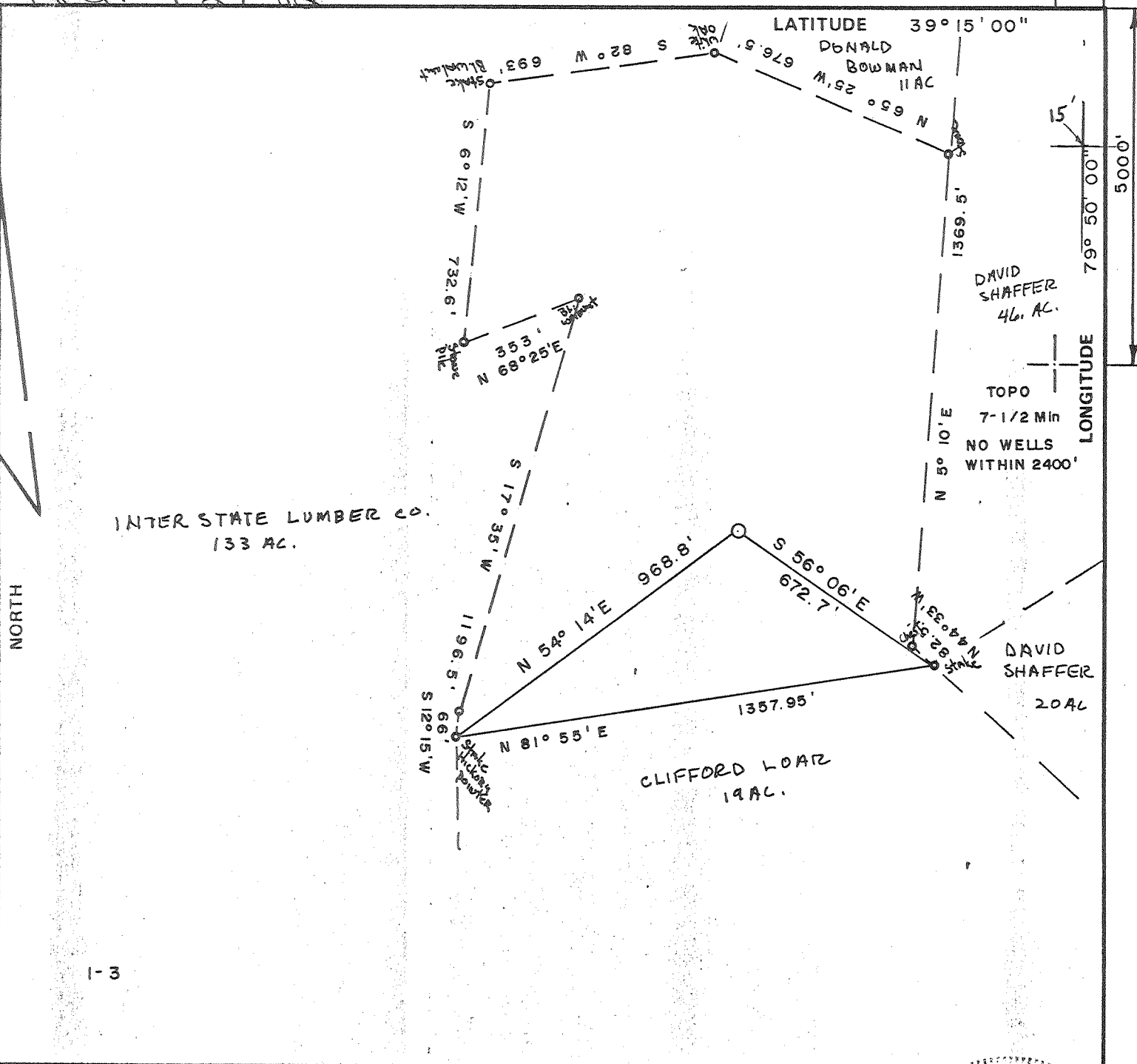


M. J. 1-29-82

700'



1-3

FILE NO. _____
 DRAWING NO. _____
 SCALE 1"=400'
 MINIMUM DEGREE OF ACCURACY 1/2500
 PROVEN SOURCE OF ELEVATION BM on Rt. 4 - 1455
3200' N.W. of Site

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) John Robert Gales
 R.P.E. 5566 L.L.S. _____

