

C1 3186 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

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

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER A 517336

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY 4 22 2008

Depth of Well 220' (TO NEAREST FOOT) 6/17/08

PERMIT NO. FROM "PERMIT TO DRILL WELL" Ho-95-1555

OWNER Warfield Jr Kenneth STREET OR RFD Michelle Dr TOWN Dayton SUBDIVISION The Warfields II SECTION 2 LOT 43

WELL LOG Not required for driven wells. STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING. TABLE with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing.

GROUTING RECORD WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL (Cement/Bentonite Clay) NO. OF BAGS 13 NO. OF POUNDS 122 GALLONS OF WATER 28 DEPTH OF GROUT SEAL (to nearest foot) from 0 to 37

CASING RECORD casing types insert appropriate code below. MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 40

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

SCREEN RECORD screen type or open hole (ST/PL/HO/OT) DEPTH (nearest ft.) 38 200

NUMBER OF UNSUCCESSFUL WELLS: 0 WELL HYDROFRACTURED (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. 1 M SD024 DRILLERS SIGNATURE Joseph E Mayne LIC. NO. 1 D

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

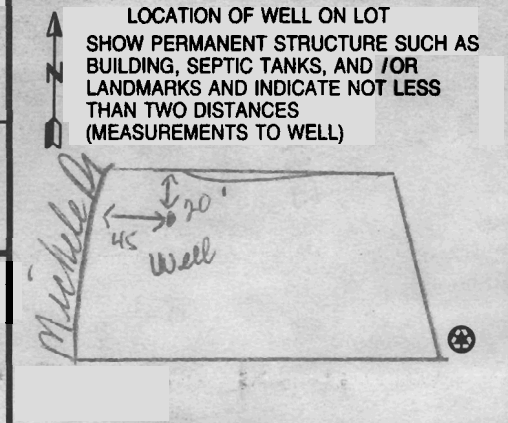
MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

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

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 20 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 26 ft. WHEN PUMPING 33 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) LAND SURFACE 2 (nearest foot)



B 1 1053 SEQUENCE NO. (MDE USE ONLY) STATE OF MARYLAND STATE PERMIT NUMBER  
 1 2 3 6  
 APPLICATION FOR PERMIT TO DRILL WELL  
528437 please type HO-95-1555  
 fill in this form completely

Date Received (APA) 12-28-08 OWNER INFORMATION  
 8 MM DD YY 13  
Wardfield, Jr Kennard  
 15 Last Name Owner First Name 34  
P.O. Box 30  
 36 Street or RFD 55  
Glennelg md 21737  
 57 Town 70 State 72 Zip 76

B 3 LOCATION OF WELL  
 8 COUNTY Howard 21  
 23 SUBDIVISION The Wardfield II 42  
 SECTION 2 LOT 43  
 44 46 48 50  
Dayton  
 52 NEAREST TOWN 71  
 MILES FROM TOWN (enter 0 if in town) 4 M I  
 73 76 77 78

DRILLER INFORMATION  
Joseph L Mayne M SD 024  
 76 Driller's Name License No. 81  
Joseph L Mayne Well Drilling  
 m Name  
Ridge Rd Mt. Airy Md 2009  
 Address  
Joseph L Mayne 12-19-2007  
 Signature Date

B 4  
 1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)  
 11 NEAR WHAT ROAD Michele Drive 30  
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
 NORTH  
 WEST SOUTH EAST  
 34 40 37 DISTANCE FROM ROAD  
 ENTER FT OR MI 38 39  
 TAX MAP: 21 BLK: 23 PARCEL 114

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

USE FOR WATER (CIRCLE APPROPRIATE BOX)  
 DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION  
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)  
 INDUSTRIAL, COMMERCIAL, DEWATERING  
 PUBLIC WATER SUPPLY WELL  
 TEST, OBSERVATION, MONITORING  
 GEO-THERMAL

