

B 1 **2108** SEQUENCE NO. (DWR USE ONLY)

1 2 3 (SEQ. NO.) 6  
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

**STATE OF MARYLAND**  
 DEPARTMENT OF WATER RESOURCES  
 STATE OFFICE BLDG., ANNAPOLIS, MARYLAND 21401  
**APPLICATION FOR PERMIT TO DRILL WELL**

DWR PERMIT NUMBER  
 PG-Hf 33  
 FILL IN THIS FORM COMPLETELY

DATE RECEIVED (DWR USE ONLY)

OWNER: POTOMAC ELECTRIC POWER COMPANY  
 COL 15 LAST NAME FIRST NAME COL. 34  
 STREET OR RFD: 1000 Pennsylvania Ave., N.W.  
 COL 36 COL. 55  
 POST OFFICE: Washington, D. C. 20006  
 COL 57 COL. 76

B 1 CONTINUED DRILLER INFORMATION  
 1 2 3 (SEQ. NO.) 6  
 DATE: 2-12-72 LICENSE NUMBER: 23  
 77 80  
SHANNAHAN ARTESIAN WELL CO., INC.  
 FIRST NAME DRILLER LAST NAME  
 SIGNATURE: Norman M. Shannahan

B 3 LOCATION OF WELL  
 1 2 3 (SEQ. NO.) 6  
 COUNTY: Prince George's  
 8 (DO NOT ABBREVIATE COUNTY NAME) 21  
 SUBDIVISION: 23 42  
 SECTION: 44 46 LOT: 48 50  
 NEAREST TOWN: Eagle Harbor  
 52 71  
 MILES FROM TOWN (ENTER 0 IF IN TOWN): 2 M I  
 73 76 77 78

B 2 WELL INFORMATION  
 1 2 3 (SEQ. NO.) 6  
 MAXIMUM PUMPING RATE (GALLONS PER MINUTE): Test Well 8 12  
 AVERAGE DAILY QUANTITY NEEDED (GALLONS PER DAY): 14 20

B 4 DIRECTION FROM TOWN (CIRCLE APPROPRIATE BOX)  
 1 2 3 (SEQ. NO.) 6  
 N NORTH  E EAST  NE NORTHEAST  SE SOUTHEAST  
 S SOUTH  W WEST  NW NORTHWEST  SW SOUTHWEST  
 8 8 8 9 8 9  
 NEAR WHAT ROAD: Eagle Harbor Rd  
 11 NORTH SOUTH EAST WEST 30  
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  N  S  E  W 32 32 32  
 DISTANCE FROM ROAD (ENTER DISTANCE AND CIRCLE APPROPRIATE BOX) 7000 F T M I  
 34 37 38 39

USE FOR WATER (CIRCLE APPROPRIATE BOX)  
 D DOMESTIC, HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)  
 F FARMING, AGRICULTURE, IRRIGATION  
 I INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOVERNMENT.  
 M MUNICIPAL WATER SUPPLY } MUST HAVE STATE HEALTH DEPT. APPROVAL  
 P PRIVATE WATER COMPANY }  
 T TEST

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS, ROADS AND STREAMS WITH NORTH IN THE DIRECTION OF THE ARROW, AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION OR STREAM-CROSSING SHOWN ON THE SKETCH, ALSO SHOW, BY MEANS OF AN "X", THE WELL LOCATION IN THE BOX BELOW, AND THE BOX NUMBER FROM THE WELL LOCATION MAP.

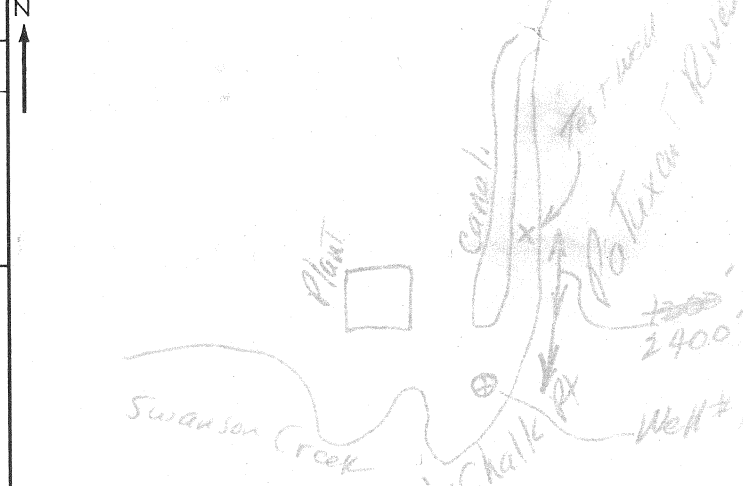
APPROXIMATE DEPTH OF WELL: 2500 FEET  
 24 28

