Denise Junis, Lab Director

Understanding the Results

This narrative is intended to help the recipient understand the results. The information listed below is for tests commonly sampled or analyzed by Home Land Environmental Labs. For a full list of the Environmental Protection Agency's (EPA) Primary and Secondary Drinking Water Standards, please visit www.epa.gov. For more information on the services we offer, please visit www.homelandhealthyhomes.com.

Definitions and Acronyms

Maximum Contamination Level (MCL): A level established by the EPA which is the "highest level of a contaminate that is allowed in drinking water." Any level that exceeds the MCL is considered unsafe for human consumption. Secondary MCL (SMCL) is used for Secondary Drinking Water Standards.
Action Level:A measure of the effectiveness of the corrosion control treatment in water systems.
Not Detected (ND): Any level below the reporting limit.
Analyst: Refers to the individual whom conducted the test.
Method: The type of analysis used to determine the results.
Reporting Limit (RL): The lowest level that can be detected by the method used for the analysis.
Primary Drinking Water Standard: Enforceable standards developed by the EPA. Levels that exceed the MCL for a particular standard are considered too unsafe for human consumption.
Secondary Drinking Water Standard: Standards developed by the EPA. Secondary standards are generally not considered to be dangerous to human health. They may cause aesthetic or cosmetic problems to the water quality or plumbing distribution system.

This table is for informational purposes only. See first page of report for your results.

Parameter	MCL/SMCL	Type	Effects	Source	Common Treatment Options
Total Coliform Bacteria	Present or 1 MPN/ 100mL	Primary	Used to indicate whether potentially harmful bacteria are present	Naturally Present	Well Repair and Chlorination, UV light
E. Coli Bacteria	Present or 1 MPN/ 100mL	Primary	Stomach illness	Human and animal fecal waste	Well Repair and Chlorination, UV light
Nitrates	10.0 mg/L	Primary	Blue-Baby Syndrome	Fertilizers and sewage	Reverse Osmosis System
Nitrites	1.0 mg/L				
Lead	Action Level of 0.015 mg/L	Primary	Slowed mental development, kidney problems, high blood pressure	Corrosion of household plumbing systems; erosion of natural deposits	Acid Neutralizer, Chemical Feeder (Soda Ash), Pipe Replacement
Radium Gross Alpha	15.0 pCi/L	Primary	Increased risk of cancer	Naturally occurring	Water Softener
Radium 226 & 228	5.0 pCi/L				
Volatile Organic Compounds (VOCs)	Varies	Primary	Increased risk of cancer	Gas and chemical leaks	Charcoal Filter
Arsenic	0.010 mg/L	Primary	Skin Damage, circulatory problems, cancer	Natural deposits, orchards, industrial waste	Reverse Osmosis System
Cadmium	0.005 mg/L	Primary	Kidney damage	Pipes, natural deposits, industrial waste	Reverse Osmosis System, Water Softener
Copper	Action Level of 1.3 mg/L	Primary	Gastrointestinal distress, liver or kidney damage	Corrosion of household plumbing systems, erosion of natural deposits	Acid Neutralizer, Reverse Osmosis System, Pipe Replacement
	1.0 mg/L	Secondary	Metallic taste; blue-green staining		
Turbidity (Public Water Systems	1.0 NTU	Primary	Water treatment intereference, possible bacteria indicator	Varies	Filtration, Source Protection
Turbidity (Private Wells)	10.0 NTU (MD COP Requirement)	Primary	Possible bacteria indicator	Surface water, iron, other	Filtration, Source Protection
Iron	0.3 mg/L	Secondary	Possible staining on plumbing fixtures and laundry	Naturally occurring	Water Softener
Chlorides	250 mg/L	Secondary	Salty taste, plumbing corrosion	Salt water intrustion, road salts	Source Protection, Whole House Reverse Osmosis System
pH	Outisde of 6.5-8.5 (Neutral range)	Secondary	Low pH: Bitter metallic taste, corrosion High pH: Slippery feel, soda taste, Deposits	Naturally occurring	Acid Neutralizer

Chain of Custody Form

Is the sample for a public water system? ☐ Yes ☒ No

HOME LAND LABS

240951 Due Date: 06/28/2023
Client: Barlow Wel

Phone: (443) 505-8375 Email: lab@homelandhealthyhomes.com

9106 Philadelphia Road, Suite 106
Rosedale, MD 21237
MD Lab # 353

108 Old Solomons Island Road, Suite L2
Annapolis, MD 21401
MD Lab # 106

3430 Rockefeller Court
Waldorf, MD 20602
MD Lab # 139

Client Name: BARLOW WELL DRILLING
Email Address: MISOM@MBLWD.US
Phone Number: 410-838-6910

