

B 1	2716	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 520755-B please type	STATE PERMIT NUMBER HO - 94 - 4018 <small>fill in this form completely</small>
Date Received (APA)		OWNER INFORMATION		
8 MM 90 YY 13		15 Last Name Owner First Name 34		
36 Street or RFD 55		57 Town 70 State 72 Zip 76		
DRILLER INFORMATION		LOCATION OF WELL		
Driller's Name 76 License No. 81		8 COUNTY 21		
Firm Name		23 SUBDIVISION 42		
Address		SECTION 44 46 LOT 48 50		
Signature Date		52 NEAREST TOWN 71		
B 2 WELL INFORMATION		MILES FROM TOWN (enter 0 if in town) 73 5 M 76 77 78		
APPROX. PUMPING RATE (GAL. PER MIN.) 8 500 12		B 4		
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 500 20		1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)		
USE FOR WATER (CIRCLE APPROPRIATE BOX)		11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		
<input checked="" type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> PUBLIC WATER SUPPLY WELL <input type="checkbox"/> TEST, OBSERVATION, MONITORING <input type="checkbox"/> GEO-THERMAL		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL COUNTY NAME STATE SIGNATURE DATE ISSUED COUNTY NO. STATE SIGNATURE DATE ISSUED NORTH GRID EAST GRID EXP. DATE		
APPROXIMATE DEPTH OF WELL 24 300 28 FEET		SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X		
APPROXIMATE DIAMETER OF WELL 6 INCH		SOURCES OF DRILLING WATER		
METHOD OF DRILLING (circle one)		WRITE THE BOX NUMBER FROM THE MAP HERE		
BORED (or Augered) JETTED Jettied & DRIVEN AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary) CABLE REVerse-ROTary Drive-POINT other		E 5101 N 8101		
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)		DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND DISTANCE FROM WELL TO NEAREST ROAD JUNCTION		
<input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="checkbox"/> THIS WELL WILL DEEPEMED AN EXISTING WELL		9/14/04-Grant Twelve Hills Rd Linden Church Rd Twelve Tree Ct		
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 PERMIT No. HO - 94 - 4018		
SPECIAL CONDITIONS				

C1 3797

SEQUENCE NO.
(MDE USE ONLY)STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPETHIS REPORT MUST BE SUBMITTED WITHIN
45 DAYS AFTER WELL IS COMPLETED.COUNTY
NUMBER

A518986

ST/CO USE ONLY

DATE Received

MM DD YY
8 13

DATE WELL COMPLETED

MM DD YY
11 5 04

Depth of Well

22 125 26
(TO NEAREST FOOT)

PERMIT NO.

FROM "PERMIT TO DRILL WELL"

41/13/04
OK (50)
HD - 94 - 4018
28 29 30 31 32 33 34 35 36 37

OWNER

STREET OR RFD

SUBDIVISION

Hishmeh
last name
Twelve Hills Rd
first name
TOWN
Clarksville

SECTION

LOT

52

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARINGDESCRIPTION (Use
additional sheets if needed)

FEET

FROM

TO

check
if water
bearingBrown
mud

0 80

Gray
Limestone

80 110

White

110 111

Gray
Limestone

111 125

Dry hole
① Cement

0 75

② Cement

0 100

Rock
cuttings

100 800

GROUTING RECORD

yes

no

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

Y

N

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT

BENTONITE CLAY

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
types
insert
appropriate
code
below

CASING RECORD

ST

CO

STEEL

CONCRETE

PL

OT

PLASTIC

OTHER

MAIN
CASING
TYPENominal diameter
top (main) casing
(nearest inch)Total depth
of main casing
(nearest foot)

ST

06

88

E
A
C
H
C
A
S
I
N
G

OTHER CASING (if used)

diameter

depth (feet)

inch

from

to

screen type
or open hole

SCREEN RECORD

STEEL

BR

HO

BRASS

BRONZE

OPEN

PL

PLASTIC

HOLE

OTHER

C 2

DEPTH (nearest ft.)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

NUMBER OF UNSUCCESSFUL WELLS: 2

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
WELLI 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)GRAVEL PACK
IF WELL DRILLED
WAS FLOWING WELL
INSERT F IN BOX 88

MDE USE ONLY

(NOT TO BE FILLED IN BY DRILLER)

T

(E.R.O.S.)

