

C1 6617

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

COUNTY NUMBER 13

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

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

DATE WELL COMPLETED MM DD YY 08 03 06

Depth of Well 22 220 26 9/13/06 (TO NEAREST FOOT) O.K. (PB)

PERMIT NO. FROM "PERMIT TO DRILL WELL" 10-45-0053

OWNER TTS Corp last name first name STREET OR RFD TOWN Glenoch SUBDIVISION SECTION 21/12/2 LOT 19

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. Rows include Top Soil, Sandy, Sand Stone, MICKA, Sand Stone, MICKA.

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) YES Y NO N TYPE OF GROUING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 20 NO. OF POUNDS 200 GALLONS OF WATER 120 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 30 ft.

CASING RECORD

MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 60

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

SCREEN RECORD screen type or open hole insert appropriate code below ST BR HO PL OT

DEPTH (nearest ft.) 220 ACHC3RESE N DIAMETER OF SCREEN (NEAREST INCH) 56 to 60

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

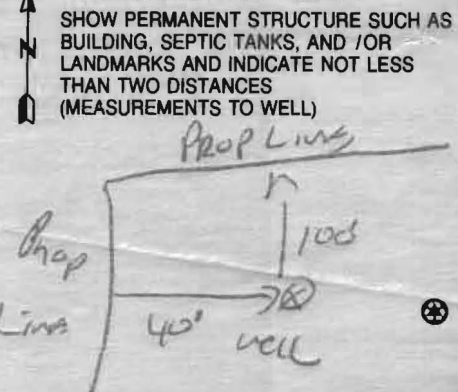
PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 5 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 5 ft. WHEN PUMPING 85 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) 2

LOCATION OF WELL ON LOT



NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES Y NO 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 SD 112 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 D

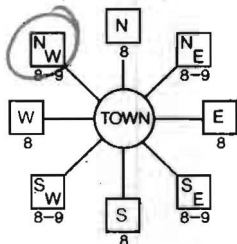

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

B 1 **8921** SEQUENCE NO (MDE USE ONLY) STATE OF MARYLAND STATE PERMIT NUMBER
 APPLICATION FOR PERMIT TO DRILL WELL *HO-95-0053*
 please type *522472* fill in this form completely

Date Received (APA) _____
 OWNER INFORMATION
 8 MM DD YY 13
 15 Last Name *J.T.S. Corp* Owner First Name 34
 36 Street or RFD *8800 Centre Park Dr Suite 209* 55
 57 Town *Columbia* MD. 70 State 72 Zip *21045* 76

B 3 LOCATION OF WELL
 8 COUNTY *Howard* 21
 23 SUBDIVISION *Musgrove Farm* 42
 SECTION *19* LOT *19*
 52 NEAREST TOWN *GLENELG* 71
 MILES FROM TOWN (enter 0 if in town) *2* M I
 73 76 77 78

DRILLER INFORMATION
 76 Driller's Name *Ralph E. Mayne* License No. 81 *MSD112*
 Firm Name *Ralph E. Mayne Inc*
 Address *17024 Handy Rd Mt Airy MD 21071*
 Signature *Ralph E. Mayne* Date *5-14-05*

