C 1 | 7103 | SEQUENCE NO. (MDE USE ONLY)

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

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.

COUNTY NUMBER 13

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

DATE WELL COMPLETED MM 03 DD 26 YY 08
15 20

Depth of Well 22 100 26 (TO NEAREST FOOT)

5/16/08 O.K. BB

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-1392
28 29 30 31 32 33 34 35 36 37

OWNER Bassler (last name) Alfred (first name)
STREET OR RFD Autumn Tree Lane TOWN Ellicott City
SUBDIVISION Walnut Creek SECTION LOT 10

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	FEET TO	check if water bearing
Top Soil	0	2	
Clay	2	10	✓
Sandy	10	12	
Micka	12	55	
Sand Stone	55	60	✓
Micka	60	100	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes Y 44 no N 44

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.: M S D 42
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: M D
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y 44 no N 44

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM 45 46 BENTONITE CLAY BC 45 46

NO. OF BAGS 8 NO. OF POUNDS 80

GALLONS OF WATER 48

DEPTH OF GROUT SEAL (to nearest foot)
from 0 ft. 48 TOP 52 to 20 ft. 54 BOTTOM 58
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL | CO CONCRETE | PL PLASTIC | OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL	6	22
60 61	63 64	66 70

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below

ST STEEL | BR BRASS BRONZE | HO OPEN HOLE | PL PLASTIC | OT OTHER

C 2 1 2

EACH SCREEN	DEPTH (nearest ft.)		
1	HO 8 9	20 11 15	100 17 21
2	23 24	26 30	32 36
3	36 39	41 45	47 51

SLOT SIZE 1 ____ 2 ____ 3 ____

DIAMETER OF SCREEN ____ 56 60 (NEAREST INCH)

from to

GRAVEL PACK
IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 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 1 2

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 6 17 20 ft.

WHEN PUMPING 8 22 25 ft.

TYPE OF PUMP USED (for test)
- A air 27
- P piston 27
- T turbine 27
- C centrifugal 27
- R rotary 27
- O other (describe below) 27
- J jet 27
- S submersible 27

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. 29

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

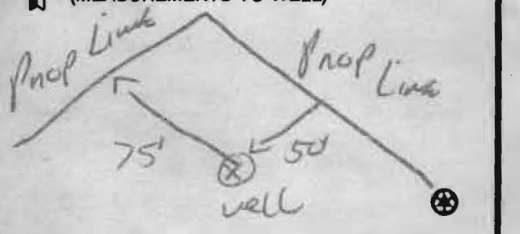
PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)
- + above 49
- – below 49

LAND SURFACE 2 (nearest foot) 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)



DENV-CR00

COUNTY

EMERGENCY/TEMP NO. IF ANY

B 1 0557 SEQUENCE NO. (MDE USE ONLY)

1 2 3 6

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

526621 please type

STATE PERMIT NUMBER: HO-95-1392 (70–79)

fill in this form completely

Date Received (APA) ____ (8 MM DD YY 13)

OWNER INFORMATION

Last Name / Owner / First Name (15–34): BASSLER Venture LLC

Street or RFD (36–55): 15550 N. AVE.

Town (57–70) / State (72) / Zip (76): LISBON MD 21765

DRILLER INFORMATION

Driller's Name: Ralph E. Mayne — License No. (76–81): M SD 112

Firm Name: Ralph E. Mayne Inc

Address: 17024 Handy Rd Mt Airy MD 21771

Signature: [signature] Date: 3-30-08

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) (8–12): 5

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) (14–20): 500

USE FOR WATER (CIRCLE APPROPRIATE BOX)

22

- [D] DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION (circled)
- [F] FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION
- [I] INDUSTRIAL, COMMERICIAL, DEWATERING
- [P] PUBLIC WATER SUPPLY WELL
- [T] TEST, OBSERVATION, MONITORING (circled)
- [G] GEO-THERMAL

APPROXIMATE DEPTH OF WELL (24–28): 150 FEET

APPROXIMATE DIAMETER OF WELL: 6" NEAREST INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) — JETTED — Jetted & DRIVEN

