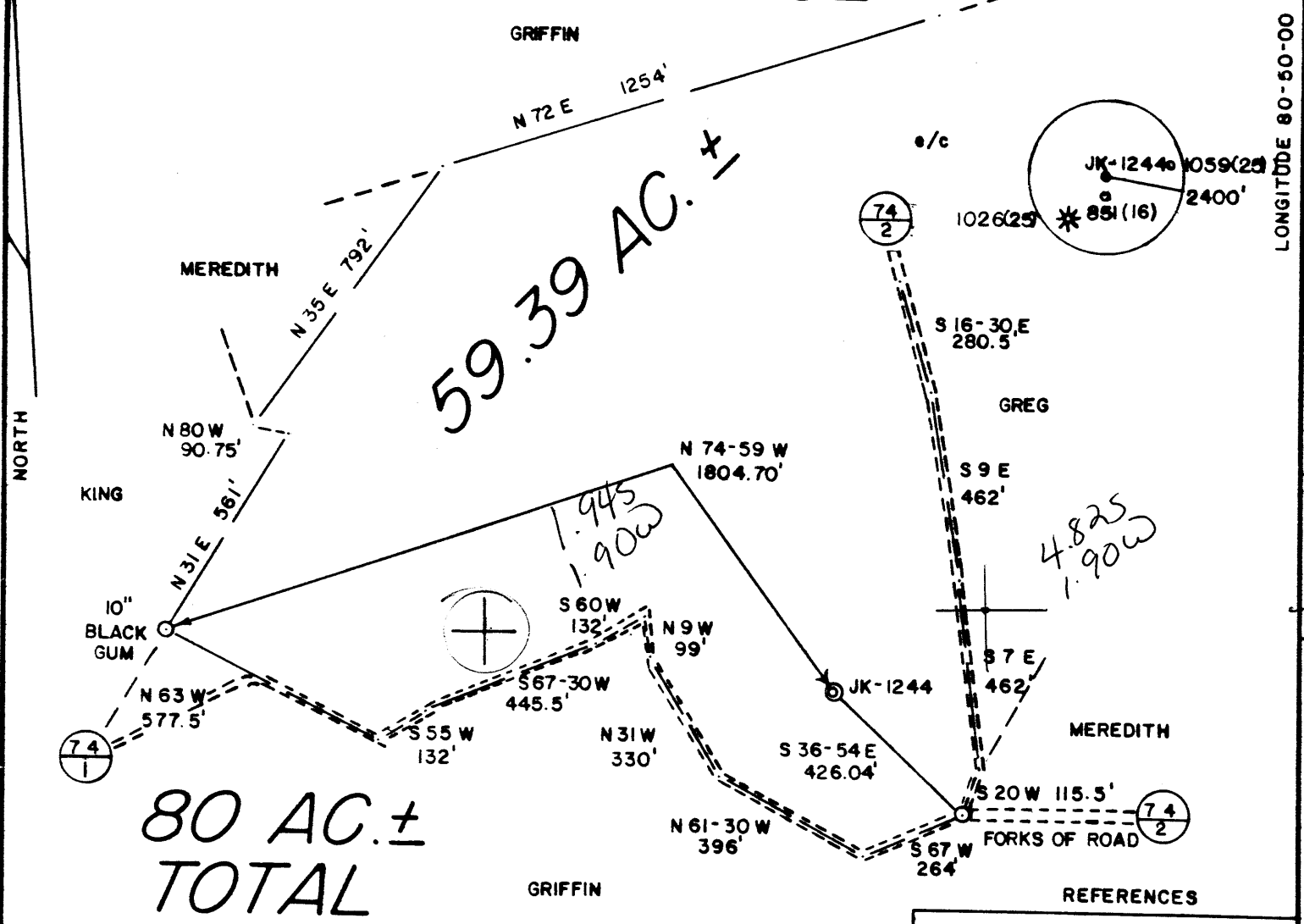


CODE \_\_\_\_\_ CARD \_\_\_\_\_ PLOT \_\_\_\_\_

LATITUDE 39-22-30

# WELL NO. MEREDITH JK-1244 LEASE

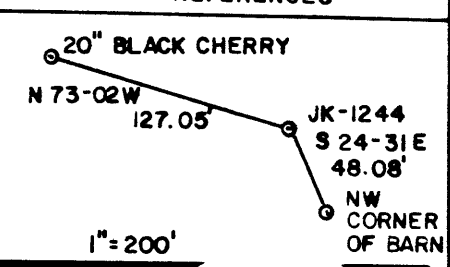
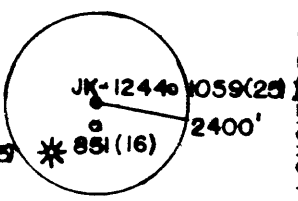


NORTH

LONGITUDE 80-50-00

## 80 AC. ± TOTAL

## 59.39 AC. ±

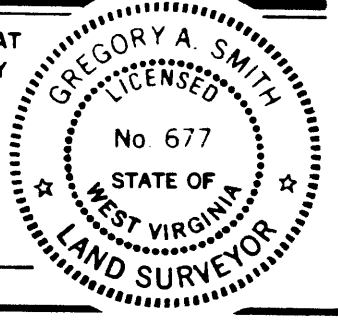


### SLS SMITH LAND SURVEYING

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 DATE OCT. 18, 19 85  
 OPERATORS WELL NO. JK-1244  
 API WELL NO.  
47 - 095 - 1119  
 STATE COUNTY PERMIT

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 ENERGY.

