

C1 2984 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 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER A 542044

ST/CO USE ONLY DATE RECEIVED MM DD YY 8 13

DATE WELL COMPLETED MM DD YY 6 16 2006 Depth of Well 22 400 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" Ho-95-0392 28 29 30 31 32 33 34 35 36 37

OWNER Warfield Jr, Howard Rd, Dayton Md, SUBDIVISION, SECTION, LOT

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Sand and Gray Mica Rock.

GROUTING RECORD: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM), NO. OF BAGS 12, NO. OF POUNDS 1198, GALLONS OF WATER 72, DEPTH OF GROUT SEAL 0 to 39 ft.

CASING RECORD: MAIN CASING TYPE (ST), Nominal diameter top (main) casing 6 inch, Total depth of main casing 42 feet.

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

SCREEN RECORD: screen type or open hole (ST), insert appropriate code below, DEPTH (nearest ft.) 41, 400

NUMBER OF UNSUCCESSFUL WELLS: 0, WELL HYDROFRACTURED (Y)

CIRCLE APPROPRIATE LETTER: A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO. 1 M SD 024, DRILLERS SIGNATURE, LIC. NO. 1 D

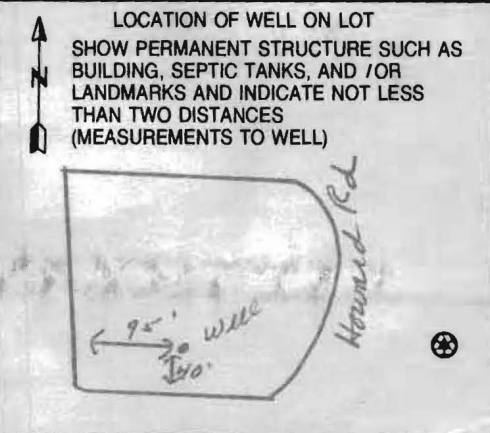
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q, TELESCOPE CASING, LOG INDICATOR, OTHER DATA

PUMPING TEST: PUMPING TEST, HOURS PUMPED (nearest hour) 6, PUMPING RATE (gal. per min.) 2.3, METHOD USED TO MEASURE PUMPING RATE Bucket, WATER LEVEL (distance from land surface) BEFORE PUMPING 10 ft, WHEN PUMPING 338 ft, TYPE OF PUMP USED (for test) S submersible

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, - below (nearest foot) 49 50 51



B 1 9833

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO - 95 - 0392

524406 please type

fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

Warfield, Jr Kennard

P.O. Box 30

Glenside md 21737

57 Town 70 State 72 Zip 76

Driller's Name Joseph L. Mayne MS D 024

Firm Name Joseph & Mayne Well Drilling

Address 5512 Ridge Rd Mt. Airy Md 21771

Signature Date

WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) 5

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500

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

G GEO-THERMAL

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jettied & DRIVEN

AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)

CABLE REVERSE-ROTary DRIVE-POINT

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

Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROX. PERMIT NUMBER HO 1990 G014 (84)

PERMIT No. HO - 95 - 0392

SPECIAL CONDITIONS

LOCATION OF WELL

Howard 8 COUNTY 21

Kennard Warfield, Jr Subdivision 23 SUBDIVISION 42

SECTION 44 46 LOT 48 50

Dayton 52 NEAREST TOWN 71

MILES FROM TOWN (enter 0 if in town) 3 M I 73 76 77 78

Howard Rd 11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH SOUTH

34 320 37 DISTANCE FROM ROAD FT 38 39

ENTER FT OR MI TAX MAP: 21 BLK: PARCEL 68

DIRECTION OF WELL FROM TOWN (CIRCLE BOX) N NE E S SE SW W

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

HOWARD (13) A542044

COUNTY NAME COUNTY NO. STATE SIGNATURE

DATE ISSUED 5/31/06

43 MM DD YY 48 CO SIGNATURE EXP. DATE

NORTH GRID 50 55 EAST GRID 57 63

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER 1. Sweetwater

2. 3. Informed Betty Mayne

WRITE THE BOX NUMBER FROM THE MAP HERE

000 000

516

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

Philadelphia Rd

Howard Rd

Dayton

well

Dayton

Dayton

FIELD DATA SHEET  
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-0392  
 Location of property (road) Howard Rd  
 Subdivision Kennard Warfield Jr. Sub. Lot 1 Block \_\_\_\_\_ Plat \_\_\_\_\_ Sec. \_\_\_\_\_  
 Well Driller Joseph Mayne Owner Kennard Warfield Jr.

