



HOWARD COUNTY HEALTH DEPARTMENT

45160

CODES

DATE

10/4/13

WS

CASH

CHECK

Received From

Liu & Wu

For

Well Permit - 7373 Hopkynith

NO.

1080

One hundred sixty 4/10 Dollars

\$

160 00

Received By

J King

C1 23424

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. 2-6 OF ALL CARDS)

COUNTY NUMBER

ST/GO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER WU, CONNIE AND CHUNG last name first name WELL SITE ADDRESS 7573 HOPKINS WAY TOWN FULTON SUBDIVISION ROBERT STILL PROP SECTION LOT

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

GROUTING RECORD form with fields for GROUTING MATERIAL (CM, BC), NO. OF BAGS (27), GALLONS OF WATER (162), DEPTH OF GROUT SEAL (75 ft).

CASING RECORD form with fields for MAIN CASING TYPE (ST), Nominal diameter (6 inch), Total depth (80 foot).

OTHER CASING (if used) form with fields for diameter and depth.

SCREEN RECORD form with fields for screen type (ST), BRASS (BR), OPEN HOLE (HO), PLASTIC (PL), OTHER (OT).

NUMBER OF UNSUCCESSFUL WELLS: 0 WELL HYDROFRACTURED: YES (Y)

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" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO. 1 MWD 040 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 WRD 0064

DEPTH (nearest ft.) table with columns for casing sections 1-3 and slot size/diameter of screen.

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

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

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST form with fields for HOURS PUMPED (6), PUMPING RATE (1.6 gal. per min.), METHOD USED TO MEASURE PUMPING RATE (Bucket), WATER LEVEL (28 ft. before, 293 ft. when pumping).

PUMP INSTALLED form with fields for DRILLER INSTALLED PUMP (YES), TYPE OF PUMP INSTALLED (S), CAPACITY: GALLONS PER MINUTE (31-35), PUMP HORSE POWER (37-41), PUMP COLUMN LENGTH (43-47), CASING HEIGHT (2 foot).

LATITUDE 39.102740 LONGITUDE 76.542792 (DEFAULT COORD. WGS 84) NOTES:

B 1	15077	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 5451160	STATE PERMIT NUMBER HO - 95 - 2596 fill in this form completely
Date Received (APA) 10 04 13 8 MM DD YY 13		OWNER INFORMATION CONNIE AND CHUNG		
15 Last Name 610 PROFESSIONAL DRIVE S 225		34 First Name		
36 Street or RFD GAITHERSBURG MD 20879		55		
57 Town		70 State		72 Zip
DRILLER INFORMATION				
George F. Easterday		M VD		040
Driller's Name		76 License No.		81
L. Franklin Easterday, Inc.				
Firm Name				
9265 Brown Church Rd., Mt. Airy, Md. 21771				
Address				
Signature George F. Easterday		Date 10/3/2013		
B 2		WELL INFORMATION		
1 APPROX. PUMPING RATE		2 (GAL. PER MIN.)		
8		500 12		
AVERAGE DAILY QUANTITY NEEDED		14 20		
1 (GAL. PER DAY)		2		
USE FOR WATER (CIRCLE APPROPRIATE BOX)				
<input checked="" type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION				
<input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)				
<input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING				
<input type="checkbox"/> PUBLIC WATER SUPPLY WELL				
<input type="checkbox"/> TEST, OBSERVATION, MONITORING				
<input type="checkbox"/> OPEN LOOP GEOTHERMAL				
<input type="checkbox"/> CLOSED LOOP GEOTHERMAL				
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL				
Howard		A544514		13
COUNTY NAME		COUNTY NO.		
STATE SIGNATURE		INSERT S →		41
DATE ISSUED		10/7/2013		10/7/14
43 MM DD YY 48		CO SIGNATURE		EXP. DATE
PROPOSED LOCATION OF WELL ON LOT				
SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL				
APPROXIMATE DEPTH OF WELL 300 FEET				
APPROXIMATE DIAMETER OF WELL 6 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 DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)				
<input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL				
<input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED				
<input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS				
<input type="checkbox"/> THIS WELL WILL DEEPEMED AN EXISTING WELL				
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52				
Not to be filled in by driller (MDE OR COUNTY USE ONLY)				
APPROX. PERMIT NUMBER _____ G _____				
PERMIT No. HO - 95 - 2596				
70 71 72 73 74 75 76 77 78 79				
SPECIAL CONDITIONS				
NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED				
Well casing must be steel and well casing, must be set at a minimum of 50 ft depth or at least 10ft into competent bedrock, whichever is deeper.				