30 AIR-ROTary (circled) — AIR-PERcussion — ROTARY (Hydraulic Rotary)

37 CABLE — REVerse-ROTary — DRive-POINT

other ____

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)

- [N] THIS WELL WILL NOT REPLACE AN EXISTING WELL (circled)
- [Y] THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- 39 [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 DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) 41 __ __ - __ __ - __ __ __ 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER _ _ _ _ _ _ G _ _ _

PERMIT No. HO-95-1392 (70 71 72 73 74 75 76 77 78 79)

B 3 LOCATION OF WELL

COUNTY (8–21): Howard

SUBDIVISION (23–42): Walnut Creek

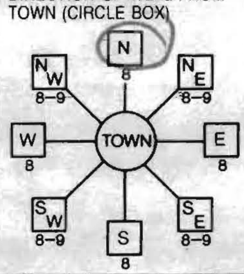
SECTION (44–46): Phase I LOT (48–50): 10

NEAREST TOWN (52–71): Clarksville

MILES FROM TOWN (enter 0 if in town) (73–78): 2 MI

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX): N (circled)



NEAR WHAT ROAD (11–30): Autumn Tree Ln.

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH (circled)

DISTANCE FROM ROAD (34–37): 240

ENTER FT OR MI (38–39): ft

TAX MAP: 28 BLK: 11 PARCEL 49

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

COUNTY NAME: Howard COUNTY NO.: 13

STATE SIGNATURE ____ INSERT S → ____ 41

DATE ISSUED (43 MM DD YY 48): 1/14/2008 CO SIGNATURE: Brian Baker EXP. DATE: 1/14/2009

NORTH GRID (50–55): 509 000 EAST GRID (57–63): 816 000

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X →

SOURCES OF DRILLING WATER
1. well
2.
3.

(X) 3/26/08 Sample collected @ Yield. (initials)

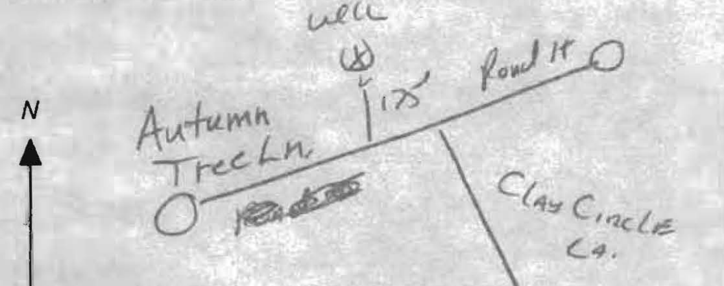
WRITE THE BOX NUMBER FROM THE MAP HERE

E 8146

N 5089 ←

000
000

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: Drill Well Per Plan SP-06-07, Radium Sample

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

DENV-Permit 97 ② COUNTY

Page ____ of ____ Review ____

Date March 26 2008

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-1392

Location of property (road) Autumn Tree Lane

Subdivision Walnut Creek Lot 10 Block ____ Plat ____ Sec. ____

Well Driller Ralph Mayne Owner Bassler

Depth of well 100

Distance of measuring point (M.P.) above ground 2 ft

Static water level (S.W.L.) below M.P. 6 ft

I. High rate pumping -- reservoir drawdown

Time pump started 8:30 Pumping rate 10 Gpm

Total time 15 min to reach pumping water level 8 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)	
8:30	6	ft	6	Sec		10	Gpm
					Test Started		
8:45	8	ft	6	Sec		10	Gpm
9:00	8	ft	6	sec		10	Gpm
9:15	8	ft	6	Sec		10	Gpm
9:30	8	"	6	"		10	"
9:45	8	"	6	"		10	"
10:00	8	"	6	"		10	"
10:15	8	ft	6	Sec		10	Gpm
10:30	8	ft	6	Sec		10	Gpm
10:45	8	ft	6	Sec		10	Gpm
11:00	8	"	6	"		10	"
11:15	8	"	6	"		10	"
11:30	8	ft	6	Sec		10	Gpm
11:45	8	ft	6	Sec		10	Gpm

