

C1 11022

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 WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE Received

MM 1-9-12 YY 12

22 400 26 (TO NEAREST FOOT)

3/2/2012 O.K. BB

170-95-2197

OWNER: K2 Properties last name first name WELL SITE ADDRESS: 3295 Corporate Ct TOWN: Ellicott City SUBDIVISION: Pine Orchard Hill SECTION: LOT: #3

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Includes handwritten entries: top soil - 0-3, Soft Ben Rock - 3-35, Hard Gray Rock - 35-400.

NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED yes Y no N

- CIRCLE APPROPRIATE LETTER A 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 W D 553 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. M W D 559

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

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 180 NO. OF POUNDS 900

GALLONS OF WATER 7500 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 400 ft.

CASING RECORD

ST STEEL CO CONCRETE PL PLASTIC OT OTHER

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch) Total depth of main casing (nearest foot)

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

SCREEN RECORD

ST STEEL BR BRASS PL PLASTIC HO OPEN HOLE OT OTHER

DEPTH (nearest ft.)

Table with columns: E A C H S R E E N, rows for casing depth intervals (1-21, 23-36, 38-51) 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

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 8 9

PUMPING RATE (gal. per min.) 11 15

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 20 ft.

WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other J jet 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) LAND SURFACE (nearest foot)

LATITUDE 39.281868 LONGITUDE 76.861268 (DEFAULT COORD. WGS 84)

NOTES: Geo field Building front

B 1	13045	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type	STATE PERMIT NUMBER HO-95-2197 <small>70 fill in this form completely 79</small>
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OWNER INFORMATION

Date Received (APA) 10-26-11
8 MM DD YY 13

K2 PROPERTIES, LLC
15 Last Name Owner First Name 34

10200 LITTLE BRICK HOUSE CT.
36 Street or RFD 55

ELlicott City MD 21042
57 Town 70 State 72 Zip 76

LOCATION OF WELL

Howard
8 COUNTY 21

PINE ORCHARD PARK
23 SUBDIVISION 42

SECTION 44 46 LOT F3
48 50

ELlicott City
52 NEAREST TOWN 71

DRILLER INFORMATION

CARROLL JOHN HESS MWD 553
Driller's Name 76 License No. 81

ALLIED ENVIRONMENTAL SERVICES
Firm Name

PO BOX 129 ANNAPOLIS JUNCTION MD 20701
Address

John Hess 10-18-11
Signature Date

SOURCES OF DRILLING WATER

1. PUBLIC WATER 3295 CORPORATE CT.
11 STREET ADDRESS 30

2. _____

3. _____

ON WHICH SIDE OF ROAD
(CIRCLE APPROPRIATE BOX)

34 150 37
DISTANCE FROM ROAD
ENTER FT OR MI 38 39

TAX MAP: 0024 BLK: 0001 PARCEL 0010

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 8 12
1 2

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20
1 2

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 10 CLOSED LOOP

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) Public
COUNTY NAME COUNTY NO.

STATE SIGNATURE _____ INSERT S →

DATE ISSUED 11/9/2011 Brian Baker 11/9/2012
43 MM DD YY 48 CO SIGNATURE EXP/DATE

APPROXIMATE DEPTH OF WELL 400 FEET
24 28

APPROXIMATE DIAMETER OF WELL 6 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 DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