Depth of well 400'  
 Distance of measuring point (M.P.) above ground 1'  
 Static water level (S.W.L.) below M.P. 10'

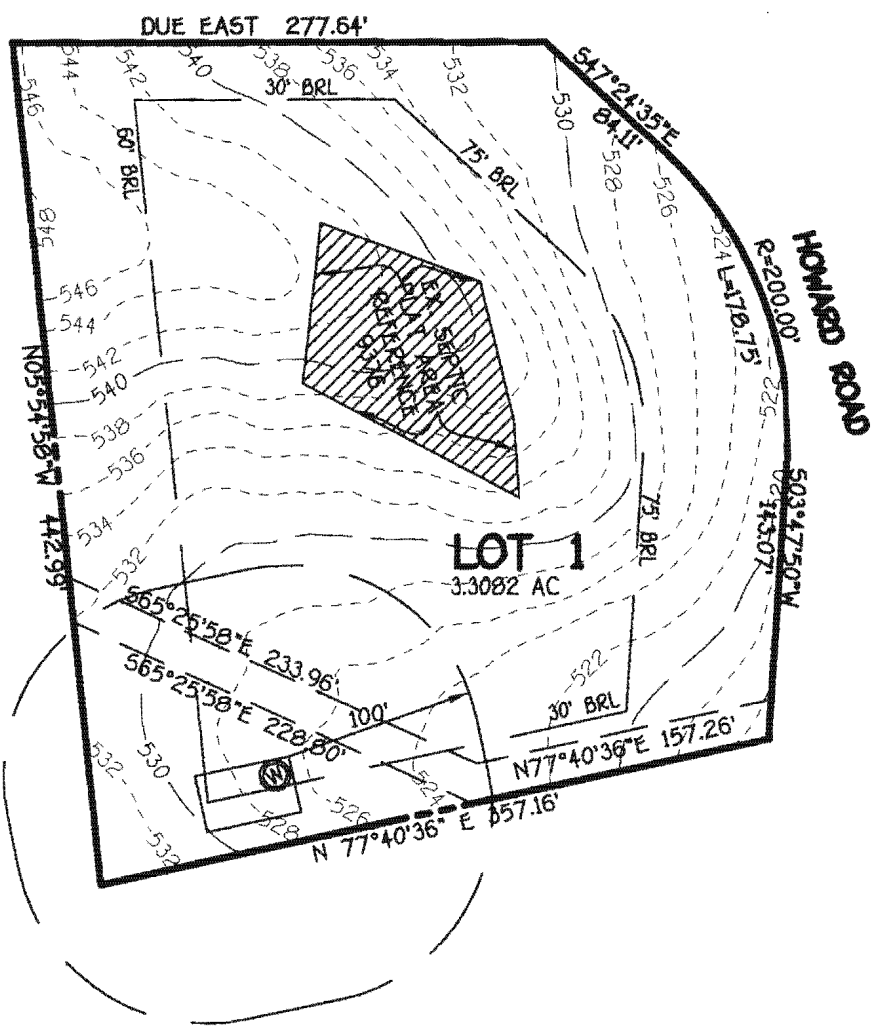
I. High rate pumping -- reservoir drawdown

Time pump started 7:00 Pumping rate 15 gpm.  
 Total time 45 min. to reach pumping water level 338 ft. below M.P.

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

TIME (in 15 minute intervals)	WATER LEVEL below M.P.	PUMPING RATE time to fill 5 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
7:15	177'	4 sec.	N/A	15 gpm.
7:30	255	4		15
7:45	338	5		12
8:00	336	26		2.3
8:15	336	26		2.3
8:30	335	26		2.3
8:45	335	26		2.3
9:00	335	26		2.3
9:15	335	26		2.3
9:30	335	26		2.3
9:45	335	26		2.3
10:00	334	26		2.3
10:15	335	26		2.3
10:30	335	26		2.3
10:45	334	26		2.3
11:00	334	26		2.3
11:15	334	26		2.3
11:30	334	26		2.3
11:45	334	26		2.3
12:00	334	26		2.3
12:15	334	26		2.3
12:30	334	26		2.3
12:45	334	26		2.3
1:00	334	26		2.3
HD-2241:15	334	26		2.3
1:30	334	26		2.3
1:45	334	26		2.3

K:\Drawings 3130310 Warfield Homestead\DWG\30310 Well Exhibit Lot 1.dwg, 6/1/2006 1:27:55 PM, 1:100