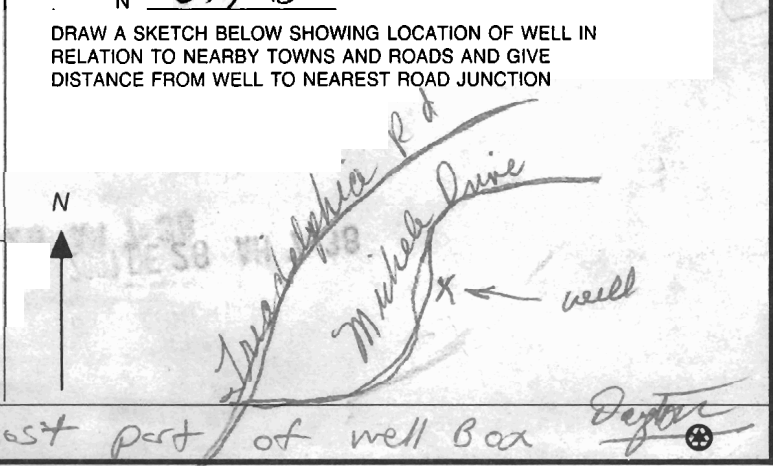
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL  
Howard (13) A 517336  
 COUNTY NAME COUNTY NO  
 STATE SIGNATURE INSERT S →  
 DATE ISSUED 2/27/08 Kim Waff 2/27/09  
 43 MM DD YY 48 CO SIGNATURE EXP. DATE  
 NORTH GRID 516 0 0 0 EAST GRID 0795 0 0 0  
 50 55 57 63

APPROXIMATE DEPTH OF WELL 300 FEET  
 24 28  
 APPROXIMATE DIAMETER OF WELL 6 INCH  
 NEAREST INCH

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X  
 SOURCES OF DRILLING WATER  
 1. well  
 2.  
 3.  
 WRITE THE BOX NUMBER FROM THE MAP HERE  
 E 7905  
 N 5196  
 000  
 000

METHOD OF DRILLING (circle one)  
 BORED (or Augered) JETTED Jetted & DRIVEN  
 30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary)  
 37 CABLE REVerse-ROTary DRive-POINT  
 other \_\_\_\_\_

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)  
 THIS WELL WILL NOT REPLACE AN EXISTING WELL  
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED  
 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS  
 THIS WELL WILL DEEPEM AN EXISTING WELL  
 PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 \_\_\_\_\_ 52



Not to be filled in by driller (MDE OR COUNTY USE ONLY)  
 APPROP. PERMIT NUMBER HO 200 6G 00 9  
 PERMIT No. HO-95-1555  
 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS Drill well @ East-most part of well box Dayton  
 NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED





**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:**

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

**S/O Number:** 87619

**Report Date:** December 17, 2012

*Nitrate Retest #1*

**Property Sampled:** 14866 Michele Drive, 21797  
**Sample Location:** Kitchen R/O Tap  
**Residual Chlorine:** <0.1 mg/L

**Building Permit #:** B12002523  
**Sampler ID #:** 5745KC  
**Samples Iced:** Yes

**County:** Howard  
**Map:** 27

**Subdivision:** The Warfields II S2 RSB  
**Parcel:** 114 **Lot#:** 43

**Date/Time Collected in Field:** December 14, 2012 @ 1:17 pm  
**Date/Time Received in Lab:** December 14, 2012 @ 2:10 pm

**Well Tag #:** HO-95-1555  
**Well Condition:** 2-Piece Cap, Satisfactory

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

PARAMETER	METHOD	MCL	RESULT	PASS/FAIL
Nitrate	SM 4500D	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.

*'OK' RB 12/18/12*

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

MCL: Maximum Contamination Level, an enforceable level established by the EPA



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Maryland State Certified Laboratory #318

**CERTIFICATE OF ANALYSIS**

**Requester:**

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

**S/O Number:** 87364

**Report Date:** November 27, 2012

**Property Sampled:** 14866 Michele Drive, 21797  
**Sample Location:** ~~Pressure Tank Tap~~  
**Residual Chlorine:** <0.1 mg/L

**Building Permit #:** B12002523  
**Sampler ID #:** 7483AM  
**Samples Iced:** Yes

**County:** Howard  
**Map:** 27

**Subdivision:** The Warfields II S2 RSB  
**Parcel:** 114

**Lot#:** 43

**Date/Time Collected in Field:** November 26, 2012 @ 10:36 am  
**Date/Time Received in Lab:** November 26, 2012 @ 12:33 pm

*11/28/12  
 High Nitrates  
 Install R/O  
 Post Treatment Sample  
 -KW*

**Well Tag #:** HO-95-1555  
**Well Condition:** 2-Piece Cap, Satisfactory

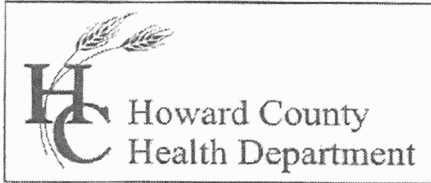
**Water Treatment/Conditioning:** ~~Softener, Neutralizer~~

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	10.6 mg/L as N	FAIL
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass ✓
pH	EPA 150.1	*6.5-8.5 Units	6.2 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.



