

LATITUDE 39°22'30"  
39°25'00"

LONGITUDE 80°50'00"  
11750'

NORTH

Mae Bond

N84°E No Dist.

OK. Griffin

4669-25

1643.2'

Fence Cor. Post

Road & Fencing

To Deep Valley  
R.W.

LOCATION  
J-74B

Edith H. Griffin

Mae Bond  
17 AC.

North

N83°W NO Dist.

15'

5.10S  
2.12W

Glen James

2.23S

Tapo 1/2' 2.10 W

4669-25

2400' Rad.  
1" = 200'

Location  
J-74B

4677-10

FILE NO. 346-01  
DRAWING NO. 83-46  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1 in 200  
PROVEN SOURCE OF ELEVATION Spot Elev. 1199'  
North of Location.

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) Rayford L. Outlander  
R.P.E. \_\_\_\_\_ L.L.S. 555  
Buckhannon, W. Va. 26201

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION



DATE March 21, 19 83  
OPERATOR'S WELL NO. J-74B  
API WELL NO. 47-095-1026  
STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
LOCATION: ELEVATION 940' WATER SHED Short Run to Arnolds Creek  
DISTRICT Centerville COUNTY Tyler  
QUADRANGLE West Union 15' C  
SURFACE OWNER Mae Bond ACREAGE 17 (Tract-1)  
OIL & GAS ROYALTY OWNER Mae Bond LEASE ACREAGE 17  
LEASE NO. JJ-1340  
PROPOSED WORK: DRILL  CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
TARGET FORMATION Benson ESTIMATED DEPTH 5000' 6-6 Stanley (90)  
WELL OPERATOR FT ENTERPRISES, INC. DESIGNATED AGENT RICHARD EGGEDDINE  
ADDRESS P.O. Box 48 ADDRESS P.O. Box 48  
Buckhannon, W. Va. 26201 Buckhannon, W. Va. 26201

FORM IV-6 (8-78)

TYLER-1026



IV-35  
(Rev 8-81)

**RECEIVED**

DEC 21 1983

OIL & GAS DIVISION  
DEPT. OF MINES

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date December 16, 1983  
Operator's Well No. J-748  
Farm Mae Bond  
API No. 47 - 095 - 1026

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: 940 Watershed West Union  
District: Centerville County Tyler Quadrangle West Union

COMPANY J&J Enterprises, Inc.

ADDRESS P.O. Box 48, Buckhannon, WV 26201

DESIGNATED AGENT Richard Reddecliff

ADDRESS Same

SURFACE OWNER Mae Bond

ADDRESS Rt. #2, Pennsboro, WV 26415

MINERAL RIGHTS OWNER Mae Bond

ADDRESS Same

OIL AND GAS INSPECTOR FOR THIS WORK Robert

Lowther ADDRESS Gen. Del. Middlebourne, WV 26149

PERMIT ISSUED 5/3/83

DRILLING COMMENCED 11/9/83

DRILLING COMPLETED 11/17/83

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	1001.85	1001.85	250 sks.
7			
5 1/2			
4 1/2	4919.20	4919.20	175 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Benson Depth 4810-22 feet

Depth of completed well 5366 feet Rotary x / Cable Tools \_\_\_\_\_

Water strata depth: Fresh 1380 feet; Salt 0 feet

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

OPEN FLOW DATA

Producing formation Riley Pay zone depth 4418-20 4422-23 4449-51 feet

Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Combined Final open flow 933 Mcf/d Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1675 psig (surface measurement) after 96 hours shut in  
(If applicable due to multiple completion--)

Second producing formation Benson Pay zone depth 4820-22 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

JAN 9 1984  
(Continue on reverse side).

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

*Huron* Riley: Perforations: 4418-20 (3 holes) 4422-23 (1 hole) 4449-51 (4 holes)  
Fracturing: 35,000 lbs. 20/40 sand: 500 gal. Acid: 430 Bbls. fluid.  
Benson: Perforations: 4820-22 (9 holes)  
Fracturing: 50,000 lbs. 20/40 sand: 500 gal. Acid: 480 Bbls. fluid.

BOTTOM HOLE PRESSURE  $P_f = P_{we}^{XGLS}$   
 $t = 60 + (0.0075 \times 4919) + 459.7 = 557$      $X = \frac{1}{53.35} \times 557 = \frac{1}{29716} = 0.0000337$      $P_f = 1675 \times 2.72$   
 $(0.0000337) (0.670) (4620) (0.9) = 1675 \times 2.72^{0.09} 1675 \times 1.$

$P_f = 1843$  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
Sand			0	78	
White sand			78	260	
Red rock			260	280	¼" stream @ 68'
Sand, shale & red rock			280	831	
Sand & shale			831	1050	½" stream @ 1380'
Sand & shale			1050	1855	
Big Lime			1855	1920	Gas ck @ 1971' No show
Injun			1920	1971	
Sand & shale			1971	3390	
Sand & shale			3390	4418	
Riley			4418	4451	
Sand & shale			4451	4810	
Benson			4810	4822	
Sand & shale			4822	<u>5366</u>	53 24 29
				T.D.	
					Rhinestreet @ T.D.

