



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1,000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION J. & J. ENTERPRISES, INC.
WELL # K-24-1 ELEV. -827'

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

PLACE SEAL HERE

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



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE APRIL 22 19 80
 OPERATOR'S WELL NO J-276
 API WELL NO 47-017-2702
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 974' WATER SHED RIGHT FORK OF ARNOLDS CREEK
 DISTRICT WEST UNION COUNTY DODDRIDGE
 QUADRANGLE OXFORD 75' Halbrook 15' NE
 SURFACE OWNER MOSES SMITH ACREAGE 97.3
 OIL & GAS ROYALTY OWNER ADA SMITH LEASE ACREAGE 97.3
 LEASE NO. _____
 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 5,400'
 WELL OPERATOR J. & J. ENTERPRISES, INC. DESIGNATED AGENT HARRY BARNETT
 ADDRESS P.O. BOX 48 BUCKHANNON, W. VA. 26201 ADDRESS P.O. BOX 48 BUCKHANNON, W. VA. 26201

G-6 STRAIGHT FR - BLUESTONE CR 133

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

WELL OPERATOR'S REPORT 8
OF

DRILLING, FRACURING AND/OR STIMULATION, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 974 Watershed: Right Fork of Arnolds Creek
District: West Union County: Doddridge Quadrangle: Oxford 7.5'

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT H.L. Barnett
Address Box 48 Address 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 4-28, 19 80

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED

Name Paul Garrett
Address 321 Beech St.
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth 5180-5115 feet

Depth of completed well, 5230 feet Rotary / Cable Tools

Water strata depth: Fresh, 45-265 feet; salt, None feet.

Coal seam depths: None Is coal being mined in the area? No

Work was commenced 6-4, 19 80, and completed 6-9, 19 80

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 | 13/4H | 40 | 42 | X | | 0 | 0 | 0 sks | None |
| Fresh water | 5/8ERW | | 23 | X | | 1497 | 1497 | 440 sks | |
| Coal | 5/8ERW | | 23 | X | | 1497 | 1497 | 440 sks | Size: |
| Intermediate | | | | | | | | | |
| Production | 1 1/2 J | 55 | 10.5 | X | | 5172 | 5172 | 750 sks | Depth set |
| Tubing | | | | | | | | | |
| Liners | | | | | | | | | Perforations: |
| | | | | | | | | | Top Bottom |
| | | | | | | | | | 3191 3213 |
| | | | | | | | | | 3329 3331 |
| | | | | | | | | | 3738 3742 |
| | | | | | | | | | 4148 4150 |
| | | | | | | | | | 4777 5089 |
| | | | | | | | | | 5059 5089 |

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 5180-5225 feet

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d

Combined Final open flow, 1,203 Mcf/d Final open flow, _____ Bbl/d

Time of open flow between initial and final tests, 6 hours

Static rock pressure, 1,100 psig (surface measurement) after 96 ~~4998-99~~ in

[If applicable due to multiple completion--] Bradford, Balltown & Warren 4166-68

Second producing formation Bradford, Balltown & Warren Pay zone depth 3191-3223 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

JUL 3 1980

08-78

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

Alexander: Perforations: 5059-5089 (15 holes)

Fracturing: 650 sks. 80/100 sand: 1100 lbs. 20/40 sand; 550 Bbl. fluid.

Bradford: Perforations: 3738-42 (8 holes) 4148-50 (3 holes) 4777-79 (2 holes)

Fracturing: 650 sks. 80/100 sand: 1100 lbs 20/40 sand: 500 gal Acid 600 Bbls. fluid.

Balltown & Warren: Perforations: 3191-3213 (10 holes) 3329-31 (4 holes)

Fracturing: 500 gal. acid: 700 lbs. 80/100 sand. 1000 lbs. 20/40 sand: 550 Bbls fluid.

