

C1 3752

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

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

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED 4/14/06

Depth of Well 500 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" -HO-95-0318

OWNER J T S CORPORATION STREET OR RFD Clarksville Pike (Md 108) TOWN Clarksville SUBDIVISION Macbeth Farm SECTION LOT 12

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Top Soil, Brown mica, Sandstone/Grey mica, etc.

GROUTING RECORD WELL HAS BEEN GROUTED (Y) NO (N) TYPE OF GROUTING MATERIAL (C) M BENTONITE CLAY (B) C NO. OF BAGS 40 NO. OF POUNDS 4000

CASING RECORD MAIN CASING TYPE (S) T Nominal diameter top (main) casing 6 Total depth of main casing 100'

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

SCREEN RECORD screen type or open hole (S) T (B) R (H) O insert appropriate code below

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (Y) (N)

CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION"

DRILLERS LIC. NO. MWD 040 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. AWD 788

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

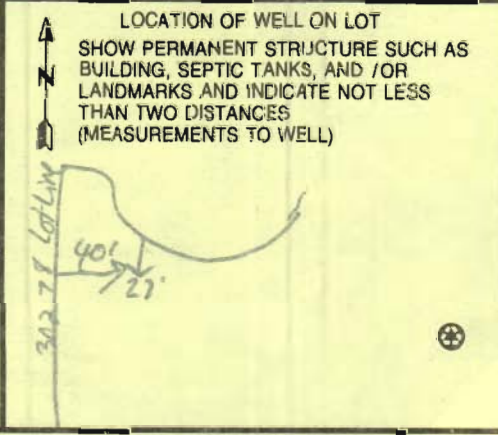
DEPTH (nearest ft.) 98 500 A 8 9 11 15 17 21 C 2 23 24 26 30 32 36 R 3 38 39 41 45 47 51 E S L O T S I Z E 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60

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) 3 PUMPING RATE (gal. per min.) 7.5 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 34 ft. WHEN PUMPING 146 ft. TYPE OF PUMP USED (for test) (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 () below LAND SURFACE (nearest foot) 2



B 1 0745
1 2 3 6

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

10-95-0318
70 79

524124 please type

fill in this form completely

Date Received (APA)

02 24 06
8 MM DD YY 13

OWNER INFORMATION 10167

J T S Corporation

15 Last Name Owner First Name 34

8808 Centre Park Drive S209

36 Street or RFD 55
Columbia, Md 21045

57 Town 70 State 72 Zip 76

B 3 HOWARD LOCATION OF WELL

8 COUNTY CG# 21

Macbeth Farm

23 SUBDIVISION 42

SECTION 44 46 LOT 12 48 50

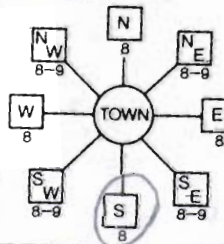
Clarksville

52 NEAREST TOWN 71

MILES FROM TOWN (enter 0 if in town) 1 M I 73 76 77 78

B 4

1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Clarksville Pike (Md 108)

11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 500+ 37 WEST EAST SOUTH NORTH

DISTANCE FROM ROAD Ft. 38 39

ENTER FT OR MI TAX MAP: 34 BLK: 24 PARCEL 90

DRILLER INFORMATION

George F. Easterday

M W D 040

Driller's Name 76 License No. 81

L. Franklin Easterday, Inc.

Firm Name 9265 Brown Church Rd., MT. Airy, Md. 21771

Address

Signature Date 2/23/2006

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 5 8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 500 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 AS14543
COUNTY NAME COUNTY NO.

