

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 3961	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	

ST/CO USE ONLY DATE Received MM DD YY 8 13	DATE WELL COMPLETED MM DD YY 08 06 2003	Depth of Well 22 300 26 (TO NEAREST FOOT)	PERMIT NO. FROM "PERMIT TO DRILL WELL" 10-94-3752 12/5/03
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OWNER VIRING DEVELOPMENT
 STREET OR RFD ARCHERS GLEN first name TOWN WEST FRIENDSHIP
 SUBDIVISION ARCHERS GLEN SECTION LOT 16

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	
Overburden	0	65	
Gray Rock	65	300	x
water at 70 & 90'			

GROUTING RECORD	
WELL HAS BEEN GROUTED (Circle Appropriate Box) <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
TYPE OF GROUTING MATERIAL (Circle one) CEMENT <input checked="" type="checkbox"/> CM BENTONITE CLAY <input type="checkbox"/> BC	
NO. OF BAGS <u>48</u>	NO. OF POUNDS <u>800</u>
GALLONS OF WATER <u>48</u>	
DEPTH OF GROUT SEAL (to nearest foot) from <u>0</u> ft. to <u>32</u> ft. (enter 0 if from surface)	

CASING RECORD		
casing types insert appropriate code below	<input checked="" type="checkbox"/> ST STEEL	<input type="checkbox"/> CO CONCRETE
	<input type="checkbox"/> PL PLASTIC	<input type="checkbox"/> OT OTHER
MAIN CASING TYPE <u>ST</u>	Nominal diameter top (main) casing (nearest inch) <u>4</u>	Total depth of main casing (nearest foot) <u>70</u>

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

SCREEN RECORD		
screen type or open hole insert appropriate code below	<input checked="" type="checkbox"/> ST STEEL	<input type="checkbox"/> BR BRASS
	<input type="checkbox"/> PL PLASTIC	<input checked="" type="checkbox"/> HO OPEN HOLE
	<input type="checkbox"/> OT OTHER	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED 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 ZIC NO. MWD 120
 DRILLERS SIGNATURE
 (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. JS049
 SIGNATURE

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

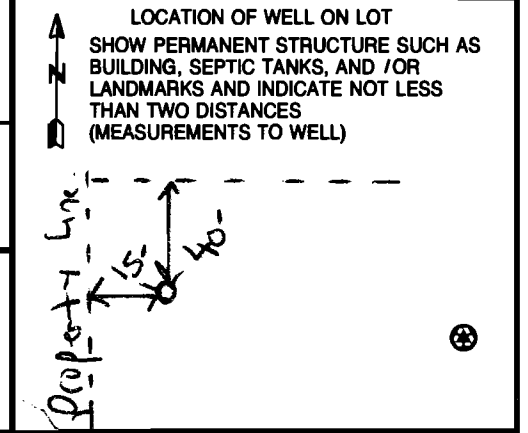
DEPTH (nearest ft.)	
T	1 <u>HO</u> 70 300
E	6 9 11 15 17 21
A	
C	
H	23 24 26 30 32 36
S	
C	
R	38 39 41 45 47 51
E	
E	
N	
SLOT SIZE 1 _____ 2 _____ 3 _____	
DIAMETER OF SCREEN _____ (NEAREST INCH)	
from _____ to _____	

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
 TELESCOPIC CASING OTHER DATA

PUMPING TEST	
HOURS PUMPED (nearest hour)	<u>3</u>
PUMPING RATE (gal. per min.)	<u>13.04</u>
METHOD USED TO MEASURE PUMPING RATE	<u>Submersible</u>
WATER LEVEL (distance from land surface)	
BEFORE PUMPING	<u>36</u> ft.
WHEN PUMPING	<u>104</u> ft.
TYPE OF PUMP USED (for test)	
<input type="checkbox"/> A air	<input type="checkbox"/> P piston
<input type="checkbox"/> C centrifugal	<input type="checkbox"/> R rotary
<input type="checkbox"/> J jet	<input checked="" type="checkbox"/> S submersible

PUMP INSTALLED	
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
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.	<u>29</u>
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)	<input checked="" type="checkbox"/> + above
LAND SURFACE (nearest foot)	<u>1</u> (nearest foot)
<input type="checkbox"/> - below	49 50 51



B 1 6734

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

519017 please type

HO-94-3752 fill in this form completely

Date Received (APA) 06-18-03

OWNER INFORMATION

Viking Development Last Name Owner First Name

815 Windriver Drive Street or RFD

Sykesville MD 21784 Town State Zip

DRILLER INFORMATION

Sandy B. Cochran MWD 120 Driller's Name License No.

