

C1 2916

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

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER: Viking Custom Homes, STREET OR RFD: 3607 Chatham Rd., TOWN: Ellwood City, SUBDIVISION: Enclave at Dunloggin, SECTION: , LOT: 7

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, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Orange clay, Boulder's w/clay, Soft + Gray d white Clay, Hard Gray.

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 1100. GALLONS OF WATER 550. DEPTH OF GROUT SEAL (to nearest foot) from 2 ft. to 46 ft.

CASING RECORD

MAIN CASING TYPE: 60 61 63 64 66 70. 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

screen type or open hole (insert appropriate code below) ST BR HO PL OT. STEEL BRASS OPEN HOLE PLASTIC OTHER.

C 2 DEPTH (nearest ft.)

Table with columns: E, A, C, H, S, R, E, N. Rows for depth intervals and slot size. Includes handwritten entries for diameters and depths.

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

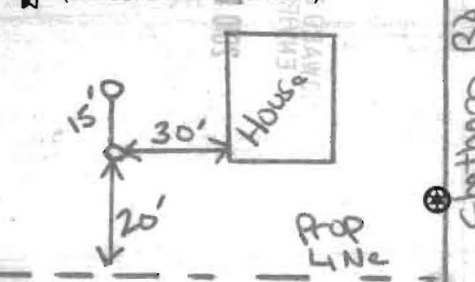
PUMPING TEST

HOURS PUMPED (nearest hour) 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 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) + above - below LAND SURFACE (nearest foot) 49 50 51.

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)



B 1	3110	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL	STATE PERMIT NUMBER <u>HO-95-1857</u> <small>70 fill in this form completely 79</small>
1 2 3 6			532482 please type	

OWNER INFORMATION

Date Received (APA) _____

8 MM DD YY 13

Viking Custom Homes

15 Last Name Owner First Name 34

815 Windriver Drive

36 Street or RFD 55

Sykesville MD 21784

57 Town 70 State 72 Zip 76

LOCATION OF WELL

B 3

Howard

8 COUNTY 21

Enclave's at Dunloggin

23 SUBDIVISION 42

SECTION 214 LOT 4

44 46 48 50

Ellicott City

52 NEAREST TOWN 71

MILES FROM TOWN (enter 0 if in town) 0 M I

73 76 77 78

DRILLER INFORMATION

Michael Barlow MWD 355

Driller's Name 76 License No. 81

Barlow Well Drilling

Firm Name

522 Underwood Lane 21014

Address

[Signature] 12-10-09

Signature Date

B 4

1 2

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

3708 Chatham Rd

11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

150

34 37

DISTANCE FROM ROAD FT

ENTER FT OR MI 38 39

TAX MAP: 24 BLK: 10 PARCEL 413

B 2

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 0

8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 0

14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)

22 I INDUSTRIAL, COMMERCIAL, DEWATERING

P PUBLIC WATER SUPPLY WELL

T TEST, OBSERVATION, MONITORING

G GEO-THERMAL 2 Bore's x 450'

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) Public

COUNTY NAME COUNTY NO.

STATE SIGNATURE _____ INSERT S →

DATE ISSUED 1/21/2010 Brian Baker 1/21/2011 41

43 MM DD YY 48 CO SIGNATURE EXP. DATE

NORTH GRID 523 000 EAST GRID 847 000

50 55 57 63

APPROXIMATE DEPTH OF WELL 450 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)

