37°50' 15"

LATITUDE 37°47'30"

81°52'30"

LONGITUDE

7'5 OGIS topo location

7.5' loc 2.29S / 2.07W 15' loc (calc.) 5.17S / 4.34W

Company Permeator Corp

Farm P.C. Winters + W.F. Robinson 2

Quad Logan 7½ + 15'

County Logan

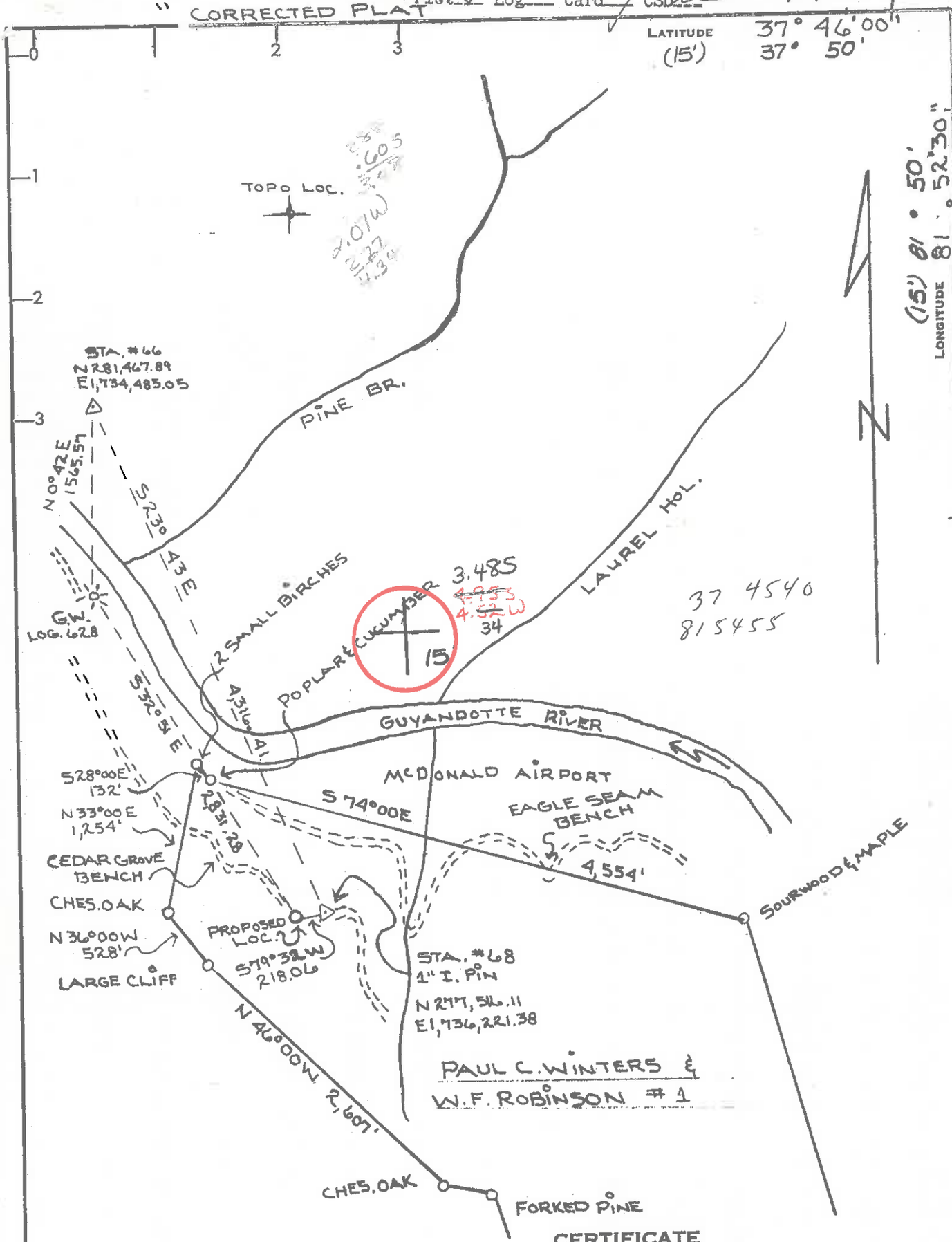
District Trivelphia

WELL LOCATION MAP

File No. Logan 1038

3-3 Member (673)

" CORRECTED PLAT Plat ✓ Log ___ Card ✓ CSD ___ 10/1/79



CERTIFICATE

☒ NEW LOCATION
☐ RECONDITION
☐ DRILL DEEPER
☐ ABANDONMENT

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."

