



1) Date: February 18, 19 83  
 2) Operator's Well No. J-616  
 3) API Well No. 47 001 1690-REN.  
 State County Permit

DRILLING CONTRACTOR:  
S.W. Jack Drilling CO.  
P.O. Box 48  
Buckhannon, WV 26201

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

**OIL AND GAS WELL PERMIT APPLICATION**

RE-PERMIT - OLD NO. 1690

- 4) WELL TYPE: A Oil  Gas  B (If "Gas", Production  Underground storage  Deep  Shallow  Elevation: 1760 Watershed: Sandy Creek District: Cove County: Barbour Quadrangle: Colebank
- 5) LOCATION: Address: P.O. Box 48 Buchannon, WV 26201
- 6) WELL OPERATOR J&J Enterprises, Inc. 11) DESIGNATED AGENT Richard M. Reddecliff  
 Address P.O. Box 48 Buchannon, WV 26201
- 7) OIL & GAS ROYALTY OWNER Interstate Lumber CO., Inc. 12) COAL OPERATOR None  
 Address 601 E. Main St. Kingwood, WV 26537
- 8) SURFACE OWNER Interstate Lumber CO., Inc. 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Address 601 E. Main St. Kingwood, WV 26537 Name Eastern Assoc. Coal Corp.  
 Acreage 64.5 Address Koppers Building  
64.5 Pittsburgh, Pa. 15219
- 9) FIELD SALE (IF MADE) TO: Name \_\_\_\_\_ Address \_\_\_\_\_  
 Address Unknown
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert Stewart  
 Address P.O. Box 345 Jane Lew, WV 26378
- 14) COAL LESSEE WITH DECLARATION ON RECORD:  
 Name None Address \_\_\_\_\_
- 15) PROPOSED WORK: Drill  Drill deeper \_\_\_\_\_ Redrill \_\_\_\_\_ Fracture or stimulate   
 Plug off old formation \_\_\_\_\_ Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_
- 16) GEOLOGICAL TARGET FORMATION, Fox
- 17) Estimated depth of completed well, 5900 feet
- 18) Approximate water strata depths: Fresh, 25 feet; salt, 825 feet.
- 19) Approximate coal seam depths: 225 Is coal being mined in the area? Yes \_\_\_\_\_ No

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FEB 21 1983

OIL AND GAS DIVISION  
 WV DEPARTMENT OF MINES

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	11 3/4	H-40	42	x		30	0	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		1800	1800	450 sks.	Sizes
Coal	8 5/8	ERW	23	x		1800	1800	450 sks.	Depths set
Intermediate									Perforations:
Production	4 1/2	J-55	10.5	x		5850	5850	375 sks.	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: [Signature]  
 My Commission Expires October 16, 1989
- Signed: [Signature]  
 Its: Designated Agent

OFFICE USE ONLY  
**DRILLING PERMIT**

Permit number 47-001-1690-REN. Date February 22 19 83

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 October 22, 1983 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond: BB Agent: [Signature] Plat: [Signature] Casing: [Signature] Fee: 1179

[Signature]  
 Administrator, Office of Oil and Gas

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

File



[08-78]

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

Haverty & Elk: Perforations: 5256-60 (5 holes) 5628.5 - 30.5 (3 holes) 5679-81 (2 holes)  
Fracturing: 4,000 lbs. 80/100 sand: 25,500 lbs. 20/40 sand: 500 gal. Acid:  
580 Bbls. fluid

Alexander & Benson: Perforations: 4260-62 (2 holes) 4344-46 (3 holes) 4397-99 (2 holes)  
4550-53 (4 holes)  
Fracturing: 26,500 lbs. 20/40 sand: 500 gal. Acid: 460 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
Soil			0	10	
Shale & sand			10	105	Wet @ 27'
White sand			105	140	
Sand & shale			140	160	1/2" stream @ 100'
Coal			160	163	
Sand, shale & red rock			163	310	1" stream @ 955'
Red rock, sand & shale			310	380	
Sand & shale			380	445	3/4" stream @ 1667'
White sand			445	458	
Gray shale & sand			458	580	1 1/4" stream @ 1886
White sand			580	650	Gas ck @ collars 2/10-1/2" w/water 2,885 cu.ft.
Sand & shale			650	710	
White sand			710	740	
Sand & shale			740	800	
White sand			800	830	
Sand & shale			830	1050	
Sand, shale & red rock			1050	1315	
Red rock, sand & shale			1315	1615	
Big Lime			1615	1765	
Sand & shale			1765	1985	
Gantz			1985	2000	
White & Gray sand			2000	2270	
Shale, sand & red rock			2270	3455	
Brown sand & shale			3455	4260	
Alexander & Benson			4260	4346	
Sand & shale			4346	5256	
Haverty & Elk			5256	5681	
Sand & shale			5681	5981	
				T.D.	

