



HOWARD COUNTY HEALTH DEPARTMENT

64007

DATE 9/14/18

105

Received From

PHONE #

410 876-5100

For

CASH

CHECK

NO.

3405

Well permit / 5037
Landing RD.

One hundred sixty

Dollars

\$

160.00

Received By

DK

C 1 48387 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) **FILL IN THIS FORM COMPLETELY PLEASE TYPE** COUNTY NUMBER 2

ST/CO USE ONLY DATE Received 10/18/18 DATE WELL COMPLETED 9/17/18 Depth of Well 300 PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-17-0341

OWNER Cain Keith WELL SITE ADDRESS 5037 Landing Rd TOWN Elkridge SUBDIVISION _____ SECTION _____ LOT _____

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	
Mica	0	45	
Loose Rock Shale	45	300	
Sandstone			
Water			100 250

GROUTING RECORD yes no
WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT BENTONITE CLAY
NO. OF BAGS 14 NO. OF POUNDS 136
GALLONS OF WATER 84
DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 45 ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
 STEEL CONCRETE
 PLASTIC OTHER
 MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 45

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

SCREEN RECORD
screen type or open hole insert appropriate code below
 STEEL BRASS OPEN HOLE
 PLASTIC OTHER
 C 2 DEPTH (nearest ft.)

NUMBER OF UNSUCCESSFUL WELLS: 0
WELL HYDROFRACTURED yes no

CIRCLE APPROPRIATE LETTER
 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. M S D 0660
 DRILLERS SIGNATURE Mame E. Jones III
 LIC. NO. D

RECEIVED
 OCT 23 2018
 HARBOR COUNTY HEALTH DEPT
 ENVIRONMENTAL HEALTH
 SLOT SIZE 2
 DIAMETER OF SCREEN (NEAREST INCH) from 56 to 60

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 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) 3
 PUMPING RATE (gal. per min.) 11.63
 METHOD USED TO MEASURE PUMPING RATE watch/bucket
 WATER LEVEL (distance from land surface) BEFORE PUMPING 48.35 ft. WHEN PUMPING 42 ft.
 TYPE OF PUMP USED (for test)
 air piston turbine
 centrifugal rotary other (describe below)
 jet 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. S
 CAPACITY: GALLONS PER MINUTE (to nearest gallon) 10
 PUMP HORSE POWER 1
 PUMP COLUMN LENGTH (nearest ft.) 280
 CASING HEIGHT (circle appropriate box and enter casing height) + above LAND SURFACE 2 (nearest foot) below

LATITUDE 39.233501
 LONGITUDE 76.762089
 (DEFAULT COORD. WGS 84)

Pursuant to §10-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info. may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or state law.

B 1 SEQUENCE NO. (MDE USE ONLY) 56787 STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type Sanford STATE PERMIT NUMBER H0-17-0341
1 2 3 6 70 fill in this form completely 79

OWNER INFORMATION
 Date Received (APA) 09/14/18
8 MM DD YY 13
 Last Name Cain Owner Keith First Name Keith
15 34
 Street or RFD 5037 Landing Rd
36 55
 Town Elkridge MD State MD Zip 21075
57 70 72 76

B 3 LOCATION OF WELL
 COUNTY Howard 8 21
 SUBDIVISION _____ 23 42
 SECTION 44 44 46 LOT 48 48 50
 NEAREST TOWN Elkridge 52 71

DRILLER INFORMATION
 Driller's Name Maurice Dixon III License No. MSD 0000
76 81
 Firm Name Corroll Water
 Address 12017 Falls Rd Cockeysville
 Signature Maurice Dixon III Date 9/14/18
57 70 72 76

B 4 SOURCES OF DRILLING WATER
 1. Well
 2. _____
 3. _____
 STREET ADDRESS 5037 Landing Rd 11 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 NORTH WEST EAST SOUTH
 DISTANCE FROM ROAD 550 FT 34 37
 ENTER FT OR MI FT 38 39
 TAX MAP: 0031 BLK: 17 PARCEL 0834

B 2 WELL INFORMATION
 APPROX. PUMPING RATE (GAL. PER MIN.) 5
1 2 8 12
 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 5000
14 20

