

C1 56516

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 Taylor Scott, WELL SITE ADDRESS 10380 Covey Lane, TOWN Woodstock, SUBDIVISION Taylor Property, SECTION, LOT Parcel 39

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Brown to Red Saprotite, Gray Schist, White, Gray Schist, White, Gray Schist.

GROUTING RECORD form: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM), NO. OF BAGS 18, NO. OF POUNDS 1692, GALLONS OF WATER 108, DEPTH OF GROUT SEAL 46 ft.

CASING RECORD form: casing types (ST, CO, PL, OT), MAIN CASING TYPE (ST), Nominal diameter top (main) casing 06, Total depth of main casing 48.

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

SCREEN RECORD form: screen type or open hole (HO), diameter of screen 48, DEPTH (nearest ft.) 300.

NUMBER OF UNSUCCESSFUL WELLS: 0, 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...

DRILLERS LIC. NO. MSD009, DRILLERS SIGNATURE, LIC. NO. D

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

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68, MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

TELESCOPE CASING, LOG INDICATOR, OTHER DATA

PUMPING TEST form: HOURS PUMPED 3, PUMPING RATE 4.6 gal. per min., METHOD USED TO MEASURE PUMPING RATE 10 gal, WATER LEVEL BEFORE PUMPING 44 ft., WHEN PUMPING 183 ft., TYPE OF PUMP USED (for test) S submersible

PUMP INSTALLED form: DRILLER INSTALLED PUMP YES (N), TYPE OF PUMP INSTALLED PLACE (A.C.J.P.R.S.T.O) IN BOX 29, CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31, PUMP HORSE POWER 41, PUMP COLUMN LENGTH (nearest ft.) 43, CASING HEIGHT (circle appropriate box and enter casing height) + above, LAND SURFACE 02 (nearest foot)

LATITUDE 39.325848, LONGITUDE 76.870969 (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.

B 1 SEQUENCE NO. (MDE USE ONLY) **59713** STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type **523011** STATE PERMIT NUMBER **Ho-17-0300**
1 2 3 4 5 6 70 fill in this form completely 79

OWNER INFORMATION
 Date Received (APA) 6/29/18
8 MM DD YY 13
 Taylor Scott
15 Last Name Owner First Name 34
 10109 Saddlebrook Farm Trail
36 Street or RFD 55
 Woodstock Md. 21163
57 Town 70 State 72 Zip 76

B 3 LOCATION OF WELL
 Howard
8 COUNTY 21
 Taylor Property
23 SUBDIVISION 42
 SECTION 44 LOT Parcel 39
44 46 48 50
 Woodstock
52 NEAREST TOWN 71

DRILLER INFORMATION
 Allen Compton M SD 009
76 License No. 81
 Eagles Well Drilling, LLC
Firm Name
 P.O. Box 202 Woodstock Md 21163
Address
 Allen Compton 5-29-18
Signature Date

B 4 SOURCES OF DRILLING WATER
 Well water
 10380 Carev Lane
11 STREET ADDRESS 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 NORTH
 WEST
 SOUTH
 EAST
 34 200 37
DISTANCE FROM ROAD FT
 ENTER FT OR MI 38 39
 TAX MAP: 11 BLK: 13 PARCEL 39

B 2 WELL INFORMATION
 APPROX. PUMPING RATE (GAL. PER MIN.) 5
1 2 8 12
 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500
14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)
 DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 INDUSTRIAL, COMMERCIAL, DEWATERING
 PUBLIC WATER SUPPLY WELL
 TEST, OBSERVATION, MONITORING
 OPEN LOOP GEOTHERMAL
 CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
 Howard (13)
COUNTY NAME COUNTY NO.
 STATE SIGNATURE _____ INSERT S → 41
 DATE ISSUED 6/18/18 St. Calli 6/18/19
43 MM DD YY 48 CO SIGNATURE EXP. DATE

APPROXIMATE DEPTH OF WELL 300 FEET
24 28

APPROXIMATE DIAMETER OF WELL 6 INCH
NEAREST INCH

METHOD OF DRILLING (circle one)
 BORED (or Augered) JETTED Jetted & DRIVEN
 AIR-ROTARY AIR-RECCUSSION ROTARY (Hydraulic Rotary)
 CABLE REVERSE-ROTARY DRIVE-POINT
 other _____

