

B 1 SEQUENCE NO. (MDE USE ONLY) **STATE OF MARYLAND** STATE PERMIT NUMBER
41875 **APPLICATION FOR PERMIT TO DRILL WELL** **HO - 15 - 0379**
 559807 please type **fill in this form completely** 79

DATE RECEIVED (APA) 12/21/16
OWNER INFORMATION
 8 MM DD YY 13
 15 Last Name Owner First Name 34
 36 Street or RFD 55
 57 Town 70 State 72 Zip 76
 Lalime Erin + Michael
 11451 Harding Road
 Laurel MD 20723

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

DRILLER INFORMATION
 Driller's Name 76 License No. 81
 Firm Name
 Address
 Signature Date
 C. John Hess MWD 553
 Allied Environmental SCS
 PO Box 129 Annapolis Junction MD 20720
 10/21/16

B 4 SOURCES OF DRILLING WATER
 11 STREET ADDRESS 30
 1. Public (RA)
 2. 12/21/17 - 70' casing
 3. grant 17/18 bags
 No H₂O
 will pull casing
 driller water
 well sealed & abandoned.
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 34 115' 37
 DISTANCE FROM ROAD
 ENTER FT OR MI 38 39
 TAX MAP: 46 BLK: PARCEL 72

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

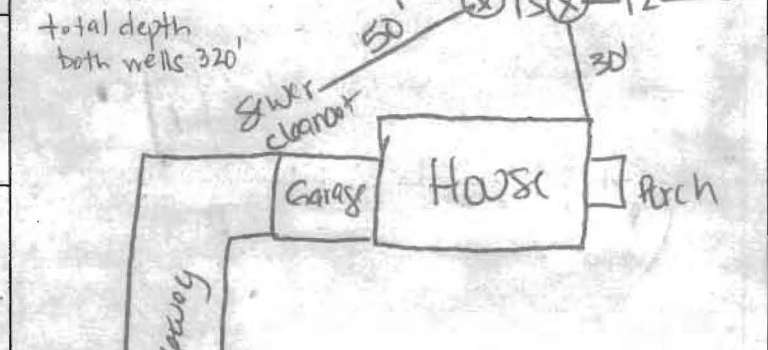
USE FOR WATER (CIRCLE APPROPRIATE BOX)
 D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
 F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 I INDUSTRIAL, COMMERCIAL, DEWATERING
 P PUBLIC WATER SUPPLY WELL
 T TEST, OBSERVATION, MONITORING
 O OPEN LOOP GEOTHERMAL
 C CLOSED LOOP GEOTHERMAL
 2 Loops

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
 Howard 13
 COUNTY NAME COUNTY NO.
 STATE SIGNATURE INSERT S → 41
 DATE ISSUED 12/07/16
 43 MM DD YY 48 CO SIGNATURE EXP. DATE
 DON: 12/21/17 DOG: 12/21/17 DOY: N/A

APPROXIMATE DEPTH OF WELL 320 FEET
 APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

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
 12/21/17
 total depth both wells 320'

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)
 N THIS WELL WILL NOT REPLACE AN EXISTING WELL
 Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
 39 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) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER G
 PERMIT No. HO - 15 - 0379
 70 71 72 73 74 75 76 77 78 79

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.

SPECIAL CONDITIONS
 NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED. All wells must be grouted from bottom to top.

C1 36198

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 01-31-17

DATE WELL COMPLETED 12-21-16

Depth of Well 320 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-15-0319

OWNER: Lalime, Erin + Michael; WELL SITE ADDRESS: 11451 Harding Rd; TOWN: Laurel MD

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Top Soil, Brown Clay, and Gray Rock.

GROUTING RECORD, CASING RECORD, SCREEN RECORD sections with checkboxes for materials like CEMENT, BENTONITE CLAY, STEEL, BRASS, etc.

PUMPING TEST section with fields for HOURS PUMPED, PUMPING RATE, WATER LEVEL, TYPE OF PUMP USED.

PUMP INSTALLED section with fields for DRILLER INSTALLED PUMP, TYPE OF PUMP INSTALLED, CAPACITY, PUMP HORSE POWER.

Administrative section including NUMBER OF UNSUCCESSFUL WELLS, WELL HYDROFRACTURED, DRILLERS LIC. NO., and SIGNATURES.

DEPTH (nearest ft.) table and MDE USE ONLY section with checkboxes for GRAVEL PACK, TELESCOPE CASING, LOG INDICATOR.

LATITUDE 39.13260, LONGITUDE 76.90918, (DEFAULT COORD. WGS 84) and disclaimer text.