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: 12-10-12 WELL PERMIT #: HO - 95 - 1555

PROPERTY OWNER: Ali Hyder + Nishat Ali

SUBDIVISION & LOT #: Warfields Lot 43

PROPERTY ADDRESS: 14866 Michele Drive

CONDITIONS:

- 1) The well installed under permit # HO - 95 - 1555 has been documented to have a nitrate level of 10.6 ppm, which exceeds the MCL of 10 ppm.
- 2) After installation and operation of a nitrate filtration system, water samples collected on 12-14-12 indicated that the nitrate contamination has been reduced to 1.0 ppm at the primary drinking tap.

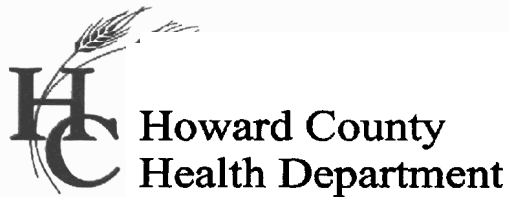
I hereby request that a Permanent Deviation to COMAR 26.04.04.09 be granted for the well installed under permit HO - 95 - 1555. I am fully aware of the conditions under which this deviation will be granted, and of my responsibilities as the well owner, which include advising any future buyer/ tenant 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]

X Ali Hyder X Nishat Ali

Prospective Owner's Day Time Phone Number(s)

703 9010449 (703) 346-3787



**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., Acting Health Officer**

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

**Expiration Date – June 18, 2013**

12/18/2012

Homeowner  
14866 Michele Drive  
Glenelg, MD 21737

**RE: The Warfields II, Lot 43**  
**14866 Michele Drive**  
**Building Permit: B12002523**  
**Well Permit: HO-95-1555**

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 **11/27/2012**. Final approval of the well line connection to the dwelling was granted on **11/5/2012**. The well construction was completed on **4/22/2008**. Water samples were collected on **11/26/2012 and 12/14/2012**.

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 **11/26/2012** indicated a nitrate level of **10.6 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 **12/14/2012** 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-95-1555. 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,



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

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

**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., Inc. 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): Robert L. Feezer License# 2122

**\*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 II Lot #: 8043 Well Tag #: HO - 95 - 1555 ✓  
Site Address: 14866 Michele Drive  
Glenelg, MD 21737

**Submersible Pump Data**

Make: Berkeley  
Model #: B7P4MS07221  
Pump Capacity 7 GPM  
Well Yield: 20 GPM

**Pitless Adapter**

Make: Boshart  
Model#: P-100-SS  
Depth: 42" (36" min)  
NSF/WSC approved: Yes

**Well Cap and Electric Conduit**

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

Depth of well encountered at time of pump installation: 200 (feet) **Conduit secured to well cap: Yes**  
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 N/A**

**Piping to house**

Type: Poly  
PSI: 200 (160 psi min)  
Depth of supply line: 42" (36" min)

**House Connection**

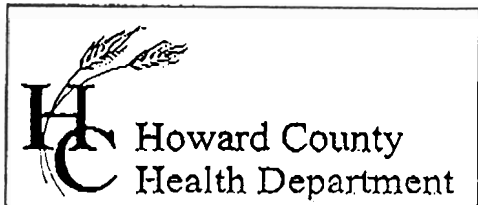
PVC sleeve to undisturbed soil at wall penetration: Yes  
Length of sleeve(5' minimum from foundation): 10'  
Sleeve sealed properly: Yes

**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.**

Robert L. Feezer Signature of Robert L. Feezer      October 18, 2012  
Signature of company representative responsible for installation      date

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 11/5/12 Inspector: (KW)  
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 ✓



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 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:

The Warfield II 14 Lots Michele Dr & Road B  
 Subdivision/Property Name Lot# Road Name

