

C1 64862

SEQUENCE NO.
(MDE USE ONLY)STATE OF MARYLAND
WELL COMPLETION REPORTTHIS 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)

ST/CO USE ONLY

DATE RECEIVED
MM DD YY
02 24 20

DATE WELL COMPLETED

MM DD YY
12 16 2019

Depth of Well

22 400 26
(TO NEAREST FOOT)PERMIT NO.
FROM "PERMIT TO DRILL WELL"HO-18-0122
28 29 30 31 32 33 34 35 36 37OWNER Howard County Maryland
WELL SITE ADDRESS last name 2855 Thorabrook first name 35 TOWN Ellicott City
SUBDIVISION Chamberlay Pumping SECTION LOT

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		check if water bearing
	FROM	TO	
Soil	0	6	
Brown shale	6	32	
Grnite	32	400	✓
		160	✓
		350	✓

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)yes no
Y N
44 44

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 45 46 19 NO. OF POUNDS 45 46 1425

GALLONS OF WATER 95

DEPTH OF GROUT SEAL (to nearest foot)

from 0 ft. to 35 ft.
48 TOP 52 54 BOTTOM 58
(enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below
ST STEEL CO CONCRETE
PL PLASTIC OT OTHERMAIN CASING TYPE
Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot)
ST 6 35
60 61 63 64 66 70OTHER CASING (if used)
EACH CASING diameter inch depth (feet) from toscreen type or open hole
(insert appropriate code below)
ST STEEL BR BRASS HO OPEN HOLE
PL PLASTIC OT OTHER

C 2 DEPTH (nearest ft.)

1 2 35 400
E A C H 8 9 11 15 17 21
23 24 26 30 32 36
S C 3 38 39 41 45 47 51
R E E N
SLOT SIZE 1 2 3DIAMETER OF SCREEN (NEAREST INCH)
56 60
from to

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 Q70 72 74 75 76
TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

PUMPING TEST 3
HOURS PUMPED (nearest hour) 8 9
PUMPING RATE (gal. per min.) 15.0
METHOD USED TO MEASURE PUMPING RATE Watch/Bucket
WATER LEVEL (distance from land surface)
BEFORE PUMPING 10 ft.
WHEN PUMPING 14 ft.
TYPE OF PUMP USED (for test)
A air P piston T turbine
C centrifugal R rotary O other (describe below)
J jet S submersiblePUMP INSTALLED
DRILLER INSTALLED PUMP YES NO
(CIRCLE) (YES or 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) 13
31 35PUMP HORSE POWER 1.12
37 41PUMP COLUMN LENGTH (nearest ft.) 310
43 47CASING HEIGHT (circle appropriate box and enter casing height)
+ above } LAND SURFACE
- below } 1 (nearest foot)
49 50 51LATITUDE 39.31177
LONGITUDE 76.84575
(DEFAULT COORD. WGS 84)

Pursuant to §10-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info. may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or state law.

