

**C 1** 52463 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  
07 07 17

DATE WELL COMPLETED  
 MM DD YY  
07 01 17

Depth of Well  
180  
 (TO NEAREST FOOT)  
 PERMIT NO.  
 FROM "PERMIT TO DRILL WELL"  
OK  
9/8/17 SC  
HO - 17 - 0167

OWNER VIKING Custom Homes  
 WELL SITE ADDRESS 278 Millers Mill Rd TOWN Cooksville  
 SUBDIVISION \_\_\_\_\_ 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	5	
Brown			
Sandy Soil	5	60	
Soft Gray			
Rock	60	180	✓
		101	✓

**GROUTING RECORD** yes  no   
 WELL HAS BEEN GROUTED (Circle Appropriate Box)  
 TYPE OF GROUTING MATERIAL (Circle one)  
 CEMENT  BENTONITE CLAY   
 NO. OF BAGS 30 NO. OF POUNDS 2250  
 GALLONS OF WATER 150  
 DEPTH OF GROUT SEAL (to nearest foot)  
 from 0 ft. to 70 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)  
ST 6 70  
 60 61 63 64 66 70

**OTHER CASING (if used)**  
 diameter inch depth (feet) from to  
PL 4 1/2 60 180

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

NUMBER OF UNSUCCESSFUL WELLS: 0  
 WELL HYDROFRACTURED  YES  NO

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 D 355  
 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)  
[Signature]  
 LIC. NO. D 113

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

**C 2** DEPTH (nearest ft.)  
 1 2  
HO 70 180  
 E 8 9 11 15 17 21  
 A  
 C 23 24 26 30 32 36  
 H  
 S  
 C 3 38 39 41 45 47 51  
 R  
 E  
 E  
 N  
 SLOT SIZE 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_  
 DIAMETER OF SCREEN (NEAREST INCH)  
 56 \_\_\_\_\_ 60 \_\_\_\_\_  
 from to

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 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**  
**PUMPING TEST**  
 HOURS PUMPED (nearest hour) 3  
 PUMPING RATE (gal. per min.) 8.57  
 METHOD USED TO MEASURE PUMPING RATE Submersible  
 WATER LEVEL (distance from land surface)  
 BEFORE PUMPING 5 ft.  
 WHEN PUMPING 100 ft.  
 TYPE OF PUMP USED (for test)  
 A air  P piston  T turbine  
 C centrifugal  R rotary  O other (describe below)  
 J jet  S submersible

**PUMP INSTALLED**  
 DRILLER INSTALLED PUMP (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 } LAND SURFACE  
 - below } 1 (nearest foot)  
 49 50 51

LATITUDE 39.31239  
 LONGITUDE 77.02850  
 (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.

**B 1** SEQUENCE NO. (MDE USE ONLY) **58694** STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type STATE PERMIT NUMBER **HO - 17 - 0167**  
70 fill in this form completely 79

**OWNER INFORMATION**  
 Date Received (APA) **05 30 17**  
 8 MM DD YY 13  
**VIKING Development**  
 15 Last Name Owner First Name 34  
**815 WindRiver Drive**  
 36 Street or RFD 55  
**Sylkesville MD 21784**  
 57 Town 70 State 72 Zip 76

**B 3 LOCATION OF WELL**  
**Howard**  
 8 COUNTY 21  
 23 SUBDIVISION 42  
 SECTION 44 46 LOT 48 50  
**Cooksville**  
 52 NEAREST TOWN 71

**DRILLER INFORMATION**  
**Michael Barlow MWD355**  
 Driller's Name 76 License No. 81  
**Barlow Well Drilling**  
 Firm Name  
**522 Underwood Lane 21014**  
 Address  
**[Signature] 5/19/17**  
 Signature Date

**B 4 SOURCES OF DRILLING WATER**  
 1. **Well**  
 2.  
 3.  
**2178 Millers Mill Rd**  
 11 STREET ADDRESS 30  
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
 NORTH [ ] WEST [ ] EAST [ ] SOUTH [ ]  
 34 **50** 37 DISTANCE FROM ROAD FT  
 ENTER FT OR MI 38 39  
 TAX MAP: **14** BLK: **4** PARCEL **26**