(Attach separate sheets as necessary)

J&J Enterprises, Inc.

Well Operator

By: *Bill Dabbin*

Date: 12/16/83

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 ~~minerals~~, encountered in the drilling of a well."



1) Date: April 15, 1983  
 2) Operator's Well No. J-748  
 3) API Well No. 47 State            County            Permit           

DRILLING CONTRACTOR:

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

OIL AND GAS WELL PERMIT APPLICATION

W. Jack Drilling Co.  
Box 49  
Duckhannon, WV 26031

- 4) WELL TYPE: A Oil            / Gas X /  
 B (If "Gas", Production            / Underground storage            / Deep X / Shallow           )
- 5) LOCATION: Elevation:            Watershed:             
 District:            County:            Quadrangle:
- 6) WELL OPERATOR            11) DESIGNATED AGENT             
 Address            Address
- 7) OIL & GAS ROYALTY OWNER            12) COAL OPERATOR             
 Address            Address
- 8) SURFACE OWNER            13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Address            Name             
 Address            Address
- 9) FIELD SALE (IF MADE) TO:            Name             
 Address            Address
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED 14) COAL LESSEE WITH DECLARATION ON RECORD:  
 Name            Name             
 Address            Address
- 15) PROPOSED WORK: Drill X / Drill deeper            / Redrill            / Fracture or stimulate             
 Plug off old formation            / Perforate new formation             
 Other physical change in well (specify)
- 16) GEOLOGICAL TARGET FORMATION,
- 17) Estimated depth of completed well,            feet
- 18) Approximate water strata depths: Fresh,            feet; salt,            feet.
- 19) Approximate coal seam depths:            Is coal being mined in the area? Yes            / No

20) 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									Kinds
Fresh water									Sizes
Coal									Depths set
Intermediate									Perforations:
Production									Top Bottom
Tubing									
Liners									

- 21) EXTRACTION RIGHTS  
 Check and provide one of the following:  
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.  
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)
- 22) ROYALTY PROVISIONS  
 Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes  No   
 If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.
- 23) Required Copies (See reverse side.)
- 24) 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.
- Notary:            Signed:             
 My Commission Expires            Its:

OFFICE USE ONLY  
DRILLING PERMIT

Permit number            Date           

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. 10) 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.)

Permit expires            unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee

Administrator, Office of Oil and Gas

Line Item Explanation

- 1) Date of Application
2) Your well name and number
3) To be filled out by office of oil & gas
4A) 'Oil' means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves underground reservoirs: 'Gas' means all natural gas and all other fluid hydrocarbons not defined as oil.
4B) 'Shallow well' means any well drilled and completed in a formation above the top of the uppermost member of the 'Onondaga Group' or a depth less than six thousand feet, whichever is shallower.
'Deep well' means any well drilled and completed in a formation at or below the top of the uppermost member of the 'Onondaga Group' or at a depth less than six thousand feet, whatever is shallower.
5) Where well is located
6) Before a permit can be issued in a corporation, company partnership, or fictitious name, the name must be registered with the Secretary of State Office
7) Use separate sheet if necessary
8) Present surface owner at time application is filed.
9) Optional
11) See Reg. 7.01 relating to code §22-4-1k
12) 'Coal Operator' means any persons, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine. See Note 24
13 & 14) As per §22-4-20; See Note 24
15) Work that will be attempted—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.
16) Anticipated formation for which well will be completed
17) Self explanatory
18) Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in elevation
19) All coal seam depths
20) Proposed casing program and cementing refer to Code 22-4-5, 22-4-6, 22-4-7, 22-4-8, 22-4-8a Reg 9.01, 15.01, 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
21) Code 22-4-11(c) - In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a permit described herein may file the following:
(1)A brief description of the tract of land including the district and county wherein the tract is located;
(2)The identification of all parties to all leases or other continuing contractual agreements by which the right to extract, produce or market the oil or gas is claimed;
(3)The book and page number wherein each such lease or contract by which the right to extract, produce or market the oil or gas is recorded;
(4)A brief description of the royalty provisions of each such lease or contract.
22) Code 22-4-11(d) and 22-4-11(e).
23) 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.
24) 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.

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.

WAIVER

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 \_\_\_\_\_