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

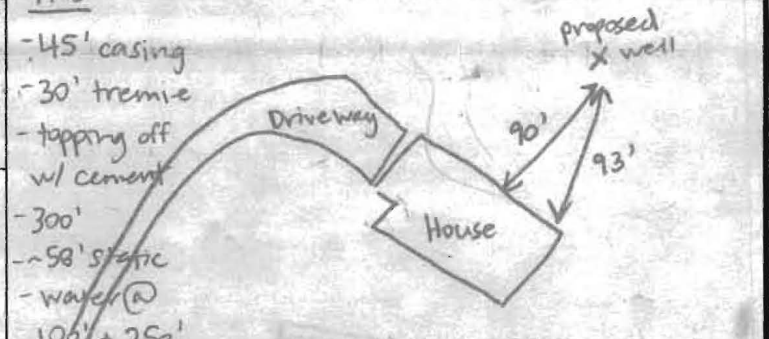
USE FOR WATER (CIRCLE APPROPRIATE BOX)
 DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 INDUSTRIAL, COMMERCIAL, DEWATERING
 PUBLIC WATER SUPPLY WELL
 TEST, OBSERVATION, MONITORING
 OPEN LOOP GEOTHERMAL
 CLOSED LOOP GEOTHERMAL

COUNTY NAME Howard COUNTY NO. 13
 STATE SIGNATURE _____ INSERT S _____
 DATE ISSUED 9/7/18 SLC/LL 9/7/19
43 MM DD YY 48 CO SIGNATURE EXP. DATE

APPROXIMATE DEPTH OF WELL 300 FEET 24 28
 APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH

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

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 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

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Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER _____ **G** _____
 PERMIT No. H0-17-0341
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS
 NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED- Existing well must be sealed.

 WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- * COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 10/2/18 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

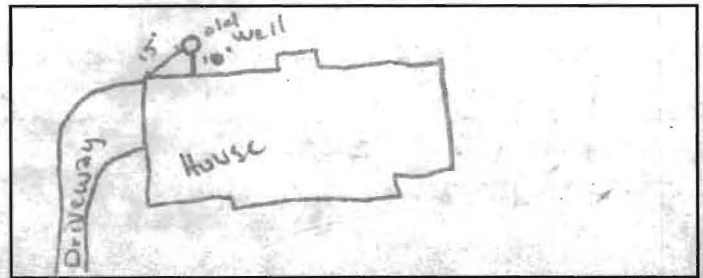
* PERMIT NUMBER OF REPLACEMENT WELL: _____

* PERSON ABANDONING WELL: Maurice Dixon III WELL DRILLER'S LICENSE NUMBER: MSD006

* OWNER'S NAME: Keith Cain

CIRCLE: MWD / MSD / MGD

SITE LOCATION MAP



* WELL LOCATION:
 COUNTY: Howard
 NEAREST TOWN: Elkridge
 TAX MAP 0031 BLOCK 17 PARCEL 03
 SUBDIVISION: _____
 SECTION: _____ LOT: _____
 STREET ADDRESS: 5037 Landing Rd

LATITUDE 3 9.2336 _ _ _

LONGITUDE 7 6.7637 _ _ _

LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Rock Cuttings	250	40
Type II cement	40	0
VOLUME OF MATERIAL USED		
	54 gal	864 lbs

* TYPE OF WELL BEING ABANDONED:
 DRILLED JETTED
 BORED HAND DUG
 OTHER (specify) _____

* USE CODE:
 DOMESTIC MUNICIPAL/PUBLIC
 IRRIGATION INDUSTRIAL
 TEST/OBSERVATION GEOTHERMAL

* TYPE OF CASING:
 STEEL PLASTIC
 CONCRETE OTHER (specify) _____

SIZE OF CASING: 4 INCHES IN DIAMETER

DEPTH OF WELL: 250 FEET DEEP

WAS ANY CASING REMOVED? YES NO
 If yes, length removed, in feet: _____

WAS CASING RIPPED OR PERFORATED? YES NO

Maurice Dixon III 10/3/18
 SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE#

MWD MSD MGS 006
 CIRCLE ONE DATE

COUNTY

OK
 1/10/1950

RECEIVED
 OCT 2 2018
 HARFORD COUNTY
 ENVIRONMENTAL HEALTH
 ENVIRONMENTAL HEALTH

HO-17-0341

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Carroll Water Systems
12047 Falls Rd
Cockeysville MD 21030
410-876-5100

RECEIVED
OCT 23 2018
HARFORD COUNTY HEALTH DEPT.
ENVIRONMENTAL HEALTH

Howard County Yield Test Report

Test Date: 9/19/2018 **Well Tag #:** HO-17-0341
Property Address: 5037 Landing Rd Elkridge, MD **Well Depth:** 300
Property Owner: Keith Cain **Static Water Level:** 35

TIME	WATER LEVEL	PSI EXISTING PUMP	PUMPING RATE	CALCULATED GPM
1100	36	48		11.21
1115	44	43		11.43
1130	44	42		11.62
1145	44	42		11.63
1200	44	42		11.63
1215	44	43		11.63
1230	44	42		11.63
1245	44	43		11.63
1300	44	42		11.63
1315	44	41		11.63
1330	44	41		11.63
1345	44	42		11.63
1400	44	42		11.63

