

C1 3747

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

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

COUNTY NUMBER

ST/CO USE ONLY DATE Received

DATE WELL COMPLETED

Depth of Well 600

PERMIT NO. FROM "PERMIT TO DRILL WELL" - HO-95-0313

OWNER J T S CORPORATION STREET OR RFD Clarksville Pike (Md 108) TOWN Clarksville SUBDIVISION Macbeth Farm SECTION LOT 07

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries like top soil, rocky clay, Brown Mica, Gravel Sandstone, Brown Mica Hard, Gray Mica, Green Mica, Sandstone, Gray Mica.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) NO (N) TYPE OF GROUTING MATERIAL (C) M BENTONITE CLAY (B) C NO. OF BAGS 18 NO. OF POUNDS 1800

CASING RECORD

MAIN CASING TYPE (S) T STEEL (C) O CONCRETE (P) L PLASTIC (O) T OTHER

OTHER CASING (if used) diameter inch depth (feet) from to

SCREEN RECORD

screen type or open hole (S) T STEEL (B) R BRASS (H) O OPEN HOLE (P) L PLASTIC (O) T OTHER

DEPTH (nearest ft.)

Table with columns: E, A, C, H, S, R, E, N and depth values (8, 11, 15, 21, 23, 26, 30, 32, 36, 38, 41, 45, 47, 51)

SLOT SIZE 1 2 3

DIAMETER OF SCREEN (NEAREST INCH) 56 60

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

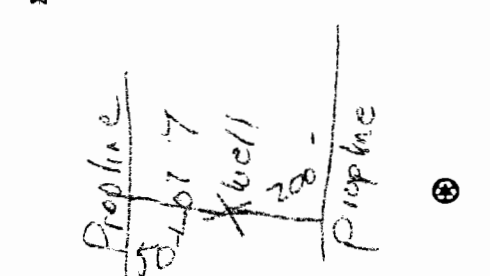
PUMPING TEST

HOURS PUMPED (nearest hour) 6 PUMPING RATE (gal. per min.) 1.5 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 30 WHEN PUMPING 247 TYPE OF PUMP USED (for test) (S) submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or 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) (F) above LAND SURFACE () below 2 (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)



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 MWD 040 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 MWD 727

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

B 1 0740

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 524124 please type

STATE PERMIT NUMBER MD-95-0313 fill in this form completely

Date Received (APA) 02 24 06 OWNER INFORMATION 10162 J T S Corporation 8808 Centre Park Drive S209 Columbia, Md 21045

Howard LOCATION OF WELL Macbeth Farm Clarksville

DRILLER INFORMATION George F. Easterday L. Franklin Easterday, Inc. 9265 Brown Church Rd., MT. Airy, Md. 21771

Clarksville Pike (Md 108) 500+ DISTANCE FROM ROAD Ft. 34 23 90

WELL INFORMATION APPROX. PUMPING RATE 5 AVERAGE DAILY QUANTITY NEEDED 500

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard AS16543

USE FOR WATER DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

APPROXIMATE DEPTH OF WELL 300 FEET APPROXIMATE DIAMETER OF WELL 6 INCH

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER wells

METHOD OF DRILLING (circle one) AIR-ROTary

REPLACEMENT OR DEEPEMED WELLS THIS WELL WILL NOT REPLACE AN EXISTING WELL

Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROX. PERMIT NUMBER MD 2009 G 004 PERMIT No. MD-95-0313

WRITE THE BOX NUMBER FROM THE MAP HERE 810 494

SPECIAL CONDITIONS At yield test, sample for Radon & VOCs

8:30

FIELD DATA SHEET
 HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-0313
 Location of property (road) ROUTE 108, CHARLKVILLE Pke
 Subdivision MACKETH FARM Lot 7 Block _____ Plat _____ Sec. _____
 Well Driller EASTON DAY Owner JTS Corp

Depth of well 600 1 1/2
 Distance of measuring point (M.P.) above ground 1 ft
 Static water level (S.W.L.) below M.P. 30 ft