**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELLICOTT CITY, MARYLAND 21042  
 (410) 461 - 2855

EXHIBIT TO ACCOMPANY  
 WELL PERMIT  
 LOT 1  
 KENNARD WARFIELD, JR  
 TAX MAP 21 PARCEL 68  
 HOWARD COUNTY, MARYLAND  
 SCALE 1"=100'  
 DATE MAY 15, 2006

**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: Robert L. Feezer Co. Telephone #: 410-781-4655  
Address: 6321 Barnett Avenue  
Sykesville, MD 21784

(**Must circle one**) Licensed Plumber      Licensed Well Driller      Licensed Well Pump Installer  
License # and name of individual responsible for the field installation:  
Name (Print): Joshua Henricks License# PI0173

**\*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: NV Homes Telephone #: 410-379-5956  
Subdivision: Warfield Estates Lot #: 2001 Well Tag #: HO - 95 - 0392  
Site Address: 14401 Howard Road  
Dayton, MD 21036-1031

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Berkeley</u>	Make: <u>Boshart</u>	Two piece watertight cap: <u>Yes</u>
Model #: <u>B7P4MS07221</u>	Model#: <u>P-100-SS</u>	Screened, vented well cap: <u>Yes</u>
Pump Capacity <u>7</u> GPM	Depth: <u>42"</u> (36" min)	Cap secured to casing: <u>Yes</u>
Well Yield: <u>2.3</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>400</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 <u>inside of well casing</u> <i>N/A</i>		

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>Poly</u>	PVC sleeve to undisturbed soil at wall penetration: <u>Yes</u>
PSI: <u>200</u> (160 psi min)	Length of sleeve(5' minimum from foundation): <u>10'</u>
Depth of supply line: <u>42"</u> (36" min)	Sleeve sealed properly: <u>Yes</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.**

Joshua Henricks      December 4, 2014  
Signature of company representative responsible for installation      date

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

Date Insp. Requested: 1/21/15 Date Insp. Approved: 1/21/15 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 ✓



Howard County  
Health Department

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

## ATTENTION WELL DRILLERS!!!

When submitting a well application for a new or replacement well, please indicate one of the following:

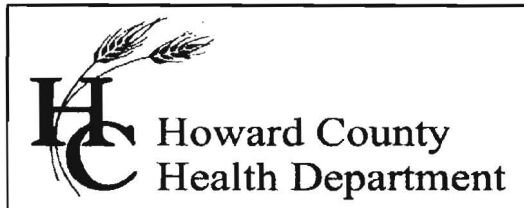
- The well site has been staked by Fisher Collins & Carter on 4-3-06 and is ready for site inspection.
- \_\_\_\_\_ will call the Health Department for a time to meet in the field to verify a well location.
- Site plan for new well is attached to well permit application.

Please attach this sheet when submitting your green application. This should help improve communication allowing a more timely service for our citizens.

KN

*Kennard Warfield Jr.*

*Lot 1 thru 4 Howard Rd*



**Bureau of Environmental Health**

8930 Stanford Blvd., Columbia, MD 21045  
Main: 410-313-1771 | Fax: 410-313-2648  
TDD 410-313-2323 | Toll Free 1-866-313-6300  
[www.hchealth.org](http://www.hchealth.org)  
Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)  
Twitter: HowardCoHealthDep

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

**INTERIM CERTIFICATE OF POTABILITY**  
**PERMANENT DEVIATION FOR NITRATES**

**Expiration Date – SEPTEMBER 6, 2015**

March 6, 2015

Homeowner  
14401 Howard Road  
Glenelg, MD 21036

**RE: Warfield's II, Lot1  
14401 Howard Rd  
Building Permit: B14003051  
Well Permit: HO-95-0392**

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 **2/20/2015**. Final approval of the well line connection to the dwelling was granted on **1/21/2015**. The well construction was completed on **6/16/2006**. Water samples were collected on **2/9/2015 & 2/18/2015**.

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.

The untreated water sample collected on **2/9/2015** indicated a nitrate level of **14.0 mg/L**. **This exceeds the maximum contaminant limit of 10 mg/L set forth in COMAR 26.04.04.09**. After installation of a nitrate removal device (kitchen tap reverse osmosis system), a post-treatment water sample was collected on **2/18/2015** and indicated a nitrate level of **<1.0 mg/L**.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the nitrate removal system effectively maintains a nitrate-nitrogen contaminant level of **10 mg/L or less**.

