

DRILLER: REMOVE COPY AND RETAIN FOR YOUR RECORDS. RETURN COUNTY COPY TO COUNTY ENVIRONMENTAL AGENCY. SUBMIT COPY TO OWNER. RETURN ALL OTHER PARTS TO DEPARTMENT OF ENVIRONMENT, 2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224.

C1 3406	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 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)			COUNTY NUMBER <u>AS14619-I</u>

ST/CO USE ONLY DATE Received MM DD YY 8 13	DATE WELL COMPLETED MM DD YY 03 30 04	Depth of Well 22 180 26 (TO NEAREST FOOT) <u>0, K. (BB)</u>	PERMIT NO. FROM "PERMIT TO DRILL WELL" 28 29 30 31 32 33 34 35 36 37 <u>H-1-94-3876</u>
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OWNER Preserve at Waverly Glen LLC
 STREET OR RFD Mount Benali Dr TOWN Woodstock
 SUBDIVISION Preserve at Waverly Glen SECTION _____ LOT 9

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	
Sandy	2	50	✓
Sand Stone	50	55	
MICKA	55	80	
Sand Stone	80	85	✓
MICKA	85	180	

GROUTING RECORD yes no

WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**
44 44

TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS 18 NO. OF POUNDS 1800
45 46 45 46

GALLONS OF WATER 108

DEPTH OF GROUT SEAL (to nearest foot)
 from 0 ft. to 30+ ft.
48 TOP 52 54 BOTTOM 58
 (enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

ST **CO**
STEEL CONCRETE

PL **OT**
PLASTIC OTHER

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

PL 6 62
60 61 63 64 66 70

OTHER CASING (if used)

diameter depth (feet)
 inch from to

E A C H C A S I N G

SCREEN RECORD

screen type or open hole insert appropriate code below

ST **BR** **HO**
STEEL BRASS OPEN HOLE

PL **OT**
PLASTIC OTHER

C2 DEPTH (nearest ft.)

1 2 HO 60 180

E A C H S C R E E N

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 88 _____ 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T _____ (E.R.O.S.) W Q _____

70 _____ 72 _____ 74 75 76

C3 **PUMPING TEST**

HOURS PUMPED (nearest hour) 3
8 9

PUMPING RATE (gal. per min.) 10
11 15

METHOD USED TO MEASURE PUMPING RATE Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING 25 ft.
17 20

WHEN PUMPING 55 ft.
22 25

TYPE OF PUMP USED (for test)

air piston turbine
27 27 27

centrifugal rotary other (describe below)
27 27 27

jet submersible
27 27

PUMP INSTALLED

DRILLER INSTALLED PUMP YES NO
 (CIRCLE) (YES or 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 _____ 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) _____ 31 _____ 35

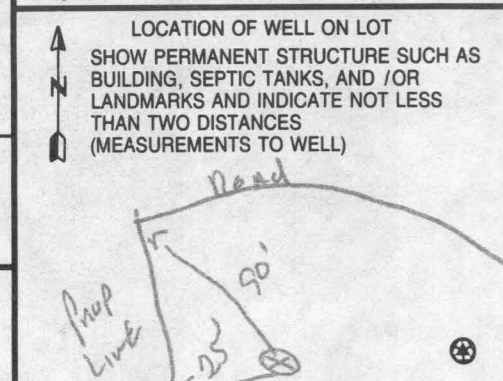
PUMP HORSE POWER _____ 37 _____ 41

PUMP COLUMN LENGTH (nearest ft.) _____ 43 _____ 47

CASING HEIGHT (circle appropriate box and enter casing height)

above } LAND SURFACE
49

below } _____ (nearest foot)
49 50 51



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. MSD 112

DRILLERS SIGNATURE _____
 (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. D _____

Date Received (APA) **10 03 03**
 8 MM DD YY 13
Preserve At Waverly GLEN LLC
 15 Last Name Owner First Name 34
3625 PARK AVE
 36 Street or RFD 55
ELlicott City MD 21043
 57 Town 70 State 72 Zip 76

B 3 LOCATION OF WELL
Howard
 8 COUNTY 21
The Preserve At Waverly GLEN
 23 SUBDIVISION 42
 SECTION 44 46 LOT **9** 48 50
WOODSTOCK
 52 NEAREST TOWN 71
 MILES FROM TOWN (enter 0 if in town) **I** M I
 73 76 77 78