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)
 THIS WELL WILL NOT REPLACE AN EXISTING WELL
 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 DEEPEEN 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-17-0300
70 71 72 73 74 75 76 77 78 79

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

6/21
 -drillers not on site - 11:30 AM
 6/22 - 18 bags cement, 40' tremie - 44' static
 - well 300', 48' steel casing - collected Na, Cl, TDS,
 - 4.6 gpm; pump @ 280' - radium samples @
 - 177 meas. Pursuant to § 10-624 of the State Govt. Article of the
 part Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR
 - started 26.04.04. Failure to provide the info may result in
 pumping @ 10:15 this form not being processed. You have the right to
 - 12-13 inspect, amend, or correct this form. The Maryland
 sec1 Department of the Environment is subject to the
 gal 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.

SPECIAL CONDITIONS
 NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED: Radium solutions, chloride + TDS samples req'd @ yield

Carey

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

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: K+T Plumbing Telephone #: 443 844 9073
Address: ~~PO Box 2151~~
Westminster MD 21158

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:

Name (Print): Tom D. Maggio License# 21451

*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: Brian Beac Telephone #: 410 443 8068
Subdivision: _____ Lot #: _____ Well Tag #: HO-12-0390 (ST)
Site Address: 10380 Carey LN
Woodstock MD 21163

Submersible Pump Data **Pitless Adapter** **Well Cap and Electric Conduit**
Make: National Make: American Corby Two piece watertight cap:
Model #: G2M102-PS810 Model#: PT300Ni Screened, vented well cap:
Pump Capacity 5 GPM Depth: 48 (36" min) Cap secured to casing:
Well Yield: _____ GPM NSF/WSC approved: Conduit min 18" B.G.:
Depth of well encountered at time of pump installation: 300 (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, 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: Poly
PSI: 200 (160 psi min)
Depth of supply line: 48 (36" min)

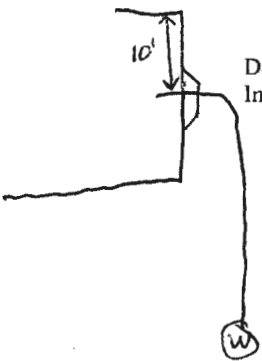
House Connection
PVC sleeve to undisturbed soil at wall penetration:
Approximate length of sleeve: 5'
Sleeve caulked and sealed properly:

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: _____ date: 11/22/19

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

Date Insp. Requested: 11/25/19 Date Insp. Approved: 11/26/19 Inspector: (ST)
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade 51"
Two piece cap installed and attached to casing securely X cap not secure ✓ 11/26/19 (ST)
Elec. conduit extends at least 18" below grade/attached to cap properly 48"
Safety rope not seen outside of well cap/casing
Correct well tag attached properly and casing 8" above finished grade 14"
Water supply line sleeved adequately at house connection 6"
Adequate grout observed below pitless adapter



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

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM
Expiration Date – NOVEMBER 28, 2020

May 28, 2020

Homeowner
10380 Cavey Lane
Woodstock, MD 21163

RE: Kane Property, P. 39
10380 Cavey Lane
Building Permit: B19001340
Well Permit: HO-17-0300

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on 4/29/2020. Final approval of the well line connection to the dwelling was granted on 11/26/2019. The well construction was completed on 6/22/2018. Water samples were collected on 4/20/2020.

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 6/22/2018. Results showed a Gross Alpha level of 18.9 ± 3.3 pCi/L and a Gross Beta level of 24.6 ± 2.8 pCi/L. **This exceeds the maximum contaminant level (MCL) combined Radium 226 and 228 of 5.0 pCi/L.**

After installation of a radionuclide removal device (Reverse Osmosis), post-treatment water samples were collected on 4/20/2020 and indicated a combined Radium 226/228 level of 1.3 pCi/L which is below the MCL of 5 pCi/L.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the radionuclide removal system effectively maintains a Gross Alpha level of less than **15 pCi/L**, a Gross Beta level of less than **50 pCi/L**, and a Radium 226/228 level of less than **5 pCi/L**.

