

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

ST/CO USE ONLY DATE RECEIVED MM DO YY DATE WELL COMPLETED MM DO YY Depth of Well 22 470' 26 (TO NEAREST FOOT) COUNTY NUMBER (13) A517422 PERMIT NO. FROM "PERMIT TO DRILL WELL" 40-95-0617

OWNER DeFrancis
STREET OR RFD Mountain Lane first name TOWN Clarksville
SUBDIVISION Walnut Grove SECTION LOT 86

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	
Sand	0	10	
Clay	10	35	✓
Gray Micaceous Rock	35	470	✓

GROUTING RECORD (yes no
WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**
TYPE OF GROUTING MATERIAL (Circle one) CEMENT **CM** BENTONITE CLAY **BC**
NO. OF BAGS 45 46 22 NO. OF POUNDS 45 46 2068
GALLONS OF WATER 132
DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 36 ft.
from 48 TOP 52 ft. to 54 BOTTOM 58 ft. (enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
ST STEEL **CO** CONCRETE
PL PLASTIC **OT** OTHER
MAIN CASING TYPE **ST** Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 40
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 **HO** OPEN HOLE
PL PLASTIC **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 LIC. NO. 1 **MS D 024** 1
Ralph Mayne Joseph Mayne
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO. 1 **MS D 027** 1

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

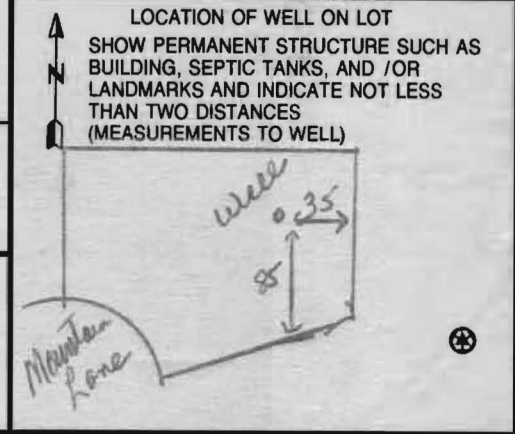
C 2 DEPTH (nearest ft.)
1 2 37 470
E 8 9 11 15 17 21
A 23 24 26 30 32 36
C 3
S 38 39 41 45 47 51
R
E
N
SLOT SIZE 1 2 3
DIAMETER OF SCREEN (NEAREST INCH) 56 60
from to

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 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 **PUMPING TEST**
HOURS PUMPED (nearest hour) 3
PUMPING RATE (gal. per min.) 15
METHOD USED TO MEASURE PUMPING RATE Bucket
WATER LEVEL (distance from land surface)
BEFORE PUMPING 27 ft.
WHEN PUMPING 54 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 } 3 (nearest foot)



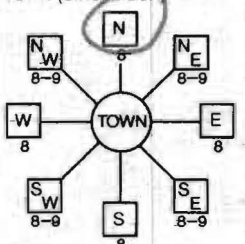
B 1 0520 SEQUENCE NO. (MDE USE ONLY) STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL STATE PERMIT NUMBER H0-95-0617
 1 2 3 6 70 fill in this form completely 79
~~0520~~ 525642 please type

Date Received (APA) _____
OWNER INFORMATION
 8 MM DD YY 13
Landmarketing Consultants
 15 Last Name Owner First Name 34
3060 Rt 97
 36 Street or RFD 55
Glenwood MD 21771
 57 Town 70 State 72 Zip 76

B 3 Howard LOCATION OF WELL
 8 COUNTY 21
WALNUT GROVE
 23 SUBDIVISION 42
 SECTION 44 46 LOT 86 48 50
CLARKSVILLE
 52 NEAREST TOWN 71
 MILES FROM TOWN (enter 0 if in town) 2 M I
 73 76 77 78

DRILLER INFORMATION
Ralph E. Mayne M SD 117
 Driller's Name 76 License No. 81
Ralph E. Mayne INC
 Firm Name
17024 Hardy Rd Mt. Airy MD 21771
 Address
Ralph E. Mayne 11-11-06
 Signature Date

B 4 Mountain LA
 11 NEAR WHAT ROAD 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 34 225 37
 DISTANCE FROM ROAD ENTER FT OR MI 38 39
 TAX MAP: 28 BLK: 18 PARCEL 74



B 2 **WELL INFORMATION**
 1 2 APPROX. PUMPING RATE 5
 (GAL. PER MIN.) 8 12
500
 AVERAGE DAILY QUANTITY NEEDED
 (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