HOWARD
COUNTY DEPARTMENT OF PERMITTING SERVICES
FIELD DATA SHEET-WELL YIELD TEST

Page _____ of _____

Data Completed 11-11-13 - 8:30

Well Driller Name EASTERDAY
 Owner Name Wu, Connie
 Well Permit # MO 10-95-2596
 Election District _____
 Street Address of Property
7373 HOPKINS WAY
 Subdivision _____
 Lot _____ Block _____

Depth of Well = 500
 Distance of Measuring Point (M. P.)
 Above Ground = 2
 Static Water (S.W.L) Below M. P. = 28'
Rate of Pumping-Reservoir Drawdown
 Time pump started: 8:45
 Pumping Rate = 156 gpm
 Total Time 45 min to reach pumping
 water level 292 ft. below M. P.

RECOVERY PUMP TEST-OBSERVATIONS TO BE RECORDED EVERY 15 MINUTES

Time	Water Level Below M.P.	Pumping Rate Time to fill gallon bucket	Flow Meter Reading (if needed)	Calculated Flow (gallons/minute)
9:30	292	37.5	460	1.6
9:45	292	37.5	460	1.6
10:00	292	37.5	460	1.6
10:15	293	37.5	460	1.6
10:30	293	37.5	460	1.6
10:45	292	37.5	460	1.6
11:00	292	37.5	460	1.6
11:15	292	37.5	460	1.6
11:30	292	37.5	460	1.6
11:45	292	37.5	460	1.6
12:00	293	37.5	460	1.6
12:15	293	37.5	460	1.6
12:30	293	37.5	460	1.6
12:45	293	37.5	460	1.6
1:00	293	37.5	460	1.6
1:15	293	37.5	460	1.6
1:30	293	37.5	460	1.6
1:45	293	37.5	460	1.6



DPS-Division of Land Development
 255 Rockville Pike, 2nd Floor * Rockville, Maryland 20850-4166
 Monday-Fri, day 7:30 am-4:00 pm
 Phone: 240-777-6300 * Fax: 240-777-6314



Cont. on Back

Time	Water Level Below M.P.	Pumping Rate Time to fill a gallon Bucket	PUMP SET	Calculated Flow (gallons/minute)
2:00	293	37.5	460	1.6
2:15	293	37.5	460	1.6
2:30	293	37.5	460	1.6
2:45	293	37.5	460	1.6
3:00	293	37.5	460	1.6
3:15	293	37.5	460	1.6
3:30	293	37.5	460	1.6

RECEIVED
 NOV 26 2013
 FORWARD COUNTY HEALTH DEPT.
 DEPT. OF ENVIRONMENTAL HEALTH

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)313-1771 FAX: (410)313-2648

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: Eastday-Wilson Water Solutions Telephone #: 301 831 7057
Address: _____

(Must circle one) Licensed Plumber _____ Licensed Well Driller X Licensed Well Pump Installer _____
License # and name of individual responsible for the field installation:
Name (Print): Darren Wilson License#: MSD188

*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: Connie Will Telephone #: 443-535-5599 - Jeff
Subdivision: _____ Lot #: _____ Well Tag #: HO-95-2596
Site Address: 7373 Hopkins Way

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Grundfos</u>	Make: <u>Martinson</u>	Two piece watertight cap: _____
Model #: <u>106510</u>	Model#: <u>B-10X</u>	Screened, vented well cap: <u>✓</u>
Pump Capacity _____ GPM	Depth: <u>3 1/2</u> (36" min)	Cap secured to casing: <u>Y</u>
Well Yield: <u>1.6</u> GPM	NSF/WSC approved: _____	Conduit min 18" B.G.: <u>Y</u>
Depth of well encountered at time of pump installation: <u>490</u> (feet)	Conduit secured to well cap: <u>Y</u>	
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4		
Torque arrestors, Cable guards, or other acceptable method used- Must circle one		
Safety rope, if used, attached to brass rope adapter or other acceptable method <u>inside of well casing</u>		