APPROXIMATE DIAMETER OF WELL: 6" (NEAREST INCH)

METHOD OF DRILLING USED (CIRCLE APPROPRIATE METHOD)  
 BORED (OR AUGERED)  JETTED  DRIVEN  
 30-37  AIR-ROTARY  AIR-PERCUSSION  ROTARY (HYDRAULIC ROTARY)  
 CABLE  REVERSE-ROTARY  DRIVE-POINT  
 OTHER (DESCRIBE):

REPLACEMENT OR DEEPEINED 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 DEEPEIN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE)  
 41 52

NOT TO BE FILLED IN BY DRILLER (DWR USE ONLY)  
 APPROPRIATION PERMIT NUMBER: 54 ENGINEER REVIEW DISTRICT NO.: 63  
 FORCE: UW WRITE INITIALS IN BOX CONDITIONS: S  
 67 68 70 71 72 73 74 75 76 77 78 79



BOX NUMBER: 890 (E) 250 (N)  
 NORTH COORDINATE: 355000 50 51 52 53 54 55  
 EAST COORDINATE: 1190000 57 58 59 60 61 62 63  
 ELEVATION AT WELL HEAD (FEET): 0/0 65 66 67 68

B 4 CONTINUED HEALTH DEPARTMENT APPROVAL  
 1 2 3 (SEQ. NO.) 6  
 S STATE HEALTH (CIRCLE BOX) COUNTY NAME: COUNTY NO.:  
 MO. DAY YR. DATE: 02 12 72 APPROVED BY:  
 43 48

B 5 SPECIAL CONDITIONS 8-63 (DWR USE ONLY)  
 1 2 3 (SEQ. NO.) 6 TEST WELL MUST BE ABANDONED AND SEALED PER PERMITS REGS.

C 1 **3301** SEQUENCE NO. (WRA USE ONLY)  
 1 2 3 (SEQ. NO.) 6  
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

**STATE OF MARYLAND**  
**WATER RESOURCES ADMINISTRATION**  
 TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401  
**WELL COMPLETION REPORT**

THIS REPORT MUST BE SUBMITTED WITHIN 30 DAYS AFTER WELL COMPLETION  
 FILL IN THIS FORM COMPLETELY  
 COUNTY NUMBER **PG HF 32**

DATE RECEIVED (WRA USE ONLY) **May 30 1973** DEPTH OF WELL **1545' 6"**  
 DATE WELL COMPLETED **1545' 6"** PERMIT NO. FROM "PERMIT TO DRILL WELL" **73-73-0065**  
 8-13 18 20 22 (TO NEAREST FOOT) 26 28 29 30 31 32 33 34 35 36 37  
 DRILLERS IDENTIFICATION NO. **23**

OWNER **Potomac Electric Power Co.** LAST NAME **PG-HF 32** FIRST NAME  
 STREET OR RFD **1900 Penn Ave.** POST OFFICE **Washington, D.C.**

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

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET		CHECK IF WATER BEARING
	FROM	TO	
Fill	0	4'	
SAND + gr.	4'	12'	
Clay + gr.	12'	17'	
Green clay	17'	298'	
gray sand	298'	340'	
Crust, sand shell	340'	455'	
green sandy clay	455'	592'	
White sand	592'	639'	
Red Clay	639'	806'	
Sandy gray clay	806'	824' 6"	
white sand + wood	824' 6"	827'	
red, gray, white clay	827'	860'	
white sand + clay streak	860'	866'	
Mixed clays	866'	995'	
gray + red sandy clay	995'	1005'	
white sand	1005'	1011'	
Clay	1011'	1013'	
white sand	1013'	1035' 6"	
Mixed clays	1035' 6"	1450'	
White sand	1450'	1460'	
Mixed clays	1460'	1514' 7"	
Sand multicolor	1514' 7"	1541' 2"	
Clay	1541' 2"	1545' 6"	

**GROUTING RECORD**  
 WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX) YES  NO   
 TYPE OF GROUTING MATERIAL (CIRCLE BOX) CEMENT  BENTONITE CLAY   
 NO. OF BAGS **15** NO. OF POUNDS  
 GALLONS OF WATER **150**  
 DEPTH OF GROUT SEAL (TO NEAREST FOOT) FROM **0** FT. TO **200** FT.  
 (ENTER 0 IF FROM SURFACE)

