

11/11

NOTES: LATITUDE, LONGITUDE, WELL AND CORNER TIES FROM DGPS SUBMETER SURVEY. SURFACE, ADJOINER AND BOUNDARY INFORMATION TAKEN FROM COURT HOUSE.

LATITUDE 39-12-30

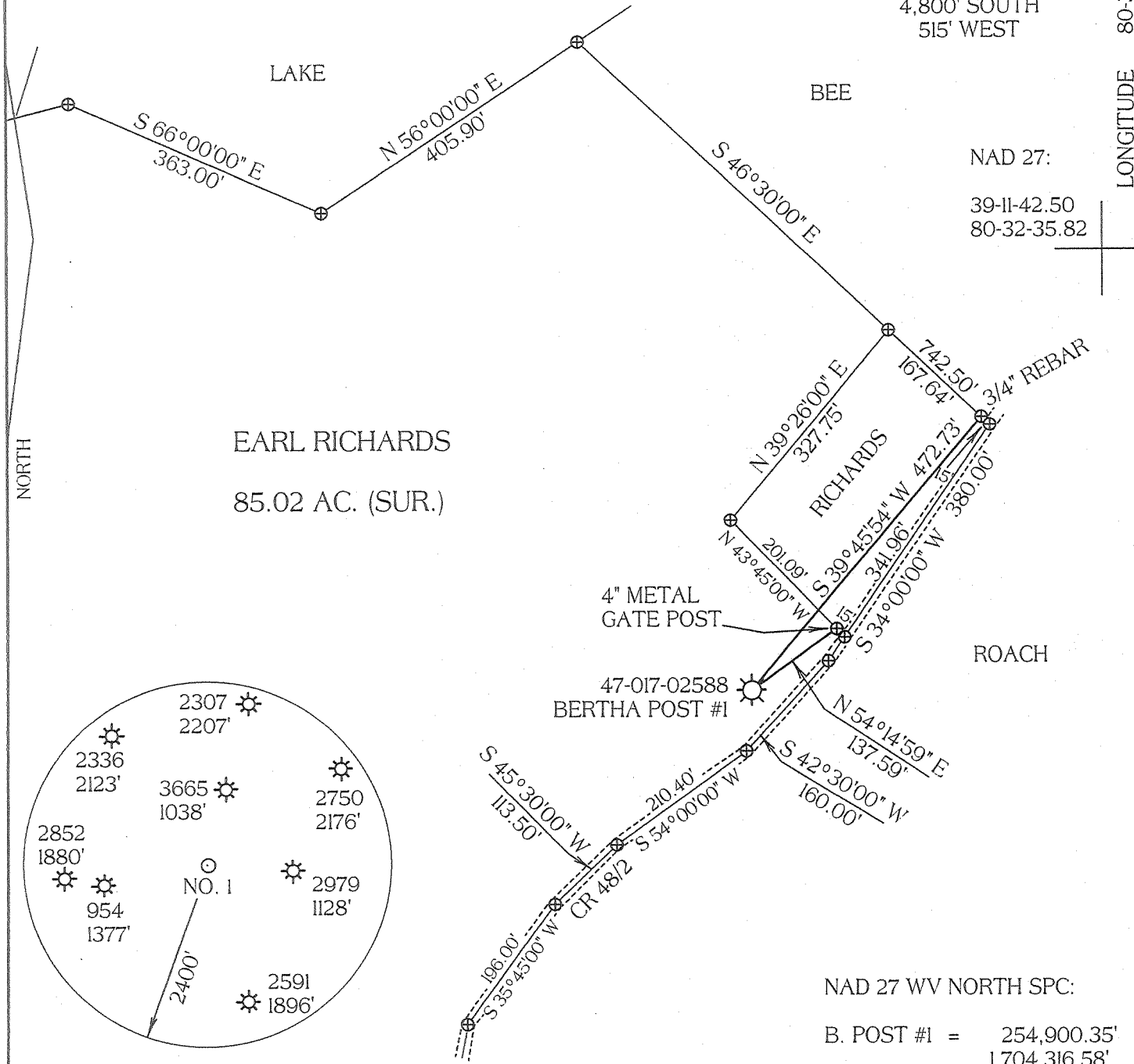
SCALED COOR.:

4,800' SOUTH
515' WEST

NAD 27:

39-11-42.50
80-32-35.82

LONGITUDE 80-32-30



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

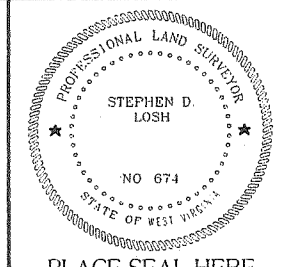
NAD 27 WV NORTH SPC:

B. POST #1 = 254,900.35'
1,704,316.58'

FILE NUMBER: _____
 DRAWING NUMBER: DGPIBPOST.PCS
 SCALE: 1" = 200'
 MINIMUM DEGREE OF ACCURACY: SUBMETER
 PROVEN SOURCE OF ELEVATION: DGPS SURVEY
SUBMETER SYSTEM

I THE UNDERSIGNED, HEREBY STATE 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 ENERGY.

(SIGNED) _____
 STEPHEN D. LOSH, P.S. #674



STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 #10 MCKUNKIN ROAD
 NITRO, WV 25143-2506

FORM WW-6

LAND SURVEYING SERVICES
 21 CEDAR LANE, BRIDGEPORT, WV 26330
 PHONE: 304-842-2018 OR 842-5762

DATE: OCTOBER 12, 2006
 OPERATORS WELL NO.: BERTHA POST #1
 API WELL NO. _____
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL CBM
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1029.12' WATERSHED LAUREL RUN NOV 10 2006
 DISTRICT GREENBRIER COUNTY DODDRIDGE
 QUADRANGLE BIG ISAAC LEASE NUMBER _____

SURFACE OWNER EARL RICHARDS ACREAGE 85.02
 OIL & GAS ROYALTY OWNER BERTHA POST LEASE ACREAGE 150.15

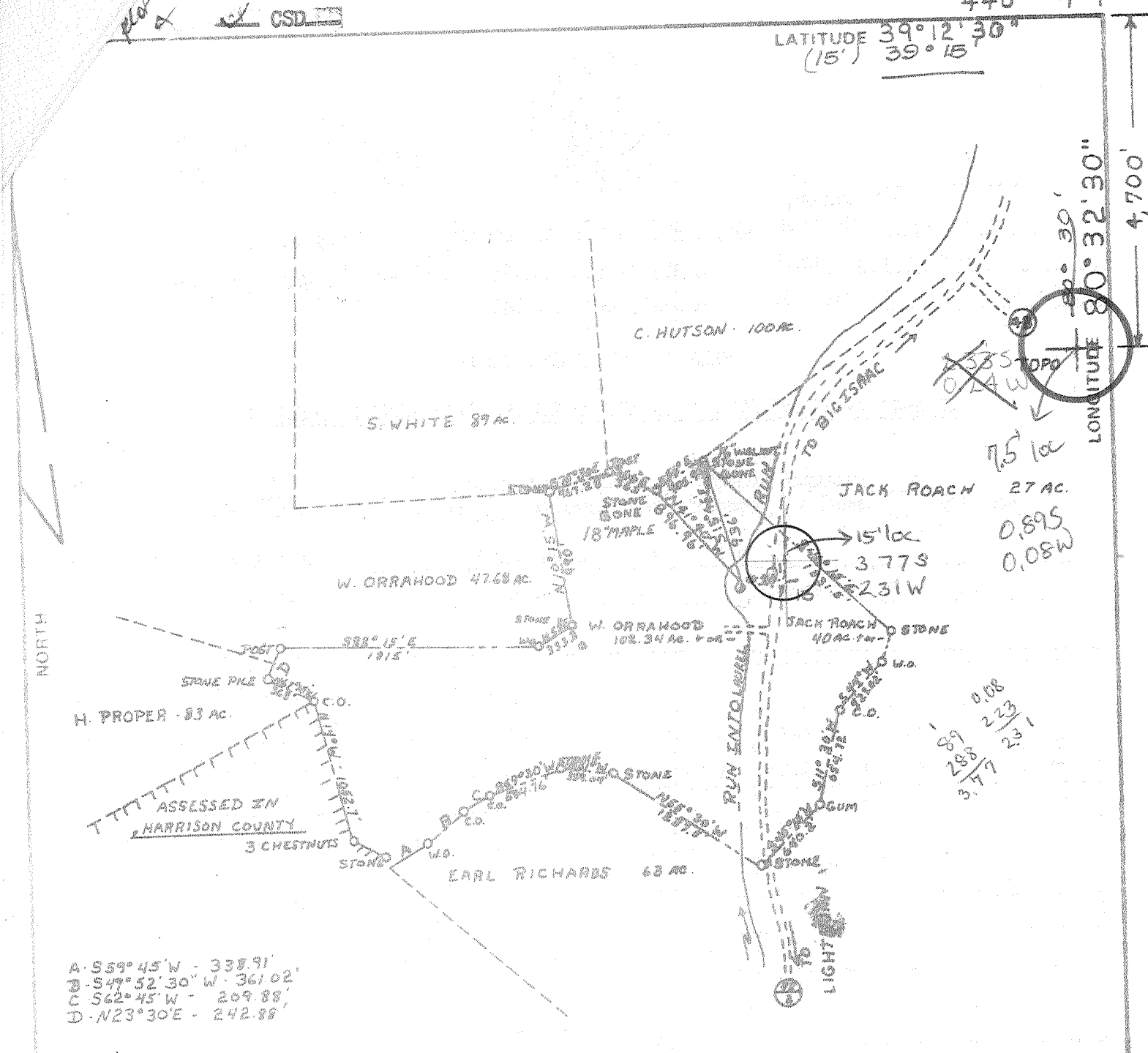
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY) _____

