

Date Received (APA) _____

OWNER INFORMATION

8 MM DD YY 13
 15 Last Name Landmarketing Consultants Owner First Name 34
 36 3060 Rt. 97 Street or RFD 55
 57 Glenwood MD 21738 Town 70 State 72 Zip 76

B 3 **LOCATION OF WELL**

8 COUNTY Howard 21
 23 SUBDIVISION Without Gravel 42
 SECTION 44 46 LOT 87 48 50
 52 NEAREST TOWN Clarksville 71
 MILES FROM TOWN (enter 0 if in town) 2 M I
 73 76 77 78

DRILLER INFORMATION

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

B 4 **DIRECTION OF WELL FROM TOWN (CIRCLE BOX)**

11 NEAR WHAT ROAD Mountain LA 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 34 190 37
 DISTANCE FROM ROAD ENTER FT OR MI 1/4 38 39
 TAX MAP: 28 BLK: 18 PARCEL 74

B 2 **WELL INFORMATION**

APPROX. PUMPING RATE (GAL. PER MIN.) 5 8 12
 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500 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 EXP. DATE
 43 MM DD YY 48 CO SIGNATURE
 NORTH GRID 509 000 EAST GRID 815 000
 50 55 57 63

APPROXIMATE DEPTH OF WELL 150 FEET 24 28
 APPROXIMATE DIAMETER OF WELL 64 INCH 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
 N 509

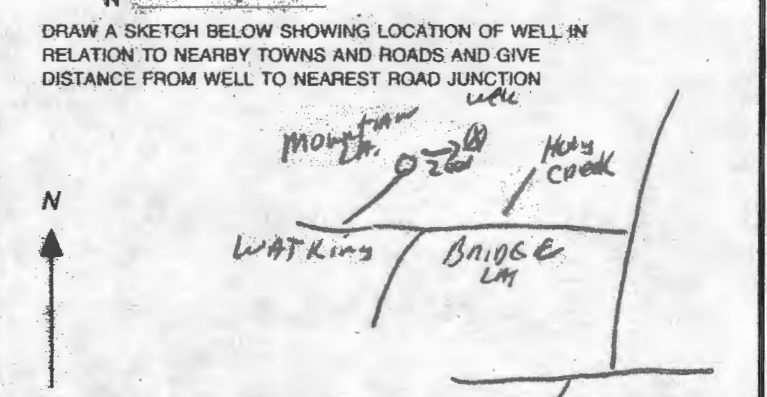
Handwritten notes: "C.P.S.'d on 3/15/07", "leadline collected on 3/15/07 @ well (K)", "000 000"

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 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
 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 H020056006
 PERMIT No. HO-95-0618
 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS Health Dept. Needs to Collect Water Sample During Yield Test

NOTE - APPROVING AUTHORITIES SHOULD USE PERMITS FREE OF CHARGE

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-0618
 Location of property (road) Mountain Lane
 Subdivision Walnut Grove Lot 87 Block _____ Plat _____ Sec. _____
 Well Driller Joe Mayne Owner DeFrancis

Depth of well 460
 Distance of measuring point (M.P.) above ground 2'
 Static water level (S.W.L.) below M.P. 34'

I. High rate pumping -- reservoir drawdown

Time pump started 7:00 Pumping rate 20 gpm.
 Total time 45 min. to reach pumping water level 400 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)
7:00			N/A	
7:15	198'	3 sec.		20 gpm.
7:30	301	3		20
7:45	400	15		4
8:00	394	30		2
8:15	394	30		2
8:30	393	30		2
8:45	393	30		2
9:00	393	30		2
9:15	392	30		2
9:30	392	30		2
9:45	392	30		2
10:00	392	30		2
10:15	392	30		2
10:30	392	30		2
10:45	392	30		2
11:00	391	30		2
11:15	391	30		2
11:30	391	30		2
11:45	391	30		2
12:00	391	30		2
12:15	391	30		2
12:30	391	30		2
12:45	391	30		2

HD-224/00 391 30 2
 1:15 391 30 2
 1:30 391 30 2

over 7

Maura J. Rossman, M.D., Health Officer

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: Fogleswell Pump & Water Treatment, LLC Telephone #: 410 795 5670
 Address: 580 Obrecht Rd
Sykesville, MD 21784

