

FILE NO. 81-871-0  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1/2500'  
 PROVEN SOURCE OF ELEVATION B.M. EL. 1933.0 AT CO. RD. (3/10) AND CO. RD. (3/9) 4200'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) \_\_\_\_\_  
 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 FEB. 11, 19 82  
 OPERATOR'S WELL NO. J-631  
 API WELL NO. \_\_\_\_\_  
47 - 077 - 0213  
 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 \_\_\_ STORAGE X DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 1800.0 WATER SHED CHEAT RIVER  
 DISTRICT PORTLAND COUNTY PRESTON  
 QUADRANGLE CUZZART BRUCETON WELLS - SC  
 SURFACE OWNER MAXINE WILMOTH FEATHER ACREAGE 105  
 OIL & GAS ROYALTY OWNER INTERSTATE LUMBER CO. LEASE ACREAGE 420  
 LEASE NO. I-12  
 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 Benson ESTIMATED DEPTH 5000  
 WELL OPERATOR J&J INTERPRISES INC. DESIGNATED AGENT HARRY L. BARNETT  
 ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48  
BUCKANNON W. VA. 26201 BUCKHANNON W. VA. 26201

MAR 9 1982

MAY 28 1982

OIL & GAS DIVISION  
DEPT. OF MINES  
STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES, OIL AND GAS DIVISION  
WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil \_\_\_ / Gas X / Liquid Injection \_\_\_ Waste Disposal \_\_\_  
(If "Gas", Production \_\_\_ / Underground storage \_\_\_ / Deep \_\_\_ / Shallow \_\_\_ /)  
LOCATION: Elevation: 1800 Watershed: Cheat River  
District: Portland County: Preston Quadrangle: Cuzzart

WELL OPERATOR: J & J Enterprises, Inc. DESIGNATED AGENT H. L. Barnett  
Address P. O. Box 48 Address P. O. Box 48  
Buckhannon, W. Va. 26201 Buckhannon, W. Va. 26201

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

PERMIT ISSUED ON February 23, 19 82 OIL & GAS INSPECTOR FOR THIS WORK:  
(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name William Blosser  
Address Rt. 4, Box 317  
Fairmont, W. Va. 26564

GEOLOGICAL TARGET FORMATION: Benson Depth 5181-91 feet  
Depth of completed well, 5600 feet Rotary X / Cable Tools \_\_\_  
Water strata depth: Fresh, \_\_\_ feet; salt, \_\_\_ feet.  
Coal seam depths: 72-75, 365-68 Is coal being mined in the area? NO  
Work was commenced March 4, 19 82, and completed March 12, 19 82

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		
Conductor	113/4	H-40	42	x		29	0	0 sks. Bands
Fresh water	8 5/8	ERW	23	x		1272.85	1272.85	320 sks.
Coal	8 5/8	ERW	23	x		1272.85	1272.85	320 sks. Sizes
Intermediate								
Production	4 1/2	J-55	10.5	x		5289	5289	600 sks. Depths set
Tubing								
Liners								Perforations:
								Top Bottom
								2780 3008
								3294 3792
								4113 4459
								4376 4669
								4775 4856
								5181 5191

OPEN FLOW DATA  
Producing formation Benson Pay zone depth 5181-91 feet  
Gas: Initial open flow, \_\_\_ Mcf/d Oil: Initial open flow, \_\_\_ Bbl/d  
Combined Final open flow, 163 Mcf/d Final open flow, \_\_\_ Bbl/d  
Time of open flow between initial and final tests, 4 hours  
Static rock pressure, 780 psig (surface measurement) after 96 hours shut in  
[If applicable due to multiple completion--]  
Second producing formation Bradford, Balltown, Speechley Pay zone depth 5181-5191 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 x5289)+459.7=559 X=53.35x559=29842 =0.0000335 Pf=780x2.72 (0.0000335) (0.650) (4722)  
(0.9)=780x2.72^0.093=780x1.097  
Pf=856  
JUN 2 1982  
JUN 2 1982

[08-78]

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

Benson: Perfs - 5181-5191 (16 Holes)  
 Frac - 100 sks. 80/100 sand; 350 sks. 20/40 sand; 750 gals. Acid; 500 Bbls. Fluid.

Bradford: Perfs- 4775-4856 (5 holes)  
 Frac - 150 sks. 80/100 sand; 450 sks. 20/40 sand; 500 gals. Acid; 600 Bbls. Fluid.

