

| | | | | | | |
|--|-------|---|--|--|--|--|
| C1 | 57220 | SEQUENCE NO. (MDE USE ONLY) | 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. | |
| 1-2-3 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS) | | DATE WELL COMPLETED MM DD YY 12 / 14 / 19 | | Depth of Well 22 400 26 (TO NEAREST FOOT) | | |
| ST/CO USE ONLY DATE Received MM DD YY 12 / 18 / 18 | | DATE WELL COMPLETED MM DD YY 12 / 14 / 19 | | PERMIT NO. FROM "PERMIT TO DRILL WELL" OK 1/22/19 SC 40-17-0219 | | |
| OWNER C. L. K. Stephen | | WELL SITE ADDRESS 2314 S. Sang Rd | | TOWN Glenwood | | |
| SUBDIVISION | | SECTION | | LOT 18 | | |

| | | | | | |
|---|--|--|--|--|--|
| WELL LOG Not required for driven wells | | GROUTING RECORD yes no WELL HAS BEEN-GROUTED (Circle Appropriate Box) Y N TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 45 46 NO. OF POUNDS 45 46 GALLONS OF WATER DEPTH OF GROUT SEAL (to nearest foot) from 48 TOP 52 ft. to 54 BOTTOM 58 ft. (enter 0 if from surface) | | C 3 1 2 PUMPING TEST HOURS PUMPED (nearest hour) 8 9 PUMPING RATE (gal. per min.) 11 15 METHOD USED TO MEASURE PUMPING RATE WATER LEVEL (distance from land surface) BEFORE PUMPING 17 20 ft. WHEN PUMPING 22 25 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 | |
| STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING | | CASING RECORD casing types insert appropriate code below MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch) 60 61 63 64 66 70 Total depth of main casing (nearest foot) 100 OTHER CASING (if used) diameter inch depth (feet) from to PL 4.5 40 400 SCREEN RECORD screen type or open hole (insert appropriate code below) ST STEEL BR BRASS PL PLASTIC HO OPEN HOLE OT OTHER | | PUMP INSTALLED DRILLER INSTALLED PUMP 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 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 (nearest foot) - below 49 50 51 | |
| DESCRIPTION (Use additional sheets if needed) | | EACH CASING | | LATITUDE 39.28528 LONGITUDE 77.00619 (DEFAULT COORD. WGS 84) | |
| Well reworked - liners added, well not deepened. | | NUMBER OF UNSUCCESSFUL WELLS: WELL HYDROFRACTURED YES NO Y N CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE. DRILLERS LIC. NO. MWD 559 DRILLERS SIGNATURE LIC. NO. D SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee) | | DEPTH (nearest ft.) 1 2 PL 140 220 SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60 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 70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| C1 27688 | | SEQUENCE NO. (MDE USE ONLY) | | 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. | |
| (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS) | | | | | | COUNTY NUMBER <u>XIII</u> | |
| ST/CO USE ONLY DATE RECEIVED MM <u>02</u> DD <u>01</u> 18 | | DATE WELL COMPLETED MM <u>1</u> DD <u>12</u> YY <u>2018</u> | | Depth of Well <u>400'</u> 26 (TO NEAREST FOOT) | | PERMIT NO. FROM "PERMIT TO DRILL WELL" <u>HO-17-0219</u> | |
| OWNER <u>Sikorski</u> | | DATE RECEIVED MM <u>02</u> DD <u>01</u> 18 | | DATE WELL COMPLETED MM <u>1</u> DD <u>12</u> YY <u>2018</u> | | PERMIT NO. FROM "PERMIT TO DRILL WELL" <u>HO-17-0219</u> | |
| WELL SITE ADDRESS <u>3314 Sang Rd</u> | | TOWN <u>Helenwood</u> | | SECTION <u>18</u> | | LOT <u>18</u> | |
| SUBDIVISION <u>Holly Hills</u> | | | | | | | |

| | | | | | | | | |
|--|--|--|---|--|--|---|--|--|
| WELL LOG Not required for driven wells | | | GROUTING RECORD | | | C 3 | | |
| STATE THE KIND OF FORMATIONS PENETRATED. THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING | | | WELL HAS BEEN GROUTED (Circle Appropriate Box) | | | PUMPING TEST | | |
| DESCRIPTION (Use additional sheets if needed) | | | TYPE OF GROUTING MATERIAL (Circle one) | | | HOURS PUMPED (nearest hour) | | |
| FEET FROM TO | | | CEMENT <input checked="" type="checkbox"/> BENTONITE CLAY <input checked="" type="checkbox"/> | | | PUMPING RATE (gal. per min.) | | |
| check if water bearing | | | NO. OF BAGS <u>18</u> NO. OF POUNDS <u>1692</u> | | | METHOD USED TO MEASURE PUMPING RATE <u>Bucket</u> | | |
| Sand | | | GALLONS OF WATER <u>108</u> | | | WATER LEVEL (distance from land surface) | | |
| Mica Rock | | | DEPTH OF GROUT SEAL (to nearest foot) | | | BEFORE PUMPING | | |
| Water 220' | | | from <u>0</u> ft. to <u>90</u> ft. | | | WHEN PUMPING | | |
| | | | (enter 0 if from surface) | | | TYPE OF PUMP USED (for test) | | |
| | | | Casing types insert appropriate code below | | | A air P piston T turbine | | |
| | | | Casing Record | | | C centrifugal R rotary O other (describe below) | | |
| | | | MAIN CASING TYPE <u>ST</u> | | | J jet S submersible | | |
| | | | Nominal diameter top (main) casing (nearest inch) <u>6</u> | | | PUMP INSTALLED | | |
| | | | Total depth of main casing (nearest foot) <u>100</u> | | | DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) | | |
| | | | OTHER CASING (if used) | | | IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. | | |
| | | | diameter inch depth (feet) from to | | | TYPE OF PUMP INSTALLED | | |
| | | | screen type or open hole | | | PLACE (A,C,J,P,R,S,T,O) IN BOX 29 | | |
| | | | insert appropriate code below | | | CAPACITY: GALLONS PER MINUTE (to nearest gallon) | | |
| | | | ST STEEL BR BRASS PL PLASTIC HO OPEN HOLE OT OTHER | | | PUMP HORSE POWER | | |
| | | | C 2 DEPTH (nearest ft.) | | | PUMP COLUMN LENGTH (nearest ft.) | | |
| | | | 1 <u>HO</u> 2 <u>98</u> 3 <u>400</u> | | | CASING HEIGHT (circle appropriate box and enter casing height) | | |
| | | | 4 <u>8</u> 5 <u>9</u> 6 <u>11</u> 7 <u>15</u> 8 <u>17</u> 9 <u>21</u> | | | + above } LAND SURFACE | | |
| | | | 10 <u>23</u> 11 <u>24</u> 12 <u>26</u> 13 <u>30</u> 14 <u>32</u> 15 <u>36</u> | | | - below } <u>2</u> (nearest foot) | | |
| | | | 16 <u>38</u> 17 <u>39</u> 18 <u>41</u> 19 <u>45</u> 20 <u>47</u> 21 <u>51</u> | | | LATITUDE <u>39.28528</u> | | |
| | | | SLOT SIZE 1 <u>2</u> 3 <u>3</u> | | | LONGITUDE <u>77.00619</u> | | |
| | | | DIAMETER OF SCREEN (NEAREST INCH) | | | (DEFAULT COORD. WGS 84) | | |
| | | | 56 <u>60</u> 68 | | | NOTES: | | |
| | | | 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 Q | | | | | |
| | | | 70 72 74 75 76 | | | | | |
| | | | TELESCOPE CAGING LOG INDICATOR OTHER DATA | | | | | |