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

 11 NEAR WHAT ROAD *Musgrove Farm Ct.* 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

 34 DISTANCE FROM ROAD *200* 37 ENTER FT OR MI 38 39
 TAX MAP: *21* BLK: *12* PARCEL *12*

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

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

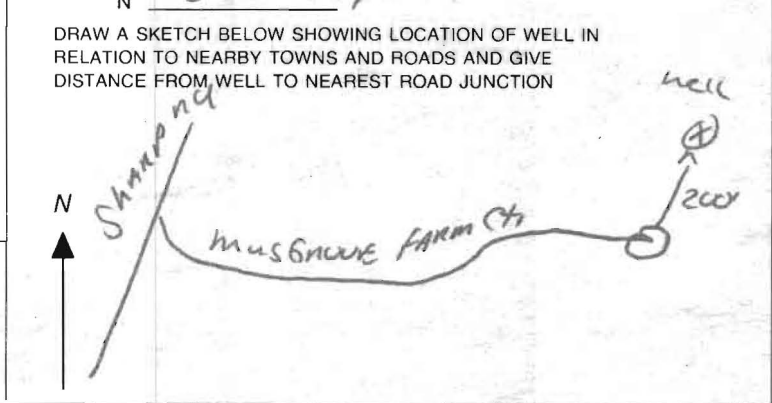
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
 COUNTY NAME *Howard* COUNTY NO. *13*
 STATE SIGNATURE _____ INSERT S →
 DATE ISSUED *6/17/05* 41
 CO SIGNATURE *Steve* EXP. DATE *6/17/06*
 NORTH GRID *524 000* EAST GRID *799 000*
 50 55 57 63

APPROXIMATE DEPTH OF WELL *150* FEET
 24 28
 APPROXIMATE DIAMETER OF WELL *61* 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 *525 799* 000
 N *800 524* 000

METHOD OF DRILLING (circle one)
 BORED (or Augered) JETTED Jetted & DRIVEN
 AIR-ROTary AIR-PERcussion ROTARY (Hydraulic Rotary)
 30 CABLE REVERSE-ROTary DRIVE-POINT
 37 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



Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER *HO 2005 G 002*
 PERMIT No. *HO-95-0053*
 70 71 72 73 74 75 76 77 78 79

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-0053
 Location of property (road) Magrove Farm Ct
 Subdivision Musgrove Farm Lot 19 Block 12 Plat 21 Sec. Par. A
 Well Driller Ralph Mague Owner J. T. S. Long
 Depth of well 220
 Distance of measuring point (M.P.) above ground 2"
 Static water level (S.W.L.) below M.P. 5"

I. High rate pumping -- reservoir drawdown

Time pump started 9:00 Pumping rate 10 Gpm
 Total time 15 min to reach pumping water level 85 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)
9:00	5"	6 Sec		10 Gpm
			TEST Started	
9:15	85"	12 Sec		5 Gpm
9:30	85"	12 Sec		5 Gpm
9:45	85"	12 Sec		5 Gpm
10:00	85"	12 "		5 "
10:15	85"	12 "		5 "
10:30	85"	12 "		5 "
10:45	85"	12 Sec		5 Gpm
11:00	85"	12 Sec		5 Gpm
11:15	85"	12 Sec		5 Gpm
11:30	85"	12 "		5 "
11:45	85"	12 "		5 "
12:00	85"	12 Sec		5 Gpm
12:15	85"	12 Sec		5 Gpm

**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: Fogles Well Drilling Telephone #: 443-609-4195
Address: 6003 Woodbine Rd
Woodbine Md 21797

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): Allen Compton License# MSD0009

*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: Ryan Homes Telephone #: 410-776-0980
Subdivision: Musgrave Farms Lot #: 19 Well Tag #: HO-45-0058
Site Address: 14357 Musgrave Farm Ct

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Cummins</u>	Make: <u>Cummins</u>	Two piece watertight cap: <u>yes</u>
Model #: <u>ISS0410-220</u>	Model #: <u>pl6</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity <u>15</u> GPM	Depth: <u>36</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>5</u> GPM	NSF approved: <u>yes</u>	Conduit min 18" B.G.: <u>yes</u>
Depth of well encountered at time of pump installation: <u>230</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 or Cable guards are required - Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt NA

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>1/2" PVC</u>	PVC sleeved to undisturbed soil at wall penetration: <u>yes</u>
PSI: <u>160</u> (160 psi min)	Approximate length of sleeve (5 foot minimum): <u>5</u>

Depth of supply line: 42 (36" min) Sleeve caulked and sealed properly: yes

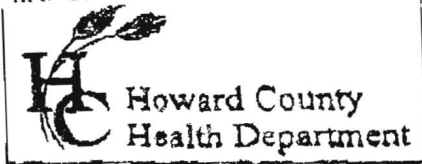
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation:

