

C1 6448

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

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

COUNTY NUMBER 13 A518592

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY 04 13 05

Depth of Well 22 300 26 (TO NEAREST FOOT) 4/15/05 O.K. BB

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-94-4140

OWNER Land Design and Development STREET OR RFD Driver Road TOWN Marriottsville SUBDIVISION Antonis Property SECTION LOT 4

WELL LOG Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for overburden, brown shale, gray rock, and water at 80+240'.

GROUTING RECORD Form: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CEMENT CM, BENTONITE CLAY BC), NO. OF BAGS 15, NO. OF POUNDS 1500, GALLONS OF WATER 90, DEPTH OF GROUT SEAL 0 to 65 ft.

CASING RECORD Form: casing types insert appropriate code below (PL), MAIN CASING TYPE (PL), Nominal diameter top (main) casing (nearest inch) 6, Total depth of main casing (nearest foot) 74.

OTHER CASING (if used) diameter inch, depth (feet) from to

SCREEN RECORD Form: screen type or open hole insert appropriate code below (ST), DEPTH (nearest ft.) 74, 300.

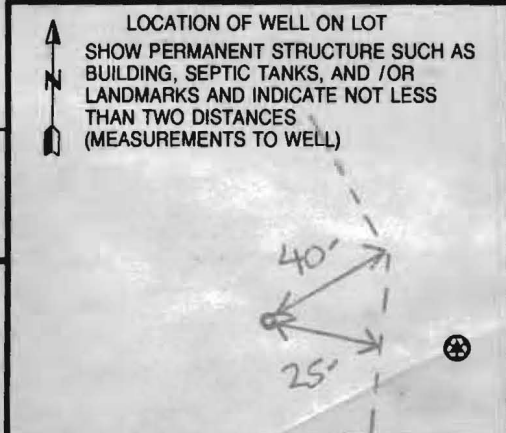
WELL HYDROFRACTURED (Y), CIRCLE APPROPRIATE LETTER (A, E, P), I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 28.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M SD 162, DRILLERS SIGNATURE (Robert Bean), LIC. NO. JS D 052, SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

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

C3 PUMPING TEST Form: PUMPING TEST 3, HOURS PUMPED (nearest hour) 8 9, PUMPING RATE (gal. per min.) 11 15, METHOD USED TO MEASURE PUMPING RATE Submersible, WATER LEVEL (distance from land surface) BEFORE PUMPING 40 ft, WHEN PUMPING 216 ft, TYPE OF PUMP USED (for test) S submersible.

PUMP INSTALLED Form: 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, 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) 1 50 51.



B 1 6606

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL W521985 please type

STATE PERMIT NUMBER

HO-94-4140 fill in this form completely

Date Received (APA) 02-10-05

OWNER INFORMATION

Land Design + Development 8000 Main Street Ellicott City MD 21043

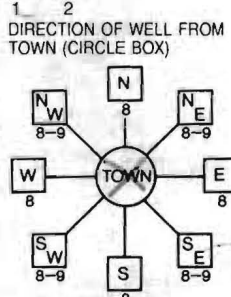
LOCATION OF WELL

Howard County Antonis Property Marriottsville

DRILLER INFORMATION

Michael Isom MS D1162 G Edgar Harris Sons Corp 12047 Falls Rd Cockersville 21030

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Driver Road

300 FT distance from road

WELL INFORMATION

APPROX. PUMPING RATE 5 GAL. PER MIN. AVERAGE DAILY QUANTITY NEEDED 750 GAL. PER DAY

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION (circled) FARMING... INDUSTRIAL... PUBLIC WATER SUPPLY WELL... TEST, OBSERVATION, MONITORING... GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) A518592 Brian Baker 3/23/2006

APPROXIMATE DEPTH OF WELL 250 FEET APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