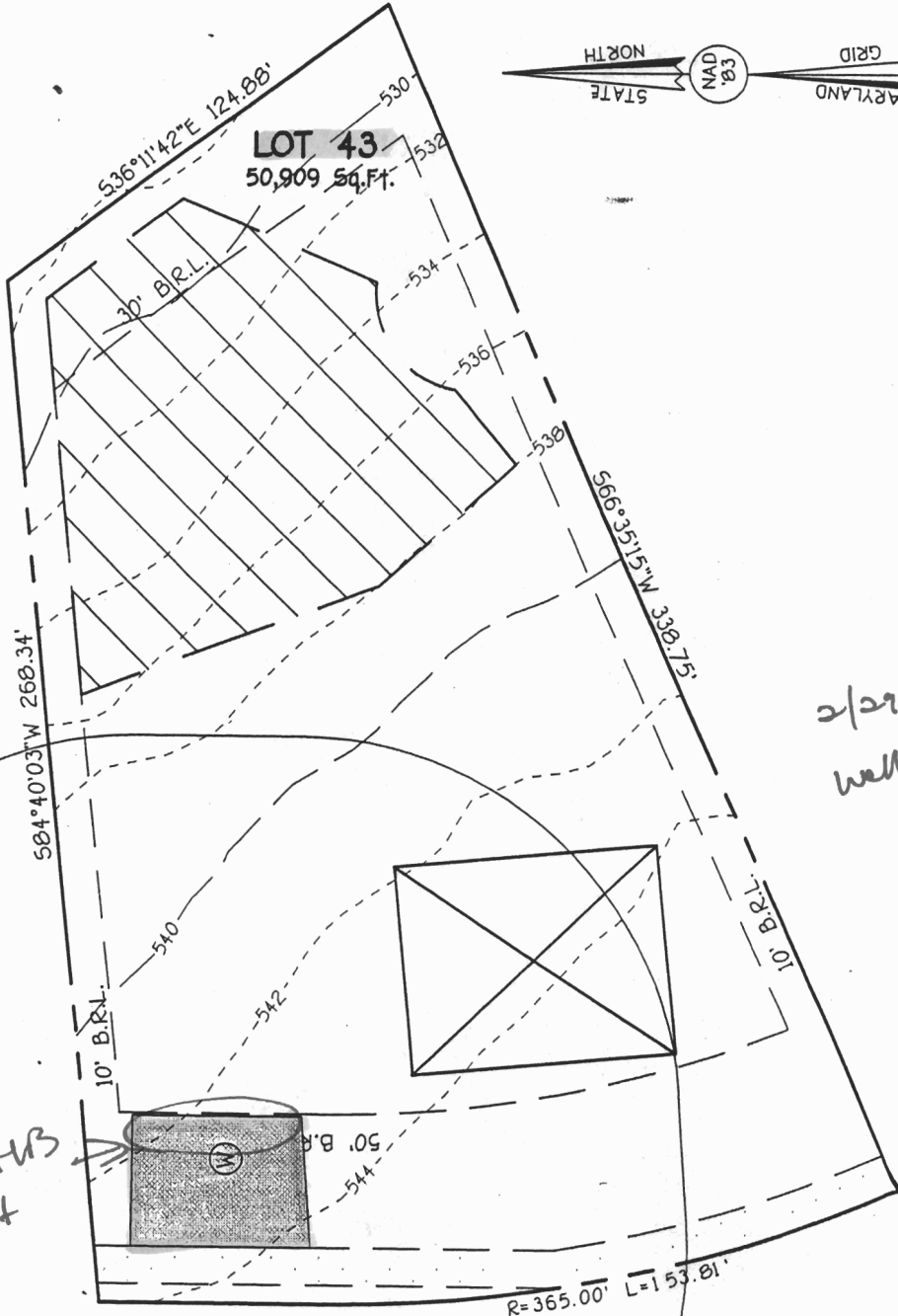
The well site has been staked by Fish Collins & Carter  
 (professional land surveyor or company employing professional land surveyors)  
 on 12-2007 (date) and does not require a site inspection.

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

Lot 31, 32, 33, 35, 36, 37, 38, 39, 40,  
41, 42, 43, 44, 48,



2/29/08  
well Box  
OK  
*(Signature)*

Drill this  
area first

N00°30'36"E  
60.86'  
**MICHELE DRIVE**

EXHIBIT TO ACCOMPANY  
WELL PERMIT  
LOT 43  
THE WARFIELDS II  
SECTION TWO  
Lots 6 Thru 68,  
Cemetery Open Space Lot 69, And  
Buildable Preservation Parcel 'A' And  
Non-Buildable Preservation Parcels 'B', Thru 'I'  
Tax Map: 21, Grid 23, Parcel: 55  
Tax Map: 27, Grid 5, Parcels: 56, 109 And 144  
Fourth Election District  
Howard County, Maryland  
Date: December 6, 2007  
F-07-040

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE