

# PERMIT

P 38291

A 34775

## SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH DISTRICT \_\_\_\_\_

### HOWARD COUNTY

BUREAU OF ENVIRONMENTAL HEALTH

~~461-9933~~

461-9933

DATE 12/17/86

DATE SYSTEM APPROVED 2/5/87

INSPECTOR R. HODGGS

INDEXED

Dave Hopkins IS PERMITTED TO INSTALL  ALTER

ADDRESS 17550 Old Frederick Road, Mt. Airy, Maryland 21771 PHONE 831-7257

SUBDIVISION Noranbrock Property ROAD 654 East Watersville Rd LOT 2

PROPERTY OWNER Coy Lanning

ADDRESS \_\_\_\_\_

IF GARBAGE GRINDER IS USED INCREASE SEPTIC TANK CAPACITY BY 50% AND ABSORPTION AREA BY 22%. *NO GARBAGE GRINDER PER MR LANDING OWNER*

GARBAGE GRINDER? YES  NO

1000

SEPTIC TANK CAPACITY 1500 GALLONS NUMBER OF BEDROOMS 3

TRENCHES - 179 ~~232~~ sq. ft. per bedroom with garbage disposal. Trench to be 3 feet wide. Inlet 4.5 feet below original grade. Bottom maximum depth 6 feet below original grade. Effective area begins at 5 feet below original grade. 1.5 feet of stone below distribution pipe.

LOCATION - Place the distribution box 85 feet from the front lot line and 100 feet from the right lot line as seen when facing lot from Watersville Road. Run trenches on contour toward front lot line. NOTE: Septic tank to be minimum 100 feet from well site.

NOTE - No trench to exceed 100 feet in length. If more than one trench used, a distribution box is required. Call for inspection of trench before gravel is installed. Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank. *ok/cw*

PLANS APPROVED BY S. Abel DATE 1/17/86

COVER NO WORK UNTIL INSPECTED AND APPROVED.

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

NOTE: CLEANOUT REQUIRED EVERY 70 FEET OF SEWER LINE AND/OR AT 90° SWEEPS IN LINES FROM HOUSE TO DRAIN FIELDS.

NOTE: ALL PARTS OF SEPTIC SYSTEMS (I.E., TANK, DISTRIBUTION BOX, TRENCHES) TO BE 100 FEET FROM WELL. (UNLESS OTHERWISE SPECIFICALLY AUTHORIZED)

NOTE: IF DEEP TRENCH(ES) ARE USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCH(ES).

NOTE: NO DRY WELL SHALL EXCEED 15 FOOT IN DIAMETER. NO ABSORPTION TRENCH TO EXCEED 100 FEET IN LENGTH.

NOTE: ALL PIPE FROM HOUSE TO SEPTIC TANK MUST BE CAST IRON OR SCHEDULE 40 PVC OR ABS.

PERMIT VOID AFTER TWO YEARS.

NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL. STAND PIPES MUST BE 6 INCHES IN DIAMETER. CAST IRON, CONCRETE OR TERRA COTTA OR PVC OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET, MANHOLE TO GRADE REQUIRED.

NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES.

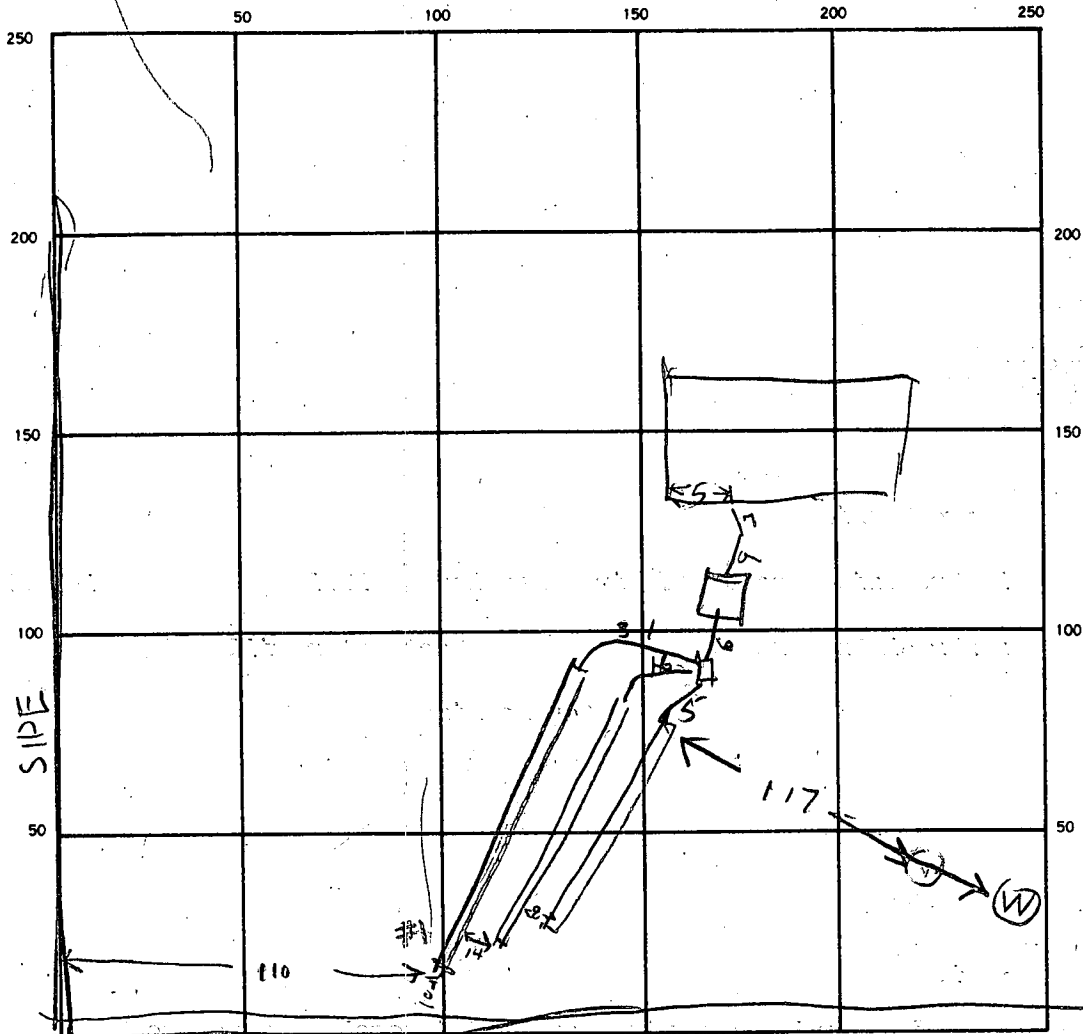
**\*INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT**

\*CALL 461-9933 FOR INSPECTION OF SEPTIC SYSTEMS.

EH - 2-1186

A 34775

277'



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE  
WATERVILLE RD

74

SEPTIC TANK LEVEL \_\_\_\_\_ CLEANOUTS 57  
OK

DISTRIBUTION BOX LEVEL OK 10 00

DRAIN FIELD/TILE FIELD DEPTH #1 #2 #3 TRENCH WIDTH #1 #2 #3 FT. INLET DEPTH #1 #2 #3 FT.

EFFECTIVE GRAVEL DEPTH #1 #2 #3 FT. TOTAL LENGTH #1 #2 #3 FT.

NUMBER OF TRENCHES 3 ONE SIDEWALL/BOTTOM AREA 684 SQ. FT.

DRYWELL INSIDE DIAMETER \_\_\_\_\_ FT. EFFECTIVE DEPTH BELOW INLET \_\_\_\_\_ FT.

ABSORBENT AREA \_\_\_\_\_ SQ. FT.

REMARKS 2/6/87 - LOCATION OK. WITHOUT GRINER  
179 SQ FT PER BEDROOM 537 SQ FT TOTAL NEEDED  
684 SQ FT INSTALLED

DATE SYSTEM APPROVED 2/5/87 INSPECTOR Raymond Hodges

SUBDIVISION: NORANBROCK Property

LOT NUMBER:

LOT 2

DRY WELL OR DRY WELL AND TRENCH

\_\_\_\_\_ sq. ft./bedroom

	<u>Septic Tank</u>	<u>Minimum Total square Feet</u>
3 bedroom	1000 gallon	_____
4 bedroom	1250 gallon	_____
5 bedroom	1500 gallon	_____

Inlet \_\_\_\_\_ feet below original grade.

Bottom maximum depth \_\_\_\_\_ feet below original grade.

Effective area begins at \_\_\_\_\_ feet below original grade.

NOTE: If trench is used to make up absorbent area, run the trench on level ground and leave a 5 foot earth buffer between dry well and trench. No trench is to exceed 100 feet in length. Trench inlet to be same as dry well, with \_\_\_\_\_ feet of stone below distribution pipe.

TRENCHES

\_\_\_\_\_ 190 sq. ft./bedroom

Trench to be 3 wide.

Inlet 4.5 feet below original grade.

Bottom maximum depth 6 feet below original grade.

Effective area begins at 5 feet below original grade.

1.5 feet of stone below distribution pipe.

- NOTE:
- (1) No trench to exceed 100 feet in length.
  - (2) If more than one trench used, a distribution box is required.
  - (3) Trenches to be installed on level ground.
  - (4) Call for inspection of trench before gravel is installed.
  - (5) Provide 6"-8" diameter cleanout and cap to grade or above on septic tank and drywell.
  - (6) If a Garbage disposal is used, increase septic tank capacity by 50% and increase absorbant sidewall area by 22%.

LOCATION: PLACE THE DISTRIBUTION BOX 85 FE FROM THE FRONT LOT LINE AND 100 FE FROM THE RIGHT LOT LINE AS SEEN WHEN FACING LOT FROM WATERSVILLE RD. RUN TRENCHES ON CONTOUR TOWARD FRONT LOT LINE. NOTE: SEPTIC TANK TO BE MINIMUM 100 FE FROM WELL SITE. S. AME 1-17-86

789  
 826  
 89  
 hb  
 18

# APPLICATION

SEWAGE DISPOSAL TESTING

A 34775

STATE OF MARYLAND - DEPARTMENT OF HEALTH AND MENTAL HYGIENE

P \_\_\_\_\_

HOWARD COUNTY HEALTH DEPARTMENT  
ENVIRONMENTAL HEALTH SERVICES  
P. O. BOX 476 ELLICOTT CITY, MARYLAND 21043  
TELEPHONE: 992-2330

DISTRICT \_\_\_\_\_

DATE 1/9/85

TO: THE COUNTY HEALTH OFFICER  
ELLICOTT CITY, MARYLAND

I, HEREBY, APPLY FOR THE NECESSARY TEST IN ORDER TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

*COX CANNING*

PROPERTY OWNER Charles W. Noranbrock (*SOUTH CALIFORNIA BACKHOE*)  
ADDRESS 24792 Pasee Vendaval  
El Toro, California 92630 PHONE 1-714-380-8276 (*Red May 725-0665*)

PROPERTY LOCATION:

SUBDIVISION Noranbrock Property LOT NO. 2

ROAD AND DESCRIPTION Watersville Road (Liber 547, Folio 14, Tax Map 2, Parcel 104)

*654 E. Watersville Rd.*

SIZE OF LOT 3.3 Acres TYPE BLDG. 3 or 4 Bedrooms  
(NUMBER OF BEDROOMS)

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCES. I ALSO AGREE TO COMPLY WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS LOT. /s/ Evans, Hagan & Holdefer, Inc.

(SIGNATURE OF APPLICANT)

APPROVED BY Sidney Abel FOR Sheldon Hil Field DATE 1-17-86

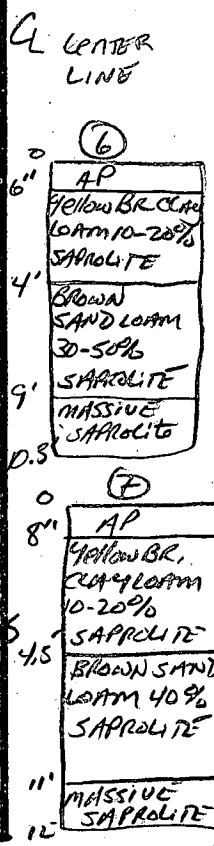
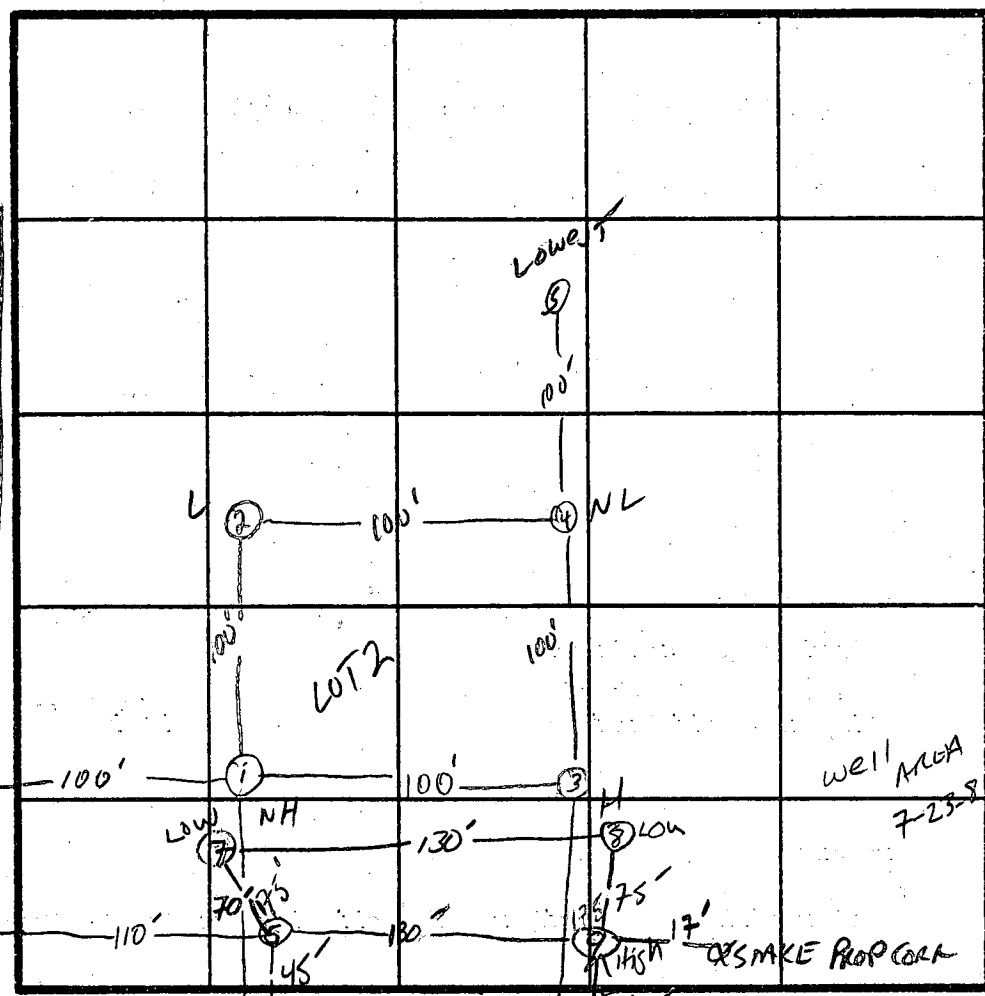
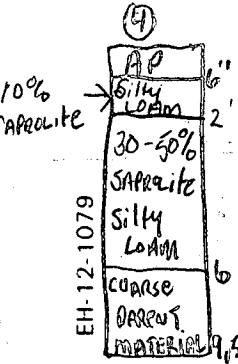
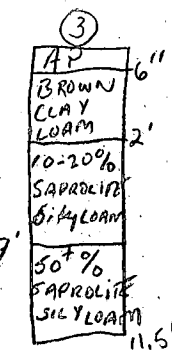
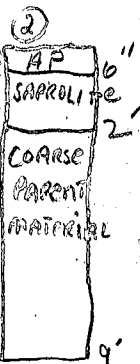
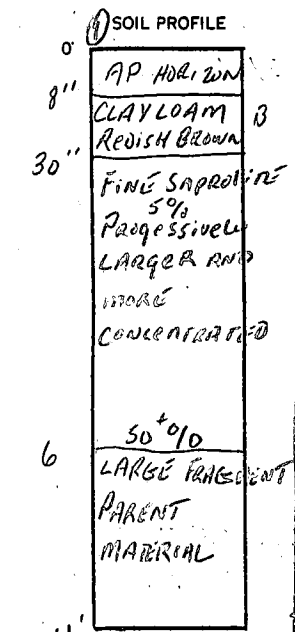
REJECTED BY \_\_\_\_\_ FOR \_\_\_\_\_ DATE \_\_\_\_\_ BLDG. PERMIT SIGNED AND RETURNED 11/5/86

HOLD PENDING FURTHER TESTS \_\_\_\_\_ DATE \_\_\_\_\_ *SABW*

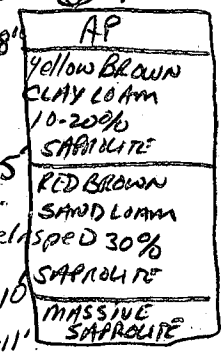
REASONS FOR REJECTION OR HOLDING 1-24-85 FAILED PERC HOLD FOR REVIEW SA *BP# 8624*

7-23-85 Perc results satisfactory; area perc'd is highest area as shown on present plat requires redesign to show house and well site at equal or higher elevation other - OTHERWISE LOT FAILS

# THIS IS NOT A PERMIT



DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
11/24/85	1S 1V	3.5' 11'	10:50	11:08	11:08	11:55	47min
11/24/85	2V	COARSE PARENT MATERIAL (S.W. EST) Below 2' POOR HOLE					
	3S 3V	4' 11.5'	11:13	12:05	→ 1ST INCH NOT COMPLETE		52min elapsed
11/24/85	4S 4V	3.0' 9.5'	11:19	11:23	11:23	11:29	6min
	4A	2'	11:41	NO NOTICEABLE MOVEMENT AFTER 20 MIN			
	5	ROLL AT 2 FEET					
7/23/85	6S 6V	4' 10.5'	2:06	2:28	→ 1/2" movement		
	7	5' 12'	2:07	2:12	2:12	2:20	8min
	8	5' 11'	2:16	2:23	2:23	2:38	15min
	9	5' 12'	2:17	2:19	2:19	2:23	4min



X Perc TIME

13min

INLET 4.5

BOTTOM MAX 6

REMARKS: ROCK & POOR PERC. TIMES / 7-23-85 PERC HIGHEST PART OF LOT AS EXIST ON CURRENT PLAT LABEL

TYPE OF SOIL: Glenelg / MAADON -

TESTED BY: S. Abel / C. Williams

ALSO PRESENT: GARY HALLER - RIDGE CLIFF STON, JOHN KOWAL, RETIREE

190°/R



APPLICATION FOR PITLESS ADAPTER, WELL PUMP AND PRESSURE TANK INSTALLATION

Howard County Health Department  
 Bureau of Environmental Health  
 3525-H Ellicott Mills Drive  
 Court House Square  
 Ellicott City, Md. 21043  
 461-9933

New Installation  Replacement   
 Receipt # 38152  
 Date 2-9-87  
 Name of Installer C S Zabel, Inc Telephone 875-2964  
 License number 6033  
 Certified Well Pump Installer  Well Driller  Registered Plumber   
 Name of Property Owner Corey Lanning Telephone \_\_\_\_\_  
 Subdivision \_\_\_\_\_ Lot # 2 Well tag # H0-81-1525  
 Site Address 670 East Walkersville Rd.  
Mt Airy, Md.

