

C1 2921 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 A541580

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY 6 19 06 Depth of Well 22 300 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" Ho - 95 - 0393

OWNER Warfield Jr Kennard STREET OR RFD Howard Rd TOWN Dayton Md SUBDIVISION Kennard Warfield Jr Sub-SECTION LOT 3

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 (Use additional sheets if needed), FEET (FROM TO), check if water bearing. Includes handwritten notes: Sand, Gray Micaceous Rock, GROUT OK Unconsolidated materials causing conditions.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (N) TYPE OF GROUTING MATERIAL (Circle one) CEMENT (CM) BENTONITE CLAY (BC) NO. OF BAGS 13 NO. OF POUNDS 7222 GALLONS OF WATER 78 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 56 ft.

CASING RECORD

MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 69

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

SCREEN RECORD

screen type or open hole (ST) (BR) (HO) (PL) (OT) insert appropriate code below

PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 8.5 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 26 ft. WHEN PUMPING 111 ft. TYPE OF PUMP USED (for test) S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (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 2 (nearest foot)

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 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 MSD024 DRILLERS SIGNATURE Joseph E. Mayne

LIC. NO. 1 D

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

DEPTH (nearest ft.)

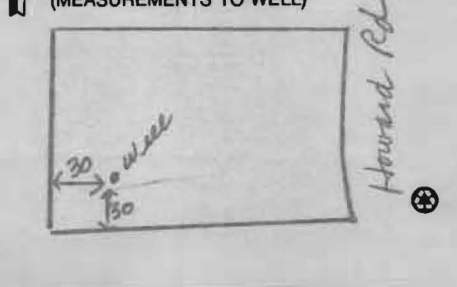
Table with columns: E A C H S C R E E N, rows 1-3, values for depth and slot size.

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

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 9835
1 2 3 6

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
524406 please type

STATE PERMIT NUMBER
HO-95-0393
70 fill in this form completely 79

Date Received (APA)
8 MM DD YY 13
15 Last Name Owner First Name 34
36 Street or RFD 55
57 Town 70 State 72 Zip 76
Warfield Jr Kennard
P.O. Box 30
Hlenelg Md 21737

OWNER INFORMATION

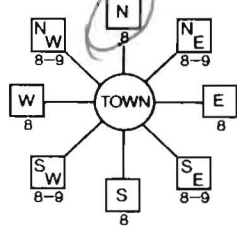
B 3 LOCATION OF WELL
8 COUNTY 21
23 SUBDIVISION 42
SECTION 44 46 LOT 48 50
52 NEAREST TOWN 71
MILES FROM TOWN (enter 0 if in town) 3 M I
73 76 77 78

LOCATION OF WELL

DRILLER INFORMATION
76 License No. 81
Firm Name
Address
Signature Date
Joseph L Mayne MS D 024
Joseph L Mayne Well Drilling
5512 Ridge Rd Mt. Airy Md 21771
Joseph L Mayne 4-11-06

DRILLER INFORMATION

B 4
1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
34 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39
TAX MAP: 21 BLK: 23 PARCEL 68
Howard Rd
Howard Rd
NORTH
WEST SOUTH EAST
370
FL
21 23 68



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

WELL INFORMATION

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

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL
Howard (13) A541580
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 5/31/06
43 MM DD YY 48 GO SIGNATURE EXP. DATE
NORTH GRID 516 000 EAST GRID 796 000
50 55 57 63

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

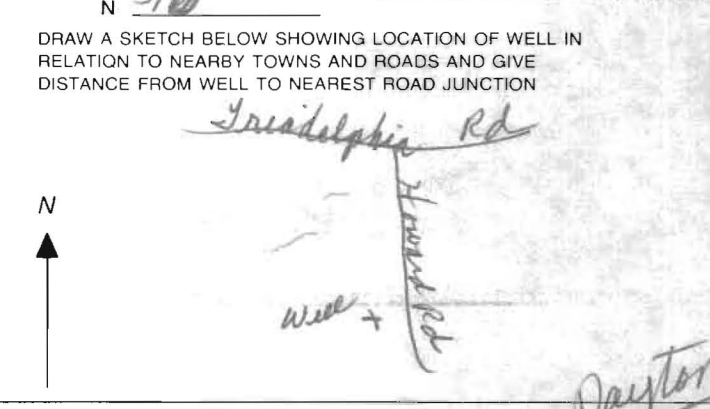
METHOD OF DRILLING (circle one)

- BORED (or Augered) JETTED Jetted & DRIVEN
- AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary)
- CABLE REVERSE-ROTARY DRIVE-POINT
- other

