





IV-35  
(Rev 8-81)

**RECEIVED**  
AUG 13 1984

OIL & GAS DIVISION  
**DEPT. OF MINES**

State of West Virginia

Department of Mines  
Oil and Gas Division

Date August 10, 1984

Operator's

Well No. JK-990

Farm Edith Griffin

API No. 47 - 095 - 1082

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: 1106 Watershed Big Run  
District: Centerville County Tyler Quadrangle Pennsboro 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 O.W. & Edith Griffin

ADDRESS P.O. Box 3025 Parkersburg, WV 26101

MINERAL RIGHTS OWNER Same as surface

ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK Robert

Lowther ADDRESS Gen. Delivery, Middlebourne, WV 26149

PERMIT ISSUED 6/12/84

DRILLING COMMENCED 7/23/84

DRILLING COMPLETED 7/28/84

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 Cord.			
13-10"	32	0	0 sks.
9 5/8			
8 5/8	1726.25	1726.25	425 sks.
7			
5 1/2			
4 1/2	3980.20	3980.20	410 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth feet

Depth of completed well 5990 feet Rotary x / Cable Tools

Water strata depth: Fresh 70 feet; Salt 0 feet

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

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 5926-30 / 5876-82 feet

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

Combined Final open flow 660 Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1700 psig (surface measurement) after 96 hours shut in

(If applicable due to multiple completion--)

Second producing formation Benson, Riley Pay zone depth 4582-4674 / 4980-82 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

SEP 10 1984

(Continue on reverse side)

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

*Rhinestreet*  
 Devonian Shale: Perforations: 5926-30 (6 holes) 5876-82 (10 holes)  
 Fracturing: 3,000 lbs. 20/40 sand: 150 Bbls. fluid.  
 Benson: Perforations: 4980-82 (8 holes)  
 Fracturing: 280 Sks. 20/40 sand: 500 gal. acid: 390 Bbls. fluid.  
 RILEY: Perforations: 4582.5-84 (6 holes) 4600-01 (4 holes) 4609-11 (8 holes) 4671-74 (8 holes)  
 Fracturing: 3,000 lbs. 20/40 sand: 500 gal. acid: 535 Bbls. fluid.

BOTTOM HOLE PRESSURE  $P_f = P_{we} \times GLS$   $\frac{1}{1}$   
 $t=60 + (0.0075 \times 3980) + 459.7 = 550$   $X=53.35 \times 550 = 29318 = 0.0034$   $P_f=1700 \times 2.72^{(0.000034)}$   
 $(0.742) (5232) (0.9) = 1700 \times 2.72^{0.12} = 1700 \times 1.1$

Pf=1917 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	50	
Red rock, shale & sand			50	195	1" stream @ 70'
Sand, shale & red rock			195	1426	
Sand & shale			1426	1520	Gas ck @ 2352 2/10-7" w/water 603,000 cu.ft.
Sand			1520	1555	
Sand & shale			1555	1950	
Big Lime			1950	2040	Gas ck @ 3519 2/10-7" w/water 603,000 cu.ft.
Big Injun			2040	2160	
Sand & shale			2160	4582.5	
Riley			4582.5	4674	Gas ck @ 4751 2/10-7" w/water 603,000 cu.ft.
Sand & shale			4674	4980	
Benson			4980	4982	
Sand & shale			4982	5876	Gas ck @ 5307 2/10-7" w/water 603,000 cu.ft.
Devonian Shlae			5876	5930	
Sand & shale			5930	5990	
				T.D.	Gas ck @ collars 2/10-7" w/wat 603,000 cu.ft.
				<i>Rhinestreet @ T.D.</i>	

5990  
25  
3490

(Attach separate sheets as necessary)

J&J Enterprises, Inc.

Well Operator

By: *[Signature]*  
Date: 8/10/84

Robert Dahlin-Geologis

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: MAY 23, 19 84  
 2) Operator's Well No. JK-990  
 3) API Well No. 47 - 095 - 1082  
 State            County            Permit           

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES, OIL AND GAS DIVISION  
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil            / Gas X  
 B (If "Gas", Production X / Underground storage            / Deep            / Shallow X)
- 5) LOCATION: Elevation: 1106' Watershed: BIG RUN (OM:37)  
 District: CENTERVILLE County: TYLER Quadrangle: PENNSBORO 7.5'
- 6) WELL OPERATOR J & J ENTERPRISES, INC.  
 Address: P.O. BOX 48  
BUCKHANNON, WV 26201
- 7) DESIGNATED AGENT RICHARD M. REIDCLIFF  
 Address: P.O. BOX 48  
BUCKHANNON, WV 26201
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name ROBERT A. LOWTHER  
 Address GENERAL DELIVERY  
MIDDLEBOURNE, WV 26149
- 9) DRILLING CONTRACTOR:  
 Name S.W. JACK DRILLING CO.  
 Address P.O. BOX 48  
BUCKHANNON, WV 26201
- 10) PROPOSED WELL WORK: Drill X / Drill deeper            / Redrill            / Stimulate X  
 Plug off old formation            / Perforate new formation             
 Other physical change in well (specify)
- 11) GEOLOGICAL TARGET FORMATION, ALEXANDER
- 12) Estimated depth of completed well, 5300' feet
- 13) Approximate strata depths: Fresh, 90' feet; salt, N/A feet.
- 14) Approximate coal seam depths: 425'-426' Is coal being mined in the area? Yes            / No X

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	Left in well		
Conductor	11 3/4	H-40	42	X		30	0	0 Sacks	
Fresh water	8 5/8	ERW	23	X		1206'	1206'	To surface	Kind: <u>NEA</u>
Coal	8 5/8	ERW	23	X		1206'	1206'	To surface	Size: <u>          </u>
Intermediate									
Production	4 1/2	J-55	10.5	X		5200'	5200'	225 Sacks	Depths set
Tubing								or as required by Rule 15-01	
Liners									Perforations:
									Top <u>          </u> Bottom <u>          </u>

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-095-1082 Date June 12, 19 84

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 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 12, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>BB</u>	Agent: <u>MH</u>	Plat: <u>MH</u>	Casing <u>MH</u>	Fee <u>1560</u>
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[Signature]  
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File