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

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

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

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

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-17-0300. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

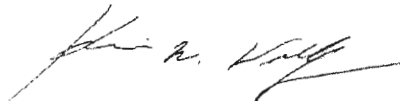
This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the *Annotated Code of Maryland, Environment Article, 9-1311*, subject to a fine of up to \$500 or imprisonment not to exceed three months.**

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:

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

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

Approving Authority,



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

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

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

July 6, 2018

Mr. Brian Kane
355 Whitfield Road
Catonsville, Maryland 21228

RE: Taylor Property
10380 Cavey Lane
Woodstock, Maryland 21163
HO - 17 - 0300

Dear Mr. Kane:

A sample was collected during a yield test on June 22, 2018 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 18.9 ± 3.3 picocuries/liter (pCi/L), while the **Gross Beta** level was 24.6 ± 2.8 pCi/L. The **Gross Alpha** result was above 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, your "untreated" well water supply **does not meet** EPA regulatory standards. Given these initial readings, some additional testing to further evaluate long-term **Gross Alpha**, **Gross Beta** and **Radium 226/228** is recommended. Both a water softener system and a point of use reverse osmosis (R/O) unit have been shown to be effective in reducing levels of these contaminants. Given some potential impact of adding salt based media to your supply, the point of use R/O may be the preferred method to consider. Prior to gaining occupancy, post - treatment levels for **Gross Alpha**, **Gross Beta** and **Radium 226/228** shall be collected to ensure that the treatment is effective. Alternatively, you could have additional testing done for these parameters without installing treatment, but this approach could delay settlement if any of the values (especially **Radium 226/228** values come back elevated).

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 once plumbing and treatment are installed, to schedule additional testing.

Sincerely,



Bert Nixon, Director
Bureau of Environmental Health

✓ Enclosure

cc: Property file

Send Report To: Bert Nixon

Howard County Health Dept
Bureau of Environmental Health
8930 Stanford Blvd
Columbia, MD 21045

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

Lab No. Date Received



E18004609001
Received: 06/25/2018
Metals HO-17-0300

SAMPLE TESTED AS RECEIVED LABORATORY ANALYSIS REQUEST

Do not write above this line

Please Print

Sample ID No: HO-17-0300 Site Name: Taylor Property County: Howard

Sample Source: 10380 Carvey Lane Woodstock Collector: S. Collins
Street Town or City Name

Date Collected: 6/22/2018 Time Collected: 11 a.m. / p.m. Phone #: 410-313-6287

Sample Preserved By: Field ESRL WMRL Central Lab
Preservative Used: HNO₃ _____ mL pH: < 2, SHS, 6/25/18

Sample Type: Drinking Water Landfill Source (Raw Water) Liquid
Data Category: Community Stream Distribution (Treated) Solid
Code Non-Community Sediment Other _____
4F 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: yield test

✓	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: E18004609 Date Coll.: 06/22/2018 Date Received: 06/25/2018 Submitted By: Collins

Field ID: HO-17-0300
Lab No.: E18004609001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	11.50	ppm	07/05/2018