Property Address: 1921 DAVIS BRANCH
WOODSTOCK, MD 21163

Field Collection Information

Sampler Name:	Michael ISOM
Sampler ID #:	1113MI
Date Sampled: 6/26/2023	Time Sampled: 2:00
Well Tag Number:	HO-95-1214

Field pH:	N/A
Field Chlorine (mg/L):	0
Sand:	NONE
Clarity:	CLEAR

Well Casing and Cap Condition

Well Type: ☒ Drilled ☐ Well Pit ☐ Below Grade ☐ Artesian ☐ Hand Dug ☐ N/A ☐ Other: _____

Height Above Grade:	Cap Type:	Casing:	Conduit:
12"	Piece PVC	PVC	PVC

Sample Point:	Water Conditioning:
Powder Room	Neutralizer + Softener

Requested Testing: *(Please check all that apply)*

☐ Potability (Bacteria, Nitrate + Nitrite, Turbidity)
☐ FHA/VA (Bacteria, Nitrate + Nitrite, Nitrite, Turbidity, Lead, Iron)

☐ Bacteria	☐ Chlorides	☐ Total Dissolved Solids
☐ Lead	☐ Hardness	☐ Copper
☐ Nitrate + Nitrite	☐ Arsenic	☐ VOCs
☒ Iron	☐ Cadmium	☐ Other: _____
☒ Turbidity	☐ Gross Alpha	☐ Other: _____

List rush samples below
Refer to table for rush turnaround times and fees

Release Signatures

Released By: Michael ISOM Date/Time: 6/26/23 3:15

Released By: _____ Date/Time: _____

Released By: _____ Date/Time: _____

Received in lab by: Jen Mun Date/Time: 6/26/23 @ 3:15PM

HOME LAND
LABS

1220 East Joppa Road #C505
Towson, MD 21286
Phone 443.505.8375
lab@homelandhealthyhomes.com
State Certified Water Quality Lab 365

108 Old Solomons Island Road, Suite I2
Annapolis, MD 21401
Phone 443.505.8375
lab@homelandhealthyhomes.com
State Certified Water Quality Lab 106

3430 Rockefeller Court
Waldorf, MD 20602
Phone 443.505.8375
lab@homelandhealthyhomes.com
State Certified Water Quality Lab 139

Certificate of Analysis

Report Date: 06/07/2023

Client: Barlow Well Drilling

Property Address: 1921 Davis Branch Road
Woodstock, MD 21153

Report No: 239812

Sample Time: 06/02/2023 10:15

Date & Time Received: 06/02/2023 14:43

Sampled By: Steve Duklewski 3091SD

Field Preservation: Ice

Sample Point(s): Pressure Tank

Water Conditioning Appears to be: None

Field Chlorine: Not Noted

Field pH: Not Noted

Well Type: Drilled

Well Height: 12"

Cap Type: 2 Piece PVC

Casing: PVC

Conduit: PVC

Clarity: Not Noted

Sand: Not Noted

Well Tag Number: HO-95-1214

This report is the sole property of Barlow Well Drilling. Any questions about the report MUST be directed to Barlow Well Drilling at (410) 838-6910. Home Land Labs is not at liberty to discuss this report without written consent from Barlow Well Drilling.

Primary Contaminants

Parameter	Method	Result	Pass/Fail	Units	MCL	RL	Analyst	Date of Analysis
Bacteria-Total Coliform	Colisure Test	Absent	Pass	Per/100ml	Present	1	A D - 365	06/04/2023
Bacteria-E.coli	Colisure Test	Absent	Pass	Per/100ml	Present	1	A D - 365	06/04/2023
Nitrate + Nitrite as N	EPA 353.2	1.1	Pass	mg/L	10	0.5	M K - 365	06/05/2023
Turbidity	EPA 180.1	17.2	Fail	NTU	10	0.5	M K - 365	06/05/2023
Radium Gross Alpha	EPA 900.0	2.8	Pass	pCi/L	15	1.4	F R C - 278	06/06/2023
Gross Beta	EPA 900.0	4.0	Pass	pCi/L	50.0	1.4	F R C - 278	06/06/2023