I. High rate pumping -- reservoir drawdown

Time pump started: 9:30 Pumping rate 15 gpm
 Total time 31 min to reach pumping water level 249 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 1 gallon bucket	FLOW METER READING (if used) Pump set 380'	CALCULATED FLOW (gallons per minute)
10:00	249	35 sec		1.7 gpm
10:15	249	35 sec		1.7 gpm
10:30	249	35 sec		1.7 gpm
10:45	249	35 sec		1.7 gpm
11:00	249	35 sec		1.7 gpm
11:15	247	30 sec		2 gpm
11:30	247	30 sec		2 gpm
11:45	247	30 sec		2 gpm
12:00	247	30 sec		2 gpm
12:15	247	30 sec		2 gpm
12:30	247	30 sec		2 gpm
12:45	247	30 sec		2 gpm
1:00	247	30 sec		2 gpm
1:15	247	30 sec		2 gpm
1:30	247	30 sec		2 gpm
1:45	247	30 sec		2 gpm
2:00	247	30 sec		2 gpm
2:15	247	30 sec		2 gpm
2:30	247	30 sec		2 gpm
2:45	247	30 sec		2 gpm
3:00	247	30 sec		2 gpm
3:15	247	30 sec		2 gpm
3:30	247	30 sec		2 gpm
3:45	247	30 sec		2 gpm
HD-2244:01	247	30 sec		2 gpm

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: Robert L. Feezer Co. Inc Telephone #: 410-781-4655
Address: 6321 BARNSIDE AVE.
SYKESVILLE, MD

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): Robert L. Feezer License# 2122

*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: N.V. Homes Telephone #: 410-379-5956
Subdivision: CLARKSVILLE OVERLOOK Lot #: 7 Well Tag #: HO 95-0313
Site Address: 12847 Macbeth Farm Ln
CLARKSVILLE 21029

Submersible Pump Data **Pitless Adapter** **Well Cap and Electric Conduit**
Make: Sta-Rite Make: Campbell Two piece watertight cap:
Model #: SSP4HS15221 Model#: PT 800 Screened, vented well cap:
Pump Capacity 5 GPM Depth: 42" (36" min) Cap secured to casing:
Well Yield: 2 GPM NSF approved: Conduit min 18" R.G.:
Depth of well encountered at time of pump installation: 600 (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: Poly PVC sleeved to undisturbed soil at wall penetration:
PSI: 200 (160 psi min) Approximate length of sleeve: 10'
Depth of supply line: 42" (36" min) Sleeve caulked and sealed properly:

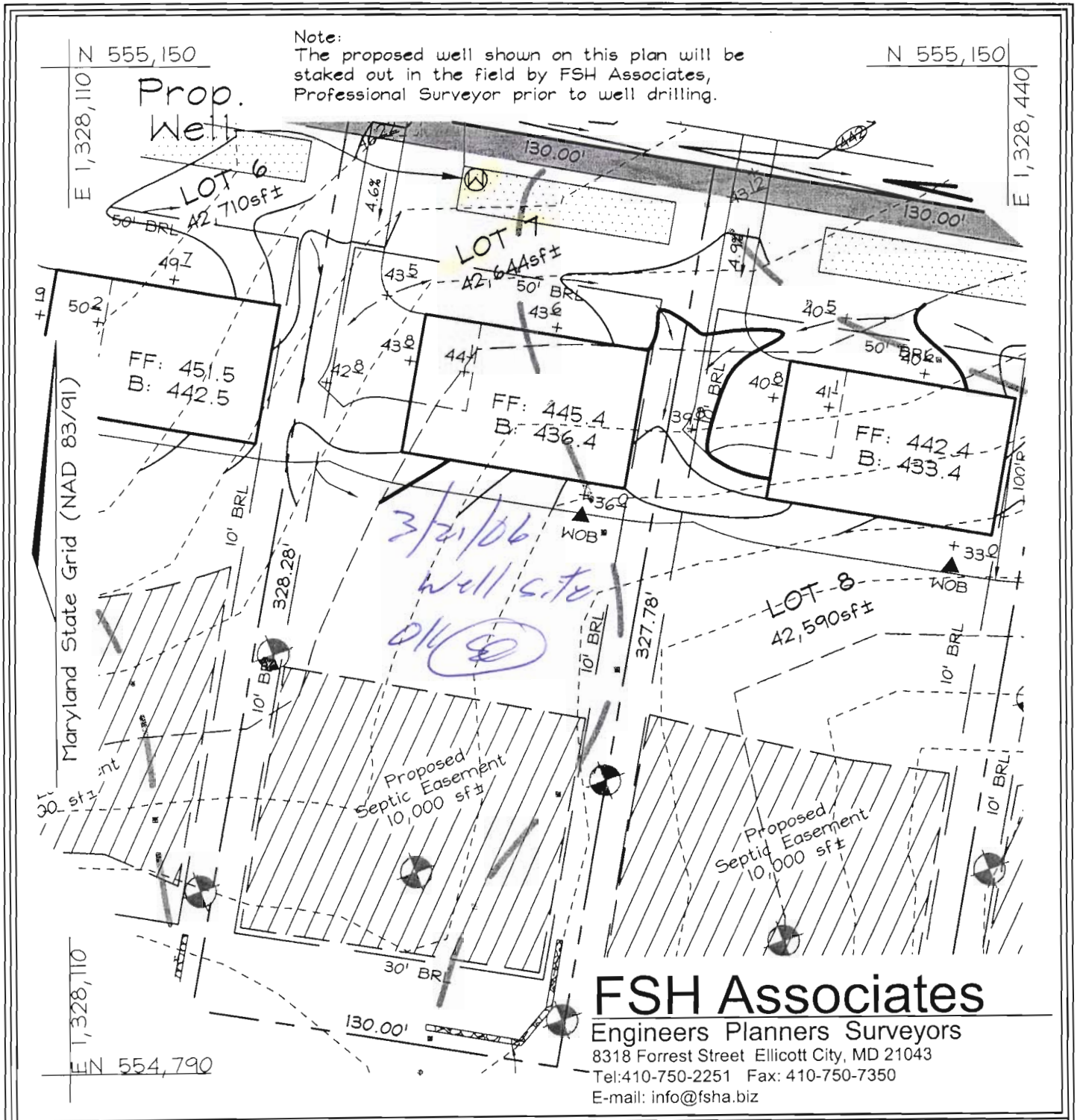
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: Robert L. Feezer date: 11/7/07