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: Carroll Water Telephone #: 410.876.5100
 Address: 12077 FALLS RD
COCKEYSVILLE MD 21030

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

Name (Print): Greg Hayden License# AP1114

***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: Keith Cain Telephone #: 410.929.2246
 Subdivision: _____ Lot #: _____ Well Tag #: HO - 17 - 0341
 Site Address: 5037 Landing Rd
Elkridge MD 21075

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Schaefer</u>	Make: <u>Campbell 1 1/4"</u>	Two piece watertight cap: _____
Model #: <u>OSR10SL-2W230</u>	Model#: _____	Screened, vented well cap: <u>✓</u>
Pump Capacity <u>10</u> GPM	Depth: _____ (36" min)	Cap secured to casing: _____
Well Yield: <u>20</u> 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 inside of well casing

<u>Piping to house</u>	<u>House Connection</u>
Type: _____	PVC sleeve to undisturbed soil at wall penetration: _____
PSI: <u>200</u> (160 psi min)	Length of sleeve (5' minimum from foundation): _____
Depth of supply line: <u>42"</u> (36" min)	Sleeve 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: Walter De date: 11/5/18

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

Date Insp. Requested: _____ Date Insp. Approved: _____ Inspector: _____
 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 _____

**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: Carroll Water Telephone #: 410.876.5100
Address: 120 N FALLS RD
OCKEYVILLE MD 21025

(Must circle one) Licensed Plumber Licensed Well Driller **Licensed Well Pump Installer**

License # and name of individual responsible for the field installation:

Name (Print): Gregory Hayden License# AP1114

***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: Keith Cain Telephone #: 410.929.2246
Subdivision: _____ Lot #: _____ Well Tag #: HO - 17 - 0341
Site Address: 5037 Landing Rd
EKRAIDGE MD 21075

Submersible Pump Data

Make: Schaefer
Model #: CR1054-2W230
Pump Capacity 10 GPM
Well Yield: 20 GPM

Pitless Adapter

Make: Campbell 1 1/4"
Model #: B10XLF
Depth: 42" (36" min)
NSF/WSC approved: _____

Well Cap and Electric Conduit

Two piece watertight cap: _____
Screened, vented well cap: X
Cap secured to casing: X
Conduit min 18" B.G.: X
Conduit secured to well cap: X

Depth of well encountered at time of pump installation: _____ (feet)

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 inside of well casing

Piping to house

Type: 1" Poly
PSI: 200 (160 psi min)
Depth of supply line: 42" (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: _____
Length of sleeve (5' minimum from foundation): _____
Sleeve sealed properly: _____

Tied to existing line

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: 11/5/18

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

Date Insp. Requested: _____ Date Insp. Approved: _____ Inspector: _____
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 _____

REC'D BY WELL & SEPTIC
19 JAN 10 PM 4:18



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

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

November 5, 2018

Homeowner
5037 Landing Road
Elkridge, MD 21075

RE: **Replacement Well Sampling**
8522 Blounts Lane
#HO-17-0342

Dear Homeowner,

According to our records, your replacement well has been connected to the dwelling. We request that you contact the Community Hygiene Program at **(410) 313-1773** to schedule initial water sampling for the above referenced replacement well, as required by the Maryland Well Construction Regulation (*COMAR 26.04.04*). This sampling includes testing for bacteria, nitrates, turbidity, and sand. There is currently **no charge** for the sampling and it is to your benefit to have it tested.

Sampling of the new well should be collected from the primary indoor drinking tap, but if suitable scheduling is not possible, the sample may be taken from an outside tap to complete your sampling obligation. However, the potential for unsuccessful sample results increases when samples are collected from taps exposed to the outside environment.

The existing well on the property must be abandoned and sealed by a licensed well driller as per *COMAR 26.04.04.34*. A well not in use can contribute to pollution of groundwater and pose a risk to people drinking water in the area. Documentation should be submitted by the driller the Health Department.

Feel free to contact me with any questions.

