

C1 2191 SEQUENCE NO. (MDE USE ONLY)
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

**STATE OF MARYLAND
 WELL COMPLETION REPORT**
 FILL IN THIS FORM COMPLETELY
 PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
 COUNTY NUMBER **A 50264C**

ST/CO USE ONLY
 DATE Received

DATE WELL COMPLETED
080795

Depth of Well
300
 (TO NEAREST FOOT)

PERMIT NO.
 FROM "PERMIT TO DRILL WELL"
40-94-0640

OWNER **Raulin Frederick**
 STREET OR RFD **Bushy Park Rd.** TOWN **Woodbine**
 SUBDIVISION **Three Keys Farm** SECTION **34** LOT **34**

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	67	
Gray Mica	67	300	

GROUTING RECORD
 WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**
 TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS **22** NO. OF POUNDS **2068**
 GALLONS OF WATER **132**
 DEPTH OF GROUT SEAL (to nearest foot)
 from **0** ft. to **67** 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
 Nominal diameter top (main) casing (nearest inch) **6**
 Total depth of main casing (nearest foot) **72**

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

SCREEN RECORD
 screen type or open hole insert appropriate code below
ST STEEL **BR** BRASS BRONZE **HO** OPEN HOLE
PL PLASTIC **OT** OTHER

NUMBER OF UNSUCCESSFUL WELLS: **0**
 WELL HYDROFRACTURED **Y** **N**

C 2

DEPTH (nearest ft.)

H	0	69	300
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SLOT SIZE 1 2 3
 DIAMETER OF SCREEN (NEAREST INCH)

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

TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

PUMPING TEST
 HOURS PUMPED (nearest hour) **6**
 PUMPING RATE (gal. per min.) **002.4**
 METHOD USED TO MEASURE PUMPING RATE **Bucket**
 WATER LEVEL (distance from land surface)
 BEFORE PUMPING **59** ft.
 WHEN PUMPING **27.5** 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 WILL INSTALL PUMP YES **NO**
 (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)
+ above **LAND SURFACE**
- below **3** (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)

See attached location

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

DRILLERS LIC. NO. **24**
 DRILLERS SIGNATURE **Joseph L. Mayne**
 LIC. NO. _____

B 1 2439

SEQUENCE NO. (DP USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please print or type

STATE PERMIT NUMBER

40-94-0640 fill in this form completely

Date Received (APA)

071095

OWNER INFORMATION

RAWLIN FREDERICK

15101 FREDERICK RD

WOODBINE MD 21797

B 3

LOCATION OF WELL

HOWARD

6 COUNTY

23 SUBDIVISION

SECTION LOT 3

GLENNWOOD

52 NEAREST TOWN

MILES FROM TOWN 3 MI

DRILLER INFORMATION

MSD/MGD/MWD

Joseph L. Mayne 24 License No. 80

Joseph L. Mayne Well Drilling

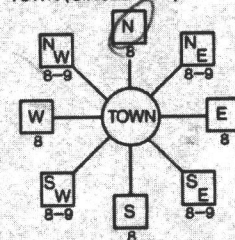
5512 Ridge Rd. Mt. Airy, Md 21771

Address

Signature Date 7/10/95

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Bushy Park Road

NEAR WHAT ROAD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 80 37 DISTANCE FROM ROAD

ENTER FT OR MI FT

TAX MAP: 8 BLK: PARCEL

B 2

WELL INFORMATION

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

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- Home (single or double household unit only)
Farming (livestock watering & agricultural irrigation)
Industrial, commercial, state and federal gov. other (requires appropriation permit)
Public or private water company (requires appropriation permit and state health department approval)
Test, observation, monitoring (may require appropriation permit)

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard A50264C COUNTY NAME COUNTY NO.