**CASING RECORD**  
 INSERT APPROPRIATE CODE BELOW  
 STEEL  CONCRETE   
 PLASTIC  OTHER   
 MAIN CASING TYPE **ST** NOMINAL DIAMETER TOP (MAIN) CASING (NEAREST INCH) **2 1/2"** TOTAL DEPTH OF MAIN CASING (NEAREST FOOT) **1025'**

**OTHER CASING (IF USED)**  
 DIAMETER (INCH) DEPTH (FEET) FROM TO  
**ST 2" 1030 1525'**  
**ST 2" 1530 1545'**

**SCREEN RECORD**  
 SCREEN TYPE OR OPEN HOLE INSERT APPROPRIATE CODE BELOW  
 STEEL  BRASS OR BRONZE  OPEN HOLE   
 PLASTIC  OTHER

**EACH SCREEN**  
 C 2 (SEQ. NO.) 6  
 DEPTH (NEAREST WHOLE FOOT) FROM TO  
 1 **SS 1025 1030**  
 2 **SS 1525 1530**  
 3  
 SLOTSIZE 1, **15** 2, **15** 3, \_\_\_\_\_

DIAMETER OF SCREEN **3"** (NEAREST INCH) FROM 56 TO 60  
 GRAVEL PACK \_\_\_\_\_  
 IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX **68 F**

WRA 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 AVAILABLE

**PUMPING TEST**  
 C 3 (SEQ. NO.) 6  
 HOURS PUMPED (TO NEAREST HOUR) **4**  
 PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON) **15**  
 METHOD USED TO MEASURE PUMPING RATE **A.L. Barrel**  
 WATER LEVEL: (DISTANCE FROM LAND SURFACE) BEFORE PUMPING **+ 4'** (NEAREST FOOT)  
 WHEN PUMPING **45'** (NEAREST FOOT)  
 TYPE OF PUMPED USED (CIRCLE APPROPRIATE BOX) (FOR PUMPING TEST)  
 AIR  PISTON  TURBINE   
 CENTRIFUGAL  ROTARY  OTHER (DESCRIBE BELOW)   
 JET  SUBMERSIBLE

**PUMP INSTALLED**  
 TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX - SEE ABOVE: A, C, J, P, R, S, T, O)   
 DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX) YES  NO   
 CAPACITY: GALLONS PER MINUTE (TO NEAREST GALLON) **31** - **35**  
 PUMP HORSE POWER **37** - **41**  
 PUMP COLUMN LENGTH (NEAREST FOOT) **43** - **47**  
 CASING HEIGHT (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT)  
 ABOVE  BELOW  LAND SURFACE **5** (NEAREST FOOT)

**LOCATION OF WELL ON LOT**  
 SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS, SEPTIC TANKS, AND/OR OTHER LAND MARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).  
 Plant   
 Canal   
 Site 32   
 2 1/2' to well  
 Chalk Pt  
 Obs. Well Site 32

**CIRCLE APPROPRIATE BOXES**  
 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 I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT TO DRILL WELL", AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.  
 DRILLERS NAME **Norman M. Shannahan Jr**  
 SIGNATURE **Norman M. Shannahan Jr**

C 1 **7989** SEQUENCE NO. (WRA USE ONLY)

1 2 3 (SEQ. NO.) 6  
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

**STATE OF MARYLAND**  
**WATER RESOURCES ADMINISTRATION**  
 TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401  
**WELL COMPLETION REPORT**

THIS REPORT MUST BE SUBMITTED WITHIN 30 DAYS AFTER WELL COMPLETION

FILL IN THIS FORM COMPLETELY

COUNTY NUMBER **PG-4-33**

DATE RECEIVED (WRA USE ONLY) \_\_\_\_\_

DATE WELL COMPLETED **Sept 5, 1973**

DEPTH OF WELL **639'**  
 22 (TO NEAREST FOOT) 26

PERMIT NO. FROM "PERMIT TO DRILL WELL" **PG-73-0063**  
 28 29 30 31 32 33 34 35 36 37

DRILLERS IDENTIFICATION NO. **23**

OWNER **Potomac Electric Power Co.** LAST NAME **Chalk Pt Plant** FIRST NAME

STREET OR RFD **1900 Penn. Ave N.W.** POST OFFICE **Wash. D.C.**

**WELL LOG**

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

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET		CHECK IF WATER BEARING
	FROM	TO	
Fill	0	4	
SAND + gravel	4	12	
Clay + gravel	12	17	
gn. clay	17	61	
gn. clay + shell	61	120	
gn. sandy clay	120	298	
gray clay sand, some clay	298	340	
rust. SAND + some shale	340	455	
green sandy clay	455	592	
White sand	592	639	

**GROUTING RECORD**

WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX) YES  NO

TYPE OF GROUTING MATERIAL (CIRCLE BOX) CEMENT  BENTONITE CLAY

NO. OF BAGS **375** NO. OF POUNDS **37500**

GALLONS OF WATER **1900**

DEPTH OF GROUT SEAL (TO NEAREST FOOT) FROM **0** FT. TO **480** FT.