G. Edgar Herr Sons' Corp. Firm Name

12047 Falls Road, Cockeysville 21030 Address

Signature Date 6/12/03

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 5

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 750

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

B 3 LOCATION OF WELL

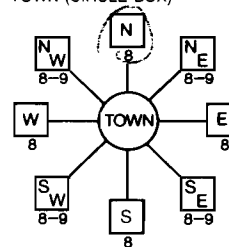
Howard 8 COUNTY ARCHER'S GLEN 23 SUBDIVISION

SECTION 44 46 LOT 48 50

West Friendship 52 NEAREST TOWN

MILES FROM TOWN (enter 0 if in town) 2 M 1

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



ARCHEERS GLEN 11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)



DISTANCE FROM ROAD ENTER FT OR MI 34 37

TAX MAP: 9 BLK 22 PARCEL 301

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

HOWARD COUNTY NAME COUNTY NO. 13

STATE SIGNATURE INSERT S

DATE ISSUED 07 30 03 Mark E. Riffin 7/30/04

43 MM DD YY 48 CO SIGNATURE EXP. DATE

NORTH GRID 50 541 000 EAST GRID 57 810 000

APPROXIMATE DEPTH OF WELL 250 FEET

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 DEEPEMED 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 HO-20-02-G016
PERMIT No. HO-94-3752

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

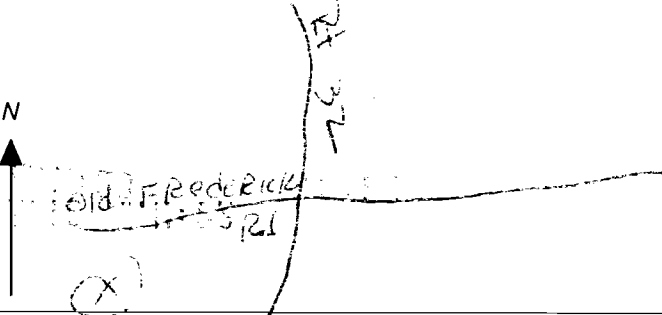
SOURCES OF DRILLING WATER

- 1. well
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 810
N 541

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 -

**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: _____ 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 #: 16 Well Tag #: HO - ____ - ____
Site Address: 1747 Achis Glen

Submersible Pump Data

Make: _____
Model #: _____
Pump Capacity _____ GPM
Well Yield: _____ GPM

Pitless Adapter

Make: _____
Model#: _____
Depth: _____ (36" min)
NSF/WSC 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, 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: _____
PSI: _____ (160 psi min)
Depth of supply line: _____ (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: _____
Length of sleeve(5' minimum from foundation): _____
Sleeve 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: 8/20/07 Date Insp. Approved: 12/4/07 Inspector: BB

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

BB No D-Ring Under Cap
8/20/07
Not finished.

ME

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: New Dimensions Telephone #: 4102394359
Address: 3018 Bachman Rd

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

License # and name of individual responsible for the field installation:
Name (Print): CW Blake License# 15443

*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: FATAPSID Telephone #: 4104422407
Subdivision: Archers Glen Lot #: 16 Well Tag #: HO -
Site Address: 1747 Archers Glen
Stokesville, MD 2184

Submersible Pump Data **Pitless Adapter** **Well Cap and Electric Conduit**
Make: F4W Make: AM. GANNY Two piece watertight cap: YES
Model #: 34 HP Model#: 1" Screened, vented well cap: ✓
Pump Capacity 7 GPM Depth: 42" (36" min) Cap secured to casing: ✓
Well Yield: 13 GPM NSF approved: YES Conduit min 18" B.G.: 30"
Depth of well encountered at time of pump installation: 322 (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 or Cable guards are required - Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt _____

