

<b>C1</b> 0225 <small>1 2 3 4 5 6</small> (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)	SEQUENCE NO. (MDE USE ONLY)	<b>STATE OF MARYLAND</b> <b>WELL COMPLETION REPORT</b> FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.  COUNTY NUMBER <b>13</b> A517422																																		
ST/CO USE ONLY DATE Received MM DD YY 8 13		DATE WELL COMPLETED MM DD YY 08 23 06																																			
		Depth of Well 22 180 26 (TO NEAREST FOOT)																																			
OWNER <u>DeFrancis</u> STREET OR RFD <u>Sweet Meadow Lane</u> SUBDIVISION <u>Walnut Grove</u> SECTION _____ LOT <u>69</u>		PERMIT NO. FROM "PERMIT TO DRILL WELL" <b>HO-95-0419</b>																																			
<b>WELL LOG</b> Not required for driven wells  STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING		<b>GROUTING RECORD</b> WELL HAS BEEN GROUTED (Circle Appropriate Box) <b>Y</b> <b>N</b> TYPE OF GROUTING MATERIAL (Circle one) CEMENT <b>CM</b> BENTONITE CLAY <b>BC</b> NO. OF BAGS <u>22</u> NO. OF POUNDS <u>2500</u> GALLONS OF WATER <u>132</u> DEPTH OF GROUT SEAL (to nearest foot) from 48 TOP 52 ft. to 54 BOTTOM 58 ft. (enter 0 if from surface)																																			
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">DESCRIPTION (Use additional sheets if needed)</th> <th colspan="2">FEET</th> <th rowspan="2">check if water bearing</th> </tr> <tr> <th>FROM</th> <th>TO</th> </tr> </thead> <tbody> <tr> <td>Top Soil</td> <td>0</td> <td>2</td> <td></td> </tr> <tr> <td>Sandy</td> <td>2</td> <td>50</td> <td>✓</td> </tr> <tr> <td>Sand Stone</td> <td>50</td> <td>55</td> <td></td> </tr> <tr> <td>MICKA</td> <td>55</td> <td>80</td> <td></td> </tr> <tr> <td>Sand Stone</td> <td>80</td> <td>85</td> <td>✓</td> </tr> <tr> <td>MICKA</td> <td>85</td> <td>180</td> <td></td> </tr> </tbody> </table>		DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing	FROM	TO	Top Soil	0	2		Sandy	2	50	✓	Sand Stone	50	55		MICKA	55	80		Sand Stone	80	85	✓	MICKA	85	180		<b>CASING RECORD</b> casing types insert appropriate code below <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td><b>ST</b> STEEL</td> <td><b>CO</b> CONCRETE</td> </tr> <tr> <td><b>PL</b> PLASTIC</td> <td><b>OT</b> OTHER</td> </tr> </table> MAIN CASING TYPE <b>PL</b> Nominal diameter top (main) casing (nearest inch) <u>6</u> Total depth of main casing (nearest foot) <u>63</u> 60 61 63 64 66 70		<b>ST</b> STEEL	<b>CO</b> CONCRETE	<b>PL</b> PLASTIC	<b>OT</b> OTHER
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NUMBER OF UNSUCCESSFUL WELLS: <u>0</u>		<b>SCREEN RECORD</b> screen type or open hole (insert appropriate code below) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td><b>ST</b> STEEL</td> <td><b>BR</b> BRASS</td> <td><b>HO</b> OPEN HOLE</td> </tr> <tr> <td></td> <td><b>PL</b> PLASTIC</td> <td><b>OT</b> OTHER</td> </tr> </table>		<b>ST</b> STEEL	<b>BR</b> BRASS	<b>HO</b> OPEN HOLE		<b>PL</b> PLASTIC	<b>OT</b> OTHER																												
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CIRCLE APPROPRIATE LETTER <b>A</b> A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED <b>E</b> ELECTRIC LOG OBTAINED <b>P</b> TEST WELL CONVERTED TO PRODUCTION WELL		<b>PUMPING TEST</b> HOURS PUMPED (nearest hour) <u>3</u> PUMPING RATE (gal. per min.) <u>10</u> METHOD USED TO MEASURE PUMPING RATE <u>Bucket</u> WATER LEVEL (distance from land surface) BEFORE PUMPING <u>15</u> ft. WHEN PUMPING <u>22</u> ft. TYPE OF PUMP USED (for test) <b>A</b> air <b>P</b> piston <b>T</b> turbine <b>C</b> centrifugal <b>R</b> rotary <b>O</b> other (describe below) <b>J</b> jet <b>S</b> submersible																																			
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.		<b>PUMP INSTALLED</b> DRILLER INSTALLED PUMP (CIRCLE) (YES OR NO) <b>NO</b> 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 <u>29</u> 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) <b>+</b> above } LAND SURFACE <b>-</b> below } <u>2</u> (nearest foot)																																			
DRILLERS LIC. NO. <u>M S D H 2</u> DRILLERS SIGNATURE <u>[Signature]</u> (MUST MATCH SIGNATURE ON APPLICATION)  LIC. NO. <u>D</u>		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) 																																			
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 <u>68</u> <b>MDE USE ONLY</b> (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q 70 72 74 75 76 TELESCOPE LOG OTHER DATA CASING INDICATOR																																			