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: Do It Plumbing & Heating Telephone #: 240 882-0069
Address: 9155 Old Mill Rd
E.C. 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# 21819

***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: TDI   Telephone #: 410-480-0427
Subdivision: Walnut Creek   Lot #: 10   Well Tag #: HO-95-1392
Site Address: 12304 Autumn tree Ln.
Clarksville, Md. 21029

Submersible Pump Data
Make: Myers
Model #: 25752-12PH5-P4-2
Pump Capacity 12 GPM
Well Yield: 10 GPM

Pitless Adapter
Make: American Granby
Model#: PF 8 LF
Depth: yes (36" min)
NSF/WSC approved: yes

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
Conduit secured to well cap: yes

Depth of well encountered at time of pump installation: 100 (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: Black Poly Plastic
PSI: yes (160 psi min)
Depth of supply line: yes (36" min)

House Connection
PVC sleeve to undisturbed soil at wall penetration: yes
Length of sleeve(5' minimum from foundation): 14 ft
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]   Dec. 17-2015
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: ____ 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 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: _____ Telephone #: _____
Subdivision: _____ Lot #: 10 Well Tag # : HO - 95 - 1392
Site Address: 12304 Autumn Tree Ln
_____

Submersible Pump Data	**Pitless Adapter**	**Well Cap and Electric Conduit**
Make: _____	Make: _____	Two piece watertight cap: _____
Model #: _____	Model#: _____	Screened, vented well cap: _____
Pump Capacity _____ GPM	Depth: ____ (36" min)	Cap secured to casing: _____
Well Yield: _____ GPM	NSF/WSC approved: ____	Conduit min 18" B.G.: _____
Depth of well encountered at time of pump installation: _____ (feet)		Conduit secured to well cap: _____

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	**House Connection**
Type: _____	PVC sleeve to undisturbed soil at wall penetration: _____
PSI: _____ (160 psi min)	Approximate length of sleeve: _____
Depth of supply line: ___ (36" min)	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: 4/22/15 Date Insp. Approved: 4/22/15 Inspector: SC

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 seen 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	✓

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #:	104938	Account #:	4035
Reference:	Walnut Creek Lot 10	Company:	Trinity Quality Homes, Inc.
Location:	12304 Autumn Tree Lane Clarksville, MD 21029	Requested By:	Michael Pfau
		Source:	Well Water
Date/ Time Collected:	12/28/2015 1400	Site:	Pressure Tank
Date/Time Rec'd:	12/28/2015 1530	Treatment:	None
Chlorine ppm:	Free: ND Total: ND	pH:	7.5
Collected By:	C. Mooshian 7268CM	Well #:	HO-95-1392

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	12/29/2015 / 0930 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	12/29/2015 / 0930 / CCH
Nitrate	3.09	mg/L	10	601	12/29/2015 / 0945 / CRS
Turbidity	0.39	NTU	<10	SM18 2130B	12/29/2015 / 1035 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	12/29/2015 / 1035 / CRS