DRILLERS LIC. NO. M D 355

DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. WRO 109 D

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

B 1	SEQUENCE NO. (MDE USE ONLY) 63112	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 566414 please type	STATE PERMIT NUMBER HO-18-0122 <small>fill in this form completely</small>
Date Received (APA) 10/21/19 8 MM DD YY 13 Howard County MD 15 Last Name Owner First Name 34 3430 Courthouse Rd 36 Street or RFD 55 Ellicott City MD 21042 57 Town 70 State 72 Zip 76		B 3 LOCATION OF WELL Howard 8 COUNTY 21 Chamberles Pumping Station 23 SUBDIVISION 42 SECTION 44 46 LOT 48 50 Ellicott City 52 NEAREST TOWN 71	
DRILLER INFORMATION Michael Barlow M W D 355 Driller's Name 76 License No. 81 Barlow Well Drilling Firm Name 522 Underwood Lane 2104 Address 10/30/19 Signature Date		B 4 SOURCES OF DRILLING WATER 1. well "400' total 2. 12/31/19 3. static 10 pump 300' level 14' 15g/min Grout: Well Grout w/ Betanite	
B 2 WELL INFORMATION APPROX. PUMPING RATE 5 (GAL. PER MIN.) 8 12 AVERAGE DAILY QUANTITY NEEDED 750 (GAL. PER DAY) 14 20		2855 Thornbrook Road 11 STREET ADDRESS 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH WEST <input checked="" type="checkbox"/> EAST SOUTH 34 2000 37 DISTANCE FROM ROAD Ft ENTER FT OR MI 38 39 TAX MAP: 17 BLK: 3 PARCEL 238	
USE FOR WATER (CIRCLE APPROPRIATE BOX) <input checked="" type="radio"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="radio"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="radio"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="radio"/> PUBLIC WATER SUPPLY WELL <input type="radio"/> TEST, OBSERVATION, MONITORING <input type="radio"/> OPEN LOOP GEOTHERMAL <input type="radio"/> CLOSED LOOP GEOTHERMAL		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard COUNTY NAME (13) COUNTY NO. STATE SIGNATURE _____ INSERT S → 41 DATE ISSUED 10/30/19 / 10/30/20 43 MM DD YY 48 CO SIGNATURE EXP. DATE DON: 11/22/19 SD DOG 11/29/19 D64: 12/3/19	
APPROXIMATE DEPTH OF WELL 300 FEET 24 28 APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH		PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL 11/23/19 11:10 am: 25' 3:10 pm: 30' some casing set hdc collapsing Pub. 3:30 pm - discharge 20' from stream. Shutting down drilling for today 11/25/19 1:00 pm 105' 76' water 36' bedrock 30' casing 11/26/19 10:45a 276' 160 water 1g/min PROP LINE	
METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN 30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTARY DRIVE-POINT other _____		REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) <input checked="" type="radio"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="radio"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED <input type="radio"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="radio"/> THIS WELL WILL DEEPEMED AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52 Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER _____ G _____ PERMIT No. HO-18-0122 70 71 72 73 74 75 76 77 78 79	
SPECIAL CONDITIONS NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED Silt bags/Screen must be in place during drilling operations		Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.	



MICHAEL BARLOW WELL DRILLING & SERVICE, INC.

522 Underwood Lane

(410) 838-6910

Bel Air, Maryland 21014

Fax (410) 838-3582

WELL YIELD REPORT

Date Test Completed:

December 3, 2019

Well Depth:

400

feet

Customer Howard County ,MD
Road 2855 Thornbrook Road
City Ellicott City
State Maryland

Permit # HO-18-0122
Subdivision Chamberlea Pumping Statiion
Section
Lot #

Time	Water Level feet	Time to Fill 1-gallon bucket seconds	G.P.M.
11:15 AM	10	4	15.00
11:30 AM	14	4	15.00
11:45 AM	14	4	15.00
12:00 PM	14	4	15.00
12:15 PM	14	4	15.00
12:30 PM	14	4	15.00
12:45 PM	14	4	15.00
1:00 PM	14	4	15.00
1:15 PM	14	4	15.00
1:30 PM	14	4	15.00
1:45 PM	14	4	15.00
2:00 PM	14	4	15.00
2:15 PM	14	4	15.00
This yield test report is for informational purposes only. Please note the yield may increase or decrease over time and the GPM indicated above is not a guarantee.			

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: BARLOW Well Drilling Telephone #: 410-838-6910
Address: 522 UNDERWOOD LANE
BEL AIR, MD 21014

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): Michael Barlow License# MWD 355
*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: Howard County Telephone #: _____
Subdivision: Chamberlea Pump Station Lot #: _____ Well Tag #: HO-18-0122 ST
Site Address: 2855 Thornbrook Rd
Ellicott City, MD

Submersible Pump Data

Make: Goulds
Model #: 13GS15434
Pump Capacity 13 GPM
Well Yield: 15 GPM

Pitless Adapter

Make: Baker
Model#: Pitless Unit
Depth: 42 (36" min)
NSF/WSC approved: yes

Well Cap and Electric Conduit

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

Depth of well encountered at time of pump installation: 400 (feet)
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: 1 1/4 Poly
PSI: 200 (160 psi min)
Depth of supply line: 42 (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: yes
Length of sleeve (5' minimum from foundation): 6'
Sleeve 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

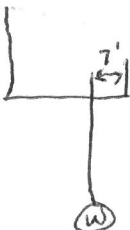
Signature of company representative responsible for installation

date

12/11/19

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

Date Insp. Requested: 12/12/19 Date Insp. Approved: 12/12/19 Inspector: ST
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓ 40"
Two piece cap installed and attached to casing securely ✓
Elec. conduit extends at least 18" below grade/attached to cap properly ✓ 32"
Safety rope not outside of well cap/casing ✓
Correct well tag attached properly and casing 8" above finished grade ✓ 13"
Water supply line sleeved adequately at house connection ✓ 10"
Adequate grout observed below pitless adapter ✓