STATE SIGNATURE INSERT S

DATE ISSUED 073195 DONNA K SOE 7/30/96 EXP. DATE

43 NORTH GRID 541000 48 CO SIGNATURE EAST GRID 0788000

APPROXIMATE DEPTH OF WELL 260 FEET

APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH

METHOD OF DRILLING (circle one)

- Bored (or Augered) Jetted Jetted & Driven
AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary)
CABLE REVerse-ROTary Drive-POINT

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- N THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
D THIS WELL WILL DEEPEM AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE)

Not to be filled in by driller (OEP USE ONLY)

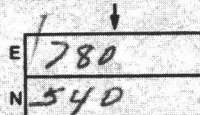
APPROP. PERMIT NUMBER GAP

FORCE DS PERMIT No. 40-94-0640

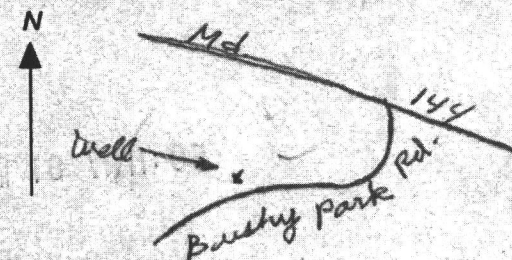
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

- SOURCES OF DRILLING WATER
1. WELL
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE



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



Glennwood

SPECIAL CONDITIONS

NOTE = APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED =

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 94-0640
 Location of property (road) Bushy Park Rd.
 Subdivision Three Keys Farm Lot 23 Block _____ Plat _____ Sec. _____
 Well Driller J. Mayhew Owner Raulin, Frederick

Depth of well 300'
 Distance of measuring point (M.P.) above ground 2 1/2
 Static water level (S.W.L.) below M.P. 59'

I. High rate pumping -- reservoir drawdown

Time pump started 7:30 Pumping rate 15 gpm.
 Total time 30 min. to reach pumping water level 275 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 5/ gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
7:45	191'	4 sec.	N/A	15 gpm.
8:00	275	4		15 gpm.
8:15	272	30		2
8:30	272	30		2
8:45	272	30		2
9:00	272	30		2
9:15	270	30		2
9:30	268	25		2.4
9:45	269	25		2.4
10:00	269	25		2.4
10:15	267	25		2.4
10:30	263	25		2.4
10:45	259	25		2.4
11:00	264	22		2.7
11:15	268	24		2.5
11:30	269	24		2.5
11:45	269	25		2.4
12:00	271	25		2.4
12:15	271	30		2
12:30	263	30		2
12:45	263	25		2.4
1:00	262	25		2.4
1:15	260	25		2.4
1:30	259	25		2.4
HD-224 1:45	258	25		2.4
2:00	258	25		2.4

FROM : HcCo EnvHealth

3/27/01
Anytime

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-3640 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: CHARLES A. KLEIN & SONS, INC. Telephone #: (410) 549-6960
Address: 5220 PINE MILL ROAD
SPRINGVILLE, 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): CHARLES A. KLEIN, JR. License # 6521

*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: WILLIAMSON, BOB Telephone #: (410) 997-8800
Subdivision: CATTAUGUS Lot #: 4 Well Tag #: HO - 28 - 0640
Site Address: 15190 BUSHY FAWN ROAD
WOODBINE, MD 21797

Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit
Make: INLET Make: HANNO Two piece watertight cap:
Model #: 5-545-TB-P-62 Model #: PT-800 Screened, vented well cap:
Pump Capacity: 5 GPM Depth: 42" (36" min) Cap secured to casing:
Well Yield: 15 GPM NSF approved: Conduit min 18" B.G.:
Depth of well encountered at time of pump installation: 520 (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 NA

Pipes to house House Connection
Type: POLYETHYLENE PVC sleeved to undisturbed soil at wall penetration: Yes
PSI: 200 (150 psi min) 300 PSI Approximate length of sleeve: 2'
Depth of supply line: (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.

Charles A. Klein Jr 1/15/01
Signature of company representative responsible for installation date

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

Date Insp. Requested: 3/27/01 Date Insp. Approved: 3/27/01 OK SRK
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 3" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter

WATER ANALYSIS

Do not write above this line.