Sincerely,

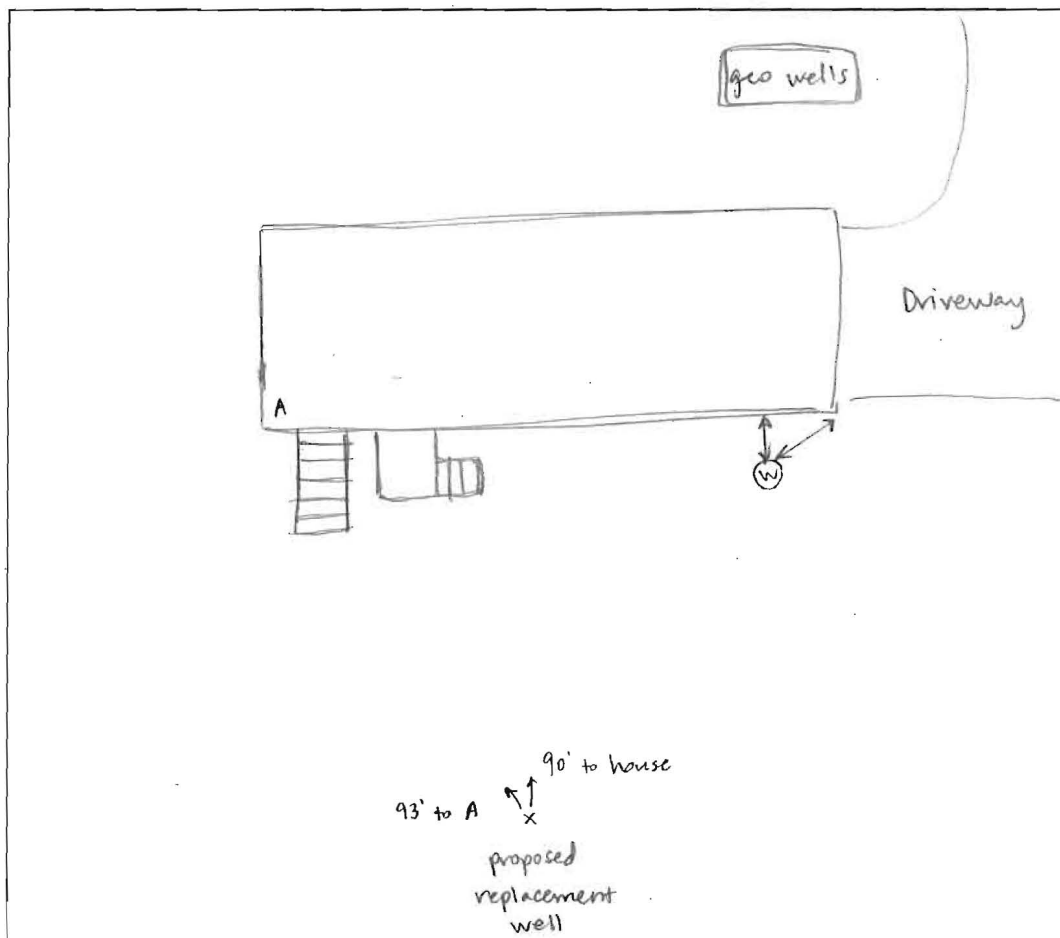
Sarah Collins, L.E.H.S.
Howard County Health Department
SCollins@howardcountymd.gov
410-313-6287

Cc: *Community Hygiene Program*
File

SITE INSPECTION SHEET

OWNER: _____ PHONE #: _____
ADDRESS: 5037 Landing Rd. CONTRACTOR: Carroll Water
WELL TAG #: 10-17-0341
SUBDIVISION: _____ LOT: _____ COUNTY #: _____
PROPOSAL: Drill a new well - existing well is dry

LOCATION DIAGRAM



COMMENTS: House is connected to public sewer. Proposed replacement well is
> 100' from neighbor's septic @ 5063 Landing Rd.

DATE: 9/7/18 INSPECTOR: Sarah Collins

Collins, Sarah

From: Wolf, Kevin
Sent: Friday, September 07, 2018 2:18 PM
To: Collins, Sarah
Subject: FW: 5037 Landing Road
Attachments: RE: Utilities access question - 5003 Landing Road

From: Knight, Zack
Sent: Friday, September 07, 2018 9:27 AM
To: Wolf, Kevin
Subject: RE: 5037 Landing Road

Hi Kevin,

This address is in the same boat as #5003 for water service. See attached email from March where I explained the situation to Sarah from your office. My capital project (W8305) is still on schedule for 2019 construction, so the owner should be able to connect by late 2019.

Thanks - Zack

Zack Knight
410.313.6125 (direct)

From: Wolf, Kevin
Sent: Thursday, September 06, 2018 4:39 PM
To: Knight, Zack <zknight@howardcountymd.gov>
Subject: 5037 Landing Road

Hey Zack,

We have an owner who is currently on well water and is out of water. They are looking to drill a new well. I see that the house has been connected to public sewer. Can you tell me if public water is available?

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045
(o) 410-313-2645
(f) 410-313-2648

