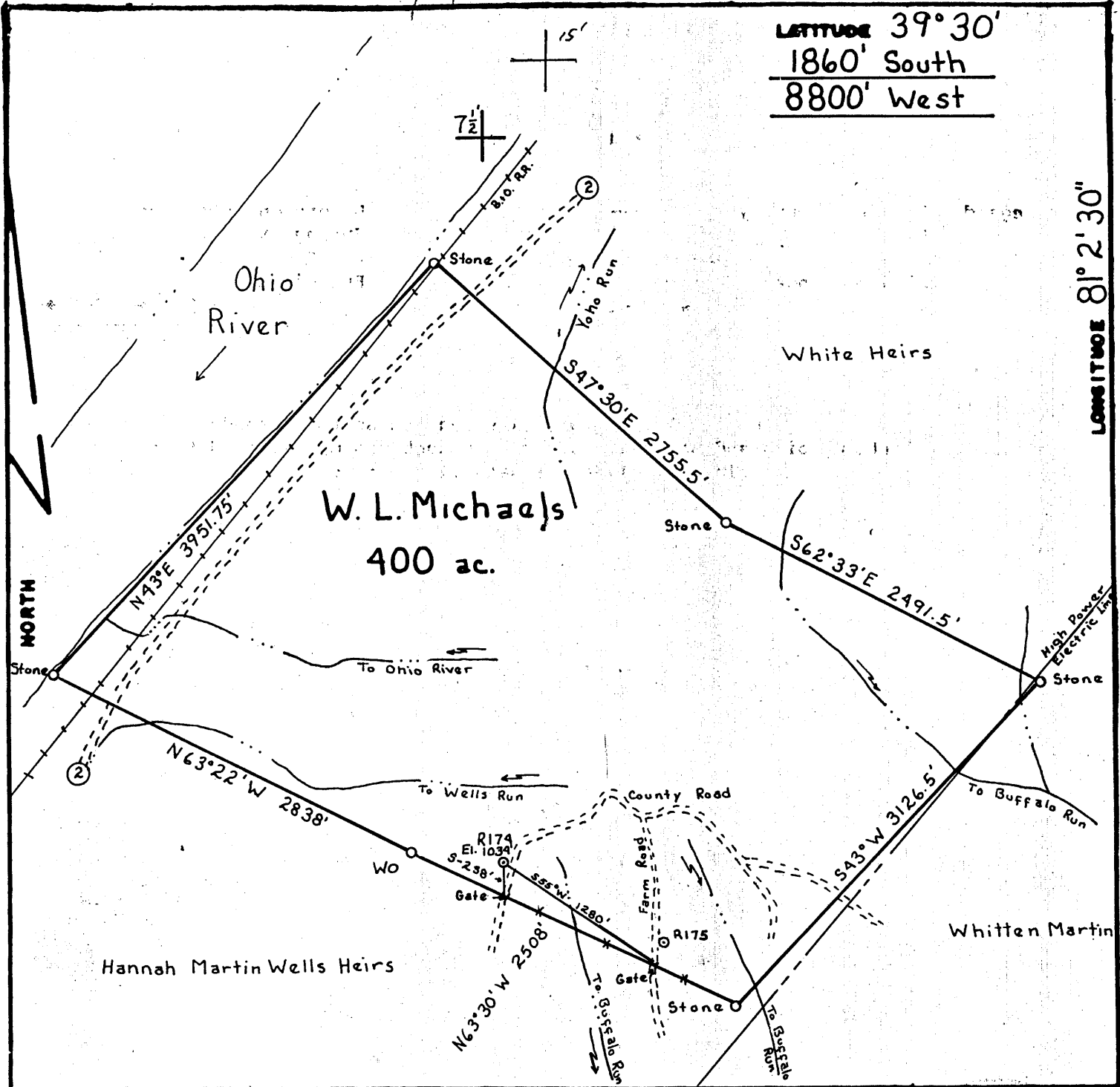


du 12/7

Latitude  $39^{\circ}30'$   
 1860' South  
 8800' West

LONGITUDE  $81^{\circ}2'30''$   
 81° 00'



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE  $1" = 1000'$   
 MINIMUM DEGREE OF ACCURACY  $1:200$   
 PROVEN SOURCE OF ELEVATION Road El. 959'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.  
 (SIGNED) William R. Mosser  
 R.P.E. \_\_\_\_\_ L.L.S. 551

