C 1 26446 — SEQUENCE NO. (MDE USE ONLY)

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER

ST/CO USE ONLY
DATE Received MM 06 DD 22 YY 15

DATE WELL COMPLETED MM 10 DD 17 YY 15

Depth of Well 323 (TO NEAREST FOOT)

OK 7/1/15 PP

PERMIT NO. FROM "PERMIT TO DRILL WELL" H0 - 15 - 0082

OWNER Esaias Wayne (last name, first name)

WELL SITE ADDRESS 6971 Mink Hollow Road TOWN Highland

SUBDIVISION 0000 SECTION LOT 14

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 FROM	FEET TO	check if water bearing
Red mica silt	0	55	
Brown schist	55	71	
Tan schist	71	95	
1 GPM at	79		
Gray schist	95	323	

2 x geothermal bores (same)

NUMBER OF UNSUCCESSFUL WELLS: 0

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

N/A

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 5 6 7

Jeff Cormon
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: __ __ D __ __ __

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

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

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT C M BENTONITE CLAY B C

NO. OF BAGS 14 NO. OF POUNDS 700

GALLONS OF WATER 350

DEPTH OF GROUT SEAL (to nearest foot)

from 0 TOP ft. to 323 BOTTOM ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

GeoLoops S T STEEL C O CONCRETE P L PLASTIC O T OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL	1¼"	323'

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below

S T STEEL B R BRASS BRONZE P L PLASTIC H O OPEN HOLE O T OTHER

C 2

DEPTH (nearest ft.)

EACH SCREEN		
1		
2		
3		

SLOT SIZE 1 ____ 2 ____ 3 ____

DIAMETER OF SCREEN ____ (NEAREST INCH)

from ____ to ____

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

70 72 74 75 76

TELESCOPE CASING | LOG INDICATOR | OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour) ____

PUMPING RATE (gal. per min.) ____

METHOD USED TO MEASURE PUMPING RATE ____

WATER LEVEL (distance from land surface)

BEFORE PUMPING ____ ft.

WHEN PUMPING ____ ft.

TYPE OF PUMP USED (for test)

A air P piston T turbine C centrifugal R rotary O other (describe below) 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) ____

PUMP HORSE POWER ____

PUMP COLUMN LENGTH (nearest ft.) ____

CASING HEIGHT (circle appropriate box and enter casing height)

+ above / − below LAND SURFACE (nearest) foot ____

LATITUDE 39.178189

LONGITUDE -76.985189

(DEFAULT COORD. WGS 84)

NOTES:

COUNTY

EMERGENCY/TEMP NO. IF ANY

B 1 | 23660 (1 2 3 6) SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

please type

55242

STATE PERMIT NUMBER: Ho - 15 - 0082 (70 79)

fill in this form completely

Date Received (APA): 052715 (8 MM DD YY 13)

OWNER INFORMATION

Esaias (15 Last Name) Wayne & Elaine (Owner First Name 34)

6971 Mink Hollow Road (36 Street or RFD 55)

Highland (57 Town), Maryland (70 State) 20777 (72 Zip 76)

DRILLER INFORMATION

Jeff Corron (Driller's Name) MWD567 (76 License No. 81)

Chesapeake Geosystems, Inc. (Firm Name)

16720 Fort Smallwood Rd Balt 21226 (Address)

Jeff Courson (Signature) 5/26/15 (Date)

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.): N/A (1 2 8 12)

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): N/A (14 20)

USE FOR WATER (CIRCLE APPROPRIATE BOX)

22
- [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 geo bores

APPROXIMATE DEPTH OF WELL: 400 FEET (24 28)

APPROXIMATE DIAMETER OF WELL: 6" NEAREST INCH

METHOD OF DRILLING (circle one)

30
- BORED (or Augered) — JETTED — Jetted & DRIVEN
- AIR-ROTary — AIR-PERcussion — ROTARY (Hydraulic Rotary)

37
- CABLE — REVerse-ROTary — DRive-POINT
- other: mud Rotary

REPLACEMENT OR DEEPENED 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 DEEPEN AN EXISTING WELL

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

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

APPROP. PERMIT NUMBER: ------G---

PERMIT No. Ho - 15 - 0082 (70 71 72 73 74 75 76 77 78 79)

B 3 LOCATION OF WELL

Howard County (8 COUNTY 21)

0000 (23 SUBDIVISION 42)

SECTION (44 46) LOT 14 (48 50)

Highland (52 NEAREST TOWN 71)

B 4

SOURCES OF DRILLING WATER
1. municipal
2.
3.