B 1	0927	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL <u>W523734</u> please type	STATE PERMIT NUMBER <u>H0-95-0419</u> fill in this form completely
Date Received (APA) <u>11/30/05</u> 8 MM DD YY 13		OWNER INFORMATION		
15 Last Name <u>Land MKTG Consultants Inc</u>		Owner First Name <u>3060 Washington Rd</u>		
36 Street or RFD <u>Glenwood MD 21738</u>		55		
57 Town <u>Glenwood</u>		70 State <u>MD</u>		
72 Zip <u>21738</u>		76		
DRILLER INFORMATION				
Driller's Name <u>Ralph E Mayne</u>		M SD 117 76 License No. 81		
Firm Name <u>Ralph E Mayne Inc</u>				
Address <u>17024 Hardy Rd. Mt. Airy MD 21771</u>				
Signature <u>Ralph E Mayne</u>		Date <u>11-20-05</u>		
LOCATION OF WELL				
B 3		Howard 8 COUNTY 21		
23 SUBDIVISION <u>Walnut Grove</u>		42		
SECTION <u>44</u>		LOT <u>69</u>		50
52 NEAREST TOWN <u>Clarksville</u>		71		
MILES FROM TOWN (enter 0 if in town) <u>2</u> M I 73 76 77 78				
B 4				
1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)		Sweet Meadow Cr. 11 NEAR WHAT ROAD 30		
		ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)		
		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">             NORTH N WEST W SOUTH S EAST E           </div> <div style="text-align: center;">             34 <u>225</u> 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39           </div> </div>		
		TAX MAP: <u>28</u> BLK: <u>18</u> PARCEL <u>74</u>		
WELL INFORMATION				
B 2		APPROX. PUMPING RATE (GAL. PER MIN.) <u>5</u> 8 12		
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) <u>500</u>		14 20		
USE FOR WATER (CIRCLE APPROPRIATE BOX)				
<input checked="" type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> PUBLIC WATER SUPPLY WELL <input type="checkbox"/> TEST, OBSERVATION, MONITORING <input type="checkbox"/> GEO-THERMAL				
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL				
<u>Howard</u> COUNTY NAME COUNTY NO. <u>13</u> STATE SIGNATURE _____ INSERT S → 41 DATE ISSUED <u>6/26/2006</u> CO SIGNATURE <u>Brian Baker</u> EXP. DATE <u>6/26/2007</u> 43 MM DD YY 48 NORTH GRID <u>508</u> 0 0 0 EAST GRID <u>814</u> 0 0 0 50 55 57 63				
APPROXIMATE DEPTH OF WELL <u>150'</u> FEET 24 28		SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X		
APPROXIMATE DIAMETER OF WELL <u>6"</u> INCH		SOURCES OF DRILLING WATER		
		1. <u>Well</u> 2. 3.		
METHOD OF DRILLING (circle one)		WRITE THE BOX NUMBER FROM THE MAP HERE		
BORED (or Augered) <u>JETTED</u> Jetted & DRIVEN 30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTARY DRIVE-POINT other _____		E <u>814</u> N <u>508</u>		
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)		DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION		
<input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="checkbox"/> THIS WELL WILL DEEPEN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52		Sample taken During field test 8/23/06 000 000		
Not to be filled in by driller (MDE OR COUNTY USE ONLY)				
APPROP. PERMIT NUMBER <u>H02005G006</u>				
PERMIT No. <u>H0-95-0419</u> 70 71 72 73 74 75 76 77 78 79				
SPECIAL CONDITIONS				

NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.