<b>Pump</b>	<b>Motor</b>	<b>Pitless Adapter</b>
1. Type	1. Horsepower <u>3/4</u>	1. Make <u>Howard</u>
a. Deep well jet _____	2. RPM _____	2. Model # _____
b. Shallow well jet _____	3. Voltage _____	3. Depth <u>1 1/2"</u>
c. Submersible <input checked="" type="checkbox"/>	a. 110 _____	
2. Make <u>McDonald</u>	b. 220 <input checked="" type="checkbox"/>	
3. Model # <u>J 75</u>		
4. Capacity <u>5</u> GPM		
5. Pump exceeds well capacity Yes _____ No _____		
6. If Yes, is low pressure cutoff switch installed? Yes _____ No _____		
7. What methods are used to protect the pump and electrical wiring from vibrations? Torque arrestors _____ Cable guards _____ Other <u>Clamps/Sleeve</u>		

<b>Tank</b>	<b>Piping</b>	<b>Well data</b>
1. Capacity <u>42.07</u>	1. Type <u>Dianq-berg</u>	1. Depth <u>300</u> ft.
2. Pressure relief valve? <u>RV 50</u>	2. Size <u>1"</u>	2. Yield _____ GPM
	3. NSF and/or BOCA Code approved _____	3. Static water level _____ ft.
	4. Depth of supply line <u>270'</u>	4. Will water supply be disinfected by installer? <u>yes</u>

I understand that it is my responsibility to notify the Howard County Health Department when the installation is ready for inspection (otherwise this permit is null and void).

All information given above is true to the best of my knowledge.

Signature of Applicant: C. Stephen Zabel  
 Date: 2-9-87

Note: A sticker indicating approval/status of the installation will be placed on the well casing at the time of the inspection.

B 1 2869

SEQUENCE NO. (OEP USE ONLY)

STATE OF MARYLAND PERMIT TO DRILL WELL

OEP PERMIT NUMBER

80-81-1525

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

please print or type

fill in this form completely

Date Received 7/10/86

OWNER INFORMATION

LANNING COY, L70 E WATERSVILLE, MT AIRY, MD 21771

B 3

LOCATION OF WELL

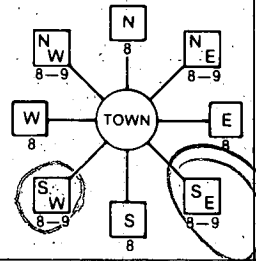
HOWARD, WATERSVILLE, MILES FROM TOWN 1 MI

DRILLER INFORMATION

George P. Bastorday, L. P. Bastorday, Inc., 9205 Brown Ch. Rd., Mt. Airy, Md. 21771

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



WATERSVILLE RD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)



200 DISTANCE FROM ROAD

B 2

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 5, AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY), F FARMING, I INDUSTRIAL, P PUBLIC OR PRIVATE WATER COMPANY, T TEST, OBSERVATION, MONITORING

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard, A-24725, COUNTY NAME, COUNTY NO., OEP SIGNATURE, DATE ISSUED 060686, CO SIGNATURE, EXP. DATE 0772000

APPROXIMATE DEPTH OF WELL 200 FEET, APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

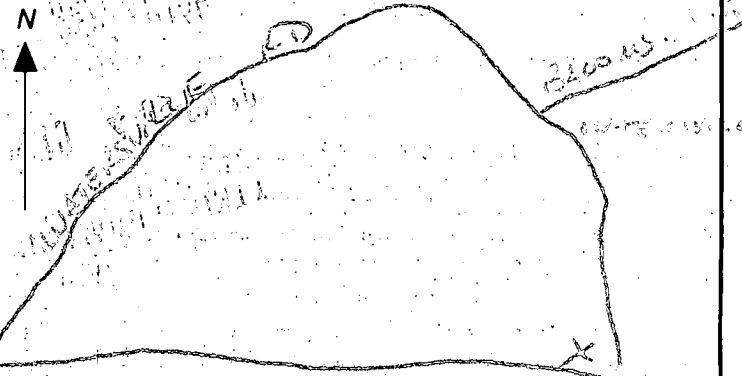
BORED (or Augered), JETTED, AIR-ROTARY, AIR-PERCussion, ROTARY (Hydraulic Rotary), CABLE, REVerse-ROTary, DRive-POINT