6971 Mink Hollow Rd (11 STREET ADDRESS 30)

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH [N] WEST [W] 32 [E] EAST [S] SOUTH

34 65 37 DISTANCE FROM ROAD: FT (ENTER FT OR MI 38 39)

TAX MAP: 0040 BLK: 0002 PARCEL 0203

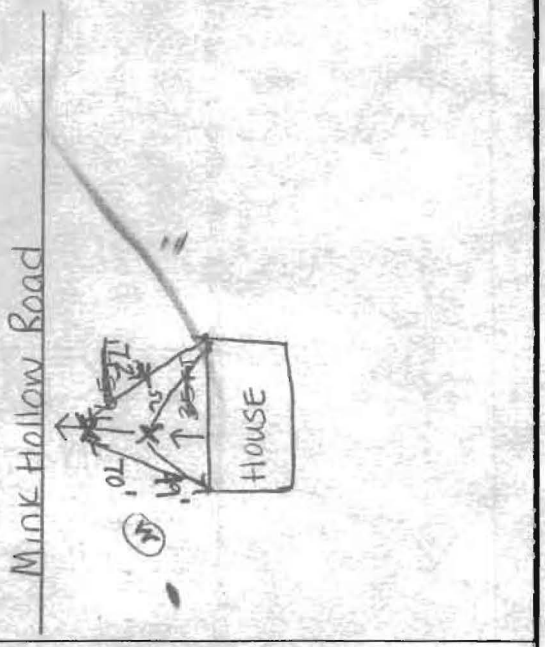
NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

Howard (COUNTY NAME) 13 (COUNTY NO.)

STATE SIGNATURE _____ INSERT S → (41)

DATE ISSUED 06/11/2015 (43 MM DD YY 48) CO SIGNATURE 6/11/16 EXP. DATE

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



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

MDE/WMA/PER.071

② COUNTY

HOWARD COUNTY HEALTH DEPARTMENT

56442

DATE 5/7/15 WS

Received From Chesapeake Ecosystems PHONE #

For Well Permit / 6971 Nash Hollow Rd.

☐ CASH
☒ CHECK
NO. 30041

One hundred sixty ⁰¹/₁₀₀ Dollars

$ 160.00

Received By A King

HOWARD COUNTY HEALTH DEPARTMENT

56442

DATE 5/27/15

WS

Received From Chesapeake Geosystems PHONE #

For Well Permit/6971 Mink Hollow Rd.