| | |
|---|--|
| NUMBER OF UNSUCCESSFUL WELLS: <u>0</u> | |
| WELL HYDROFRACTURED | yes <input checked="" type="checkbox"/> no <input checked="" type="checkbox"/> |
| 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. <u>MSD027</u> | |
| DRILLERS SIGNATURE <u>[Signature]</u> | |
| (MUST MATCH SIGNATURE ON APPLICATION) | |
| LIC. NO. <u>D</u> | |
| SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee) | |



HOWARD COUNTY HEALTH DEPARTMENT

62376

DATE
12/27/17

WS

Received
From

Stephen Sikorski

PHONE #

For Well permit - #302 Shiny 6ers

Drive

3314 Sang Road



CASH



CHECK

NO

160

One hundred & Sixty Dollars — 00/100

Dollars

\$

160 00

Received By

Vicki DeLeoncy

| | | | |
|--|--|---|---|
| B 1 | SEQUENCE NO. (MDE USE ONLY) <div style="font-size: 24pt; font-weight: bold;">51640</div> | STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type | STATE PERMIT NUMBER <div style="font-size: 24pt; font-weight: bold;">HO-17-0219</div> fill in this form completely |
| 1 2 3 6 | | | |
| Date Received (APA) <div style="font-size: 24pt; font-weight: bold;">12/27/17</div> <div style="display: flex; justify-content: space-between;"> <div>8 MM DD YY 13</div> <div>OWNER INFORMATION</div> </div> <div style="display: flex; justify-content: space-between;"> <div>15 Last Name <u>Likorski</u></div> <div>Owner <u>Stephen</u></div> <div>34 First Name <u>Stephen</u></div> </div> <div style="display: flex; justify-content: space-between;"> <div>36 Street or RFD <u>2302 Shady Glen Dr</u></div> <div>55</div> </div> <div style="display: flex; justify-content: space-between;"> <div>57 Town <u>Columbia Md</u></div> <div>70 State <u>21046</u></div> <div>72 Zip <u>21046</u></div> <div>76</div> </div> | | B 3 LOCATION OF WELL <div style="display: flex; justify-content: space-between;"> <div>8 COUNTY <u>Howard</u></div> <div>21</div> </div> <div style="display: flex; justify-content: space-between;"> <div>23 SUBSECTION <u>Holly Hills</u></div> <div>42</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SECTION <u>11</u></div> <div>LOT <u>18</u></div> </div> <div style="display: flex; justify-content: space-between;"> <div>52 NEAREST TOWN <u>Glennwood</u></div> <div>71</div> </div> | |
| DRILLER INFORMATION <div style="display: flex; justify-content: space-between;"> <div>Driller's Name <u>Larry Mayne</u></div> <div>76 License No. <u>M 5 D 027</u></div> <div>81</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Firm Name <u>Joseph L Mayne Well Drilling</u></div> <div>55</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Address <u>5512 Ridge Rd Mt Airy Md 21111</u></div> <div>76</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Signature <u>Larry Mayne</u></div> <div>Date <u>1-15-2018</u></div> </div> | | B 4 SOURCES OF DRILLING WATER 1. <u>well</u> 2. 3. | |
| B 2 WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) <u>5</u> AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) <u>500</u> | | ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) <div style="text-align: center;"> <div style="display: flex; justify-content: space-around;"> <div>34</div> <div>30</div> <div>37</div> </div> <div style="display: flex; justify-content: space-around;"> <div>NORTH</div> <div>WEST</div> <div>EAST</div> </div> <div style="display: flex; justify-content: space-around;"> <div>SOUTH</div> </div> </div> DISTANCE FROM ROAD ENTER FT OR MI <u>FL</u> TAX MAP: <u>0014</u> BLK: <u>0674</u> PARCEL: <u>0092</u> | |
| 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 <div style="display: flex; justify-content: space-between;"> <div> COUNTY NO. <u>19</u> STATE SIGNATURE _____ DATE ISSUED <u>01/16/18</u> CO SIGNATURE _____ EXP. DATE _____ </div> <div> INSERT S → 41 </div> </div> | |
| APPROXIMATE DEPTH OF WELL <u>300</u> FEET APPROXIMATE DIAMETER OF WELL <u>6</u> 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 <div style="text-align: center;"> </div> | |
| METHOD OF DRILLING (circle one) BORED (or Augered) <u>AIR-ROTARY</u> JETTED <u>ROTARY</u> (Hydraulic Rotary) CABLE <u>REVERSE-ROTARY</u> 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 DEEPEN 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. <u>HO-17-0219</u> | |
| SPECIAL CONDITIONS NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED | | 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. | |

Well Permit No. HO - 17-0219
Location of property (road) 3314 Sang Rd
Subdivision Holly Hills Lot 18 Block Plat Sec.
Well Driller Joseph L. Mayne, Jr Owner Stephen Sikorski

Depth of well 400'
Distance of measuring point (M.P.) above ground 2'
Static water level (S.W.L.) below M.P. 55'

Time pump started 7:30 Pumping rate 20 gpm
Total time 30 min to reach pumping water level 180 ft. below M.P.

[illegible]

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 17-0219
Location of property (road) 3314 Sanger Rd
Subdivision Holly Hills Lot 18 Block Plat Sec.
Well Driller Maurice Owner

Depth of well 400'
Distance of measuring point (M.P.) above ground 2'
Static water level (S.W.L.) below M.P. 55'

I. High rate pumping -- reservoir drawdown

Pump Set @ 380'

Time pump started _____ Pumping rate 6 gpm
Total time _____ to reach pumping water level _____ ft. below M.P.

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

[illegible]

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: All Around Plumbing Telephone #: 301-829-6745
Address: PO Box 3546
Frederick, MD 21705

(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 Fleming License# 24834

*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: Stephen Rosanova Telephone #: 240-381-0460
Subdivision: Holly Hills Lot #: 18 Well Tag #: HO-17-0219
Site Address: 3314 Sunny Rd.
Glenwood, MD 21738

Submersible Pump Data

Make: Goulds
Model #: SG510422C
Pump Capacity 5 GPM
Well Yield: 20 GPM

Pitless Adapter

Make: BEE
Model#: PA-100NL
Depth: 48" (36" min)
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: 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: Poly
PSI: 250 (160 psi min)
Depth of supply line: 42" (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

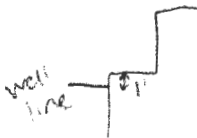
date

11-28-2018

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

Date Insp. Requested: 11/29/18 Date Insp. Approved: 12/26/18 Inspector: SC

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 ✓



Environmental Testing Lab Inc.

