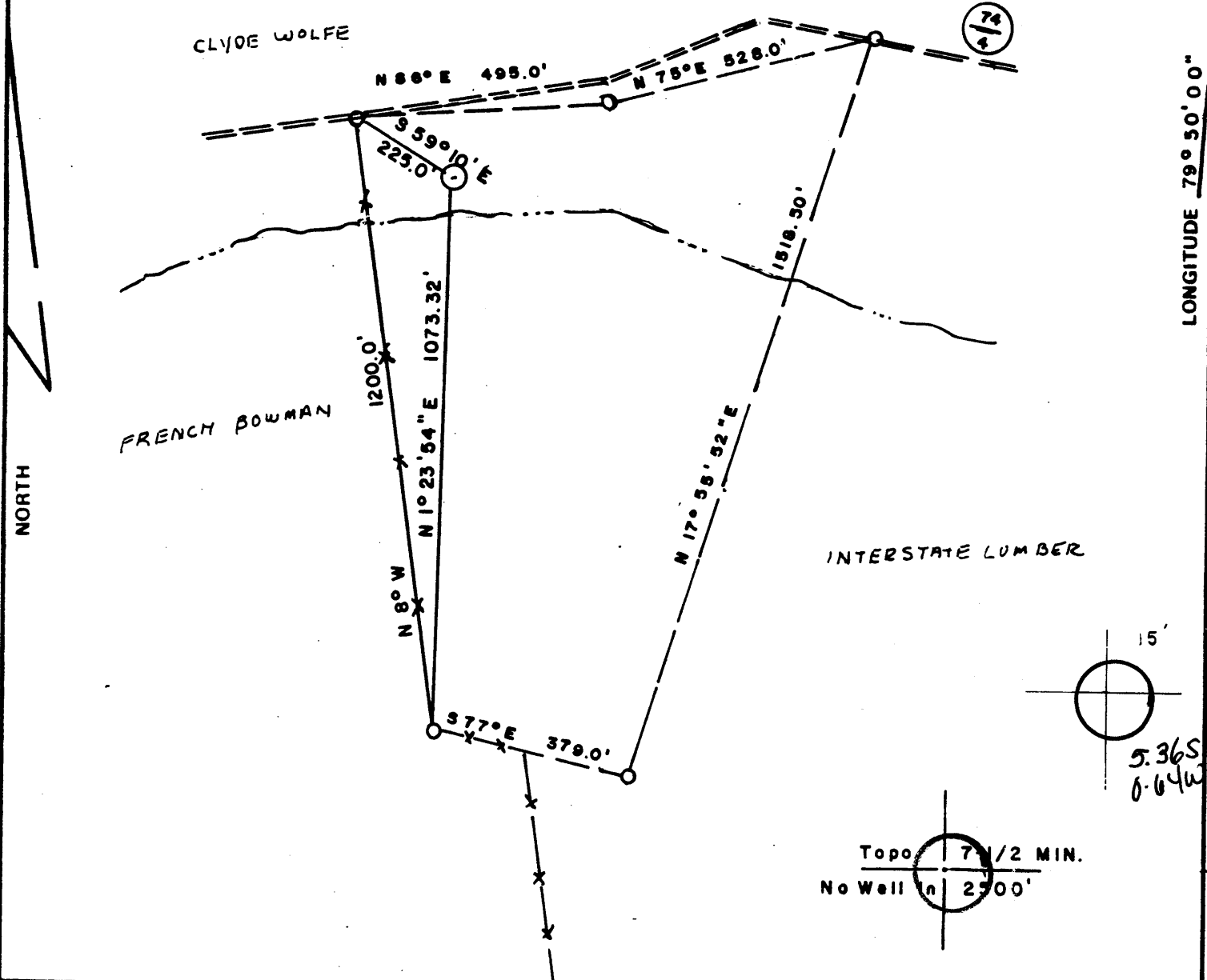


Plot Card 3-17-82

LATITUDE 39° 17' 30" 39° 20'

LONGITUDE 79° 50' 00"



FILE NO. 81-871-W

DRAWING NO. _____

SCALE 1" = 300'

MINIMUM DEGREE OF ACCURACY 1/2500

PROVEN SOURCE OF ELEVATION S.G. ELEV. 1380.0 ON CO. RD (74/4) AT CO. RD. (92/24) 1100' S.W. 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)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE MARCH 10, 1982

OPERATOR'S WELL NO. J-648

API WELL NO. _____

47 - 077 - 0223

STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___

(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 1430.0 WATER SHED SANDY CREEK

DISTRICT RENO COUNTY PRESTON

QUADRANGLE FELLOWSVILLE Section 15' SC

SURFACE OWNER INTERSTATE LUMBER CO. ACREAGE 20.50

OIL & GAS ROYALTY OWNER INTERSTATE LUMBER CO. LEASE ACREAGE 20.50

LEASE NO. I-8

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 HAVARTY ESTIMATED DEPTH 5100

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

SEP 14 1983

Date: May 7, 1982
Operator's Well No. J-646
API Well No. 47 - 077 - 022
State County Fairmont

