

C1 04815

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED AFTER WELL IS COMPLETED.

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER Hucht, Dennis E. STREET OR RFD 3342 West Brantley Rd. TOWN Glenwood MD

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: Brn Dirt + Fill, Hard Brn Clay + Red L, Broken Rock - Brn + Quartz + lots of water, Gray Rock.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y/N), TYPE OF GROUTING MATERIAL (Cement, Bentonite Clay), NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL.

CASING RECORD

MAIN CASING TYPE, Nominal diameter top (main) casing, Total depth of main casing.

OTHER CASING (if used)

Table for other casing with columns: diameter, depth (from, to).

SCREEN RECORD

screen type or open hole (S, B, H), insert appropriate code below.

DEPTH (nearest ft.)

Table for depth measurements with columns: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80.

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

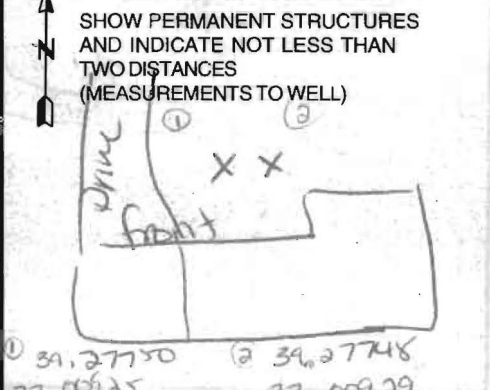
PUMPING TEST

HOURS PUMPED, PUMPING RATE, METHOD USED TO MEASURE PUMPING RATE, WATER LEVEL, TYPE OF PUMP USED.

PUMP INSTALLED

DRILLER INSTALLED PUMP, TYPE OF PUMP INSTALLED PLACE, CAPACITY: GALLONS PER MINUTE, PUMP HORSE POWER, PUMP COLUMN LENGTH, CASING HEIGHT.

LOCATION OF WELL ON LOT



NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED (Y/N)

CIRCLE APPROPRIATE LETTER A, E, P

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION"

DRILLERS LIC. NO. MW D 553

DRILLERS SIGNATURE

LIC. NO. D 144

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

04-337514

EMERGENCY/TEMP NO. IF ANY

B 1 **25674**

SEQUENCE NO. (MDE USE ONLY)

1 2 3 6

STATE OF MARYLAND

APPLICATION FOR PERMIT TO DRILL WELL

please type

STATE PERMIT NUMBER

HO-14-0101

70 fill in this form completely 79

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

Hucht Dennis F

15 Last Name Owner First Name 34

3342 Brantly Road

36 Street or RFD 55

Glenwood MD 21738

57 Town 70 State 72 Zip 76

B 3 LOCATION OF WELL

Howard

8 COUNTY 21

23 SUBDIVISION 42

SECTION 44 46 LOT 9 48 50

Glenwood

52 NEAREST TOWN 71

DRILLER INFORMATION

C John Hess M W D 553

Driller's Name 76 License No. 81

Allied Environmental Services

Firm Name

PO Box 29 Annapolis Junction MD 20701

Address

C John Hess **09/22/14**

Signature Date

B 4 SOURCES OF DRILLING WATER

1. **Public**

2.

3.

3342 W Brantly Rd

11 STREET ADDRESS 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

NORTH N

WEST W 32 EAST E

SOUTH S

34 **400** 37

DISTANCE FROM ROAD FT

ENTER FT OR MI 38 39

TAX MAP: **0021** BLK: **0006** PARCEL **0185**

B 2 WELL INFORMATION

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

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

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 **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 **10/6/14** **10/6/15**

43 MM DD YY 48 CO SIGNATURE EXP. DATE

APPROXIMATE DEPTH OF WELL **290** FEET

24 28

APPROXIMATE DIAMETER OF WELL _____ 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

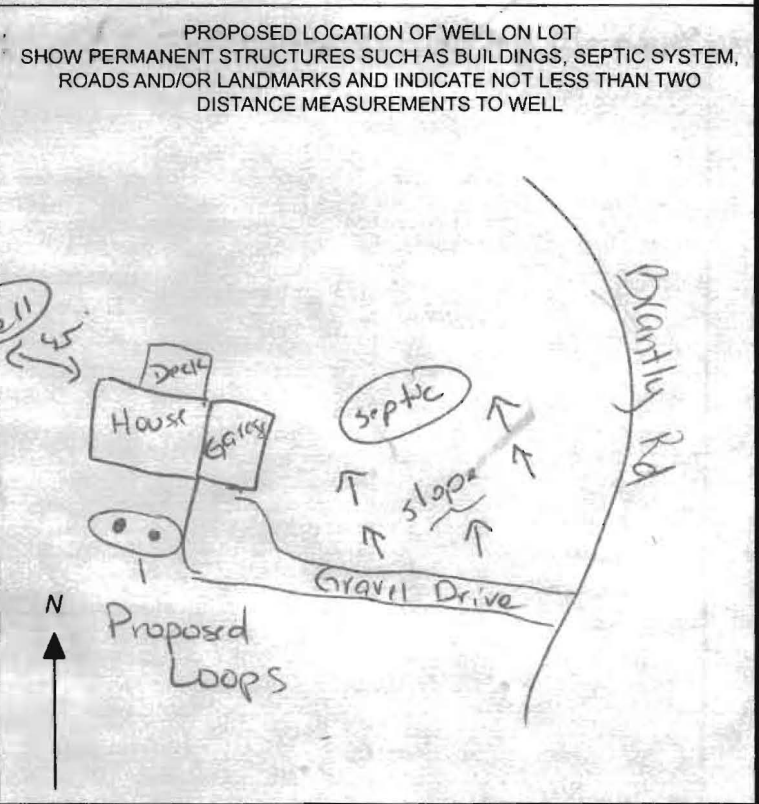
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52

