

C 1 0838 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 13

ST/CO USE ONLY DATE RECEIVED MM DD YY 11 05 13

DATE WELL COMPLETED MM DD YY 11 07 11

Depth of Well 400 (TO NEAREST FOOT) 12/6/2011 O.K. (B)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-0064

OWNER RUSTIN last name first name MARTY STREET OR RFD Hill Musgrave Farm TOWN Glenely SUBDIVISION SECTION LOT 30

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 Drilled well Deeper from 200-400 Gray Mica 200 400 ✓

GROUTING RECORD WELL HAS BEEN GROUTED (Circle Appropriate Box) YES Y NO N

TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS NO. OF POUNDS GALLONS OF WATER DEPTH OF GROUT SEAL (to nearest foot) from 48 TOP 52 ft. to 54 BOTTOM 58 ft. (enter 0 if from surface)

CASING RECORD casing types insert appropriate code below MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot) 60 61 63 64 66 70

OTHER CASING (if used) diameter inch depth (feet) from to E A C H I N G

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

DEPTH (nearest ft.) 1 2 3 4 5 6 7 8 9 11 15 17 21 23 24 28 30 32 36 38 39 41 45 47 51 SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60 from to

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 70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3 PUMPING TEST

HOURS PUMPED (nearest hour) 01 8 9 PUMPING RATE (gal. per min.) 4 11 15 METHOD USED TO MEASURE PUMPING RATE 194 WATER LEVEL (distance from land surface) BEFORE PUMPING 34 17 20 ft. WHEN PUMPING 396 22 25 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 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 02 (nearest foot) 49 50 51

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) N 39° 16.345 W 677.00457

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 009 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 8932

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 522472

STATE PERMIT NUMBER

110-95-0064 fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

J.T.S. CORP. Owner First Name 34 8800 Centre Park Dr Suite 203 Street or RFD 55 Columbia MO 21045 Town 70 State 72 Zip 76

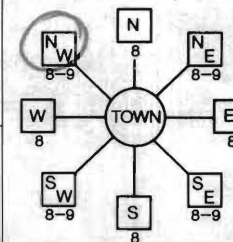
B 3 LOCATION OF WELL

Howard COUNTY 21 Mus Grove Farm SUBDIVISION 42 SECTION 44 46 LOT 30 48 50 GLENELG NEAREST TOWN 71 MILES FROM TOWN (enter 0 if in town) 2 M I 73 76 77 78

DRILLER INFORMATION

Ralph E. Mayne MS D 12 Driller's Name 76 License No. 81 Ralph E. Mayne Inc Firm Name 17024 Handy Rd Mt Airy MD 21778 Address 5-14-05 Signature Date

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Mus Grove Farm Ct. NEAR WHAT ROAD 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH WEST EAST SOUTH 34 400 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: 21 BLK: 12 PARCEL 12

B 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)

- 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 COUNTY NAME 13 COUNTY NO. STATE SIGNATURE INSERT S DATE ISSUED 6/20/05 EXP. DATE 6/20/06 CO SIGNATURE EXP. DATE NORTH GRID 524 000 EAST GRID 790 000 50 55 57 63

APPROXIMATE DEPTH OF WELL 150 FEET 24 28

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 DEEPEMED 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 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 HD 2005 G 002 PERMIT No. HD 95-0064 70 71 72 73 74 75 76 77 78 79

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

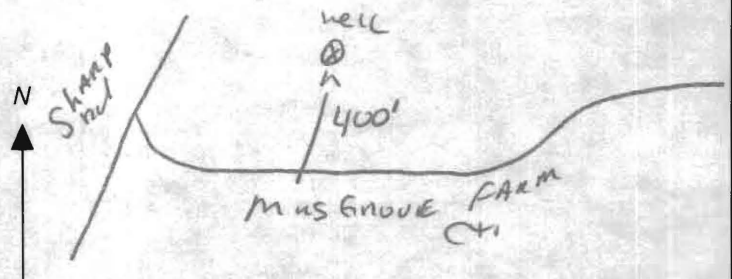
SOURCES OF DRILLING WATER

- 1. well
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 528 798 000 000 N 890 524

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



SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED



Failed  
Start  
6/14/10  
6/15/10

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: P.O. Box 202  
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 Cropton License# MS2007

\*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 #: 410-796-0780  
Subdivision: Muscrope Farms Lot #: 30 Well Tag #: HO-95-0064  
Site Address: 14311 Maryland Farmct  
Glenn, md