REPLACEMENT OR DEEPEINED 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 DEEPEIN AN EXISTING WELL
- PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 52

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 796
N 516
000
000



Not to be filled in by driller (MDE OR COUNTY USE ONLY)
APPROP PERMIT NUMBER HO 19906014(04)
PERMIT No. HO-95-0393
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS
NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

5/15/06

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: J. Joseph Gartland, Inc Telephone #: 410-875-2400
Address: 1875 W. Old Liberty Rd.
Westminster, Md. 21157

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): JAMES J. GARTLAND, JR. License# 1713

*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: Kennard Wanfield, Jr. Telephone #: 410-442-1113
Subdivision: _____ Lot #: 3 Well Tag #: HO-95-0393
Site Address: 14389 Howard Rd.
DARTON, Md. 21036

Submersible Pump Data **Pitless Adapter** **Well Cap and Electric Conduit**
Make: Goulds Make: Harvard Two piece watertight cap:
Model #: 75B07422 Model#: PT800 Screened, vented well cap:
Pump Capacity 7 GPM Depth: 42' (36" min) Cap secured to casing:
Well Yield: _____ GPM NSF approved: Conduit min 18" B.G.:
Depth of well encountered at time of pump installation: 300 (feet) Conduit secured to well cap:

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors of Cable guards are required - Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt

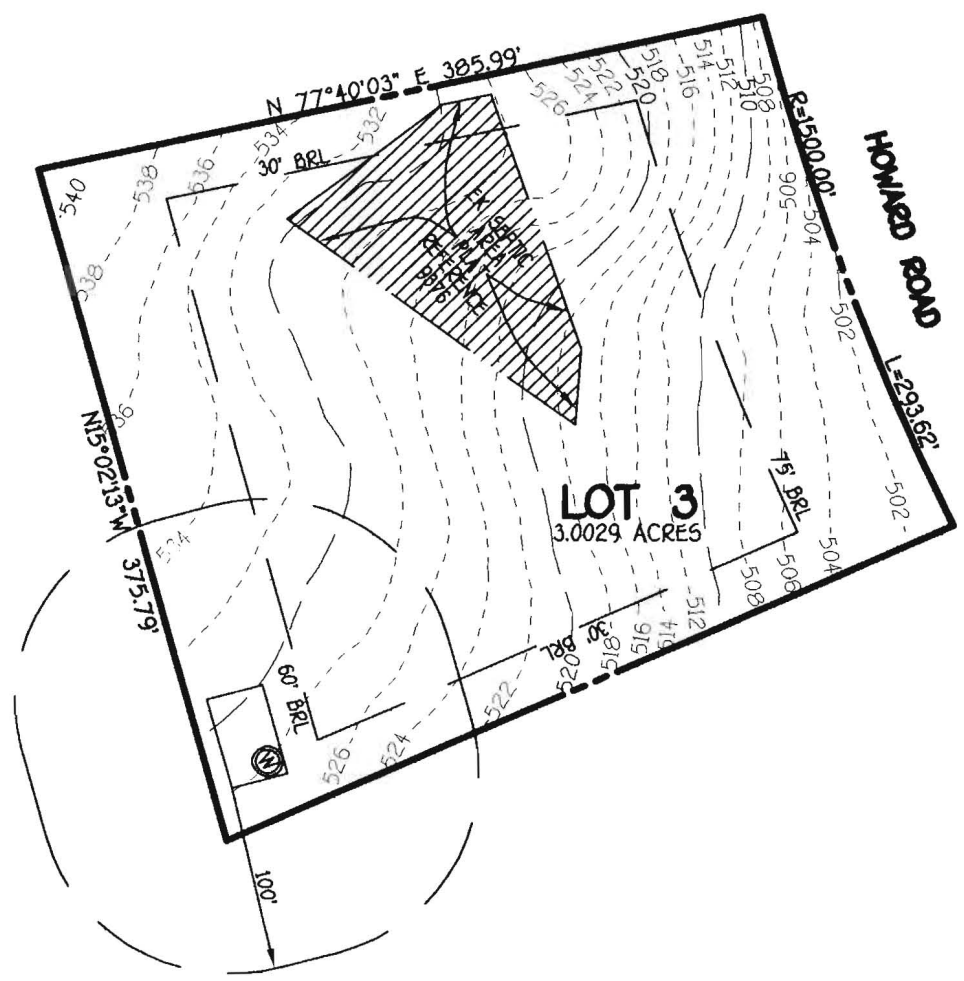
Piping to house **House Connection**
Type: PLASTIC PVC sleeved to undisturbed soil at wall penetration:
PSI: 160 (160 psi min) Approximate length of sleeve: 6 FT
Depth of supply line: 42' (36" min) Sleeve caulked and sealed properly:

