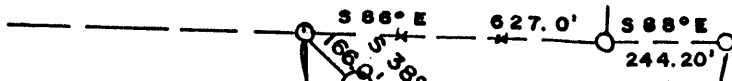


04. 2-22-83

10,600'

LATITUDE 39° 17' 30"  
39° 20' 00"

G. BOLYARD



C. GOFF

C. ROSIERS ESTATE

1.505  
2.014

Topo 7-1/2 MIN.  
No Well In 1750'

79° 45' 00"

LONGITUDE 79° 47' 30"

7900'

NORTH

A. RIDGEWAY

NO WELLS IN 2400'

FILE NO. 81-871-X  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 400'  
MINIMUM DEGREE OF ACCURACY 1/2500  
PROVEN SOURCE OF ELEVATION S.G. ELEV. 1684.0 ON CO. RD. (74/3) AT PROPERTY COR. 1800' S.E. OF WELL SITE

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) John Robert Gales

R.P.E. 5566 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

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

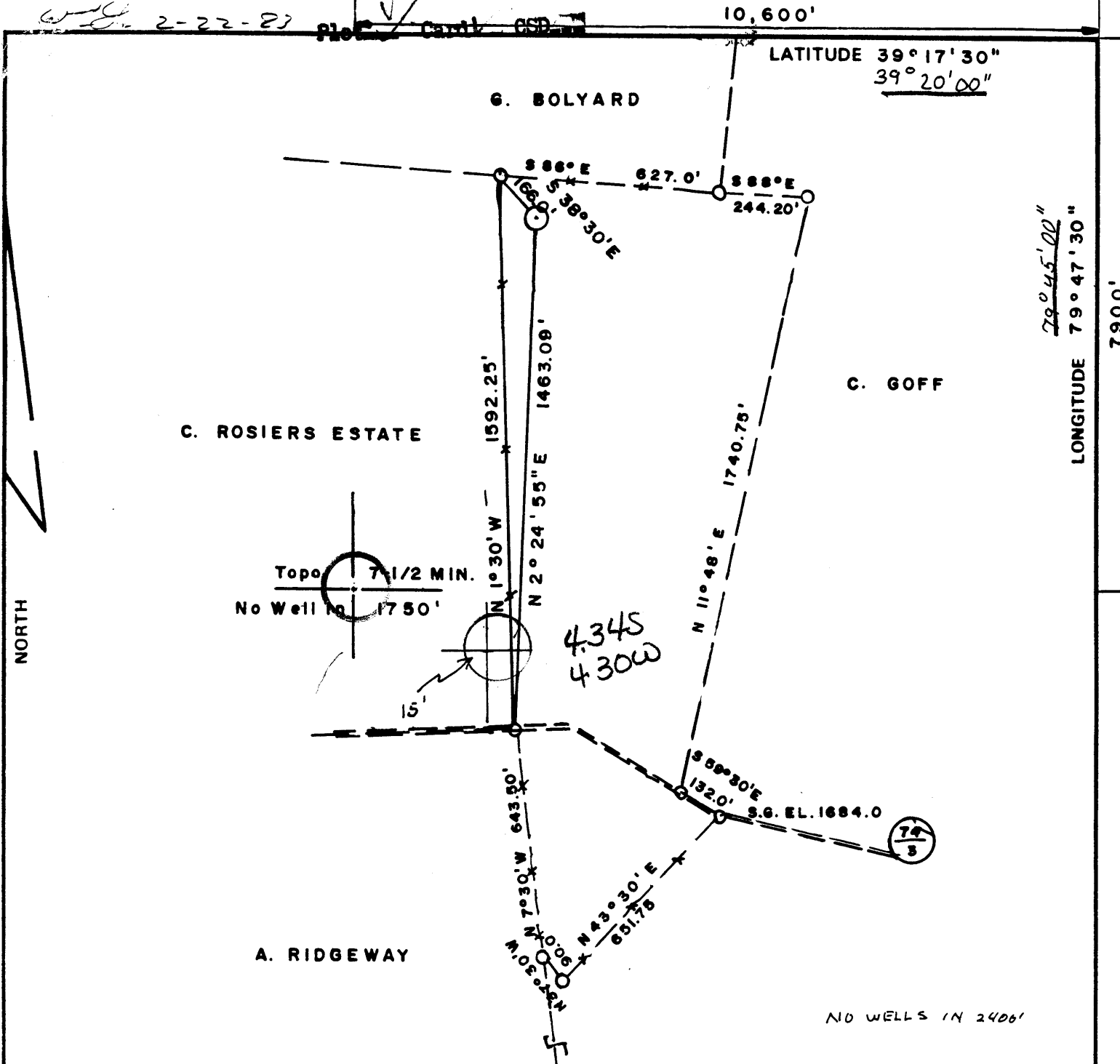


DATE MARCH 10, 1982  
OPERATOR'S WELL NO. J-650  
API WELL NO. 47-077-002387  
STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
LOCATION: ELEVATION 1730.00 WATER SHED SANDY CREEK  
DISTRICT RENO COUNTY PRESTON  
QUADRANGLE FELLOWSVILLE  
SURFACE OWNER INTERSTATE LUMBER CO. ACREAGE 30.60  
OIL & GAS ROYALTY OWNER INTERSTATE LUMBER CO. LEASE ACREAGE 30.60  
LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Existing well drilled in 1983 TD. 5800 Set temporary plug from Bulltown & Goechley & Comingle.  
PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
TARGET FORMATION Haverly ESTIMATED DEPTH 5600  
WELL OPERATOR J&J ENTERPRISES INC. DESIGNATED AGENT Richard M. Reddecliff  
ADDRESS P.O. BOX 48 ADDRESS P.O. Box 48  
BUCKANNON W. VA. 26201 Buckhannon WV 26201

JUL 12 1999



FILE NO. 81-871-X  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 400'  
 MINIMUM DEGREE OF ACCURACY 1/2500  
 PROVEN SOURCE OF ELEVATION S.G. ELEV. 1684.0 ON CO. RD. (74/3) AT PROPERTY COR. 1800' S.E. OF WELL SITE

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) John Robert Gale  
 R.P.E. 5566 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

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



DATE MARCH 10, 1982  
 OPERATOR'S WELL NO. J-650  
 API WELL NO. \_\_\_\_\_  
47 - 077 - 0238  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1730.00 WATER SHED SANDY CREEK  
 DISTRICT RENO COUNTY PRESTON  
 QUADRANGLE FELLOWSVILLE Whornton 10 SE  