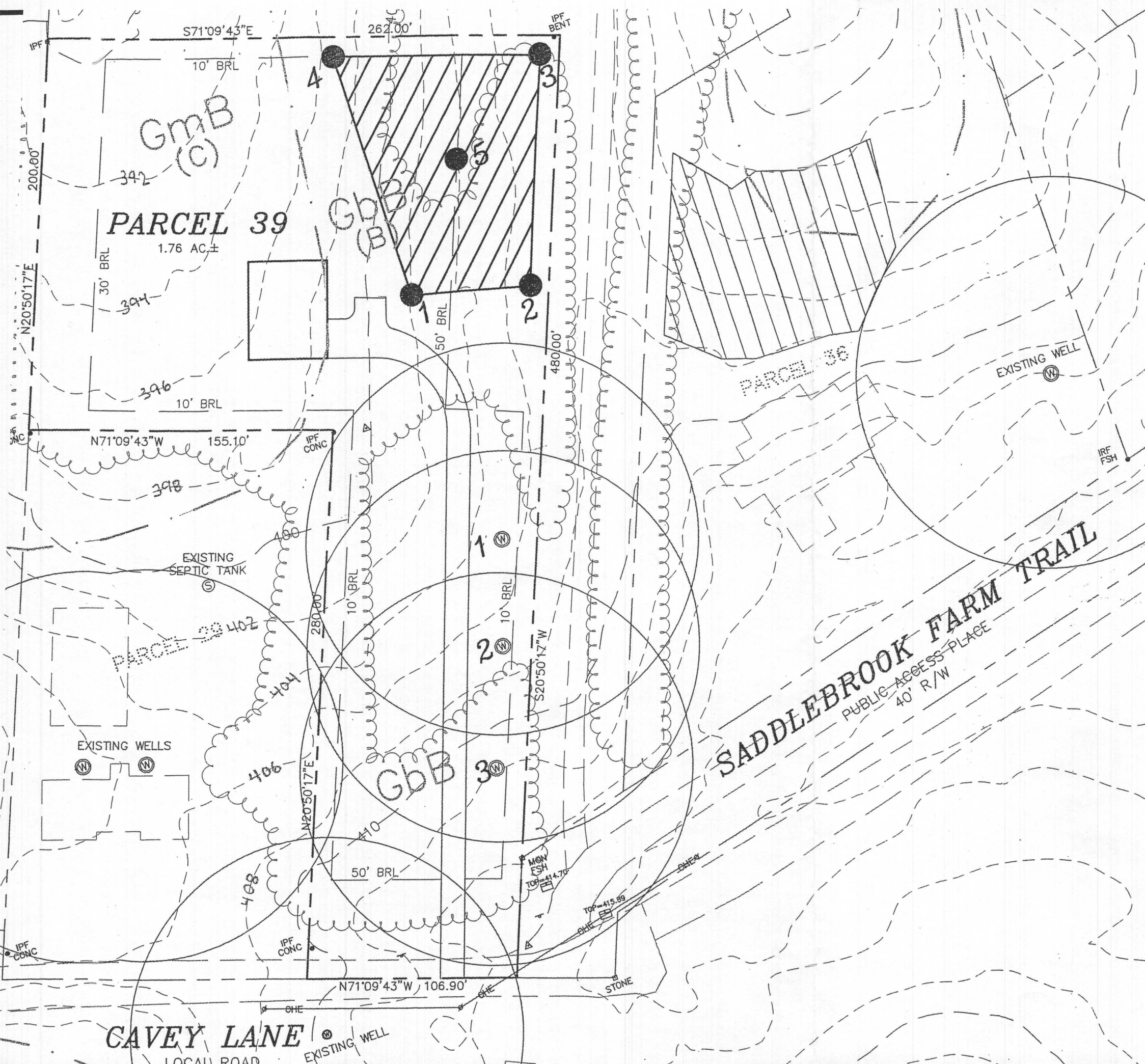
Comments:

Approved by: Yungtao Choi

Approval date: 07/06/2018

**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.

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) 767-6944 and arrange for return or destruction.



2. TAX MAP: PARCEL 39
- DEED REFERENCE: [unclear]
- ELECTION DISTRICT: RC-DEO
- ZONING: RC-DEO
- AREA: 1.76 ACRES ±
3. 2' TOPOGRAPHY FOR THE DEPT OR ABOUT OCT. 2017. 2' TOP
4. PRIVATE WELL AND SEPTIC
5. SOILS DATA BASED ON TR
6. TO THE BEST OF OUR KN HAVE BEEN SHOWN.
7. ANY CHANGES TO A P
8. EXISTING WELLS, SEP^T THOSE WELLS WITH DISPOSAL AREAS I
9. THE WELL SHALL F IS THE DEVELOP BUILDING PERM HEALTH DEPAR

Well sites approved
6/18/18 SC
well sites staked by Mildenberg, Bender,
+ Associates, Inc.

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

H0-17-0300

INFORMATION GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD
BALTIMORE MARYLAND 21230

Copy of signed perc cert 12/27/17

CAVEY LANE LOCAL ROAD EXISTING WELL



Bureau of Environmental Health

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

Facebook: www.facebook.com/hocohealth

Twitter: [HowardCoHealthDep](https://twitter.com/HowardCoHealthDep)

Dr. Maura J. Rossman, M.D., 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:

Taylor Properties
Subdivision/Property Name

39
Lot #
Parcel

10380 Carey Lane
Road Name

- The well site has been staked by Mildenberg, Brender & Assoc, Inc.
(professional land surveyor or company employing professional land surveyors)
on May 25, 2018 (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.