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

December 30, 2019

Ms. Kerri Dinsomere, Eng. Specialist III
Howard County DPW
Riverwood Drive Building
Columbia, Maryland 21046
410-313-5819

RE: DPW Pumping Station
2855 Thornbrook Road
Elicott City, Maryland 21042
Well Tag: HO - 18 - 0122

Dear Ms. Dinsmore:


A sample was collected during a yield test on December 4, 2019 and submitted to the Maryland Department of Health 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. These naturally occurring radioactive nuclides have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of $< 2.0 \pm 0.0$ picocuries/liter (pCi/L), while the **Gross Beta** level was $< 4.0 \pm 0.0$ 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 targeted standard 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 **meets** EPA regulatory standards. Additional testing **for these parameters** is not necessary to secure the future Use & Occupancy. Please **note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be needed to help secure Use & Occupancy. Information on results for sodium and chloride samples collected during the same yield test, will be provided in separate correspondence.

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 or to schedule additional testing.

Sincerely,



Bert Nixon, Director
Bureau of Environmental Health

Enclosure

✓ cc: Property file

SEND REPORT TO:

Bert NixonState of Maryland
DHMH - Laboratories Administration
Division of Environmental Sciences

RADIATION LABORATORY

1770 Ashland Avenue
Baltimore, Maryland 21205

Lab No.

217-8-42

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, Maryland 21045

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: 2855 Thornbrook RdCounty: HowardSample Source: 2855 Thornbrook RdLocation: H0-18-0122

(Well no., lab sink, sample tap, etc.)

Radon-222

Bottle A H0ST0122RA

Radon-222 Field Blank

Bottle A _____

Radium

Bottle B _____

Bottle B _____

County

13

Plant No.

--	--	--	--	--	--	--	--	--	--

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code:

4 F

Federal Project:

☐

Collector:

Susan Thomas

Telephone No.:

410-313-6287

Date Collected:

12/4/19

Time Collected:

10:05 a.m. _____ p.m.

Field pH:

6.0

Field Chlorine:

negative

Nitric Acid Preserved:

Yes

☒

No

☐

Iced:

Yes

☐

No

☒

Remarks:

collected at yield of well H0-18-0122

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	<u>1214</u>	<u>EPA 900.0</u>	<u>62.0</u>	<u>12/5/19</u>	<u>PH</u>	<u>12/6/19</u>
<input checked="" type="checkbox"/>	Gross Beta	4100	<u>1214</u>	<u>EPA 900.0</u>	<u>4.0</u>	<u>12/5/19</u>	<u>KH</u>	<u>12/6/19</u>
<input type="checkbox"/>	Radium-226	4020						
<input type="checkbox"/>	Radium-228	4030						
<input type="checkbox"/>	Total Uranium	4006						
<input type="checkbox"/>	Radon-222 (Bottle A)	4004						
<input type="checkbox"/>	Radon-222 (Bottle B)	4004						
<input type="checkbox"/>	Radon Field Blank A	4004						
<input type="checkbox"/>	Radon Field Blank B	4004						
<input type="checkbox"/>	Tritium							
<input type="checkbox"/>								
<input type="checkbox"/>								

RECEIVED

DEC 18 2019

HOWARD COUNTY HEALTH DEPT.
COMMUNITY HYGIENE PROGRAM

Date Received:

12/4/19

Received By:

R Holmes

Data Release Signature:

Wendy Thomas

Date:

12/17/19

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	<input checked="" type="checkbox"/>		
Sample pH <2.0?	<input checked="" type="checkbox"/>		
Received within holding time?	<input checked="" type="checkbox"/>		

•Tel. No.: (443) 681-3766 •Fax No.: (443) 681-4507

SEND REPORT TO:

Bert Nixon

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Sciences
RADIATION LABORATORY
1770 Ashland Avenue
Baltimore, Maryland 21205

Lab No.

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: 2855 Thornbrook RdCounty: HowardSample Source: 2855 Thornbrook RdLocation: Field Blank

(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A _____

Radon-222 Field Blank

Bottle A Field Blank

Bottle B _____

Bottle B _____

County 13Plant No.