Submersible Pump Data      Pitless Adapter      Well Cap and Electric Conduit  
Make: Grundfos      Make: Cropton      Two piece watertight cap: yes  
Model #: 1590 02-180      Model #: N/A      Screened, vented well cap: yes  
Pump Capacity 15 GPM      Depth: 42 (36" min)      Cap secured to casing: yes  
Well Yield: 30 GPM      NSF approved: yes      Conduit min 18" B.G.: yes  
Depth of well encountered at time of pump installation: 300 (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 or Cable guards are required - Must circle one  
Safety rope, if used, attached to inside of well casing with eye bolt N/A

Piping to house      House Connection  
Type: 1" PVC Pipe      PVC sleeved to undisturbed soil at wall penetration: yes  
PSI: 160 (160 psi min)      Approximate length of sleeve (5 foot minimum): 5  
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 Cropton      date: 4/22/10

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 4/22/10 (BO)  
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 ✓

C1 6628

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)

COUNTY NUMBER

13

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY

Depth of Well 22 200 26 9/13/06

PERMIT NO. FROM "PERMIT TO DRILL WELL" HD-95-0064

OWNER ITS Corp last name first name STREET OR RFD TOWN Glenelder SUBDIVISION SECTION 21/12/12 LOT 30

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, FEET TO, check if water bearing. Rows include Top Soil, Sandy, Sandstone, MICKA, Sandstone, MICKA.

GRROUTING RECORD yes no WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N

TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 19 NO. OF POUNDS 1780

GALLONS OF WATER 114 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 36 ft.

CASING RECORD casing types insert appropriate code below ST STEEL CO CONCRETE PL PLASTIC OT OTHER

MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 55

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

SCREEN RECORD screen type or open hole insert appropriate code below ST STEEL BR BRASS PL PLASTIC HO OPEN HOLE OT OTHER

C 3 PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 4 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 27 ft. WHEN PUMPING 67 ft. TYPE OF PUMP USED (for test) 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 LAND SURFACE - below 2 (nearest) foot

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes no 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 SD 112 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

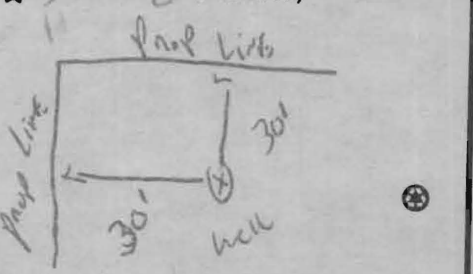
LIC. NO. 1 D

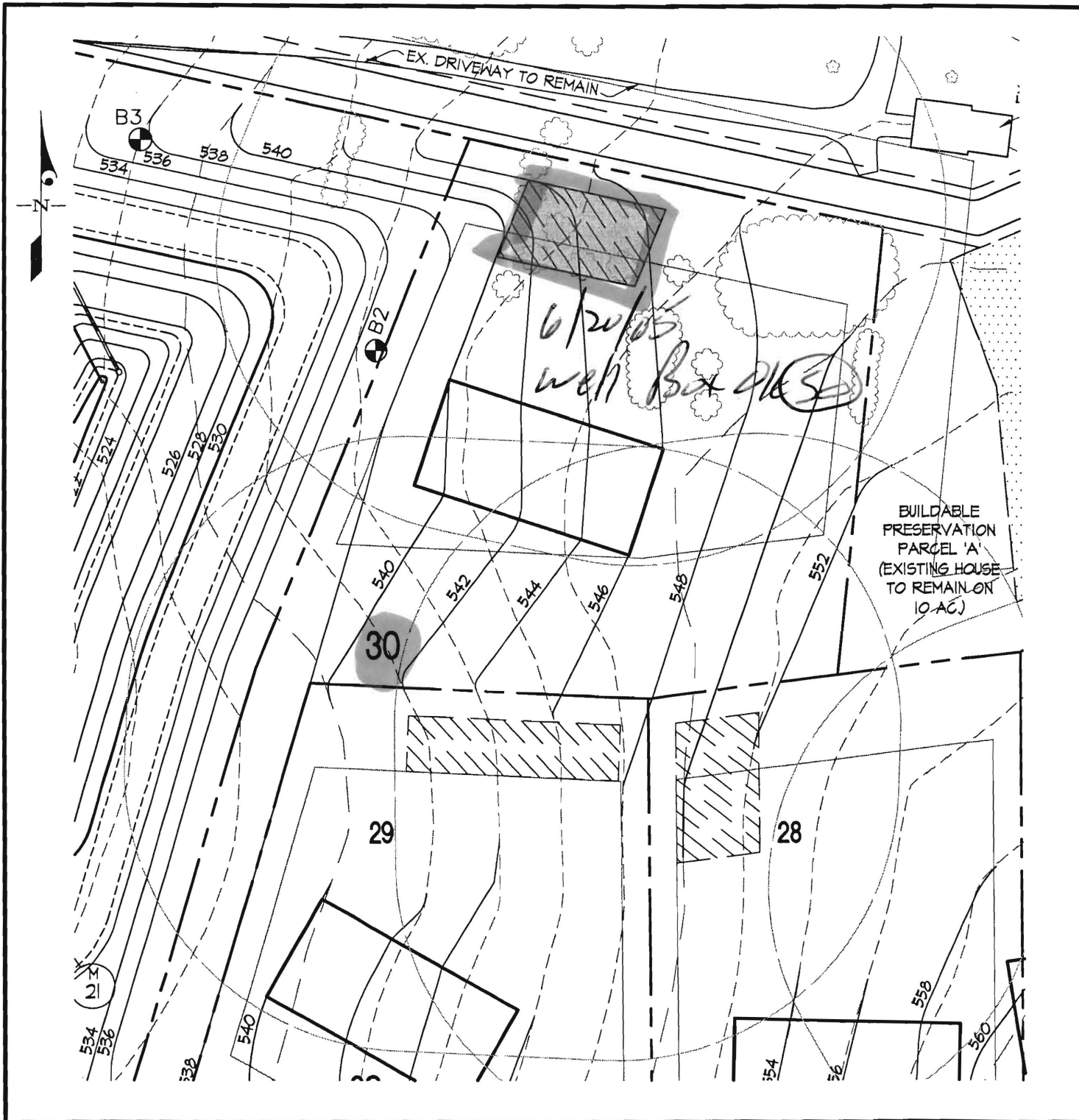
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