**B 2 WELL INFORMATION**  
 APPROX. PUMPING RATE **5**  
 (GAL. PER MIN.) 8 12  
 AVERAGE DAILY QUANTITY NEEDED **750**  
 (GAL. PER DAY) 14 20

**NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL**  
**Howard** (13) COUNTY NAME COUNTY NO.  
 STATE SIGNATURE INSERT S → 41  
 DATE ISSUED **8/2/17** **Sub Gelli** **8/2/18**  
 43 MM DD YY 48 CO SIGNATURE EXP. DATE  
 DON: 8/28/17 (SC) DOG: 8/31/17 (SC) DOY: 8/31/17 (SC)

**USE FOR WATER (CIRCLE APPROPRIATE BOX)**  
 D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION  
 F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)  
 I INDUSTRIAL, COMMERCIAL, DEWATERING  
 P PUBLIC WATER SUPPLY WELL  
 T TEST, OBSERVATION, MONITORING  
 O OPEN LOOP GEOTHERMAL  
 C CLOSED LOOP GEOTHERMAL

APPROXIMATE DEPTH OF WELL **300** FEET  
 24 28  
 APPROXIMATE DIAMETER OF WELL \_\_\_\_\_ 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

**8/28 - at 180'**  
 -63' plastic casing set → need steel, 10' into bedrock  
 -water @ 100', 160' (10 gpm)  
 -will install liner b/c rock is soft

**8/29 - 70' steel casing set**  
 -will install 5" liner 60-130'

**8/31 - pump start 12 pm**  
 -Na, Cl, TDS samples @ 1:30 pm  
 -8.5 gpm  
 -5' static, 100' m.  
 -MS bag cement so far

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**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)**  
 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 DEEPEM 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)**  
 APPROX. PERMIT NUMBER \_\_\_\_\_ **G** \_\_\_\_\_  
 PERMIT No. **HO - 17 - 0167**  
 70 71 72 73 74 75 76 77 78 79

**SPECIAL CONDITIONS**  
 NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED  
**50' steel casing or 10' into competent bedrock req'd.**  
 Sodium, chloride, + TDS samples @ COUNTY whichever is deeper. req'd at yield.



**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: August 31, 2017

Well Depth: 180 feet

Customer Viking Custom Homes  
Road 2178 Millers Mill Rd  
City Cooksville  
State Maryland

Permit # HO-17-0167  
Subdivision  
Section  
Lot #

Time	Water Level In Feet	Time to Fill 1-gallon bucket seconds	G.P.M.
12:00 PM	5	5	12.00
12:15 PM	80	6	10.00
12:30 PM	100	7	8.57
12:45 PM	100	7	8.57
1:00 PM	100	7	8.57
1:15 PM	100	7	8.57
1:30 PM	100	7	8.57
1:45 PM	100	7	8.57
2:00 PM	100	7	8.57
2:15 PM	100	7	8.57
2:30 PM	100	7	8.57
2:45 PM	100	7	8.57
3:00 PM	100	7	8.57
3:15 PM	100	7	8.57
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.			

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

**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: WTC III Telephone #: \_\_\_\_\_  
 Address: \_\_\_\_\_

**Must circle one:** Licensed Plumber / Licensed Well Driller / Licensed Well Pump Installer

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

Name (Print): BILL CAMBERLAND License# \_\_\_\_\_

**\*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: \_\_\_\_\_ Telephone #: \_\_\_\_\_  
 Subdivision: \_\_\_\_\_ Lot #: \_\_\_\_\_ Well Tag #: HO-17-0167  
 Site Address: \_\_\_\_\_

**Submersible Pump Data**

Make: \_\_\_\_\_  
 Model #: \_\_\_\_\_  
 Pump Capacity \_\_\_\_\_  
 Well Yield: \_\_\_\_\_

**Pitless Adapter**

Make: \_\_\_\_\_ +  
 Model#: \_\_\_\_\_  
 GPM Depth: \_\_\_\_\_ (36" min)  
 GPM NSF/WSC approved: \_\_\_\_\_