S
A
M
P
L
E
I
D

Bottle Number HO-2582 Name Roulin County Howard County Code 13

Source Three Keys Farm, Lot 3, Bushy Park Rd. Date Category Code 4F

Collected: Date 8/7/95 Time 11:00 Collector & Phone D. See 313-2640 Submitter Code

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"/>	Federal Project <input checked="" type="checkbox"/> <u>S</u>
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 type="checkbox"/>	
Other <input type="checkbox"/>	Other <input type="checkbox"/>		Special <input type="checkbox"/>	

F
I
E
L
D

Plant No. Sampling Station Preservation: Iced Acid Type of Acid H₂SO₄

pH Chlorine: Free Total Specific Conductance

Notes to Lab/Remarks: HO-94-0640

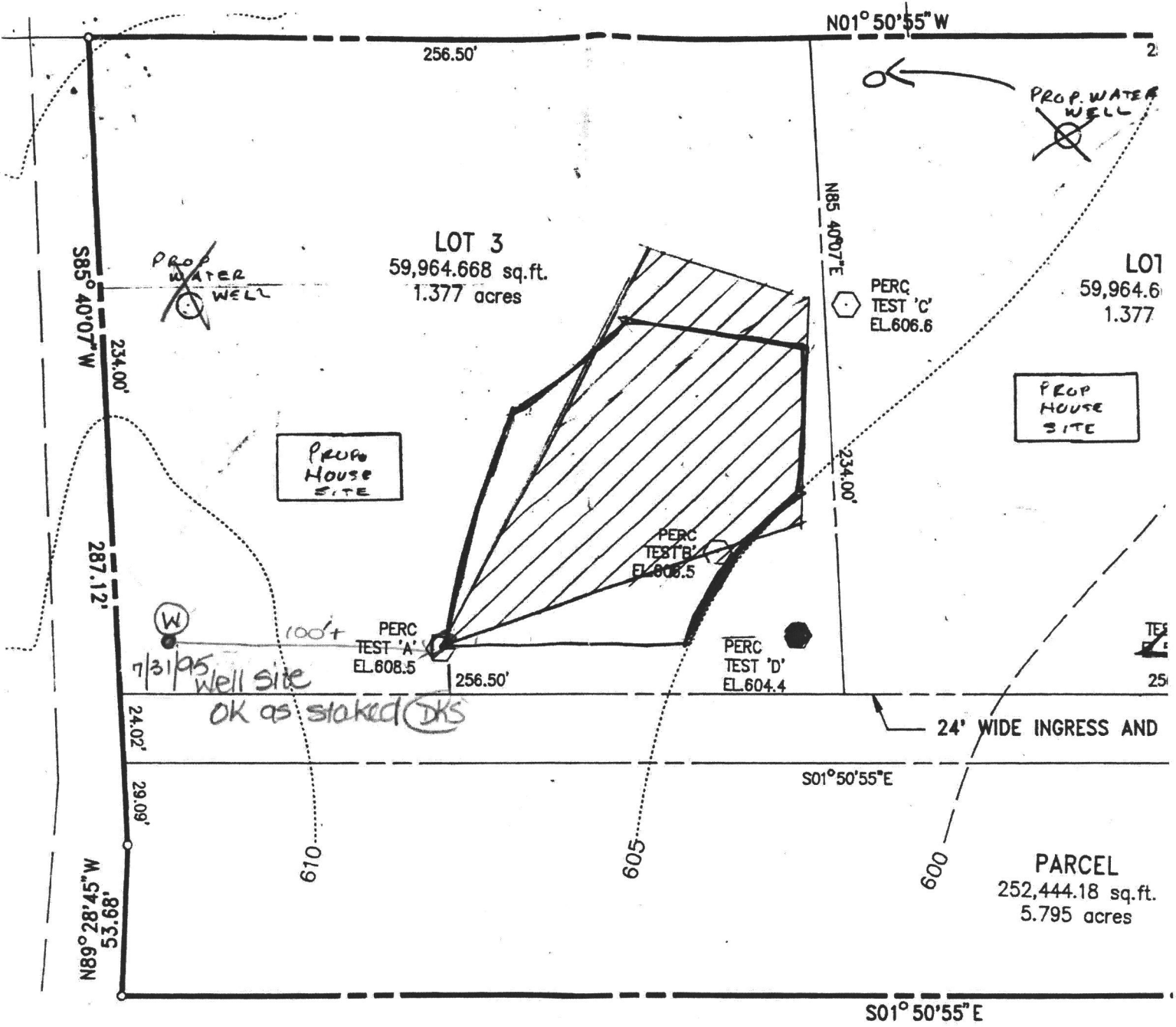
CHECK TESTS	TESTS	CODES	ERROR CODE	G/L	RESULTS	DATE ANALYZED	ANALYST INITIALS
	Alkalinity (Total)	00410					
	Alkalinity, Ca CO ₃ Sat.	74023					
	Ammonia - N	00608					
	Chloride	00940					
	Color*	00081					
	Conductance*, spec.	00095					
	Dissolved Solids	70300					
	Hardness	00900					
	Fluoride	00951					
	Nitrite, N	00615					
<input checked="" type="checkbox"/>	Nitrate - Nitrate, N	00630					
	pH*, Ca CO ₃ SAT	70311					
	Sulfate	00945					
	Total Solids	00500					
	Turbidity*	00076					
	Other:						