STATE OF WEST VIRGINIA REGISTERED PROFESSIONAL SURVEYOR
 5566
 STATE OF WEST VIRGINIA
 PLACE SEAL HERE

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



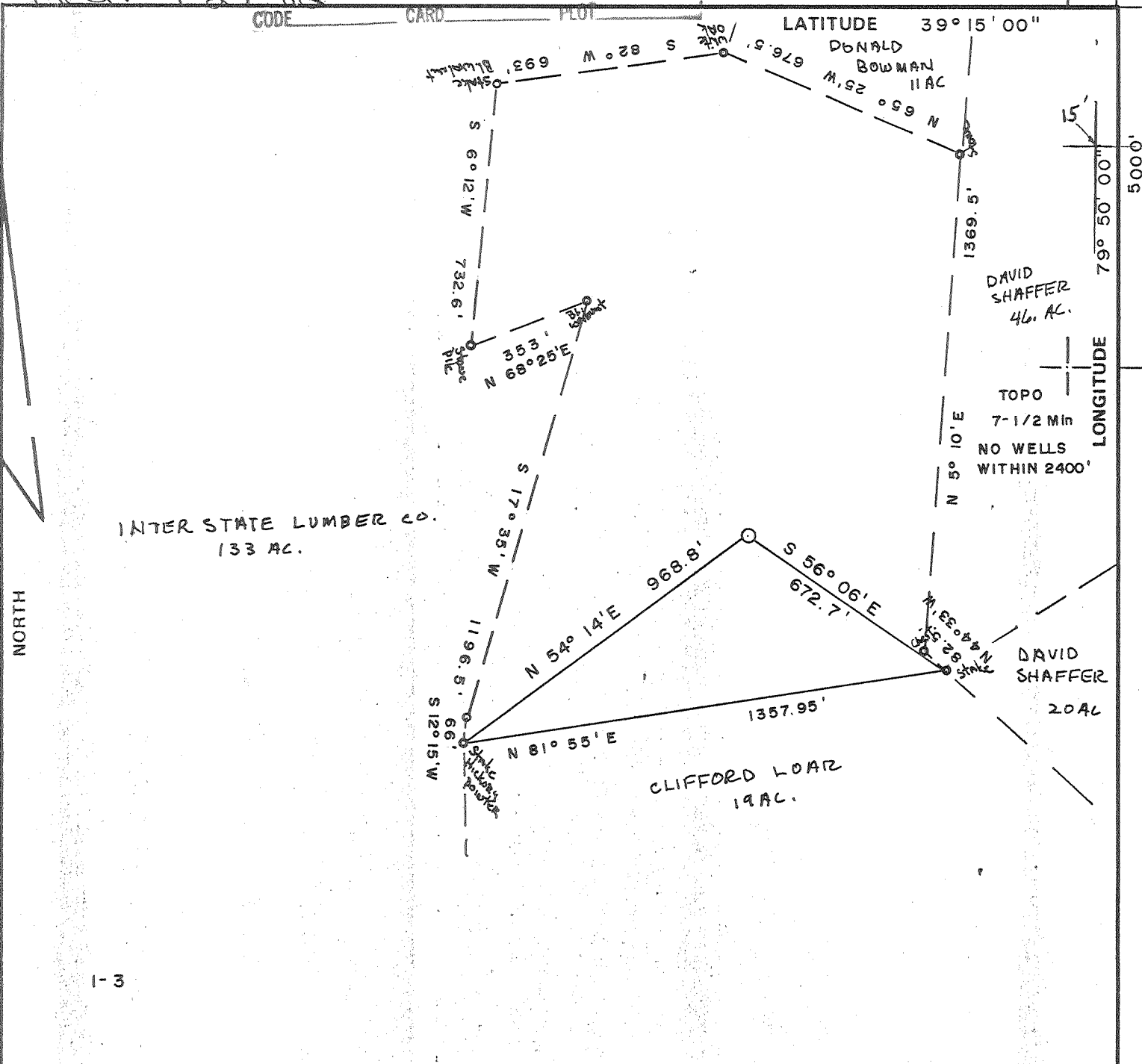
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE 1/11, 19 82
 OPERATOR'S WELL NO. J-622
 API WELL NO. 47-001-1694
 STATE COUNTY PERMIT

Plugging Cancelled

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE X DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1840 WATER SHED SANDY CREEK
 DISTRICT COVE COUNTY BARBOUR
 QUADRANGLE COLEBANK
 SURFACE OWNER INTERSTATE LUMBER CO. ACREAGE 47.17
 OIL & GAS ROYALTY OWNER INTERSTATE LUMBER CO. LEASE ACREAGE 47.17
 LEASE NO. I-3
 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 ORISKANY ESTIMATED DEPTH 7400
 WELL OPERATOR J&J ENTERPRISES INC. DESIGNATED AGENT James B. Willett
 ADDRESS BOX 48 ADDRESS Box 48
BUCKHANNON, WV 26201 Buckhannon WV 26201

M 2. 1-29-82



INTERSTATE LUMBER CO.
133 AC.