108 Old Solomons Island Rd
Annapolis, MD 21401



3430 Rockefeller Ct
Waldorf, MD 20602

*State Certified Water Quality
Laboratory # 106*

*State Certified Water Quality
Laboratory # 139*

Certificate of Analysis

Tim Edwards
Hague Quality Water

Project
Date Received 12/20/2018
Date Reported 12/21/2018

This report is the sole property of Hague Quality Water. Any questions about the report MUST be directed to Hague Quality Water at (410) 757-2992.

Environmental Testing Lab is not at liberty to discuss this report without written consent from Hague Quality Water.

Sample No: 167325-01 Sampled: 12/20/2018 3:25:0 Sampler: TEwards8309TE (Exp. 5/18/2019)
Location: 3314 Sang Road Preservation: Ice
Glenwood, MD Sample Point: Hose Bib/Kitchen

| Parameter | Method | Result | Qualifiers | Units | RL | Test Date | Analyst |
|-------------------------|--------------|-------------|------------|-----------|----|------------|---------|
| Bacteria-Total Coliform | Colitag Test | Absent/Pass | | Per/100ml | 1 | 12/20/2018 | CT-106 |
| Bacteria-E.coli | Colitag Test | Absent/Pass | | Per/100ml | 1 | 12/20/2018 | CT-106 |

Field Test(s) such as chlorine and pH are reported on the attached COC form. "NT" means Not Tested

Sample taken after treatment (softener and chemical feed system). No UV light.

Approved By

Daniel J. Brumsted, Laboratory Director

*Received
12/28*

Annapolis

Ph 410-224-4304 Fax 443-926-0586

Waldorf

Ph 410-224-4304 Fax 443-926-0586

Environmental Testing Lab Inc.

108 Old Solomons Island Rd
Annapolis, MD 21401



3430 Rockefeller Ct
Waldorf, MD 20602

*State Certified Water Quality
Laboratory # 106*

*State Certified Water Quality
Laboratory # 139*

Certificate of Analysis

Hague Quality Water
814 E. College Parkway
Annapolis, MD 21409

Project
Date Received 12/20/2018
Date Reported 12/21/2018

This report is the sole property of Hague Quality Water. Any questions about the report MUST be directed to Hague Quality Water at (410) 757-2992.

Environmental Testing Lab is not at liberty to discuss this report without written consent from Hague Quality Water.

| | | |
|--|----------------------------|---|
| Sample No: 167325-01 | Sampled: 12/20/2018 3:25:0 | Sampler: TEwards8309TE (Exp. 5/18/2019) |
| Location: 3314 Sang Road Glenwood, MD | | Preservation: Ice |
| | | Sample Point: Hose Bib/Kitchen (softener) |

| Parameter | Method | Result | Qualifiers | Units | RL | Test Date | Analyst |
|-------------------------|--------------|-------------|------------|-----------|----|------------|---------|
| Bacteria-Total Coliform | Colitag Test | Absent/Pass | | Per/100ml | 1 | 12/20/2018 | CT-106 |
| Bacteria-E.coli | Colitag Test | Absent/Pass | | Per/100ml | 1 | 12/20/2018 | CT-106 |

Field Test(s) such as chlorine and pH are reported on the attached COC form. "NT" means Not Tested

Approved By

Daniel J. Brumsted, Laboratory Director

Annapolis

Ph 410-224-4304 Fax 443-926-0586

Waldorf

Ph 410-224-4304 Fax 443-926-0586

ENVIRONMENTAL TESTING LAB, INC - CHAIN OF CUS

ANNAPOLIS
410-224-4304 FAX 443-926-0586

WALDORF
410-224-4304 FAX

167325 Date Due: 12/21/2
Client: Hague Quality Water
Project:

Company Name, Address Phone & Fax

Hague
814 E. College Park
Annapolis, MD

Testing Address

3314 SANG RD.
STREET
Glenwood, MO
CITY STATE ZIP

Send Report By: Fax Postal Service Email

THIS FORM WILL BE ATTACHED AS A PERMANENT PART OF YOUR FINAL REPORT

FIELD COLLECTION INFORMATION

Collected: Date 12/20/19 Time 3:26 Well Tag #:

Collectors Name: TIM EDWARDS Certification # 756309 Expires 7/19

Collectors Signature: Circle One: PRIVATE WELL or CITY WATER

pH: 7.2 Chlorine, Total mg/L: Results for U & O Permit? YES NO Sample Clear when drawn? YES NO

Sand present? YES NO "YES" submit one liter of sample to lab for testing

Sample Tap Bacteria: ROSE KIB BASIN - AFTER TREATMENT Chemicals: KITCHEN SINK Lead: SOFTENED + CHEMICAL

Bacteriological Test

Next Day 11:30

Next Day 3:30

2 Day

FEED SYSTEM

FULL Chemical Analysis

(Iron, Nitrite/Nitrate, Turbidity, Lead)

Next Day

2 Day

3 Day

BASIC Chemical Analysis

(Iron, Nitrite/Nitrate, Turbidity)

Next Day

2 Day

3 Day

NO UV LIGHT

Lead Arsenic

Next Day

2 Day

3 Day

Cadmium

2 Day

4 Day

6 Day

Radium Gross Alpha

One Week

2 Week

Special Instructions:

Released By: R Date: 12/20/18 Time 4:30 Received By:

Released By: Date: Time Received By:

(*) TAT: is by Close of Business: Samples for chemical analysis received at 1:30 or later cannot be guaranteed "Next Day" results. TAT's are a good faith estimate and are not guaranteed.

LABORATORY SAMPLE RECEIPT INFORMATION

Samples Delivered on ICE: YES NO N/A Add Qualifiers: Non-Certified Holding Time Sample Volume Frozen

Received in LAB By: Date: 12/20/18 Time 16:30

Ver: 08042015

Environmental Testing Lab Inc.

108 Old Solomons Island Rd
Annapolis, MD 21401



3430 Rockefeller Ct
Waldorf, MD 20602

State Certified Water Quality
Laboratory # 106

State Certified Water Quality
Laboratory # 139

Certificate of Analysis

Hague Quality Water
814 E. College Parkway
Annapolis, MD 21409

Project
Date Received 12/19/2018
Date Reported 12/20/2018

This report is the sole property of Hague Quality Water. Any questions about the report MUST be directed to Hague Quality Water at (410) 757-2992.

Environmental Testing Lab is not at liberty to discuss this report without written consent from Hague Quality Water.