STATE SIGNATURE INSERT S 41

DATE ISSUED 3/23/06

43 MM DD YY 48 CO SIGNATURE EXP. DATE 3/23/07

NORTH GRID 494 000 EAST GRID 917 000 50 55 57 63

APPROXIMATE DEPTH OF WELL 300 FEET 24 28

APPROXIMATE DIAMETER OF WELL 5 INCH NEAREST INCH

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 DEEPENED 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 DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER 10 2004 G 008

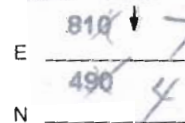
PERMIT No. 10-95-0318
70 71 72 73 74 75 76 77 78 79

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

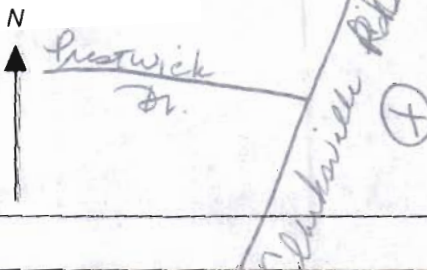
SOURCES OF DRILLING WATER

- 1. wells
- 2.
- 3.

WRITE THE BOX NUMBER FROM THE MAP HERE



DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION 14 E 10



4/17/06
Unable to sample Radium @ yield test. X
yield
7/11/07 Sample for Radium collected. BB

SPECIAL CONDITIONS

NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.

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 PARTRIT AVU,
SYKESTOWN, 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: NV Homes Telephone #: 410-379-5956

Subdivision: CLARKSVILLE OVERLOOK Lot #: 12 Well Tag #: HO-95-0318

Site Address: 12860 MACREYN FARM LANE
CLARKSVILLE, MD 21029

Submersible Pump Data

Make: STA-RTIG
Model #: SSPYHS10221
Pump Capacity: 5 GPM
Well Yield: 7.5 GPM

Pitless Adapter

Make: Campbell
Model #: PT 800
Depth: 42" (36" min)
NSF 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: 500 (feet)

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

Type: Poly
PSI: 200 (160 psi min)
Depth of supply line: 42 (36" min)

House Connection

PVC sleeved to undisturbed soil at wall penetration:
Approximate length of sleeve: 10'
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: 10/19/07

Called for inspection
10/2/07

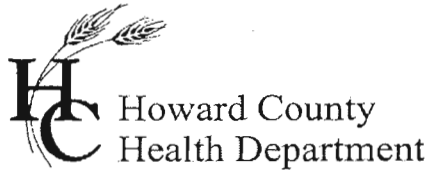
For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: _____

Date Insp. Approved: 10/3/07 KW

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



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

January 7, 2008

NV Homes, Inc.
6085 Marshalee Drive, Suite 130
Elkridge, MD 21075

RE: Clarksville Overlook, Lot 12
12860 Macbeth Farm Lane
Clarksville, MD 21029
BP #: B07002391
Well Permit # HO-95-0318

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 11/08/2007.** **Final approval of the well line connection to the dwelling was approved on 10/03/2007.**

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, Gross Alpha and Beta samples were collected on 07/11/2007. The Gross Alpha result exceeded its maximum contaminant level (MCL) of 15 pCi/L, while the Gross Beta level was below its targeted value of 50 pCi/L. In order to meet compliance, a water treatment device (Neutralizer) was installed. Also, post treatment Radium 226/228 samples were collected on 10/24/2007 without treatment. The results were above the combined 226/228MCL of 5pCi/l. Therefore, on 12/03/2007 the radium 226/228 were sampled again with treatment (a softener) and both findings were below the combined 226/228 MCL of 5pCi/l. 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.

However, this treatment system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence to assure future compliance.

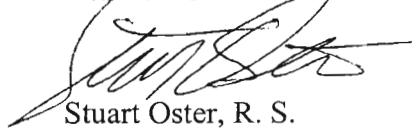
INTERIM CERTIFICATE OF POTABILITY

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-95-0318. 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.**

Dates of Water Sample: 10/24/2007, 10/31/2007, 11/07/2007 & 11/16/2007
Date of Samples for Gross Alpha and Gross Beta: 07/11/2007 & 12/03/2007
Dates of Samples for Radium 10/24/2007 & 12/03/2007
Date of Well Completion: 04/14/2006

Approving Authority,



Stuart Oster, R. S.
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File



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

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

November 28, 2007

Homeowner
12860 Macbeth Farm Lane
Clarksville, MD 21029

RE: Clarksville Overlook, Lot 12
12860 Macbeth Farm Ln.
Clarksville, MD 21029
BP # B07002391
Well Permit #HO-95-0318

Dear Homeowner:

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 11/08/2007. Final approval for the well installation was granted on 10/3/2007.**

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 26.04.04 water quality standards.