--	--	--	--	--	--	--	--	--	--

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code: 4 FFederal Project: ☐Collector: Susan ThomasTelephone No.: 410-313-6287Date Collected: 12/4/19Time Collected: 10:05 a.m. _____ p.m.Field pH: 5.5Field Chlorine: negativeNitric Acid Preserved: Yes ☒ No ☐Iced: Yes ☐ No ☒

Remarks: _____

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	1213	EPA 900.0	12.0	12/15/19	KH	12/16/19
<input checked="" type="checkbox"/>	Gross Beta	4100	1213	EPA 900.0	14.0	12/15/19	KH	12/16/19
<input type="checkbox"/>	Radium-226	4020						
<input type="checkbox"/>	Radium-228	4030						
<input type="checkbox"/>	Total Uranium	4006						
<input type="checkbox"/>	Radon-222 (Bottle A)	4004						
<input type="checkbox"/>	Radon-222 (Bottle B)	4004						
<input type="checkbox"/>	Radon Field Blank A	4004						
<input type="checkbox"/>	Radon Field Blank B	4004						
<input type="checkbox"/>	Tritium							
<input type="checkbox"/>								
<input type="checkbox"/>								

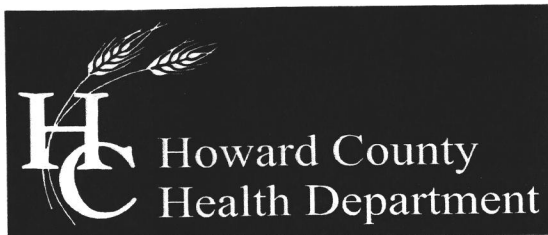
RECEIVED

DEC 18 2019

HOWARD COUNTY HEALTH DEPT.
COMMUNITY HYGIENE PROGRAMDate Received: 12/14/19Received By: R. HolmesData Release Signature: Juanisha TuxenDate: 12/17/19

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	<input checked="" type="checkbox"/>		
Sample pH <2.0?	<input checked="" type="checkbox"/>		
Received within holding time?	<input checked="" type="checkbox"/>		

•Tel. No.: (443) 681-3766 •Fax No.: (443) 681-4507



Bureau of Environmental Health

8930 Stanford Blvd, Columbia, MD 21045
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org

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

December 30, 2019

Ms. Kerri Dinsmore, Eng. Specialist III
Howard County DPW
Riverwood Drive Building
Columbia, Maryland 21046

12/30/19 ST

Re: DPW Pumping Station
2855 Thornbrook Road
Ellicott City, Maryland 21042
Well Tag: HO-18-0122

Dear Ms. Dinsmore,

The Health Department received results from the testing for sodium, chloride, and total dissolved solids (TDS) from your well water.

Sodium from your well measured 25.38 mg/L. There is no Maximum contaminant level for sodium, however elevated sodium levels in drinking water could affect individuals on low-salt diets. If anyone in the household is on a low-salt diet, you may want to discuss these results with your physician.

Chloride and TDS are both considered secondary contaminants, meaning high concentrations can affect taste, color, odor, or corrosive properties of water but present no risk to health. The secondary maximum contaminant level for chloride is 250 mg/L; **chloride from your well measured 42 mg/L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from your well measured 207 mg/L.**

Given the elevated levels of sodium, you may want to consult a plumber and/or water treatment company to discuss options. Please be aware that any backwash generated from a treatment system must be disposed of in a subsurface disposal system. Prior to installing a system that generates backwash, please contact the Health Department to ensure that all regulatory requirements are met.

Feel free to contact me at the number or email below with any questions regarding the results of water sampling.

Respectfully,

Susan Thomas
Environmental Health Specialist
Howard County Health Department
Well and Septic Program

Cc: File

Howard County Health Department
Bureau of Environmental Health
8920 Stanford Blvd.
Columbia, Maryland 21045

State of Maryland
MDH-Laboratories Administration
Division of Environmental Sciences
INORGANICS ANALYTICAL LABORATORY
1770 Ashland Avenue
Baltimore, Maryland 21205
WATER ANALYSIS