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

Date Insp. Requested: 10/2/07 Date Insp. Approved: 10/12/07
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

Note:
 The proposed well shown on this plan will be
 staked out in the field by FSH Associates,
 Professional Surveyor prior to well drilling.



FSH Associates

Engineers Planners Surveyors
 8318 Forrest Street Ellicott City, MD 21043
 Tel: 410-750-2251 Fax: 410-750-7350
 E-mail: info@fsha.biz

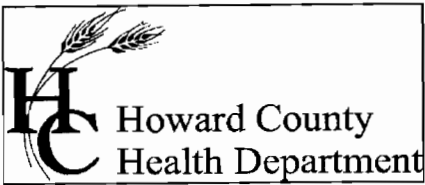
DESIGN BY: PS
 DRAWN BY: CD
 CHECKED BY: ZYF
 SCALE: 1"=50'
 DATE: Feb. 9, 2006
 W.O. No.: 3165
 SHEET No.: 7 OF 35

WELL PERMIT PLAN MACBETH FARM

LOT 7

TAX MAP 34 GRID 18 & 24
 4TH ELECTION DISTRICT

PARCEL 90
 HOWARD COUNTY, MARYLAND



Bureau of Environmental Health
7178 Columbia Gateway Drive Columbia, Maryland 21046-2132
(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

November 16, 2007

Homeowner
12840 Macbeth Farm Lane
Clarksville, MD 21029

RE: Clarksville Overlook, Lot 7
12840 Macbeth Farm Lane
Clarksville, MD 21029
BP #: B07002388
Well Permit # HO-95-0313

Dear Sir:

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 10/24/2007. Final approval of the well line connection to the dwelling was approved on 10/12/2007.**

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 water sample results were found to be in compliance with COMAR water quality standards.

Also, a Gross Alpha and Beta sample was collected on 04/18/2006. Both findings were below the maximum limit suggested by the EPA. At the time of the 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 and Occupancy.

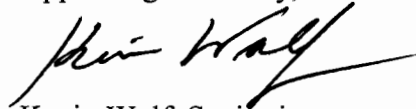
INTERIM CERTIFICATE OF POTABILITY

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-95-0313. 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.**

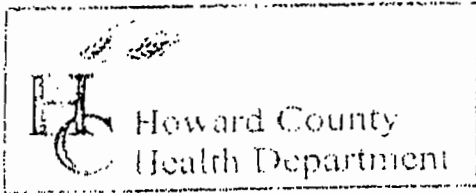
Date of Water Samples: 11/14/2007
RADIUM Sample: 04/18/2006
Date of Well Completion: 03/31/2006

Approving Authority,

A handwritten signature in black ink, appearing to read "Kevin Wolf", with a long horizontal flourish extending to the right.