CLIFFORD LOARZ
19 AC.

DAVID SHAFFER
46 AC.

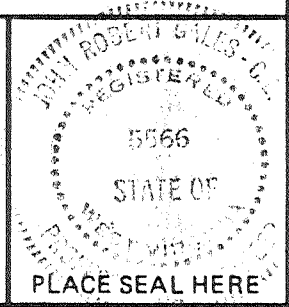
DAVID SHAFFER
20 AC.

NORTH

1-3

FILE NO. _____
DRAWING NO. _____
SCALE 1"=400'
MINIMUM DEGREE OF ACCURACY 1/2500
PROVEN SOURCE OF ELEVATION BM on Rt. 4 - 1455
3200' N.W. of Site

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) John Robert Gales
B.P.E. 5566 L.L.S. _____



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



DATE 1/11, 19 82
OPERATOR'S WELL NO. J-622
API WELL NO. _____
47 - 001 - 1694 - P
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

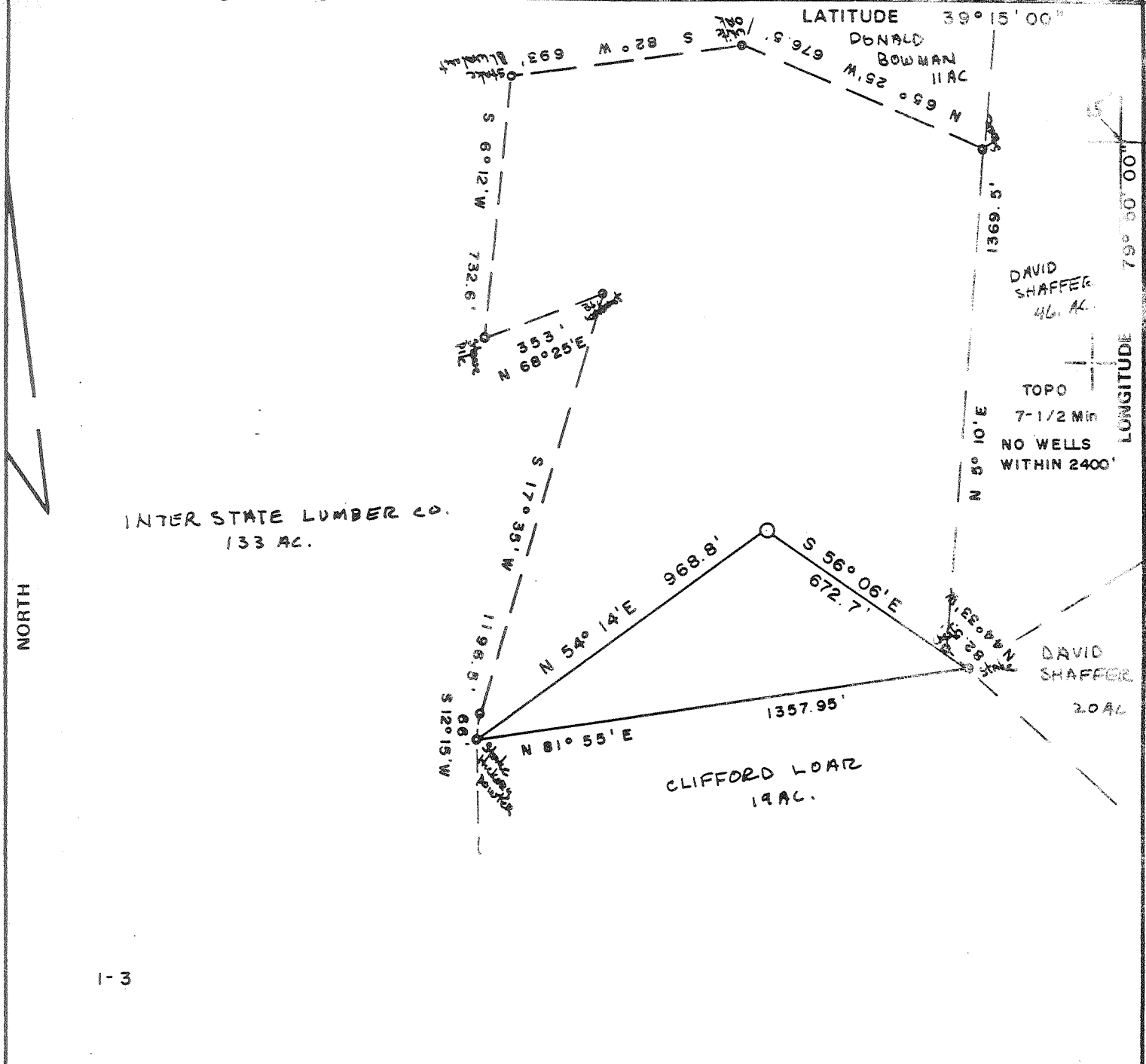
WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 1840 WATER SHED SANDY CREEK
DISTRICT COVE COUNTY BARBOUR
QUADRANGLE COLEBANK

