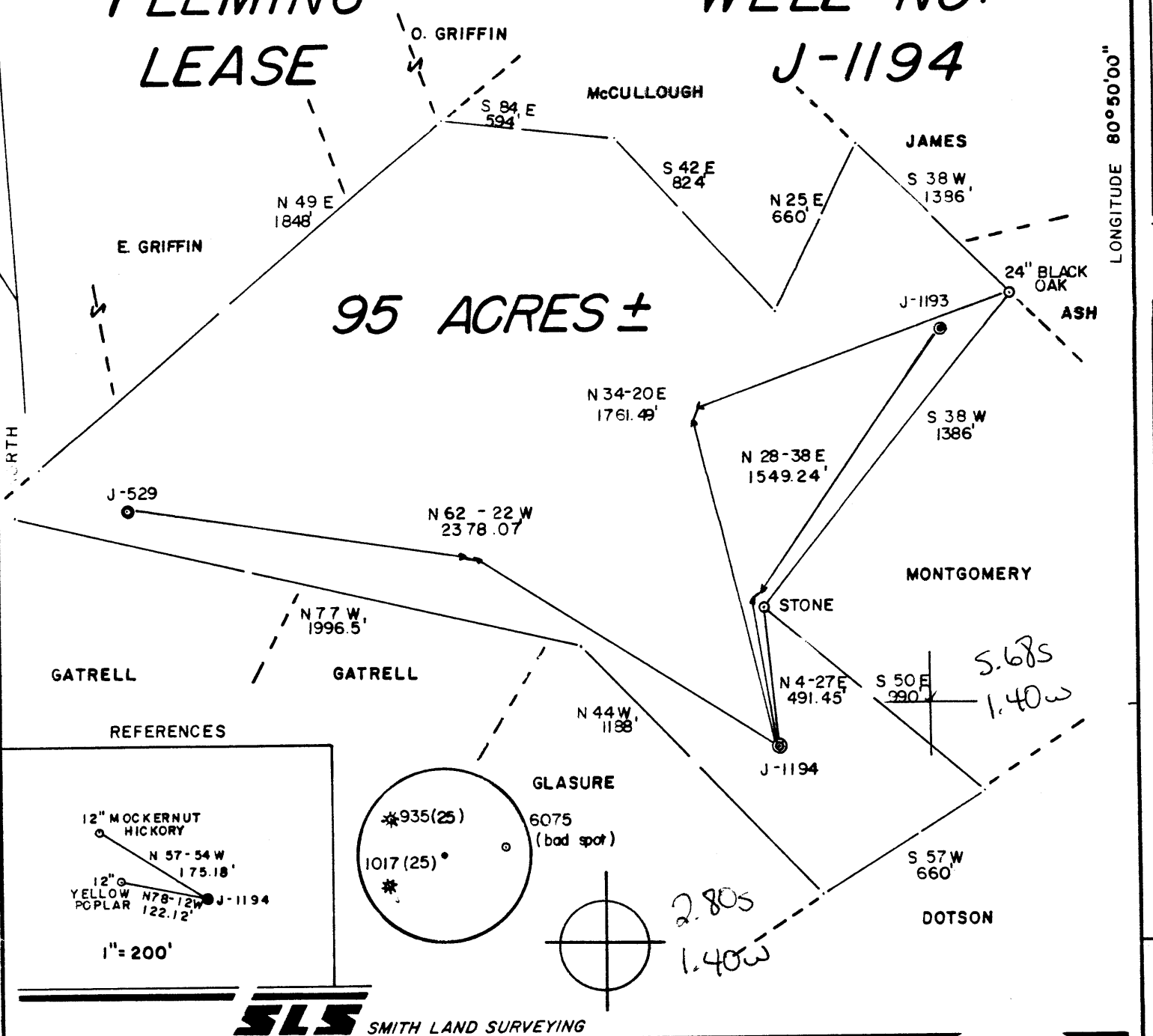


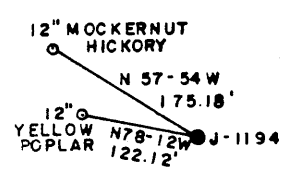
# FLEMING LEASE

# WELL NO. J-1194

## 95 ACRES ±



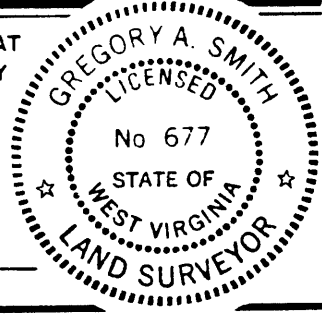
### REFERENCES



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 DATE APRIL 18, 1985  
 OPERATORS WELL NO. J-1194  
 API WELL NO.  
47 - 095 - 1106  
 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. Gregory A. Smith  
 677



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



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 1177' WATERSHED SHORT RUN 15' 133 CS  
 DISTRICT CENTERVILLE 1 COUNTY TYLER QUADRANGLE WEST UNION 7.5' 671

SURFACE OWNER DAVID GLASURE ACREAGE 95  
 OIL & GAS ROYALTY OWNER DAVID GLASURE LEASE ACREAGE 95

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 ALEXANDER  
 ESTIMATED DEPTH 5600'

WELL OPERATOR J & J ENTERPRISES, INC. 427 DESIGNATED AGENT RICHARD REDECLIFF  
 ADDRESS P.O. BOX 48, BUCKHANNON, WV 26201 ADDRESS P.O. BOX 48, BUCKHANNON, WV 26201  
6-6 Wilber (92) JUN 10 1985

COUNTY NAME PERMIT



IV-35  
(Rev 8-81)

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date September 5, 1985  
Operator's Well No. J-1194  
Farm Glasure  
API No. 47 - 095 - 1106

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: 1177 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 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 Lowther  
ADDRESS Gen. Delivery Middlebourne, WV 26149  
PERMIT ISSUED 6/3/85  
DRILLING COMMENCED 7/29/85  
DRILLING COMPLETED 8/4/85  
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON    

| Casing & Tubing  | Used in Drilling | Left in Well | Cement fill up Cu. ft. |
|------------------|------------------|--------------|------------------------|