RECEIVED

WATER WELL ABANDONMENT-SEALING REPORT FORM

FEB 13 2017

HOWARD COUNTY HEALTH DEPT.
COMMUNITY HYGIENE PROGRAM

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: 01/24/17 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

hand dug

* PERMIT NUMBER OF REPLACEMENT WELL: _____

* PERSON ABANDONING WELL: C John Hess

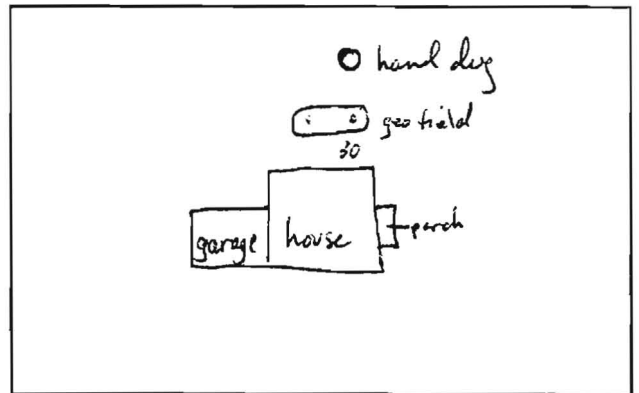
WELL DRILLER'S LICENSE NUMBER: 553

* OWNER'S NAME: Erin Nicole Lalimi

CIRCLE: MWD / MSD / MGD

* WELL LOCATION: Howard
COUNTY: _____
NEAREST TOWN: Laurel
TAX MAP 0046 BLOCK 0015 PARCEL 0072
SUBDIVISION: Takiar Property
SECTION: _____ LOT: 1
STREET ADDRESS: 11451 Harding Rd

SITE LOCATION MAP



LATITUDE 39.13250

LONGITUDE 76.90916

hand dug well left standing with consent of the County

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

LOG OF SEALING MATERIAL

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

MATERIAL	FEET	
	FROM	TO
#57 stone	30	5
Portland Cement	5	3
#57 Stone	3	3 above grade
portland Cement	cap	
VOLUME OF MATERIAL USED		
19 tons		

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

SIZE OF CASING: 36 INCHES IN DIAMETER

DEPTH OF WELL: 30 FEET DEEP

WAS ANY CASING REMOVED? YES NO
 If yes, length removed, in feet: with permission of County

WAS CASING RIPPED OR PERFORATED? YES NO

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE#

553 MWD / MSD / MGS

CIRCLE ONE

DATE

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: 12/20/16 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

HO-73-4012

* PERMIT NUMBER OF REPLACEMENT WELL: _____

- NONE -

* PERSON ABANDONING WELL: C John Hess

WELL DRILLER'S LICENSE NUMBER: 553

CIRCLE: MWD / MSD / MGD

* OWNER'S NAME: Erin Nicole Laline

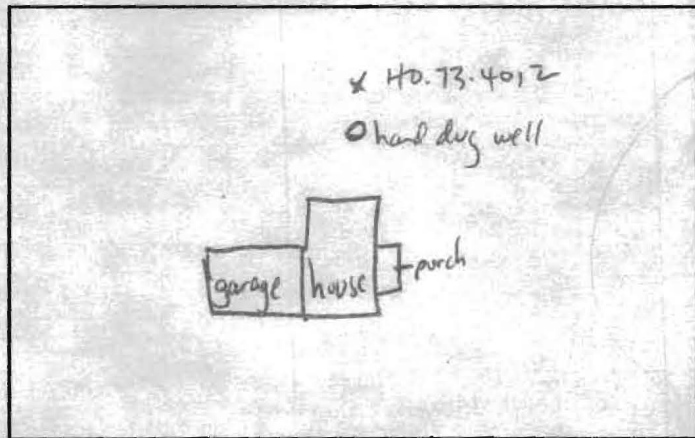
* WELL LOCATION:

COUNTY: Howard
NEAREST TOWN: Lanart
TAX MAP 0016 BLOCK 0015 PARCEL 0072
SUBDIVISION: Takier Property
SECTION: _____ LOT: _____
STREET ADDRESS: 11451 Handay Rd

LATITUDE 3 9.13250 -

LONGITUDE 7 6.90916 -

SITE LOCATION MAP



* TYPE OF WELL BEING ABANDONED:

- DRILLED
- BORED
- OTHER (specify) _____
- JETTED
- HAND DUG

* USE CODE:

- DOMESTIC
- TEST/OBSERVATION
- MUNICIPAL/PUBLIC
- INDUSTRIAL
- GEOTHERMAL

* TYPE OF CASING:

- STEEL
- CONCRETE
- PLASTIC
- OTHER (specify) _____

SIZE OF CASING: 6 INCHES IN DIAMETER

DEPTH OF WELL: 140 FEET DEEP

WAS ANY CASING REMOVED? YES NO

If yes, length removed, in feet: _____

WAS CASING RIPPED OR PERFORATED? YES NO

LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
bentonite clay	140	3
"quickgrout"		
clean fill	3	0

VOLUME OF MATERIAL USED

11 bags Quick Grout 550/131

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE# _____

553 MWD / MSD / MGS

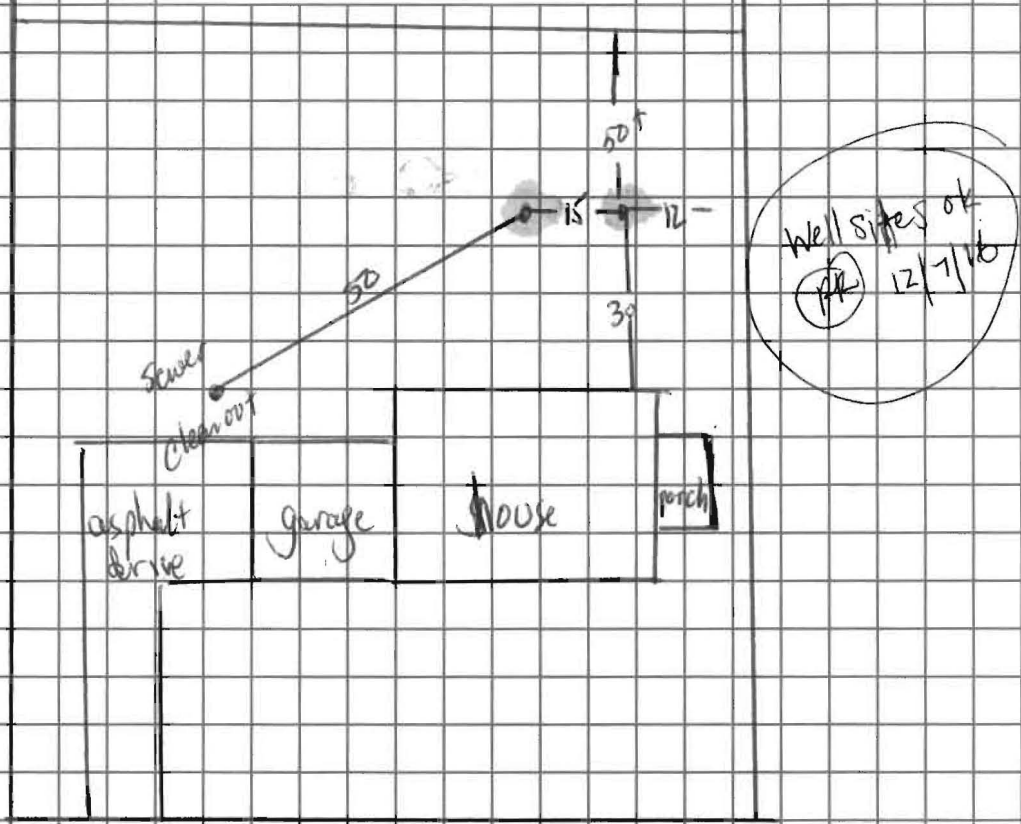
CIRCLE ONE

DATE

COUNTY



SITE PLAN



11451 Harding Rd
 Laurel Md 20723

Sediment Control Protocol: silt fence

Distance From House: 30
 From Septic: n/a
 From Sewer: 50
 From Property Line: 12
 From Street: 50+

Trees Nearby: none
 Utility Issues: to be marked
 Mats Needed: to leave asphalt
 Access For H/U: to be done by others
 Neighboring Tags: municipal

Comments: downhill slope in drill area

Person Completing Form: Guviardi

HOWARD COUNTY GROUTING PROCEDURE

Boreholes will be grouted from the bottom to the top via a tremie pipe and positive displacement pump. Bentonite grout, known as Quik-Grout will be used according to the manufacturer's specifications to achieve a consistency of at least 20% solids (24 gallons potable water/50 lb. sack of grout) and a permeability no more than $2.5 \text{ E}(-08) \text{ cm/sec}$. Grouting will be completed immediately after installing the geothermal loop and no later than twenty-four (24) hours after installing the geothermal loop. Open boreholes/annular space will be protected as necessary to prevent the entry of surface water or pollutants.