Minimum degree of accuracy is one part in 1/6,512.00

Signed O. E. Preb S.V. 209

COMPANY PERMEATOR CORPORATION
ADDRESS 5200 MITCHELL - HOUSTON TX. 77092
FARM PAUL C. WINTERS & W.F. ROBINSON
MAP ___ ACRES 515.76 LEASE NO. 1
WELL (FARM) NO. 2 SERIAL NO. ___
ELEVATION (SPIRIT LEVEL) 1174.69
QUADRANGLE SW/4 LOGAN 15' QUAD.
COUNTY LOGAN DISTRICT TRIADELPHIA
POINT OF PROVEN ELEVATION DEHUE #2 U.S.C.G. STATION 1870.00
FILE NO. ___ DRAWING NO. ___
DATE 6-26-79 SCALE 1" = 1000'

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP

FILE NO. 47-045-1038
(CORRECTED PLAT)

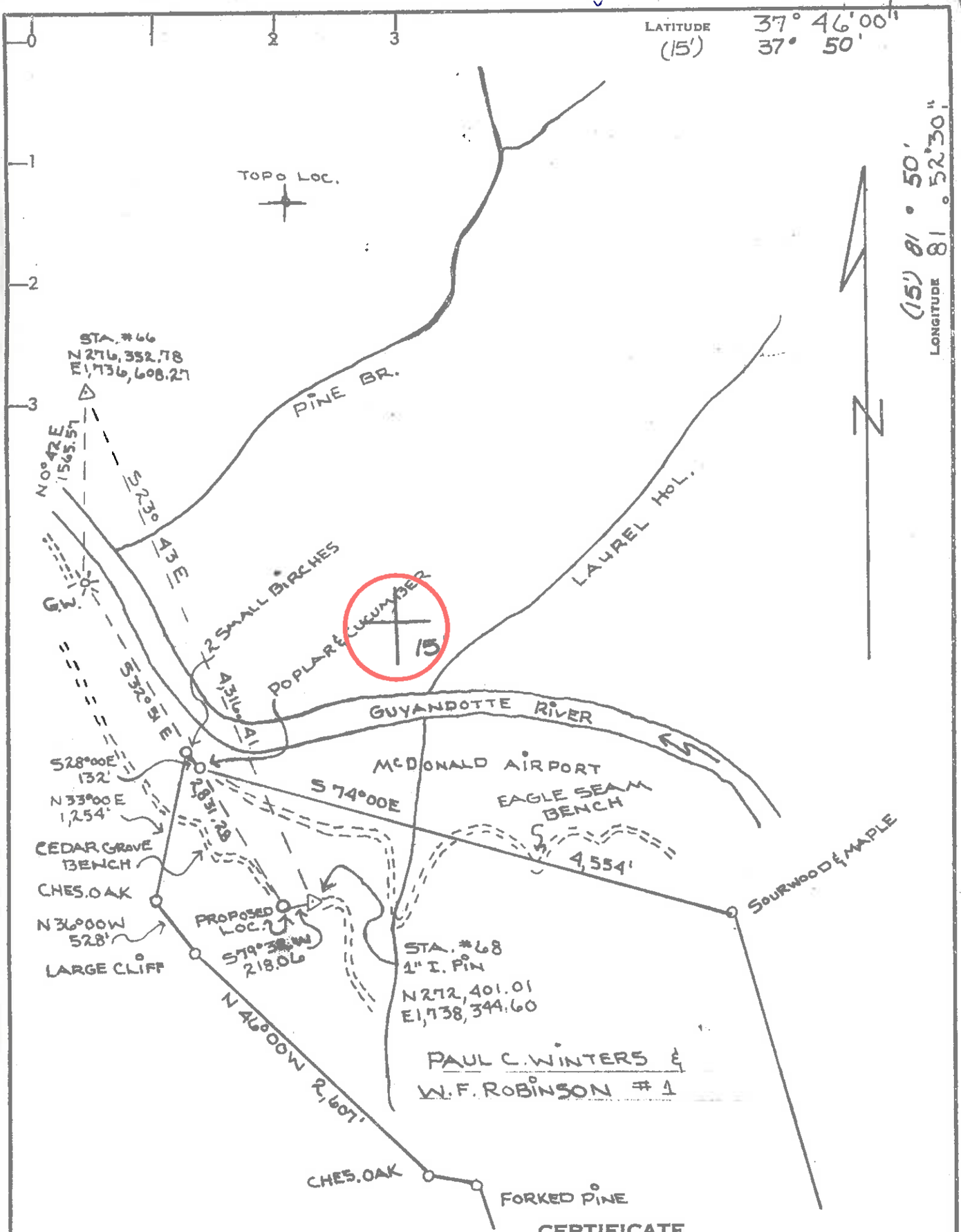
+ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS, SCALE 1 TO 62,500, LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.

— DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

NOV 14 1979

3-3 Rig 1 me 2 on MANBAR 273

Plot___ Log___ Card ✓ CSD___ 10/1/79



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POINT OF PROVEN ELEVATION DEHUE #2 U.S.C.G. STATION 1870.00
FILE NO. ___ DRAWING NO. ___
DATE 6-26-79 SCALE 1" = 1000'

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP

FILE NO. 47-045-1038

+ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS, SCALE 1 TO 24,000, LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.

— DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

OCT 12 1979

OG-10
Rev. - 9-71

RECEIVED
FEB - 5 1980
OIL & GAS DIVISION
DEPT. OF MINES

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Logan

Permit No. 47-045-1038

Appalachian Drilling
Rig "Laurie"
Rotary X Oil ____
Cable ____ Gas X
Recycling ____ Comb. ____
Water Flood ____ Storage ____
Disposal ____ ____ (Kind)

Company Permeator Corporation No. 2
Address 5200 Mitchelldale-Suite F30, Houston, TX
Farm Paul C. Winters, W.F.Robinson Acres 515.76
Location (waters) Guyandotte River
Well No. 1 Elev. 1185 EKB
District Tridelphia County Logan
The surface of tract is owned in fee by Paul C. Winter and W. F. Robinson
Address Logan, West Virginia
Mineral rights are owned by same
____ Address ____
Drilling Commenced 9-29-79
Drilling Completed 10-9-79
Initial open flow 58 M cu. ft. ____ bbls.
Final production 671 M cu. ft. per day ____ bbls.
Well open ____ hrs. before test 100# RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20/16 Cond.	35	35	
13/10" 11 3/4"	201	201	
9 5/8			
8 5/8	1640'	1640'	
7			
5 1/2			
4 1/2	-	3268	
3			
2			
Liners Used			

Attach copy of cementing record.

Well treatment details:

Foam frac Berea with 500 gal. HCl, 20000# 80/100, 20000# 20/40 in 220 bbl. BD 1200#, AIR 7 BPM, ATP 1475#, ISI 900#

Acid & Sand frac Big Lime with 8000 gal. HCl, 7500 # 80/100, 5000# 20/40 in 299 bbl. BD 2000#, ATP 2789#, AIR 13.6 BPM, ISI 1800#

Coal was encountered at ____ Feet ____ Inches
Fresh water 72' Feet ____ Salt Water ____ Feet ____
Producing Sand Berea, Big Lime Depth 3214-22 (17), 2560-62 (3), 2568-74 (13)

