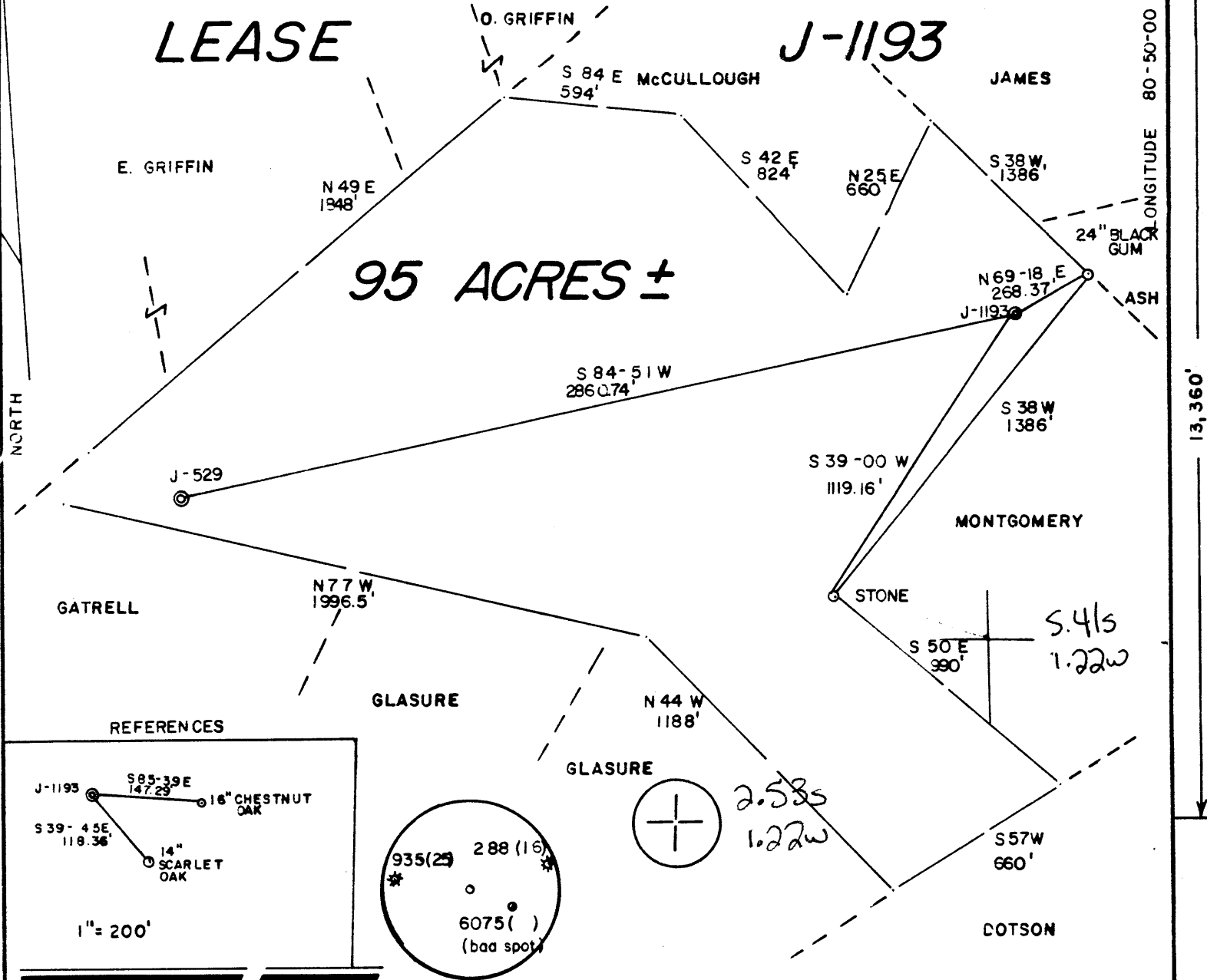


LATITUDE 39-22-30  
39.25

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

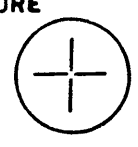
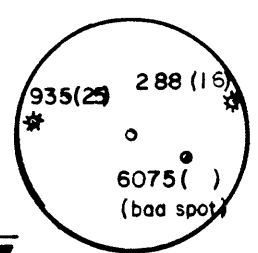
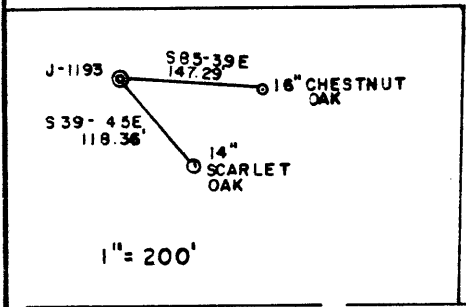
# FLEMING LEASE