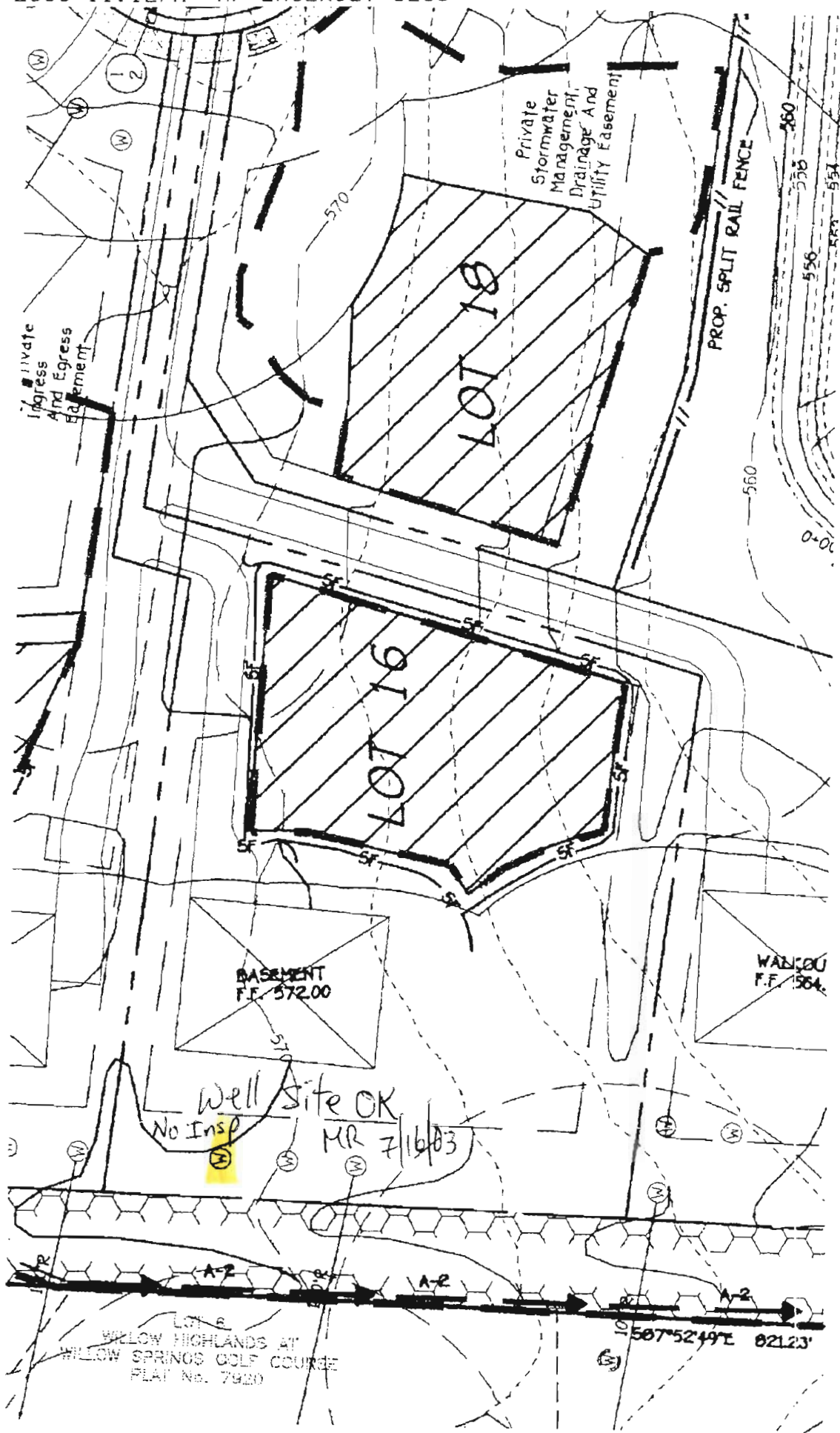
Piping to house **House Connection**
Type: PLASTIC PVC sleeved to undisturbed soil at wall penetration: YES
PSI: 200 (160 psi min) Approximate length of sleeve: 10 FT
Depth of supply line: 42 (36" min) Sleeve caulked and sealed properly: YES

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.

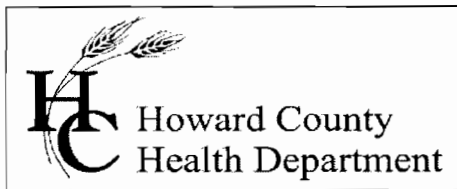
CW Blake 8/18/07
Signature of company representative responsible for installation date

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

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



LOT 6
 WILLOW HIGHLANDS AT
 WILLOW SPRINGS GOLF COURSE
 PLAT No. 7920



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

December 4, 2007

Patapsco Homes, Inc.
13898 Forsythe Road
Sykesville, MD 21784

SENT BY FACSIMILE 410-489-0319

RE: Archers Glen, Lot 16
1747 Archers Glen
Sykesville, MD 21784
BP #: B07000844
Well Permit # HO-94-3752

To Whom It May Concern:

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 08/17/2007. Final approval of the well line connection to the dwelling was approved on 12/04/2007.**

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 raw nitrate sample results were previously documented to be 12.0 ppm. A nitrate device has been installed to treat the excessive nitrate contamination. The nitrate treatment device appears to be operating properly as evidenced by the water sample results reported on 11/27/2007, which indicates that nitrate level is less than 1 ppm.

COMAR 26.04.04.09 prohibits approval of any water supply with a nitrate-nitrogen contaminant level in excess of 10 parts per million. This department will grant a permanent deviation to that section of the regulation on condition that the nitrate removal system effectively maintains the nitrate-nitrogen contaminant level of 10 ppm or less.