Kevin Wolf, Sanitarian
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File



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 F.S.H. ASSOCIATES,
 (professional land surveyor or company employing professional land surveyors)
 on 2-20-06 (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

JTS CORPORATION

LOTS 1-35 MACBETH FARM

Analytical Summary Report

Client Name:	Howard County Health Department	Client Sample ID:	HOGCMBF7418
Sample Date/Time:	4/18/2006	Lab Sample ID:	604123-001-001-1/1
Receipt Date/Time:	4/19/2006	Sample Matrix:	WATER
Prepared Date/Time:		Analytical Method:	ALPHA/BETA BY METHOD 900.0

Isotope	Result	Uncertainty 2 σ	MDA	Q
Gross Alpha	6.4335 pCi/L	± 1.1304 pCi/L	2.1194 pCi/L	
Gross Beta	11.1733 pCi/L	± 1.0495 pCi/L	1.9868 pCi/L	

~~ACE~~

Send Report To:

State of Maryland

DHM
Divis
RAI
MacBeth Farm
JTS Corporation Suite 209
8808 Centre Park Dr. Columbia, MD 21045
201 W. Preston Street, Baltimore
John M. DeBoy, Dr. P.H., Director

LABORATORY ANALYSIS REQUEST

HOGCMBF7418

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

Plant/Site Name: MACBETH FARMS Lot 7 County: HOWARD

Sample Source: Well HO 95 0313 Location: _____
(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: GAC

Telephone No: 410 313 1773

Date Collected: 4/18/06

Time Collected: 11AM a.m. _____ p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

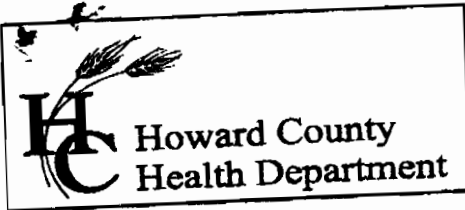
Submitters Code: Federal Project: Field Data: _____

Remarks: RAW H₂O sampled initial well^{pH} yield test Chlorine

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>604123-001</u>	<u>6.4 ± 1.1</u>	<u>4/26/07</u>
✓	Gross Beta	4100		<u>11.2 ± 1.0</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
(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

May 30, 2006

Clarksville Overlook, LLC
5300 Dorsey Hall Drive
Suite 200
Ellicott City, Maryland 21042

RE: MacBeth Farm Lot 7
Well Tag: HO-95-0313

To Whom It May Concern:

A sample was collected from a yield test on April 18, 2006 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 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 6.4 ± 1.1 picocuries/liter (pCi/L); while the Gross Beta level was 11.2 ± 1.0 pCi/L. Both the Gross Alpha and Gross Beta were below the maximum contaminant levels (MCL's) of 15 pCi/L and 50 pCi/L respectively. 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 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 or to schedule additional testing.

Sincerely,

Bert Nixon, Deputy Director
Bureau of Environmental Health

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

CERTIFICATE OF ANALYSIS



Requester:
 NV Homes, Inc
 Attn: Buddy
 6085 Marshalee Drive Suite 130
 Elkridge, Maryland 21075

S/O Number: 66110
Report Date: November 15, 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



**PERRY JOHNSON
 REGISTRARS, INC.**
 Cert No. C2005-01504

Property Sampled: 12840 Macbeth Farm Road

County: Howard
Subdivision: Clarksville Overlook **Tax Map #:** 34
Lot #: 7 **Parcel #:** 90
Building Permit #: B07002388

Date/Time Collected: November 14, 2007 at 11:56 am
Date/Time Received: November 14, 2007 at 2:45 pm

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

Well Tag Number: HO-95-0313
Well Condition: 2-Piece Cap
 Satisfactory

Water Conditioning/Treatment: Neutralizer

PARAMETER	RESULT	METHOD	MCL/*SMCL	
Nitrate	5.1 mg/L as N	SM 4500D	10 mg/L as N	Pass
Turbidity	2.2 NTU	EPA 180.1	10 NTU	Pass
pH	6.6 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.