

C1 6912

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.

COUNTY NUMBER

AS17336

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

ST/CO USE ONLY

DATE RECEIVED MM DD YY

DATE WELL COMPLETED

MM DD YY 5 20 2008

DEPTH OF WELL

22 180' 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" 40-95-1568

28 29 30 31 32 33 34 35 36 37

OWNER Warfield 3 Kennard last name first name STREET OR RFD TOWN Dayton SUBDIVISION The Warfields II SECTION 2 LOT 49

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)

FEET FROM TO

check if water bearing

Sand 0 26 Gray Mica Rock 26 180 water 33' 120'

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle appropriate box) Y N

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 12 NO. OF POUNDS 4128

GALLONS OF WATER 72

DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 37 ft. (enter 0 if from surface)

CASING RECORD

ST CO PL OT STEEL CONCRETE PLASTIC OTHER

MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch): 6 Total depth of main casing (nearest foot): 40

OTHER CASING (if used)

Table with columns for diameter inch and depth (feet) from to

SCREEN RECORD

ST BR HO PL OT STEEL BRASS BRONZE PLASTIC OPEN HOLE OTHER

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED Y N

CIRCLE APPROPRIATE LETTER 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 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. 1 M 5 D 0 2 1 DRILLERS SIGNATURE Joseph L Mayne

LIC. NO. 1 M 5 D 0 2 1 SIGNATURE Harvey Maple

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

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 3

PUMPING RATE (gal. per min.) 7.5

METHOD USED TO MEASURE PUMPING RATE Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING 33 ft.

WHEN PUMPING 109 ft.

TYPE OF PUMP USED (for test)

A air P piston T turbine C centrifugal R rotary O other (describe below) J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

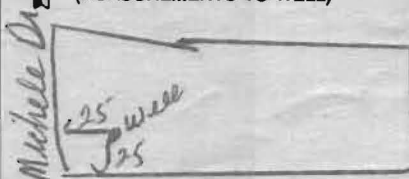
PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height) + above - below LAND SURFACE 2 (nearest foot)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



B 1	1050	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 528461 please type	STATE PERMIT NUMBER <u>HO-95-1568</u> <small>70 fill in this form completely 79</small>
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OWNER INFORMATION

Date Received (APA) 1-28-08
8 MM DD YY 13

Warfield Jr. Kennards
15 Last Name Owner First Name 34

P.O. Box 30
36 Street or RFD 55

Altonely md 21737
57 Town 70 State 72 Zip 76

LOCATION OF WELL

Howard
8 COUNTY 21

The Warfield II
23 SUBDIVISION 42

SECTION 2 LOT 49
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 5 D 024
Driller's Name 76 License No. 81

Joseph L Mayne Well Drilling
Firm Name

5512 Ridge Rd Mt. Airy Md 21111
Address

Joseph L Mayne 12-19-2007
Signature Date

4

1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

Michèle Daine
11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

50 FT
34 DISTANCE FROM ROAD 37
ENTER FT OR MI 38 39

TAX MAP: 21 BLK: _____ PARCEL 114

2

1 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 5
8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500
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 (3) A517336
COUNTY NAME COUNTY NO.

STATE SIGNATURE _____ INSERT S → 41

DATE ISSUED 3/10/08 Michèle Daine 3/10/08
43 MM DD YY 48 CO SIGNATURE EXP. DATE

NORTH GRID 516 000 EAST GRID 0795 000
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

- well
-
-

WRITE THE BOX NUMBER FROM THE MAP HERE

E 7985 000
N 5106 000

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN

AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)

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

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

Dayton

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER HO2006G009

PERMIT No. HO-95-1568
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS SEE MEMO.

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 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 BARNDIFF AVE
SYKESVILLE, MD

(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 direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.