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Fill dirt			0	20		
Sand & Shale			20	126	Water @ 72'	
Sand			126	208		
Coal			208	211		
Shale & Sand			211	273		
Sand & Shale			273	368		
Shale & Sand			368	428		
Sand & Shale			428	504		
Shale			504	704		
Sand & Shale			704	768		
Shale			768	805		
Sand & Shale			805	932		
Sand			932	1052		
Shale			1052	1084		
Sand			1084	1122		
Shale & Sand			1122	1208		
Sand			1208	1670		
Shale			1670	1744		
Sand			1744	1780		
Shale & Sand			1780	2242		
Lime & Shale			2242	2300		
Pencil Cave			2300	2325		
Big Lime			2325	2578	Gas chk @ 2541' - No Show	

(over)

* Indicates Electric Log tops in the remarks section

FEB 28 1980

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale & Sand			2578	2856		
Shale			2856	3176		
Coffee Shale			3176	3204		
Berea			3204	3230		
Shale			3230			
TOTAL DEPTH				3294	Gas chk @ TD - 58 M	

3294
2578
716 EXPL FT.

Date _____ 19 ____

APPROVED Permeator Corporation Owner

By D. Glenn Haney Cons.
(Title)

FORM IV-2
(Obverse)

[08-78]

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL AND GAS WELL PERMIT APPLICATION

Date: September 24, 1979

Operator's
Well No. 2

API Well No. 47 - 045 - 1038
State County Permit

WELL TYPE: Oil ____/ Gas X /

(If "Gas", Production X / Underground storage ____/ Deep ____/ Shallow X /)

LOCATION: Elevation: 1174.69 Watershed: Guyandot River

District: Tridelphia County: Logan Quadrangle: Logan

WELL OPERATOR Permeator Corporation

Address 5200 Mitchelldale, Suite F-30

Houston, Texas 77092

DESIGNATED AGENT D. G. Haney

Address 1562 Dixie Street

Charleston, W. Va. 25311

OIL & GAS
ROYALTY OWNER Paul C. Winters & W. F. Robinson

Address Logan, West Virginia

Acreage 515.76

COAL OPERATOR Elkay Mining Company

Address

COAL OWNER(S) WITH DECLARATION ON RECORD:

Name

Address

SURFACE OWNER Same

Address

Acreage

Name

Address

FIELD SALE (IF MADE) TO:

Name

Address

COAL LESSEE WITH DECLARATION ON RECORD:

Name

Address

OIL & GAS INSPECTOR TO BE NOTIFIED

Name Mr. Arthur St. Clair

Address Brenton, West Virginia

RECEIVED
SEP 25 1979
OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed ____/ lease X / other contract ____/ dated _____, 19____, to the undersigned well operator from _____

[*If said deed, lease, or other contract has been recorded:*]

Recorded on November 30, 1968, in the office of the Clerk of the County Commission of Logan County, West Virginia, in Logan Book 29 at page 360. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper ____/ Redrill ____/ Fracture or stimulate ____/

Plug off old formation ____/ Perforate new formation ____/

Other physical change in well (specify) _____

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA OIL AND GAS
CONSERVATION COMMISSION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311

TELEPHONE: (304) 348-3092

Permeator Corporation
Well Operator

By D. Gene Haney

Its Consultant

RENEW DRILL

[08-78]

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Appalachian Drilling Company

Address Post Office Box 2669

Charleston, W. Va. 25301 Topo El. 1120'

GEOLOGICAL TARGET FORMATION, Big Lime, Berea

Estimated depth of completed well, 3000 feet Rotary X / Cable tools / /

Approximate water strata depths: Fresh, 485 feet; salt, 875 feet.

Approximate coal seam depths: 220, 365, 465, 795 Is coal being mined in the area? Yes / / No X /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS Size	Grade	Weight per ft	New	Used	FOOTAGE INTERVALS For drilling	Left in well	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
Conductor	16"			X		30'	30'		Kinds
Fresh water									
Coal	11"			X		240'	240'	Surface	Sizes
Intermediate	8 5/8"			X		1640'	1640'	Surface	
Production	4½"			X		-	3000'	As needed	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

NOTE: *Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.*

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

Permeator Corporation

Paul C. Winters & W. F. Robinson #1

Tridelphia District, Logan Co., W. Va.

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 6-1-80

Robert F. Hall

Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator X / owner / / lessee X / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: June 21, 1979

Elkay Mining Company

By T. H. Tinley

Its Vice President