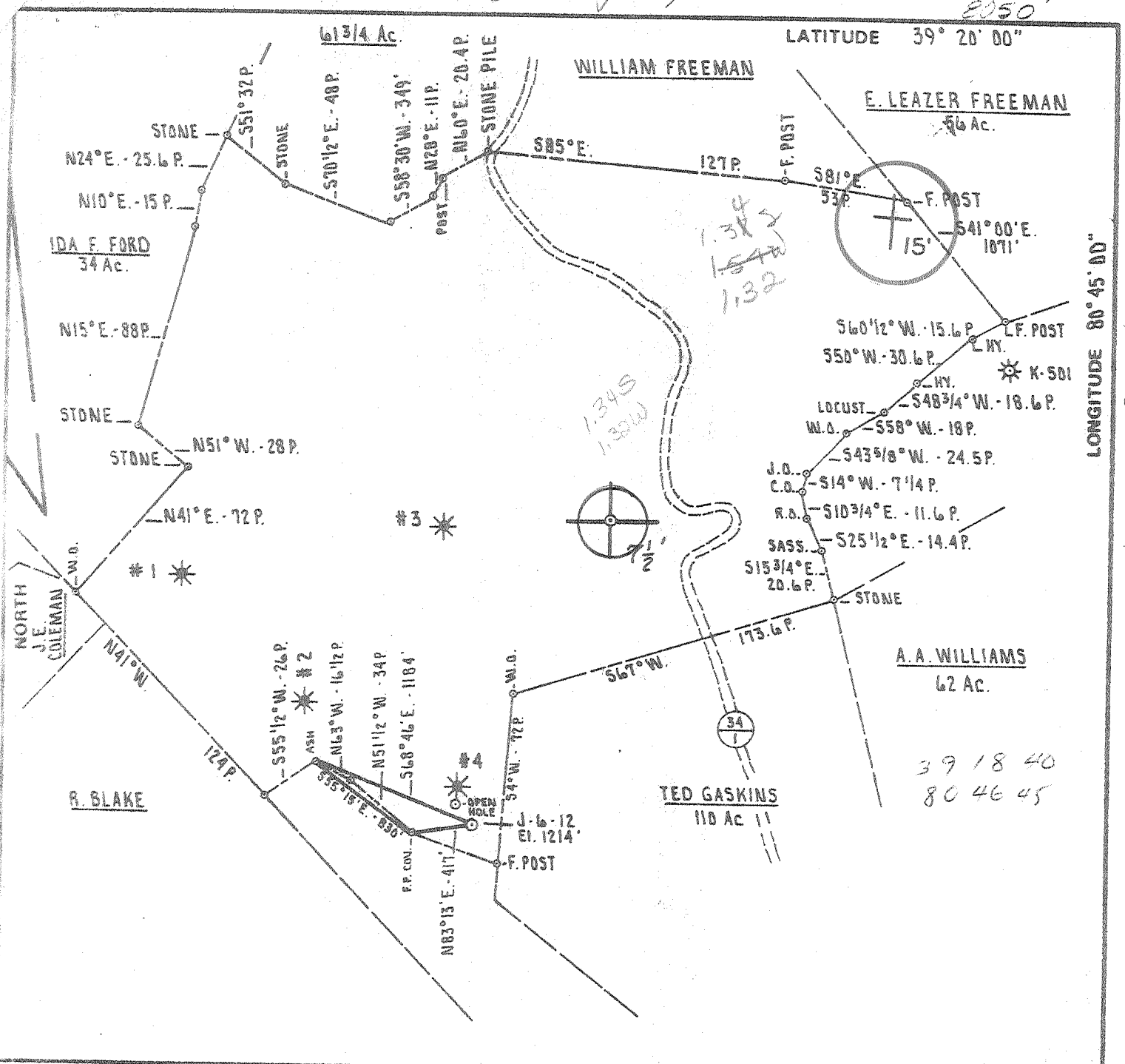


2050'

LATITUDE 39° 20' 00"

LONGITUDE 80° 45' 00"



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION J. and J. ENTERPRISES
 WELL # K-501 ELEVATION 1214'

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) David L. Wheeler
 R.P.E. _____ L.L.S. 530



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE NOVEMBER 13th, 19 79
 OPERATOR'S WELL NO. J-6-12
 API WELL NO. _____
47 - 017 - 2539
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1214' WATER SHED MIDDLE ISLAND CREEK
 DISTRICT WEST UNION COUNTY DODDRIDGE
 QUADRANGLE WEST UNION 7.5' / 15' SE
 SURFACE OWNER HOMER MARTIN JR. ACREAGE 450
 OIL & GAS ROYALTY OWNER RALPH LEADERBRAND; J.M.L. Smith LEASE ACREAGE 450
 LEASE NO. J-6-12
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5,150'
 WELL OPERATOR J. and J. ENTERPRISES, INC. DESIGNATED AGENT HARRY BARNETT DEC 6 1979
 ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48
6-6 BUCKHANNON, WEST VIRGINIA 26201 CENTRAL STA BUCKHANNON, WEST VIRGINIA 26201 91