SURFACE OWNER INTERSTATE LUMBER CO. ACREAGE 47.17
OIL & GAS ROYALTY OWNER INTERSTATE LUMBER CO. LEASE ACREAGE 47.17
LEASE NO. I-3

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 ORISKANY ESTIMATED DEPTH 7400
WELL OPERATOR J&J ENTERPRISES INC DESIGNATED AGENT James R. Willett
ADDRESS BOX 48 ADDRESS Box 48
BUCKHANNON, WV 26201 Buckhannon WV 26201

Plot Card GSD



INTER STATE LUMBER CO.
133 AC.

LATITUDE 39° 15' 00"

LONGITUDE 79° 50' 00"

DAVID SHAFFER
46 AC.

TOPO
7-1/2 Min
NO WELLS
WITHIN 2400'

DAVID SHAFFER
20 AC.

CLIFFORD LOARZ
19 AC.

NORTH

1-3

FILE NO. _____
 DRAWING NO. _____
 SCALE 1"=400'
 MINIMUM DEGREE OF ACCURACY 1/2500
 PROVEN SOURCE OF ELEVATION BM on Rt. 4 - 1455
 3200' N.W. of Site

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) John Robert Gales
 R.P.E. 5866 L.L.S. _____

PLACE SEAL HERE

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

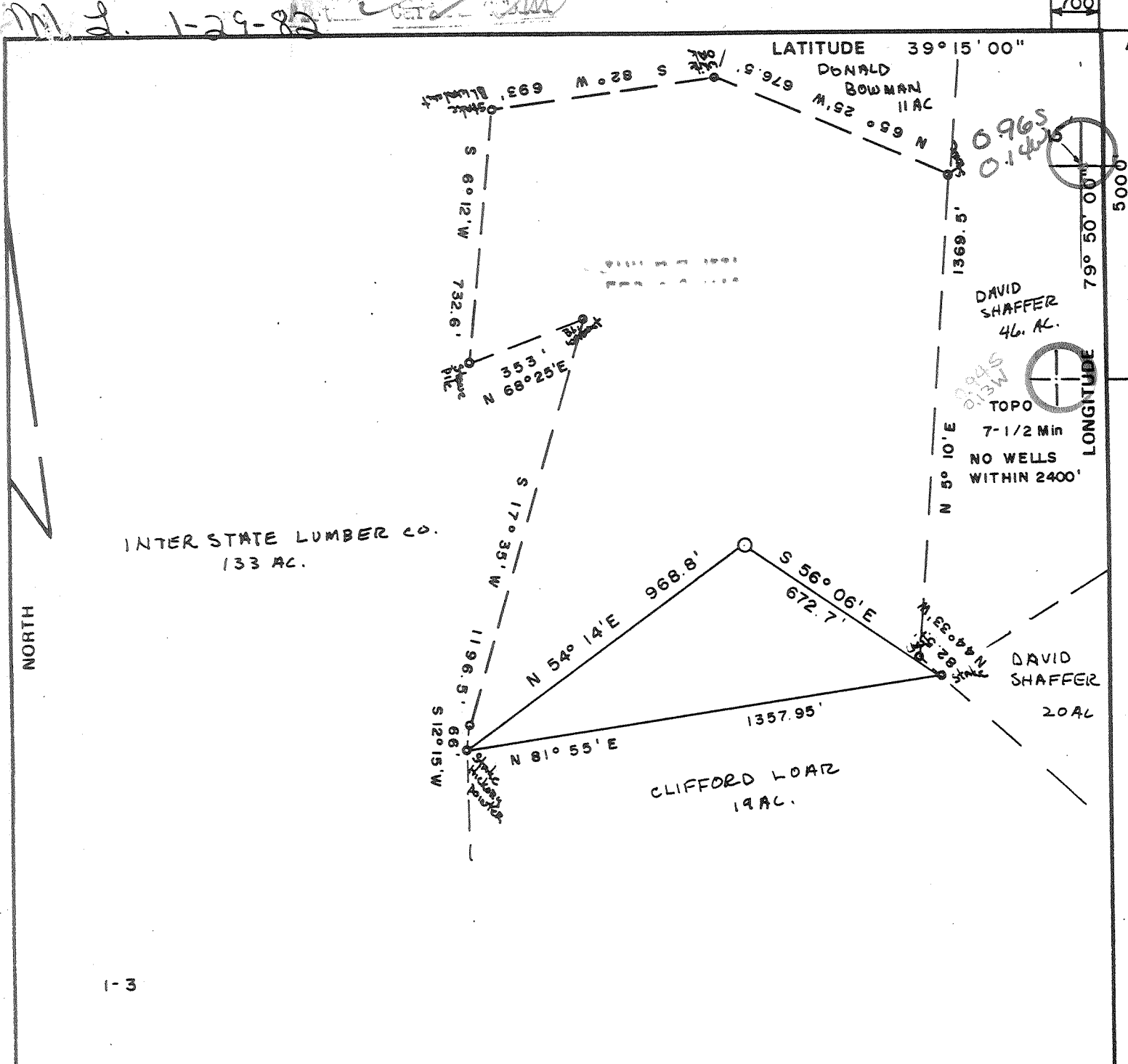


DATE 1/11, 19 82
 OPERATOR'S WELL NO. J-622
 API WELL NO. _____
 STATE 47 COUNTY 001 PERMIT 1694

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE X DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1840 WATER SHED SANDY CREEK
 DISTRICT COVE COUNTY BARBOUR
 QUADRANGLE COLEBANK Belington DC
 SURFACE OWNER INTERSTATE LUMBER CO. ACREAGE 47.17
 OIL & GAS ROYALTY OWNER INTERSTATE LUMBER CO. LEASE ACREAGE 47.17
 LEASE NO. I-3
 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 ORISKANY ESTIMATED DEPTH 7400
 WELL OPERATOR J&J ENTERPRISES INC DESIGNATED AGENT James R. Willett
 ADDRESS BOX 48 ADDRESS Box 48
BUCKHANNON, WV 26201 Buckhannon WV 26201

AUG 10 1982



1-3

FILE NO. _____
 DRAWING NO. _____
 SCALE 1"=400'
 MINIMUM DEGREE OF ACCURACY 1/2500
 PROVEN SOURCE OF ELEVATION BM on Rt. 4 - 1455
3200' N.W. of Site