WELL 100

| FORMATION | Color | Thickness Feet | Top Feet | Bottom Feet | REMARKS Including indication of gas flow and salt water, coal, etc. |
|--------------------|-------|-------------------|-------------|----------------|---|
| Clay | | | 0 | 15 | |
| Shale & White Sand | | | 15 | 40 | 1/2" stream water @ 45' |
| Red Rock | | | 40 | 60 | |
| White Sand | | | 60 | 90 | |
| Sand & Shale | | | 90 | 110 | |
| Red Rock & Shale | | | 110 | 250 | |
| Sand & Shale | | | 250 | 355 | |
| Sand & Shale | | | 355 | 615 | |
| Red Rock & Shale | | | 615 | 740 | |
| Sand & Shale | | | 740 | 780 | |
| Shale & Red Rock | | | 780 | 905 | |
| Shale & Sand | | | 905 | 1055 | |
| White Sand | | | 1055 | 1135 | |
| Shale | | | 1135 | 1160 | |
| White Sand | | | 1160 | 1215 | |
| Shale & Sand | | | 1215 | 1280 | 1/2" ,stream water @ 1240 |
| Shale | | | 1280 | 1400 | |
| Sand | | | 1400 | 1740 | |
| Sand | | | 1740 | 1830 | |
| Big Lime | | | - 1830 | 1950 | |
| Sandy Shale | | | 1950 | 2350 | |
| Shale | | | 2350 | 3191 | |
| Balltown | | | 3191 | 3213 | |
| Speechley | | | 3213 | 3331 | Gas ck @ 3908 2/10 thru 11/2" w/water |
| Bradford | | | 3331 | 4150 | |
| Sand | | | 4150 | 4779 | |
| Shale | | | 4779 | 4795 | |
| White Shale | | | 4795 | 4800 | |
| Benson | | | 4800 | 4995 | Gas ck @ 4828 6/10 thru 11/2" w/ water |
| Lt. Brown Sand | | | 4995 | 5000 | |
| Gray Shale | | | 5000 | 5180 | |
| Alexander | | | 5180 | 5115 | Gas ck @ 5230 2/10 thru 11/2" w/ water |
| Shale | | | 5115 | 5230 | T.D. 5230 |

(Attach separate sheets as complete as necessary.)

J & J Enterprises, Inc.

Well Operator

By

Peter Battles
Peter Battles
Geologist

NOTE: Regulation 0.0216, provides as follows:

"The term 'log' in well logs 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. J-276

API Well No. 47 - 017- 2702
State County Permit

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

LOCATION: Elevation: 974 Watershed: Right Fork of Arnold's Creek
District West Union County: Doddridge Quadrangle: Oxford 7.5'

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

DESIGNATED AGENT H.L. Barnett
Address Box 48
Buckhannon, WV 26201

OIL & GAS ROYALTY OWNER Ada Smith / Moses W. & Anna Smith
Address 770 Valley Crest / West Union
Akron, Ohio 44305 WV 26456

COAL OPERATOR None
Address

ACREAGE 97.3
SURFACE OWNER Moses & Anna Smith
Address West Union, WV 26456
ACREAGE 97.3

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name Moses & Anna Smith
Address West Union, WV 26456

FIELD SALE (IF MADE) TO:
Name
Address

Name
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address 321 Beech St.
Clarksburg, WV 26301

COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address
APR 28 1980

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 11-1, 1978, to the undersigned well operator from Justin Henderson

[If said deed, lease, or other contract has been recorded:]
Recorded on 11-12, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, Oil & Gas Lease Book 105 at page 496. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate XX
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 § 20-4-3 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 plan 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
1616 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

J & J Enterprises, Inc.
Well Operator
BY Peter Battles
Peter Battles
Its 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 Box 48
Buckahannon, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well 5700 feet Rotary / Cable tools _____
Approximate water strata depths: Fresh, 80 feet; salt, 1000 feet.
Approximate coal seam depths: 0 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 | | |
| Conductor | 1 1/4 | H-40 | 42 | x | | 30 | 30 | 0 sks Kinds |
| Fresh water | 8 5/8 | ERW | 23 | x | | 1200 | 1200 | 325 sks |
| Coal | 8 5/8 | ERW | 23 | x | | 1200 | 1200 | 325 sks Sizes |
| Intermediate | | | | | | | | |
| Production | | | | | | | | Depths set |
| Tubing | 4 1/2 | J-55 | 10.5 | x | | 5650 | 5650 | 400 sks |
| Liners | | | | | | | | Perforations: Top _____ |

NOTE: Regulation 7.03 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 12, (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 drilling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well. THIS PERMIT MUST BE POSTED AT THE WELL SITE 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 12-31-80.

Robert T. [Signature]

Deputy Director - Oil & Gas Division

The full compliance with regulations by the coal operator and by any coal owner or coal leaseholder is required 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 _____