



FILE NO. 81-894-D  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 / 200  
 PROVEN SOURCE OF ELEVATION EL. 1089 AT INT. OF 20/2 and 20/49, 5700' SE. OF WELL 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) \_\_\_\_\_  
 B.P.E. 5568 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

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



DATE APRIL 7, 1982  
 OPERATOR'S WELL NO. J-654  
 API WELL NO. \_\_\_\_\_  
47 - 033 - 2792  
 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 1390 WATER SHED LITTLE ELK CREEK  
 DISTRICT SARDIS COUNTY HARRISON  
 QUADRANGLE WALLACE Clarksburg 15' NW  
 SURFACE OWNER MINNIE M. FERREE, et al ACREAGE 85  
 OIL & GAS ROYALTY OWNER EDNA D. BRAMER LEASE ACREAGE 85  
 LEASE NO. F-11  
 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 5th Sand ESTIMATED DEPTH 2950  
 WELL OPERATOR J.J. ENTERPRISES INC. DESIGNATED AGENT HARRY L. BARNETT MAY 17 1982  
 ADDRESS BOX 48 ADDRESS BOX 48  
BUCKHANNON W. VA. 26201 BUCKHANNON W. VA. 26201

[08-78]

JUL 26 1982

Operator's Well No. J-654

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

API Well No. 47 - 033 - 2792  
State County Permit

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

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: 1390 Watershed: Little Elk Creek

District: Sardis County: Harrison Quadrangle: Wallace

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

DESIGNATED AGENT H.L. Barnett  
Address P.O. Box 48  
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 4/23, 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 Stephen Casey  
Address Rt. # 2, Box 232-D  
Jane Lew, WV 26378

GEOLOGICAL TARGET FORMATION: 5th Sand Depth \_\_\_\_\_ feet

Depth of completed well, 3353 feet Rotary X / Cable Tools \_\_\_\_\_

Water strata depth: Fresh, 270, 201.5; salt, 0 feet.

Coal seam depths: 480-84 Is coal being mined in the area? No

Work was commenced 6/9, 19 82, and completed 6/14, 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		30	0	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	X		1060.80	1060.80	290 sks.	
Coal	8 5/8	ERW	23	X		1060.80	1060.80	290 sks.	Sizes
Intermediate									
Production Tubing	4 1/2	J-55	10.5	X		3225	3225	135 sks.	Depths set
Liners									Perforations:
									Top Bottom
									2988 3031
									2907 2915
									3159 3162

OPEN FLOW DATA

Producing formation Gordon Pay zone depth 3159-3162 feet

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

Combined Final open flow, 198 Mcf/d Final open flow, \_\_\_\_\_ Bbl/d

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

Static rock pressure, 600 psig (surface measurement) after 96 hours shut in

[If applicable due to multiple completion--]

Second producing formation 50ft., 30ft. sand Pay zone depth 3159-3162 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

$$t=60+(0.00753225) + 459.7=544 \quad x=\frac{1}{53.35 \times 544} = \frac{1}{29016} = 0.0000345 \quad Pf=600 \times 2.72 (0.0000345) (0.733)$$

$$(3034) (0.9) = 600 \times 2.72^{0.069} = 600 \times 1.072 =$$

Pf=643 psi

AUG 2 1982

108-783

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

Gordon: Perforations: 3159-62 (3 holes)

Fracturing: 150 sks. 80/100 sand: 350 sks. 20/40 sand: 700 gal. Acid. 500 Bbls. fluid

30 ft. sand: Perforations: 2979-3031 (6 holes)

Fracruing: 150 sks. 80/100 sand: 350 sks. 20/40 sand: 700 gals. Acid: 500 bbls fluid.

50 ft. sand: Perforations: 2905-15 (4 holes)

Fracturing: 150 sks. 80/100 sand: 350 sks. 20/40 sand: 700 gals. Acid: 500 Bbls. fluid.

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 & shale			0	202	
Shale & red rock			202	288	
Sand, shale & red rock			288	320	Hole Damp @ 270'
Sand & red rock			320	342	
Sand, shale & red rock			342	423	Hole Damp @ 2015'
Sand & shale			423	480	
Coal			480	484	Hole full @ 2911'
Sand & shale			484	554	
Red rock			554	567	
Sand, shale & red rock			567	1949	
Sand & shale			1949	2100	
Sand & shale			2100	2249	
Big Lime			2249	2905	
50 ft. Sand			2905	2915	
Sand & shale			2915	2979	
30 ft. sand			2979	3031	
Sand & shale			3031	3159	
<u>Gordon</u>			3159	3162	
Sand & shale			3162	3353	
				T.D.	

(Attach separate sheets as complete as necessary.)

J&J Enterprises, Inc.

Well Operator

By

*Peter Battles*  
Peter Battles

Its

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."

[08-78]

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

APR 23 1982

Date: April 22, 1982

Operator's Well No. J-654

API Well No. 47-033-2792  
State County Per

WELL TYPE: Oil / Gas x /  
(If "Gas", Production x / Underground storage / Deep / Shallow x /)  
LOCATION: Elevation: 1390 Watershed: Little Elk Creek  
District: Sardis County: Harrison Quadrangle: Wallace

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

DESIGNATED AGENT Harry L. Barnett  
Address P.O. Box 48  
Buckhannon, WV 26201

OIL & GAS ROYALTY OWNER Edna D. Bramer  
Address Rt. # 1, Box 136  
Wallace, WV 26448

COAL OPERATOR  
Address:

ACREAGE 85  
SURFACE OWNER Minnie M. Ferree  
Address C/O Jeffrey Ferree  
1214 Cherry St. Rt. # 5  
Clarksburg, WV 26301  
ACREAGE 85

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Consolidation Coal CO.  
Address P.O. Box 1314  
Morgantown, WV 26505

FIELD SALE (IF MADE) TO:  
Name Unknown  
Address

Name  
Address

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Stephen Casey  
Address Rt. # 2, Box 232-D  
Jane Lew, WV 26378

COAL LESSEE WITH DECLARATION ON RECORD:  
Name  
Address

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease x / other contract / dated 9/1, 1980, to the undersigned well operator from Minnie M. Ferree & Jeffrey W. Ferree  
[If said deed, lease, or other contract has been recorded:]

Recorded on 10/3, 1980, in the office of the Clerk of the County Commission of Harrison County, West Virginia, in Oil & Gas Lease Book 1096 at page 397. A permit is requested as follows:

PROPOSED WORK: Drill x / Drill deeper / Redrill / Fracture or stimulate x /  
Plug off old formation / Re-formate 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

**BLANKET BOND**

J&J Enterprises, Inc.  
Well Operator  
By 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, WV 26201

GEOLOGICAL TARGET FORMATION, 5th Sand

Estimated depth of completed well, 2950 feet Rotary  Cable tools

Approximate water strata depths: Fresh, 120 feet; salt, None feet.

Approximate coal seam depths: 20, 170, 490 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		
Conductor	11 3/4	H-40	42	x		30	0	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		800	800	To surface	
Coal	8 5/8	ERW	23	x		800	800	To surface	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		2900	2900	175 sks.	Depths set
Tubing									
Liners									Perforations:
									Top Bot

**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 § 22-4-12a 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,**  
**ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY**  
 APPROVED FOR Drilling. THIS PERMIT SHALL EXPIRE  
 IF OPERATIONS HAVE NOT COMMENCED BY 1-8-83.

BY [Signature]

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 \_\_\_\_\_