HOST0122CLT

S A M P L E I D	Bottle Number <u>H050122CLTDS</u>		Name <u>2855 Thornbrook Rd</u>		County <u>Howard</u>		County Code <u>13</u>																
	Location <u>2855 Thornbrook Rd, HO-18-0122</u>				Data Category Code <u>4F</u>		Submitter Code <u> </u>																
	Collected: Date <u>12/4/19</u>		Time <u>10:05am</u>		Collector & Phone <u>Susan Thomas, 410-313-6287</u>																		
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>CHECK (one per box)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Drinking Water <input checked="" type="checkbox"/></td> <td>Community <input type="checkbox"/></td> </tr> <tr> <td>Landfill <input type="checkbox"/></td> <td>Non-community <input type="checkbox"/></td> </tr> <tr> <td>Stream <input type="checkbox"/></td> <td>Private <input checked="" type="checkbox"/></td> </tr> <tr> <td>Other <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> </table> </div> <div style="width: 45%;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Source (raw water) <input checked="" type="checkbox"/></td> <td>Emergency <input type="checkbox"/></td> </tr> <tr> <td>Distribution (treated) <input type="checkbox"/></td> <td>Routine <input checked="" type="checkbox"/></td> </tr> <tr> <td>MCL <input type="checkbox"/></td> <td>Recheck <input type="checkbox"/></td> </tr> <tr> <td></td> <td>Special <input type="checkbox"/></td> </tr> </table> </div> </div>								Drinking Water <input checked="" type="checkbox"/>	Community <input type="checkbox"/>	Landfill <input type="checkbox"/>	Non-community <input type="checkbox"/>	Stream <input type="checkbox"/>	Private <input checked="" type="checkbox"/>	Other <input type="checkbox"/>	Other <input type="checkbox"/>	Source (raw water) <input checked="" type="checkbox"/>	Emergency <input type="checkbox"/>	Distribution (treated) <input type="checkbox"/>	Routine <input checked="" type="checkbox"/>	MCL <input type="checkbox"/>	Recheck <input type="checkbox"/>	
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MCL <input type="checkbox"/>	Recheck <input type="checkbox"/>																						
	Special <input type="checkbox"/>																						
F I E L D	Plant No. <u> </u> <u> </u> <u> </u> <u> </u>		Sampling Station <u> </u> <u> </u> <u> </u>		Preservation: Iced? <input checked="" type="checkbox"/> Acid <input type="checkbox"/>		Type of Acid <u> </u>																
	pH <u>6.0</u>		Chlorine: Free <u>0.0</u>		Total <u>0.6</u>		Specific Conductance <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>																
	Notes to Lab/Remarks: <u>collected at yield of well HO-18-0122</u>																						

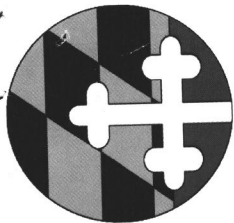
[illegible]

SAMPLE TESTED AS RECEIVED

Number of Tests Requested		
---------------------------	--	--

Section Chief _____
SUBMITTER'S COPY

Date
Reported



State of Maryland
Department of Health
Laboratories Administration
Division of Environmental Sciences
INORGANICS ANALYTICAL LABORATORY
1770 Ashland Avenue, Baltimore, Maryland 21205
Robert Myers, Ph.D., Director



Certificate of Analysis

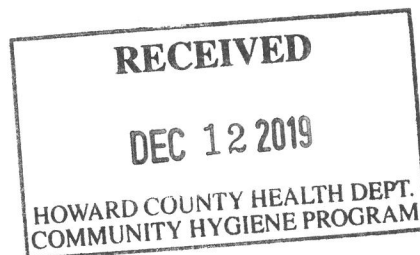
HOWARD CO ENVIRONMENTAL HLTH
8930 STANFORD BLVD
COLUMBIA, MD 21045

Lab Project NoE20002065 Date Coll. 12/04/2019 Date Received 12/04/2019 Submitted By: Thomas

Field ID: HOST0122CLTDS
Lab No.: E20002065001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	42	mg/L	12/10/2019
Total Dissolved Solids	SM 2540C	207	mg/L	12/10/2019

Comments:



Approved by: *Shahen Aneli*

Approval date: 12/11/2019

*The following methods are included in our A2LA Scope of Accreditation: EPA150.1, EPA 353.2, EPA 375.2, SM4500F C, SM 4500-CN G & QCM-CN, QCM-CN. Samples are tested as received.

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6190 and arrange for return or destruction.