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) _____
 R.P.E. _____ L.L.S. _____

PLACE SEAL HERE

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



DATE 1/11, 19 82
 OPERATOR'S WELL NO. J-622
 API WELL NO. 47-001-11694
 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 X STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1840 WATER SHED SANDY CREEK
 DISTRICT COVE COUNTY BARBOUR
 QUADRANGLE COLEBANK Belington 15' Nc
 SURFACE OWNER INTERSTATE LUMBER CO. ACREAGE 47.17
 OIL & GAS ROYALTY OWNER INTERSTATE LUMBER CO. LEASE ACREAGE 47.17
 LEASE NO. I-3
 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 ORISKANY ESTIMATED DEPTH 7400
 WELL OPERATOR J&J ENTERPRISES INC DESIGNATED AGENT James R. Willett FEB 22 1982
 ADDRESS BOX 48 ADDRESS Box 48
BUCKHANNON, WV 26201 Buckhannon WV 26201

RECEIVED
DEC - 9 1985

Date: January 5, 19 82
Operator's Well No. J-622
API Well No. 47 - 001 1694-PP
State County Perkins

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

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

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

LOCATION: Elevation: 1840 Watershed: Sandy Creek
District: Cove County: Barbour Quadrangle: Colebank

WELL OPERATOR J&J Enterprises, Inc. DESIGNATED AGENT Richard M. Reddecliff
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 1/20, 19 82 OIL & GAS INSPECTOR FOR THIS WORK:
Name Robert Stewart
Address P.O. Box 345
Jane Lew, WV 26378

GEOLOGICAL TARGET FORMATION: _____ Depth _____ feet
Depth of completed well, 3419 feet Rotary / Cable Tools _____
Water strata depth: Fresh, 215¹⁰⁶⁵ feet; salt, 0 feet.
Coal seam depths 226-30, 385-88, 1090-92 is coal being mined in the area?
Work was commenced March 1, 19 82, and completed March 15, 19 82
11/3/82 - no comp date