TARGET FORMATION GORDON PLUG & ABANDON CLEAN OUT & REPLUG
 ESTIMATED DEPTH 2500'

WELL OPERATOR DEVONIAN GAS PRODUCTION, INC. DESIGNATED AGENT JOHN HASKINS
 ADDRESS P. O. BOX 907 JANE LEW, WV 26378 ADDRESS P. O. BOX 907 JANE LEW, WV 26378

COUNTY NAME PERMIT

D000 2588F



FILE NO. PDC #3-PG-39
 DRAWING NO. 1
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1' IN 200'
 PROVEN SOURCE OF ELEVATION 985' INTER. OF RT. 1 AND RT. 25

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) Thomas E. Weaver, Jr.
 R.P.E. _____ L.L.S. 410

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV 6 (878)



DATE JANUARY 23, 1980
 OPERATOR'S WELL NO. 1
 API WELL NO. 47-017-2588
 STATE VA COUNTY BRIDGEPORT 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 1030' WATER SHED LAUREL RUN
 DISTRICT GREEN BRIER COUNTY BRIDGEPORT
 QUADRANGLE BIG T SAAC 74 VADIS 15' NE
 SURFACE OWNER W. ORRAHOOD ACREAGE 102.341
 OIL & GAS ROYALTY OWNER BERTHA POST LEASE ACREAGE 150.15
 LEASE NO. _____

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION CEDAR CREEK ESTIMATED DEPTH 5500'
 WELL OPERATOR PETROLEUM DEVELOPMENT DESIGNATED AGENT PETROLEUM DEVELOPMENT CORP.
 ADDRESS 103 E. MAIN STREET ADDRESS 103 E. MAIN STREET
BRIDGEPORT W.VA. 26320 BRIDGEPORT, W.VA. 26330

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

STAGE	FORMATION	PERFORATIONS	SAND LADEN FLUID	SAND		ACID
				80/100	20/40	
1st	Cedar Creek	20(5046-5080)	632 bbls	15,000#	45,000#	15 bbls
2nd	Benson	13(4724-4734)	626 bbls	15,000#	45,000#	9 bbls