GRADE

EACH BORE HOLE (TYP.)

MINIMUM
HORIZONTAL BURY
DEPTH 4 FT

FOR CONT.
SEE PLANS

HORIZONTAL
PIPING

GROUT ENTIRE ANNULAR
SPACE AND VERTICAL
U-TUBE WITH (BENTANITE)
GROUT.

BORE DEPTH

TAPE

5' TO 10 FOOT SECTION OF
REBAR TO GUIDE TUBE
INTO BORE DURING
INSTALLATION

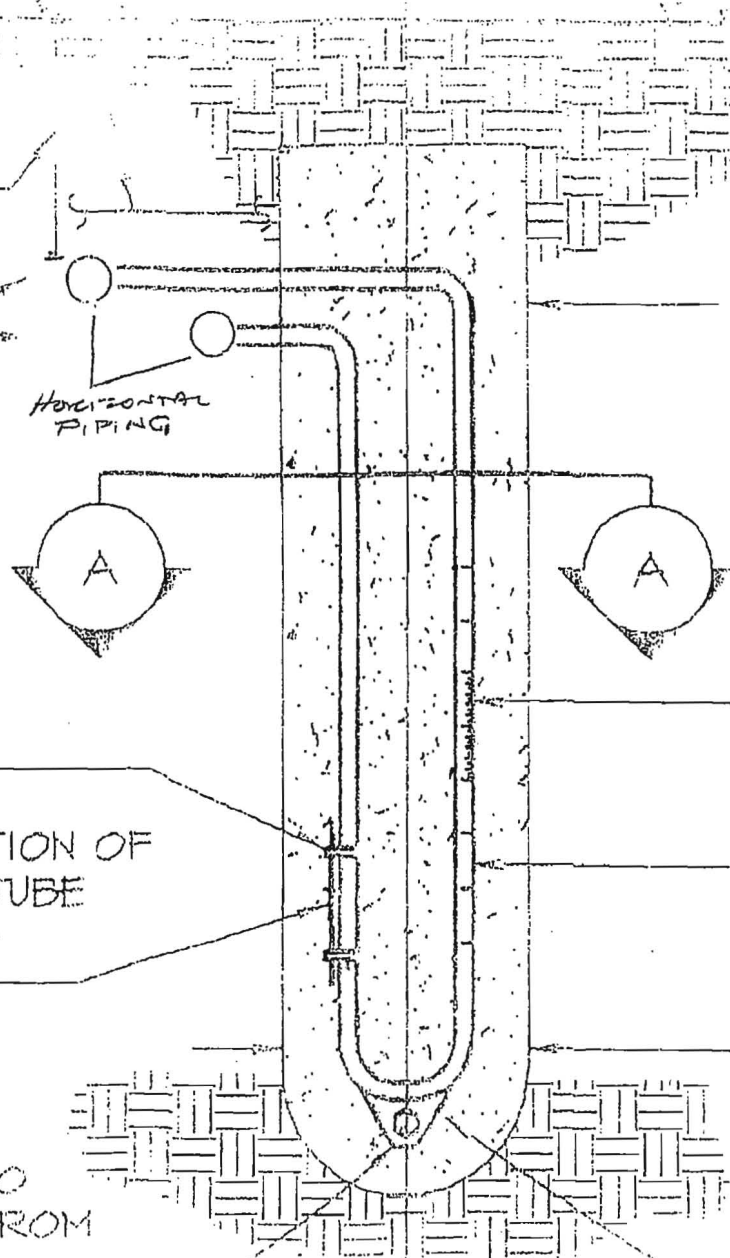
DEPTH MARKINGS IN FEET TO
INDICATE DEPTH OF INSERTION

TYPICAL VERTICAL U TUBE
1.5 INCHES

TYPICAL BORE DIAMETER
6.0 INCHES

ANCHOR FITTING TO
PREVENT U-TUBE FROM
SURFACING AFTER
INSTALLATION

TYPICAL SOCKET U-BEND





Bureau of Environmental Health

8930 Stanford Blvd, Columbia, MD 21045
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

November 2, 2016

Michael & Erin Lalime
11451 Harding Rd.
Laurel, MD. 20723

(443) 794-8307

RE: Geothermal well permit on hold – question regarding well onsite HO-73-4012

Dear Mr. and Mrs. Lalime,

I am in receipt of a geothermal well permit from Allied Environmental Services for your property at 11451 Harding Road in Laurel, MD and it is currently on hold. My initial review of the permit included a site visit. During that site visit I found a well on your property with a well tag number HO-73-4012. Howard County records have this property connected to public water and sewer since August 2010. I'd like to verify this information with you directly before issuing the geothermal well permit. Please contact me at 410-313-1781 or RRappaport@howardcountymd.gov to discuss the current use of this well.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Rappaport', is written over a white rectangular area.