(Attach separate sheets to complete as necessary.)

J&J Enterprises, Inc.

Well Operator

By

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 26  
2/16/82

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

INSPECTOR'S PLUGGING REPORT

Permit No. \_\_\_\_\_ Well No. \_\_\_\_\_

COMPANY \_\_\_\_\_ ADDRESS \_\_\_\_\_

FARM \_\_\_\_\_ DISTRICT \_\_\_\_\_ COUNTY \_\_\_\_\_

Filling Material Used \_\_\_\_\_

Liner			Packer			Location		
PLUGS USED AND DEPTH PLACED			BRIDGES			CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION		RECOVERED	SIZE	LOST	

Drillers' Names \_\_\_\_\_

Remarks: \_\_\_\_\_

DATE \_\_\_\_\_ I hereby certify I visited the above well on this date.

DISTRICT WELL INSPECTOR

Combined Final open flow, \_\_\_\_\_  
 Time of open flow between initial and final tests, \_\_\_\_\_ hours  
 Static rock pressure, 960 psig (surface measurement) after 96 hours shut in  
 [If applicable due to multiple completion--]  
 Second producing formation Alexander & Benson Pay zone depth 4260-4553  
 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  
 $t=60 + (0.0075 \times 5764) + 459.7 = 563$   $X=53.35$   $X \times 563 = 30036$   $\frac{1}{30036} = 0.0000333$   $Pf=960 \times 2.72(0.0000333)$   
 $(0.577)(4971)(0.9) = 960 \times 2.72^{0.085} = 960 \times 1.09 =$   
 Pf=1046 psi

B-4

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

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JUL 18 1983

INSPECTOR'S WELL REPORT OIL & GAS DIVISION  
DEPT. OF MINES

Permit No. 001-1690

Oil or Gas Well \_\_\_\_\_  
(KIND)

Company	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
<u>J&amp;J Enterprises</u>	Size			
<u>BUCK HANNON</u>	16			Kind of Packer _____
<u>INTERSTATE LUMBER</u>	13			
<u>J 616</u>	10			Size of _____
District <u>COVE</u> County <u>BARBOUR</u>	<u>8 7/8</u>		<u>896</u>	<u>240 SKS</u>
Drilling commenced <u>7-13-83</u>	6%			Depth set _____
Drilling completed _____ Total depth _____	<u>5 3/16</u>			
Date shot _____ Depth of shot _____	3			Perf. top _____
Initial open flow _____ /10ths Water in _____ Inch	2			Perf. bottom _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	Liners Used			Perf. top _____
Volume _____ Cu. Ft.				Perf. bottom _____
Rock pressure _____ lbs. _____ hrs.	CASING CEMENTED <u>8 7/8</u> SIZE <u>896</u> No. FT. <u>7-14-83</u> Date			
Oil _____ bbls., 1st 24 hrs.	NAME OF SERVICE COMPANY <u>HALL BURTON</u>			
Fresh water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
Salt water _____ feet _____ feet	_____ FEET _____ INCHES FEET _____ INCHES			
	_____ FEET _____ INCHES FEET _____ INCHES			

Drillers' Names S.W. JACK RIG 27

Remarks: CEMENT TO SURFACE

7-14-83  
DATE

Robert Stewart  
DISTRICT WELL INSPECTOR

Form 26  
2/16/82

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS WELLS DIVISION  
**INSPECTOR'S PLUGGING REPORT**

Permit No. \_\_\_\_\_ Well No. \_\_\_\_\_

COMPANY \_\_\_\_\_ ADDRESS \_\_\_\_\_

FARM \_\_\_\_\_ DISTRICT \_\_\_\_\_ COUNTY \_\_\_\_\_

Filling Material Used \_\_\_\_\_

Liner	Location		Amount	Packer	Location		
	PLUGS USED AND DEPTH PLACED			BRIDGES	CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST	

Drillers' Names \_\_\_\_\_

Remarks: \_\_\_\_\_

\_\_\_\_\_ I hereby certify I visited the above well on this date.