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 C Fogle License# MSD226

*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: Cairn Custom Homes Telephone #: _____
 Subdivision: Walnut Grove Lot #: 87 Well Tag #: HO-95-06196 ✓
 Site Address: 5104 Mountain Lane
Clarksville, MD 21029

Submersible Pump Data

Make: Guards
 Model #: 7H507422
 Pump Capacity: 7
 Well Yield: 2
 Depth of well encountered at time of pump installation: 460 (feet)

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Must circle one: Torque arrestors / Cable guards / Other acceptable method used

Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing NA

Pitless Adapter

Make: Campbell +
 Model#: NA
 GPM Depth: 36" (36" min)
 GPM 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

Piping to house

Type: 1" poly pipe
 PSI: 200 (160 psi min)
 Depth of supply line: 36" (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: YES
 Length of sleeve (5' minimum from foundation): 6'
 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 of company representative responsible for installation: [Signature] date: 7/18/2020

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

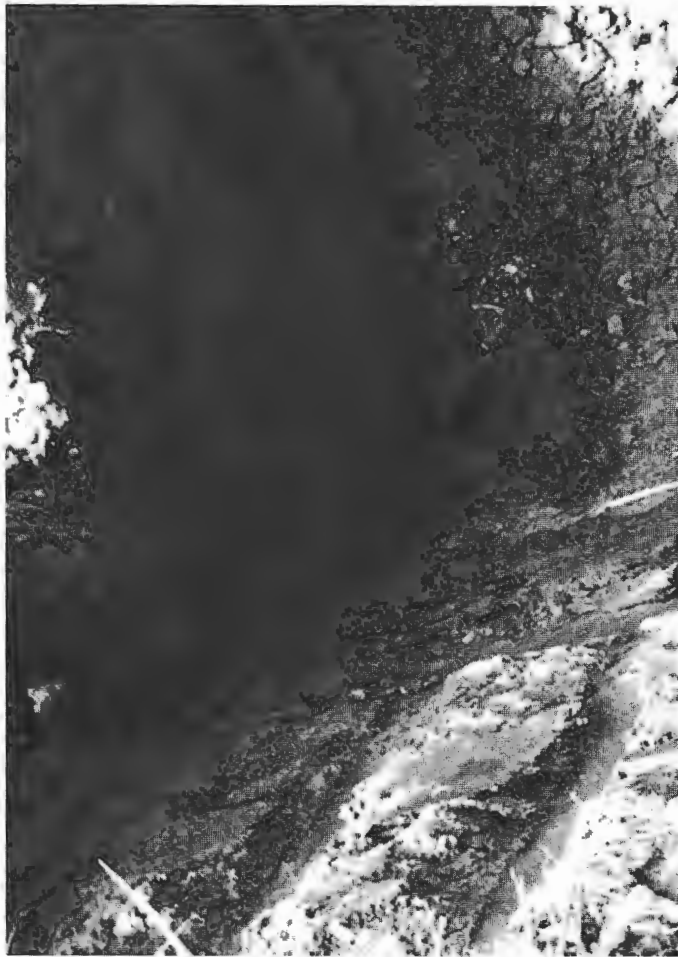
Date Insp. Requested: 7/9/20 Date Insp. Approved: 7/9/20 Inspector: RR
 Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓
 Two piece cap installed and attached to casing securely ✓
 Elec. conduit extends at least 18" below grade/attached to cap properly ✓
 Safety 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 ✓

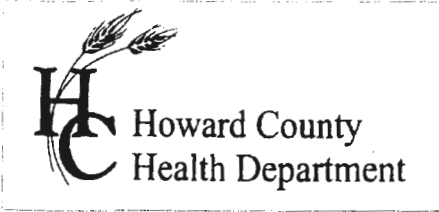
(Revised form 10/24/2018)

7/19/20 - Contractor onsite to verify that grout was @ approx 36" below pitless, upper terminal no grout but w/ excavator we were able to verify adequate grout (RR)

7/9/20

grout verified @ approx 36" below pitless





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:

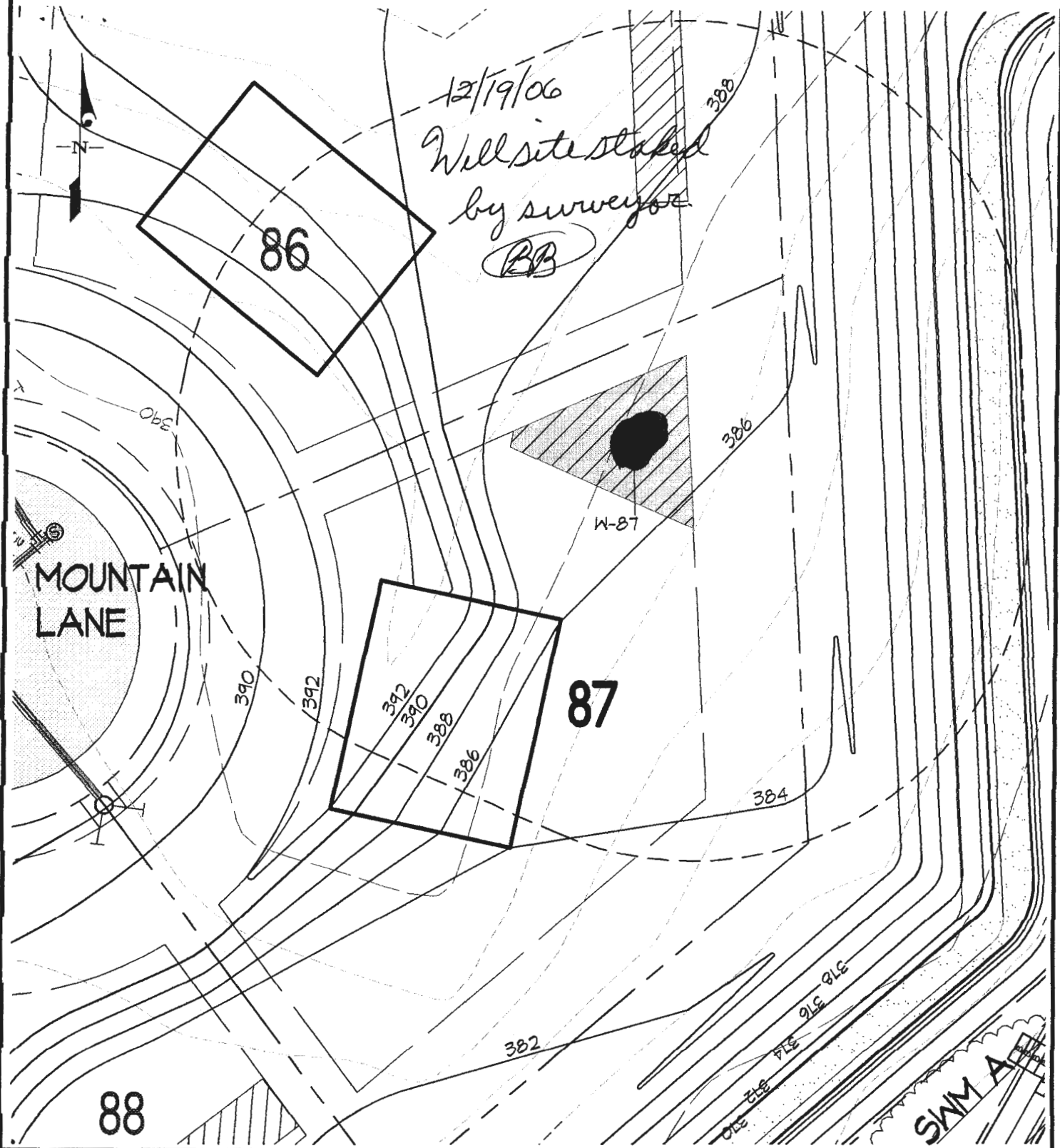
Well Site Location:

<i>Walnut Grove</i>	<i>87</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



12/19/06
Well site staked
by surveyor
BB

86

87

88

MOUNTAIN
LANE

SWM AREA

LEGEND

- PROPOSED LPSS
- PROPOSED STORM DRAIN
- HOUSE BOX
- WELL BOX
- W-05 SURVEY POINT

WELL LOCATION EXHIBIT - LOT 87

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

GLWGUTSCHICK 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

CERTIFICATE OF ANALYSIS

Requester:
Heritage Realty & Land Development
Attn: Jeremy Rutter
P.O. Box 482
Lisbon, MD 21765