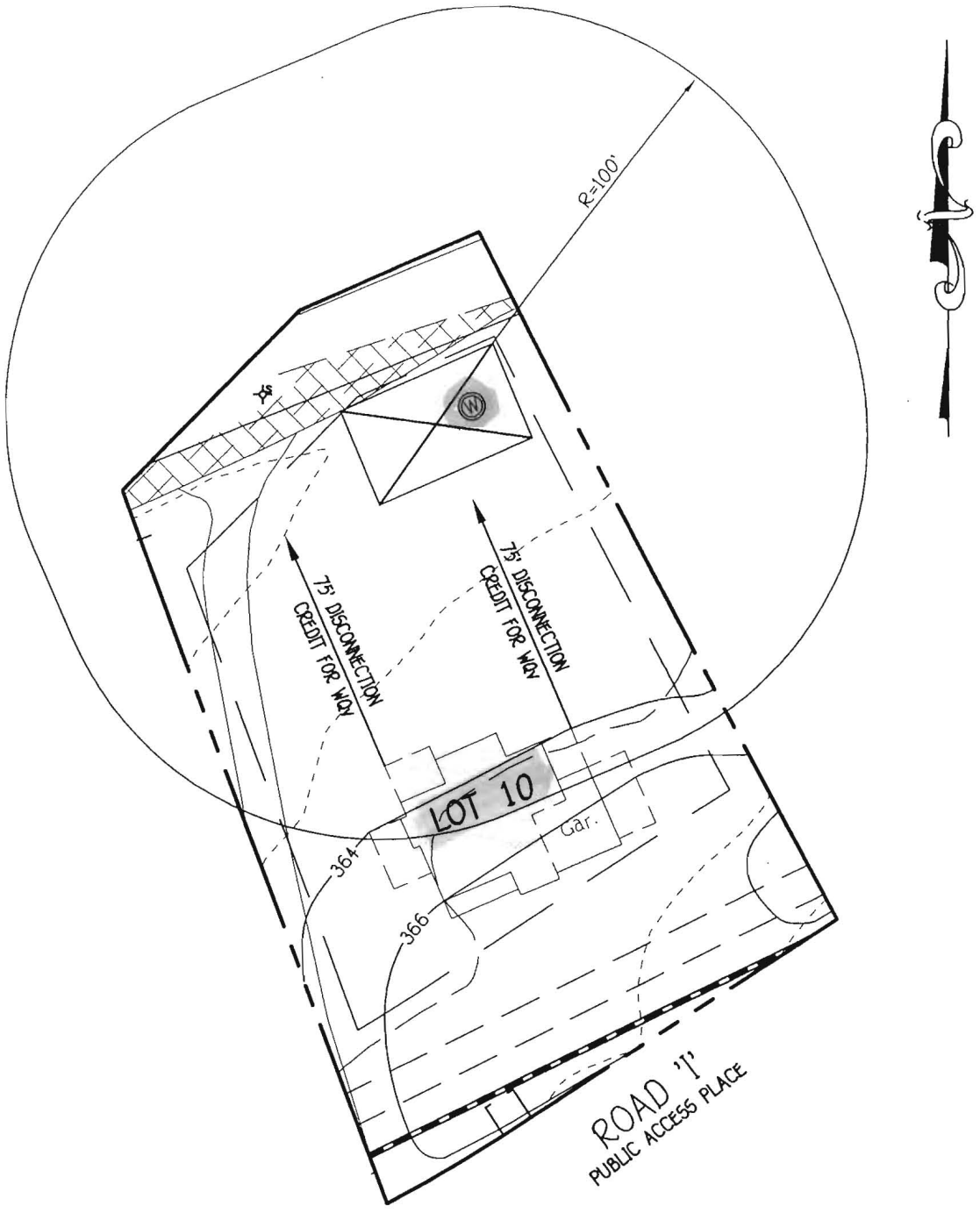
NOTES

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 pH & Chlorine level tested on site
8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : B13004392

Date Reported: 12/29/2015 Reviewed By: Bud Cotton

MD State Certification # 133



1/14/08 Well Site
Staked by BB

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

WELL LOCATION PLAN
LOT 10
ZONED RC-DEO & RR-DEO
TAX MAP No. 28 GRID No. 4, 5, 10-12, 17 & 18
PARCEL No. 49
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE 1"=50' DATE: FEBRUARY 26, 2007

regarding naturally occurring radiation (i.e., Radionuclides) that may exist in

Howard County Health Department

Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(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

April 25, 2008

Heritage Realty & Land Development
15950 North Ave.
P.O. Box 482
Lisbon, Md 21765

RE: Walnut Creek, Lot#10 Autumn Tree Ln
Well Tag: HO-95-1392

To Whom It May Concern:

A sample was collected from a yield test March 26, 2008 and submitted to the 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. In turn, this can provide information regarding naturally occurring radiation (i.e., Radionuclides) that may exist in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of **6.0 ± 2.0 picocuries/liter (pCi/L);** while the **Gross Beta** level was **7.0 ± 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.

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

cc: Barry Glotfelty, MDE Water Mgmt.