DATE

\_\_\_\_\_  
DISTRICT WELL INSPECTOR

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

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JUL 22 1983

INSPECTOR'S WELL REPORT

OIL & GAS DIVISION  
DEPT. OF MINES

Permit No. BAR 001-1690

Oil or Gas Well \_\_\_\_\_  
(KIND)

Company <u>J &amp; J Enterprises</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size			
Farm <u>Interstate Lumber</u>	16			Kind of Packer _____
Well No. <u>J 616</u>	13			
District <u>Core</u> County <u>Barbour</u>	10			Size of _____
Drilling commenced _____	8 1/4			
Drilling completed _____ Total depth <u>4682</u>	6 3/8			Depth set _____
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. top _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. bottom _____
Volume _____ Cu. Ft.	Liners Used			Perf. top _____
Rock pressure _____ lbs. _____ hrs.				Perf. bottom _____
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY _____			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names \_\_\_\_\_

Remarks: Drilling at 4682

July 19, 83  
DATE

[Signature]  
DISTRICT WELL INSPECTOR





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

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JUL 26 1983

INSPECTOR'S WELL REPORT

OIL & GAS DIVISION  
DEPT. OF MINES

Permit No. 001-1690

Oil or Gas Well \_\_\_\_\_  
(KIND)

Company J & J Enterprises  
 Address Buckhannon W Va  
 Farm Interstate Lumber  
 Well No. J-616  
 District Cove County Barbour  
 Drilling commenced \_\_\_\_\_  
 Drilling completed \_\_\_\_\_ Total depth 5981  
 Date shot \_\_\_\_\_ Depth of shot \_\_\_\_\_  
 Initial open flow \_\_\_\_\_ /10ths Water in \_\_\_\_\_ Inch  
 Open flow after tubing \_\_\_\_\_ /10ths Merc. in \_\_\_\_\_ Inch  
 Volume \_\_\_\_\_ Cu. Ft.  
 Rock pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
 Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
 Fresh water \_\_\_\_\_ feet \_\_\_\_\_ feet  
 Salt water \_\_\_\_\_ feet \_\_\_\_\_ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
16			Kind of Packer _____
13			
10			Size of _____
8 1/4			
6 5/8			Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. FT. \_\_\_\_\_ Date \_\_\_\_\_  
 NAME OF SERVICE COMPANY \_\_\_\_\_  
 COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
 \_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
 \_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

Drillers' Names \_\_\_\_\_

Remarks: J.D. Well 7-21-83 5981

July 21 1983  
DATE

Phil Tracy 372  
DISTRICT WELL INSPECTOR

FORM 26  
2/16/82

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

INSPECTOR'S PLUGGING REPORT

Permit No. \_\_\_\_\_ Well No. \_\_\_\_\_  
COMPANY \_\_\_\_\_ ADDRESS \_\_\_\_\_  
FARM \_\_\_\_\_ DISTRICT \_\_\_\_\_ COUNTY \_\_\_\_\_

Filling Material Used \_\_\_\_\_

Liner			Location	Amount	Packer	Location		
PLUGS USED AND DEPTH PLACED			BRIDGES			CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION			RECOVERED	SIZE	LOST

Drillers' Names \_\_\_\_\_

Remarks: \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ I hereby certify I visited the above well on this date.  
DATE

\_\_\_\_\_  
DISTRICT WELL INSPECTOR

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

Date December 8, 1983

Operator's Well No. J-Like

API Well No. 47 - CO1 - 1190-R  
State County Permit

WELL CLASSIFICATION FORM  
NEW ONSHORE PRODUCTION WELL  
NGPA Section 103

DESIGNATED AGENT James R. Willett  
ADDRESS S.W. Jack Drilling Company  
Box 48 Buckhannon, W. VA. 26201

WELL OPERATOR J & J Enterprises, Inc.  
ADDRESS P. O. Box 697  
Indiana, PA 15701  
GAS PURCHASER Cons. Gas Supply Corp.  
ADDRESS Box 2450  
Clarksburg, W. VA.

LOCATION: Elevation 1760  
Watershed Sandy Creek  
Dist. Cove County Barbour Quad. Colebank  
Gas Purchase Contract No. \_\_\_\_\_  
Meter Chart Code \_\_\_\_\_  
Date of Contract \_\_\_\_\_

\* \* \* \* \*

Date surface drilling was begun: July 12<sup>th</sup>, 1983

Indicate the bottom hole pressure of the well and explain how this was calculated:

Rock Pressure: Well was shut in several days after treatment and pressure was measured with a spring gauge.