S/O Number: 64290-9
Report Date: July 31, 2007



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@connext.net
www.tracelabs.com

Maryland State Certified
Water Quality Laboratory
No. 318

ISO 9001:2000



Cert No. C2005-01504

Property Sampled: Walnut Grove Property

County: Howard
Subdivision: Walnut Grove
Lot #: 87
Tax Map #: N/A
Parcel #: N/A

Date/Time Collected: July 11, 2007 at 2:27 pm
Date/Time Received: July 11, 2007 at 3:40 pm

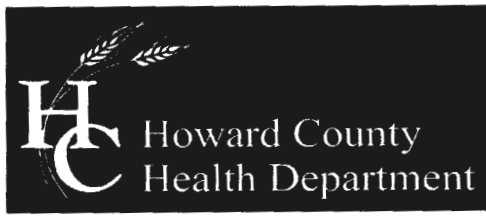
Sample Location: Pump
Sampler ID: 6308KW
Samples Iced: Yes
Residual Cl₂ <0.1 mg/L: Yes

Well Tag Number: HO-95-0618
Well Condition: N/A

Water Conditioning/Treatment: None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	0.8 +/- 0.3 pCi/L	EPA 903.1	0.2 pCi/L
Radium 228	0.9 +/- 0.6 pCi/L	EPA Ra-05	0.8 pCi/L
Uranium	1.9 +/- 1.0 pCi/L	EPA 908.0	0.8 pCi/L

Allison R. Milburn
Manager-Drinking Water Testing



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 9, 2007

Walnut Grove, LLC
10705 Charter Drive
Suite 320
Columbia, Maryland 21044

RE: Walnut Grove Subdivision, Lot 87
Well Tag: HO - 95 - 0618

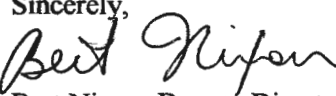
To Whom It May Concern:

A sample was collected during a yield test on March 15, 2007 and submitted to GPL Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** (GAGB) measure the total alpha and beta particle activity in a water supply. These naturally occurring radioactive nuclides have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of 13.4 ± 2.1 picocuries/liter (pCi/L); while the **Gross Beta** level was 7.8 ± 1.3 pCi/L. With the margin of error, the **Gross Alpha** result was above 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 millirem/year).

Since the **Gross Alpha** finding exceeded its MCL, additional testing for **Radium** will be necessary to verify existing levels prior to occupancy. Alternatively, you may install treatment designed to reduce **Gross Alpha**, **Gross Beta** and **Radium**, plus provide post treated results (short and long term GAGB, plus **Radium**) confirming that levels are in conformance with existing standards. **Additionally**, the owners will be required to sign an "AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN ON-SITE TREATMENT SYSTEM" as part of the Use and Occupancy process. Moreover, keep in mind that the standard potability parameters required for occupancy will still be needed.

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 or concerns.

Sincerely,

Bert Nixon, Deputy Director
Bureau of Environmental Health

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

Send Report To:

John Nixon

State of Maryland

DHMH - Laboratories Administration

Division of Environmental Chemistry

RADIATION LABORATORY

201 W. Preston Street, Baltimore, Maryland 21201

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

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: AW 8206018 No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Water Tower County: Harris

Sample Source: Water Location: H- 25-0415
(well no., lab sink, sample tap, etc.)

County: Plant No.

CHECK (one per box)

Drinking Water <input checked="" type="checkbox"/>	Community <input type="checkbox"/>	Source (raw water) <input checked="" type="checkbox"/>	Emergency <input type="checkbox"/>
Landfill <input type="checkbox"/>	Non-community <input type="checkbox"/>	Distribution (treated) <input type="checkbox"/>	Routine <input type="checkbox"/>
Stream <input type="checkbox"/>	Private <input checked="" type="checkbox"/>	MCL <input type="checkbox"/>	Recheck <input checked="" type="checkbox"/>
Other <input type="checkbox"/>	Other <input type="checkbox"/>		Special <input type="checkbox"/>

Collector: K. Wolf Telephone No: 410-313-2645

Date Collected: 3/15/07 Time Collected: 10:45 a.m. _____ p.m.