Depth of well 180  
Distance of measuring point (M.P.) above ground 2'  
Static water level (S.W.L.) below M.P. 15 ft

HD-224

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: John E. RUTH Co Telephone #: 410-747-0678  
Address: 5621 Old Frederick Rd  
CATONSVILLE MD 21228

(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 Arnold License# MP9332

\*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: James Arnold Telephone #: 410-206-5396  
Subdivision: WALNUT GROVE Lot #: 69 Well Tag #: HO-95-0414  
Site Address: 5211 Sweet Meadow Lane  
CLARKSVILLE MD 21029

**Submersible Pump Data**

Make: Meyers  
Model #: 35F162-20Plus-P40  
Pump Capacity: 10 GPM  
Well Yield: 15 GPM

**Pitless Adapter**

1hp Make: Amc  
Model #: 4M6PT 825  
Depth: 42" (36" min)  
NSF/WSC approved: ✓

**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 42"  
Conduit secured to well cap: yes

Depth of well encountered at time of pump installation: 180 (feet)  
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**

Type: 1" polyethylene  
PSI: 200 (160 psi min)  
Depth of supply line: 42" (36" min)

**House Connection**

PVC sleeve to undisturbed soil at wall penetration: 3" pvc  
Length of sleeve (5' minimum from foundation): 6'  
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.

Signature of company representative responsible for installation

date 11-1-11

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: \_\_\_\_\_ Inspector: \_\_\_\_\_

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  
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: \_\_\_\_\_ Telephone #: \_\_\_\_\_  
Address: \_\_\_\_\_

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

License # and name of individual responsible for the field installation:

Name (Print): \_\_\_\_\_ License# \_\_\_\_\_

\*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: \_\_\_\_\_ Telephone #: \_\_\_\_\_  
Subdivision: \_\_\_\_\_ Lot #: 69 Well Tag #: HO-95-0419 ✓  
Site Address: 5211 Sweet Meadow Lane

Submersible Pump Data

Make: \_\_\_\_\_  
Model #: \_\_\_\_\_  
Pump Capacity \_\_\_\_\_ GPM  
Well Yield: \_\_\_\_\_ GPM

Pitless Adapter

Make: \_\_\_\_\_  
Model #: \_\_\_\_\_  
Depth: \_\_\_\_\_ (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: \_\_\_\_\_ (feet)  
If pump capacity exceeds well yield, a low water cut 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: \_\_\_\_\_  
PSI: \_\_\_\_\_ (160 psi min)  
Depth of supply line: \_\_\_\_\_ (36" min)

House Connection

PVC sleeved to undisturbed soil at wall penetration: \_\_\_\_\_  
Approximate length of sleeve: \_\_\_\_\_  
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 \_\_\_\_\_

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

Date Insp. Requested: 4/12/11 Date Insp. Approved: 4/19/11  
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 \_\_\_\_\_

Approved by  
M5

See attach letter  
- 5ft from foundation  
Requires  
pre-inspection



Howard County  
Health Department

7178 Columbia Gateway Dr. • Columbia, MD 21046

(410) 313-2640

Fax (410) 313-2648

TDD (410) 313-2323

Toll Free 1-866-313-6300

website: [www.hchealth.org](http://www.hchealth.org)

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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 Gutschick, Little & Weber  
on 11/10/2005
- ☐ \_\_\_\_\_ 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



Howard County  
Health Department

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](http://www.hchealth.org)

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

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

Expiration Date – MAY 8, 2012

NOVEMBER 8, 2011

JAMES C. AND PATRICIA ARNOLD  
5211 SWEET MEADOW DRIVE  
CLARKSVILLE, MD 21029

**RE: WALNUT GROVE, LOT 69**  
**5211 SWEET MEADOW LANE**  
**Building Permit: B09003283**  
**Well Permit: HO-95-0419**

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 **10/21/2011**. Final approval of the well line connection to the dwelling was granted on **4/19/2011**. The well construction was completed on **8/23/2006**. Water samples were collected on **October 21 and 31, and November 4, 2011**.

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 **October 21** indicated a nitrate level of **10.5 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 **October 31** and indicated a nitrate level of **0.2 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-95-0419. 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  
Environmental Sanitarian  
Well & Septic Program

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

Trinity Homes/TBI Homes  
3675 Park Avenue Suite 301  
Ellicott City, MD 21043

S/O Number: 83246

Report Date: November 4, 2011

Property Sampled: 5211 Sweet Meadow Lane, 21029  
Sample Location: Pressure Tank Tap  
Residual Chlorine: <0.1 mg/L