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 | | 35 | 35 | 0 sks. Binds |
| Fresh water | 8 5/8 | ERW | 23 | x | | 1929.90 | 1929.90 | 485 sks. |
| Coal | 8 5/8 | ERW | 23 | x | | 1929.90 | 1929.90 | 485 sks. Binds |
| Intermediate | | | | | | | | |
| Production Tubing | 4 1/2 | J-55 | 10.5 | x | | 3409.45 | 3409.45 | 180 sks. Binds set |
| Liners | | | | | | | | Perforations: Top Bottom |

OPEN FLOW DATA

Producing formation Balltown Pay zone depth 3218-98 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Final open flow, 112 Mcf/d Final open flow, _____ Bbl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 1200 psig (surface measurement) after 96 hours shut in

[If applicable due to multiple completion--]

Second producing formation _____ Pay zone depth _____ feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Final open flow, _____ Mcf/d 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

DEC 16 1985

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

Perforations:
Balltown: 3218-3298 (12 holes)

Fracturing:

Well was acidized

100 ft. plug top of cement on 4 1/2"
6% Gel up to Balltown
Pulled 11.60, Set 10.5 pipe on Balltown.

BOTTOM HOLE PRESSURE Pf=Pwe^{XGLS}

$$Pw=1000 \text{ psia} \quad e=2.72 \quad T=60 + (3409 \times 0.0075) + 459.7 = 545.27 \quad X=53.34 \quad T = \frac{1}{53.34} (545.27)$$

$$=0.000034 \quad Pf=(1000)(2.72)(0.000034)(.680)(3258)(0.9) = (1000)(2.72)(0.0678) \quad Pf=(1000)(1.07)$$

Pf=1070 psia

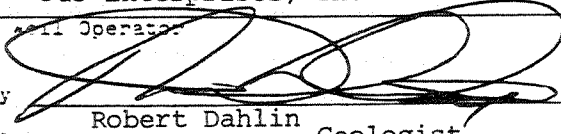
WELL LOG

| FORMATION | Color | Hard or Soft | Top Feet | Bottom Feet | Remarks Including indication of all fresh and salt water, coal, oil and gas |
|------------------------------|-------|--------------|----------|-------------|--|
| Conductor | | | 0 | 36 | |
| Sandy shale & sand | | | 36 | 226 | |
| Coal | | | 226 | 230 | Damp @ 85' |
| Sand & sandy shale | | | 230 | 385 | |
| Coal | | | 385 | 388 | 1/2" stream @ 215 |
| Sand | | | 388 | 465 | |
| Coal | | | 465 | 470 | |
| Sand | | | 470 | 510 | 3/4" stream @ 1815 |
| Coal | | | 510 | 515 | |
| Sand & sandy shale | | | 515 | 680 | Gas ck @ 2434 No show |
| Coal | | | 680 | 683 | |
| Sandy shale, red rock & sand | | | 683 | 1090 | Gas ck @ 2905 No show |
| Coal | | | 1090 | 1092 | |
| Sandy shale & red rock | | | 1092 | 1130 | |
| Sand, sandy shale & red rock | | | 1130 | 1265 | Top Dev ≈ 1830' |
| Sand & sandy shale | | | 1265 | 1310 | |
| Little lime | | | 1310 | 1335 | |
| Sandy shale | | | 1335 | 1340 | |
| Big Lime | | | 1340 | 1400 | |
| Sand & sandy shale | | | 1400 | 1570 | |
| Sand & sandy shale | | | 1570 | 2005 | |
| Sand & sandy shale | | | 2005 | 3218 | |
| Balltown | | | 3218 | 3298 | |
| Sand & sandy shale | | | 3298 | 3419 | |

TD

(Attach separate sheets to complete as necessary.)

J&J Enterprises, Inc.

Well Operator: _____
By: 
Its: Robert Dahlin Geologist

NOTE: Regulation 2.02(d) 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."

FORM IV-38 **RECEIVED**

Date: Nov. 5, 1982

[08-78]

NOV 8 - 1982

Operator's Well No. J-622

API Well No. 47 - 001 - 1694
State County Permit

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

Partial
AFFIDAVIT OF PLUGGING AND FILLING WELL

WELL TYPE: Oil ___ / Gas x / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas", Production x / Underground storage ___ / Deep ___ / Shallow x /
LOCATION: Elevation: 1840 Watershed: Sandy Creek
District: Cove County: Barbour Quadrangle: Colebank

WELL OPERATOR J&J Enterprises, Inc. DESIGNATED AGENT Richard M. Reddecliff
Address P.O. Box 48 Address P.O. Box 48
Buckhannon, WV 26201 Buckhannon, WV 26201