Nitric Acid Preserved: Yes No Iced: Yes No

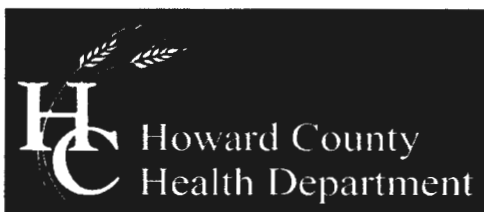
Submitters Code: Federal Project: Field Data: _____

Remarks: 20 Sample Collected @ Water Tower pH _____ Chlorine _____

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>20015-005</u>	<u>1245.31</u>	<u>3/15/07</u>
✓	Gross Beta	4100		<u>2.85 13</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: _____/_____/_____

Supervisor: _____



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
December 19, 2007

Jeremy Rutter
Heritage Realty & Land Development
P.O. Box 482
Lisbon, Maryland 21765

RE: Radium & Uranium Results for:
Walnut Grove Lot 15, HO - 95 - 0572
Walnut Grove Lot 19, HO - 95 - 0575
Walnut Grove Lot 30, HO - 95 - 0584
Walnut Grove Lot 41, HO - 95 - 0594
Walnut Grove Lot 45, HO - 94 - 4187
Walnut Grove Lot 51, HO - 94 - 4181
Walnut Grove Lot 53, HO - 95 - 0598
Walnut Grove Lot 63, HO - 94 - 4183
✓ Walnut Grove Lot 87, HO - 95 - 0618

Dear Mr. Rutter:

You have requested that I review and comment upon sample results from the aforementioned lots at the Walnut Grove Sub Division, all taken on July 11, 2007 and sent to Trace Laboratories for analysis of Radium 226 / 228 and Uranium. My comments would be used to help confirm whether or not treatment to address these parameters, would be needed on any of these well water supplies.

Let me first state that no information was provided on how long the wells were purged prior to the sample being collected. From looking at the sample reports, wells were sampled at 10 - 15 minute intervals, suggesting little to no purging on some (or all) of these wells. Additionally, without the benefit of short and long term Gross Alpha & Beta components, the interpretation of some results is less clear. Because of this, I will "err" on the side of caution in my conclusions.

In general, my interpretation of these results is similar to those reached by Allison Milburn, Manager - Drinking Water Testing for Trace Laboratories. **Lots 19, 45, 53 and 87** are water supplies in which no additional treatment for these parameters would be anticipated. Alternatively, **Lots 15 (based upon Uranium), 51 and 63** are lots that additional treatment (i.e., softeners and/or reverse osmosis systems) will be needed. The remaining two lots (**30 and 41**), though not strictly reaching or exceeding the maximum contaminant level (MCL) of 5 picocuries/liter, are close enough that with variability (and a lack of additional information), will at this point be required to have treatment.

If you have questions or wish to discuss further, please contact me at (410) 313 - 1774.

Sincerely,

A handwritten signature in cursive script that reads 'Bert Nixon'.

Bert Nixon, Director
Bureau of Environmental Health

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@connect.net
www.tracelabs.com

Maryland State Certified
Water Quality Laboratory
No. 318

ISO 9001:2000



Cert No. C2005-01504

Requester:
Heritage Realty & Land Development
Attn: Jeremy Rutter
P.O. Box 482
Lisbon, MD 21765

S/O Number: 64290-9
Report Date: July 31, 2007

Property Sampled: Walnut Grove Property

County: Howard
Subdivision: Walnut Grove
Lot #: 87
Tax Map #: N/A
Parcel #: N/A

Date/Time Collected: July 11, 2007 at 2:27 pm
Date/Time Received: July 11, 2007 at 3:40 pm

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

Well Tag Number: HO-95-0618
Well Condition : N/A

Water Conditioning/Treatment: None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	0.8 +/- 0.3 pCi/L	EPA 903.1	0.2 pCi/L
Radium 228	0.9 +/- 0.6 pCi/L	EPA Ra-05	0.8 pCi/L
Uranium	1.9 +/- 1.0 pCi/L	EPA 908.0	0.8 pCi/L

Allison Milburn

Allison R. Milburn
Manager-Drinking Water Testing

Samples analyzed by Laboratory #E83033