Sample No: 167269-01
Location: 3314 Sang Rd.
Glenwood, MD 20718

Sampled: 12/19/2018 9:30:0

Sampler: TEdwards8309TE (Exp. 5/18/2019)

Sample Point: Kitchen (vaw)

| Parameter | Method | Result | Qualifiers | Units | RL | Test Date | Analyst |
|------------------------|-----------|--------|-------------|----------|------|------------|---------|
| Iron, Total | SM 3500 D | 0.08 | | mg/l | 0.05 | 12/20/2018 | DB-139 |
| Turbidity | EPA 180.1 | 1 | | NTU | 0.5 | 12/20/2018 | RM-139 |
| Nitrate + Nitrite as N | EPA 353.2 | 1.8 | | mg/l | 1 | 12/20/2018 | DB-139 |
| pH | Field | 6.0 | X-Secondary | pH Units | 1 | 12/19/2018 | - |

X A result qualified with an "X" DOES NOT meet EPA Drinking Water Standards. EPA has Primary Standards (health related, enforceable) and Secondary Standards (non-health related, non-enforceable). Refer to page two of this report, the case narrative, to see if the parameter with an "X" is a "Primary" or a "Secondary". The narrative is available online at www.MyWaterTesting.com under documents. We can only discuss these results with the person or Company that this report is address to.

Approved By

Daniel J. Brumsted, Laboratory Director

Annapolis

Ph 410-224-4304 Fax 443-926-0586

Waldorf

Ph 410-224-4304 Fax 443-926-0586

Environmental Testing Lab, Inc.

CASE NARRATIVE

For those not familiar with reading a laboratory report and putting the result(s) into a more meaningful light the following information may assist you in making any decisions based on the results of the sample(s) submitted for analysis.

Qualifiers – A note added to a result to provide the end user with additional information about the result or how it was obtained.

X = Parameter dose NOT meet EPA Primary/Secondary Guidelines for Drinking Water.

BLANK (no qualifier) = Parameter DOSE meet EPA Primary/Secondary Guidelines for Drinking Water.

RL- Reporting Limit this is the lowest concentration of parameter that we can detect.

ND – Not Detected, see RL

Maximum Contaminate Level - The EPA establishes a (MCL) which is the “highest level of a contaminate that is allowed in drinking water”

The U.S. Environmental Protection Agency (EPA) publishes the National Primary Drinking Water Standards which are divided into two categories'. **Primary Contaminates** which are health related, and for a “public” water systems, enforceable. These are identified with a “P” in the table. **Secondary Contaminates** are non-health related and non-enforceable, they may cause cosmetic and/or aesthetic effects and are identified with an “S”. Some parameters are unregulated and are identified with a “U”.

This table is not an official EPA document, it is intended to provide the user with some perspective and it is assumed the water is from a privately owned well.

| Parameter | MCL mg/L | Type | Effects | Sources | Treatment (1) |
|------------------------------------|-------------------|------|---|---|--|
| Coliforms Total Fecal/E coli | Absent | P | Not a health threat itself used to indicate whether other potentially harmful bacteria may be present | Naturally present. Fecal coliforms & E. coli only come from human & animal waste. | Chlorinate the well. Install Chemical feeder or U/V light. |
| Arsenic | 0.010 | P | Skin damage, circulatory system problems, increased risk of cancer | Natural deposits | Reverse Osmosis (R/O). Ion exchange |
| Cadmium | 0.005 | P | Kidney damage | Natural deposits, galvanized pipes, | Reverse Osmosis (R/O). |
| Lead | 0.015 | P | Infants/children-developmental delays. Adults kidney problems & high blood pressure | Corrosion of household plumbing | Reverse Osmosis pH correction, pipe replacement |
| Nitrate+Nitrite-N | 10 | P | Infants less than 6 mo's can become Seriously ill. | Runoff from fertilizer, leaching from septic tanks, naturally occurring | Reverse Osmosis (R/O). Ion exchange |
| Radium Gross Alpha | 5 pCi/L Note 2 | P | Increased risk of cancer | Erosion of natural deposits | Reverse Osmosis Water Softener |
| Radium 226 + 228 | 5 | P | Increased risk of cancer | Erosion of natural deposits | Reverse Osmosis Water Softener |
| Iron | 0.3 | S | Possible staining on plumbing fixtures and laundry | Naturally Occurring | Water Softener |
| pH | 6.5-8.5 | S | Water is acidic or basic | Naturally Occurring | Neutralizer |
| Turbidity (3) | 10 NTU | S | Interferes with filtration | Naturally Occurring | Contact a Well Driller |

NOTES:

- 1) The Treatment Column is from information provided from various water treatment companies that do business with us. More information is available from epa.gov/safewater.
- 2) If Gross Alpha is between 5-15 pCi/L test for Radium 226/228. If Gross Alpha is above 15 pCi/L consider water treatment equipment.
- 3) Turbidity is a parameter that is continuously monitored at a water treatment plant. Privately owned wells do not have a turbidity MCL. Local Health Departments have used 10 NTU as a level at which if exceeded, and not because of high iron, the well itself may need repair.

ENVIRONMENTAL TESTING LAB, INC - CHAIN OF C

ANNAPOLIS
410-224-4304 FAX 443-926-0586

WALDOE
410-224-4304

167269 Date Due: 12/20/2
Client: Hague Quality Water
Project:

Company Name, Address Phone & Fax

Hague
8142 College Parkway
Annapolis MD 21409

Testing Address

3314 SANG RD
STREET
GROVER, MD
CITY STATE ZIP

Send Report By: Fax Postal Service Email

THIS FORM WILL BE ATTACHED AS A PERMANENT PART OF YOUR FINAL REPORT

FIELD COLLECTION INFORMATION

Collected: Date 12/19/18 Time 9:30 Well Tag #:
Collectors Name: TIM EDWARDS Certification # TE8309 Expires 7/19
Collectors Signature: Circle One: PRIVATE WELL or CITY WATER
pH: 6.0 Chlorine, Total mg/L: 2.0 Results for U & O Permit? YES NO Sample Clear when drawn? YES NO
Sand present? YES NO If "YES" submit one liter of sample to lab for testing
Sample Tap Bacteria: Chemicals: KITCHEN SINK Lead:

Bacteriological Test Next Day 11:30 Next Day 3:30 2 Day
FULL Chemical Analysis (Iron, Nitrite/Nitrate, Turbidity, Lead) Next Day 2 Day 3 Day
BASIC Chemical Analysis (Iron, Nitrite/Nitrate, Turbidity) Next Day 2 Day 3 Day
Lead Arsenic Next Day 2 Day 3 Day
Cadmium 2 Day 4 Day 6 Day
Radium Gross Alpha One Week 2 Week

Special Instructions:

Released By: Date: 12/19/18 Time 10:58 Received By:
Released By: Date: Time Received By:

(*) TAT: is by Close of Business; Samples for chemical analysis received at 1:30 or later cannot be guaranteed "Next Day" results.
TAT's are a good faith estimate and are not guaranteed.