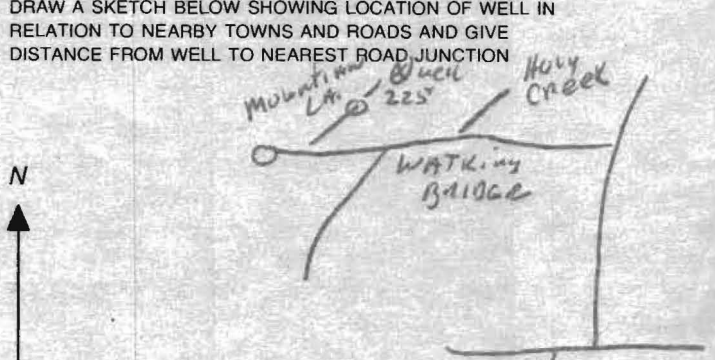
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
Howard (13) A517422
 COUNTY NAME COUNTY NO.
 STATE SIGNATURE INSERT S → 41
 DATE ISSUED 12/19/2006 Brian Baker 12/19/2007
 43 MM DD YY 48 CO SIGNATURE EXP. DATE
 NORTH GRID 509 0 0 0 EAST GRID 815 0 0 0
 50 55 57 63

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 815 000
 N 509 000

METHOD OF DRILLING (circle one)
 BORED (or Augered) JETTED Jetted & DRIVEN
 30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
 37 CABLE REVerse-ROTary DRive-POINT
 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
 39 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
 PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 _____ 52

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

 N ↑

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER H02005G006
 PERMIT No. H0-95-0617
 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS
 NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEETS IF NEEDED
Health Dept. Needs to Collect Water Sample During Yield Test

F
4/26/09
Re-104
6-24-09
Re-104
6-25-09

**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, 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: Fogles Well Drilling Telephone #: 443-609-4195
Address: 6003 Woodbine Rd
Woodbine Md 21797

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): Allen Compton License# MSD 009
*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: Stevens Builders Telephone #: 410-531-2100
Subdivision: Walnut Grove Lot #: 86 Well Tag #: HO
Site Address: 5109 Mountain Lane

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Cocorotas</u>	Make: <u>Cambell</u>	Two piece watertight cap: <u>YES</u>
Model #: <u>1550E10-290</u>	Model #: <u>N/A</u>	Screened, vented well cap: <u>YES</u>
Pump Capacity <u>15</u> GPM	Depth: <u>86</u> (36" min)	Cap secured to casing: <u>YES</u>
Well Yield: <u> </u> GPM	NSF approved: <u>YES</u>	Conduit min 18" B.O.: <u>YES</u>
Depth of well encountered at time of pump installation: <u>450</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 <u>N/A</u>		

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>1" Dark Plastic</u>	PVC sleeved to undisturbed soil at wall penetration: <u>YES</u>
PSI: <u>160</u> (160 psi min)	Approximate length of sleeve (5 foot minimum): <u>5</u>
Depth of supply line: <u>42</u> (36" min).	Sleeve caulked and sealed properly: <u>YES</u>

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: Allen Compton date: 4-26-09