**CASING RECORD**

INSERT APPROPRIATE CODE BELOW

STEEL  CONCRETE

PLASTIC  OTHER

MAIN CASING TYPE **ST** NOMINAL DIAMETER TOP (MAIN) CASING (NEAREST INCH) **18"** TOTAL DEPTH OF MAIN CASING (NEAREST FOOT) **480'**

**OTHER CASING (IF USED)**

DIAMETER (INCH) **12** DEPTH (FEET) FROM **0** TO **596**

**SCREEN RECORD**

INSERT APPROPRIATE CODE BELOW

STEEL  BRASS OR BRONZE  OPEN HOLE

PLASTIC  OTHER

**SCREEN**

DEPTH (NEAREST WHOLE FOOT) FROM **55** TO **639**

DIAMETER OF SCREEN **10** (NEAREST INCH)

GRAVEL PACK **0** TO **639'**

IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX **68 F** NO

**WRA USE ONLY (NOT TO BE FILLED IN BY DRILLER)**

TELESCOPE CASING  LOG INDICATOR  OTHER DATA AVAILABLE

**PUMPING TEST**

HOURS PUMPED (TO NEAREST HOUR) **2 24**

PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON) **511**

METHOD USED TO MEASURE PUMPING RATE **Orifice**

WATER LEVEL: (DISTANCE FROM LAND SURFACE) BEFORE PUMPING **35'** WHEN PUMPING **206'**

TYPE OF PUMPED USED (CIRCLE APPROPRIATE BOX) AIR  PISTON  TURBINE  CENTRIFUGAL  ROTARY  OTHER  JET  SUBMERSIBLE

**PUMP INSTALLED**

TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX - SEE ABOVE: A, C, J, P, R, S, T, O)

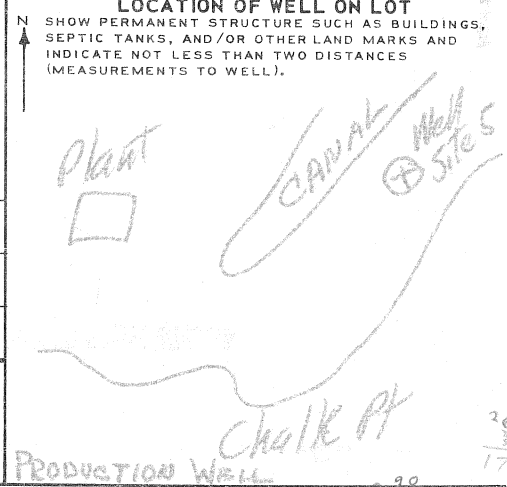
DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX) YES  NO

GALLONS PER MINUTE (TO NEAREST GALLON) **31** TO **35**

PUMP HORSE POWER **37** TO **41**

PUMP COLUMN LENGTH (NEAREST FOOT) **43** TO **47**

**CASING HEIGHT** (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT) **+** ABOVE LAND SURFACE **2** BELOW



**CIRCLE APPROPRIATE BOXES**

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 I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT TO DRILL WELL", AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

DRILLERS NAME **Norman M. Skamalak**

SIGNATURE **Norman M. Skamalak**

171511 1690 171531 1690 1510

PEPCO Chalk Point, Md. 18" x 12" Well #5

Productive Well #5

Estimated Capacity - 500 GPM.

Location Site (2)  
Test Well site

Drilled Hole

24"

Steel Casing

18"

Steel Casing

12"

Grout

Cigua Formation

435'

Sands

Sands & Clays

455'

Clays

480'

Filter Gravel Wall

Clays

592'  
596'

12" x 10" Steel Reducer

596'

Well to

Johnson 10" P.S.  
S.S. screen  
Xhy Const 43' low

Coarse  
Sand

Magother Aquifer

639' 3"

639'

PEPCO  
P.O. BOX 217  
ST. MARYS, MARYLAND