L.L.S. 677 *Gregory A. Smith*



MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 17-73  
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV. 1199' SCALE 1" = 400'



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1109' WATERSHED BIG RUN  
 DISTRICT CENTERVILLE / COUNTY TYLER QUADRANGLE WEST UNION 7.5' 671 133

SURFACE OWNER ROY A. MEREDITH ACREAGE 59.39  
 OIL & GAS ROYALTY OWNER ROY A. MEREDITH, et. al. LEASE ACREAGE 59.39 of 80

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF   
 OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION RHINE STREET  
 ESTIMATED DEPTH 5995' NOV 4 1985

WELL OPERATOR J&J ENTERPRISES, INC. 427 DESIGNATED AGENT RICHARD M. REDECLIFF  
 ADDRESS P.O. BOX 48 BUCKHANNON, WV 26101 ADDRESS P.O. BOX 48 BUCKHANNON, WV 26101

COUNTY NAME PERMIT



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

Alexander: Perforations: 5283-85 ( 7 holes) 5297-99 ( 7 holes)

Fracturing: 400 sks. 20/40 sand: 529 Bbls. fluid.

Benson: Perforations: 4985-86 ( 8 holes)

Fracturing: 400 sks. 20/40 sand: 500 gal. acid: 574 Bbls. fluid.

Riley: Perforations: 4585-86 ( 4 holes) 4587-88 ( 4 holes) 4604-06 ( 3 holes) 4614-16 (8 holes)

Fracturing: 430 sks. 20/ 40 sand: 500 gal. acid: 510 Bbls. fluid: Foam frac.

BOTTOM HOLE PRESSURE Pf=Pwe XGLS

$$t=60+(5414 \times 0.0075)+459.7=560.3 \quad X=53.34T = \frac{53.34(560.3)}{29886} = 0.0000334 \quad Pf=(1600)(2.72)$$

$$(0.0000334)(.661)(4942)(0.9) \quad Pf=(1600)(2.72)^{(0.0982)} = (1600)(1.10)$$

Pf=1760 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fr and salt water, coal, oil and
Top Soil			0	8	
Sand & sandy shale			8	215	1/2" stream @ 681'
Sand, sandy shale & red rock			215	620	
Sand & sandy shale			620	995	1" stream @ 1565
Sandy shale & sand			995	1225	
Sand & sandy shale			1225	1375	1" stream @ 2227
Sandy shale & sand			1375	1860	
Sand & Sandy shale			1860	1925	Gas ck @ 3501 0-20/10-1" w/wat
Little lime			1925	1950	40.83 cu.ft.
Sandy shale			1950	1960	
Big Lime			1960	2030	Gas ck @ 5078 6/10-2" w/water
Sand & sandy shale			2030	2325	103,000 cu.ft.
Sand & sandy shale			2325	3485	
Sandy shale			3485	4585	Gas ck @ collars 10/10-2" w/wa
Riley			4585	4616	133,000 cu.ft.
Sandy shale			4616	4985	
Benson			4985	4986	
Sandy shale			4986	5283	
Alexander			5283	5299	
Sandy shale			5299	5976	
				T.D.	

Top Dev = 2530'

~~Atwood~~  
Brathier

(Attach separate sheets as necessary)

J&J Enterprises, Inc.

Well Operator

By: Daniel F. Stark

Date: 12/9/85

Daniel F. Stark - Asst/Geologist

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."

7/85



1) Date: October 14, 1985  
 2) Operator's Well No. JK-1244  
 3) API Well No. 47 - 095 - 1119  
 State County Permit

**RECEIVED**  
 OCT 28 1985

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

**APPLICATION FOR A WELL WORK PERMIT**

- 4) WELL TYPE: Gas  / Gas  / B (If "Gas", Production  / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow  /)
- 5) LOCATION: Elevation: 1109' Watershed: Big Run  
 District: Centerville County: Tyler Quadrangle: West Union 7.5'
- 6) WELL OPERATOR J&J Enterprises, Inc. CODE: 24150 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 Robert Lowther 9) DRILLING CONTRACTOR: Name S.W. Jack Drilling Co.  
 Address General Delivery Address P.O. Box 48  
Middlebourne, WV 26419 Buckhannon, WV 26201
- 10) PROPOSED WELL WORK: Drill  / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate  /  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_ /  
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Rhine Street
- 12) Estimated depth of completed well, 5995' feet
- 13) Approximate trata depths: Fresh, 125' feet; salt, N/A feet.
- 14) Approximate coal seam depths: N/A Is coal being mined in the area? Yes \_\_\_\_\_ / No  /
- 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.	New	Used	For drilling		
Conductor	11 3/4	H-40	42	X		250'	250'	0 Sacks <i>as required by rule 15.0</i>
Fresh water	8 5/8	ERW	23	X		1709'	1709'	To Surface
Coal	8 5/8	ERW	23	X		1709'	1709'	To Surface
Intermediate								
Production	4 1/2	J-55	10.5	X		5995'	5945'	300 Sacks or <i>as required by Rule 15-01</i>
Tubing								
Lin...								

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-095-1119 Date October 28 1985

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 October 28, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Plat: <u>MEMU 2096</u>	Casing	Fee	WPCP	S&E	Other
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*Margaret J. Hesse*  
 Director, Division 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.