Building Permit #: B09003283  
Sampler ID #: 9898JK  
Samples Iced: Yes

County: Howard  
Map: 28

Subdivision: Walnut Grove  
Parcel: 74

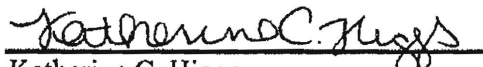
Lot #: 69

Date/Time Collected in Field: November 4, 2011 @ 11:53 am  
Date/Time Received in Lab: November 4, 2011 @ 3:40 pm

Well Tag #: HO-95-0419  
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Softener, Neutralizer, Sediment Filter

PARAMETER	METHOD	MCL	RESULT	PASS/FAIL
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
Sand		Absent	Absent	Pass

  
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](http://www.tracelabs.com) / Email: [info@tracelabs.com](mailto:info@tracelabs.com)

Maryland State Certified Laboratory #318

**CERTIFICATE OF ANALYSIS****Requester:**

Trinity Homes/TBI Homes  
3675 Park Avenue Suite 301  
Ellicott City, MD 21043

**S/O Number:** 83192**Report Date:** November 1, 2011

**Property Sampled:** 5211 Sweet Meadow Lane, 21029  
**Sample Location:** Kitchen R/O Tap  
**Residual Chlorine:** <0.1 mg/L

**Building Permit #:** B09003283  
**Sampler ID #:** 9898JK  
**Samples Iced:** Yes

**County:** Howard  
**Map:** 28

**Subdivision:** Walnut Grove  
**Parcel:** 74

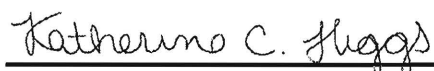
**Lot #:** 69

**Date/Time Collected in Field:** October 31, 2011 @ 12:59 pm  
**Date/Time Received in Lab:** October 31, 2011 @ 3:15 pm

**Well Tag #:** HO-95-0419  
**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	<0.2 mg/L as N	Pass

  
Katherine C. Higgs  
Manager – Drinking Water Testing



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## CERTIFICATE OF ANALYSIS

**Requester:**

Trinity Homes/TBI Homes  
3675 Park Avenue Suite 301  
Ellicott City, MD 21043

**S/O Number:** 83105**Report Date:** October 24, 2011

**Property Sampled:** 5211 Sweet Meadow Lane, 21029  
**Sample Location:** Hose Bib Behind Garage  
**Residual Chlorine:** <0.1 mg/L

**Building Permit #:** B09003283  
**Sampler ID #:** 9170DH  
**Samples Iced:** Yes

**County:** Howard  
**Map:** 28

**Subdivision:** Walnut Grove  
**Parcel:** 74

**Lot #:** 69

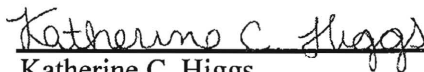
**Date/Time Collected in Field:** October 21, 2011 @ 10:59 am

**Date/Time Received in Lab:** October 21, 2011 @ 4:40 pm

**Well Tag #:** HO-95-0419  
**Well Condition:** 2-Piece Cap, Satisfactory

**Water Treatment/Conditioning:** Softener, Neutralizer, Sediment Filter (Bypassed)

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	10.5 mg/L as N	FAIL
Turbidity	EPA 180.1	10 NTU	1.2 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	7.6 Units	***
Sand		Absent	Absent	Pass

  
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  
17178 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: 11/1/11 WELL PERMIT #: HO - 95 - 0419  
PROPERTY OWNER: JIM AND PATTY ARNOLD  
SUBDIVISION & LOT #: WALNUT GROVE LOT 69  
PROPERTY ADDRESS: 5211 SWEET MEADOW Lane, 21029

CONDITIONS:

1) The well installed under permit # HO - 95-0419 has been documented to have a nitrate level of 10.5 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 \_\_\_ 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 - 95-0419. 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]

JIM ARNOLD

PATTY ARNOLD

Prospective Owner's Day Time Phone Number(s)

410-206-5396

410-206-6181

PA

October 5, 2006

**Walnut Grove, LLC  
10705 Charter Dr.  
Suite 320  
Columbia, Maryland 21044**

**RE: Walnut Grove  
Well Tag: HO-95-0419**

To Whom It May Concern:

A sample was collected during a yield test on August 23, 2006 and submitted to Department of Health and Mental Hygiene Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. These naturally occurring radioactive nuclides have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of **4.0 ± 2.0 picocuries/liter (pCi/L)**; while the **Gross Beta** level was **5.0 ± 2.0 pCi/L**. The **Gross Alpha** result was below its **maximum contaminant level (MCL)** of **15 pCi/L**, while the **Gross Beta** level was below its target value of **50 pCi/L** (roughly equivalent to the **annual dose rate** of **4 millirems/year**). At the time of testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing **for these parameters** will be required to secure the future Use & Occupancy. However, other standard (potability) testing will still be necessary.