Telephone: (443) 681 - 3855

Fax: (443) 681 - 4507

S:\EnviroFinal-InorganicsA.rpt

Send Report To: -

Bert Nixon

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, Maryland 21045

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Sciences
TRACE METALS LABORATORY
1770 Ashland Avenue
Baltimore, Maryland 21205

Lab No. Date Received



E20002066001

Received: 12/04/2019

Metals

HOST0122NA

Do not write above this line

LABORATORY ANALYSIS REQUEST

Please Print

Sample ID No: HOST0122NA Site Name: 2855 Thornbrook Rd County: Howard

Sample Source: 2855 Thornbrook Rd, Ellicott City Collector: Susan Thomas
Street Town or City Name

Date Collected: 12/4/2019 Time Collected: 10:05 a.m./p.m. Phone #: 410-313-6287

Sample Preserved By: ☐ Field ☐ ESRL ☐ WMRL ☐ Central Lab

Preservative Used: ☒ HNO₃ 2 mL pH: 6.0

Sample Type: ☒ Drinking Water ☐ Landfill ☒ Source (Raw Water) ☐ Liquid
Data Category: ☐ Community ☐ Stream ☐ Distribution (Treated) ☐ Solid
Code ☐ ☐ Non-Community ☐ Sediment ☐ Other _____
☒ Private

Specify Program: ☐ SDWA ☐ NPDES ☐ CWA ☐ RCRA ☐ Consumer Products ☐ Other _____

Type of Sample Preparation: ☒ Total Metals ☐ Total Metals TCLP ☐ Dissolved Metals
(field preparation required)

Remarks: collected at yield of well HO-18-0122

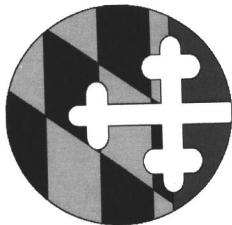
✓	Element	Lab Use	✓	Element	Lab Use	✓	Element	Lab Use
	Antimony (Sb)			Aluminum (Al)			Uranium (U)	
	Arsenic (As)			Calcium (Ca)			Vanadium (V)	
	Barium (Ba)			Cobalt (Co)			Zinc (Zn)	
	Beryllium (Be)			Copper (Cu)				
	Cadmium (Cd)			Iron (Fe)				
	Chromium (Cr)			Lead (Pb)				
	Mercury (Hg)			Magnesium (Mg)				
	Nickel (Ni)			Manganese (Mn)				
	Selenium (Se)			Molybdenum (Mo)				
✓	Sodium (Na)	<u>SHS</u>		Potassium (K)				
	Thallium (Tl)			Silver (Ag)				

Lab Supervisor: _____

Date Reported: ____/____/____

•Phone: (443) 681 - 4596

•Fax: (443) 681 - 4507



State of Maryland
Department of Health
Laboratories Administration
Division of Environmental Sciences
TRACE METALS LABORATORY
1770 Ashland Avenue, Baltimore, Maryland 21205
Robert Myers, Ph.D., Director



Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH
8930 STANFORD BLVD
COLUMBIA, MD 21045

Lab Project No: E20002066 Date Coll.: 12/04/2019 Date Received: 12/04/2019 Submitted By: Susan Thomas

Field ID: HOST0122NA
Lab No.: E20002066001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	25.38	ppm	12/16/2019

Comments:

Approved by: *Wanda L. Thomas*

Approval date: 12/18/2019

**The following methods are included in our A2LA Scope of Accreditation: EPA 200.7, EPA 200.8, EPA 245.1. Samples are tested as received.

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Telephone: (443) 681 - 3853


Fax: (443) 681-4507

S:\EnviroFinal-Metals.rpt

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

MEMORANDUM

TO: Barlow Well Drilling
Attn: Mike Isom (MSD 162)

FROM: Kevin M. Wolf, L.E.H.S., REHS/RS, Supervisor 
Groundwater Mgmt. Sec.
Well & Septic Program

DATE: November 4, 2019

RE: 2855 Thornbrook Road – Chamberlea Pumping Station Well Permit
Special Condition

The following comments apply to the above referenced Well Permit Applications. Please read through and complete as needed.

In order to preserve the quality of stream water, a special condition has been set for the above referenced well. Due to the location of the proposed well, this special condition will require the driller to construct sediment control devices (i.e. silt bags, silt fencing, etc...) in and around the proposed well site location. These control devices are to remain in place during the well construction and may not be removed until the well has been completed. **Any deviations to this condition are to be prior approved by the Health Department.**

If you have any questions regarding the above mentioned information, please feel free to contact me at 410-313-2645 or email kwolf@howardcountymd.gov.

KMW

Cc: Pat Haley, EMH Environmental, Inc., Project Manager, ph@emhenviro.com
file

100 YEAR Property of
FLOOD H.J. BAKER et al
LIMITS 213/338
GABION RETAINING WALL
LENGTH (SEE SCHEMATIC
THIS SHEET AND SITE PL)
2-3" P.V.C. Conduits To Main
Circuit Breaker.