LABORATORY SAMPLE RECEIPT INFORMATION

Samples Delivered on ICE: YES NO N/A Add Qualifiers: Non-Certified Holding Time Sample Volume Frozen

Received in LAB By: Date: 12/19/18 Time 10:58

Ver: 08042015

KNL Environmental

3202 N. Florida Ave. Tampa, FL 33603
Phone: (813) 229-2879 Fax: (813) 229-0002

CHAIN OF CUSTODY RECORD

Email: jhayes@knlenvironmental.com

| | | | | | | | |
|---|-----------------------------|-----------|--------------------|-----------------|--------------------|--|--|
| Company Name: TIMOTHY EDWARDS / HAGUE | | | | Preservative | | | |
| Address: 8149 COLLEGE DR | | | | | | | |
| City/State/Zip: ANNAPOLIS, MD 21409 | | | | | | | |
| Phone # 410-757-2992 Attn: TIM | | | | | | | |
| <div style="text-align: center; font-size: 2em;">R</div> <div style="text-align: right; font-size: 1.5em;">12-18-18</div> | | | | # of containers | Analysis Requested | | |
| | | | | | | | |
| SAMPLE ID | SAMPLE DESCRIPTION/LOCATION | DATE/TIME | MATRIX | | | | |
| # | 3314 SANG RD | 12/7/18 | W | 2 | | | |
| | GLENWOOD, MD | 11:30 | | | | | |
| | GROSS ALPHA + GROSS BETA | | | | | | |
| | OTHER TEST | | | | | | |
| | LONG TERM | | | | | | |
| | Radium 226/228 | | | | | | |
| *WW - Wastewater DW - Drinking Water GW - Groundwater SW - Surface Water SL - Sludge Other: | | | | | | | |
| Special Instructions: | | | | | | | |
| Relinquished By: | | | | Accepted By: | | | |
| Print Name/Company | Signature | Date/Time | Print Name/Company | Signature | Date/Time | | |
| Timothy Edwards | | 12/1/18 | KNL | | 12-11-18/1330 | | |
| Relinquished By: | | | | Accepted By: | | | |
| Print Name/Company | Signature | Date/Time | Print Name/Company | Signature | Date/Time | | |
| | | | | | | | |
| Relinquished By: | | | | Accepted By: | | | |
| Print Name/Company | Signature | Date/Time | Print Name/Company | Signature | Date/Time | | |
| | | | | | | | |

Environmental Testing Lab Inc.

108 Old Solomons Island Rd
Annapolis, MD 21401



3430 Rockefeller Ct
Waldorf, MD 20602

State Certified Water Quality
Laboratory # 106

State Certified Water Quality
Laboratory # 139

Certificate of Analysis

Hague Quality Water
814 E. College Parkway
Annapolis, MD 21409

Project
Date Received 12/7/2018
Date Reported 12/10/2018

This report is the sole property of Hague Quality Water. Any questions about the report MUST be directed to Hague Quality Water at (410) 757-2992.

Environmental Testing Lab is not at liberty to discuss this report without written consent from Hague Quality Water.

Sample No: 167048-01 Sampled: 12/7/2018 Sampler: TEdwards8309TE (Exp. 5/18/2019)
Location: 3314 Sang Road Preservation: Ice
Glenwood, MD Sample Point: Pressure Tank

| Parameter | Method | Result | Qualifiers | Units | RL | Test Date | Analyst |
|-------------------------|--------------|--------------|-------------|-----------|------|------------|---------|
| Bacteria-Total Coliform | Colitag Test | Present/Fail | — | Per/100ml | 1 | 12/07/2018 | LC-106 |
| Bacteria-E.coli | Colitag Test | Absent/Pass | | Per/100ml | 1 | 12/07/2018 | LC-106 |
| Iron, Total | SM 3500 D | 3.03 | X-Secondary | mg/l | 0.05 | 12/10/2018 | DB-139 |
| Turbidity | EPA 180.1 | 246 | X-Secondary | NTU | 0.5 | 12/10/2018 | RM-139 |
| Nitrate + Nitrite as N | EPA 353.2 | 2.3 | | mg/l | 1 | 12/10/2018 | DB-139 |
| pH | Field | 5.7 | X-Secondary | pH Units | 1 | 12/07/2018 | - |

Field Test(s) such as chlorine and pH are reported on the attached COC form. "NT" means Not Tested

X A result qualified with an "X" DOES NOT meet EPA Drinking Water Standards. EPA has Primary Standards (health related, enforceable) and Secondary Standards (non-health related, non-enforceable). Refer to page two of this report, the case narrative, to see if the parameter with an "X" is a "Primary" or a "Secondary". The narrative is available online at www.MyWaterTesting.com under documents. We can only discuss these results with the person or Company that this report is address to.

Approved By

Daniel J. Brumsted, Laboratory Director

Annapolis

Waldorf

Ph 410-224-4304 Fax 443-926-0586

Ph 410-224-4304 Fax 443-926-0586

ENVIRONMENTAL TESTING LAB, INC - CHAIN OF CUSTODY

ANNAPOLIS
410-224-4304 FAX 443-926-0586

WALDORF
410-224-4304 FAX 443-926-0586

167048 Date Due:
Client: Hague Quality Water
Project:

Company Name, Address Phone & Fax

Hague
814 E. College Parkway
Annapolis, MD 21409

Testing Address

3314 Sang Rn.
STREET
Glenwood, Mo
CITY STATE ZIP

Send Report By: _____ Fax _____ Postal Service _____ Email _____

THIS FORM WILL BE ATTACHED AS A PERMANENT PART OF YOUR FINAL REPORT

FIELD COLLECTION INFORMATION

Collected: Date 12/7/18 Time _____ Well Tag #: _____

Collectors Name: TIM EDWARDS Certification # TE 8308 Expires 7/19

Collectors Signature: [Signature] Circle One: PRIVATE WELL or CITY WATER

pH: 5.7 Chlorine, Total mg/L: 0 Results for U & O Permit? YES NO Sample Clear when drawn? YES NO

Sand present? YES NO If "YES" submit one liter of sample to lab for testing

Sample Tap Bacteria: Pressure Tank Chemicals: Pressure Tank Lead: _____

Bacteriological Test Next Day 11:30 _____ Next Day 3:30 _____ 2 Day

FULL Chemical Analysis _____ Next Day _____ 2 Day _____ 3 Day
(Iron, Nitrite/Nitrate, Turbidity, Lead)

BASIC Chemical Analysis Next Day _____ 2 Day _____ 3 Day
(Iron, Nitrite/Nitrate, Turbidity)

_____ Lead _____ Arsenic _____ Next Day _____ 2 Day _____ 3 Day

_____ Cadmium _____ 2 Day _____ 4 Day _____ 6 Day

Radium Gross Alpha _____ One Week _____ 2 Week

Special Instructions: _____

Released By: [Signature] Date: 12/7/18 Time 2:20 Received By: _____

Released By: _____ Date: _____ Time _____ Received By: _____

(*) TAT: is by Close of Business; Samples for chemical analysis received at 1:30 or later cannot be guaranteed "Next Day" results.
TAT's are a good faith estimate and are not guaranteed.

LABORATORY SAMPLE RECEIPT INFORMATION

Samples Delivered on ICE: YES NO N/A Add Qualifiers: _____ Non-Certified _____ Holding Time _____ Sample Volume _____ Frozen

Received in LAB By: [Signature] Date: 12/7/18 Time 4:20

January 28, 2019

Giulia and Stephen Sikorski
7302 Shady Glen Lane
Columbia, MD 21046

Re: Radium test results for 3314 Sang Road
Well #HO-17-0219

Dear Mr. & Mrs. Sikorski,

Hague Quality Water of Maryland recently tested the drinking water for Gross Alpha, Gross Beta, Radium 226, and Radium 228. Gross Alpha and Gross Beta measure the total alpha particle 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 a region of Howard County. Your property is located well outside of this formation.