| Size 20-16 Cond. |                  |              |                        |
| 13-10"           | 30               | 0            | 0 sks.                 |
| 9 5/8            |                  |              |                        |
| 8 5/8            | 1244.70          | 1244.70      | 270 sks.               |
| 7                |                  |              |                        |
| 5 1/2            |                  |              |                        |
| 4 1/2            | 5156.70          | 5156.70      | 220 sks.               |
| 3                |                  |              |                        |
| 2                |                  |              |                        |
| Liners used      |                  |              |                        |

GEOLOGICAL TARGET FORMATION Alexander Depth 5310-40 feet  
Depth of completed well 5651 feet Rotary x / Cable Tools      
Water strata depth: Fresh 110,124 feet; Salt 0 feet  
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Benson Pay zone depth 5038-40 feet  
Gas: Initial open flow     Mcf/d Oil: Initial open flow     Bbl/d  
Combined Final open flow (440) 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 Riley Pay zone depth 4636-62 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.**

Riley: Perforations: 4636-38 (6 holes) 4644-45 (4 holes) 4660-62 (6 holes)  
 Fracturing: 100 sks. 20/40 sand: 500 gal. acid.  
 Benson: Perforations: 5038-40 (8 holes)  
 Fracturing: 400 sks. 20/40 sand: 409 Bbls. fluid.

BOTTOM HOLE PRESSURE  $P_f = P_{we}^{XGLS}$

$$t=60 + (0.0075 \times 5157) + 459.7 = 558 \quad X = \frac{1}{53.35} \times 558 = \frac{1}{29769} = 0.000034 \quad P_f = 1600 \times 2.72^{(0.000034)}$$