STATE OF WEST VIRGINIA,)
COUNTY OF Upshur) SS:
Jerry Legg and Daniel F. Stark

being first duly sworn according to law, depose and say that they are experienced in the work of
plugging and filling oil and gas wells; that they were employed by J&J Enterprises, Inc.
the well operator, and participated in the work of plugging and filling the above well; that the work
was commenced on 11/3, 1982, and completed on 11/3, 1982, in the
following manner:

PARTIAL PLUGGING

PERMITTED WORK: Plug and abandon ___ / Clean out and replug ___ /

PLUGGING MATERIALS

| Type of Cement | Other Materials | Depth | Thickness |
|----------------|-----------------|-------------------|-------------|
| Cement Plug | | 6680-90 | 10' |
| | Gel | 6680- <u>3419</u> | <u>8261</u> |
| | | | |
| | | | |
| | | | |

Bridge Plugs Used--Type and Depth

VENT PIPE

MISCELLANEOUS MATERIALS

CASING LOST Pulled 6894 ft. 4 1/2" csg.

TYPE OF RIG: Ran 3409.45' new csg. back in hole.

Owner: Well Op'r x / Contractor ___ /

Rig time: 1 days plus ___ hours

COAL SEAMS (NAMES AND DEPTHS)

DESCRIPTION OF WELL MONUMENT

Jerry Legg (SEAL)
Daniel F. Stark (SEAL)
BAR. 1694

Subscribed and sworn to before me this

5th day of November, 1982.

My commission expires October 16, 1989.

Guida S. Casfield
Notary Public

[08-78]

Operator's
Well No. J-622
API Well No. 47 001 1694
State County Permit

RECEIVED

AUG - 2 1982

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

**OIL AND GAS DIVISION
WV DEPARTMENT OF MINES**

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: 1840 Watershed: Sandy Creek
District: Cove County: Barbour Quadrangler: Colebank

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

PERMIT ISSUED ON 1/20, 19 82 OIL & GAS INSPECTOR FOR THIS WORK:
(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Robert Stewart
Address P.O. Box 345
Jane Lew, WV 26378

GEOLOGICAL TARGET FORMATION: Oriskany Depth 8235-8304 feet
Depth of completed well, 8425 feet Rotary x / Cable Tools ___
Water strata depth: Fresh 215, 1065, 1815 feet; salt, 0 feet.
Coal seam depths: 226-30, 385-88, 1090-92 feet coal being mined in the area? No
465-70, 510-15, 680-83
Work was commenced 3/1, 19 82, and completed 3/15, 19 82

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 | | 35 | 35 | 0 sks. | Rinds |
| Fresh water | 8 5/8 | ERW | 23 | x | | 1929.90 | 1929.90 | 485 sks. | |
| Coal | 8 5/8 | ERW | 23 | x | | 1929.90 | 1929.90 | 485 sks. | Sizes |
| Intermediate | | | | | | | | | |
| Production | 4 1/2 | J-55 | 10.5 | x | | 8355 | 8355 | 250 sks. | Depths set |
| Tubing | | | | | | | | | |
| Liners | | | | | | | | | Perforations: |
| | | | | | | | | | Top Bottom |
| | | | | | | | | | 8235 8304 |

OPEN FLOW DATA

Producing formation Oriskany Pay zone depth 8235-8304 feet
Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d
Final open flow, Dry Mcf/d 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
[If applicable due to multiple completion--]
Second producing formation _____ Pay zone depth _____ feet
Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d
Final open flow, ___ Mcf/d Final open flow, ___ Bbl/d
Time of open flow between initial and final tests, ___ hours
Bottom Hole Pressure Static rock pressure, ___ psig (surface measurement) after ___ hours shut in
Pf=PweXGLS

AUG 9 1982

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

Oriskany: Perforations: 8235-8304 (12 holes)

Fracturing: Well Acidized with 5,000 gal. Acid and 180,000 SCF Nitrogen.