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

APPROX. PERMIT NUMBER _____ G _____

PERMIT No. **HO-14-0101**

70 71 72 73 74 75 76 77 78 79



SPECIAL CONDITIONS **Grout Bottom to top.**

NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.

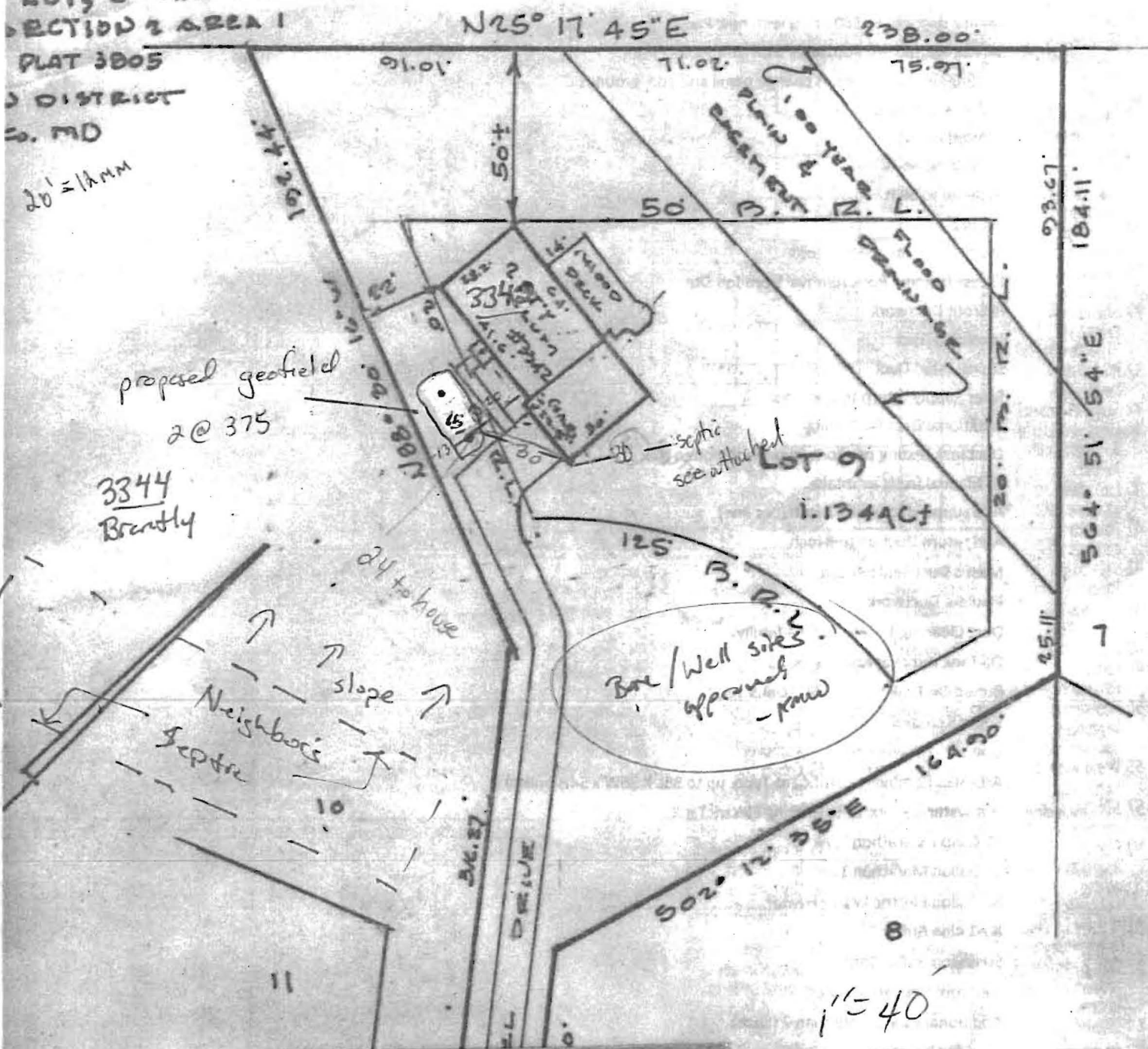
Supranu

LOT 9 BLOCK "A" THIS PLAT CAN NOT BE USED TO ESTABLISH PROPERTY LINES OR CORNERS.

