



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.
350' N.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 REGU-
 LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
 MENT 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 MARCH 9, 1982
 OPERATOR'S WELL NO. J-649
 API WELL NO. _____
47 - 077 - 0224
 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 1681.0 WATER SHED SANDY CREEK
 DISTRICT RENO COUNTY PRESTON
 QUADRANGLE FELLOWSVILLE Thornton 15 SE
 SURFACE OWNER INTERSTATE LUMBER CO. ACREAGE 30.60
 OIL & GAS ROYALTY OWNER INTERSTATE LUMBER CO. LEASE ACREAGE 30.60
 LEASE NO. I-25
 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 5200 5-5 Taylor Drain (316)
 WELL OPERATOR J&J ENTERPRISES INC. DESIGNATED AGENT HARRY L. BARNETT
 ADDRESS P.O. BOX 48 ADDRESS P.O. Box 48 APR 6 1982
BUCKANNON W. VA. 26201 BUCKANNON, WV 26201

(Obverse)

[08-78]

RECEIVED
MAY 28 1982

Operator's Well No. J-649
API Well No. 47 - 077 - 0224
State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
OIL & 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: 1681 Watershed: Sandy Creek
District: Reno County: Preston Quadrangle: Fellowsville
WELL OPERATOR: J&J Enterprises, Inc. DESIGNATED AGENT: Harry L. Barnett
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 3/17, 1982 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, WV 26564

GEOLOGICAL TARGET FORMATION: Haverty Depth: 5534-43 feet
Depth of completed well, 5792 feet Rotary / Cable Tools
Water strata depth: Fresh, 60,490 feet; salt, None feet.
Coal seam depths: 60-62, 565-68, 825-27 Is coal being mined in the area? NO
Work was commenced 850-53 4/12, 1982, and completed 4/21, 1982

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		1468	1468	320 sks.	
Coal	8 5/8	ERW	23	x		1468	1468	320 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		5611.90	5611.90	410 sks.	Depths set
Tubing									
Liners									Perforations:
									Top Bottom
									4210 4218
									4424 4450
									5534 5543

OPEN FLOW DATA

Producing formation: Haverty Pay zone depth: 5534-43 feet
Gas: Initial open flow, Mcf/d Oil: Initial open flow, Bbl/d
Combined Final open flow, 353 Mcf/d Final open flow, Bbl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 1650 psig (surface measurement) after 96 hours shut in
(If applicable due to multiple completion--)
Second producing formation: Benson & Elk Pay zone depth: 4424-4450 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, 1650 psig (surface measurement) after 96 hours shut in
Pf=PweXGLS
t=60+(0.0075 x 5612)+459.7=561 X=53.35x561 =29971 =0.0000334 Pf=1650 x 2.72 (0.0000334) (0.650)
(4877) (0.9) =1650 x 2.72 =1650 x 1.1
Pf=1815 psi

JUN 2 1982

[08-78]

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

Haverty: Perforations: 5534-43 (14 holes)
Fracturing: 150 sks. 80/100 sand: 100 sks. 20/40 sand: 260 Bbls. fluid.

Elks: Perforations: 4424-50 (12 holes)
Fracturing: 422 sks. 20/40 sand: 150 sks. 80/100 sand: 500 gal. Acid: 497 Bbls. fluid.

Benson: Perforations: 4210-18 (12 holes)
Fracturing: 50 sks. 80/100 sand: 157 sks. 20/40 sand: 500 gal. Acid: 278 Bbls. fluid.

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	3	
Sand, shale & red rock			3	60	½" stream @ 60'
Coal			60	62	
Sand & shale			62	165	1½" stream @ 490'
Sand & shale			165	565	
Coal			565	568	½" stream @ 1793'
Sand			568	825	
Coal			825	827	Gas ck @ 1895 No show
Sand			827	850	
Coal			850	853	Gas ck @ 2777 No show
Sand & shale			853	1010	
Sand & red rock			1010	1105	Gas ck @ 3054 No show
Sand, shale & red rock			1105	1305	
Sand & shale			1305	1430	Gas ck @ 4284 No show
Big Lime			1430	1550	
Injun			1550	1725	Gas ck @ 5238 No show
Sand & shale			1725	1975	
Shale			1975	2040	
Red rock & shale			2040	4030	
Brown sand			4030	4205	
Benson			4205	4235	
Sand			4235	4424	
Elks			4424	4450	
Sand			4450	4680	
Brown sand			4680	4690	
Sand & shale			4690	5120	
Brown sand			5120	5160	
Shale & sand			5160	5534	
<u>Haverty</u>			5534	5543	
Shale & sand			5543	5792	

TD

(Attach separate sheets to complete as necessary.)

J&J Enterprises, Inc.
Well Operator
By Peter Battles
Peter Battles 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-649
API Well No. 47 - 077 - 0224
State County Permit

WELL TYPE: Oil / Gas x /
(If "Gas", Production x / Underground storage / Deep / Shallow x /)
LOCATION: Elevation: 1681 Watershed: Sandy Creek
District: Reno County: Preston Quadrangle: Fellowsville

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 Interstate Lumber Company
Address 601 E. Main St.
Kingwood, WV 26537

COAL OPERATOR _____
Address _____

ACREAGE 30.60
SURFACE OWNER Interstate Lumber CO.
Address 601 E. Main St.
Kingwood, WV 26537
ACREAGE 30.60

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name Eastern Associated Coal Corp.
Address Koppers Building
Pittsburgh, Pa. 15219
Name _____
Address _____

FIELD SALE (IF MADE) TO:
Name Unknown
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
Name _____
Address _____

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

RECEIVED

MAR 17 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

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 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 § 12-4-3 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
615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

J & J Enterprises, Inc.
Well Operator
By [Signature]
Its Manager