* Results reported in Units, all others in milligrams per liter (ppm)

Number of Tests Requested 01

Section Chief _____

Date Reported _____



Private Sewer Systems.

Signature 3/24/95
DATE

FREDERICK

Corrections made on original
only (by engineer) DKS

NOTES:

1. THERE ARE NO WELLS OR SEPTIC SYSTEM WITHIN 100' OF THE PROPERTY SHOWN HEREON.

installed and inspected - 3-27-01. New WELL pipe and wire to be replaced from WELL to house only at this time.

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: K.H. Plumbing, Inc. Telephone #: 410-259-5910
 Address: 470 Dotsie Dr
Westminster, MD 21158

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
 License # and name of individual responsible for the field installation:
 Name (Print): Keith Hundertmark License# 8300

*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: Jason Taylor Telephone #: 410-977-8927
 Subdivision: Village of Three Keys Lot #: 4 Well Tag #: HO-94-0640
 Site Address: 15790 Bushy Park Rd

Submersible Pump Data	Pitless Adapter	Well Cap and Electric Conduit
Make: _____	Make: _____	Two piece watertight cap: _____
Model #: _____	Model#: _____	Screened, vented well cap: _____
Pump Capacity _____ GPM	Depth: _____ (36" min)	Cap secured to casing: _____
Well Yield: _____ GPM	NSF/WSC approved: _____	Conduit min 18" B.G.: _____
Depth of well encountered at time of pump installation: _____ (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, 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>		

Piping to house	House Connection
Type: <u>poly 1" PE 3408</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>7</u>
Depth of supply line: <u>42"</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: Keith Hill date: 9-21-19

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

Date Insp. Requested: 9/25/19 Date Insp. Approved: 9/25/19 Inspector: ST
 Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade 45"
 Two piece cap installed and attached to casing securely
 Elec. conduit extends at least 18" below grade/attached to cap properly 44"
 Safety rope not outside of well cap/casing
 Correct well tag attached properly and casing 8" above finished grade 24"
 Water supply line sleeved adequately at house connection 19"
 Adequate grout observed below pitless adapter
9/25/19 Cable line crosses well line 5' from well

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

INTERIM CERTIFICATE OF POTABILITY
Expiration Date – JULY 16, 2020

January 16, 2020

Homeowner
15190 Bushy Park Road
Woodbine, MD 21797

RE: Village of Three Keys, Lot 4
15190 Bushy Park Road
Building Permit: B19001311
Well Permit: HO-94-0640

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **9/20/2019**. Final approval of the well line connection to the dwelling was granted on **9/25/2019**. The well construction was completed on **8/7/1995**. Water samples were collected on **12/26/2019**.