DEPTH (nearest ft.) 1 170 53 200 2 8 9 11 15 17 21 3 23 24 26 30 32 36 4 38 39 41 45 47 51 5 SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60 from to 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 70 72 74 75 76 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)





**LEGEND**



CONCEPTUAL HOUSE BOX

4022  
W-30



WELL SURVEY POINT

WELL BOX

**WELL LOCATION EXHIBIT - LOT 30**

**MUSGROVE FARM**

Lots 1 thru 30, Buildable Preservation Parcels 'A'  
and Non-Buildable Preservation Parcels 'C' and 'D'

**GLW GUTSCHICK LITTLE & WEBER, P.A.**

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS

3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK

BURTONSVILLE, MARYLAND 20866

TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

SCALE: 1"=50'

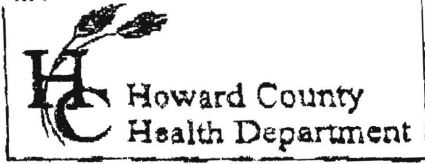
ZONING: RC/RR-DEO

TAX MAP/GRID: 22-12,22-1&7

GLW JOB NO: 01171

APR., 2005

1 OF 1



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!!!**

*Muscovis 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 Gutschick 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



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

June 11, 2010

Homeowner  
14311 Musgrove Farm Court  
Glenwood, MD 21738

RE: Musgrove Farm, Lot 30  
14311 Musgrove Farm Court  
BP #: B10000295  
Well Tag: HO-95-0064

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 06/07/2010. Final approval of the well line connection to the dwelling was approved on 04/22/2010.**

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 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-95-0064. 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: 06/09/2010  
Date of Well Completion: 04/20/2006

Approving Authority,

A handwritten signature in black ink that reads "Kevin M. Wolf, R.S." with a stylized, cursive script.

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

cc: Building Inspector's Office  
Community Hygiene  
File

**FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.**  
 1413 Old Laneview Rd., Westminster, MD 21157 (410) 843-1034 (410) 843-5554 FAX (410) 843-0298

**REPORT OF ANALYSIS**

Laboratory ID #:	75585	Account #:	1930
Reference:	Ryan Homes Lot 30	Company:	Fogle's Well Drilling
Location:	14311 Musgrove Farm Glenwood, MD 21738	Requested By:	Dave Fogle
Date/ Time Collected:	6/9/2010 1245	Source:	Well Water
Date/Time Rec'd:	6/9/2010 1335	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	J. Fogle 1974JF	pH:	6.5
		Well #:	HO-95-0064

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME ANALYSIS
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	6/10/2010 / 0830 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	6/10/2010 / 0830 / CCH
Nitrate	1.92	mg/L	10	601	6/9/2010 / 1530 / CCH
Turbidity	1.74	NTU	<10	SM18 2130B	6/9/2010 / 1515 / CHH
Sand	NS	mg/L	5	Visual/Gravimetric	6/9/2010 / 1515 / CHH

**NOTES**

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

Reason for Test : Use & Occupancy  
 Building Permit # : B 10000295

Date Reported: 6/10/2010