Results from pre-treatment testing completed on December 7, 2018 revealed a Gross Alpha level of 1.0 ± 0.8 picocuries/liter (pCi/L) while the Gross Beta level was 1.0 ± 6.5 pCi/L. The Gross Alpha level was below its maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta level was below its targeted value of 50 pCi/L (roughly equivalent to the annual dose rate of 4 millirems/year).

A pre-treatment Radium sample was collected on December 7, 2018 to assess the presence of Radium 226 and Radium 228. These naturally occurring isotopes of radium are considered important due to their longer half-lives and health significance. Results revealed a Radium 226 level of 0.9 ± 0.5 pCi/L and a Radium 228 level of 7.1 ± 1.2 pCi/L. The combined Radium 226 and Radium 228 value was above the MCL of 5 pCi/L. I contacted the laboratory that completed the testing, KNL Environmental Testing, and they said that the high value may have been due to the high turbidity of the well water.

Allied Well Drilling reworked the well on December 14, 2018 and effectively reduced the turbidity in the water. Another round of Gross Alpha, Gross Beta, Radium 226, and Radium 228 samples were collected to determine if improved turbidity levels would alter these test findings.

Results from pre-treatment testing completed on December 27, 2018 revealed a Gross Alpha level of 0.2 ± 0.7 pCi/L while the Gross Beta level was 1.7 ± 1.6 pCi/L. The Gross Alpha level was below its MCL of 15 pCi/L and the Gross Beta level was below its targeted value of 50 pCi/L. Results revealed a pre-treatment Radium 226 level of 0.2 ± 0.3 pCi/L and a Radium 228 level of 0.7 ± 0.6 pCi/L. The combined Radium 226 and Radium 228 value was below the MCL of 5 pCi/L.

Results from post-treatment testing (after a water softener and chemical feeder) completed on December 27, 2018 revealed a Gross Alpha level of 0.2 ± 0.7 pCi/L while the Gross Beta level was 0.0 ± 1.5 pCi/L. The Gross Alpha level was below its MCL of 15 pCi/L and the Gross Beta level was below its targeted

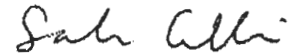
Maura J. Rossman, M.D., Health Officer

value of 50 pCi/L. Results revealed a post-treatment Radium 226 level of 0.4 ± 0.5 pCi/L and a Radium 228 level of 0.0 ± 0.5 pCi/L. The combined Radium 226 and Radium 228 value was below the MCL of 5 pCi/L.

Results from the samples collected on December 27, 2018 are all below the detection limits listed by KNL Environmental Testing (see attached test results). I spoke with the laboratory manager and he said that the results likely do not represent the true values given the levels of detection are higher, but levels are indeed below the detection limits. The detection limits are well below the respective MCLs; with respect to these parameters, the water does not exceed the MCLs for Gross Alpha, Gross Beta, Radium 226, and Radium 228.

Please contact me with any questions regarding the water sample results.

Sincerely,



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

Cc: File

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – JUNE 28, 2019

December 28, 2018

Homeowner
3314 Sang Road
Glenwood, MD 21738

**RE: Holly Hills Section II, Lot 18
3314 Sang Road
Building Permit: B18001781
Well Permit: HO-17-0219**

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 **12/3/2018**. Final approval of the well line connection to the dwelling was granted on **12/26/2018**. The well construction was completed on **1/22/2017**. Water samples were collected on **12/19/18 and 12/20/2018**.

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-17-0219. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

Preliminary water test results for radium were inconclusive. The Health Department has requested repeat testing and samples were to be collected prior to issuance of this Interim Certificate of Potability. High radium levels in water may require a treatment system in the house.

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.**



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

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

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a 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>

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,

Sarah Collins, LEHS
Groundwater Management Section
Well & Septic Program

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



FL DOH Certification #E84025
MD Laboratory Certification #283

Report Date: January 16, 2019

Rec'd 1/22/19

Hague Quality Water of Maryland
814 E. College Pkwy.
Annapolis, MD 21409

Field Custody: Client
Client/Field ID: 3314 Sang Rd
Raw #1/#2
Sample Collection: 12-27-18/1300
Lab ID No: 19.027
Lab Custody Date: 01-02-19/1305
Sample description: Water

CERTIFICATE OF ANALYSIS

| Parameter | Results | Units | Method | Analysis Date | Detection Limit |
|-------------|-----------|-------|-----------|---------------|-----------------|
| Gross Alpha | 0.2 ± 0.7 | pCi/l | EPA 900.0 | 1-5-19/0748 | 1.2 |
| Gross Beta | 1.7 ± 1.6 | pCi/l | EPA 900.0 | 1-5-19/0748 | 3.6 |
| Radium 226 | 0.2 ± 0.3 | pCi/l | EPA 903.0 | 1-15-19/1124 | 0.6 |
| Radium 228 | 0.7 ± 0.6 | pCi/l | EPA Ra-05 | 1-16-19/0906 | 0.9 |

Alpha Standard: Th-230

[Well less turbid
after well reworking]

James W. Hayes
Laboratory Manager

Test results meet all requirements of the NELAC standards.
Contact person: Jim Hayes (813) 229-2879.



FL DOH Certification #E84025
MD Laboratory Certification #283

Report Date: January 16, 2019

Rec'd 1/22/19

Hague Quality Water of Maryland
814 E. College Pkwy.
Annapolis, MD 21409

Field Custody: Client
Client/Field ID: 3314 Sang Rd
Treated #3 - softener
Sample Collection: 12-27-18/1300
Lab ID No: 19.028
Lab Custody Date: 01-02-19/1305
Sample description: Water

CERTIFICATE OF ANALYSIS

| Parameter | Results | Units | Method | Analysis Date | Detection Limit |
|-------------|-----------|-------|-----------|---------------|-----------------|
| Gross Alpha | 0.2 ± 0.7 | pCi/l | EPA 900.0 | 1-5-19/0749 | 1.4 |
| Gross Beta | 0.0 ± 1.5 | pCi/l | EPA 900.0 | 1-5-19/0749 | 3.6 |
| Radium 226 | 0.4 ± 0.5 | pCi/l | EPA 903.0 | 1-15-19/1124 | 1.0 |
| Radium 228 | 0.0 ± 0.5 | pCi/l | EPA Ra-05 | 1-16-19/0906 | 0.9 |

Alpha Standard: Th-230

[Water less turbid
after well reworking]

James W. Hayes

James W. Hayes
Laboratory Manager

Test results meet all requirements of the NELAC standards.
Contact person: Jim Hayes (813) 229-2879.