# WELL NO. J-1193



## 95 ACRES ±

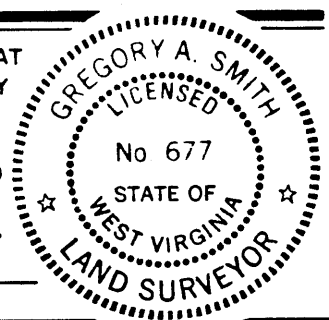
### REFERENCES



## SLS SMITH LAND SURVEYING

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 DATE APRIL 18, 1985  
 OPERATORS WELL NO. J-1193  
 API WELL NO.  
47 - 095 - 1105  
 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 MINES.  
 L.L.S. 677 Gregory A. Smith



MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 18-11 JR  
 PROVEN SOURCE OF ELEVATION JCT. ROADS ELEV. 832' SCALE 1" = 500'



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 1137' WATERSHED SHORT RUN 15' 133 CS  
 DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE WEST UNION 7.5' 671  
 SURFACE OWNER DAVID W. GLASURE ACREAGE 95  
 OIL & GAS ROYALTY OWNER DAVID W. GLASURE et al. LEASE ACREAGE 95  
 PROPOSED WORK: DRILL X CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE X PLUG OFF \_\_\_\_\_  
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION ALEXANDER  
 ESTIMATED DEPTH 5600'

WELL OPERATOR J & J ENTERPRISES, INC. 427 DESIGNATED AGENT RICHARD REDDECLIFF  
 ADDRESS P.O. BOX 48, BUCKHANNON, WV 26301 ADDRESS P.O. BOX 48, BUCKHANNON, WV 26301

JUN 10 1985



**State of West Virginia**  
Department of Mines  
Oil and Gas Division

Date September 9, 1985  
Operator's Well No. J-1193  
Farm Glasure  
API No. 47 - 095 - 1105

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil \_\_\_ / Gas x / Liquid Injection \_\_\_ / Waste Disposal \_\_\_ /  
(If "Gas," Production x / Underground Storage \_\_\_ / Deep \_\_\_ / Shallow x /)

LOCATION: Elevation: 1137 Watershed Short Run  
District: Centerville County Tyler Quadrangle West Union 7.5

COMPANY J&J Enterprises, Inc.  
ADDRESS P.O. Box 48, Buckhannon, WV 26201  
DESIGNATED AGENT Richard M. Reddecliff  
ADDRESS P.O. Box 48, Buckhannon, WV 26201  
SURFACE OWNER David Glasure  
ADDRESS Rt. # 1, Mingo Junction, OH 43938  
MINERAL RIGHTS OWNER Same as surface  
ADDRESS \_\_\_\_\_  
OIL AND GAS INSPECTOR FOR THIS WORK Robert Gen Delivery  
Lowther ADDRESS Middlebourne, WV 26149  
PERMIT ISSUED 8/3/85  
DRILLING COMMENCED 8/7/85  
DRILLING COMPLETED 8/15/85  
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON \_\_\_\_\_

Casing & Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"	67	67	0
9 5/8			
8 5/8	1305.85	1305.85	300 sks
7			
5 1/2			
4 1/2	5443.05	5443.05	265 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth 5313-31 feet  
Depth of completed well 5558 feet Rotary x / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 60,290 feet; Salt 0 feet  
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 5313-31 feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 1,032 Mcf/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests 4 hours  
Static rock pressure 1600 psig (surface measurement) after 96 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation Benson & Riley Pay zone depth 4607-37 / 5016-18 feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ Mcf/d Oil: Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ hours  
Static rock pressure \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in

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

Alexander: Perforations: 5313-17 (8 Holes) 5329-31 (6 holes)  
 Fracturing: 350 sks. 20/40 sand: 432 Bbls. fluid.  
Benson: Perforations: 5016-18 ( 8 holes)  
 Fracturing: 400 sks. 20/40 sand: 500 gal. acid: 457 Bbls. fluid.  
Riley: Perforations: 4607-08 ( 4 holes) 4610-11 ( 4 holes) 4635-37 ( 7 holes)  
 Fracturing: 170 sks. 20/40 sand:500 gal. acid: 297 Bbls. fluid.

