

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

DATE WELL COMPLETED
MM DD YY
12 21 06
15 20

Depth of Well
22 325 26
(TO NEAREST FOOT)

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
H0-95-0559
28 29 30 31 32 33 34 35 36 37

OWNER Sullivan Barbara
STREET OR RFD 15215 Bushy Park Rd.
SUBDIVISION Rippeon Property SECTION TOWN Woodbine LOT 2

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		check if water bearing
	FROM	TO	
Top Soil	0	2	
Brown Shale	2	25	
Brown SLATE	25	45	
Blue SLATE	45	90	
Brown SLATE	90	95	
Blue SLATE	95	325	

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT (CM) BENTONITE CLAY (BC)
NO. OF BAGS 9 NO. OF POUNDS 900
GALLONS OF WATER 54
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 PL
Nominal diameter top (main) casing (nearest inch) 6
Total depth of main casing (nearest foot) 35

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

SCREEN RECORD
screen type or open hole insert appropriate code below

DEPTH (nearest ft.)
H0 33 325

EACH CASING	DEPTH (nearest ft.)	
	diameter inch	depth (feet) from to
1	8	9 11 15 17 21
2	23	24 26 30 32 36
3	38	39 41 45 47 51

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

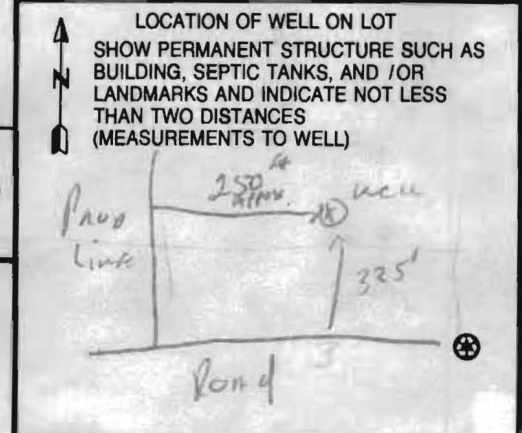
MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST

HOURS PUMPED (nearest hour) 6
PUMPING RATE (gal. per min.) 3
METHOD USED TO MEASURE PUMPING RATE Bucket
WATER LEVEL (distance from land surface)
BEFORE PUMPING 33 ft.
WHEN PUMPING 175 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)
LAND SURFACE (nearest foot) 2



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 D 12
DRILLERS SIGNATURE
LIC. NO. 1 D

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

B 1 8474

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

525626 please type

40-95-0559 fill in this form completely

Date Received (APA) 11/06/06

OWNER INFORMATION

Sullivan Barbara Last Name Owner First Name 34
3620 Ivory del Street or RFD 55
GLENELF MD 21737 Town State 72 Zip 76

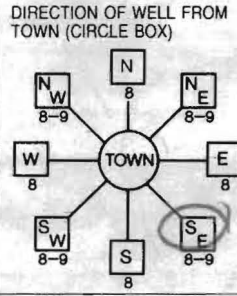
B 3 LOCATION OF WELL

Howard COUNTY 21
Rippeow Prop SUBDIVISION 23 15215 Bushy Park rd 42
SECTION 44 46 LOT 48 50
Lisbon WOODBINE NEAREST TOWN 52
MILES FROM TOWN (enter 0 if in town) 2 M I 73 76 77 78

DRILLER INFORMATION

Ralph E. Wayne MS D 117 Driller's Name 76 License No. 81
Ralph E. Wayne Inc Firm Name
17024 Hardy rd Mt Airy MD Address 21771
Signature Date 9-30-06

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Bushy Park rd NEAR WHAT ROAD 11 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
34 325 37 DISTANCE FROM ROAD 38 39
ENTER FT OR MI
TAX MAP: 14 BLK: PARCEL 12

B 2 WELL INFORMATION

APPROX. PUMPING RATE 5 GAL. PER MIN. 8 12
AVERAGE DAILY QUANTITY NEEDED 500 GAL. PER DAY 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- Domestic Potable Supply & Residential Irrigation (circled)
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 COUNTY NAME 13 A 525171 COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 11/28/06 CO SIGNATURE 11/28/07 EXP. DATE
NORTH GRID 539 000 EAST GRID 0787 000
50 55 57 63

APPROXIMATE DEPTH OF WELL 500 FEET 24 28

APPROXIMATE DIAMETER OF WELL 8.6 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)