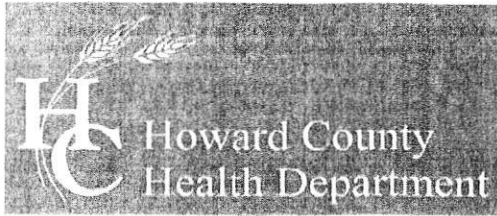
<u>Piping to house</u>	<u>House Connection</u>
Type: <u>PE</u>	PVC sleeve to undisturbed soil at wall penetration: <u>YES</u>
PSI: <u>200</u> (160 psi min)	Length of sleeve (5' minimum from foundation): <u>5 FT</u>
Depth of supply line: <u>3 1/2</u> (36" min)	Sleeve sealed properly: <u>YES</u>

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: Darren Wilson date: 1-8-16

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

Date Insp. Requested: _____ Date Insp. Approved: 1/13/2016 Inspector: BB
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓
Two piece cap installed and attached to casing securely ✓
Elec. conduit extends at least 18" below grade/attached to cap properly ✓
Safety rope not outside of well cap/casing ✓
Correct well tag attached properly and casing 8" above finished grade ✓
Water supply line sleeved adequately at house connection ✓
Adequate grout observed below pitless adapter ✓



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., 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:

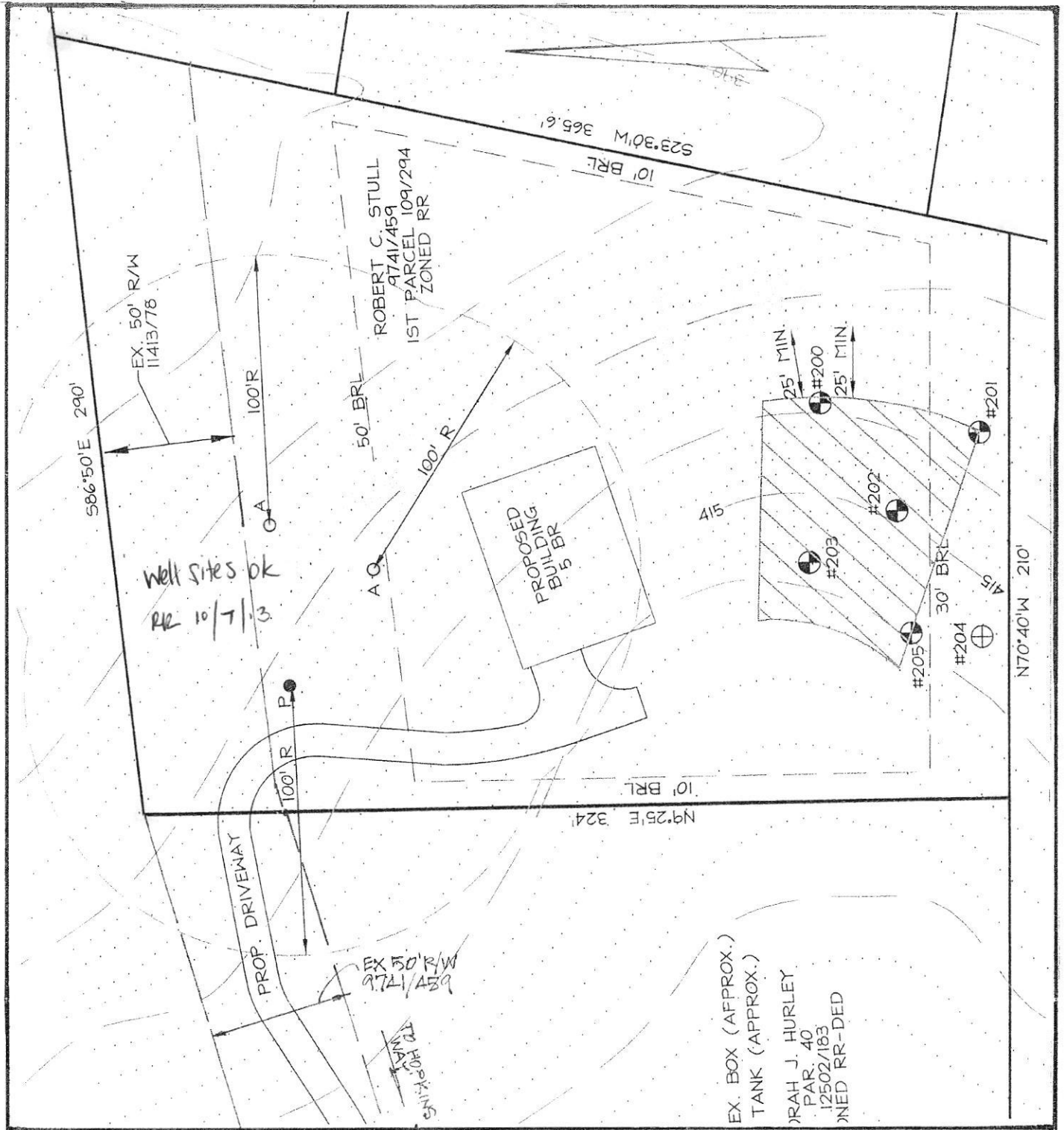
Well Site Location: #7373 HOPKINS WAY
Subdivision/Property Name Lot# Road Name