STATE OF WEST VIRGINIA  
 LAND SURVEYOR  
 No. 551  
 PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6  
 (8-78)



DATE 23 Nov. 1980  
 OPERATOR'S WELL NO R-174  
 API WELL NO. 47-095-0886  
 STATE COUNTY PERMIT

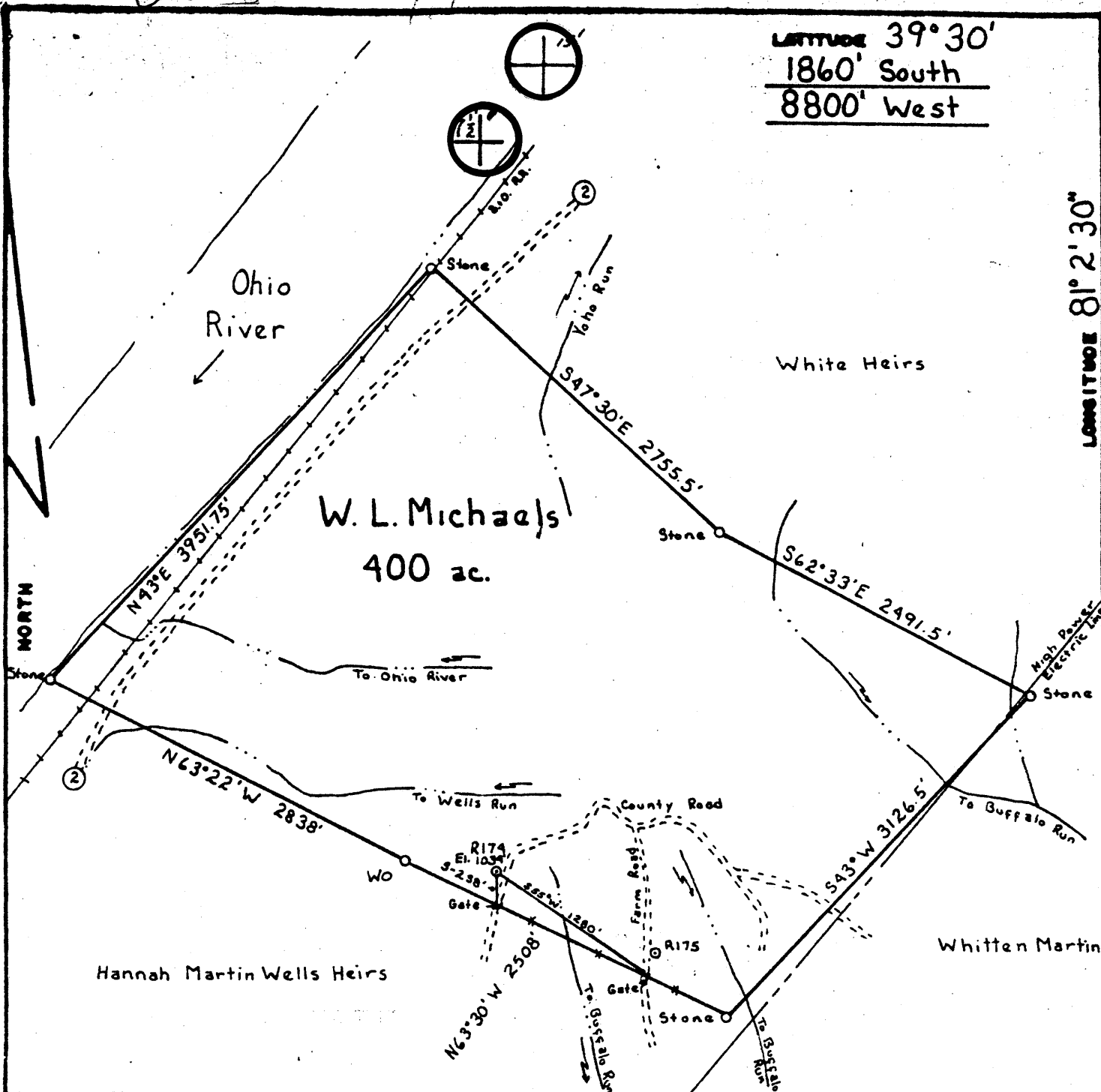
STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