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
K.B. - G.L.			0'	10'	1" stream of H ₂ O at 45'. 1½" stream of H ₂ O at 397'. Hole wet @ 1480' Gas check @ 3090' 25/10 = 1" Mercury Gas check @ 3621' 22/10 = 1" Mercury Gas check @ 5275' 16/10 = 1" Mercury
Soil			10'	20'	
Sand, Shale			20'	500'	
Ssnd			500'	520'	
Sand, Shale			520'	1816'	
Big Lime			1816'	1896'	
Big Injun			1896'	2000'	
Sand, Shale			2000'	2396'	
Gordon Stray/Gordon			2396'	2570'	
Sand, Shale			2570'	2762'	
5th			2762'	2802'	
Sand, Shale			2802'	3404'	
Speechley			3404'	3448'	
Sand, Shale			3448'	3550'	
Balltown			3550'	3742'	
Sand, Shale			3742'	4122'	
Bradford			4122'	4222'	
Sand, Shale			4222'	4432'	
Riley			4432'	4510'	
Sand, Shale			4510'	4718'	
Benson			4718'	4778'	
Sand, Shale			4778'	5042'	
Cedar Creek (alex)			5042'	5102'	
Sand, Shale			5102'	5275' TD	

(Attach separate sheets as necessary)

PETROLEUM DEVELOPMENT CORPORATION, BRIDGEPORT, WV 26330

Well Operator

By: Mel. Edwards

Date: 4/20/84

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

FEB - 1 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 JANUARY 24, 1980

Surface Owner WILFORD ORRAHOOD

Company PETROLEUM DEVELOPMENT CORPORATION

Address RT. 3 SALEM, WV 26426

Address P.O. Box 26 Bridgeport, WV

Mineral Owner ADA SOMMERVILLE et al

Farm Bertha Post Acres 150.15

Address Stonewall Jackson Hotel Apt.
3rd St. Clarksburg, WV

Location (waters) Laurel Run

Coal Owner Eastern Assoc. Coal Co.

Well No. ONE Elevation 1030'

Address Fairview, WV Federal #2 Mine

District Greenbrier County Doddridge

Coal Operator _____

Quadrangle Big Isiac

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 10/4/80

INSPECTOR
TO BE NOTIFIED Paul Garrett

ADDRESS Clarksburg WV 26301

PHONE 622-3871

Robert R. [Signature]
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 eb. 16 19 78 by Bertha Post et al made to PETROLEUM DEV. CORP. and recorded on the 29th day of March 19 78 in Doddridge County, Book 103 Page 593

XX 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, *[Signature]*
(Sign Name) PETROLEUM DEVELOPMENT CORPORATION
Well Operator

P.O. Box 26 Bridgeport, WV
Street
West Virginia
City or Town

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.

47-017-2588 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by _____

BLANKET BOND

[Handwritten signature]

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

PROPOSED WORK ORDER TO XX DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____

DRILLING CONTRACTOR: (If Known)

RESPONSIBLE AGENT:

NAME Unkown

NAME Petroleum Development Developm

ADDRESS _____

ADDRESS P.O. Box 26 Bridgeport, WV

TELEPHONE _____

TELEPHONE 842-6256

ESTIMATED DEPTH OF COMPLETED WELL: 5500'

ROTARY XX CABLE TOOLS _____

PROPOSED GEOLOGICAL FORMATION: Cedar Creek

TYPE OF WELL: OIL _____ GAS XX COMB. _____ STORAGE _____ DISPOSAL _____

RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10 13 3/8	40'	40'	
9 - 5.8			
8 - 5.8		1150'	
7			
5 1/2		5250'	
4 1/2			
3			Perf. Top
2			Perf. Bottom
			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 30' FEET 150' SALT WATER 500' FEET

APPROXIMATE COAL DEPTHS 400' 840' 960' 1000'

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

Fracture Information

Perforations 2500-2540 20 Holes

20,000 lb. Of 2040 Sand

350 BBL H2O