☐ CASH

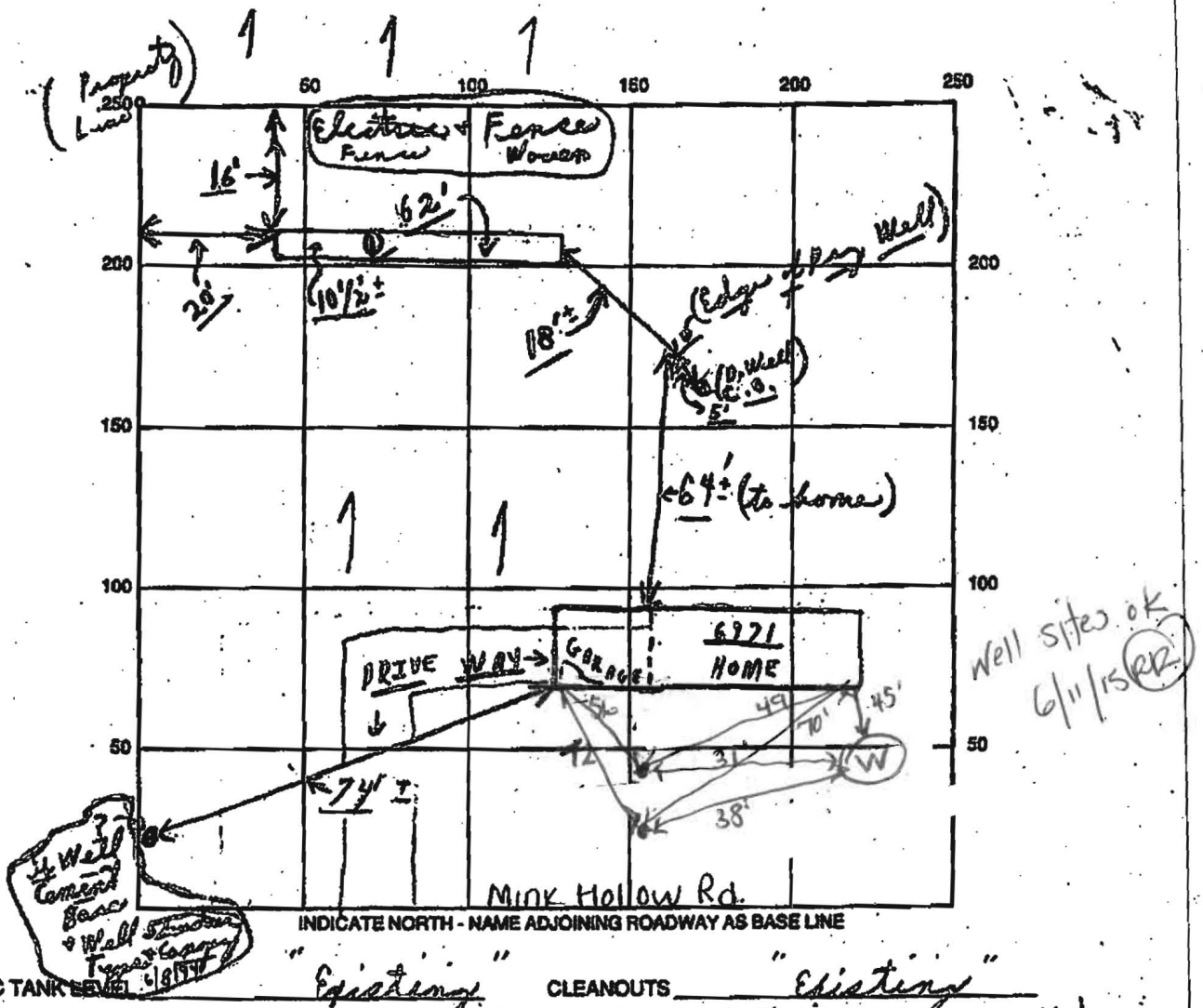
☒ CHECK

NO. 3041

One hundred sixty---- Dollars

$ 160|00

Received By A King



SEPTIC TANK LEVEL "Existing" CLEANOUTS "Existing"

DISTRIBUTION BOX LEVEL (Coming off existing day well)

DRAIN FIELD/TITLE DEPTH 10½'± sweeps FT. TRENCH WIDTH 2 FT. INLET DEPTH 2 FT.

EFFECTIVE GRAVEL DEPTH 8½'± FT. TOTAL LENGTH 62 FT.

NUMBER OF TRENCHES 1 ONE SIDEWALL/[redacted] AREA 527+ SQ. FT. {Plus old day well}