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 _____ date 6/4/09

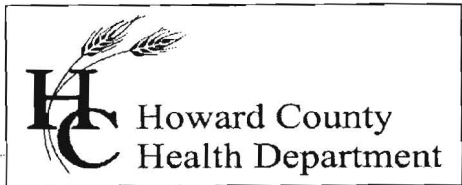
For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: _____ Date Insp. Approved: 2/5/2009 BB
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



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 3
 KENNARD WARFIELD, JR
 TAX MAP 21 PARCEL 68
 HOWARD COUNTY, MARYLAND
 SCALE 1"=100'
 DATE MAY 15, 2006



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

June 15, 2009

Homeowner
14389 Howard Road
Dayton, MD 21036

SENT VIA FACSIMILE 301-854-6370

RE: Kennard Warfield Jr., Lot 3
14389 Howard Road
Dayton, MD 21036
BP # B07000842
Well Permit #HO-95-0393

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 06/12/2009. Final approval of the well line connection to the dwelling was approved on 02/05/2008**

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 12.3 ppm. **A nitrate 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 06/12/2009 which indicate a nitrate level of 5.0 ppm.**

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)

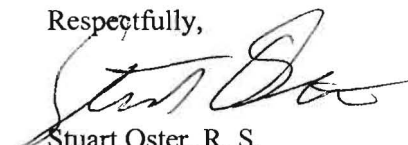
This certifies that **the initial** sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-0393. **Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water 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.

Furthermore, 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-95-0393 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) 313-1792 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.

Date of Water Sample(s): 06/10/2009 & 06/12/2009
Date of Well Completion: 06/19/2006

Respectfully,


Stuart Oster, R. S.
Well and Septic Program

cc: Building Inspector's office
Community Health Services
File



TRACE LABORATORIES, INC
 A Methode Electronics, Inc. Company
 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:
 Farm Tech, Inc.
 144551 Triadelphia Road
 Glenelg, Maryland 21737

S/O Number: 72910
Report Date: June 15, 2009

Property Sampled: 14389 Howard Road, 21036, Retest

County: Howard
Subdivision: Kennard Warfield Jr **Tax Map #:** 21
Lot #: 3 **Parcel #:** 68
Building Permit#: B07000842

Date/Time Collected: June 12, 2009 at 2:42 pm
Date/Time Received: June 12, 2009 at 4:05 pm

Sample Location: R/O Tap **Samples Iced:** Yes
Sampler ID: 5745KC **Residual Cl₂ <0.1 mg/L:** Yes

Well Tag Number: HO-95-0393
Well Condition: 2-Piece Cap
 Satisfactory

Water Conditioning/Treatment: R/O

PARAMETER	RESULT	METHOD	MCL	
Nitrate	5.0 mg/L as N	SM 4500D	10 mg/L as N	Pass

Allison R. Milburn
 Allison R. Milburn
 Manager-Drinking Water Testing

MCL=Maximum Contamination Level



TRACE LABORATORIES, INC
 A Methode Electronics, Inc. Company
 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:
 Farm Tech, Inc.
 144551 Triadelphia Road
 Glenelg, Maryland 21737

S/O Number: 72875
Report Date: June 11, 2009

Property Sampled: 14389 Howard Road, 21036

County: Howard
Subdivision: Kennard Warfield Jr **Tax Map #:** 21
Lot #: 3 **Parcel #:** 68
Building Permit#: B07000842

Date/Time Collected: June 10, 2009 at 10:57 am
Date/Time Received: June 10, 2009 at 1:55 pm

Sample Location: Powder Room Tap
Sampler ID: 5745KC

Samples Iced: Yes
Residual Cl₂ <0.1 mg/L: Yes

Well Tag Number: HO-95-0393
Well Condition: 2-Piece Cap
 Satisfactory

Water Conditioning/Treatment: None

PARAMETER	RESULT	METHOD	MCL/*SMCL	
Nitrate	12.3 mg/L as N	SM 4500D	10 mg/L as N	FAIL
Turbidity	1.8 NTU	EPA 180.1	*10 NTU	Pass
pH	6.0 Units	EPA 150.1	*6.5-8.5 Units	***
Sand	Negative		Negative	
Total Coliform	Absent	SM 9223B	Absent	Pass
E.coli	Absent	SM 9223B	Absent	Pass

Allison R. Milburn

Allison R. Milburn
 Manager-Drinking Water Testing

MCL=Maximum Contamination Level

*SMCL=Secondary Maximum Contamination Level

***A non-enforceable parameter that may cause cosmetic effects or aesthetic effects (such as taste, color or odor) in drinking water.