Secondary Contaminants

Parameter	Method	Result	Acceptable/High	Units	SMCL	RL	Analyst	Date of Analysis
pH	EPA 150.1	5.8	-	pH Units	-	1	M K - 365	06/05/2023
Iron, Total	H 8008	0.74	High	mg/L	0.30	0.05	E H - 365	06/06/2023

Contaminants

Parameter	Method	Result	Acceptable/High	Units	SMCL	RL	Analyst	Date of Analysis
Sand	SM 2540F	Not Detected	NA	ml/L/hr	-	0.5	M K - 365	06/05/2023

Report Notes

The lab added the following notes for your report:

- pH must be analyzed in the field to be in accordance with EPA protocol.

Approved By: Kevin Barnaba Kevin Barnaba, Lab Director

Understanding the Results

This narrative is intended to help the recipient understand the results. The information listed below is for tests commonly sampled or analyzed by Home Land Environmental Labs. For a full list of the Environmental Protection Agency's (EPA) Primary and Secondary Drinking Water Standards, please visit www.epa.gov. For more information on the services we offer, please visit www.homelandhealthyhomes.com.

Definitions and Acronyms

Maximum Contamination Level (MCL): A level established by the EPA which is the "highest level of a contaminate that is allowed in drinking water." Any level that exceeds the MCL is considered unsafe for human consumption. Secondary MCL (SMCL) is used for Secondary Drinking Water Standards.
Action Level:A measure of the effectiveness of the corrosion control treatment in water systems.
Not Detected (ND): Any level below the reporting limit.
Analyst: Refers to the individual whom conducted the test.
Method: The type of analysis used to determine the results.
Reporting Limit (RL): The lowest level that can be detected by the method used for the analysis.
Primary Drinking Water Standard: Enforceable standards developed by the EPA. Levels that exceed the MCL for a particular standard are considered too unsafe for human consumption.
Secondary Drinking Water Standard: Standards developed by the EPA. Secondary standards are generally not considered to be dangerous to human health. They may cause aesthetic or cosmetic problems to the water quality or plumbing distribution system.

This table is for informational purposes only. See first page of report for your results.

Parameter	MCL/SMCL	Type	Effects	Source	Common Treatment Options
Total Coliform Bacteria	Present or 1 MPN/ 100mL	Primary	Used to indicate whether potentially harmful bacteria are present	Naturally Present	Well Repair and Chlorination, UV light
E. Coli Bacteria	Present or 1 MPN/ 100mL	Primary	Stomach illness	Human and animal fecal waste	Well Repair and Chlorination, UV light
Nitrates	10.0 mg/L	Primary	Blue-Baby Syndrome	Fertilizers and sewage	Reverse Osmosis System
Nitrites	1.0 mg/L				
Lead	Action Level of 0.015 mg/L	Primary	Slowed mental development, kidney problems, high blood pressure	Corrosion of household plumbing systems; erosion of natural deposits	Acid Neutralizer, Chemical Feeder (Soda Ash), Pipe Replacement
Radium Gross Alpha	15.0 pCi/L	Primary	Increased risk of cancer	Naturally occurring	Water Softener
Radium 226 & 228	5.0 pCi/L				
Volatile Organic Compounds (VOCs)	Varies	Primary	Increased risk of cancer	Gas and chemical leaks	Charcoal Filter
Arsenic	0.010 mg/L	Primary	Skin Damage, circulatory problems, cancer	Natural deposits, orchards, industrial waste	Reverse Osmosis System
Cadmium	0.005 mg/L	Primary	Kidney damage	Pipes, natural deposits, industrial waste	Reverse Osmosis System, Water Softener
Copper	Action Level of 1.3 mg/L	Primary	Gastrointestinal distress, liver or kidney damage	Corrosion of household plumbing systems, erosion of natural deposits	Acid Neutralizer, Reverse Osmosis System, Pipe Replacement
	1.0 mg/L	Secondary	Metallic taste; blue-green staining		
Turbidity (Public Water Systems	1.0 NTU	Primary	Water treatment intereference, possible bacteria indicator	Varies	Filtration, Source Protection
Turbidity (Private Wells)	10.0 NTU (MD COP Requirement)	Primary	Possible bacteria indicator	Surface water, iron, other	Filtration, Source Protection
Iron	0.3 mg/L	Secondary	Possible staining on plumbing fixtures and laundry	Naturally occurring	Water Softener
Chlorides	250 mg/L	Secondary	Salty taste, plumbing corrosion	Salt water intrustion, road salts	Source Protection, Whole House Reverse Osmosis System
pH	Outisde of 6.5-8.5 (Neutral range)	Secondary	Low pH: Bitter metallic taste, corrosion High pH: Slippery feel, soda taste, Deposits	Naturally occurring	Acid Neutralizer