DRILLER INFORMATION
Ralph E. MAYNE M S D I I D
 76 License No. 81
Ralph E. MAYNE INC
 Firm Name
12024 Andy Rd Mt Airy MD 21771
 Address
Ralph E. Mayne 9-18-03
 Signature Date

B 4
 1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
 11 NEAR WHAT ROAD 30
Mount Denali Dr.
Tompkins Way
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 NORTH SOUTH WEST EAST
 34 100 37
 DISTANCE FROM ROAD **41**
 ENTER FT OR MI 38 39
 TAX MAP: **10** BLK: **23** PARCEL **102**

B 2 WELL INFORMATION
 1 2 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
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 INDUSTRIAL, COMMERCIAL, DEWATERING
 PUBLIC WATER SUPPLY WELL
 TEST, OBSERVATION, MONITORING
 GEO-THERMAL

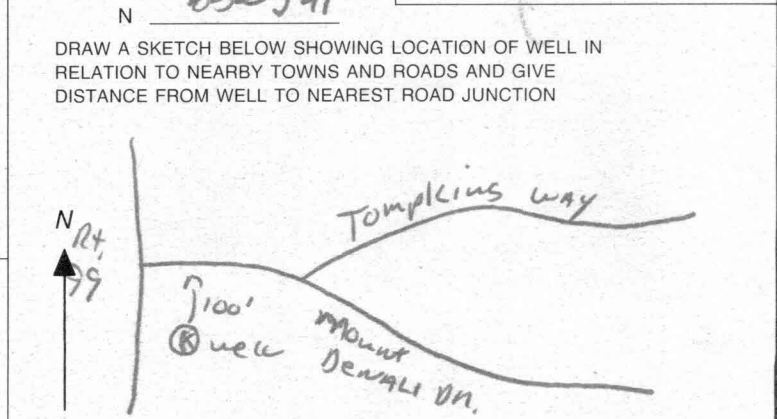
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
Howard COUNTY NAME
A514619-I COUNTY NO.
 STATE SIGNATURE INSERT S →
 DATE ISSUED **01 29 04** Mark R. Klein 41
 43 MM DD YY 48 CO SIGNATURE EXP. DATE
 NORTH GRID **541** 0 0 0 EAST GRID **0832** 0 0 0
 50 55 57 63

APPROXIMATE DEPTH OF WELL **150** FEET
 24 28
 APPROXIMATE DIAMETER OF WELL **6"** 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 **540832**
 N **8320541**
 000 000

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)
 THIS WELL WILL NOT REPLACE AN EXISTING WELL
 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 DEEPEIN AN EXISTING WELL
 39
 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 2003** G A P **005**
 54 63
 PERMIT No. **HO-94-3876**
 70 71 72 73 74 75 76 77 78 79

Date MARCH 30 2004

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 94-3876
 Location of property (road) Mount Denali Dr
 Subdivision PRESERVE @ WAVERLY GLEN Lot 9 Block Plat Sec.
 Well Driller R Mayne Owner Preserve @ Waverly Glen LLC

Depth of well 180
 Distance of measuring point (M.P.) above ground 2nd
 Static water level (S.W.L.) below M.P. 25

I. High rate pumping -- reservoir drawdown

Time pump started 8:30 Pumping rate 10 GPM
 Total time 15 min to reach pumping water level 55 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 <u>5</u> gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
8:30	25 ft	6 Sec	Test Started	10 GPM
8:45	55 ft	6 Sec		10 GPM
9:00	55 ft	6 Sec		10 GPM
9:15	55 ft	6 Sec		10 GPM
9:30	55 "	6 "		10 "
9:45	55 "	6 "		10 "
10:00	55 "	6 "		10 "
10:15	55 ft	6 Sec		10 GPM
10:30	55 ft	6 Sec		10 GPM
10:45	55 ft	6 Sec		10 GPM
11:00	55 "	6 "		10 "
11:15	55 "	6 "		10 "
11:30	55 ft	6 Sec		10 GPM
11:45	55 ft	6 Sec		10 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: Do-It Plumbing & Heating LLC Telephone #: 240-882-0069
Address: 7955 Old Mill Rd
E. I. Md. 21042

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): Duane Gilbert License# 21899

*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: TBF Telephone #: 410-480-0023
Subdivision: Preserves of Waverly Glen Lot #: 9 Well Tag #: HO-94-3870
Site Address: 1887 Mt. Dennis Dr.
Woodsack Md.