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

WELL OPERATOR'S REPORT
OF
DRILLING, FRACURING AND/OR STIMULATIONS, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal
(If "Gas", Production / Underground storage / Deep / Shallow)

LOCATION: Elevation: 1214' Watershed: Middle Island Creek
District: West Union County: Doddridge Quadrangle: West Union 7 1/2

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT H.L. Barnett
Address P.O. Box 48 Address P.O. Box 48
Buckhannon, WV 26201 Buckhannon, WV 26201

PERMITTED WORK: Drill / Convert / Drill deeper / Redrill / Fracture or stimulate
Plug off old formation / Perforate new formation /
Other physical change in well (specify) _____

PERMIT ISSUED ON 11-19, 1979, OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED _____)
Name Paul Garrett
Address 321 Beech ST.
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth 5470-5535 feet

Depth of completed well, 5713 feet Rotary / Cable Tools _____
Water strata depth: Fresh, 0 feet; salt, 0 feet.
Coal seam depths: 605'-608' Is coal being mined in the area? No
Work was commenced 2-8, 1980, and completed 2-14, 1980

CASING AND TUBING PROGRAM

| CASING OR TUBING TYPE | SPECIFICATIONS | | | | FOOTAGE INTERVALS | | CEMENT FILL-UP OR SACKS (Cubic feet) | REMARKS |
|-----------------------|----------------|-------|---------------|-----|-------------------|--------------|--------------------------------------|---------|
| | Size | Grade | Weight per Ft | New | Used | For drilling | | |
| Conductor | 13/4H-40 | 42 | x | | | 28 | 0 | Winds |
| Fresh water | 85/8 ERW | 23 | x | | | 826.35 | 826.35 | 230 Sks |
| Coal | 85/8 ERW | 23 | x | | | 826.35 | 826.35 | 230 Sks |
| Intermediate | | | | | | | | |
| Production | 41/2J-55 | 105 | x | | | 5599 | 5599 | 700 Sks |
| Tubing | | | | | | | | |
| Liners | | | | | | | | |

MAR 16 1980
OIL & GAS DIVISION
DEPT. OF MINES

OPEN FLOW DATA

Producing formation Alexander, Riley & Bradford Pay zone depth 4755'-5505'
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Combined Final open flow, 246,000 Mcf/d Final open flow, _____ Bbl/d
Time between open flow between initial and final tests, 46 hours
Static rock pressure _____ psig (surface measurement, after _____ hours shut in)
[If applicable due to multiple completions--]
Second producing formation Gordon, Berea, Weir & Speechley zone depth 2453'-3672'
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Final open flow, _____ Mcf/d Final open flow, _____ Bbl/d
Time between open flow between initial and final tests, _____ hours
Static rock pressure _____ psig (surface measurement, after _____ hours shut in)

Continued on reverse side

(Reverse)

108-78

DETAILS OF PERFORATED INTERVALS, FRACTURING OF CEMENTATION, PHYSICAL CHANGE, ETC.

- 1 4755'-5505' 26 Shots 590 bbl. fluid 200 sks. 80/100 sand; 500 sks. 20/40 sand
Average pres. 2760 Average rate 34.3
- 2 2894'-3672' 13 Shots 350 bbls. fluid 150 sks 80/100 sand; 250 sks 20/40 sand
500 gal HCL
Average pres. 2995; Average rate 32.7
- 3 2453'-2660' 15 Shots 17 bbls. 500 gal HCL Hole curculated

WELL LOG

| FORMATION | Color | Hard or Soft | Top Feet | Bottom Feet | REMARKS Including indication of oil, gas and salt water, etc. |
|--------------------|-------|--------------|----------|-------------|--|
| Fill | | | 0 | 15 | |
| Red Rock | | | 15 | 25 | |
| Shale | | | 25 | 100 | |
| Sand & Shale | | | 100 | 520 | |
| Red Rock | | | 520 | 605 | |
| Coal | | | 605 | 608 | |
| Red Rock | | | 608 | 650 | |
| Shale & Sand | | | 650 | 900 | |
| Red Rock | | | 900 | 1126 | |
| Sand | | | 1126 | 1157 | |
| Shale & Sand | | | 1157 | 2135 | |
| Big Lime | | | -2135 | 2215 | |
| Big Injun | | | 2215 | 2320 | |
| Shale | | | 2320 | 2450 | |
| Weir | | | 2450 | 2570 | |
| Shale | | | 2570 | 2650 | |
| Sand | | | -2650 | 2660 | |
| Shaly Sand | | | 2660 | 2890 | |
| Sand | | | 2890 | 2900 | |
| Shaly Sand & Shale | | | 2900 | 3500 | |
| Sand | | | 3500 | 3700 | |
| Shaly Sand & Shale | | | 3700 | 4380 | |
| Shale | | | 4380 | 4500 | |
| Shaly Sand | | | 4500 | 4730 | |
| Sand | | | 4730 | 4740 | |
| Shale | | | 4740 | 4950 | |
| Shaly Sand | | | 4950 | 5070 | |
| Sand | | | 5070 | 5100 | |
| Shale | | | 5100 | 5190 | |
| Shaly Sand | | | 5190 | 5330 | |
| Alexander | | | 5330 | 5410 | Gas 5341 |
| Shale | | | 5410 | 5500 | |