W Q

70

72

74 75 76

TELESCOPE
CASINGLOG
INDICATOR

OTHER DATA

C 3

PUMPING TEST

HOURS PUMPED (nearest hour)

03

PUMPING RATE (gal. per min.)

8 9

METHOD USED TO
MEASURE PUMPING RATE

10

WATER LEVEL (distance from land surface)

BEFORE PUMPING

30

ft.

WHEN PUMPING

35

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)

+

above

LAND SURFACE

-

below

01

(nearest
foot)

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)Twelve Hills Rd
0
200' well
75' dry hole
240' 120'
800' dry hole

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 94-4018
Location of property (road) Twelve Hills Rd
Subdivision Twelve Hills Lot 52 Block Plat Sec.
Well Driller Fisher Owner

Depth of well 125'
Distance of measuring point (M.P.) above ground 1'
Static water level (S.W.L.) below M.P. 30'

I. High rate pumping -- reservoir drawdown

Time pump started 8:00 Pumping rate 15
Total time 15 min to reach pumping water level 35' ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes

[illegible]

FAXED 2-5-07

Feb 27 04 11:03a

HO GO FNY HFRI TH

14103127648

P.1

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2643**

Information Form for the Installation of the Well Pump, Fitters 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: NATIONAL WATER SERVICE Telephone #: 301-854-1333
Address: PO BOX 138
ASHTON, MD 20861

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

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

Name (Print): DAVID RYCKE License #: P1-0145

*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: GLEN BOWMAN Telephone #: _____
Subdivision: _____ Lot #: _____ Well Tag #: HO-94-4018

Site Address: 13060 TWINE HILLS RD
CHURCHVILLE, MD 21029

Submersible Pump Data

Make: BRUNNEN

Model #: 1550007-180

Pump Capacity: 15 GPM

Well Yield: 10 GPM

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, 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

Fitters Adapter

Make: BTI

Model #: _____

Depth: 36 (36" min)

NSP/WSC approved: YES

Well Cap and Electric Conduit

Two piece watertight cap: ✓

Screened, vented well cap: ✓

Cap secured to casing: ✓

Conduit min 1 1/2" B.G. ✓

Conduit secured to well cap: ✓

Piping to house

Type: AQUA-VIT

PSI: 160 (160 psi min)

Depth of supply line: 36 (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: YES

Approximate length of sleeve: 8'

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 the office for approval prior to installation.

Signature of company representative responsible for installation

date 10/25/06

Inspector's Use Only - Not to be completed by Installer

Date Insp. Requested: _____

Date Insp. Approved: 10-19-06

Inspector: BB

Installation Data: Address adapter watertight & water supply line at least 10' below grade ✓