4/23/20 - pump alarm test fail





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 NoE18004603 Date Coll. 06/22/2018 Date Received 06/25/2018 Submitted By: S. Collins

Field ID: HO-17-0300
Lab No.: E18004603001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	18	mg/L	07/02/2018
Total Dissolved Solids	SM 2540C	253	mg/L	06/27/2018

Comments:

Approved by: _____

Shahin Aneli

Approval date: 07/03/2018

*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.

SEND REPORT TO: Bert Nixon
 Howard County Health Dept
 Bureau of Environmental Health
 8930 Stanford Blvd
 Columbia, MD 21045

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: Taylor Property County: Howard

Sample Source: 10380 Cavey Lane Woodstock Location: HO-17-0300
(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A _____ Radon-222 Field Blank _____ Bottle A _____
 Bottle B _____ Bottle B _____

County 13 Plant No.

CHECK (one per Box)

Type	Service	Point of Collection	Testing
Drinking Water <input checked="" type="checkbox"/>	Community <input type="checkbox"/>	Source (Raw) <input checked="" type="checkbox"/>	Emergency <input type="checkbox"/>
Landfill <input type="checkbox"/>	Non-Community <input type="checkbox"/>	Distribution (treated) <input type="checkbox"/>	Routine <input checked="" type="checkbox"/>
Stream <input type="checkbox"/>	Private <input checked="" type="checkbox"/>	MCL <input type="checkbox"/>	Recheck <input type="checkbox"/>
Other <input type="checkbox"/>	Other <input type="checkbox"/>		Special <input type="checkbox"/>

Submitters Code: Federal Project: 5

Collector: S. Collins Telephone No.: 410-313-6287

Date Collected: 6/22/18 Time Collected: 11 a.m. _____ p.m.

Field pH: _____ Field Chlorine: _____

Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: Yield test

✓	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	2454	EPAG000	18.7 ± 3.3	6/27/18	IT	6/28/18
<input checked="" type="checkbox"/>	Gross Beta	4100	2454	EPAG000	24.6 ± 2.8	6/27/18	IT	6/28/18
<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"/>								

Date Received: 06/25/18 Received By: W. Turner

Data Release Signature: _____ Date: 6-29-18

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	✓		
Sample pH <2.0?	✓		
Received within holding time?	✓		

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

SAMPLE TESTED AS RECEIVED

SEND REPORT TO: Bert Nixon
 Howard County Health Dept
 Bureau of Environmental Health
 8930 Stanford Blvd
 Columbia, MD 21045

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

Lab No. 13

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: Field Blank County: Howard

Sample Source: dH₂O Location: HCIID Lab
(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A _____ Radon-222 Field Blank Bottle A _____
 Bottle B _____ Bottle B _____

County 13 Plant No.

CHECK (one per Box)

Type	Service	Point of Collection	Testing
Drinking Water <input checked="" type="checkbox"/>	Community <input type="checkbox"/>	Source (Raw) <input checked="" type="checkbox"/>	Emergency <input type="checkbox"/>
Landfill <input type="checkbox"/>	Non-Community <input type="checkbox"/>	Distribution (treated) <input type="checkbox"/>	Routine <input checked="" type="checkbox"/>
Stream <input type="checkbox"/>	Private <input checked="" type="checkbox"/>	MCL <input type="checkbox"/>	Recheck <input type="checkbox"/>
Other <input type="checkbox"/>	Other <input type="checkbox"/>		Special <input type="checkbox"/>

Submitters Code: Federal Project: S
 Collector: S. Collins Telephone No.: 410-313-6287
 Date Collected: 6/27/18 Time Collected: 10 a.m. p.m.
 Field pH: _____ Field Chlorine: _____
 Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: _____

✓	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	<u>2453</u>	<u>EPA900.0</u>	<u><2.0</u>	<u>6/27/18</u>	<u>JT</u>	<u>6/28/18</u>
<input checked="" type="checkbox"/>	Gross Beta	4100	<u>2453</u>	<u>EPA900.0</u>	<u><4.0</u>	<u>6/27/18</u>	<u>JT</u>	<u>6/28/18</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"/>								