TEMPORARY INTERIM CERTIFICATE OF POTABILITY

This is a **Temporary Deviation** to allow additional time for radium testing and/or installation of a water treatment device along with post-treated samples to be taken if the radium levels exceed the EPA recommendations. **Until the water sample results are obtained or a treatment device is installed, it is recommended that all water that is used for cooking or drinking be bottled.** If the water sample indicates that the radium levels are above the EPA standards, then a treatment device will have to be installed and an additional water sample will have to be collected to make sure that the treatment device is working properly.

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-95-0318. 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 **temporary deviation is good for thirty days** to allow time for radium sampling and treatment if necessary. **An Interim Certificate of Potability will be issued upon submission of a water sample report that documents a Radium level that is within the EPA standards.**

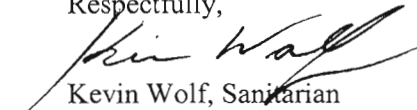
The Health Department has no objection to the issuance of temporary Use and Occupancy for the above referenced property.

Date of Initial Water Sample(s): 10/24/2007, 10/31/2007, 11/7/2007, 11/16/2007

PENDING RADIUM TESTS

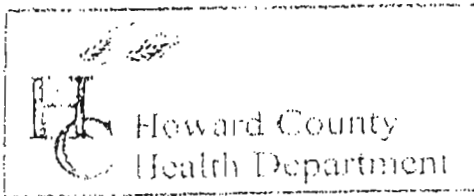
Date of Well Completion: 4/14/2006

Respectfully,



Kevin Wolf, Sanitarian
Well and Septic Program

cc: Building Inspector's office
Community 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

Send Report To:

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

MF12BB950318

Sample Bottle No. A: 1 No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Macbeth Farm - Lot 12 County: Howard

Sample Source: Route 108 Location: HO-95-0318
(well no., lab sink, sample tap, etc.)

County: Plant No.

CHECK (one per box)

Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Community	<input type="checkbox"/>
Non-community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Source (raw water)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Collector: Brian Baker

Telephone No: (410) 313-2643

Date Collected: 7/11/2007

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

Nitric Acid Preserved: Yes No

Iced: Yes No

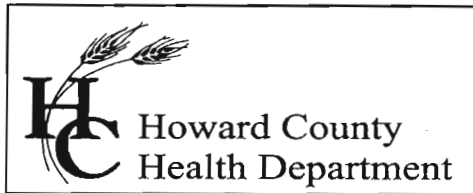
Submitters Code: Federal Project: Field Data: _____

Remarks: Freezer Plumbing Ran Pump for 30 Minutes pH _____ Chlorine _____

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>707077-003</u>	<u>15.3 ± 3.8</u>	<u>7/17/07</u>
✓	Gross Beta	4100		<u>30.4 ± 5.1</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: _____



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website: www.hchealth.org

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

August 29, 2007

JTS Corporation
8808 Centre Park Drive
Suite 209
Columbia, Maryland 21045

RE: MacBeth Farm Lot 12
Well Tag: HO - 95 - 0318

To Whom It May Concern:

A sample was collected from a yield test on July 11, 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** 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 15.3 ± 3.8 picocuries/liter (pCi/L); while the **Gross Beta** level was 30.0 ± 5.1 pCi/L. The **Gross Alpha** result exceeded its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below its targeted value of 50 pCi/L (roughly equivalent to the **annual dose rate of 4 millirems/year**).