AIR-ROTary AIR-PERCussion (circled) ROTARY (Hydraulic Rotary) DRIVE-POINT

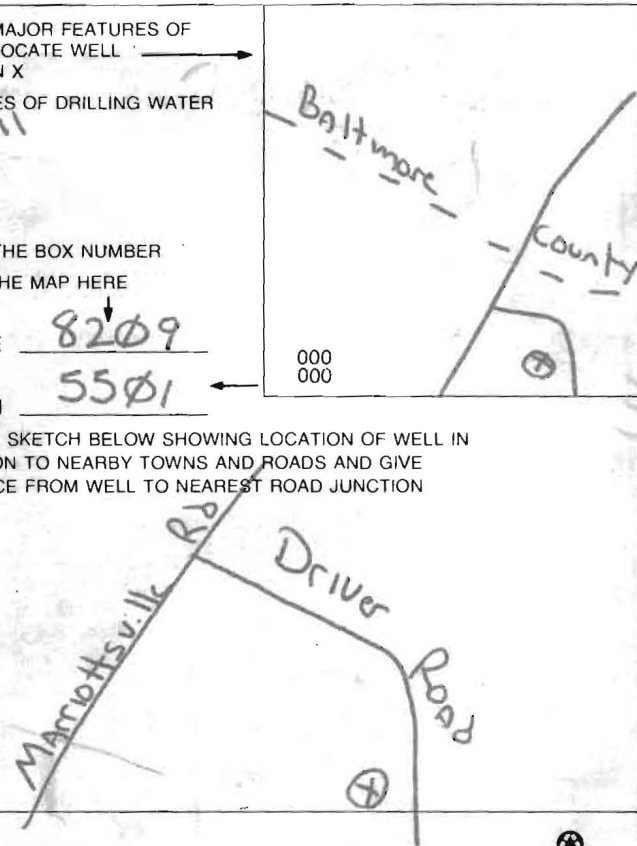
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL (circled) THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED... THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY... THIS WELL WILL DEEPEMED AN EXISTING WELL

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER 1. Well

WRITE THE BOX NUMBER FROM THE MAP HERE E 8209 N 5501

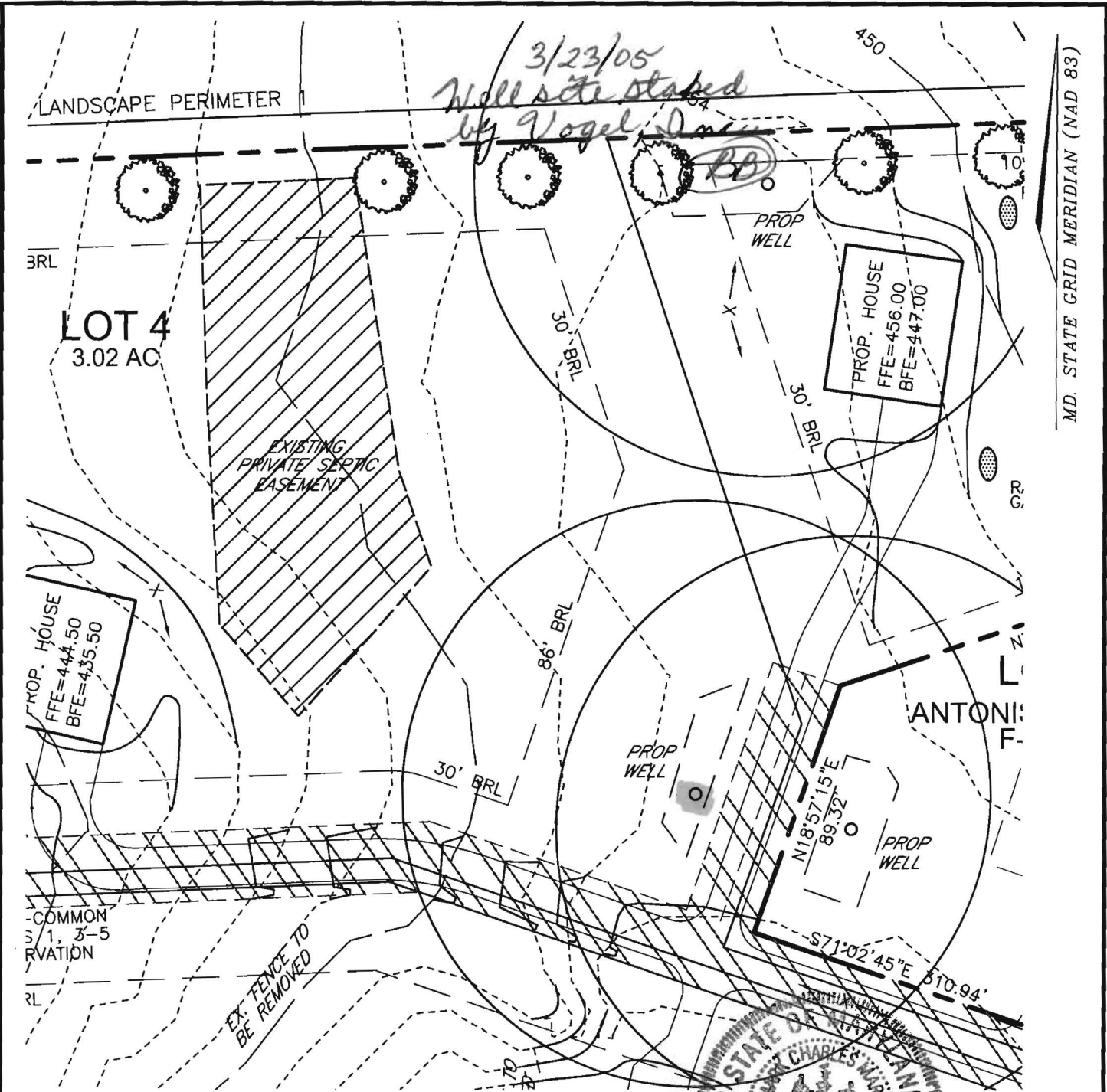
DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER G PERMIT No. HO-94-4140