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. 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-94-0640. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

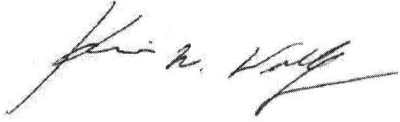
This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the *Annotated Code of Maryland, Environment Article, 9-1311*, subject to a fine of up to \$500 or imprisonment not to exceed three months.**

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

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

In closing, please refer to our "Homeowner Fact Sheet" which illustrates a better understanding for your septic system. You will also find a link to Maryland Department of the Environment's website which describes in further detail operation and maintenance of your septic system.

Approving Authority,



Kevin M. Wolf, LEHS, R.S./REHS, Supervisor
Groundwater Management Section
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
File



Fredericktowne Labs Inc.

ENVIRONMENTAL TESTING

3020 Ventrie Court • P.O. BOX 245 • Myersville, MD 21773 • 800-332-3340 • FAX 301-293-2366
 www.fredericktownelabs.com • info@fredericktownelabs.com

Certificate of Analysis

Acct. No. 10632 - 9-1

Field Record

Site visit performed on: Thursday, December 26, 2019 11:45 AM
 by: Ronald Demory State ID No. 8072RD
 Affiliation: Fredericktowne Labs, Inc.
 Property Owner: Carrigan Homes, Inc.
 Property Address: 15190 Bushy Park Road
 Woodbine, MD 21797
 Sample Source: Pressure Tank
 Treatment Devices Noted: No Treatment Devices
 Sample taken after treatment: No
 Well No.: HO-94-0640
 Field pH: 6.6
 Free Res. Cl.: <0.1 mg/l
 Temp: 16.8° C

Laboratory Report

Sample Received at laboratory: 12/26/2019 2:20 PM

Bacteriological results:

Total Colif. (/100ml)	E.coli.(/100ml)	Start		End		Method	Analyst
		Date	Time	Date	Time		
<1	<1	12/26/19	14:57	12/27/19	08:58	9223B	KB

Bacteriological analysis of this sample indicates the water is safe for human consumption and meets federal, state and local requirements. Analysis was performed according to the 20th edition of Standard Methods

Inorganic Chemical results:

Parameter	Result	Units	MCL	Date of Analysis	Method	Analyst
Nitrate-Nitrogen	8.4	mg/l	10	12/26/2019	300.0	PH
Turbidity	4.3	NTU'	<10	12/26/2019	180.1	KMW

Reported by: Tallen Mellott 12/30/19
 Name Date

Fredericktowne Labs, Inc. is a State Certified Water Quality Laboratory
 Maryland Cert. No. 116 Virginia Cert. No. 00444
 MDOT WBE Cert. No.: 91-158



Fredericktowne Labs Inc.

ENVIRONMENTAL TESTING

3020 Ventrie Court • P.O. BOX 245 • Myersville, MD 21773 • 800-332-3340 • FAX 301-293-2366
www.fredericktownelabs.com • info@fredericktownelabs.com

Certificate of Analysis

Acct. No. 10632 - 9-2

Field Record

Site visit performed on: Thursday, December 26, 2019 4:45 PM
by: Cristy Phelps State ID No. 0632CP
Affiliation: Fredericktowne Labs, Inc.
Property Owner: Carrigan Homes, Inc.
Property Address: 15190 Bushy Park Road
Woodbine, MD 21797
Sample Source: Outside Hose Bib
Well No.: HO-94-0640

Laboratory Report

Sample Received at laboratory: 12/27/2019 7:30 AM

Inorganic Chemical results:

<u>Parameter</u>	<u>Result</u> <u>Units</u>	<u>MCL</u>	<u>Date of Analysis</u>	<u>Method</u>	<u>Analyst</u>
Sand	<2 mg/l	5	12/27/2019	0.065mmFilter	KB

Reported by:

Edlin Millott 12/30/19
Name Date

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Maryland Cert. No. 116 Virginia Cert. No. 00444
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