 SURFACE OWNER INTERSTATE LUMBER CO. ACREAGE 30.60  
 OIL & GAS ROYALTY OWNER INTERSTATE LUMBER CO. LEASE ACREAGE 30.60  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Haverty ESTIMATED DEPTH 5600  
 WELL OPERATOR J & J ENTERPRISES INC. DESIGNATED AGENT Richard M. Redde MAR 14 1982  
 ADDRESS P.O. BOX 48 ADDRESS P.O. Box 48  
BUCKANNON W. VA. 26201 Buckhannon, WV 26201

6-6 unnamed to (316)

**RECEIVED**

SEP 12 1983

Date: September 2, 19 83  
Operator's Well No. J-650 **238**  
API Well No. 47 - 077 - **1730**  
State County Permit

STATE OF WEST VIRGINIA  
OIL & GAS DIVISION DEPARTMENT OF MINES, OIL AND GAS DIVISION  
**DEPT. OF MINES**

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil  / Gas  / Liquid Injection  Waste Disposal   
If "Gas", Production  / Underground storage  Deep  Shallow   
LOCATION: Elevation: 1730 Watershed: Sandy Creek  
District: Reno County: Preston Quadrangle: Fellowsville

WELL OPERATOR J&J Enterprises, Inc. DESIGNATED AGENT Richard Reddecliff  
Address P.O. Box 48 Address P.O. Box 48  
Buckhannon, WV 26201 Buckhannon, WV 26201

PERMITTED WORK: Drill  / Convert  / Drill deeper  / Redrill  / Fracture or stimulate   
Plug off old formation  / Perforate new formation   
Other physical change in well (specify) \_\_\_\_\_

PERMIT ISSUED ON 9/8, 19 83 OIL & GAS INSPECTOR FOR THIS WORK:

IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED

Name Wm. Blosser  
Address Rt. # 4, Box 317  
Fairmont, WV 26564

GEOLOGICAL TARGET FORMATION: Haverty Depth 5256-60 feet  
Depth of completed well, 5860 feet Rotary  / Cable Tools   
Water strata depth: Fresh, 100,400 feet; salt, 0 feet.  
Coal seam depths: 0 Is coal being mined in the area? NO  
Work was commenced 6/16, 19 83, and completed 6/24, 19 83

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor	113/4	H-40	42	x		24	0	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		1260.86	1260.86	315 sks.	
Coal	8 5/8	ERW	23	x		1260.86	1260.86	315 sks.	Sizes
Intermediate	4 1/2	J-55	10.5	x		5649.70	5649.70	525 sks.	Design set
Production									
Tubing									
Liners									Perforations:
									Top Bottom
									5485 5544
									5130 5134
									4416 4421
									4189 4198