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED



MD. STATE GRID MERIDIAN (NAD 83)

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961



SCALE: 1"=50'
 DRAWN BY: LJT
 CHECKED BY: RHV
 DATE: 3.11.05
 PROJECT NO.: 03-32
 SHEET NO. 1 OF 1

**ANTONIS PROPERTY
 LOT 4**

PROPOSED WELL LOCATION EXHIBIT

TAX MAP 10 PARCEL 271
 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**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: K.H. Plumbing, Inc. Telephone #: 410-259-5910
Address: 470 DOTSIE DR.
WESTMINSTER, MD 21158

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer

License # and name of individual responsible for the field installation:
Name (Print): Keith Hundermark License# 8300

***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: PHL Wegener Telephone #: 410-977-8927
Subdivision: Antonis Property Lot #: 4 Well Tag #: HO 9A-4140
Site Address: 870 DRIVER RD

Submersible Pump Data	Pitless Adapter	Well Cap and Electric Conduit
Make: <u>Cowlds</u>	Make: <u>American Granby</u>	Two piece watertight cap: <u>✓ LK-61</u>
Model #: <u>56507422C</u>	Model #: <u>PT 800NL</u>	Screened, vented well cap: _____
Pump Capacity <u>5</u> GPM	Depth: <u>36"</u> (36" min)	Cap secured to casing: <u>Yes</u>
Well Yield: <u>11</u> GPM	NSF/WSC approved <u>Yes</u>	Conduit min 18" B.G.: <u>Yes</u>
Depth of well encountered at time of pump installation: <u>300</u> (feet)	Conduit secured to well cap: <u>Yes</u>	

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	House Connection
Type: <u>POLYETHYLENE "1.5" X-3408</u>	PVC sleeve to undisturbed soil at wall penetration: <u>✓</u>
PSI: <u>160</u> (160 psi min)	Length of sleeve (5' minimum from foundation): <u>6'</u>
Depth of supply line: <u>36"</u> (36" min)	Sleeve sealed properly: <u>✓</u>

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: Keith Hundermark date: 2-28-13

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

Date Insp. Requested: _____ Date Insp. Approved: 3/5/2013 Inspector: BBB

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 ✓



Bureau of Environmental Health
 7178 Columbia Gateway Drive, Columbia, MD 21046-2147
 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