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, S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY, D THIS WELL WILL DEEPEN AN EXISTING WELL

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X, SOURCES OF DRILLING WATER, WRITE THE BOX NUMBER FROM THE MAP HERE

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



Not to be filled in by driller (OEP USE ONLY), APPROP. PERMIT NUMBER, FORCE PERMIT NO. 80-81-1525

SPECIAL CONDITIONS



C1 2570 SEQUENCE NO. (OEP USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

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

COUNTY NUMBER A-34775

DATE Received

DATE WELL COMPLETED 07/1/86

Depth of Well 300 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-81-1525

OWNER Lanning Coy last name Watersville Rd. first name TOWN Watersville SUBDIVISION NORANROCK PROP. SECTION LOT 2

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. Rows include Topsoil, Red shale, brown shale, blue slate, brown slate w/ Flint, blue slate, brown shale, blue slate.

GROUTING RECORD WELL HAS BEEN GROUTED (Circle Appropriate Box) YES [X] NO [ ] TYPE OF GROUTING MATERIAL CEMENT [CM] BENTONITE CLAY [BC]

NO. OF BAGS 20 NO. OF POUNDS 2000 GALLONS OF WATER 105 DEPTH OF GROUT SEAL (to nearest foot) from 48 TOP 52 ft. to 54 BOTTOM 58 ft.

CASING RECORD casing types insert appropriate code below STEEL [ST] CONCRETE [CO] PLASTIC [PL] OTHER [OT]

MAIN CASING TYPE [S] Nominal diameter top (main) casing (nearest inch) [7] Total depth of main casing (nearest foot) [68]

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

SCREEN RECORD screen type or open hole insert appropriate code below STEEL [ST] BRASS [BR] OPEN HOLE [HO] BRONZE [PL] PLASTIC [OT] OTHER [OT]

DEPTH (nearest ft.) HO 66 300

CIRCLE APPROPRIATE LETTER 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 10.17.13 "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 IDENT. NO. 40 DRILLERS SIGNATURE George B. Eastman Robert K. Heston SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH)

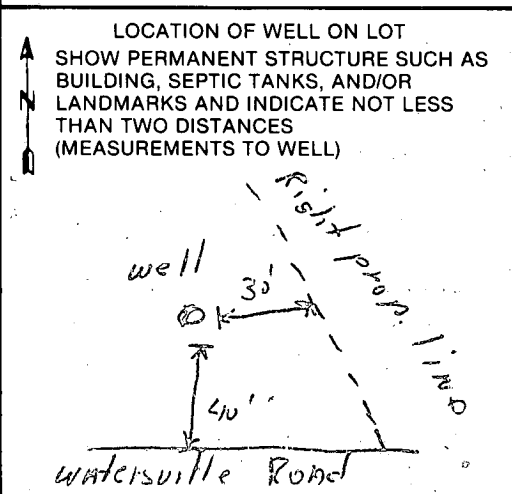
GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) WQ LOG INDICATOR OTHER DATA

C 3 PUMPING TEST

HOURS PUMPED (nearest hour) 6 PUMPING RATE (gal. per min. to nearest gal.) 1 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 75 WHEN PUMPING 1.01 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 WILL INSTALL PUMP YES [X] NO [ ] IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETE FOR ALL WELLS EXCEPT HOME USE TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: CAPACITY: GALLONS PER MINUTE (to nearest gallon) PUMP HORSE POWER PUMP COLUMN LENGTH (nearest ft.) CASING HEIGHT (circle appropriate box and enter casing height) [4] above LAND SURFACE [2] (nearest foot) below