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

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATION, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal
(If "Gas", Production / Underground storage / Deep / Shallow)
LOCATION: Elevation: 1430 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 RERWORKING. VERBAL PERMISSION OBTAINED) Name Wm. Blosser
Address Rt. # 4, Box 317
Fairmont, WV 26564

GEOLOGICAL TARGET FORMATION: Haverty Depth 5322-82 feet
Depth of completed well, 5449 feet Rotary / Cable Tools
Water strata depth: Fresh, 50,60,700 feet; salt, None feet.
Coal seam depths: 53-55,540-50 Is coal being mined in the area? NO
Work was commenced 4/2, 1982, and completed 4/9, 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	Rinds
Fresh water	8 ⁵ / ₈	ERW	23	x		1176	1176	290 sks.	
Coal	8 ⁵ / ₈	ERW	23	x		1176	1176	290 sks.	Sizes
Intermediate									
Production	4 ¹ / ₂	J-55	10.5	x		5436.45	5436.45	590 sks.	Becks set
Tubing									
Liners									Perforations:
									Top
									Bottom
									3000 3136
									3215 3254
									4513 4597
									5322 5382

OPEN FLOW DATA

Producing formation Haverty Pay zone depth 5322-82
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Combined Final open flow, 1,008 Mcf/d Final open flow, _____ Bbl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 1350 psig (surface measurement) after 96 hours shut in
[If applicable due to multiple completion--]
Second producing formation Elks, Balltown Pay zone depth 3215-58
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

$$t=60 + (0.000075 \times 5436) + 459.7 = 560 \quad X=53.35 \times 560 = 29876 \quad =0.0000335 \quad Pf=1350 \times 2.72 (0.0000335) = 459.7$$

$$(0.650) (4191) (0.9) = 1350 \times 2.72^{0.08} = 1350 \times 1.08 =$$

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

Haverty :Perforations: 5322-5382 (11 holes)

Fracturing: 100 sks. 80/100 sand: 350 sks. 20/40 sand: 500 Bbls. fluid.

abx

~~Elk~~ Perforations: 4513-95 (12 holes)

Fracturing: 100 sks. 80/100 sand: 280 sks. 20/40 sand: 500 gals. Acid:450 Bbls.

2nd. Balltown: Perforations: 3215-3254 (10 holes)

Fracturing: 150 sks. 80/100 sand: 350 sks. 20/40 sand: 500 gals. Acid: Bb

1st. Balltown: Perforations: 3000-3065 (11 holes) 3136 (2 holes)

Fracturing: 150 sks. 80/100 sand : 350 sks. 20/40 sand: 500 gals. Acid 550 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	5	
Shale & sand			5	53	Damp @ 50'
Coal			53	55	1" stream @ 60'
Shale & sand			55	250	
Shale & sand			250	540	1½" - 2" stream @ 700'
Coal			540	550	
White sand			550	620	Gas ck @ 1505 No show
Dark shale			620	622	
White sand			622	705	Gas ck @ 2552 No show
Sand, shale & red rock			705	935	Gas ck @ 3168 No show
Sand, shale & red rock			935	1295	
Injun			1295	1412	Gas ck @ 3999 No show
Sand & shale			1412	1875	
Red rock, sand & shale			1875	2885	Gas ck @ 4371 No show
Sand			2885	3000	
Balltown 1 & 2			3000	3254	Gas ck @ 5449 2/10-½" w/water
Sand			3254	3965	2,533 cu.ft.
Benson			3965	3980	
Sand			3980	4513	
Elk			4513	4595	
Sand			4595	5322	
Haverty			5322	5382	
Sand & shale			5382	5449	

Brallier @ TD.

TD

(Attach separate sheets as complete as necessary)

J&J Enterprises, Inc.
Operator
By: *Peter Batties*
Peter Batties
Geologist

NOTE: Regulation 2.02(f) 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."

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-646
API Well No. 47 - 077 - 0223
State County Preston Permi

WELL TYPE: Oil / Gas x /
(If "Gas", Production x / Underground storage / Deep / Shallow x /)
LOCATION: Elevation: 1430 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 Co.
Address 601 East Main St.
Kingwood, WV 26537

COAL OPERATOR
Address

Acreage 20.50

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

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

Acreage 20.50

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
Address
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 10/22, 19 81, to the undersigned well operator from S & S, Inc.

(If said deed, lease, or other contract has been recorded:)
Recorded in 12/28, 1981, in the office of the Clerk of the County Commission of Preston County, West Virginia, in Oil & Gas lease 4 on 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 application they wish to make or are required to make by Code § 12-2-3 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

J & J Enterprises, Inc.
Well Operator

BLANKET DOWN

By [Signature]
Its MANAGER

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 Company
Address P.O. Box 48
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Haverty

Estimated depth of completed well, 5100 feet. dry x table top

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

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

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	J-55	10.5	x		5050	5050	375 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 Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE.
ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY
APPROVED FOR drilling. THIS PERMIT SHALL EXPIRE
11-26-82
IF OPERATIONS HAVE NOT COMMENCED BY _____

BY [Signature]
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 _____