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

REQUEST FOR TEMPORARY DEVIATION TO
 RADIUM STANDARDS FOR CERTIFICATE OF POTABILITY

DATE: 4-19-13 WELL PERMIT #: HO - ~~0~~ - 5-44444

PROPERTY OWNER: Phil Wagener
 SUBDIVISION & LOT #: _____
 PROPERTY ADDRESS: 870 Driver Road
Marriottsville Md. 21104

TESTIMONIAL: Steps that will be taken, or that have already been taken, by the well owner or agent to bring the well into compliance with COMAR 26.04.04.09 (B) within forty-five (45) days. If post-treatment water samples have been taken, state the specific analyses that will be reported in results, e.g. Gross Alpha and Gross Beta and/or Radium.

CONDITIONS:

- 1) Within forty-five (45) days, the well installed under permit # HO - - will be documented to have Gross Alpha level of 15 pCi/l, Gross Beta level 50 pCi/l, and/or sum of Radium 226 and Radium 228 at level 5 pCi/l or less (including reported margin of error) at the primary drinking tap as a result of installation of a water softener system, or at the reverse osmosis tap.
- 2) If the radium condition cannot be remediated to a level of Gross Alpha level of 15 pCi/l, Gross Beta level 50 pCi/l, and/or sum of Radium 226 and Radium 228 at level 5 pCi/l or less (including reported margin of error) via installation of a water softener treatment or reverse osmosis system, then drilling a replacement well would likely be necessary. Issuance of a Final Certificate of Potability will be delayed until the issue is resolved.

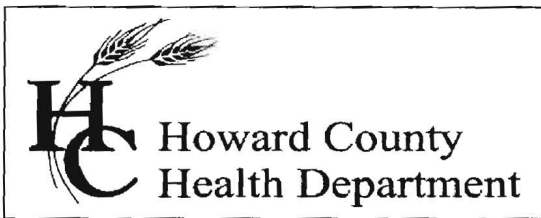
I hereby request that a Forty-five Day Temporary Deviation to COMAR 26.04.04.09 be granted for the well installed under permit # HO - - . I am fully aware of the conditions under which this deviation will be granted, and of my responsibilities as the well owner which include advising any future buyer/tenant of the installation, condition and maintenance responsibilities of the radium removal device.

Prospective Owner's Original Signature(s) [Person(s) that intend to live in the dwelling

Phil Wagener Phil Wagener

Prospective Owner's Day Time Phone Number(s)

443-262-2576 _____



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
Main: 410-313-6300 | Fax: 410-313-6303
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

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

TEMPORARY INTERIM CERTIFICATE OF POTABILITY
TEMPORARY DEVIATION FOR RADIUM
Expiration Date – JUNE 3, 2013

April 19, 2013

Phill Wagener
870 Driver Road
Marriottsville, MD 21104

**RE: Tax Map 10, Parcel 271
870 Driver Road
Building Permit: B12003608
Well Permit: HO-94-4140**

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **4/9/2013**. Final approval of the well line connection to the dwelling was granted on **3/5/2013**. The well construction was completed on **4/13/2005**. Water samples were collected on **4/5/2013**.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking.

Gross Alpha and Beta samples have not been collected. When obtained, results of **Gross Alpha** and **Gross Beta** analyses must be **at or below the maximum contaminant limit (MCL) of 15 pCi/L and/or 50 pCi/L, respectively.**

This is a **temporary deviation** to allow additional time for analyses of radionuclide content in a submitted water sample and installation of treatment that may be needed to meet EPA recommendations.

This Department will grant a **temporary deviation** to the Interim Certificate of Potability on condition that water sample results for pre- and post-treatment short term and long term gross alpha/beta and radium 226/228 are submitted to this Department **within 45 days**. Those results must indicate that the radionuclide removal system is effectively maintaining a Gross Alpha level of less than **15 pCi/L**, a Gross Beta level of less than **50 pCi/L**, and a Radium 226/228 level of less than **5 pCi/L**.