**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 nitrates analysis perform a yearly nitrate analysis.

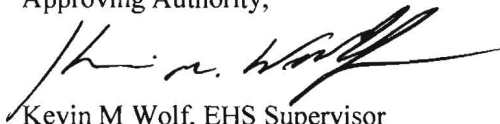
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.**

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-95-0392. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

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

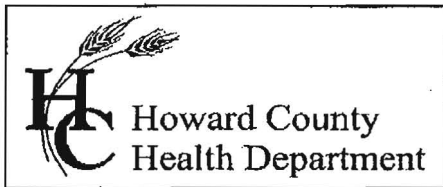
Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:  
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,



Kevin M Wolf, EHS Supervisor  
Environmental Health Specialist  
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  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

**REQUEST FOR PERMANENT DEVIATION TO  
NITRATE STANDARDS FOR CERTIFICATE OF POTABILITY**

DATE: 2/23/15 WELL PERMIT # : HO - 95 - 0392

PROPERTY OWNER: Matt and Marla Paper

SUBDIVISION & LOT #: Warfields II/ lot 1


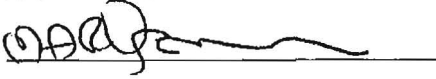
PROPERTY ADDRESS: 14401 Howard Road

**CONDITIONS:**

- 1) The well installed under permit # HO -95 - 0392 has been documented to have a nitrate level of 14.0 ppm, which exceeds the MCL of 10 ppm.
- 2) After installation and operation of a nitrate filtration system, water samples collected on 2/18/15 indicated that the nitrate contamination has been reduced to <1.0 ppm at the primary drinking tap.

I hereby request that a Permanent Deviation to COMAR 26.04.04.09 be granted for the well installed under permit HO - 95 - 0392 . 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 nitrate removal device.

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

Prospective Owner's Day Time Phone Number(s)

410 531 6600 410 373 5932



**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:**

Robert L. Feezer Company  
 Attn: Rick Cross  
 6321 Barnett Avenue  
 Sykesville, Maryland 21784

**S/O Number:** 98593

**Report Date:** February 19, 2015

*Nitrate Retest #1*

**Property Sampled:** 14401 Howard Road, 21036  
**Sample Location:** Kitchen R/O Tap  
**Residual Chlorine:** <0.1 mg/L

**Building Permit #:** 14003051  
**Sampler ID #:** 7483AM  
**Samples Iced:** Yes

**County:** Howard      **Subdivision:** Clifton Park II      **Lot #:** 1

**Date/Time Collected in Field:** February 18, 2015 2:13 pm  
**Date/Time Received in Lab:** February 18, 2015 4:15 pm

**Well Tag #:** HO-95-0392 (Tag Scratched)  
**Well Condition:** 2-Piece Cap, Satisfactory

**Water Treatment/Conditioning:** Softener, Neutralizer, Reverse Osmosis (R/O)

PARAMETER	METHOD	MCL	RESULT	COMMENT
Nitrate	SM 4500-NO3D	10 mg/L as N	<1.0 mg/L as N	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



**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:**

Robert L. Feezer Company  
 Attn: Rick Cross  
 6321 Barnett Avenue  
 Sykesville, Maryland 21784

**S/O Number:** 98335

**Report Date:** February 10, 2015

**Property Sampled:** 14401 Howard Road, 21036  
**Sample Location:** Pressure Tank Tap  
**Residual Chlorine:** <0.1 mg/L

**Building Permit #:** 14003051  
**Sampler ID #:** 7483AM  
**Samples Iced:** Yes

**County:** Howard

**Subdivision:** Clifton Park II

**Lot #:** 1

**Date/Time Collected in Field:** February 9, 2015 10:31 am

**Date/Time Received in Lab:** February 9, 2015 11:22 am

**Well Tag #:** HO-95-0392 (Tag Scratched)

**Well Condition:** 2-Piece Cap, Satisfactory

**Water Treatment/Conditioning:** N/A – Raw Sample

PARAMETER	METHOD	MCL/*SMCL	RESULT	COMMENT
Total Coliform	SM 9223B	Absent	Absent	Pass
<i>E. coli</i>	SM 9223B	Absent	Absent	Pass
Nitrate	SM 4500-NO3D	10 mg/L as N	14 mg/L as N	FAIL
Turbidity	EPA 180.1	10 NTU	1.4 NTU	Pass
pH (Field)	SM 4500-H <sup>+</sup> B	*6.5-8.5 Units	6.6 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.