The well site has been staked by LDE, INC.
(professional land surveyor or company employing professional land surveyors)
on 9/30/13 (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



LDE Inc.

Engineers ♦ Surveyors ♦ Planners

Historic Carriage House

7520 Main Street • Suite 203

Sykesville, Maryland • 21784

(410)795-6391 • (410)795-6392 • FAX(410)795-9540

www.Landsurveyormd.com

WELL PERMIT EXHIBIT

A544514

PROPERTY OF ROBERT C. STULL

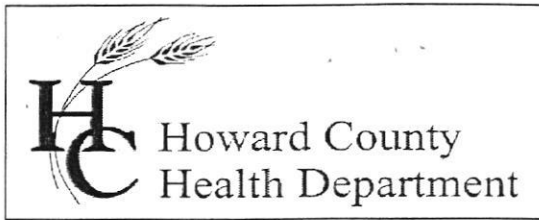
#7373 HOPKINS WAY

PARCEL 1 1.92 ACRES

LIBER 109 FOLIO 294

TAX MAP 41 GRID 10 PARCEL 42
5th ELECTION DISTRICT HOWARD COUNTY, MD

SCALE: 1" = 50' | DATE: 9/2013



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
Main: 410-313-6300 | Fax: 410-313-6303
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

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

September 10, 2013

Margaret Melvin, Prudential Penfed Realty for Suntrust Mortgage, Inc.
c/o Bruce Burton, LDE, Inc., Consultant/ Applicant for Percolation Tests

RE: Variance request
7373 Hopkins Way
Tax Map 41, Parcel 42
Howard County, Maryland

Dear Ms. Melvin,

The Health Department submitted a variance request on your behalf for the potential development of 7373 Hopkins Way (Howard County, Tax Map 41, Parcel 42). Consideration of the soil conditions and percolation test results, assumed groundwater flow patterns, and landscape position were some of the factors used in making our recommendation for approval.

The Maryland Department of the Environment (MDE) has accepted our recommendation to approve the variance request subject to the specific conditions that are described below. The pending approval will allow for a well to be established on the subject property at one of the three currently proposed locations. Each of the three proposed well locations is downgradient of the septic system distribution trench at 7381 Hopkins Way, and at least 200 feet distance.


Due to the geology, soils characteristics, and landscape position of the sewage areas in relation to the proposed wells, the proposal may be approved subject to the following conditions:

1. The well's casing must be made of steel.
2. The well's casing is to be set at a minimum of 50 feet depth or at least 10 feet into competent bedrock, whichever is deeper.

Should you sell your property prior to development, these requirements shall continue with the property transfer.

If you have any questions regarding this letter, you may contact me at the above address or by calling (410) 313-1771.

Respectfully,


Robert Bricker, REHS/R.S.
Well and Septic Program


Maryland Department of the Environment

COPY: file

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 107089 Account #: 7188
Reference: Chung Woo Company: Lakestone Homes
Location: 7373 Hopkins Way Requested By: Jeff Van Stone
Clarksville, MD 21029 Source: Well Water
Date/ Time Collected: 5/3/2016 1240 Site: Pressure Tank
Date/Time Rec'd: 5/3/2016 1425 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.9
Collected By: T. Frazier 3126TF Well #: HO-95-2596

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/4/2016 / 0850 / LLO
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/4/2016 / 0850 / LLO
Nitrate	2.08	mg/L	10	601	5/4/2016 / 1230 / CRS
Turbidity	3.62	NTU	<10	SM18 2130B	5/4/2016 / 1250 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	5/4/2016 / 1250 / CRS

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 pH & Chlorine level tested on site
- 8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : B14000629

Date Reported: 5/4/2016