Is the sample for a public water system? ☐ Yes ☑ No

HOME LAND LABS

239812 Due Date: 06/06/2023
Client: Barlow Wel

Phone: (443) 505-8375 Email: lab@homelandhealthyhomes.com

1220 E Joppa Rd. Ste C505
Towson, MD 21286
MD Lab # 365

108 Old Solomons Island Road, Ste L2
Annapolis, MD 21401
MD Lab # 106

3430 Rockefeller Court
Waldorf, MD 20602
MD Lab # 139

2216 Commerce Road, Ste 2A
Forest Hill, MD 21050
MD Lab # 139

Client Name: Michael Barlow Well Drilling	Property Address:
Email Address: misom@mbwd.us	1921 Davis Branch Rd
Phone Number (410) 838-6910	Woodstock, MD 21163

Field Collection Information

Sampler Name: Steve Duklewski		Field pH:	N/A
Sampler ID #: 309150		Field Chlorine (mg/L):	ø
Date Sampled: 6-2-23	Time Sampled: 10:15am	Sand	ø
Well Tag Number: HO-95-1214		Clarity:	ø

Well Casing and Cap Condition

Well Type: ☑ Drilled ☐ Well Pit ☐ Below Grade ☐ Artesian ☐ Hand Dug ☐ N/A ☐ Other: _____

Height Above Grade: 12"	Cap Type: PVC 2Piece	Casing: PVC	Conduit: PVC
Sample Point: Psi Tank		Water Conditioning: N/A	

Requested Testing: (Please check all that apply)

☑ Potability (Bacteria, Nitrate + Nitrite, Turbidity)
☐ FHA/VA (Bacteria, Nitrate + Nitrite, Turbidity, Lead, Iron)

☐ Bacteria	☐ Chlorides	☐ Total Dissolved Solids
☐ Lead	☐ Hardness	☐ Copper
☐ Nitrate + Nitrite	☐ Arsenic	☐ VOCs
☐ Iron	☐ Cadmium	☑ Other: Sand
☐ Turbidity	☑ Gross Alpha	☑ Other: PH

✓ Gross Beta per client request - QM 6/7/23

List rush samples below
Refer to table for rush turnaround times and fees

Release Signatures

Released By: _____ Date/Time: 6223 2:43
Released By: _____ Date/Time: _____
Released By: _____ Date/Time: _____
Received in lab by: _____ Date/Time: 6.2.23 2:43p
Sample temperature upon receipt: _____

Howard County Health Department

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

October 26, 2007

James Keelty and Company, Inc.
61 East Padonia Road
Timonium, MD 21093

RE: Myrtue Property, Lot # 18
Well Tag: HO-95-1214

To Whom It May Concern:

A sample was collected from a yield test September 11, 2007 and submitted to 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 **2.0 ± 1.0 picocuries/liter (pCi/L);** while the **Gross Beta** level was **3.0 ± 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:
Beth Nixon

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: HO-95-1214 **No. B:** _____ **Field Blank Bottle No. A:** _____ **No. B:** _____

Plant/Site Name: My Cove Prop Lot 18 **County:** Howard

Sample Source: Dobbs Branch Rd. **Location:** HO-95-1214
(well no., lab sink, sample tap, etc.)

County: ☒ 13 **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: 9/11/07 **Time Collected:** _____ a.m. 1:30 p.m.

Nitric Acid Preserved: Yes ☒ No ☐ **Iced:** Yes ☐ No ☒

Submitters Code: ☐☐ **Federal Project:** ☐ **Field Data:** _____ pH _____ Chlorine

Remarks: Sample collected @ Yield tap

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	~~0648~~ 0649	2 ± 1	09/14/07
✓	Gross Beta	4100	~~0648~~ 0649	3 ± 2	"
	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: 09/12/07
Supervisor: L. Wise

FORM REVISED 02/06
DHMH 4540 02/06

• Tel. No.: (410) 767-5537 • Fax. No.: (410) 333-5373

ORIGINAL - LABORATORY