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-95-1857

70 71 72 73 74 75 76 77 78 79

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

- 1.
- 2.
- 3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 8407

N 5203

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

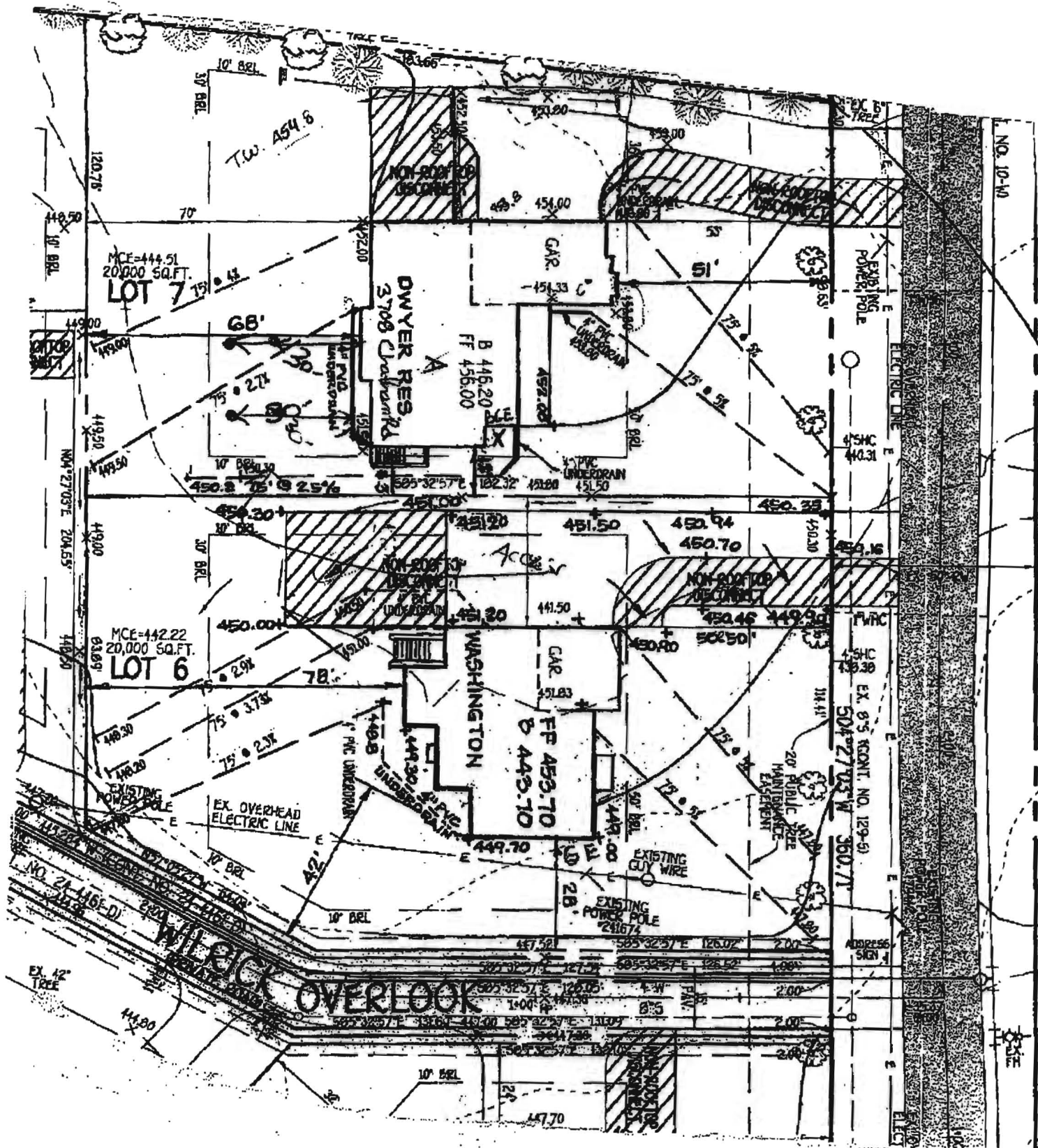
Chatham Rd

Old Frederick Rd

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

Ground Bore holes From Bottom Up





Providing Quality Systems for Over 20 Years
Commercial & Residential Water Well Drilling
Test Borings & Consulting • Geothermal Drilling & Systems
NGWA & IGSHPA Certified

December 10, 2009

Howard County Health Department
7178 Columbia Gateway Drive
Columbia, MD 21046
Fax: 410-313-2648

Re: 3708 Chatham Road, Ellicott City

Dear Department of Environment:

Please note unless otherwise specified all geothermal bores installed by our company will be installed as follows:

Grout: Bentonite Grout 20% solids minimum
Manufacture(s): Baroid or Wyo-Ben
Will be grouted from the bottom to the top with grout material

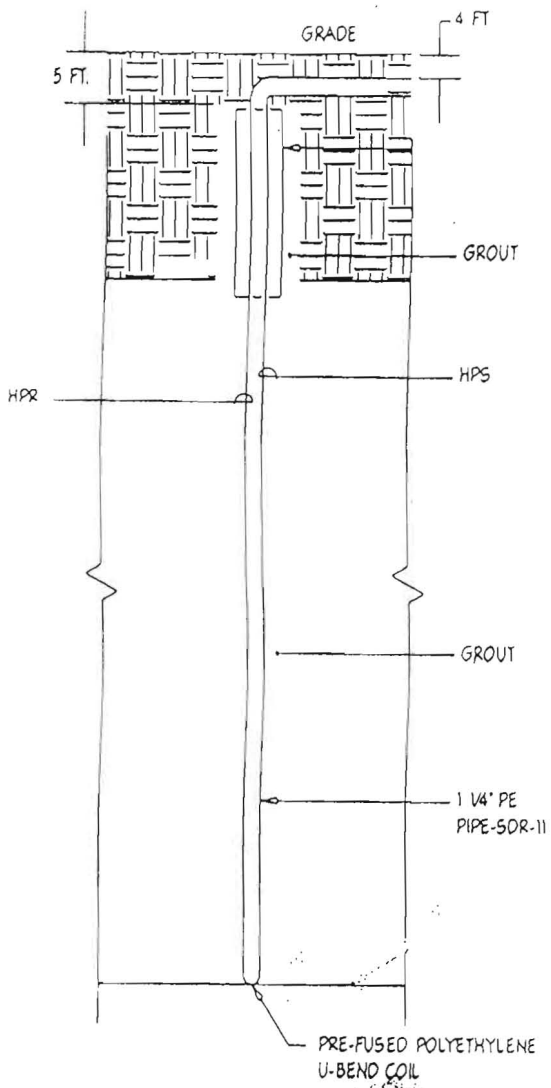
Piping: Polyethylene SDR 11 160 PSI as recommended per IGSHPA
Manufacture: EnDot or Charter Plastics or equal, Size 1" or 1 1/4"
IGSHPA Certification Number 12687

Also attached is a cross section diagram of the bore hole.

We would appreciate your help in getting this permit released as soon as possible so that we can expedite this project. If you have any questions, please do not hesitate to contact me.

Sincerely,

Michael Barlow



4 TYPICAL BORE HOLE DETAIL
 M1.00 NOT TO SCALE