Two piece cap installed and attached to casing securely ✓

Cap, screened, vented and attached to casing properly ✓

Safety rope not seen outside of well cap/casing ✓

Conduit well cap attached properly and casing 1 1/2" above finished grade ✓

Water supply line sleeved adequately at house connection ✓

Adapter properly installed in well pit/casing adapter ✓

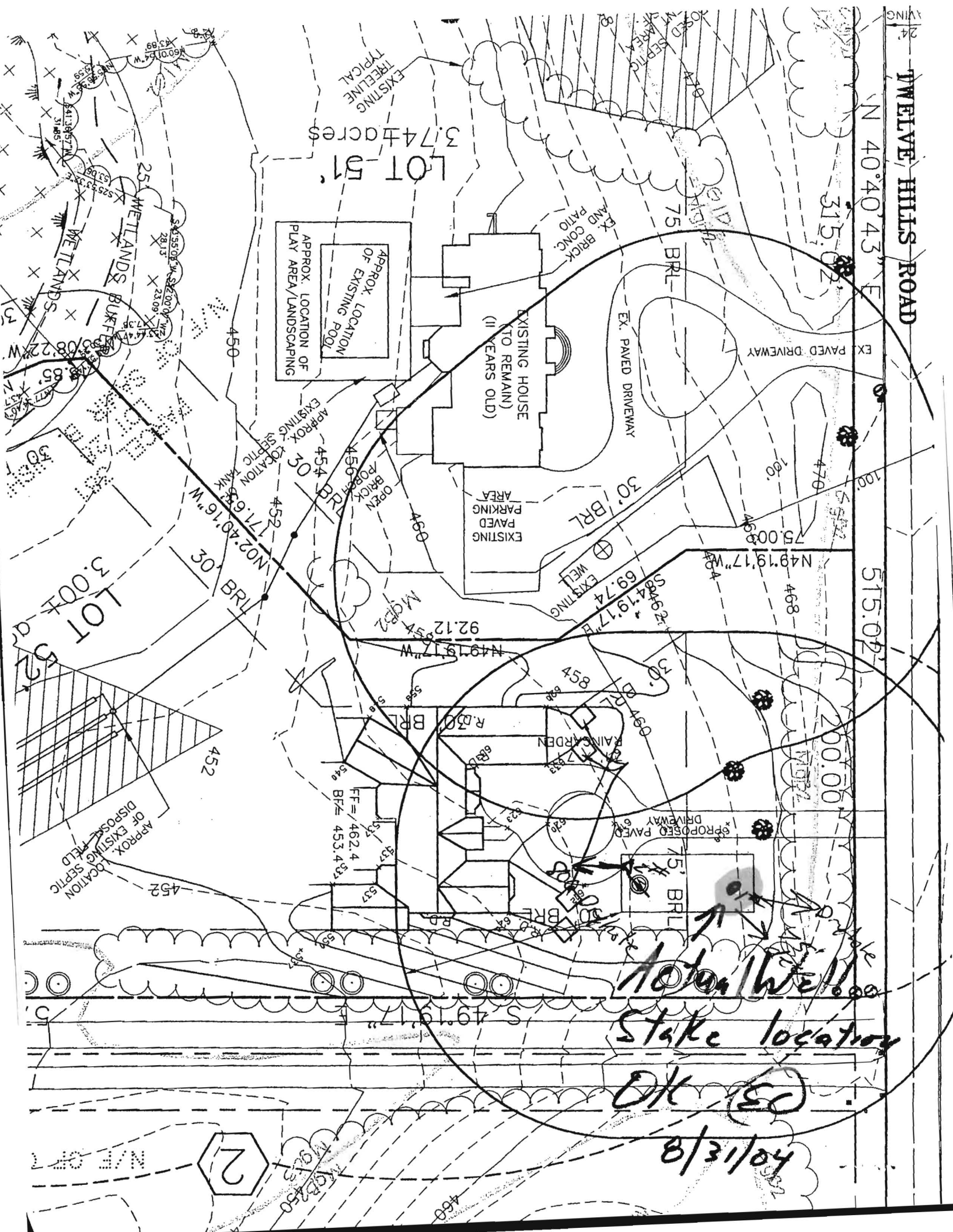
*well was
verified
pump*

HO-215

REV. 12/00

*INSPECTION
LATE AFTERNOON 10-19-06
3pm*

124 TWELVE HILLS ROAD



LOT 51
3.74 acres

APPROX. LOCATION OF EXISTING POOL
APPROX. LOCATION OF PLAY AREA/LANDSCAPING

EXISTING HOUSE
(11 YEARS OLD)

EXISTING PAVED PARKING AREA

EXISTING WELL

PROPOSED PAVED DRIVEWAY

PROPOSED WELL

Notes:
Stake location

OK (SC)