WELL LOG

| FORMATION | Color | Hard or Soft | Top Feet | Bottom Feet | Remarks Including indication of all fresh and salt water, coal, oil and gas |
|------------------------------|-------|--------------|----------|-------------|--|
| Conductor | | | 0 | 36 | |
| Sandy shale & sand | | | 36 | 226 | Damp @ 85' |
| Coal | | | 226 | 230 | 1/2" stream @ 215' |
| Sand & sandy shale | | | 230 | 385 | 3/4" stream @ 1065' |
| Coal | | | 385 | 388 | |
| Sand | | | 388 | 465 | 1" stream @ 1815' |
| Coal | | | 465 | 470 | |
| Sand | | | 470 | 510 | |
| Coal | | | 510 | 515 | Gas ck @ 2434' No show |
| Sand & sandy shale | | | 515 | 680 | |
| Coal | | | 680 | 683 | Gas ck @ 2905 No show |
| Sandy shale, red rock & sand | | | 683 | 1090 | |
| Coal | | | 1090 | 1092 | |
| Sandy shale & red rock | | | 1092 | 1130 | |
| Sand, sandy shale & red rock | | | 1130 | 1265 | Water @ 3720' |
| Sand & sandy shale | | | 1265 | 1310 | |
| Little lime | | | 1310 | 1335 | |
| Sandy shale | | | 1335 | 1340 | Gas ck @ 4165' 34/10-2" w/water 245,000 cu.ft. |
| Big Lime | | | 1340 | 1400 | |
| Sand & sandy shale | | | 1400 | 1570 | |
| Sand & sandy shale | | | 1570 | 2005 | Gas ck @ 4320 32/10-2" w/water 239,000cu.ft. |
| Sand & sandy shale | | | 2005 | 4075 | |
| Brown sand & sandy shale | | | 4075 | 5370 | |
| Brown sand & sandy shale | | | 5370 | 5500 | Gas ck @ 4875 34/10-2" w/water 245,000 cu.ft. |
| Haverty | | | 5500 | 5550 | |
| Sandy shale & brown sand | | | 5550 | 6370 | |
| Brown sand & sandy shale | | | 6370 | 7220 | Gas ck @ 5745 6/10-2" w/water 103,000 cu.ft. |
| Dark brown shale | | | 7220 | 7286 | |
| Dark gray & limey shale | | | 7286 | 7590 | |
| Black & limey shale | | | 7590 | 7665 | Gas ck @ 6795 Show |
| Brown shale | | | 7665 | 7900 | |
| Dark gray & black shale | | | 7900 | 8050 | Gas ck @ 8275 Show |
| Huntsville | | | 8050 | 8290 | |
| Oriskany | | | 8290 | 8345 | |
| Helderberg | | | 8345 | 8425 | |

(Attach separate sheets to complete as necessary)

TD

Well Operator J&I Enterprises, Inc.
 By Peter Battles
 Its Peter Battles Geologist

NOTE: Regulation 2.02(f) 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."

[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, WV 26201

GEOLOGICAL TARGET FORMATION, Oriskany

Estimated depth of completed well, 7400 feet Rotary X / Cable tools /
Approximate water strata depths: Fresh, 15 feet; salt, 815 feet.
Approximate coal seam depths: 200 Is coal being mined in the area? Yes / No X

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 | | 30 | 0 | 0 sks. Kinds |
| Fresh water | 8 5/8 | CRW | 22.36 | X | | 1700 | 1700 | To surface |
| Coal | 8 5/8 | CRW | 22.36 | X | | 1700 | 1700 | To surface Sizes |
| Intermediate | | | | | | | | |
| Production | 4 1/2 | ERW | 11.6 | | | 7350 | 7350 | 735 300 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.

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 10-1-82.

[Signature]
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded 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

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-622 API Well No. 47 - 001 - 1694 State County Permit

WELL TYPE: Oil / Gas x / (If "Gas", Production x / Underground storage / Deep / Shallow x /) LOCATION: Elevation: 1840 Watershed: Sandy Creek District: Cove County: Barbour Quadrangle: Colebank

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

DESIGNATED AGENT James R. Willett Address P.O. Box 48 Buckhannon, WV 26201

OIL & GAS LEASE & GAS LEASE OWNERSHIP OWNER Interstate Lumber Co. Inc. Address 601 E. Main St. Kingwood, WV

COAL OPERATOR None Address

ACREAGE 47.17 SURFACE OWNER Interstate Lumber CO., Inc. Address 601 E. Main St. Kingwood, WV 26537 Acreage 47.17

COAL OWNER(S) WITH DECLARATION ON RECORD: Name Eastern Assoc. Coal Corp. Address Koppers Building Pittsburgh, Pa. 15219

FIELD SALE (IF MADE) TO: Name Unknown Address

COAL LESSEE WITH DECLARATION ON RECORD: Name None Address

OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert Stewart Address P.O. Box 345 Jane Lew, WV 26378

RECEIVED

JAN 20 1982

OIL AND GAS DIVISION WV DEPARTMENT 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 10/23, 1981, to the undersigned well operator from S & S, Inc.

If said deed, lease, or other contract has been recorded: recorded on 10/22, 1981, in the office of the Clerk of the County Commission of Barbour County, West Virginia, in Oil & Gas Book 89 at page 75. 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)

--planned 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 objection 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.

Copies 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 1615 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 348-3092

J & J Enterprises, Inc. Well Operator By Peter Battles Geologist

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