THIS WELL WILL NOT REPLACE AN EXISTING WELL

THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

39 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS

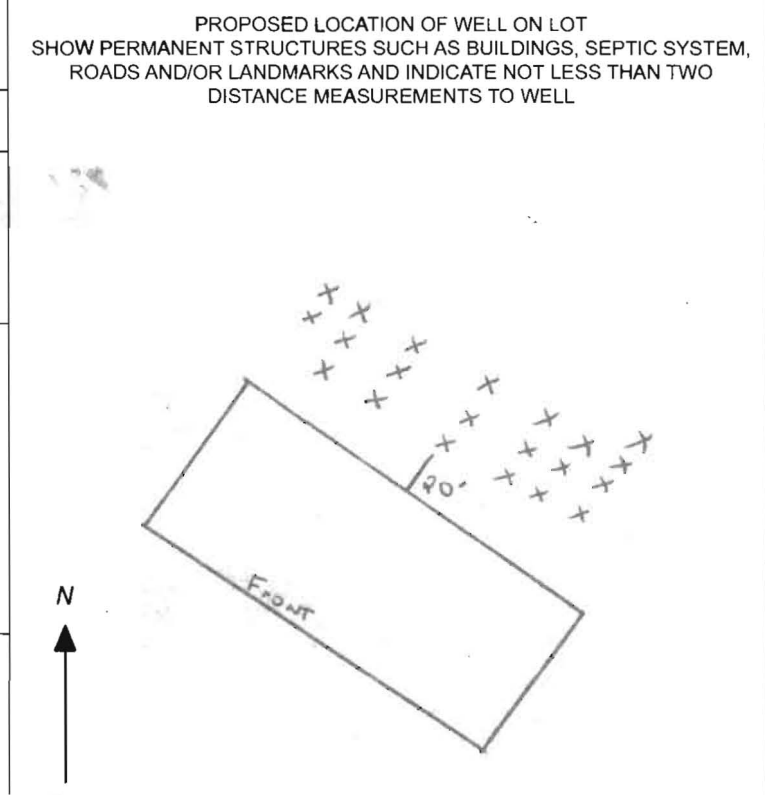
THIS WELL WILL DEEPEM AN EXISTING WELL

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)

APPROX. PERMIT NUMBER _____ G _____

PERMIT No. HO-95-2197
70 71 72 73 74 75 76 77 78 79



SPECIAL CONDITIONS

NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

Day 02-287749

EMERGENCY/TEMP NO. IF ANY

B 1	1699	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 535963 please type	STATE PERMIT NUMBER HO-95-2197 fill in this form completely
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Date Received (APA) 08/29/11

OWNER INFORMATION

8 MM DD YY 13
K2 Properties LLC
15 Last Name Owner First Name 34
10200 Little Brick House Ct
36 Street or RFD 55
Elliott City MD 21042
57 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

8 COUNTY 21
Howard
Pine Orchard Park
23 SUBDIVISION 42
SECTION 44 46 LOT F3 48 50
Elliott City
52 NEAREST TOWN 71

DRILLER INFORMATION

Driller's Name Marshall Arnette M S D 106
76 License No. 81
Firm Name Allied Environmental Svcs
Address PO Box 129, Annap Junction MD
Signature [Signature] Date 8/17/11

B 4

SOURCES OF DRILLING WATER

1. Public
2. Public
3.

3295 Corporate Ct
11 STREET ADDRESS 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH N
WEST W EAST E
SOUTH S
34 150 37
DISTANCE FROM ROAD FT
ENTER FT OR MI 38 39
TAX MAP 0024 BLK: 0001 PARCEL 0010

B 2

WELL INFORMATION

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 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 INDUSTRIAL, COMMERCIAL, DEWATERING
 PUBLIC WATER SUPPLY WELL
 TEST, OBSERVATION, MONITORING
 OPEN LOOP GEOTHERMAL
 CLOSED LOOP GEOTHERMAL 10 loops

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) Public
COUNTY NAME COUNTY NO.
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DATE ISSUED 9/13/2011 Brian Baker 9/13/2012
43 MM DD YY 48 CO SIGNATURE EXP. DATE 41

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APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH



METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
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37 CABLE REVERSE-ROTary DRIVE-POINT
other