KNL Environmental

3202 N. Florida Ave. Tampa, FL 33603
Phone: (813) 229-2879 Fax: (813) 229-0002

CHAIN OF CUSTODY RECORD

Email: jhayes@knlenvironmental.com

20

| | | | | | | | | | | |
|-----------------|-----------------------------|-------------------------|---------|-----------------|--------------------|-------------|-------|------|-----|-----------|
| Company Name: | | HAGUE WATER OF MARYLAND | | Preservative | | | | | | |
| Address: | | 814 E. COLLEGE PKWY | | | | | | | | |
| City/State/Zip: | | ANNAPOLIS, MD 21407 | | | | | | | | |
| Phone #: | | 410-353-8501 | | Attn: | | TIM EDWARDS | | | | |
| | | | | # of containers | Analysis Requested | GROSS | ALPHA | BETA | RAD | 19.027-28 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| SAMPLE ID | SAMPLE DESCRIPTION/LOCATION | DATE/TIME | MATRIX* | | | | | | | |
| RAW #1 | 3314 SANG RD. | 12/28/18 | | | | | | | | |
| #2 | GREENWOOD, MD | 1:00 PM | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| TREATED | 3314 SANG RD. | 12/28/18 | | | | | | | | |
| #3 | GREENWOOD MD | 1:00 PM | | | | | | | | |
| # | | | | | | | | | | |

*WW - Wastewater DW - Drinking Water GW - Groundwater SW - Surface Water SL - Sludge Other:

Special Instructions:

| | | | | | |
|--------------------|--------------------|------------------|--------------------|--------------------|------------|
| Relinquished By: | | | Accepted By: | | |
| Print Name/Company | Signature | Date/Time | Print Name/Company | Signature | Date/Time |
| HAGUE | <i>[Signature]</i> | 12/28/18 1:00 PM | KNL | <i>[Signature]</i> | 12-19 1:05 |
| Relinquished By: | | | Accepted By: | | |
| Print Name/Company | Signature | Date/Time | Print Name/Company | Signature | Date/Time |
| | | | | | |
| Relinquished By: | | | Accepted By: | | |
| Print Name/Company | Signature | Date/Time | Print Name/Company | Signature | Date/Time |
| | | | | | |



FL DOH Certification #E84025
MD Laboratory Certification #283

Report Date: December 19, 2018

Hague Quality Water of Maryland
814 E. College Pkwy.
Annapolis, MD 21409

Field Custody: Client
Client/Field ID: Sample 1
3314 Sang Rd
Sample Collection: 12-07-18/1130
Lab ID No: 18.14830
Lab Custody Date: 12-11-18/1330
Sample description: Water

CERTIFICATE OF ANALYSIS

| Parameter | Results | Units | Method | GA | Analysis Date | Detection Limit |
|-------------|-----------------------------|-------|-----------|--------------------|---------------|-----------------|
| Gross Alpha | 1.0 ± 0.8 | pCi/l | EPA 00-02 | high solids method | 12-15-18/0754 | 1.4 |
| Gross Beta | 1.0 ± 6.5 results skewed | pCi/l | EPA 900.0 | | 12-15-18/0759 | 15.1 |
| Radium 226 | 0.9 ± 0.5 | pCi/l | EPA 903.0 | | 12-17-18/1200 | 0.7 |
| Radium 228 | 7.1 ± 1.2 | pCi/l | EPA Ra-05 | | 12-14-18/1434 | 1.2 |

Alpha Standards: Pb-210

[Water high in turbidity-
may have skewed results.]

James W. Hayes

James W. Hayes
Laboratory Manager

Test results meet all requirements of the NELAP standards.
Contact person: Jim Hayes (813) 229-2879.

Collins, Sarah

From: Collins, Sarah
Sent: Thursday, December 27, 2018 4:56 PM
To: Kenneth Knode
Cc: Timothy Edwards; Wolf, Kevin; Bricker, Robert
Subject: RE: We'll head 3314 Sang Rd

Thanks, Ken. If you are able to get us the signed radium agreement, Chain of Custody forms with the treatment listed, and the completion report from Allied we can issue the ICOP. Please include Robert Bricker on any emails related to the ICOP.

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

From: Kenneth Knode [mailto:KKnode@carusohomes.com]
Sent: Thursday, December 27, 2018 3:27 PM
To: Collins, Sarah
Cc: Timothy Edwards; Wolf, Kevin
Subject: Re: We'll head 3314 Sang Rd

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

Sarah, Again I appreciate your efforts to release the ICOP letter and working with us on 3314 Sang Rd. All the documents should be to you in the morning and if you would let us know the status Asap, we could forward it to inspector Kalie. He could release the u&o. Thanks again. Ken Caruso homes

Sent from my iPhone

> On Dec 27, 2018, at 11:05 AM, Collins, Sarah <SCollins@howardcountymd.gov> wrote:

>

> Hi Ken,

>

> The radium samples taken from the well on 12/7/18 before the liner was added show high levels of Radium 228. I spoke with the lab and some of the tests were complicated by the high levels of solids in the samples. We would like repeat Gross alpha, Gross beta, Radium 226, and Radium 228 both pre- and post- water softener treatment.

>

> In case the levels pre-treatment come back high and a softener is required we would like to have an agreement signed by the homeowners on hand. I have attached a copy of the agreement- we'll keep it with the file, and if treatment is required it'll need to be recorded in Land Records.

>

> The last items we need for the ICOP are a revised completion report from Allied and revised Chain of Custody forms from Hague stating the treatment for the samples.

>

> Thanks,

> Sarah

>

>

> -----Original Message-----

> From: Kenneth Knode [mailto:KKnode@carusohomes.com]

> Sent: Wednesday, December 26, 2018 1:48 PM

> To: Collins, Sarah

> Subject: Re: We'll head 3314 Sang Rd

>

> [Note: This email originated from outside of the organization. Please

> only click on links or attachments if you know the sender.]

>

>

> We've received final inspection at 3314 Sang Rd and if there's nothing

> left to test, could you release the well for UCOP? I know Tim has been

> in contact and the system was installed. Please let us, me know of the

> status and if anything is needed. Thanks in advance. Ken with Caruso

> homes

> 301-832-5266

>

> Sent from my iPhone

>

>> On Dec 26, 2018, at 12:13 PM, Kenneth Knode <KKnode@carusohomes.com> wrote:

>>

>> The well head bolts were replaced and installation completed at 3314

>> Sang Rd

>>

>> <IMG_0596.JPG>

>>

>>

>>

>> <IMG_0597.JPG>

>>

>>

>> Sent from my iPhone

> CONFIDENTIALITY NOTICE: This e-mail contains privileged and/or confidential information which is intended only for the use of the Addressee named above. If you are not the intended recipient, or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination or copying of this e-mail, or the taking of any action in reliance on the contents of this information, may be strictly prohibited. If you have received this e-mail in error, please notify us immediately and delete the material. Thank you.