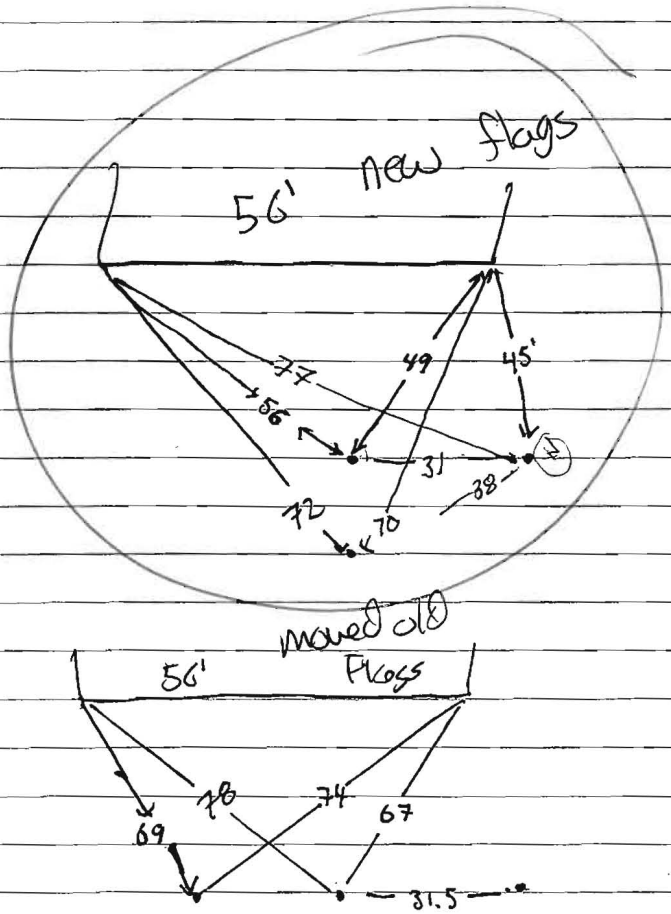
DRYWALL INSIDE DIAMETER ~ FT. EFFECTIVE DEPTH BELOW INLET ~ FT.

ABSORBENT AREA 527 SQ. FT. +{Plus old day well}

REMARKS: 6/8 Final - one stop - ok to finish trench; etc and cover - material on site; cas

DATE SYSTEM APPROVED 6/8/94 INSPECTOR Charles Bryan Streeter

~~77*45~~ 6971


56'
new flags
77
49
45'
56
31
38
72
70
moved old
56'
Flags
78
74
67
69
31.5

GROUT-WELL® and GROUT-WELL® DF

NSF Certified to NSF/ANSI 60

Product Information

Description

GROUT-WELL® and **GROUT-WELL® DF** are one step bentonite grouting materials designed to achieve low permeability seals in water wells, monitor wells, geotechnical borings, and heat pump holes. They achieve a range of solids contents, 17% to 20% solids by weight. **GROUT-WELL® DF**'s granular nature reduces nuisance dust during mixing operations.

Characteristics

- Permeability: 1 x 10 –8 cm/sec
- Slurry Density: 9.4 – 9.5 lbs/gal
- pH Range: 8.0 – 10.0
- Dry Bulk Density: 55 - 60 lbs/cu ft
- Thermal Conductivity: .42 BTU/hr-ft-degree F

Application

Placement of the **GROUT-WELL®** products is best done using a positive displacement or progressive cavity pump. When pumping must be done with gear or diaphragm pumps, you may have to use additional make-up water to insure pumpability due to the limited pressure generated by these types of pumps. When adding the grouts to make-up water, the slurry will resemble "pancake batter", a creamy consistency with lumps. This is the ideal time to pump the fluid since all the bentonite has not fully hydrated. Once in place, the particles continue to swell, sealing off cracks and crevices while gelling to form its caulk-like consistency.

Provided local regulations allow, it is always recommended that the tremie line be withdrawn as the grout is being pumped. This permits the grout to continue its "set" undisturbed, reduces pump pressure, and minimizes unnecessary migration into surrounding formations.

TYPICAL E.P. TOXICITY ANALYSIS

	Standard (ppm)	Set Grout (ppm)
Arsenic	5.0	<0.10
Barium	100.0	0.50
Cadmium	1.0	<0.05
Chromium	5.0	<0.10
Lead	5.0	<0.10
Mercury	0.2	<0.02
Selenium	1.0	<0.05
Silver	5.0	<0.10

	17.7% Solids	20.0% Solids
Grout-Well® DF	50 lbs	50 lbs
Water	28 gal	24 gal
Usable Slurry	31 gal	27 gal

TYPICAL CHEMICAL ANALYSIS %

SiO_2	63.54	MgO	1.67
Al_2O_3	19.28	CaO_3	0.38
Fe_2O_3	3.48	TiO_2	0.22
K_2O	0.10	Na_2O	2.34
MnO	0.02	H_2O	4.50
L.O.I. *	4.37		