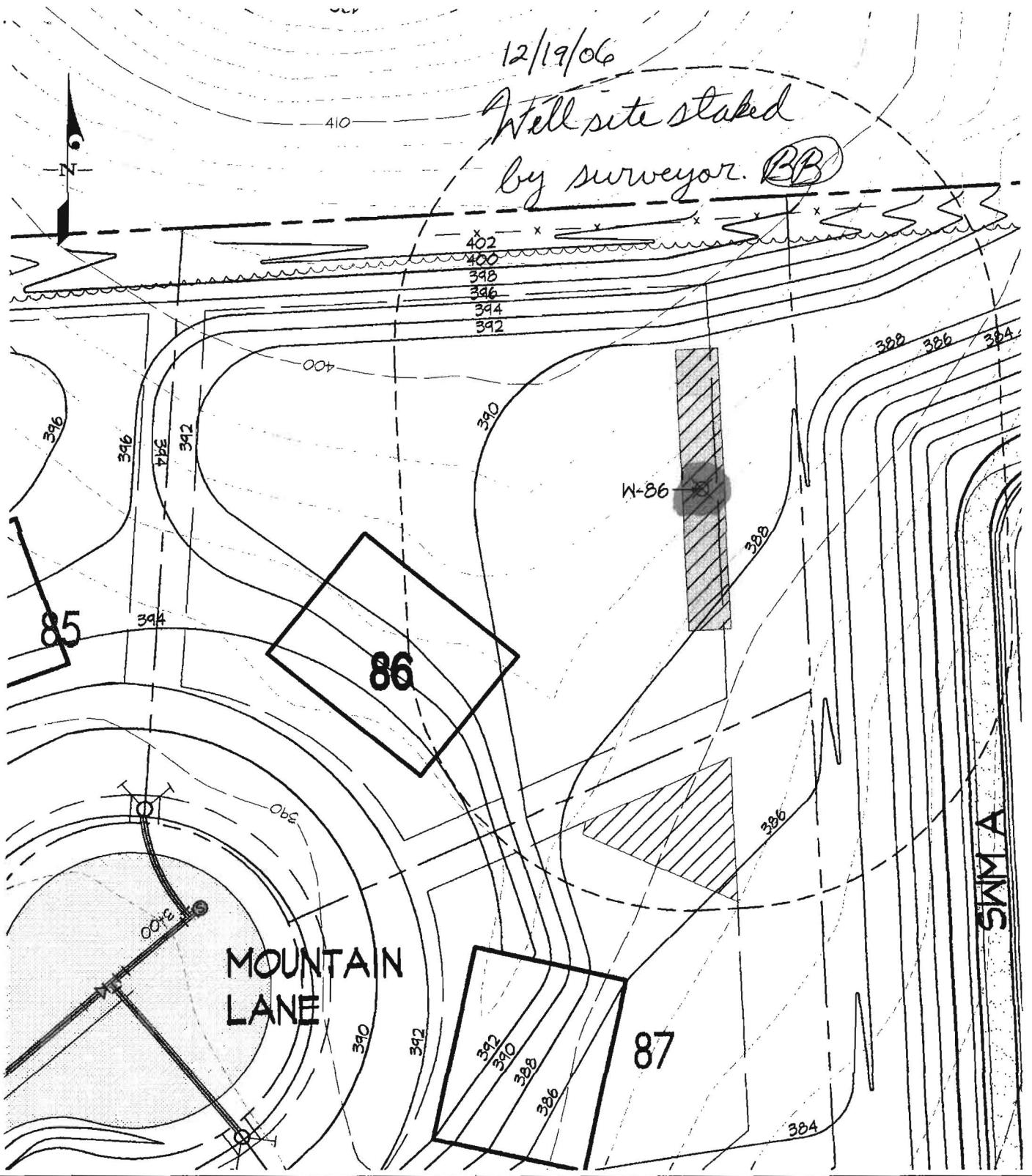
For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: Date Insp. Approved: 12/19/08

Inspection Data: Pitless adapter and water supply line at least 36" below grade	<u>✓</u>
Two piece cap installed and attached to casing securely	<u>✓</u>
Elec. conduit extends at least 18" below grade/attached to cap properly	<u>✓</u>
Safety rope installed inside of well casing	<u>✓</u>
Correct well tag attached properly and casing 8" above finished grade	<u>✓</u>
Water supply line sleeved adequately at house connection	<u>✓</u>
Adequate grout observed below pitless adapter	<u>✓</u>

12/19/06

Well site staked
by surveyor. (BB)



LEGEND

- PROPOSED LPSS
- PROPOSED STORM DRAIN

HOUSE BOX

WELL BOX

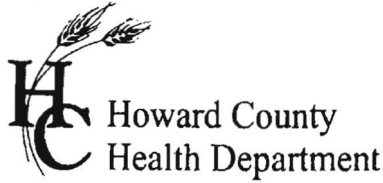
W-05 SURVEY POINT

WELL LOCATION EXHIBIT - LOT 86

WALNUT GROVE
 Lots 1 thru 88, Buildable Preservation Parcel "A",
 Non-Buildable Preservation Parcels "B" Thru "I" And
 and Non-Buildable Bulk Parcel "J"

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



7178 Columbia Gateway Dr., Columbia, MD 21046
(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 application for a proposed well for new construction, please indicate one of the following:

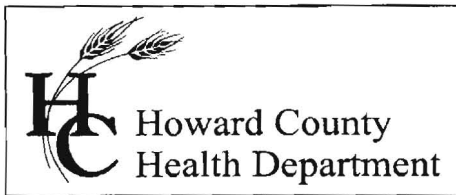
Well Site Location:

<i>Walnut Grove</i>	<i>86</i>	<i>Mountain Lane</i>
Subdivision/Property Name	Lot #	Road Name

- Staking to take place after initial review (as discussed with Bob Weber).
- 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 3/11/05



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

June 26, 2009

Homeowner
5109 Mountain Lane
Clarksville, MD 21029

RE: Walnut Grove, Lot 86
5109 Mountain Lane
Clarksville, MD 21029
BP # 08001532
Well Tag: HO-95-0617

Dear Sirs:

This is to advise that the septic house connection and grinder pump installation for the referenced property have been installed and inspected. **Final approval was granted on 6/22/2009. Final approval of the well line connection to the dwelling was approved on 12/19/2008.**

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. Enclosed with this certificate, is a copy of the septic permit and the as-built along with information on your well and how to keep your water supply safe.


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-95-0617. 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: 6/3/2009
Date of Well Completion: 3/20/2007

Respectfully,


Brian Baker, Sanitarian
Well and Septic Program

cc: Building Inspectors Office
Community Environmental Health
File

Water Testing Laboratories

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

of Maryland, Inc.

Stevens Builders
4714 Linthicum Road
Dayton, Md 21036

Reporting Date: 6/9/2009
Report #: K5270

Submitted Sample Address: 5109 Mountain Lane
Clarksville, Md 21029
Submitted Sample Source: Outside faucet
Date / Time Collected: 6/3/2009 10:31 AM
Sample Type: Drinking Water
Sampler/Company: D. Pitts 4322DP, WTL of MD
Field Record: Chlorine residual: Absent Clear when drawn
Well #: HO-95-0617


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
Nitrates + Nitrites	ND	mg/L	1.0	10	EPA 353.2
Sand	Absent	P/A	Present/Absent	Present	Visual
Turbidity	1.2	NTU	0.5	10	SM 2130B
pH	7.8	SU	0.5	6.5-8.5 (SMCL)	EPA 150.1

Notes:

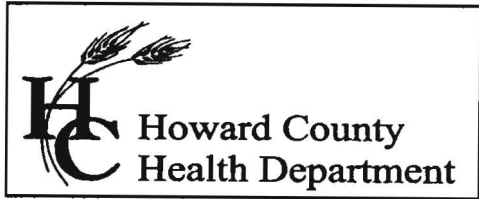
- Bacteriological analysis of this sample indicates this water is safe for human consumption.
- MCL is EPA's maximum contaminant level under primary drinking water regulations. SMCL is secondary maximum contaminant level and is the aesthetic quality only. If your result is above any MCL or SMCL, you 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,



C. Rodgers, Customer Service Representative

Reviewed by: SUB



Bureau of Environmental Health
7178 Columbia 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

April 11, 2007

Walnut Grove, LLC
10705 Charter Dr.
Suite 320
Columbia, Maryland 21044

RE: Walnut Grove, Lot # 86
Well Tag: HO-95-0617

To Whom It May Concern:

A sample was collected from a yield test on March 20, 2007 and submitted to Department of Health and Mental Hygiene State Laboratory 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 10.0 ± 2.0 picocuries/liter (pCi/L); while the **Gross Beta** level was 6.0 ± 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, Deputy Director
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater
✓ Well & Septic File

Send report to:

Bert Nixon

DHMH - Laboratories Administration
Division of Environmental Chemistry
RADIATION LABORATORY

201 W. Preston Street, Baltimore, Maryland 21201

John M. DeBoy, Dr. P.H., Director

DHMH

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: KW 26 ^{26 WG 0617} No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Waldart Crane Lot 86 County: Howard

Sample Source: Mountain Ln Location: HW-95-0617
(well no., lab sink, sample tap, etc.)

County: Plant No.

CHECK (one per box)

Drinking Water
Landfill
Stream
Other

Community Non-community
Private
Other

Source (raw water)
Distribution (treated)
MCL

Emergency Routine
Recheck
Special

Collector: K. Wulf

Telephone No: 410-313-2645

Date Collected: 3 / 20 / 07

Time Collected: 10:15 a.m. _____ p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code: Federal Project: Field Data: _____

Remarks: Sample collected during yield test pH _____ Chlorine _____

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>1981 1961 (B)</u>	<u>10 ± 2</u>	<u>03/23/07</u>
✓	Gross Beta	4100	<u>1981 1961 (B)</u>	<u>6 ± 2</u>	"
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank A	4004			
	Field Blank B	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: 03 / 20 / 07

Supervisor: S. Wagon