NOTE: Straw Bale
installed along stream
construction of sewer

NEW 1 1/4" WATER SERVICE

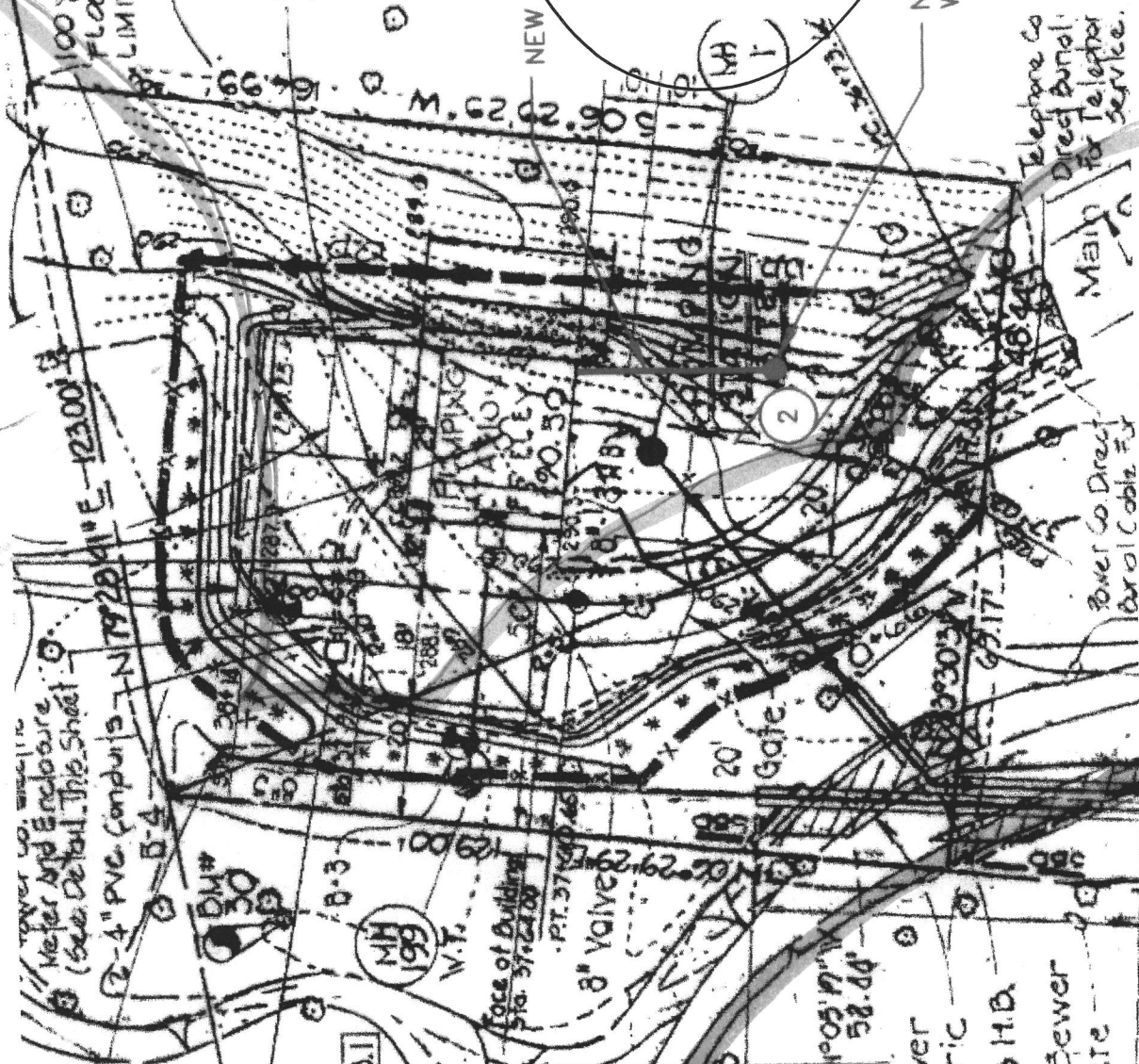
Well side
Approved
staked by
Driller.