OPEN FLOW DATA

Producing formation Haverty Pay zone depth 5485-5544 feet  
Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d  
Combined Final open flow, 112 Mcf/d Final open flow, \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests, 4 hours  
Static rock pressure, 790 psig (surface measurement) after 96 hours shut in  
[If applicable due to multiple completion--] see back 5130-34  
Second producing formation 4th Elk, 1st Elk & Benson Pay zone depth 4189-98 feet  
Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d  
Final open flow, \_\_\_\_\_ Mcf/d Final open flow, \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests, \_\_\_\_\_ hours

Bottom Hole Pressure Static rock pressure, \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in  
Pf=PweXGLS 1 1  
t=60 + (0.0075 x 56.50) + 459.7 = 562 X=53.35 x 562 = 29987 = 0.0000333 Pf=790 x 2.72 (0.0000333) (0.4867) (0.9) = 790 x 2.72<sup>0.084</sup> = 790 x 1.09  
Pf=861 psi

SEP 19 1983

[08-78]

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

Haverty: Perforations: ~~5485-86~~ (3 holes) 5534-36 (6 holes) 5542-44 (6 holes)  
Fracturing: 5,000 lbs. 80/100 sand: 25,000 lbs. 20/40 sand: 500 gal. Acid:  
480 Bbls. fluid.

4th ELk: Perforations: 5130-34 (16 holes)  
Fracturing: 5,000 lbs. 80/100 sand: 26,000 lbs. 20/40 sand: 500 gal. Acid:  
480 Bbls. fluid.


1st. ELk: Perforations: 4416-21 (15 holes)  
Fracturing: 5,000 lbs. 80/100 sand: 24,000 lbs. 20/40 sand: 500 gal. Acid:  
*Alexander* 480 Bbls. fluid.

Benson: Perforations: 4189-90 (3 holes) 4195-98 (9 holes)  
Fracturing: 5,000 lbs. 80/100 sand: 24,000 lbs. 20/40 sand: 500 gal. Acid:  
480 Bbls. fluid.

WELL 103

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Shale & red rock			0	75	
Shale, sand & sandy shale			75	120	Damp @ 45'
Red rock & shale			120	160	
Sandy shale & red rock			160	200	1/2" stream @ 100'
Sand & shale			200	610	
Black shale			610	620	1/2" stream @ 400'
Sand & shale			620	880	
Black shale			880	910	1/2" stream @ 1750
Sand, sandy shale & red rock			910	1200	
Sandy shale, red rock and shale			1200	1270	Gas ck @ 1838 No show
Sandy shale, red rock and sand			1270	1490	Gas ck @ 2416 No show
Little lime			1490	1510	
Red rock and shale			1510	1520	Gas ck @ 2925 No show
Big Lime			1520	1550	
Red rock & shale			1550	1620	Gas ck @ 3631 No show
Injun			1620	1755	
Shale, sand & red rock			1755	2820	Show of oil @ 3900
Shale & sand			2820	3305	
Balltown			3305	3460	Gas ck @ 4208 No show
Shale & sand			3460	4189	
Benson			4189	4198	Gas ck @ 4301 No show
Sandy shale			4198	4416	
1st Elk			4416	4421	Gas ck @ 4780 No show
Shale			4421	4630	
2nd ELk			4630	4660	Gas ck @ 5227 No show
Sandy shale			4660	5130	
4th Elk			5130	5134	Gas ck @ 5734 No show
Sandy shale			5134	5485	
Haverty			5485	5544	Gas ck @ Drill collars No show
Sandy shale			5544	5860	
				T.D.	Brallier @ T.D.

(Attach separate sheets to complete as necessary.)

J&J Enterprises, Inc.  
Well Operator  
By   
Robert Danlin  
Geologist

NOTE: Regulation 2.02(4) 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."