Pressure Static rock pressure, \_\_\_\_\_ psig (surface pressure) \_\_\_\_\_  
LS  
 $0075 \times 5764 + 459.7 = 563 \times \frac{1}{53.35} \times 563 = 20036 = 0.0000333$  Pf=960 x 2.72 (0.0000333)  
 $4971 (0.9) = 960 \times 2.72^{0.085} = 960 \times 1.09 =$

AFFIDAVIT

I, James H. McElwain, having been first sworn according to law state that surface drilling of the well for which this determination is sought was begun on or after February 19, 1977; the well satisfies applicable state or federal well spacing requirements and the well is not within a proration unit, in existence at the time surface drilling began, which was applicable to the reservoir from which gas is or will be produced and which applied to any other well producing gas in commercial quantities or on which surface drilling began on or after February 19, 1977, and which was capable of producing gas in commercial quantities. I state, further, that I have concluded, to the best of my information, knowledge and belief, that the well for which this determination is sought is a new onshore production well and that I am not aware of any information not described in the application which is inconsistent with this conclusion.

James H. McElwain

STATE OF ~~WEST VIRGINIA~~, PA  
COUNTY OF Indiana, TO WIT:

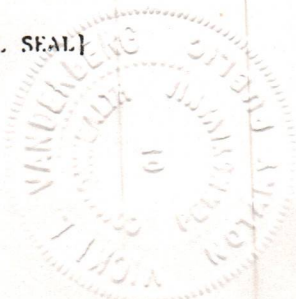
I, Vicki Vanderberg a Notary Public in and for the state and county aforesaid, do certify that J.H. McElwain, whose name is signed to the writing above, bearing date the 9<sup>th</sup> day of Dec, 1983, has acknowledged the same before me, in my county aforesaid.

Given under my hand and official seal this 9<sup>th</sup> day of Dec, 1983.

My ~~XXXXXX~~ expires on the 23 day of January, 1984.  
Commission

Vicki L. Vanderberg  
Notary Public

[NOTARIAL SEAL]



VICKI L. VANDERBERG, NOTARY PUBLIC  
INDIANA BOROUGH, INDIANA COUNTY  
MY COMMISSION EXPIRES JAN 23 1984  
Member, Pennsylvania Notary Association



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

Date December 2, 1983

Operator's Well No. J-1111

API Well No. 47 - COI - 11190-R  
State County Permit

STATE APPLICATION FOR WELL CLASSIFICATION

Previous File No. \_\_\_\_\_  
(If Applicable)

WELL OPERATOR J & J Enterprises, Inc.  
ADDRESS Box 697  
Indiana, PA 15701

DESIGNATED AGENT James R. Willett  
ADDRESS S. W. Jack Drilling Co.  
Box 48, Buckhannon, W. VA. 26201

Gas Purchase Contract No. \_\_\_\_\_ and Date \_\_\_\_\_  
(Month, day and year)

Meter Chart Code \_\_\_\_\_

Name of First Purchaser Consolidated Gas Supply Corporation  
P. O. Box 2450  
(Street or P. O. Box)  
Clarksburg, W. VA. 26301  
(City) (State) (Zip Code)

FERC Seller Code 009480 FERC Buyer Code 004228

TYPE OF DETERMINATION BEING SOUGHT: 103 N/A  
Section of NGPA Category Code

- (1) Initial determination (See FERC Form 121.)
- (2) Determination that increased production is the result of enhanced recovery technology.
- (3) Determination of a seasonally affected well.

Richard J. Kline Secretary  
Name (Print) Title  
Richard J. Kline  
Signature  
P. O. Box 697  
Street or P. O. Box  
Indiana PA 15701  
City State (Zip Code)  
412 349-6800  
Area Code Phone Number

(Certificate of Proof of Service to Purchaser)

(All of the above to be completed by the Operator/Applicant)

(To be completed by Jurisdictional Agency. Executed copy to be returned to Operator/Applicant and purchaser, if known).

The Department of Mines has received a request  for certification of the above described well as meeting the requirements of Section \_\_\_\_\_ under the Natural Gas Policy Act of 1978, (NGPA);  for determination that increased production is the result of enhanced recovery technology under Section 108 of (NGPA);  or for determination of a seasonally affected well under Section 108 of (NGPA).

All interested parties are hereby notified that on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, at the office of the Oil and Gas Division in Charleston, West Virginia, or as soon thereafter as it may be heard, there will be a public hearing, if requested, or if objection is filed.

This Application is assigned File No. \_\_\_\_\_

Initial review of information submitted indicates the well  is,  is not entitled to certification as claimed under the Natural Gas Policy Act (NGPA). A review of this evidence and any additional evidence will be made at the time appointed for a public hearing or as soon thereafter as the matter may be heard.

Unless objections are timely filed or a request for a hearing is made within fifteen (15) days, a hearing will not be held except on ex parte motion of the department and the matter will go to determination.

WEST VIRGINIA DEPARTMENT OF MINES

DEC 14 1983

Date received by  
Jurisdictional Agency

[Signature] Director  
By \_\_\_\_\_  
Title \_\_\_\_\_