1421

Page 7/11/86 of 8:00 AM  
Date

Review Review OK 7/18/86  
C. Williams

FIELD DATA SHEET  
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 81-152.5  
Location of property (road) Watersville Rd.  
Subdivision NORANBROOK PROP. Lot 2 Block Flat Sec.  
Well Driller G. CASTERDAY Owner LANNING, COY

Depth of well 300 16 PM 2 Feet  
Distance of measuring point (M.P.) above ground  
Static water level (S.W.L.) below M.P. 75 FT

High rate pumping - reservoir drawdown  
Time pump started 9:00 Pumping rate 12 G.P.M.  
Total time 15 min to reach pumping water level 101 ft. below M.P.  
Pump sit 200 FT Denny

II. Recovery pump test data - observations to be recorded every 15 minutes

TIME (in 15 minute intervals)	WATER LEVEL below M.P.	PUMPING RATE time to fill gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
9:15	101	60 sec		1
9:30	93	60 sec		1
9:45	85	20 sec		3
10:00	85	20 sec		3
10:15	85	20 sec		3
10:30	85	20 sec		3
10:45	87	25 sec		2 1/2
11:00	101	30 sec		2
11:15	101	30 sec		2
11:30	101	30 sec		2
11:45	101	30 sec		2
12:00	101	30 sec		2
12:15	101	45 sec		1.33
12:30	101	45 sec		1.33
12:45	101	45 sec		1.33
1:00	101	45 sec		1.33
1:15	101	50 sec		1.20
1:30	101	50 sec		1.20
1:45	101	50 sec		1.20
2:00	101	50 sec		1.20
2:15	101	50 sec		1.20
2:30	101	50 sec		1.20
2:45	101	50 sec		1.20
3:00	101	50 sec		1.20
3:15	101	50 sec		1.20

D



C1 01129

SEQUENCE NO. (OEP USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY PLEASE PRINT OR TYPE

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

COUNTY NUMBER

A 34775

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

DATE Received

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

8 9 13

15 20 071186

22 26 300 (TO NEAREST FOOT)

28 37 110-81-1627

OWNER Lanning Co. last name first name STREET OR RFD 1070 @ Watersville Rd TOWN SUBDIVISION SECTION LOT 2

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. Rows include: Topsoil (0-1), Red shale (1-35), brown shale (35-50), blue slate (50-76), Red shale (76-82), brown shale (82-87), blue slate (87-300)

GROUTING RECORD WELL HAS BEEN GRouted (Circle Appropriate Box) TYPE OF GRouting MATERIAL CEMENT C.M. BENTONITE CLAY B.C.

NO. OF BAGS 20 NO. OF POUNDS 2000 GALLONS OF WATER 103 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 75 ft.

CASING RECORD casing types insert appropriate code below ST CO STEEL CONCRETE PL OT PLASTIC OTHER

MAIN CASING TYPE Nominal diameter top (main) (nearest inch) Total depth of main casing (nearest foot) S+ 6 83

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

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

DEPTH (nearest ft.) HO 81 300

SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) WQ 70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST in nearby

HOURS PUMPED (nearest hour) 9 PUMPING RATE (gal. per min. to nearest gal.) 7 METHOD OF MEASURE PUMPING RATE bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 55 WHEN PUMPING 300

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 WILL INSTALL PUMP YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: CAPACITY: GALLONS PER MINUTE (to nearest gallon) PUMP HORSE POWER PUMP COLUMN LENGTH (nearest ft.) CASING HEIGHT (circle appropriate box and enter casing height) LAND SURFACE (nearest foot)

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)

NOTE: It appears that this may have been 1st well drilled; came up w/ 1/2 gal, had 2nd well drilled which had 1 gal, decided to deep both. Then applied for...

A CIRCLE APPROPRIATE LETTER 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 10.17.13 "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 IDENT. NO. 40 George J. Kosterick Robert K. Nueber SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