Date Received: 06/25/18 Received By: W. Tuerksen
 Data Release Signature: _____ Date: 6-29-18

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 **SAMPLE TESTED AS RECEIVED**

FORM REVISED 05/15
 DHMH 4540 05/17



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

July 16, 2018

Brian Kane
355 Whitfield Road
Catonsville, MD 21228

Re: Water sample results for 10380 Cavey Lane

Dear Mr. Kane,

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

Elevated sodium levels in drinking water may affect individuals on low-salt diets. The action level for sodium is 20 milligrams per liter (mg/L); **sodium from your well measured 11.50 mg/L.**

Chloride and TDS are both considered secondary contaminants, meaning high concentrations may 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 18 mg/L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from your well measured 253 mg/L.**

Levels of contaminants in groundwater may change over time due to construction activities or seasonal variations in weather. Given the intermediate levels of sodium and TDS in the water at the time of sample collection, you may want to consider future testing.

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

Sincerely,

Sarah Collins, L.E.H.S.
Howard County Health Department
Well & Septic Program
SCollins@howardcountymd.gov
410-313-6287

Cc: *Community Hygiene Program*
File

Oswald, Hank

From: Oswald, Hank
Sent: Monday, April 08, 2019 1:07 PM
To: 'DRS & Associates'
Cc: Williams, Jeffrey
Subject: RE: (03355-97396) Kane Prop,ST - S, HCHD, WS, Rev2

Hello Dan:

If your choosing some version of the WE05H, then the GPM would be approximately 57 GPM (not 35 GPM)? The pump should be fine but the runtime would be around 2 minutes. In addition, I don't see where I made the comment that the trenches must be on contour. Also, the 4 in. PVC storm water discharge pipe must be 25 feet from the tank. Other than that, we will need at least 2 copies (or 3 if you'd like one back).

Thanks,

Hank

-----Original Message-----

From: DRS & Associates <drs@ramss.com>
Sent: Friday, March 29, 2019 2:44 PM
To: Oswald, Hank <hoswald@howardcountymd.gov>
Subject: RE: (03355-97396) Kane Prop,ST - S, HCHD, WS, Rev2

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Hank,

In response to your questions:

That plan is the final version.

The red line was just doodling while discussing the plan at the meeting.

The friction loss chart you sent follows the equation sent to you on
2019-03-21 by Mark Hurt.

Hopefully that clears it up.

Dan Staley

At 2019-03-29 07:45 AM, you wrote:

>DRS:

>

>My supervisor stated that he met with you about the plan for Kane Property and discussed the swale near the well sites. Apparently, it's no longer a concern. You left him with one copy of the plan. Is this the final version? The plan had a redline on the pump chart (See attachment). What does that indicate? I also wanted to see if the Friction Loss chart that we follow is like the one that you use (See attachment).

>

>Thanks,

>

>Hank
>
>-----Original Message-----
>From: DRS <drs+proj@ramss.com>
>Sent: Monday, March 25, 2019 4:45 PM
>To: Oswald, Hank <hoswald@howardcountymd.gov>; Cary/VikingDevelopmentCorp. <cary@vikingcustomhomes.com>;
>Moore, Dan/Viking <dan@vikingcustomhomes.com>; Kane, Brian <briankane355@msn.com>; Williams, Jeffrey
><jewilliams@howardcountymd.gov>
>Subject: (03355-97396) Kane Prop,ST - S, HCHD, WS, Rev2

>
>[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the
sender.]

>
>
>Attached is the data requested. Please contact us if you have any questions.

>--
>DRS & Associates
>52 Winters St
>Westminster, MD 21157
>410-848-4060 * 410-876-6040

--
DRS & Associates
52 Winters St
Westminster, MD 21157
410-848-4060 * 410-876-6040

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 #: 136861 Account #: 4226
 Reference: Viking Development Corporation Company: Viking Development Corporation
 Location: 10380 Cavey Lane Requested By: Cary Cumberland
 Woodstock, MD 21163 Source: Well Water
 Date/ Time Collected: 4/20/2020 0915 Site: Pressure Tank
 Date/Time Rec'd: 4/20/2020 1448 Treatment: Prior to Softener and Spin Down Filter
 Chlorine ppm: Free: ND Total: ND pH: 7.1
 Collected By: R. Ott 0266RO Well #: HO-17-0300