Since the **Gross Alpha** finding exceeded its **MCL**, additional testing for **Gross Alpha**, **Gross Beta** and **Radium** will be necessary prior to occupancy to verify existing levels. Alternatively, you may install treatment designed to reduce **Gross Alpha**, **Gross Beta** and **Radium**, plus provide post treated results (**for all 3 parameters**) confirming that levels are in conformance with existing standards. These tests are in addition to the standard parameters required for Use & Occupancy. (U & O). Finally, a "Radium Treatment Agreement" will need to be signed by "you" and the new owners as part of the U & O process.

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 discuss additional testing requirements.

Sincerely,

Bert Nixon, Acting Director
Bureau of Environmental Health

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

CERTIFICATE OF ANALYSIS

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

S/O Number: 65811
Report Date: October 25, 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@connect.net
 www.tracelabs.com

Maryland State Certified
 Water Quality Laboratory
 No. 318

ISO 9001:2000



Cert No. C2005-01504

Property Sampled: 12860 Macbeth Farm Lane

County: Howard
Subdivision: Clarksville Overlook **Tax Map #:** 34
Lot #: 12 **Parcel #:** 90
Building Permit #: B07002391

Date/Time Collected: October 24, 2007 at 12:15 pm
Date/Time Received: October 24, 2007 at 2:50 pm

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

Well Tag Number: HO-95-0318
Well Condition: 2-Piece Cap
 Satisfactory

Water Conditioning/Treatment: Neutralizer, Softener (unplugged)

PARAMETER	RESULT	METHOD	MCL/*SMCL	
Nitrate	1.4 mg/L as N	SM 4500D	10 mg/L as N	Pass
Turbidity	2.5 NTU	EPA 180.1	10 NTU	Pass
pH	7.0 Units	EPA 150.1	*6.5-8.5 Units	***
Sand	Negative		Negative	
Total Coliform	PRESENT	SM 9223B	Absent	FAIL
E.coli	Absent	SM 9223B	Absent	

Kate Cannon
 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



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

S/O Number: 65811
Report Date: November 13, 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

Property Sampled: 12860 Macbeth Farm Lane

County: Howard
Subdivision: Clarksville Overlook **Tax Map #:** 34
Lot #: 12 **Parcel #:** 90
Building Permit #: B07002391

Date/Time Collected: October 24, 2007 at 12:15 pm
Date/Time Received: October 24, 2007 at 2:50 pm

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

Well Tag Number: HO-95-0318
Well Condition: 2-Piece Cap
Cap Broken
Cap Tight

Water Conditioning/Treatment: Neutralizer, Softener (both unplugged)

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	2.1 +/- 0.2 pCi/L	EPA 903.1	0.1 pCi/L
Radium 228	3.6 +/- 0.8 pCi/L	EPA Ra-05	0.9 pCi/L
Uranium	21.9 +/- 2.7 pCi/L	EPA 908.0	0.7 pCi/L

Maryland State Certified
Water Quality Laboratory
No. 318

ISO 9001:2000



Cert No. C2005-01504

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

Samples analyzed by Laboratory #E83033

CERTIFICATE OF ANALYSIS



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

S/O Number: 66002
Report Date: November 8, 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: 12860 Macbeth Farm Lane, Retest #2

County: Howard
Subdivision: Clarksville Overlook **Tax Map #:** 34
Lot #: 12 **Parcel #:** 90
Building Permit #: B07002391

Date/Time Collected: November 7, 2007 at 11:36 am
Date/Time Received: November 7, 2007 at 3:26 pm

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

Well Tag Number: HO-95-0318
Well Condition: 2-Piece Cap
Cap Broken By Screw

Water Conditioning/Treatment: Neutralizer, Softener (unplugged)

PARAMETER	RESULT	METHOD	MCL	
Total Coliform	PRESENT	SM 9223B	Absent	FAIL
E.coli	Absent	SM 9223B	Absent	