Balltown; Perfs - 4392-4669 (10 holes)  
 & Frac - 100 sks. 80/100 sand; 350 sks. 20/40 sand; 750 gals. Acid; 500 Bbls. Fluid.

Speechley: Perfs - 4253-4277 (2 holes)

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Fill			0	10	
Sand & Shale			10	72	1 1/2" stream @ 50'
Coal			72	75	
Shale & White Sand			75	130	
Sand & Shale			130	365	
Coal			365	368	
Sand & Shale			368	640	
Red Rock, Shale & Sand			640	760	
Red Rock & Shale			760	800	
Sand & Shale			800	860	
Lime, Red Rock, Shale & Injun			860	1000	
Red Rock, Shale & Sand			1000	1235	Gas @ 1229' no show
White Sand			1235	1710	
Brown Sand			1710	1760	Gas @ 1753 no show
Sand & Shale			1760	1850	
Red & Brown Sand			1850	1885	
Red Rock & Shale			1885	3050	Gas @ 2799' no show
Shale			3050	4253	Gas @ 4307' no show
Speechley			4253	4277	
Shale			4277	4392	
Balltown			4392	4669	
Shale			4669	4775	
Bradford			4775	4856	
Shale			4856	5181	Gas @ 5015' no show
<u>Benson</u>			5181	5191	
Shale			5191	5600	Gas @ 5291' no show
T.D.				T.D.	Gas @ 5600' no show

(Attach separate sheets to complete as necessary.)

J&J Enterprises, Inc.

Well Operator

By

For

Robert Dahlin Geologist

NOTE: Regulation 2.02(d) 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."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-631  
API Well No. 47 - 077 - 0213  
State County Permit

WELL TYPE: Oil \_\_\_ / Gas x /  
(If "Gas", Production x / Underground storage \_\_\_ / Deep \_\_\_ / Shallow x /)  
LOCATION: Elevation: 1800 Watershed: Cheat River  
District: Portland County: Preston Quadrangle: Cuzzart

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

DESIGNATED AGENT Harry L. Barnett  
Address P.O. Box 48  
Buckhannon, WV 26201

OIL & GAS ROYALTY OWNER Donald Frazee  
Address C/O Interstate Lumber Co.  
601 E. Main St. Kingwood, WV  
26537  
Acreage 420

COAL OPERATOR None  
Address FEB 23 1982  
OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

SURFACE OWNER Maxine & Wilmoth Feather  
Address Albright, West Va.  
26519  
Acreage 105

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Interstate Lumber Company  
Address 601 E. Main St.  
Kingwood, WV 26537

FIELD SALE (IF MADE) TO:  
Name Unknown  
Address \_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name William Blosser  
Address Rt. # 4, Box 317  
Fairmont, WV 26564

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address \_\_\_\_\_

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed \_\_\_ / lease \_\_\_ / other contract x / dated 10/23, 1981, to the undersigned well operator from S & S, Inc.

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

Recorded on 12/28, 1981, in the office of the Clerk of the County Commission of Preston County, West Virginia, in Oil & Gas lease Book 4 at page 53. A permit is requested as follows:

PROPOSED WORK: Drill x / Drill deeper \_\_\_ / Redrill \_\_\_ / Fracture or stimulate x /  
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

BLANKET BOND

J & J Enterprises, Inc.  
Well Operator  
By [Signature]  
Peter Battles  
Its Geologist

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) S.W. Jack Drilling Co.

Address P.O. Box 48  
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Benson

Estimated depth of completed well, 5000 feet Rotary  / Cable tools  /

Approximate water strata depths: Fresh, 125 feet; salt, 1050 feet.

Approximate coal seam depths: 350 **Is coal being mined in the area?** Yes  No

CASING AND TUBING PROGRAM

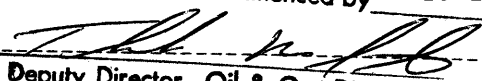
CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor	11 3/4	H-40	42	x		30	0	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		1200	1200	To surf.	
Coal	8 5/8	ERW	23	x		1200	1200	To surf.	Sizes
Intermediate									
Production	4 1/2			x		4950	4950	350 sks.	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 permit. **THIS PERMIT MUST BE POSTED AT THE WELL SITE** in connection therewith.

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 10-25-82

  
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            / 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                                 

*Geo*