CANCELLED

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 ( IF "GAS", PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW  )  
 LOCATION: ELEVATION 1034' WATER SHED Ohio River  
 DISTRICT Union COUNTY Tyler  
 QUADRANGLE Bens Run, W. Va. 7 1/2 Quad  
 SURFACE OWNER Alden Michaels ACREAGE 400  
 OIL & GAS ROYALTY OWNER W. L. Michaels LEASE ACREAGE 400  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE \_\_\_\_\_ PLUS OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION Shale ESTIMATED DEPTH 4000' 8 23 1987  
 WELL OPERATOR C.W. Riggs, Inc. DESIGNATED AGENT John Cox  
 ADDRESS P.O. Box 358 ADDRESS P.O. Box 358  
St. Marys, W. Va. 26170 St. Marys, W. Va. 26170

Latitude 39° 30'  
1860' South  
8800' West

LONGITUDE 81° 2' 30"



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=1000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION Road El. 959'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.  
 (SIGNED) William R. Massol  
 R.P.E. \_\_\_\_\_ L.L.S. 551

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6  
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DATE 23 Nov. 1980  
 OPERATOR'S WELL NO. R-174  
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 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS", PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 LOCATION: ELEVATION 1034' WATER SHED Ohio River  
 DISTRICT Union COUNTY Tyler  
 QUADRANGLE Bens Run, W. Va. 7<sup>th</sup> Quad St. Marys NE  
 SURFACE OWNER Alden Michaels ACREAGE 400  
 OIL & GAS ROYALTY OWNER W. L. Michaels LEASE ACREAGE 400  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE \_\_\_\_\_ PLUS OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION Shale ESTIMATED DEPTH 4000'  
 WELL OPERATOR C.W. Riggs, Inc. DESIGNATED AGENT John Cox  
 ADDRESS P.O. Box 358 ADDRESS P.O. Box 358  
St. Marys, W. Va. 26170 St. Marys, W. Va. 26170



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED  
DEC - 8 1980

Oil and Gas Division

OIL & GAS DIVISION  
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

DATE 11-30-80  
Company C. W. Riggs, Inc.  
Address Box 358, St. Marys, W. Va.  
Farm Michaels Acres 400  
Location (waters) Ohio River  
Well No. R-174 Elevation 1034'  
District Union County Tyler  
Quadrangle Bens Run, W. Va.

Surface Owner A. O. Michaels  
Address Friendly, W. Va.  
Mineral Owner Same As Surface  
Address " " "  
Coal Owner Same As Surface  
Address " " "  
Coal Operator None  
Address \_\_\_\_\_

THIS PERMIT MUST BE POSTED AT THE WELL SITE

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 8-10-81.

INSPECTOR  
TO BE NOTIFIED Phillip Tracy  
ADDRESS Middlebourne, W. Va.  
PHONE 758-4573

J. J. Murray  
Deputy Director Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated April 7 19 79 by Curtis Fox made to Loren E. Bagley and recorded on the 7th day of April 19 79, in Tyler County, Book 218 Page 522  
 NEW WELL \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  
\_\_\_\_\_ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. \*

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address \_\_\_\_\_ day \_\_\_\_\_ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND  
ECONOMIC SURVEY  
P. O. BOX 879  
MORGANTOWN, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address  
of  
Well Operator

Very truly yours,  
(Sign Name) T. N. Riggs  
Well Operator  
Box 358  
Street  
St. Marys  
City or Town  
W. Va.  
State

\*SECTION 3 . . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

**THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION**

PROPOSED WORK ORDER TO X DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:  
 NAME Haight Drilling Inc. NAME C. W. Riggs, Inc.  
 ADDRESS Smithville, W. Va. ADDRESS St. Marys, W. Va.  
 TELEPHONE 477-3333 TELEPHONE 684-3974  
 ESTIMATED DEPTH OF COMPLETED WELL: 4900' ROTARY X CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Upper Devonian Shale  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB. X STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

**TENTATIVE CASING PROGRAM:**

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT FILL UP OR SACKS CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	250' Minimum	250'	cement top-bottom
7			
5 1/2			
4 1/2		4900'	200 sks. <i>as reqd.</i>
3			Perf. Top <i>by rule 15.01</i>
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 115' FEET n/a SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS n/a  
 IS COAL BEING MINED IN THE AREA? no BY WHOM? \_\_\_\_\_

**TO DRILL:**

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

**TO DRILL DEEPER OR REDRILL:**

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

**TO FRACTURE - STIMULATE:**

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
For Coal Company

\_\_\_\_\_  
Official Title