1) Date: February 18, 19 83  
 2) Operator's Well No. J-650  
 3) API Well No. 47 State 077 County 238 Permit

DRILLING CONTRACTOR:

W. Jack Drilling Co.  
P.O. Box 48  
Buckhannon, WV 26201

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

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil \_\_\_\_\_ / Gas X /  
 B (If "Gas", Production X / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow \_\_\_\_\_ /)
- 5) LOCATION: Elevation: 1730 Watershed: Sandy Creek  
 District: None County: Putnam Quadrangle: Fallcamville
- 6) WELL OPERATOR J&J Enterprises, Inc. 11) DESIGNATED AGENT Richard M. Daddoliff  
 Address P.O. Box 48 Address P.O. Box 48  
Buckhannon, WV 26201 Buckhannon, WV 26201
- 7) OIL & GAS ROYALTY OWNER Interstate Lumber Co. 12) COAL OPERATOR None  
 Address 601 E. Main St. Address \_\_\_\_\_  
Kingwood, WV 26537
- 8) SURFACE OWNER Interstate Lumber Co. 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Address 601 E. Main St. Name Eastern Assoc. Coal Corp.  
Kingwood, WV 26537 Address Koppers Building  
 Acreage 30.60 Pittsburgh, Pa. 15210  
 Name \_\_\_\_\_  
 Address \_\_\_\_\_
- 9) FIELD SALE (IF MADE) TO:  
 Address Unknown
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name Mr. Blosser Address \_\_\_\_\_  
 Address Rt. 4, Box 317 Address \_\_\_\_\_  
Fairmont, WV 26564
- 15) PROPOSED WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Fracture or stimulate X /  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_ /  
 Other physical change in well (specify) \_\_\_\_\_
- 16) GEOLOGICAL TARGET FORMATION, Beaverly
- 17) Estimated depth of completed well, 5600 feet
- 18) Approximate water strata depths: Fresh, 150 feet; salt, None feet.
- 19) Approximate coal seam depths: 300 Is coal being mined in the area? Yes \_\_\_\_\_ / No X /

20) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	11 3/4	H-40	42	X		30	0	0 sbs.	Kinds
Fresh water	8 5/8	HRW	23	X		1400	1400	To surf.	
Coal	8 5/8	HRW	23	X		1400	1400	To surf.	Sizes
Intermediate									
Production	4 1/2	J-85	10.5	X		5550	5550	400 sbs.	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

21) EXTRACTION RIGHTS

Check and provide one of the following:

- Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.  
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)

22) ROYALTY PROVISIONS

Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes  No

If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

23) Required Copies (See reverse side.)

24) 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.

Notary: Linda S. Canfield  
 My Commission Expires October 16, 1983

Signed: \_\_\_\_\_  
 Its: Designated Agent

OFFICE USE ONLY  
**DRILLING PERMIT**

Permit number \_\_\_\_\_ Date March 1983

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector. (Refer to No. 10) Prior to the construction of roads, locations and pits for any permitted work.** In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

Permit expires November 3, 1983 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
-------	--------	-------	--------	-----

Administrator, Office of Oil and Gas

Line Item Explanation

- 1) Date of Application
- 2) Your well name and number
- 3) To be filled out by office of oil & gas
- 4A) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves underground reservoirs: "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil.
- 4B) "Shallow well" means any well drilled and completed in a formation above the top of the uppermost member of the "Onondaga Group" or a depth less than six thousand feet, whichever is shallower.  
 "Deep well" means any well drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group" or at a depth less than six thousand feet, whatever is shallower.
- 5) Where well is located
- 6) Before a permit can be issued in a corporation, company partnership, or fictitious name, the name must be registered with the Secretary of State Office
- 7) Use separate sheet if necessary
- 8) Present surface owner at time application is filed.
- 9) Optional
- 11) See Reg. 7.01 relating to code §22-4-1k
- 12) "Coal Operator" means any persons, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine. See Note 24
- 13 & 14) As per §22-4-20; See Note 24
- 15) Work that will be attempted—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.
- 16) Anticipated formation for which well will be completed
- 17) Self explanatory
- 18) Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in elevation
- 19) All coal seam depths
- 20) Proposed casing program and cementing refer to Code 22-4-5, 22-4-6, 22-4-7, 22-4-8, 22-4-8a Reg 9.01, 15.01, 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
- 21) Code 22-4-11(c) - In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a permit described herein may file the following:
  - (1) A brief description of the tract of land including the district and county wherein the tract is located;
  - (2) The identification of all parties to all leases or other continuing contractual agreements by which the right to extract, produce or market the oil or gas is claimed;
  - (3) The book and page number wherein each such lease or contract by which the right to extract, produce or market the oil or gas is recorded;
  - (4) A brief description of the royalty provisions of each such lease or contract.
- 22) Code 22-4-11(d) and 22-4-11(e).
- 23) 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.
- 24) 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.

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.

WAIVER

The undersigned coal operator \_\_\_\_\_ / owner \_\_\_\_\_ / lessee \_\_\_\_\_ / 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: \_\_\_\_\_, 19\_\_\_\_\_

By \_\_\_\_\_

Its \_\_\_\_\_