> <Radium Agreement revised 7.16.18.pdf> <18.14830.pdf>

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Clerk of the Circuit Court for
Howard County
Land Records/Licensing

The Thomas Dorsey Building
9250 Bendix Road
Columbia, MD 21045
410-313-5850

=====

| | | |
|------------------------------|-------|-------|
| LR - Agreement Recording Fee | | |
| 1x | 20.00 | 20.00 |

Name: sikorski
Ref: 48

LR - Agreement Surcharge

| | | |
|----|-------|-------|
| 1x | 40.00 | 40.00 |
|----|-------|-------|

=====

| | |
|-----------|-------|
| SubTotal: | 60.00 |
| Total: | 60.00 |

=====

| | |
|----------|-------|
| REV-Cash | 60.00 |
|----------|-------|

12/28/2018 15:14

CC13-YW

#11455831/494/109

Thank you for waiting us today~



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

copy
Page 1 of 2

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 Stephen S. Koriski II ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 3314 Sang Rd, Glenwood MD 21738 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 14, Block # 24, Parcel # 92, Deed Reference # SB171436 and Tax Account # 04-359739 ("the Property").

Plat # 13722

WHEREAS, the Property lacks an available public drinking water source and is required to have an 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 17-0219 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:

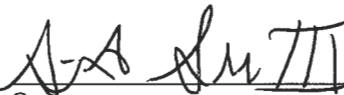
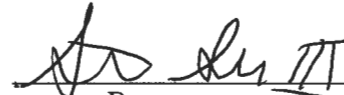
1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department

copy
page 2 of 2

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).

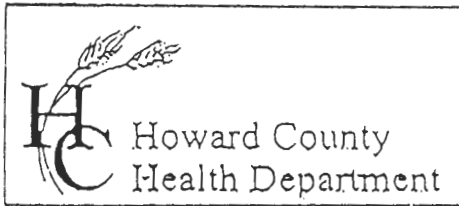
3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta (short and long term) and radium 226 / 228 levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or 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.

| | |
|---|--|
|  |  |
| Owner Stephan Sikorski | Buyer |
| 12/27/18 | 12/27/18 |
| Date | Date |

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

| | |
|---|----------|
|  | 12/28/18 |
| Howard County Health Department | Date |



7178 Columbia Gateway Drive, Columbia, MD 21046
(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:

Well Site Location:

Holly Hills 18 3314 Sang Rd
Subdivision/Property Name Lot# Road Name

- ☒ The well site has been staked by NJR Associates
(professional land surveyor or company employing professional land surveyors)
on 12-12-2017 (date) and does not require a site inspection.

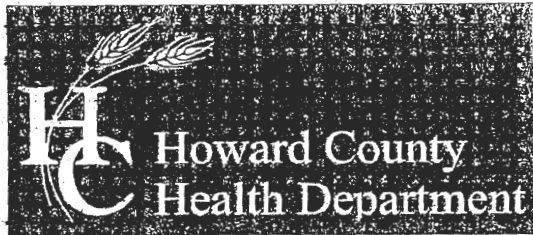
- ☐ The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

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

Revised 3/11/05

Call Greg Phillips if problem.

410-977-0864



Bureau of Environmental Health

8930 Stanford Blvd, Columbia, MD 21045

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Twitter: HowardCoHealthDep

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

January 5th, 2018
(1)

Larry Mayne MSD 027
Joseph L Mayne Well Drilling
5512 Ridge Road
Mt. Airy, MD 21771

Dear Mr. Mayne,

Thank you for your well permit application on behalf of our honored citizen; Steven Sikorski III of 7302 Shady Glen Drive in Columbia, Maryland (postal code 21046)

Regrettably, this application cannot be processed as submitted. The following corrective actions are required for timely processing of this well application:

Application Boxes in Section B4

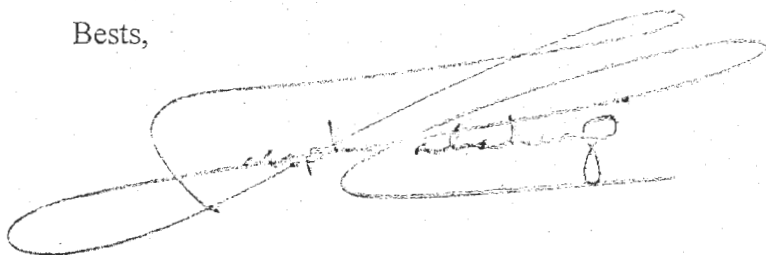
- **The proposed location of the well on lot must show two permanent structures such as buildings, septic system, roads and/or landmarks and indicate not less than two distance measurements to the well.**

This is a requirement of the Maryland Department of the Environment (MDE). Howard County does ask for a well site plan and the site to be staked by a licensed surveyor as part of our local application process. However, MDE only accepts the Green Well permit application, the Yellow completion report, and the White abandonment report at this time and they do not receive any supplemental permit materials required by local approving authorities.

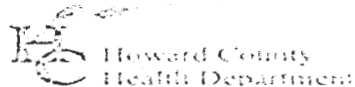
Moving forward, the Howard County Health Department will no longer be able to support service to correct incomplete Well Permit Applications. Please complete the missing elements in the green well permit form and resubmit the well permit application for processing.

Thank you for your understanding.

Bests,



Joseph C. Cabahug - LEHS
Environmental Health Specialist
Howard County Health Department - Well & Septic Program
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045
(o) 410-313-2643
(f) 410-313-2648



jcabahug@howardcountymd.gov

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SANG ROAD
(50' R.O.W.)

EX. SEPTIC AREA

EX. SEPTIC AREA

LOT 19

EX. BLDG.

EX. WELL HO-94-2692

LOT 5

EX. BLDG.

EX. WELL HO-94-0750

N 23°19'19" E
128.02'

LOT 18

HOLLY HILLS
SECTION II
42,503 SQ. FT.

EX. SEPTIC AREA

S 66°40'41" E
171.94'

10' B.R.L.

S 62°34'31" E
122.34'

N 27°25'29" E

EX. SEPTIC AREA

EX. BLDG.

LOT 15

LOT 17

EX. SEPTIC AREA

N 62°34'31" W
292.87'

10' B.R.L.

PROPOSED
2-STORY
FRAME
WITH BASEMENT

PROP. DRIVEWAY

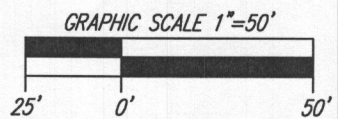
PROP. WELL

EX. BLDG.

EX. DRIVEWAY

EX. WELL
HO-94-3657

PRESERVATION
PARCEL "A"



PLAN PREPARED BY:
NJR & ASSOCIATES
Land Surveying and Planning
2770 STATE ROUTE 32
WEST FRIENDSHIP, MD 21794
TEL: (240) 508-3200

NOTES:

- 1- ELEVATIONS SHOWN HEREON ARE BASED ON HOWARD COUNTY GIS FILES.
- 2- ALL EXISTING WELLS AND SEPTIC AREAS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES HAVE BEEN SHOWN ON THIS PLAN.

Holly Hills Lot 18
LOT 16
Approved 01/16/18
Ho-17-0219
Staked By NJR

PLAN TO ACCOMPANY A WELL PERMIT APPLICATION

LOT 18
HOLLY HILLS
SECTION II
PLAT No. 13722
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' DATE: JAN. 11, 2018

FILE No.
2442