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/21/2020 / 0920 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/21/2020 / 0920 / CRS
Nitrate	<1.0	mg/L	10	601	4/21/2020 / 0930 / RER
Turbidity	0.89	NTU	<10	SM20 2130B	4/21/2020 / 1010 / RER
Sand	NS	mg/L	5	Visual/Gravimetric	4/21/2020 / 1010 / RER

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 pH & Chlorine level tested on site
- 8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
 Building Permit # : B19001340

Date Reported: 4/21/2020

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 #: 136862 Account #: 4226
Reference: Viking Development Corporation Company: Viking Development Corporation
Location: 10380 Cavey Lane Requested By: Cary Cumberland
Woodstock, MD 21163 Source: Well Water
Date/ Time Collected: 4/20/2020 0907 Site: Basement Utility Sink
Date/Time Rec'd: 4/20/2020 1448 Treatment: Softener/Spin Down Filter
Chlorine ppm: Free: ND Total: ND pH: 7.2
Collected By: R. Ott 0266RO Well #: HO-17-0300

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	<2.4	pCi/L	15	900.0	4/23/2020 / 0724 / MJN
Gross Beta, Short Term	4.5	pCi/L	50	900.0	4/23/2020 / 0724 / MJN
Radium-226	0.6	pCi/L	****	903.1	4/30/2020 / 0932 / MJN
Radium-228	0.7	pCi/L	****	Ra-05	4/29/2020 / 1034 / SN

NOTES

- 1 ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 2 Gross Alpha Detection Limit: 2.4 pCi/L; Gross Alpha Error: +/- 1.9 pCi/L
- 3 Gross Beta Detection Limit: 3.4 pCi/L; Gross Beta Error: +/- 2.3 pCi/L
- 4 pCi/L = picocuries per liter
- 5 Radium 226 Detection Limit: 0.2 pCi/L; Radium 226 Error: +/- 0.3 pCi/L
- 6 Radium 228 Detection Limit: 0.6 pCi/L; Radium 228 Error: +/- 0.4 pCi/L
- 7 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 8 Sub-contracted to Reference Lab #278
- 9 ND:None Detected
- 10 pH & Chlorine level tested on site
- 11 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy

Building Permit # : B19001340

Date Reported: 4/30/2020

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

**AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN
ON-SITE TREATMENT SYSTEM**

This agreement is entered into by and between the Howard County Health Department ("the Health Department") and Brian Kane ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 10380 Caway Lane, Woodstock, MD 21163 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 11, Block # 13, Parcel # 391, Deed Reference # 18567/00454 and Tax Account # 288137 ("the Property").

WHEREAS, the Property lacks an available public drinking water source and is required to have and individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit HO-17-0300 that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi /L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the maximum contaminate levels (MCL's) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce radionuclides.

WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

NOW THEREFORE, the parties have agreed to the following terms and conditions:

1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department shall verify that the treatment device is operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).

LR - Agreement
 Recording Fee 20.00
 LR - Agreement
 Surcharge 40.00
 SubTotal: 60.00
 Total: 60.00
 05/12/2020 01:33
 0013-MT
 11201897 00500 -
 Howard Co
 Columbia/0005.00.00 -

3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta (short and long term) and radium 226 / 228 levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warranty or guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
9. The laws of the State of Maryland govern the provisions of all transactions.

The parties have signed this Agreement on the dates set forth below.

<u>Brian Kane</u> Owner BRIAN KANE	<u>5/6/2020</u> Date	<u>Brian Kane</u> Buyer BRIAN KANE	<u>5/6/2020</u> Date
---	-------------------------	---	-------------------------

Owner	Date	Buyer	Date
-------	------	-------	------

<u>Beet Nifon</u> Howard County Health Department	<u>5/26/2020</u> Date
--	--------------------------

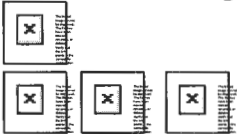
Wolf, Kevin

From: Wolf, Kevin
Sent: Monday, May 04, 2020 1:52 PM
To: Dan Moore
Cc: Martin, Sharhonda
Subject: Re: Viking
Attachments: Radium Agreement 2.11.19.pdf