Name of Property Owner: NV Homes Telephone #: 410-379-5956
Subdivision: WARFIELD ESTATES II Lot #: 79 Well Tag #: HO 95-1568
Site Address: 14890 ANTONELLE DR
GLENELO, MD 21721

Submersible Pump Data

Make: STANLEY
Model #: SIOP4H50720
Pump Capacity: 10 GPM
Well Yield: 7.5 GPM

Pitless Adapter

Make: CAMPBELL
Model #: PT 800
Depth: 40" (36" min)
NSF 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: 180 (feet)
If pump capacity exceeds well yield, a low water out off switch is required by NSPC 1990 Section 17.8.4

Torque arrestors or Cable guards are required - Must circle one

Safety rope, if used, attached to inside of well casing with eye bolt:

Piping to house

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

House Connection

PVC sleeved to undisturbed soil at wall penetration:
Approximate length of sleeve: 10'
Sleeve caulked and 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.

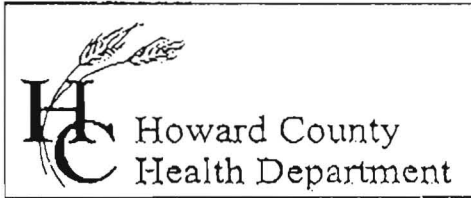
Signature of company representative responsible for installation: Robert L. Feezer date: 10/20/10

INSPECTION CALLED IN FOR 10/18/10

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

Date Insp. Requested: 10/18/10 Date Insp. Approved: OK (12/10) 10/19/10

- Inspection Data: Pitless adapter and 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 installed inside of well 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



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:

<u>The Warfield II</u>	<u>49, 50, 51, 52, 53, 54, 55, 56, 57, 58,</u>	<u>Imperial Rd</u>
Subdivision/Property Name	Lot#	Road Name

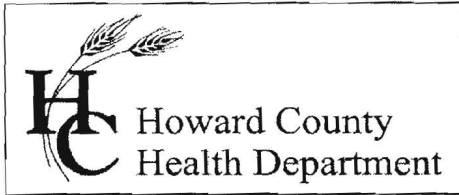
Michelle Dr.

The well site has been staked by Fisher Collins Carter,
 (professional land surveyor or company employing professional land surveyors)
 on Jan 4, 2008 (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



Bureau of Environmental Health
7178 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

November 30, 2010

Homeowner
14890 Michele Drive
Glenelg, MD 21737

RE: Warfields II, Lot 49
14890 Michele Drive
Glenelg, MD 21737
BP #B10001895
Well Permit #HO-95-1568

Dear Sir/Madam,

This is to advise you that the septic system for the above referenced property has been installed and inspected. **Final approval of the septic system was granted on 10/22/2010. Final approval of the well line connection to the dwelling was approved on 10/18/2010.**

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 raw nitrate sample results were previously documented to be 17.9 ppm. **A nitrate removal device (Reverse Osmosis) has been installed to treat the excessive nitrate contamination. The nitrate treatment device appears to be operating properly as evidenced by the water sample results taken on 10/22/2010 which indicates a nitrate level of <1.0 ppm.**

Permanent Deviation for Nitrates

COMAR 26.04.04.09 prohibits approval of any water supply with a nitrate-nitrogen contaminant level in excess of 10 parts per million. **This department will grant a permanent deviation to that section of the regulation on condition that the nitrate removal system effectively maintains the nitrate-nitrogen contaminant level of 10 ppm 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 laboratory certified for water testing perform a yearly nitrate analysis. (Certified to test for nitrates)
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of the above condition.

INTERIM CERTIFICATE OF POTABILITY
(Permanent Deviation for Nitrates)

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-95-1568 **Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.** Based upon satisfactory investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

Further more under COMAR 26.04.04.09 E. *Disclosure*, any and all special conditions to this interim certificate of potability shall be disclosed to any purchaser of the property served by the well HO-95-1568 before entering into a contract of sale or lease. A person who fails to make this disclosure is subject to the penalties set out in Regulation .12F *Enforcement* and Environment Article 9-1311, Annotated Code of Maryland.