**Well Cap and Electric Conduit**

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

Depth of well encountered at time of pump installation: \_\_\_\_\_ (feet)  
 If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

**Must circle one:** Torque arrestors / Cable guards / Other acceptable method used

**Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing** \_\_\_\_\_

**Piping to house**

Type: \_\_\_\_\_  
 PSI: \_\_\_\_\_ (160 psi min)  
 Depth of supply line: \_\_\_\_\_ (36" min)

**House Connection**

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

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

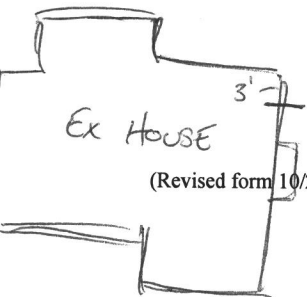
Signature of company representative responsible for installation \_\_\_\_\_ date \_\_\_\_\_

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

Date Insp. Requested: 03/25/2019 Date Insp. Approved: 03/25/2019 Inspector: [Signature]

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

[Signature] 40" 03/25/2019 [Signature]  
[Signature] 34" 03/25/2019 [Signature]  
[Signature] 21" 03/25/2019 [Signature]  
[Signature] 6' 03/25/2019 [Signature]



(Revised form 10/24/2018)

**INTERIM CERTIFICATE OF POTABILITY**

**Expiration Date – DECEMBER 5, 2019**

June 5, 2019

Homeowner  
2178 Millers Mill Road  
Cooksville, MD 21723

**RE: Katz Property, P. 26**  
**2178 Millers Mill Road**  
**Building Permit: B18002052**  
**Well Permit: HO-17-0167**

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 **5/16/2019**. Final approval of the well line connection to the dwelling was granted on **3/25/2019**. The well construction was completed on **9/1/2017**. Water samples were collected on **4/25/2019, 5/1/2019**.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-17-0167. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

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

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



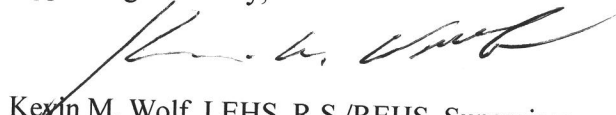
Bureau of Environmental Health  
8930 Stanford Blvd | Columbia, MD 21045  
410.313.2640 - Voice/Relay  
410.313.2648 - Fax  
1.866.313.6300 - Toll Free

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

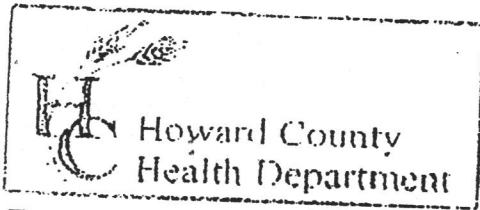
In closing, please refer to our "Homeowner Fact Sheet" which illustrates a better understanding for your Onsite Sewage Disposal System. You will also find a link to Maryland Department of the Environment's website which describes in further detail operation and maintenance of your septic system.

Approving Authority,



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

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



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

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

The well site has been staked by Fisher, Collins + Carter,  
(professional land surveyor or company employing professional land surveyors)  
on 5/19/17 (date) and does not require a site inspection.

The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

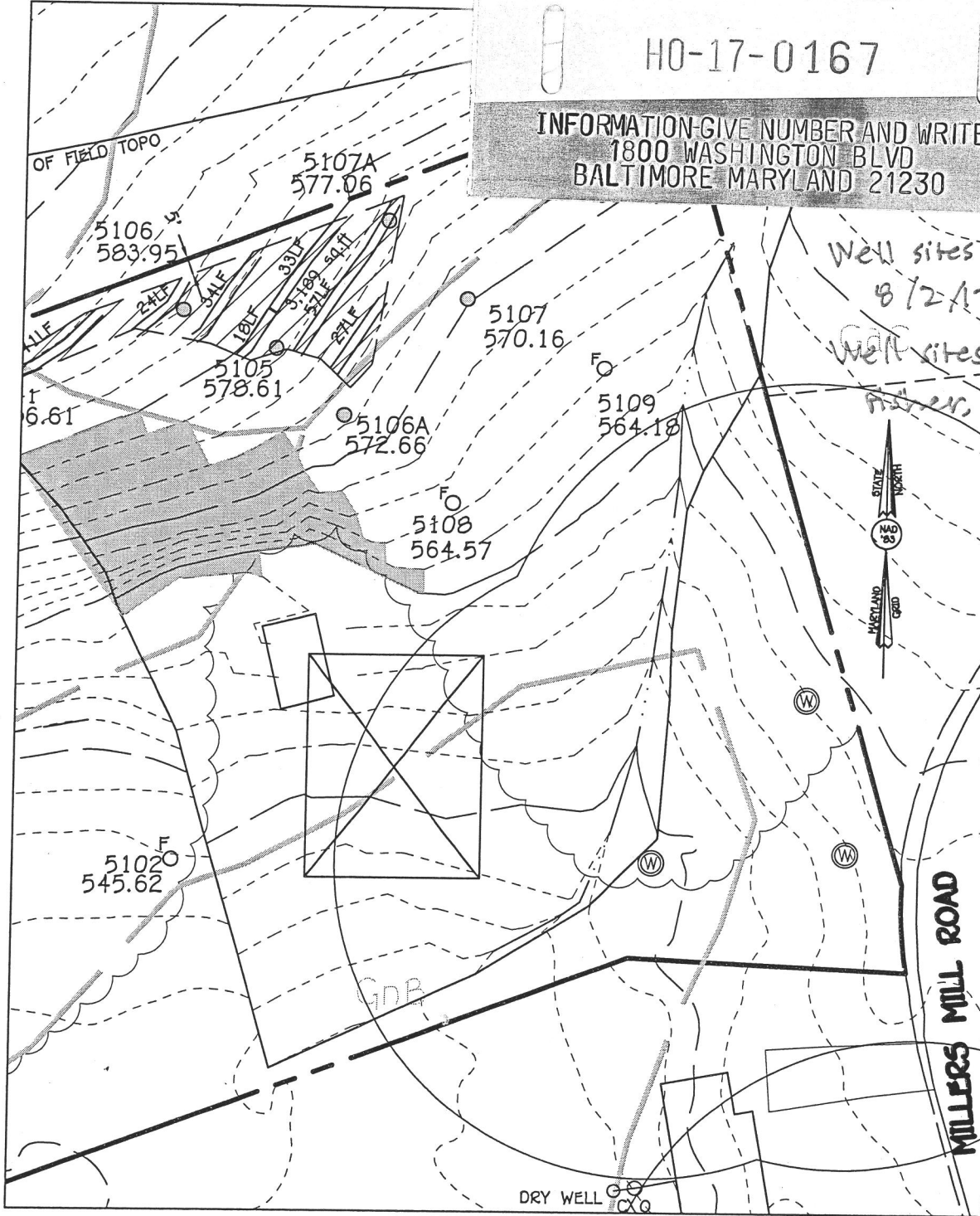
This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

Revised 6/10/03

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

H0-17-0167

INFORMATION GIVE NUMBER AND WRITE  
1800 WASHINGTON BLVD  
BALTIMORE MARYLAND 21230



Well sites approved  
8/2/17 SC  
Well sites staked by  
Fisher, Collins, +  
Carter

## WELL EXHIBIT 2178 MILLERS MILL

ZONED: RC-DEO

TAX MAP #14 GRID: 4 PARCEL: 26  
4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1"=50' DATE: NOVEMBER 8, 2016

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLCOTT CITY, MARYLAND 21042  
(410) 461 - 2855

# 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 #: 129734 Account #: 4226  
Reference: Viking Development Corporation Company: Viking Development Corporation  
Location: 2178 Millers Mill Road Requested By: Cary Cumberland  
Cooksville, MD 21723 Source: Well Water  
Date/ Time Collected: 4/25/2019 1014 Site: Pressure Tank  
Date/Time Rec'd: 4/25/2019 1340 Treatment: Prior to Spin Down Separator  
Chlorine ppm: Free: ND Total: ND pH: 6.7  
Collected By: J. Yeager 6176JY Well #: HO-17-0167