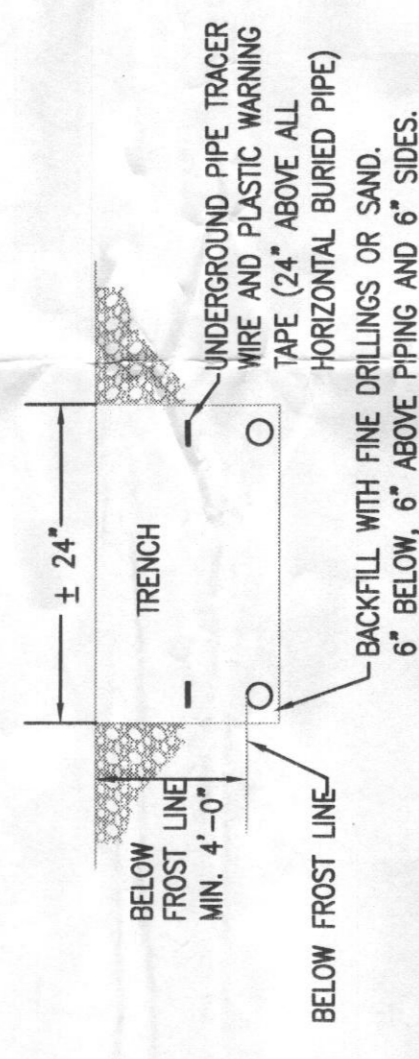
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Not to be filled in by driller (MDE OR COUNTY USE ONLY)

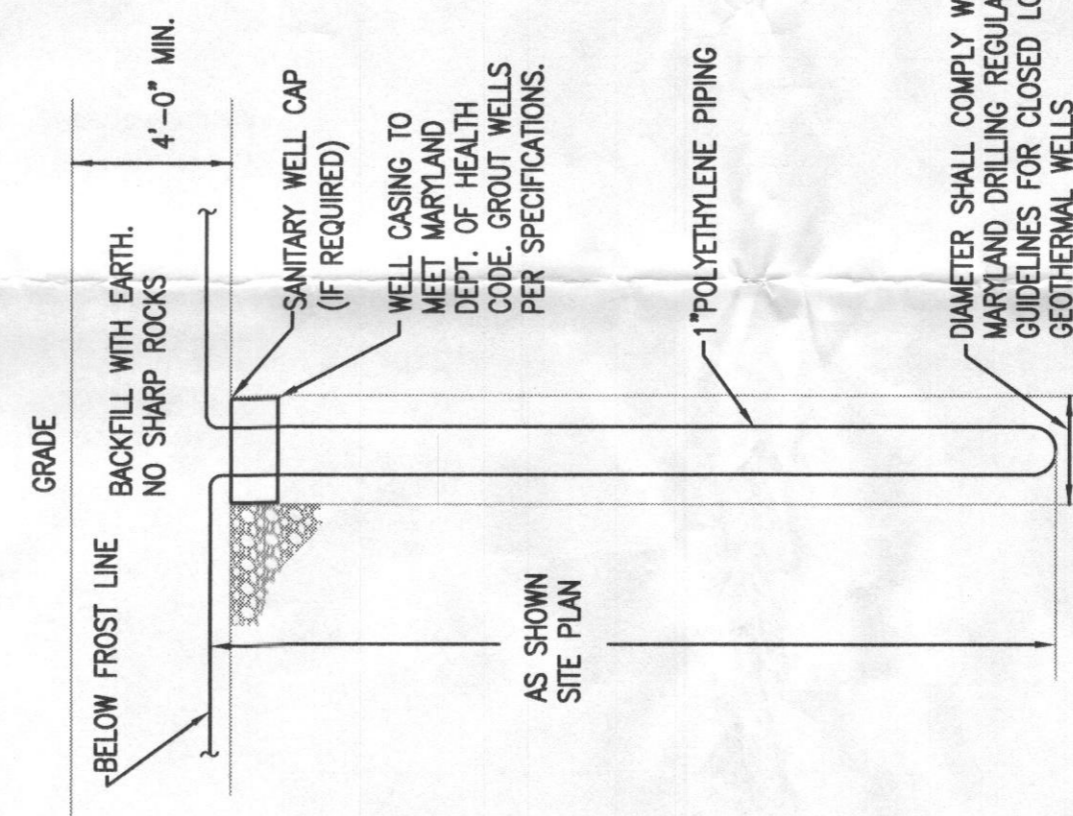
APPROX. PERMIT NUMBER - - - - - G - - - - -
PERMIT No. HO-95-2197
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS
NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED
Carry out Entire Borehole



GEOTHERMAL TRENCH DETAIL

NOT TO SCALE



GEOTHERMAL WELL DETAIL

NOT TO SCALE