This certificate may become final upon completion of the second bacteriological and nitrate tests, which may be taken by the health department within six months of the date of this letter. Please contact (410) 313-1773 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.

Date of Water Sample(s): 11/01/2010, & 11/17/2010
Date of Well Completion: 05/20/2008

Respectfully,



Kevin M. Wolf, R.S./R.E.H.S.
Environmental Sanitarian
Well and Septic Program

cc: Building Inspector's office
Community Health Services
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:

NV Homes, Inc.
 6085 Marshalee Drive Suite 130
 Elkridge, MD 21075

S/O Number: 79536

Report Date: November 18, 2010

Property Sampled: 14890 Michele Drive
Sample Location: R/O Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B10001895
Sampler ID #: 9813AM
Samples Iced: Yes

Nitrate Retest

County: Howard
Map: 27

Subdivision: Warfields
Parcel: 114

Lot #: 49

Date/Time Collected in Field: November 17, 2010 at 2:05 pm
Date/Time Received in Lab: November 17, 2010 at 3:00 pm

Well Tag #: HO-95-1568
Well Condition: 2-Piece Cap
 Satisfactory

Water Conditioning/Treatment: Neutralizer, Softener, R/O

PARAMETER	METHOD	MCL	RESULT	PASS/FAIL
Nitrate	SM 4500D	10 mg/L as N	<1.0 mg/L as N	Pass

OK

Katherine C. Higgs
 Katherine C. Higgs
 Administrative Assistant



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

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

NV Homes, Inc.
 6085 Marshalee Drive Suite 130
 Elkridge, MD 21075

S/O Number: 79346

Report Date: November 2, 2010

Property Sampled: 14890 Michele Drive
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B10001895
Sampler ID #: 9813AM
Samples Iced: Yes

County: Howard **Subdivision:** Warfields
Map: 27 **Parcel:** 114 **Lot #:** 49

Date/Time Collected in Field: November 1, 2010 at 11:10 am
Date/Time Received in Lab: November 1, 2010 at 3:35 pm

Well Tag #: HO-95-1568
Well Condition: 2-Piece Cap
 Satisfactory

Water Conditioning/Treatment: Neutralizer, Softener

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	17.9 mg/L as N	FAIL
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	6.5 Units	***
Sand		Negative	Negative	

Before Treatment
After Treatment? *OK* *KW* *Need Retest*

Allison R. Milburn
 Allison R. Milburn
 Drinking Water Division Manager

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.

REQUEST FOR PERMANENT DEVIATION TO
NITRATE STANDARDS FOR CERTIFICATE OF POTABILITY

DATE: 11/29/10 WELL PERMIT #: HO - 95 - 1568

PROPERTY OWNER: Mr. Wang / NV HOMES
SUBDIVISION & LOT #: Warfields Lot #49
PROPERTY ADDRESS: 14890 Michelle Dr Glenelg, MD

CONDITIONS:

- 1) The well installed under permit # HO - 95 - 1568 has been documented to have a nitrate level of 17.9 ppm which exceeds the MCL of 10 ppm. As a result of installation and operation of a nitrate filtration system, this 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 - 1568. 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)

443 - 310 - 1398 _____



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7178 Gateway Drive Columbia, MD 21046
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TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

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

Friday, February 08, 2008

IMPORTANT

MEMORANDUM

To: WELL DRILLER,
FILE

From: Kevin Wolf, Sanitarian
Well and Septic Program

Re: The Warfield's II (F-07-040)
Lot 49

In order to preserve the quality of ground drinking water, a special condition has been set for lot 49 for the above referenced property. This condition requires the driller to seal off the upper strata by placing a certain amount of casing to the approximate depth below the very first water-bearing fracture OR a minimum of 75 feet (which ever comes first). For example, if you hit a water-bearing fracture at 53 feet, then there should be at least 55 feet of casing or enough casing to get below that fracture. **Any deviations to this condition are to be prior approved by the Health Department.**