BOTTOM HOLE PRESSURE  $P_f = P_{we} \times GLS$

$$t=60 + (0.0075 \times 5443) + (459.7) = 561 \quad x = \frac{1}{53.35} \times 561 = \frac{1}{29929} = 0.000033 \quad P_f = 1600 \times 2.72$$

$$(0.000033)(0.684)(4969)(0.9) = 1600 \times 2.72^{0.1} = 1600 \times 1.1$$

Pf= 1760 psi

**WELL LOG**

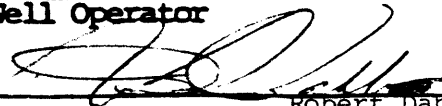
FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Red rock			0	20	Damp @ 60'
Sandy shale & red rock			20	115	
Sand, shale & red rock			115	410	1/4" stream @ 290'
Red rock & shale			410	790	
Sandy shale & red rock			790	855	Gas ck @ 2228 No show
Sandy shale & red rock			855	1065	
Sand & sandy shale			1065	1170	Gas ck @ 2514 No show
Sandy shale			1170	1500	
Sand & shale			1500	1640	Gas ck @ 3559 No show
Shale & sand			1640	1815	
Sand & shale			1815	1920	Gas ck @ 4670 16/10-1" w/water
Red rock & shale			1920	1960	30,123 cu.ft.
Little Lime			1960	1975	
Red rock & shale			1975	2010	Gas ck @ 5052 65/10-1" w/water
Big Lime			2010	2115	60,715 cu.ft.
Injun (see p. 1)			2115	2175	
Sand & shale			2175	2515	Gas ck @ 5399 60/10-1" w/water
Shale & sandy shale			2515	3450	58,383 cu.ft.
Sand & sandy shale			3450	4015	
Shale & sandy shale			4105	4607	Gas ck @ Drill Collars
Riley			4607	4637	44/10-1" w/water
Sandy shale			4637	5016	49,951 cu.ft.
Benson			5016	5018	
Sand & shale			5018	5313	
<u>Alexander</u>			5313	5321	
Sandy shale			5331	5558	
					T.D.

(Attach separate sheets as necessary)

J&J Enterprises, Inc.

Well Operator

By:



Robert Dahlin - Geologist

Date:

9/9/85

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 coal, encountered in the drilling of a well."



1) Date: April 29, 19 85
2) Operator's Well No. XXXXXX J-1193
3) API Well No. 47 -095-1105
State County Permit

RECEIVED stamp

MAY 24 1985

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

- Oil & Gas Division
5) LOCATION: Elevation: 1137', Watershed: Short Run, District: Centerville, County: Tyler, Quadrange: West Union 7.5'
6) WELL OPERATOR: J & J Enterprises, Inc., Address: P.O. Box 48, Buckhannon, WV 26201
7) DESIGNATED AGENT: Richard Reddecliff, Address: P.O. Box 48, Buckhannon, WV 26201
8) OIL & GAS INSPECTOR TO BE NOTIFIED: Name: Robert Lowther, Address: General Delivery, Middlebourne, WV 26149
9) DRILLING CONTRACTOR: Name: S.W. Jack Drilling Co., Address: P.O. Box 48, Buckhannon, WV 26201
10) PROPOSED WELL WORK: Drill X, Drill deeper, Redrill, Stimulate X
11) GEOLOGICAL TARGET FORMATION: Alexander 439
12) Estimated depth of completed well, 5600' feet
13) Approximate trata depths: Fresh, 1385' 125' 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

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft., New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS. Includes handwritten notes like 'by rule 15-01'.

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-095-1105 Date June 3 19 85

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 June 3, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Table with columns: Bond, Agent, Plat, Casing, Fee. Values: 82, A/B, MW, MW, 1972

Signature of Margaret J. Hase, Administrator, Office of Oil and Gas

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

File

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