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/26/2019 / 1000 / RER
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/26/2019 / 1000 / RER
Nitrate	<1.0	mg/L	10	601	4/26/2019 / 0900 / CRS
Turbidity	10.2	NTU	<10	SM20 2130B	4/26/2019 / 0930 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	4/26/2019 / 0930 / CRS

### 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 # : B18002052

Date Reported: 4/26/2019

# 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 #:	129850	Account #:	4226
Reference:	Viking Development Corporation	Company:	Viking Development Corporation
Location:	2178 Millers Mill Road Cooksville, MD 21723	Requested By:	Cary Cumberland
Date/ Time Collected:	5/1/2019 1330	Source:	Well Water
Date/Time Rec'd:	5/1/2019 1515	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	Prior to Spin Down Separator
Collected By:	J. Yeager 6176JY	pH:	7.1
		Well #:	HO-17-0167

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Turbidity	6.50	NTU	<10	SM20 2130B	5/2/2019 / 0945 / CRS

### NOTES

- 1 NTU = Nephelometric Turbidity Units
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 pH & Chlorine level tested on site
- 5 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy  
Building Permit # : B18002052

Date Reported: 5/2/2019

## REPORT OF ANALYSIS

Laboratory ID #:	129734	Account #:	4226
Reference:	Viking Development Corporation	Company:	Viking Development Corporation
Location:	2178 Millers Mill Road Cooksville, MD 21723	Requested By:	Cary Cumberland
Date/ Time Collected:	4/25/2019 1014	Source:	Well Water
Date/Time Rec'd:	4/25/2019 1340	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	Prior to Spin Down Separator
Collected By:	J. Yeager 6176JY	pH:	6.7
		Well #:	HO-17-0167

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/26/2019 / 1000 / RER
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/26/2019 / 1000 / RER
Nitrate	<1.0	mg/L	10	601	4/26/2019 / 0900 / CRS
Turbidity	10.2	NTU	<10	SM20 2130B	4/26/2019 / 0930 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	4/26/2019 / 0930 / CRS

**NOTES**

- 1 mg/L = milligrams per liter (also, parts per million)
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- 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 # :** B18002052

Date Reported: 4/26/2019

Send Report To: Bert Nixon  
Howard Co. Health Dept.  
Bureau of Environmental Health  
8930 Stanford Blvd.

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



**E18000930001**

Received: 09/01/2017

Metals

HO-17-0167

Do not write above this line

Columbia, MD 21045

**LABORATORY ANALYSIS REQUEST**

Please Print

Sample ID No: HO-17-0167 Site Name: \_\_\_\_\_ County: Howard

Sample Source: 2178 Millers Mill Rd. Cooksville Collector: S. Collins  
Street Town or City Name

Date Collected: 8/31/2017 Time Collected: \_\_\_\_\_ a.m. 1:30 p.m. Phone #: 410-313-6287

Sample Preserved By:  Field  ESRL  WMRL  Central Lab  
Preservative Used:  HNO<sub>3</sub> \_\_\_\_\_ mL pH: < 2

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: Sample collected during yield test.

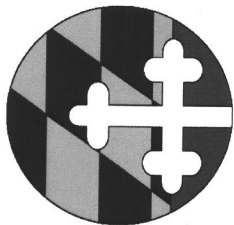
✓	Element	Results (ppm)	✓	Element	Results (ppm)
	Antimony (Sb)			Copper (Cu)	
	Arsenic (As)			Lead (Pb)	
	Barium (Ba)			Silver (Ag)	
	Beryllium (Be)			Zinc (Zn)	
	Cadmium (Cd)			Aluminum (Al)	
	Chromium (Cr)			Iron (Fe)	
	Mercury (Hg)			Manganese (Mn)	
	Nickel (Ni)			Calcium (Ca)	
	Selenium (Se)			Magnesium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

Lab Supervisor: \_\_\_\_\_

Date Reported: \_\_\_\_/\_\_\_\_/\_\_\_\_

•Phone: (443) 681-3857

•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: E18000930 Date Coll.: 08/31/2017 Date Received: 09/01/2017 Submitted By: Collins

Field ID: HO-17-0167  
Lab No.: E18000930001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	11.33	ppm	09/08/2017