Attach separate sheets to complete log necessary.

5500 T.D.
T.D.-5690

J & J Enterprises, Inc.
Well Operator

By _____
Peter Battles
Geologist

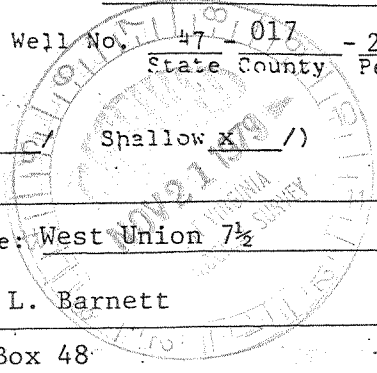
NOTE: Subsequent to this log, the following:

"Take some logs of 'Well Log' shall mean a systematic, detailed geological record of all formations, including coal, encountered in the drilling of a well."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. JJ-6-#12 API Well No. 47-017 - 2539 State County Permit



WELL TYPE: Oil ___ / Gas X ___ (If "Gas", Production X ___ / Underground storage ___ / Deep ___ / Shallow X ___ /)

LOCATION: Elevation: 1214' Watershed: Middle Island Creek District: West Union County: Doddridge Quadrangle: West Union 7 1/2

WELL OPERATOR J & J Enterprises, Inc. Address P. O. Box 48 Buckhannon, West Virginia 26201

DESIGNATED AGENT H. L. Barnett Address P. O. Box 48 Buckhannon, West Virginia 26201

OIL & GAS ROYALTY OWNER J. M. L. Smith Address 405 W. Main Street West Union, W. Va. 26456

COAL OPERATOR None Address

SURFACE OWNER Homer Martin, Jr. Address Star Route West Union, W. Va. 26456 Acreage 450

COAL OWNER(S) WITH DECLARATION ON RECORD: Name J. M. L. Smith Address 405 W. Main Street West Union, W. Va. 26456

FIELD SALE (IF MADE) TO: Name Address

Name Address

OIL & GAS INSPECTOR TO BE NOTIFIED Name Paul Garrett Address 321 Beech Street Clarksburg, W. Va. 26301

COAL LESSEE WITH DECLARATION ON RECORD: Name None Address

RECEIVED NOV 19 1979

OIL & GAS DIVISION DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed ___ / lease ___ / other contract X ___ / dated September 27, 1979, to the undersigned well operator from Leaderbrand

[If said deed, lease, or other contract has been recorded:] Recorded on October 16, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 111 at page 540. A permit is requested as follows:

PROPOSED WORK: Drill X ___ / Drill deeper ___ / Redrill ___ / Fracture or stimulate X ___ / Plug off old formation ___ / Perforate new formation ___ / Other physical change in well (specify) ___

--closed as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objections they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Dated of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION 1601 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 348-3092

BLANKET BOND

J & J ENTERPRISES, INC. Well Operator

By Peter Battles PETER BATTLES GEOLOGIST

[08-78]

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) S. W. Jack Drilling Company
Address P. O. Box 48
Buckhannon, W. Va. 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5700 feet Rotary / Cable tools /
Approximate water strata depths: Fresh, 150 feet; salt, 1630 feet.
Approximate coal seam depths: 394, 505 Is coal being mined in the area: Yes / No /


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 | | Kind | Depth |
| Conductor | 11 3/4 | H-40 | 42 | X | | 30 | 0 | 0 sks. | None | |
| Fresh water | 8 5/8 | ERW | 23 | X | | 1100 | 1100 | 280 sks. | | |
| Coal | 8 5/8 | ERW | 23 | X | | 1100 | 1100 | 280 sks. | | |
| Intermediate | | | | | | | | | | |
| Production | 4 1/2 | J-55 | 10.5 | X | | 5675 | 5675 | 300 sks. | | Depths set |
| Tubing | | | | | | | | | | |
| Liners | | | | | | | | | | Perforations: |
| | | | | | | | | | | Top Bottom |

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.
THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 7-20-80


Deputy Director - Oil & Gas Division

... by the coal operator and by any coal owner or coal lessee who has not made a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator / owner / lessee of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____, 19____

By _____
Its _____