Signature of company representative responsible for installation: Allen Compton date: 8-18-09

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

Date Insp. Requested: 8/19/09 Date Insp. Approved: 8/19/09 (KW)

Inspection Data: Pitless adapter and water supply line at least 36" below grade	<u>✓</u>
Two piece cap installed and attached to casing securely	<u>✓</u>
Elec. conduit extends at least 18" below grade/attached to cap properly	<u>✓</u>
Safety rope installed inside of well casing	<u>✓</u>
Correct well tag attached properly and casing 8" above finished grade	<u>✓</u>
Water supply line sleeved adequately at house connection	<u>✓</u>
Adequate grout observed below pitless adapter	<u>✓</u>



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!!!

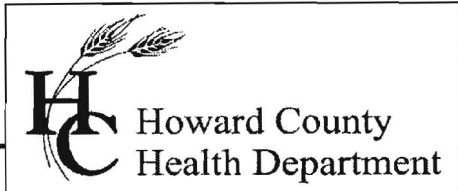
Musgrove Team

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

- The well site has been staked by Gutachnick Little & Weber PA on 05/05/05 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



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

September 16, 2009

Homeowner
14377 Musgrove Farm Court
Glenwood, MD 21738

RE: Musgrove Farm, Lot 19
14377 Musgrove Farm Court
BP #: B09001212
Well Tag: HO-95-0053

Dear Sir:

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 09/11/2009. Final approval of the well line connection to the dwelling was approved on 08/19/2009.**

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 water sample results were found to be in compliance with COMAR water quality standards.

Enclosed with this certificate, is a copy of the septic permit and the as-built along with important information regarding the use and maintenance of your septic system. Please read through carefully and thoroughly. Any questions regarding your well and/or septic, please call this office for guidance 410-313-1771.

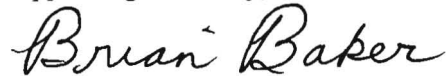
INTERIM CERTIFICATE OF POTABILITY

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-95-0053. 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.

This certificate may become final upon completion of the second bacteriological test, which is to be taken by the county health department within six months of receipt 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 Samples: 09/14/2009
Date of Well Completion: 06/03/2006

Approving Authority,

A handwritten signature in cursive script that reads "Brian Baker".

Brian Baker, R. S.
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

415 Old Lane, P.O. Box 101, Glenwood, MD 21738 (410) 845-1014 (410) 845-1015 FAX (410) 845-1028

REPORT OF ANALYSIS

Laboratory ID #: 72741 Account #: 1930
 Reference: Ryan Home Lot 19 Company: Fogle's Well Drilling
 Location: 14377 Musgrove Farm Requested By: Dave Fogle
 Glenwood, MD 21738 Source: Well Water
 Date/ Time Collected: 9/14/2009 1212 Site: Kitchen Sink Tap
 Date/Time Rec'd: 9/14/2009 1450 Treatment: Reverse Osmosis**
 Chlorine ppm: Free: ND Total: ND pH: 6.1
 Collected By: V.M. Fadoul 6804VF-FS Well #: HO-95-0053

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	9/15/2009 / 0900 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	9/15/2009 / 0900 / CCH
Nitrate	3.60	mg/L	10	601	9/15/2009 / 1345 / CCH
Turbidity	1.20	NTU	<10	SM18 2130B	9/15/2009 / 1115 / CCH
Sand	NS	mg/L	5	Visual/Gravimetry	9/15/2009 / 1130 / CCH

NOTES:

- 1 **Sample collected prior to treatment
- 2 mg/L = milligrams per liter (also, parts per million)
- 3 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 4 NS = None Seen (NS indicates less than 5 mg/L)
- 5 NTU = Nephelometric Turbidity Units
- 6 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 7 ND:None Detected
- 8 Sample collected by client, analyzed as received
- 9 pH tested on-site

Reason for Test : Use & Occupancy
 Building Permit #: B09001212

Date Reported: 9/15/2009