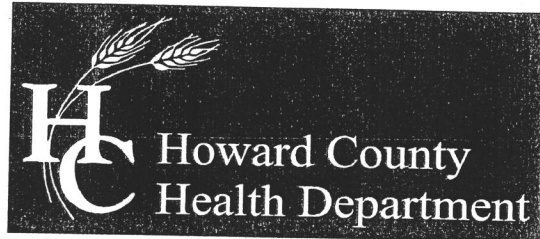
### Comments:

Approved by: Yinghao Choi

Approval date: 09/13/2017

\*\*The following methods are included in our A2LA Scope of Accreditation: EPA 200.7, EPA 200.8, EPA 245.1.

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.



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](http://www.hchealth.org)

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

September 19, 2017

Jessica Faulkner  
11775 Route 99  
Marriottsville, MD 21104

Re: 2178 Millers Mill Road water samples

Dear Ms. Faulkner,

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

Elevated sodium levels in drinking water could affect individuals on low-salt diets. The action level for sodium is 20 milligrams per liter (mg/L); **sodium from your well measured 11.33 mg/L.**

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 12 mg/L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from your well measured 115 mg/L.**

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](mailto:SCollins@howardcountymd.gov)  
410-313-6287

Cc: *Community Hygiene Program*  
*File*

Send Report To: Bert Nixon  
 Howard Co. Health Dept.  
 Bureau of Environmental Health  
 8930 Stanford Blvd.  
 Columbia, MD 21045

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

  
**E18000921001**  
 Received: 09/01/2017  
 Inorganic HO-17-0167

**SAMPLE ID**

Bottle Number HO-17-0167 Name \_\_\_\_\_ County Howard County Code 13

Location 2178 Millers Mill Rd. Cooksville Data Category Code 4F

Collected: Date 8/31/17 Time 1:30 pm Collector & Phone S. Collins 410-313-6287 Submitter Code     

**CHECK (one per box)**

Drinking Water <input checked="" type="checkbox"/>	Community <input type="checkbox"/>	Source (raw water) <input checked="" type="checkbox"/>	Emergency <input type="checkbox"/>
Landfill <input type="checkbox"/>	Non-community <input type="checkbox"/>	Distribution (treated) <input checked="" type="checkbox"/>	Routine <input checked="" type="checkbox"/>
Stream <input type="checkbox"/>	Private <input type="checkbox"/>	MCL <input type="checkbox"/>	Recheck <input type="checkbox"/>
Other <input type="checkbox"/>	Other <input type="checkbox"/>		Special <input type="checkbox"/>

Federal Project S

**FIELD**

Plant No.      Sampling Station      Preservation: Iced  Acid  Type of Acid     

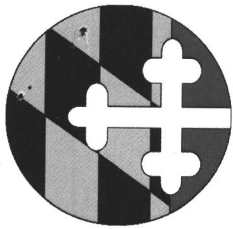
pH      Chlorine: Free      Total      Specific Conductance     

Notes to Lab/Remarks: Sample collected during yield test.

CHECK TESTS	TESTS	Error Code	RESULTS
	Alkalinity (Total)		
	Ammonia - N		
✓	Chloride		
	Conductance*, Spec.		
✓	Dissolved Solids (Total)		
	Hardness		
	Fluoride		
	Nitrate, N		
	Nitrate - Nitrite, N		
	Sulfate		
	Total Solids		
	Turbidity*		
	Other:		

\* Results reported in Units, all others in milligrams per liter (ppm)

Number of Tests Requested      Section Chief \_\_\_\_\_ Date Reported \_\_\_\_\_



State of Maryland  
Department of Health  
Laboratories Administration  
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HOWARD CO ENVIRONMENTAL HLTH  
8930 STANFORD BLVD  
COLUMBIA, MD 21045

## Certificate of Analysis

Lab Project NoE18000921 Date Coll. 08/31/2017 Date Received 09/01/2017 Submitted By: S. Collins

Field ID: HO-17-0167  
Lab No.: E18000921001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	12	mg/L	09/01/2017
Total Dissolved Solids	SM 2540C	115	mg/L	09/01/2017

### Comments:

Approved by:

Approval date: 09/07/2017

\*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.

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