- This well will not replace an existing well (circled)
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 deepen 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)

APPROX. PERMIT NUMBER G
PERMIT No. 40-95-0559

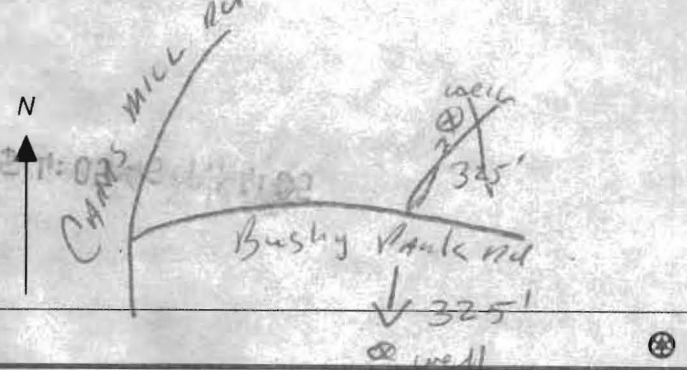
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER
1. well
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 28087
N 54039

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

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-0559
 Location of property (road) 15215 Bushy Park Rd.
 Subdivision Rippeon Prop. Lot 2 Block 3 Plat _____ Sec. _____
 Well Driller Ralph Mayne Owner Barbara Sullivan

Depth of well 325
 Distance of measuring point (M.P.) above ground 2 ft
 Static water level (S.W.L.) below M.P. 33 ft

I. High rate pumping -- reservoir drawdown

Time pump started 8:00 Pumping rate 15 GPM
 Total time 30 min to reach pumping water level 175 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 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
8:00	33 ft	4 Sec		15 GPM
8:30	175 ft	20 Sec	Test Started	3 GPM
8:45	175 ft	20 Sec		3 GPM
9:00	175 ft	20 Sec		3 GPM
9:15	175 "	20 "		3 "
9:30	175 "	20 "		3 "
9:45	175 "	20 "		3 "
10:00	175 ft	20 Sec		3 GPM
10:15	175 ft	20 Sec		3 GPM
10:30	175 ft	20 Sec		3 GPM
10:45	175 "	20 "		3 "
11:00	175 "	20 "		3 "
11:15	175 "	20 "		3 "
11:30	175 ft	20 Sec		3 GPM
11:45	175 ft	20 Sec		3 GPM
12:00	175 ft	20 Sec		3 GPM
12:15	175 "	20 "		3 "
12:30	175 "	20 "		3 "
12:45	175 "	20 "		3 "
1:00	175 ft	20 Sec		3 GPM
1:15	175 ft	20 Sec		3 GPM
1:30	175 ft	20 Sec		3 GPM
1:45	175 "	20 "		3 "
2:00	175 "	20 "		3 "
HD-224 2:15	175 ft	20 Sec		3 GPM
2:30	175 ft	20 Sec		3 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: K.A. Plumbing, Inc. Telephone #: 410-259-5910
Address: 470 Dotsie Dr.
Westminster, MD 21158

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

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

Name (Print): Keith Hundertmark License# 8300

*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: Kim Sullivan Telephone #: 410-489-4886
Subdivision: 15215 Bushy Park Rd. Lot #: 2 Well Tag #: HO CL-95-0559
Site Address: Woodbine, MD 21797

Submersible Pump Data

Make: Myers
Model #: 25772-5
Pump Capacity: 3 GPM
Well Yield: 3 GPM

Pitless Adapter

Make: American Canby
Model #: PT 800
Depth: 42" (36" min)
NSF approved: yes

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: 305 (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: Polyethylene
PSI: 160 (160 psi min)
Depth of supply line: 42 (36" min)

House Connection

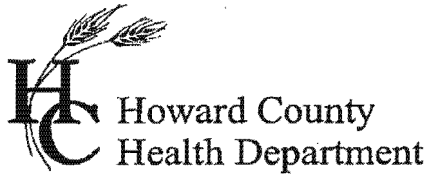
PVC sleeved to undisturbed soil at wall penetration: ✓
Approximate length of sleeve: 6'
Sleeve caulked and sealed properly: yes

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: [Signature] date: 6-2-07

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

Date Insp. Requested: _____ Date Insp. Approved: 8/28/07 [Signature]
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 ✓



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

09/25/2007

Gary Barnard
Barnard Brothers Construction Co.
1045 St. Michaels Road
Mt. Airy, MD 21771

SENT VIA FACSIMILE 410-489-7621

RE: Rippeon Property, Tenant House
15215 Bushy Park Rd.
BP # B07000036
Well Permit # HO-95-0559

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 5/15/2007. Final approval of the well line connection to the dwelling was approved on 8/28/2007.**

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.