It will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.
2. It is recommended that a laboratory certified for water testing perform a yearly nitrate analysis. (Certified to test for nitrates)
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of the above condition.

INTERIM CERTIFICATE OF POTABILITY
(Permanent Deviation for Nitrates)

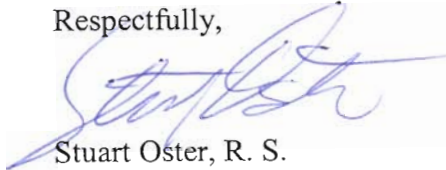
This certifies that the initial sampling requirements as set forth in Code of Maryland Annotated Regulations or COMAR, 26.04.04 "*Well Construction*" have been met for the water supply system installed under well permit number HO-94-3752. **Although the submitted sample results are in compliance with 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 and nitrate tests, which may be taken by the health department within six months of the date 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 Sample(s): 11/08/2007 & 11/27/2007

Date of Well Completion: 08/06/2003

Respectfully,



Stuart Oster, R. S.
Well and Septic Program

MLB

cc: Building Inspector's office
Community Environmental Health Program
File

CERTIFICATE OF ANALYSIS



Trace Laboratories, Inc.
Maryland

5 North Park Drive
Hunt Valley, MD 21030
Telephone: 410/252-7742
Telephone: 410/584-9099
Fax: 410/584-9117
Email: tracelab@connex.net
www.tracelabs.com

Maryland State Certified
Water Quality Laboratory
No. 318

ISO 9001:2000



Registered Firm



PERRY JOHNSON
REGISTRARS, INC.

Cert No. C2005-01504

Requester:
Patapsco Homes
Attn: Marty
13898 Forsythe Road
Sykesville, Maryland 21784

S/O Number: 66013
Report Date: November 9, 2007

Property Sampled: 1747 Archer's Glen

County: Howard
Subdivision: Archer's Glen
Lot #: 16
Building Permit #: B07000844

Tax Map #: 9
Parcel #: 301

Date/Time Collected: November 8, 2007 at 11:24 am
Date/Time Received: November 8, 2007 at 3:45 pm

Sample Location: Powder Room Tap
Sampler ID: 6308KW
Samples Iced: Yes
Residual Cl₂ <0.1 mg/L: Yes

Well Tag Number: HO-94-3752
Well Condition: 2-Piece Cap
Satisfactory

Water Conditioning/Treatment: None

PARAMETER	RESULT	METHOD	MCL/*SMCL	
Nitrate	12.0 mg/L as N	SM 4500D	10 mg/L as N	Fail
Turbidity	1.8 NTU	EPA 180.1	10 NTU	Pass
pH	6.4 Units	EPA 150.1	*6.5-8.5 Units	***
Sand	Negative		Negative	
Total Coliform	Absent	SM 9223B	Absent	Pass
E.coli	Absent	SM 9223B	Absent	Pass

Allison R. Milburn
Allison R. Milburn
Manager-Drinking Water Testing

MCL=Maximum Contamination Level

*SMCL=Secondary Maximum Contamination Level

***A non-enforceable parameter that may cause cosmetic effects or aesthetic effects (such as taste, color or odor) in drinking water.

CERTIFICATE OF ANALYSIS



**Trace Laboratories, Inc.
Maryland**

5 North Park Drive
Hunt Valley, MD 21030
Telephone: 410/252-7742
Telephone: 410/584-9099
Fax: 410/584-9117
Email: tracelab@connex.net
www.tracelabs.com

Maryland State Certified
Water Quality Laboratory
No. 318

ISO 9001:2000



Registered Firm



FERRY JOHNSON
REGISTRARS, INC.

Cert No. C2005-01504

Requester:
Patapsco Homes
Attn: Marty
13898 Forsythe Road
Sykesville, Maryland 21784

S/O Number: 66258
Report Date: November 28, 2007

Property Sampled: 1747 Archer's Glen

County: Howard
Subdivision: Archer's Glen
Lot #: 16
Building Permit #: B07000844

Tax Map #: 9
Parcel #: 301

Date/Time Collected: November 27, 2007 at 1:14 pm
Date/Time Received: November 27, 2007 at 3:55 pm

Sample Location: R/O Tap
Sampler ID: 5745KC
Samples Iced: Yes
Residual Cl₂ <0.1 mg/L: Yes

Well Tag Number: HO-94-3752
Well Condition: 2-Piece Cap
Satisfactory

Water Conditioning/Treatment: R/O

PARAMETER	RESULT	METHOD	MCL	
Nitrate	<1.0 mg/L as N	SM 4500D	10 mg/L as N	Pass

Allison R. Milburn

Allison R. Milburn
Manager-Drinking Water Testing

MCL=Maximum Contamination Level