Ryan Rappaport, LEHS
Groundwater Protection Program

Allied Well Drilling

P.O. Box # 129
Annapolis Junction, MD 20701
Office #: 301-776-8370
Fax #: 301-776-8374

Contract

Cell #: _____ Primary Phone #: _____
Map Coordinates: _____ Work #: _____ Fax #: _____
This Agreement, made this **5th** Day of **DEC-16** between **Michael Lalime** (hereafter called the "Owner")
and Allied Well Drilling (hereinafter called the "Driller"). The Driller agrees to do the following work on the property
11451 Harding Road Laurel, MD under the terms, conditions
and consideration, and pay for the same, all as herein set forth:

1. To perform service listed below and furnish all equipment and labor to complete job.
2. All electrical wiring, connections, installations from the power panel and any and all non-drilling work to be performed by owner at the expense of the owner.
3. The owner agrees to pay the full contract price plus 33 1/3% for attorney fees and court costs if the account should have to be collected by an attorney.
4. Interest at the rate of 18% percent will be charged on all money not paid when due.
5. The owner agrees that title in and to any and all materials furnished by the driller, whether in the ground or attached to the premises, shall remain the property of the driller, and the right to remove the pump from the well and materials from the premises, and it is agreed that the driller will not be deemed guilty of trespass in any manner whatsoever if he shall return to remove said materials due to default of payment. The owner assumes full responsibilities for property damage and/or liability which may arise from removal of such material. This clause binding until full payment is received.
6. All materials and/or equipment furnished by the driller are guaranteed for a period of (1 Year's) if maintained according to instructions.
7. The contractor will not be responsible for damaged oil lines, septic lines, buried structures, foundations, lawns, trees, shrubbery, flowers, driveways, walkways or unmarked utility lines. All cutting, debris and fluids will remain on the owners premises.
8. Service/repairs and/or installations of water systems are as follows:

- #1 Abandon and Seal Hand Dug Well
- #2 Abandon and Seal 6 Inch Well

\$ 3,500.00

9. The undersigned acknowledges the complete understanding of this agreement and authorizes the work and/or installations herein above set forth, and agrees to make payments as follows: balance due at time of install
10. **For Value Received, and in order to induce the Driller to enter this Contract, Owner by signing in any capacity below ALSO personally guarantees. No payment is to be held pending well certification.**

Contract Accepted

11. This contract will expire after 30 days from the issued date _____
(Date)

Signed: _____
Michael Lalime

FILE INQUIRY NOTES

Allied Driller = Pete

DATE	RESULTS OF REVIEW FOR FILE
12/20/16	- Site visit, driller on site and work has begun on 1 st of the 2 geo bores. He's 70' down and has placed 70' of casing. No abandonment of the drilled water well or the hand dug well has been completed yet. (RR)
12/21/16	- Site visit, driller onsite, both bores complete, loop dropped and grouted. Driller pulling out tremie upon arrival, the 1 st bore took 17 bags of grout the 2 nd bore took 18 bags. The drilled water well # H0-T3-4012 was also grouted (sealed & abandoned). Driller said water well was 200' the pump was pulled out and was sitting at 90' and it took 24 bags of grout to seal. Abandonment report to be sent to HD. All casing was pulled out of both geo bores. (RR)
1/6/17	- Site visit, the sealed top of the hand dug well has been removed and the well extends approximately 30' deep. I took some photos for the file, sent email to driller to move forward with abandonment. (RR)
1/29/17	- site visit driller onsite to meet Stone Shooters for the abandonment of the hand dug well. Filled well w/ approximately 15 tons of stone then added the 2ft plug of concrete and topped it off with more stone. Stone 30' down to water level up to 5' below grade - then the concrete and then topped off w/ more stone and the well was recovered. (RR)

11451 Harding Rd.

1/24/17 - Stone Shooter
filling hand dug well w/ stone.

approx. 15 tons.



Hand Dug Well before Abandonment. 11451 Harding Rd. 1/6/17







HOWARD COUNTY HEALTH DEPARTMENT

59807

DATE 10/24/16

WS

Received From

Allied Env. Services

PHONE # 301 776-8370

For Well permit / 11451 Harding way

CASH CHECK NO. 12816

One hundred sixty Dollars

\$ 160 00

Received By [Signature]