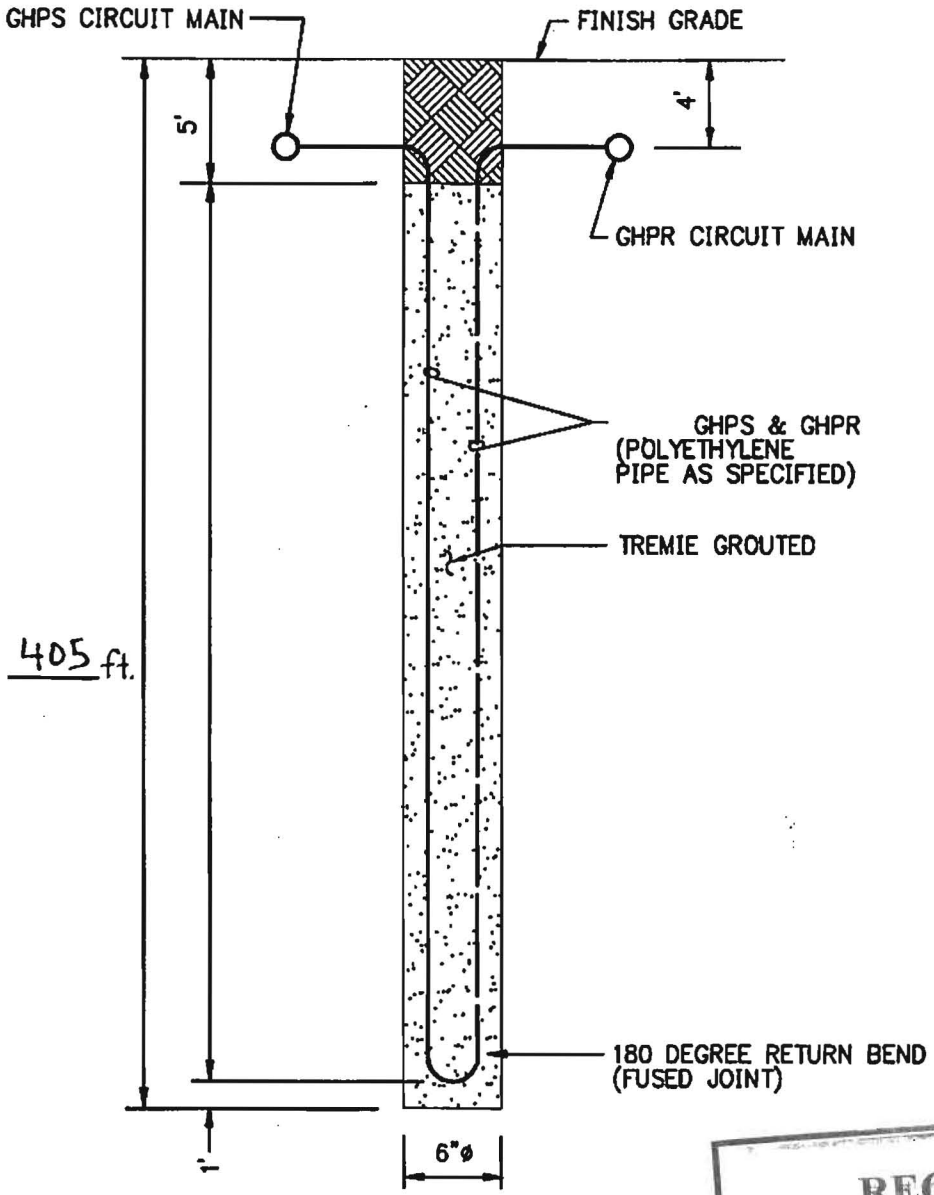
*Loss on Ignition

Packaging

GROUT-WELL® and **GROUT-WELL® DF** are packaged in 50 pound bags.

4330-4335/201302

WYO-BEN, INC., Billings, Montana 800.548.7055 406.652.6351 **www.wyoben.com**



DETAIL 2/M0.2

TYPICAL VERTICAL BOREHOLE

NOT TO SCALE


maryland
6971 mink hollow
Interactive Map
MINK HOLLOW RD
MINK HOLLOW RD
MINK HOLLOW RD
MINK HOLLOW RD
500
490
480
470
460
450