Dan,
I need the attached radium agreement completed prior to ICOP issuance. If you can print this, complete as needed with homeowners signatures, return back to us to review and sign, I will be able to issue the ICOP. Just make sure i get a copy of the receipt when its recorded. There may be a delay (as everything is) so just keep track of things moving forward.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Howard County Health Department
8930 Stanford Blvd.
Columbia, MD 21045
410-313-2645 (Office)
410-313-2648 (Fax)
www.hchealth.org



kwolf@howardcountymd.gov

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From: Dan Moore <dan@vikingcustomhomes.com>
Sent: Monday, May 4, 2020 10:32 AM
To: Wolf, Kevin <KWolf@howardcountymd.gov>
Subject: Re: Viking

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Thanks. Need to settle this house

Dan Moore
VP Construction
Viking Custom Homes
443-250-5016

From: Wolf, Kevin <KWolf@howardcountymd.gov>
Sent: Monday, May 4, 2020 10:31:34 AM
To: dan@vikingcustomhomes.com <dan@vikingcustomhomes.com>
Subject: Re: Viking

Dan,
Your request received. I will do my best to get this out to you this week, If not today depending on how i can get paper work to my home computer.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Howard County Health Department
8930 Stanford Blvd.
Columbia, MD 21045
410-313-2645 (Office)
410-313-2648 (Fax)
www.hchealth.org



kwolf@howardcountymd.gov

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From: dan@vikingcustomhomes.com <dan@vikingcustomhomes.com>
Sent: Friday, May 1, 2020 3:54 PM
To: Wolf, Kevin <KWolf@howardcountymd.gov>
Subject: Viking

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Hey Kevin,

I am looking for an ICOP for 10380 Cavey Lane.

Thank you

Dan Moore

VP Construction

Viking Custom Homes

dan@vikingcustomhomes.com

www.vikingcustomhomes.com

443-250-5016

MHBR #1185

MHIC #120643

VIKING
CUSTOM HOMES



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

July 6, 2018

Mr. Brian Kane
355 Whitfield Road
Catonsville, Maryland 21228

RE: Taylor Property
10380 Cavey Lane
Woodstock, Maryland 21163
HO - 17 - 0300

Dear Mr. Kane:

A sample was collected during a yield test on June 22, 2018 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 18.9 ± 3.3 picocuries/liter (pCi/L), while the **Gross Beta** level was 24.6 ± 2.8 pCi/L. The **Gross Alpha** result was above 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, your "untreated" well water supply **does not meet** EPA regulatory standards. Given these initial readings, some additional testing to further evaluate long-term **Gross Alpha**, **Gross Beta** and **Radium 226/228** is recommended. Both a water softener system and a point of use reverse osmosis (R/O) unit have been shown to be effective in reducing levels of these contaminants. Given some potential impact of adding salt based media to your supply, the point of use R/O may be the preferred method to consider. Prior to gaining occupancy, post - treatment levels for **Gross Alpha**, **Gross Beta** and **Radium 226/228** shall be collected to ensure that the treatment is effective. Alternatively, you could have additional testing done for these parameters without installing treatment, but this approach could delay settlement if any of the values (especially **Radium 226/228** values come back elevated).

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 once plumbing and treatment are installed, to schedule additional testing.

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

Enclosure

✓ cc: Property file

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

July 16, 2018

Brian Kane
355 Whitfield Road
Catonsville, MD 21228

Re: Water sample results for 10380 Cavey Lane

Dear Mr. Kane,

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

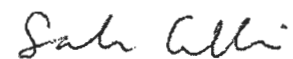
Elevated sodium levels in drinking water may affect individuals on low-salt diets. The action level for sodium is 20 milligrams per liter (mg/L); **sodium from your well measured 11.50 mg/L.**

Chloride and TDS are both considered secondary contaminants, meaning high concentrations may 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 18 mg/L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from your well measured 253 mg/L.**

Levels of contaminants in groundwater may change over time due to construction activities or seasonal variations in weather. Given the intermediate levels of sodium and TDS in the water at the time of sample collection, you may want to consider future testing.

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

Sincerely,



Sarah Collins, L.E.H.S.
Howard County Health Department
Well & Septic Program
SCollins@howardcountymd.gov
410-313-6287

*Cc: Community Hygiene Program
File*