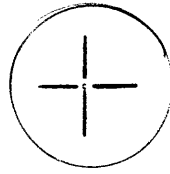


# DOTSON LEASE



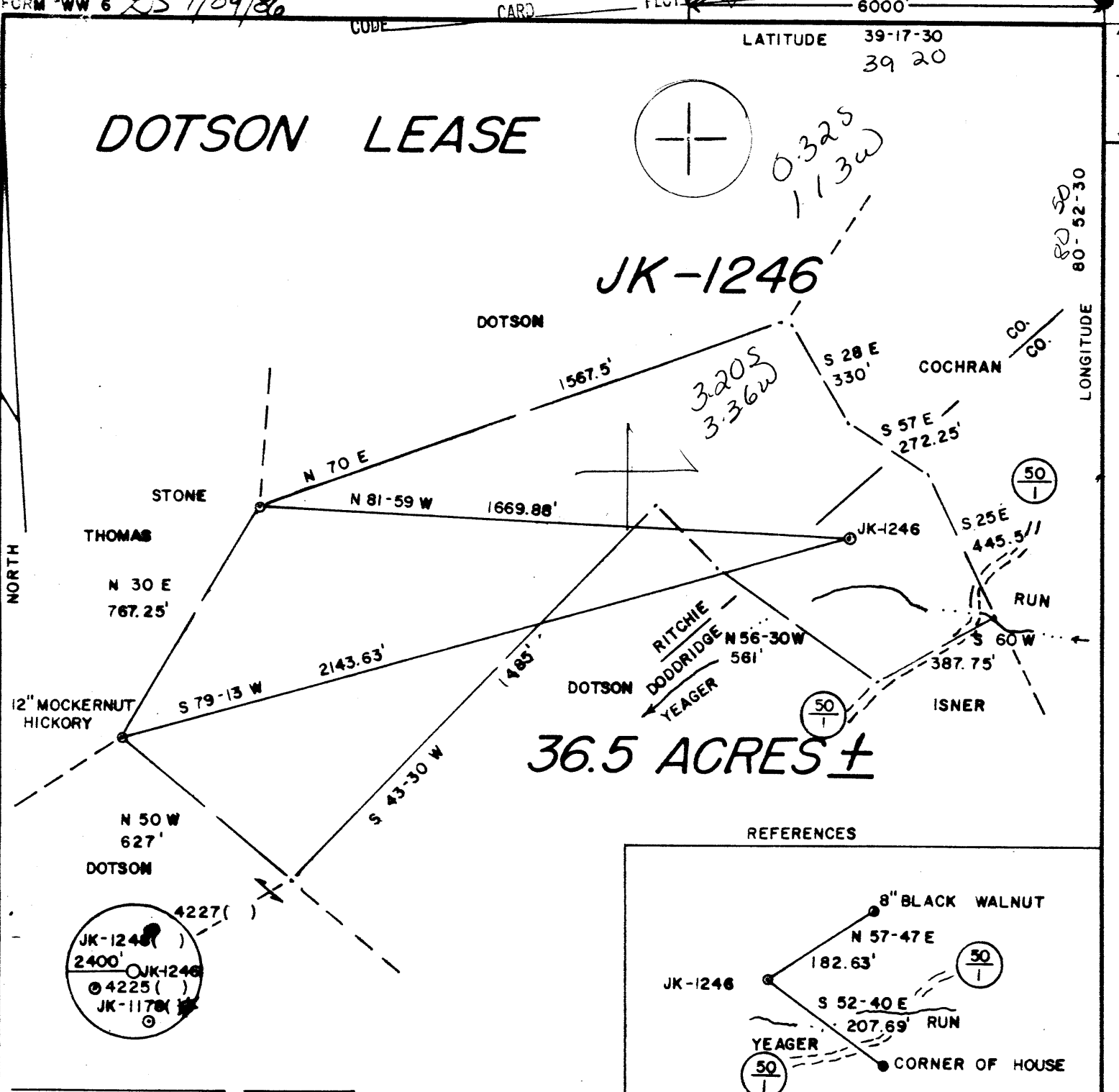
0.325  
1.13W

## JK-1246

DOTSON

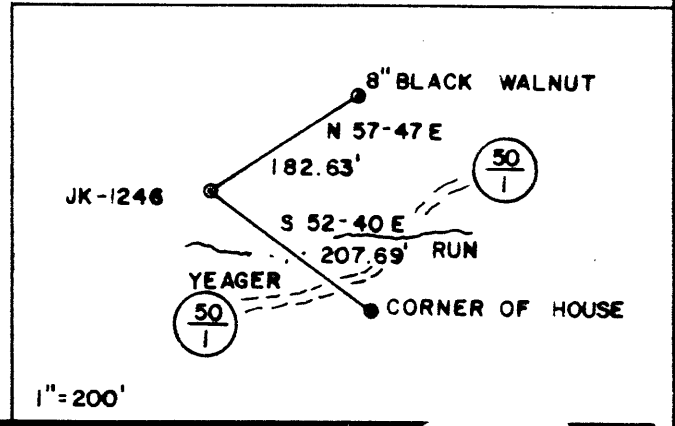
80-52-30  
80-50

NORTH



### 36.5 ACRES ±

#### REFERENCES



1" = 200'

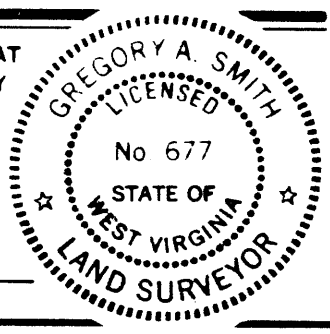


SMITH LAND SURVEYING

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 DATE DECEMBER 9, 1985  
 OPERATORS WELL NO. JK-1246  
 API WELL NO.  
47 - 017 - 3493  
 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  
 PROVEN SOURCE OF ELEVATION B.M. ELEV. 854'