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

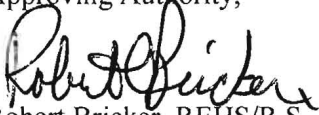
1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.
2. It is recommended that a Maryland certified water laboratory certified for radionuclide analysis perform a yearly radionuclide analysis.
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.**

This Temporary Interim Certificate of Potability will expire 45 days from the date of issuance. **Failure to submit the required radium sample results and obtain an Interim Certificate of Potability before the expiration date 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 water sample appointment or contact a Maryland certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:

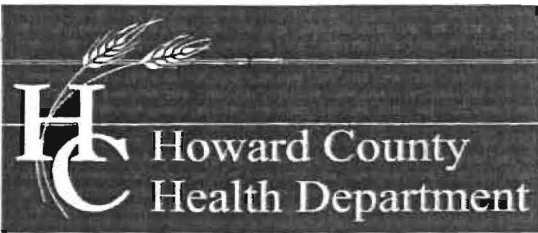
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,



Robert Bricker, REHS/R.S.
Environmental Sanitarian
Well & Septic Program

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



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
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www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

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

November 16th, 2012

Carrigan Homes
Attn: Owen Kelly
9812 Caitlins Ct
Ellicott City, MD 21042

**RE: 870 Driver Road
Antonis Property, Lot 4
Marriottsville, MD 21104**

Dear Mr. Kelly,

Upon recent review of the above referenced property, it was noted that this lot is within an area of naturally occurring radiation in the county (i.e., Radionuclides) that may exist in your location of development. Prior to occupancy the Health Dept. must collect a raw water sample to test for the presence of radium.

If the results of the initial radium test exceed the maximum contaminant levels, additional testing for Gross Alpha, Gross Beta (short-term and long-term), and Radium 226/228 will be necessary prior to issuance of an Interim Certificate of Potability (ICOP), in essence prior to Use and Occupancy. You may choose to test either (A) a raw water sample, or (B) a post-treatment sample. The analysis of each water sample requires approximately one month.

Should you choose to install a treatment system, an agreement for installation and maintenance must be signed by a representative of your organization and the Director, Bureau of Environmental Health, and then recorded at Howard County Land Records.

Please contact me at the Bureau of Environmental Health if you should have any further questions (410-313-1771).

Respectfully,

A handwritten signature in black ink, appearing to read 'Heidi Scott'.

Heidi Scott, R.S.
Well and Septic Program
E-mail: hscott@howardcountymd.gov

cc: Well & Septic program file



TRACE LABORATORIES, INC
 5 North Park Drive
 Hunt Valley, MD 21030 USA
 Telephone: 410/584-9099 / Fax: 410/584-9117
 Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

Carrigan Homes
 Attn: Owen Kelly
 9812 Caitlins Court
 Ellicott City, Maryland 21042

S/O Number: 88705

Report Date: April 8, 2013

Property Sampled: 870 Driver Road, 21104
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B12003608
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard **Subdivision:** Antonis Prop RS LTS 1&2
Map: 10 **Parcel:** 271 **Lot #:** 4

Date/Time Collected in Field: April 5, 2013 @ 12:26 pm
Date/Time Received in Lab: April 5, 2013 @ 1:46 pm

*OK
 JB
 4-18-13*

Well Tag #: HO-94-4140
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: None

PARAMETER	METHOD	MCL/*SMCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	Absent	Pass
E. coli	SM 9223B	Absent	Absent	Pass
Nitrate	SM 4500D	10 mg/L as N	6.0 mg/L as N	Pass
Turbidity	EPA 180.1	10 NTU	2.3 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	6.5 Units	***
Sand		Absent	Absent	Pass

The results in this report relate only to those items tested. If any additional information or clarification of this report is required, please contact us. This test report shall not be reproduced except in full without the written approval of Trace Laboratories Inc.

Katherine C. Higgs
 Katherine C. Higgs
 Manager – Drinking Water Testing

MCL: Maximum Contamination Level, an enforceable level established by the EPA
 *SMCL: Secondary Maximum Contamination Level, a level recommended by the EPA
 ***A non-enforceable parameter that may cause cosmetic effects or aesthetic effects (such as taste, color or odor) in drinking water.