Allison R. Milburn
Manager- Drinking Water Testing

MCL=Maximum Contamination Level

CERTIFICATE OF ANALYSIS



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

S/O Number: 66146
Report Date: November 19, 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: 12860 Macbeth Farm Lane, Retest #3

County: Howard
Subdivision: Clarksville Overlook **Tax Map #:** 34
Lot #: 12 **Parcel #:** 90
Building Permit #: B07002391

Date/Time Collected: November 16, 2007 at 11:55 am
Date/Time Received: November 16, 2007 at 1:00 pm

Sample Location: Pressure Tank
Sampler ID: 5745KC
Samples Iced: Yes
Residual Cl₂ <0.1 mg/L: Yes

Well Tag Number: HO-95-0318
Well Condition: 2-Piece Cap
Cap Broken By Screw

Water Conditioning/Treatment: Neutralizer, Softener (unplugged)

PARAMETER	RESULT	METHOD	MCL	
Total Coliform	Absent	SM 9223B	Absent	Pass
E.coli	Absent	SM 9223B	Absent	Pass

Allison R. Milburn
Manager- Drinking Water Testing

MCL=Maximum Contamination Level



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	0710224-01	0710224-02
Client I.D.	65810	65811
Radium 226	0.9	2.1
Error +/-	0.2	0.2
MDL	0.2	0.1
EPA Method	903.1	903.1
Prep Date	10/31/07	10/31/07
Analysis Date	11/08/07	11/08/07
Analyst	MJN	MJN
Radium 228	1.1	3.6
Error +/-	0.7	0.8
MDL	1.0	0.9
EPA Method	Ra-05	Ra-05
Prep Date	10/31/07	10/31/07
Analysis Date	11/08/07	11/08/07
Analyst	PJ	PJ
Uranium	15.7	21.9
Error +/-	2.4	2.7
MDL	0.8	0.7
EPA Method	908.0	908.0
Prep Date	10/31/07	11/05/07
Analysis Date	11/01/07	11/06/07
Analyst	MJN	MJN
Units	pCi/l	pCi/l

Uranium 235 ??

CERTIFICATE OF ANALYSIS



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

S/O Number: 66330
Report Date: December 10, 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@comnext.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: 12860 Macbeth Farm Lane, Treated Sample

County: Howard
Subdivision: Clarksville Overlook **Tax Map #:** 34
Lot #: 12 **Parcel #:** 90
Building Permit #: B07002391

Date/Time Collected: December 3, 2007 at 11:31 am
Date/Time Received: December 3, 2007 at 3:00 pm

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

Well Tag Number: HO-95-0318
Well Condition: 2-Piece Cap
Satisfactory

Water Conditioning/Treatment: Neutralizer, Softener

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Gross Alpha	<1.1 +/- 0.7 pCi/L	EPA 900.0	1.1 pCi/L
Gross Beta	<1.2 +/- 0.8 pCi/L	EPA 900.0	1.2 pCi/L

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

**AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL
WITH AN ON-SITE TREATMENT SYSTEM**

This agreement is entered into by and between the Howard County Health Department ("the Health Department") and Jianxing Yuan and Beili ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 12800 MacBeth Farm Lane and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # _____, Block # _____, Parcel # _____, Deed Reference # _____ and Tax Account # _____ ("the Property").

WHEREAS, the Property lacks an available public drinking water source and is required to have an individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit HW-95-6318 that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi/L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition, a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the maximum contaminate levels (MCL's) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce radionuclides.

WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

NOW THEREFORE, the parties have agreed to the following terms and conditions:

1. The Health Department will record this Agreement among the Land Records of Howard County, Maryland.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department shall verify that the treatment device is operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).
3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta and radium levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warrant nor guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
9. The laws of the State of Maryland govern the provisions of all transactions.

The parties have signed and sealed this Agreement on the dates set forth below.

X 9/16/07
Date
X 9/16/07
Date

Date

X [Signature]
Owner
X [Signature]
Owner

Howard County Health Department

DELIVERED BY NV HOMES, TOM HERBERT 10/15/07