* See attached memo

(KRM)

NEW WATER WELL & PUMP, SEE
WATER WELL NOTES, THIS SHEET

1" = 30'



75' Butler
Stream

Telephone Co
Direct Burial
Main for Telephone Service

Power Co Direct
Burial Cable #3

DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER

HO-18-0122

INFORMATION-GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD
BALTIMORE MARYLAND 21230

e-laid Diprap Over
ion Control Fabric
Detail this 3' x 16 H.B.
Encase Sewer
in Concrete

FILE INQUIRY NOTES

DATE	RESULTS OF REVIEW FOR FILE
10/10/19	<p>After discussions w/ Diller / project manager (Pat Haley) well is to be used for clearing sewage pumps but site / building will also have utilities (ie. sink, mop sink, bathroom). Well is to be potable. Told Pat Haley to send a letter of intent for well along w/ plumbing drawings and site plan. (KMS)</p>
10/21/19	<p>Drawing rec'd. Plumbing details very vague, not too much on set-up. Will still be issuing as 'potable' well. Will need to inspect well line, issue on TCO. Samples required Explained to Diller and Pat Haley. (KMS) Permit is to be issued.</p>
	<p>"Special condition" to require <u>silt fence</u> and possibly silt basin</p>

*Must get
ECOP sample*

10/21/19

Howard County Health Department
8930 Stanford Blvd.
Columbia, MD 21046

ATTN: Mr. Kevin Wolf

RE: Chamberlea Pumping Station Upgrades, Capital Project No. S6262, Agreement No. CA 012-2019

Subject: Intended Use for Well Service at Chamberlea P.S.

Dear Kevin:

EMH Environmental, Inc. has a contract (Capital Project No. S6262) with Howard County DPW to install a new water well system at Chamberlea Pumping Station. The well is to be used for domestic potable water use. The well will feed a pressure tank, tankless water heater, hose bibbs, and a service sink. In turn, this means the well is subject to COMAR 26.04.04.30 Approval of Well for Use as Potable Water Supply.

Very truly yours,
EMH Environmental, Inc.

Pat Halley
Project Manager

CF – 1815

Real Property Data Search (w4)

Search Result for HOWARD COUNTY

View Map		View GroundRent Redemption		View GroundRent Registration	
Tax Exempt: None		Special Tax Recapture: None			
Exempt Class: None					
Account Identifier:		District - 02 Account Number - 277786			
Owner Information					
Owner Name:	HOWARD COUNTY DEPT PUBLIC WORKS		Use:	EXEMPT	
Mailing Address:	3430 COURT HOUSE DR ELLCOTT CITY MD 21043-4300		Principal Residence:	NO	
			Deed Reference:	/01030/ 00321	
Location & Structure Information					
Premises Address:	ROUTE 99 ELLCOTT CITY 21042-0000		Legal Description:	.537 A ROUTE 99 ELLCOTT CITY	
Map:	Grid:	Parcel:	Neighborhood:	Subdivision:	Section:
0017	0003	0238	2090901.14	9001	
Assessment Year:			Plat No:		
2019			Plat Ref:		
Special Tax Areas: None			Town:	None	
			Ad Valorem:	103	
			Tax Class:	None	
Primary Structure Built	Above Grade Living Area	Finished Basement Area	Property Land Area	County Use	
			0.5370 AC		
Stories	Basement	Type	Exterior	Quality	Full/Half Bath
			/		
Value Information					
	Base Value	Value	Phase-in Assessments		
		As of	As of	As of	
		01/01/2019	07/01/2019	07/01/2020	
Land:	1,800	1,800			
Improvements	0	0			
Total:	1,800	1,800	1,800	1,800	
Preferential Land:	0			0	
Transfer Information					
Seller:	Date:	Price:			
Type:	Deed1:	Deed2:			
Seller:	Date:	Price:			
Type:	Deed1:	Deed2:			
Seller:	Date:	Price:			
Type:	Deed1:	Deed2:			
Exemption Information					
Partial Exempt Assessments:	Class	07/01/2019	07/01/2020		
County:	500	1,800.00	1,800.00		
State:	500	1,800.00	1,800.00		
Municipal:	500	0.00 0.00	0.00 0.00		
Tax Exempt: None		Special Tax Recapture: None			
Exempt Class: None					
Homestead Application Information					
Homestead Application Status: No Application					
Homeowners' Tax Credit Application Information					
Homeowners' Tax Credit Application Status: No Application				Date:	



HOWARD COUNTY HEALTH DEPARTMENT

66414

DATE

10/21/19

PHONE #

Received
From

Michael Brackard

410-838-6491

For

100005 for next/2855

the book on the road

☐ CASH

☒ CHECK

NO.

1431

One hundred thirty

Dollars

\$

100.00

Received By

John