LOTS 6 THRU 27
SECTION 2 AREA 1
PLAT 3805

DISTRICT
Co. MD

20' = 12MM



proposed geofield
2 @ 375

3344
Brandly

septic
see attached

Bore/Well sites
approved
-PMD

Neighbors
septic
slope
24 to have

DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER

HO-14-0101

INFORMATION GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD
BALTIMORE MARYLAND. 21230

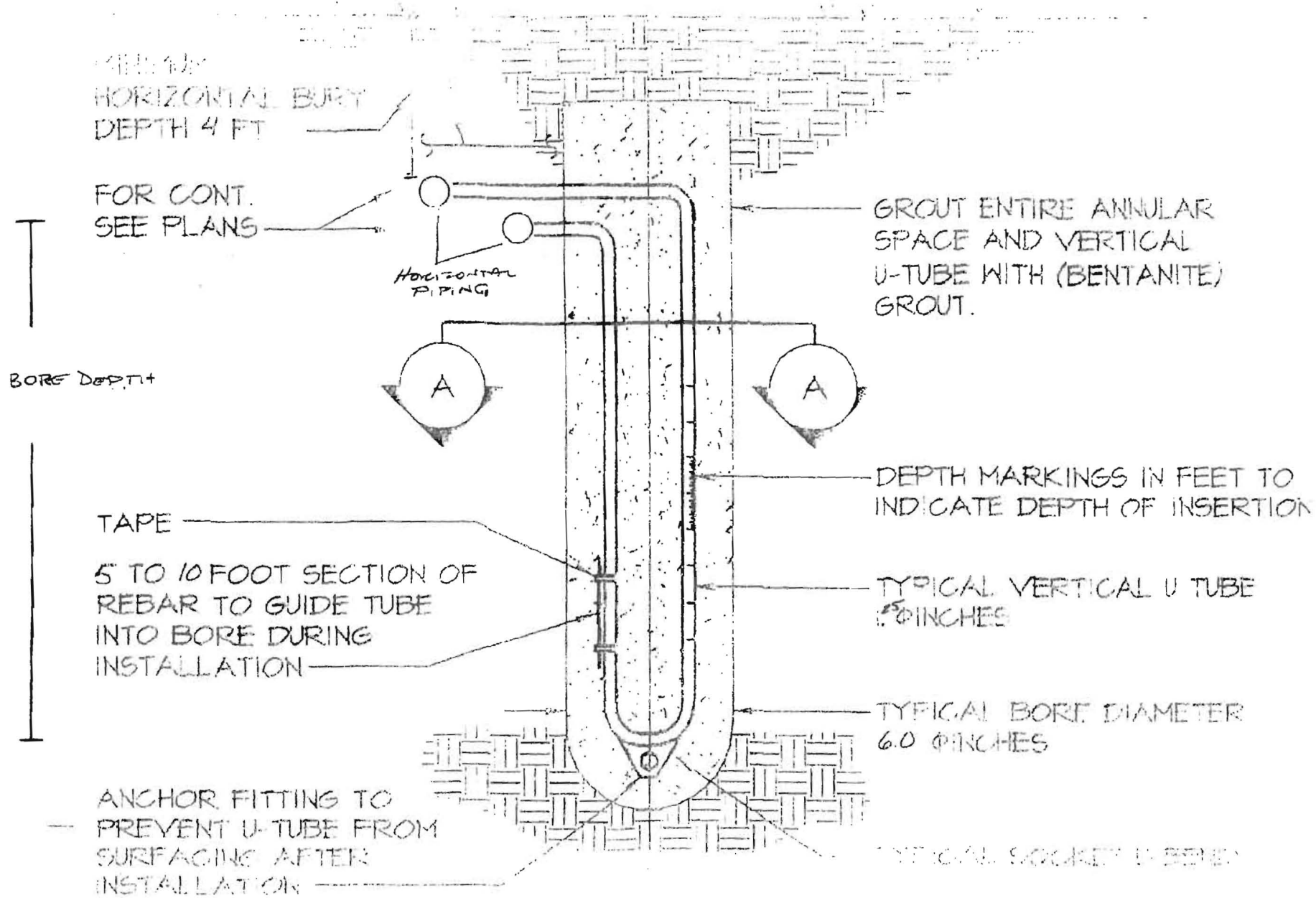
Handwritten notes: 2 @ 375, 7 Series

Handwritten notes: upreme, ucht

Handwritten note: 1" = 40

GRADE

EACH BORE HOLE (TYP.)



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.