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-95-0559. 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: 8/15/2007, 8/1/2007
Date of Well Completion: 12/21/2006

Approving Authority,

Brian Baker, Registered Sanitarian
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File

Water Testing Laboratories

P.O. Box 712
Stevensville, MD 21666
410-643-7711

of Maryland, Inc.

Bernard Brothers Construction
1045 St. Michaels Road
Mount Airy, Md 21771

Reporting Date: 8/16/2007
Report #: K3623

Submitted Sample Address: 15215 Bushy Park Road
Woodbine, Md 21797
Submitted Sample Source: Laundry Tub
Date / Time Collected: 8/15/2007 09:12 AM
Sample Type: Drinking Water
Sampler/Company: D. Pitts 4322DP, WTL of MD
Field Record: Chlorine residual: Absent Clear when drawn
Well #: HO-95-0559
Permit #: B007 0000 36

Analytical Results

Parameter	Result	Units	Detection Level	MCL	Analytical Method
Total Coliforms	Absent	Coliforms/100 ml	Present/Absent	Present	SM 9223B
<i>E. Coli</i>	Absent	Coliforms/100 ml	Present/Absent	Present	SM 9223B

Notes:

- Bacteriological analysis of this sample indicates this water is safe for human consumption.
- MCL is EPA's maximum contaminant level under primary drinking water regulations. SMCL is secondary maximum contaminant level and is the aesthetic quality only. If your result is above any MCL or SMCL, you may want to consider a water treatment system or a new well. Please check your local regulations for any restrictions or additional limits.
- ND -- Not Detected.
- Sample received and examined within EPA's recommended holding time
- Analyzed by Lab 214.
- SM - Greenberg, Clesceri and Eaton, *Standard Methods for the Examination of Water and Wastewater*, 20th Ed.

Reported by,

Christine Rodgers

C. Rodgers, Customer Service Representative

Reviewed by: 8MB

Water Testing Laboratories

P.O. Box 712
Stevensville, MD 21666
401-643-7711

of Maryland, Inc.

Bernard Bros. Construction
1045 St. Michaels Road
Mount Airy, Md 21771

Reporting Date: 8/7/2007
Report #: K3572

Submitted Sample Address: 15215 Bushy Park Rd.
Woodbine, Md 21797
Submitted Sample Source: Holding tank
Date / Time Collected: 8/1/07 8:30AM
Sample Type: Drinking Water
Sampler/Company: D. Pitts 4322DP, WTL of MD
Field Record: Chlorine residual: Absent Clear when drawn
Well #: HO-95-0559

Analytical Results

Parameter	Result	Units	Detection Level	MCL	Analytical Method
Total Coliforms	Present	Coliforms/100 ml	Present/Absent	Present	SM 9223B
<i>E. Coli</i>	Absent	Coliforms/100 ml	Present/Absent	Present	SM 9223B
Nitrates + Nitrites	8.2	mg/L	1.0	10	EPA 353.2
Sand	Absent	P/A	Present/Absent	Present	Visual
Turbidity	0.7	NTU	0.5	10	SM 2130B
pH	7.6	SU	0.1	6.5-8.5 (SMCL)	EPA 150.1

Notes:

- Bacteriological analysis of this sample indicates this water is **unsafe** for human consumption.
- MCL is EPA's maximum contaminant level under primary drinking water regulations. SMCL is secondary maximum contaminant level and is the aesthetic quality only. If your result is above any MCL or SMCL, you may want to consider a water treatment system or a new well. Please check your local regulations for any restrictions or additional limits.
- ND - Not Detected.
- Sample received and examined within EPA's recommended holding time
- Analyzed by Lab 214.
- SM - Greenberg, Clesceri and Eaton, *Standard Methods for the Examination of Water and Wastewater*, 20th Ed.

Reported by,

Kendra VanWyck

K. VanWyck, Customer Service Representative

Reviewed by: *SB*