$$(0.684)(4838)(0.9) = 1600 \times 2.72^{0.1} = 1600 \times 1.1$$

Pf= 1760 psi

**WELL LOG**

| FORMATION                     | COLOR | HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS<br>Including indication of all fresh and salt water, coal, oil and gas. |
|-------------------------------|-------|--------------|----------|-------------|---|
| Clay                          |       |              | 0        | 3           |   |
| Sandy shale & sand            |       |              | 3        | 30          |   |
| Shale, red rock & sandy shale |       |              | 30       | 120         | 1/4" stream @ 110'  |
| Sand & sandy shale            |       |              | 120      | 220         |   |
| Red rock & shale              |       |              | 220      | 245         | 1/4" stream @ 1244'   |
| Sand, shale & red rock        |       |              | 245      | 395         |   |
| Sand, shale & red rock        |       |              | 395      | 440         | Gas ck @ 2292 No show   |
| Sandy shale & red rock        |       |              | 440      | 785         |   |
| Sand & shale                  |       |              | 785      | 970         | Gas ck @ Drill collars 14/10-1" w/water   |
| Red rock, shale & sandy shale |       |              | 970      | 1200        | 28,277 cu.ft.   |
| Shale & sandy shale           |       |              | 1200     | 1600        |   |
| Sand & sandy shale            |       |              | 1600     | 2035        |   |
| Big Lime & INjun              |       |              | 2035     | 2230        |   |
| Sandy shale & sand            |       |              | 2230     | 2485        |   |
| Sandy shale                   |       |              | 2485     | 2900        |   |
| Shale & sand                  |       |              | 2900     | 3275        |   |
| Shale & sandy shale           |       |              | 3275     | 3595        |   |
| Sandy shale & sand            |       |              | 3595     | 4636        |   |
| Riley                         |       |              | 4636     | 4662        |   |
| Shale & sandy shale           |       |              | 4662     | 5038        |   |
| Benson                        |       |              | 5038     | 5040        |   |
| Sandy shale                   |       |              | 5040     | 5310        |   |
| Alexander                     |       |              | 5310     | 5340        |   |
| Sandy shale                   |       |              | 5340     | 5651 P.D.   |   |

(Attach separate sheets as necessary)

J&J Enterprises, Inc.

Well Operator

By:

Date: 9/5/85

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 coal, encountered in the drilling of a well."



1) Date: April 29, 19 85  
 2) Operator's Well No. J-1194  
 3) API Well No. 47 -095-1106  
 State County Permit

**RECEIVED**

MAY 24 1985

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

APPLICATION FOR A WELL WORK PERMIT

OIL & GAS DIVISION

- 4) WELL TYPE:  OIL  MINES Gas  /  
 B (If "Gas", Production  / Underground storage  / Deep  / Shallow  )  
 5) LOCATION: Elevation: 1177' / Watershed: Short Run 670  
 District: Centerville / County: Tyler / Quadrangle: West Union 7.5'  
 6) WELL OPERATOR J & J Enterprises, Inc. 427 7) DESIGNATED AGENT Richard Reddecliff  
 Address P.O. Box 48 24130 Address P.O. Box 48  
Buckhannon, WV 26201 Buckhannon, WV 26201  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name Robert Lowther Name S.W. Jack Drilling Co.  
 Address General Delivery Address P.O. Box 48  
Middlebourne, WV 26149 Buakhannon, 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, Alexander 439  
 12) Estimated depth of completed well, 5600' feet  
 13) Approximate trrata depths: Fresh, 150' 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   |                   | 425' 30"         | 4270'                                | 0 Sacks <u>7.5 Kip by rule 15-01</u> |
| Fresh water           | 8 5/8          | ERW   | 23             | X   |                   | 1777'            | 1777'                                | To Surface                           |
| Coal                  | 8 5/8          | ERW   | 23             | X   |                   | 1777'            | 1777'                                | To Surface                           |
| Intermediate          |                |       |                |     |                   |                  |                                      |                                      |
| Production            | 4 1/2          | J-55  | 10.5           | X   |                   | <del>5600'</del> | <del>5550'</del>                     | 300 sacks                            |
| Tubing                |                |       |                |     |                   | 5600'            | 5550'                                | or as required by rule 15-01         |
| Liners                |                |       |                |     |                   |                  |                                      | Perforations:<br>Top Bottom          |

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-095-1106 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.

|       |          |       |        |      |
|-------|----------|-------|--------|------|
| Bond: | ✓ Agent: | Plat: | Casing | Fee  |
| 82    | AIB      | MH    | MH     | 1974 |

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.