Submersible Pump Data	Pitless Adapter	Well Cap and Electric Conduit
Make: <u>Z5T5Z-12Plus-P4-1</u>	Make: <u>American Grundy</u>	Two piece watertight cap: <u>yes</u>
Model #: <u>myers</u>	Model#: <u>PT800</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity <u>10</u> GPM	Depth: <u>yes</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>10</u> GPM	NSF approved: <u>yes</u>	Conduit min 18" E.G.: <u>yes</u>
Depth of well encountered at time of pump installation: <u>180</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 NO

Piping to house
Type: Plastic - one inch
PSI: yes (160 psi min)
Depth of supply line: yes (36" min)

House Connection
PVC sleeved to undisturbed soil at wall penetration: yes
Approximate length of sleeve: 10 Ft
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: 3-1-12

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

Date Insp. Requested: _____ Date Insp. Approved: _____
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 _____

**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 #: _____ Well Tag #: HO-74-3876

Site Address: 1887 Mt. Denali Dr

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 _____

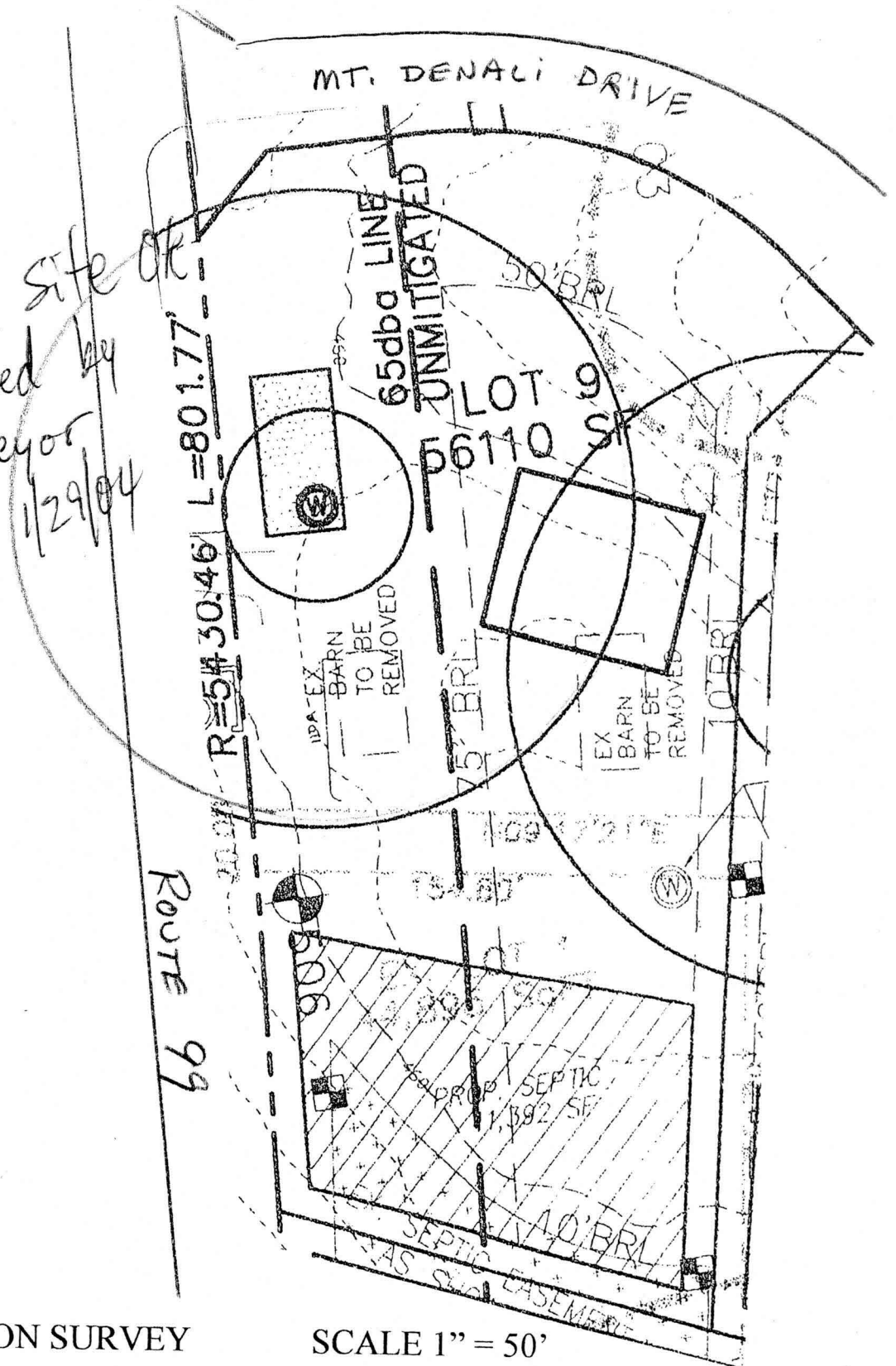
For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: _____ Date Insp. Approved: 10/26/2011
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 3" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter

BIB

PRESERVE AT WAVERLY GLEN

Well site staked by Surveyor MR 1/29/04



WELL LOCATION SURVEY

SCALE 1" = 50'

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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – October 3, 2012

April 3, 2012

Homeowner
1887 Mount Denali Drive
Woodstock, Maryland, 21163

**RE: Preserve at Waverly Glen, Lot #9
1887 Mount Denali Drive
Building Permit: B10003372
Well Permit: HO-94-3876**

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 **10/26/11**. Final approval of the well line connection to the dwelling was granted on **10/26/11**. The well construction was completed on **03/30/04**. Water samples were collected on **03/26/12**.

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.

Gross Alpha and Beta samples were also collected on **03/26/12**. Results showed a Gross Alpha level of **4.6 ± 1.3 pCi/L** and **Gross Beta** level of **7.1 ± 1.4 pCi/L**. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the MCL of 50pCi/L. At the time of testing and with respect to these parameters, the well water is safe for all uses.

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-94-3876. 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 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,



Dana Bernard, REHS/RS
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: 84712

Report Date: March 27, 2012

Potability Testing

Property Sampled: 1887 Mount Denali Drive, 21163
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B10003372
Sampler ID #: 0765AR
Samples Iced: Yes

County: Howard
Map: 10

Subdivision: Preserve at Waverly Glen
Parcel: 330

Map: 9

Date/Time Collected in Field: March 26, 2012 @ 2:40 pm
Date/Time Received in Lab: March 26, 2012 @ 3:45 pm

*4-3-12
DB*

Well Tag #: HO-94-3876
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter

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	<1.0 mg/L as N	Pass
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	7.0 Units	***
Sand		Absent	Absent	Pass

The results in this report relate only to those items tested. If any additional information or clarification of this report is required, please contact us. This test report shall not be reproduced except in full without the written approval of Trace Laboratories Inc.

Katherine C. Higgs
 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.



TRACE LABORATORIES, INC
 5 North Park Drive
 Hunt Valley, MD 21030 USA
 Telephone: 410/584-9099 / Fax: 410/584-9117
 Website: www.traceclabs.com / Email: info@traceclabs.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: 84712

Report Date: March 30, 2012

Radium Testing

Property Sampled: 1887 Mount Denali Drive, 21163
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B10003372
Sampler ID #: 0765AR
Samples Iced: Yes

County: Howard
Map: 10

Subdivision: Preserve at Waverly Glen
Parcel: 330

Map: 9

Date/Time Collected in Field: March 26, 2012 @ 2:40 pm
Date/Time Received in Lab: March 26, 2012 @ 3:45 pm

4-3-12
 DFB

Well Tag #: HO-94-3876
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter

PARAMETER	METHOD	DETECTION LIMIT (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha	EPA 900.0	1.1	15	4.6 ± 1.3	Acceptable
Gross Beta	EPA 900.0	1.9	50	7.1 ± 1.4	Acceptable

*Note: There are no established limits set forth by the EPA for radionuclide particles in private well water. The limits for public water are instead provided as MCLs in this report and the acceptability of this sample is based on these requirements. Gross Alpha levels under 5 pCi/L are acceptable. Levels between 5 and 15 pCi/L are considered moderate, and levels greater than 15 pCi/L are considered high. When levels are moderate or high, treatment or further testing is recommended and in certain cases may be required by the health department.

The results in this report relate only to those items tested. If any additional information or clarification of this report is required, please contact us. This test report shall not be reproduced except in full without the written approval of Trace Laboratories Inc.

Katherine C. Higgs
 Manager – Drinking Water Testing