8/3/04

2



Howard County
Health Department

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

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

- ☐ The well site has been staked by _____,
(professional land surveyor or company employing professional land surveyors)
on _____ (date) and does not require a site inspection.
- ☒ The well driller, builder or property owner will call the Health
Department to schedule a time to meet in the field to verify the
proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

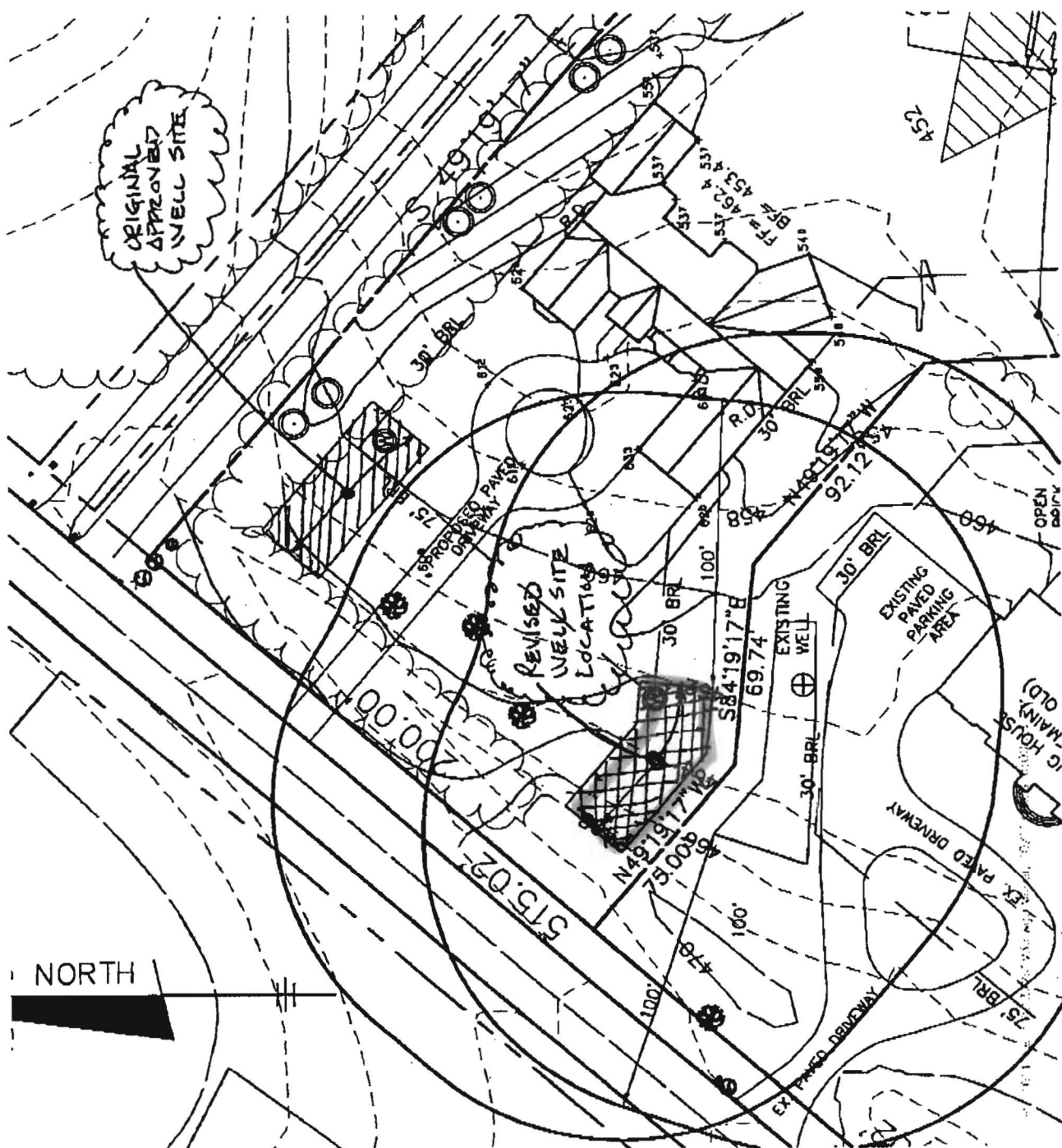
Revised 6/10/03

Homeowner staked well - Call
when you need to medium out there

8/31/04 - Site visit, well closer to
the road in well box. Location D/K (50)

