

10,880

LATITUDE 39° 15' 00"

LONGITUDE 80° 35' 00"

Plot Card CSD

# GAIN LEASE WELL NO. JK - 945

HILL

FORMAN

28" CHESTNUT OAK

N 41 - 18 E  
833.98'

S 3 - 30 E  
1320'

N 18 E  
255.75'

WELL NO. JK - 945

N 3 E  
680.62'

NORTH

## 55 ACRES ±

S 12 - 49 W  
1131.83'

1995  
2.00 acre

S 81 W  
264'

S 73 W  
247.5'

CLEVENCER

N 33 W  
544.5'

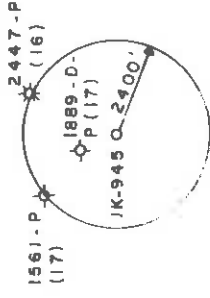
S 37 - 30 W  
478.5'

BURNSIDE

STONE WITH HACK

S 67 - 30 W 268.12'

BURNSIDE



FILE NO. 13 - 20  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 400'  
MINIMUM DEGREE OF \_\_\_\_\_  
ACCURACY 1 / 20.0  
PROVEN SOURCE OF \_\_\_\_\_  
ELEVATION BM ELEV. 898'

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) Gregory A. Smith  
R.P.E. L.L.S. 677

\* DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
FORM IV-6  
8781



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

DATE MARCH 28 19 84  
OPERATOR'S WELL NO. JK - 945  
API WELL NO. \_\_\_\_\_

47 - 017 - 3322  
STATE COUNTY PERMIT

WELL TYPE OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
OF GAS: PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
LOCATION: ELEVATION 1176' WATER SHED INDIAN FORK  
DISTRICT GREENBRIER CO. COUNTY OODORIDGE  
QUADRANGLE 252 BIG ISAAC T. 5. 15' NC 2  
OWNER JAMES A. GAIN ACREAGE 55

AS ROYALTY OWNER JAMES A. GAIN LEASE ACREAGE 55  
LEASE NO. JJ - 1528

FR. 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 \_\_\_  
WELL INFORMATION ALEXANDER ESTIMATED DEPTH 5700'  
WELL OPERATOR J & J ENTERPRISES, INC. DESIGNATED AGENT RICHARD M. REDDECLIFF  
ADDRESS P.O. BOX 48 427 ADDRESS F.O. BOX 48  
BUCKHANNON, WV 26201 BUCKHANNON, WV 26201

MAY 14 1984

6-6 Zinnia (145)

PLACE SEAL HERE



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

Alexander: Perforations: 5461-65 (10 holes) 5488-90 (4 holes)  
 Fracturing: 400 sks. 20/40 sand: Foam frac.  
 Benson: Perforations: 5123-26 (12 holes)  
 Fracturing: 400 sks. 20/40 sand:500 gal. acid: 525 Bbls. fluid.

BOTTOM HOLE PRESSURE Pf=PwexGLS  $\frac{1}{1} = 0.000033$  Pf=1850 x 2.72 (0.000033)  
 t=60 + (0.0075 x 5548) + 459.7 = 561 X=53.35 x 561 = 29929 = 0.000033 Pf=1850 x 2.72 (0.000033)  
 (0.682) (5307) (0.9) = 1850 x 2.72 0.1 = 1850 x 1.1

Pf=2035 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Fill			0	5	
Red rock, sand & shale			5	150	1/4" stream @ 120'
Sand, shale & red rock			150	225	
Sand & shale			225	530	Damp @ 1840'
Red rock & shale			530	650	
Sand, shale & red rock			650	780	Gas ck @ 2356 No show
Shale & red rock			780	1085	
Sand, shale & red rock			1085	1190	Gas ck @ 3567 40/10-1/4" w/water
Sand & shale			1190	1825	11,987 cu.ft.
Sand & shale			1825	2200	
Big Lime			2200	2260	Gas ck @ 4684 120/10-1" w/water
Sand & shale			2260	2420	462,000 cu.ft.
Sand & shale			2420	3370	
Sand & shale			3370	3715	Gas ck @ 5210 120/10-1" w/water
Sand & shale			3715	5123	462,000 cu.ft.
Shale & sand			5123	5126	
Benson			5126	5461	Gas ck @ 5522 120/10-1" w/water
Sand & shale			5461	5490	462,000 cu.ft.
Alexander			5490	5708	
Sand & shale			5708		T.D.

(Attach separate sheets as necessary)

J&J Enterprises, Inc.

Well Operator

By:

Robert Dahlin-Geologist

Date:

5/29/85

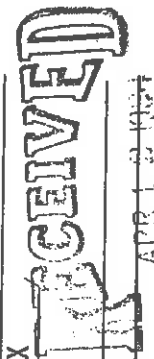
Note: Regulation 2.02(i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic  
 detailed geological record of all formations, including  
 any, encountered in the drilling of a well."



1) Date: APRIL 5, 19 84  
 2) Operator's Well No. JK-945  
 3) API Well No. 47 - 017 - 3322 State County Permit

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES, OIL AND GAS DIVISION  
 APPLICATION FOR A WELL WORK PERMIT

4) WELL TYPE: A Oil  Gas   
 B (If "Gas", Production  Underground storage  Deep  Shallow   
 Elevation: 1176' Watershed: INDIAN FORK  
 District: GREENBRIER County: DODDRIDGE Quadrangle: BIG ISAAC 7.5'  
 6) WELL OPERATOR J & J ENTERPRISES, INC. 7) DESIGNATED AGENT RICHARD M. REDDECLIFF  
 Address P.O. BOX 48 Address P.O. BOX 48  
BUCKHANNON, WV 26201 BUCKHANNON, WV 26201  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name STEPHEN CASEY 9) DRILLING CONTRACTOR:  
 Address RT. 2 - BOX 232 - D Name S.W. JACK DRILLING CO.  
JANE LEW, WV 26378 Address P.O. BOX 48  
BUCKHANNON, WV 26201



10) PROPOSED WELL WORK: Drill  deeper  Drill  deeper  Redrill  Stimulate   
 Plug off old formation  Perforate new formation   
 Other physical change in well (specify) ALEXANDER  
 11) GEOLOGICAL TARGET FORMATION, 5700' feet  
 12) Estimated depth of completed well, 120' feet; salt, 0 feet.  
 13) Approximate tract depths: Fresh, 425' feet; Is coal being mined in the area? Yes

14) Approximate coal seam depths:  
 15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	For drilling	Left in well		
Conductor	11 3/4	E-40	42	X	30	0 SKS.	
Fresh water	8 5/8	ERW	23	X	1275'	To surface	Kinds
Coal	8 5/8	ERW	23	X	1275'	To surface	Sizes
Intermediate	4 1/2	J-55	10.5	X	5650'	450 SKS.	Depths set
Production							Perforations:
Tubing							Top
Liners							Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-017-3322 Date May 8, 1984

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. 8) 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.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
 Permit expires May 8, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Agent: <u>TS</u>	Plat: <u>TS</u>	Casing: <u>TS</u>	Fec: <u>1516</u>
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*[Signature]*  
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File