FILE NO. 18-  
 SCALE 1" = 400'



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION

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

LOCATION: ELEVATION 896' WATERSHED YEAGER RUN  
 DISTRICT CENTRAL 1 COUNTY DODDRIDGE QUADRANGLE PENNSBORO 7.5' 539  
 SURFACE OWNER ROGER D. DOTSON ACREAGE 39.23 OF 64.01 133  
 OIL & GAS ROYALTY OWNER ROGER DOTSON et. al. LEASE ACREAGE 40 West Union 508

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X 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

WELL OPERATOR J&J ENTERPRISES, INC. 421 DESIGNATED AGENT RICHARD REDDICLIFF  
 ADDRESS P.O. BOX 48 BUCKHANNON W. V. 26201 ADDRESS P.O. BOX 48 BUCKHANNON, WV 26201

COUNTY NAME PERMIT

017 3493



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

Alexander: Perforations: 5013-18 (15 holes) Foam frac.

Benson: Perforations: 4727-30 (15 holes)  
Fracturing: 300 sks. 20/40 sand:500 gal. acid: 400 Bbls. fluid.

Riley: Perforations: 4236-4358 (13 hoels)  
Fracturing: 400 sks. 20/40 sand:500 gal. acid: 530 Bbls. fluid.

Bottom Hole Pressure  $P_f = P_{we}^{XGLS}$

$t=60 + (0.0075 \times 5156) + 459.7 = 558$   $X = 53.35 \times 558 = \frac{1}{29789} = 0.000034$   $P_f = 1400 \times 2.72^{(0.000034)}$   
 $(0.661)(4627)(0.9) = 1400 \times 2.72^{0.094} = 1400 \times 1.1$

Pf= 1540 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fre and salt water, coal, oil and g
Ground Level			0	10	
Soil, sand & shale			10	50	1" stream @ 30'
Sand, shale & red rock			50	250	
Sand, shale & red rock			250	985	1/4"-1/2" stream @ 250'
Sand & shale			985	1280	
Sand & shale			1280	1705	1/2" stream @ 1350'
Sand & shale			1705	1740	
Big Lime & Injun			1740	1880	Gas ck @ 1767 No show
Sand & shale			1880	2345	
Sand & shale			2345	3182	Gas ck @ 2082 No show
Warren sand			3182	4236	
Riley			4236	4358	Gas ck @ 2905 No show
Sand & shale			4358	4727	
Benson			4727	4730	Gas ck @ 3284 No show
Sand & shale			4730	5013	
✓ Alexander			5013	5018	Gas ck @ 4076 2/10-1" w/water 60,000 cu.ft.
Sand & shale			5018	5213	
				T..D	
					Gas ck 4391 4/10-1" w/water 84,000 cu.ft.
					Gas ck @ 4769 4/10-1" w/water 84,000 cu.ft.
					Gas ck @ 5055 6/10-1" w/water 103,000 cu.ft.

RECEIVED  
MAY 26 1987

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

J & J Enterprises, Inc.

Well Operator

By:

Date: 5/20/87

Robert Dahlin, 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  
and encountered in the drilling of a well."

7/85



1) Date: December 13, 1985  
 2) Operator's Well No. JK-1246  
 3) API Well No. 47-017-3493  
 State \_\_\_\_\_ County \_\_\_\_\_ Permit \_\_\_\_\_

**RECEIVED**  
**DEC 23 1985**

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

**APPLICATION FOR A WELL WORK PERMIT**

- DIVISION OF OIL & GAS  
 DEPARTMENT OF ENERGY
- 4) WELL TYPE: A Oil \_\_\_\_\_ / Gas X /  
 B (If "Gas", Production X / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow X /)
- 5) LOCATION: Elevation: 896' Watershed: Yeager Run  
 District: Central 427 County: Doddridge Quadrangle: Pennsboro 7.5'
- 6) WELL OPERATOR J&J Enterprises, CO, 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 9) DRILLING CONTRACTOR:  
 Name Mike Underwood Name S.W. Jack Drilling Co.  
 Address Rt. 2 Box 114 Address P.O. Box 48  
Salem, WV 26426 Buckhannon, WV 26201
- 10) PROPOSED WELL WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate X /  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Rhine Street 437
- 12) Estimated depth of completed well, 5995' feet  
 13) Approximate trata depths: Fresh, 75' feet; salt, N/A feet.  
 14) Approximate coal seam depths: N/A Is coal being mined in the area? Yes \_\_\_\_\_ / No X /

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	Left in well		
Conductor	11 3/4	H-40	42	X		150' 30"	150' 0"	<del>0 Sacks</del> <u>C.P.S. by rule 15.05</u>	
Fresh water	8 5/8	ERW	23	X		1496'	1496'	To Surface	<u>by rule 15.05</u>
Coal	8 5/8	ERW	23	X		1496'	1496'	To Surface	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X		5995'	5945'	300 Sacks	Depths set
Tubing								or as required	required by rule 15-01
Link...									Perforations:
									Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-017-3493

January 10 19 86  
 Date

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 January 10, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <u>KB</u>	Plat: <u>DS</u>	Casing: <u>MDN 2116</u>	Fee	WPCP: <u>DS</u>	S&E: <u>DS</u>	Other
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NOTE: Keep one copy of this permit posted at the drilling location.

[Signature]  
 Director, Division of Oil and Gas