10/14/04 Revised
well box benton
OK (SC)

SCALE: $1^{\text{st}} = 50^{\text{th}}$





Howard County
Health Department

7178 Columbia Gateway Drive, Columbia
Maryland 21046
(410) 313-1771 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

02/12/2007

Glenn Bowman
P.O. Box 100
Columbia, MD 21045

SENT VIA FACSIMILE 410-381-2576

RE: Twelve Hills, Lot 52
13060 Twelve Hills Rd.
Clarksville, MD 21029
BP # B00158265
Well Permit # HO-94-4018

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 02/02/2007. Final approval of the well line connection to the dwelling was approved on 10/19/2006.**

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.

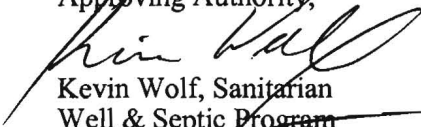
INTERIM CERTIFICATE OF POTABILITY

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-94-4018. 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: 11/06/2007, 11/16/2007
Date of Well Completion: 11/05/2004

Approving Authority,


Kevin Wolf, Sanitarian
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File

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 #:	61343	Account #:	3123
Reference:	Glen Bowman	Company:	National Water Servicing
Location:	13060 Twelve Hills Road	Requested By:	Dave Rycke
	Clarksville, MD 21029	Source:	Well Water
Date/ Time Collected:	11/16/2006 1043	Site:	Pressure Tank
Date/Time Rec'd:	11/16/2006 1345	Treatment:	Softener/Sediment Filter/Neutralizer**
Chlorine ppm:	Free: ND Total: ND	pH:	6.0
Collected By:	J.Yeager 6176JY	Well #:	HO-94-4018

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	11/17/2006 / 0825 / AD/RD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	11/17/2006 / 0825 / AD/BD

NOTES:

- 1 **Sample collected prior to treatment
- 2 MPN/ 100 ml - Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 4 ND:None Detected
- 5 Visual well check: Sealed, vented cap
- 6 pH tested on-site

Reason for Test : Use & Occupancy
Building Permit # : 158265

Date Reported: 11/18/2006

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 #:	61244	Account #:	3123
Reference:	Glen Bowman	Company:	National Water Servicing
Location:	13060 Twelve Hills Road	Requested By:	Dave Rycke
	Clarksville, MD 21029	Source:	Well Water
Date/ Time Collected:	11/6/2006 1200	Site:	Pressure Tank
Date/Time Rec'd:	11/6/2006 1600	Treatment:	Softener/Sediment Filter/Neutralizer**
Chlorine ppm:	Free: ND Total: ND	pH:	6.7
Collected By:	C. Mooshian 7268CM	Well #:	HO-94-4018

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	200.5	MPN/ 100 ml	<1.0	SM18 9223 B.	11/7/2006 / 1010 / AD/BD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	11/7/2006 / 1010 / AD/BD
Nitrate	7.85	mg/L	10	601	11/6/2006 / 1615 / BCD
Turbidity	4.81	NTU	<10	SM18 2130B	11/6/2006 / 1600 / AD/BD
Sand	NS	mg/L	5	Visual/Gravimetric	11/6/2006 / 1600 / AD/BD

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 Visual well check: Sealed, vented cap
- 9 pH tested on-site

Reason for Test : Use & Occupancy
 Building Permit # : 158265

Date Reported: 11/7/2006