A copy of the test results is enclosed for your information. Please call this office at **410-313-1773** if you have any further questions or concerns.

Sincerely,

Bert Nixon, Deputy Director  
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater  
Well & Septic property file

**The John E. Ruth Company, Inc.***Plumbing & Heating Contractors*

5621 Old Frederick Road, Suite 2

Catonsville, MD 21228

Phone (410)-747-0678 &amp; Fax (410)-788-3623

Website: [www.johneruthco.com](http://www.johneruthco.com)

To: Howard County Health Department  
Environmental Health Division  
7178 Columbia Gateway Drive  
Columbia, MD 21046  
Attn: Mr. Michael Johnson

From: James Arnold (owner, contractor)  
5211 Sweet Meadow Lane  
Clarksville, MD 21029  
410-206-5396

Re: Well Permit #95-0419 inspection

Via Fax: 410-313-2648

Date: April 19, 2011

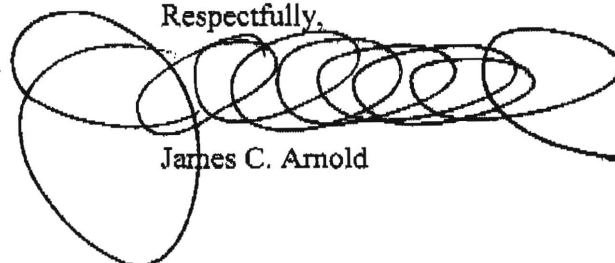
Dear Mr. Johnson,

As a follow-up to our phone conversation today, I submit the following for the record. I certify that the foundation well water sleeve pipe, consisting of Schedule 40 PVC pipe and fittings, was in fact installed through the foundation wall and extends out approximately 6' from the foundation wall. It was installed in accordance with the Health Dept. Regulations and was properly sealed.

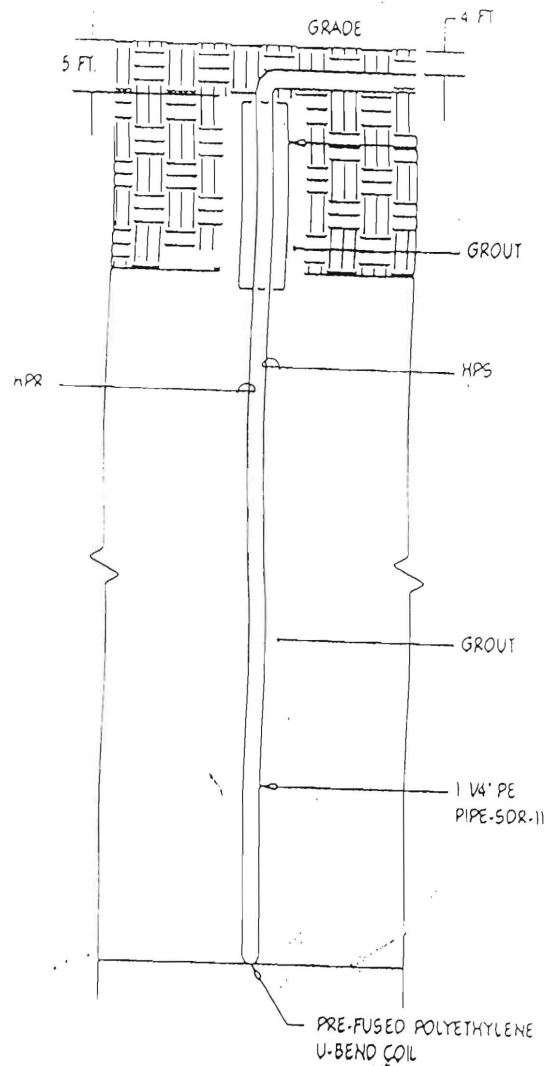
Because of the uncertainty of the day to day weather conditions, the sleeve pipe and trench have been covered so that the pipe currently is not visible. I, as owner and contractor will assume all responsibility as to the condition of this installation and will hold harmless the Howard County Health Dept. and its Inspection Division.

Upon receipt of this notice, please enter into record a satisfactory result as to the inspection of same. If you require any additional information please feel free to contact me.

Respectfully,

A large, stylized handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke.

James C. Arnold



4 TYPICAL BORE HOLE DETAIL  
 H1.00 NOT TO SCALE