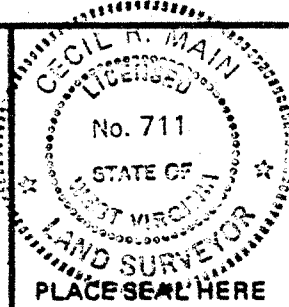


FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" 500'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION INTERSECTION (13) and (6)  
(13) ELEVATION 918' (13)

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) Cecil R. Main  
 R.P.E. \_\_\_\_\_ L.L.S. 711



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



DATE JANUARY 28<sup>th</sup>, 19 81  
 OPERATOR'S WELL NO. J-442  
 API WELL NO. \_\_\_\_\_  
47 - 033 - 2576  
 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 X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1026' WATER SHED SHINN'S RUN  
 DISTRICT CLAY COUNTY HARRISON  
 QUADRANGLE SHINNSTON 7.5 Clarksburg EC  
 SURFACE OWNER JAMES JARRETT, EX. UX. ACREAGE 12.5 Ac.  
 OIL & GAS ROYALTY OWNER JAMES JARRETT, ET. UX. LEASE ACREAGE 12.5 Ac.  
 LEASE NO. F-9  
 PROPOSED WORK: DRILL X 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 ALEXANDER ESTIMATED DEPTH 5400'  
 WELL OPERATOR J. and J. ENTERPRISES, INC. DESIGNATED AGENT HARRY BARRETT  
 ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48  
BUCKHANNON, WEST VIRGINIA 26201 BUCKHANNON, WEST VIRGINIA 26201

(08-78)

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-442

API Well No. 47 - 033 - 2576 State County Permit

WELL TYPE: Oil / Gas x / (If "Gas", Production x / Underground storage / Deep / Shallow x /) Elevation: 1026 Watershed: Shinns Run District: Clay County: Harrison Quadrangle: Shinnston 7.5'

(RENEWAL OLD # 2576)

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

DESIGNATED AGENT Roger Rolston Address P.O. Box 48 Buckhannon, WV 26201

COAL & GAS LEASE OWNER James Jarrett Address 1 Shinns Run Road Shinnston, WV 26431

COAL OPERATOR None Address

COAL FACE OWNER James S. Jarrett Address 1 Shinns Run Road Shinnston, WV 26431 Acreage 12.5

COAL OWNER(S) WITH DECLARATION ON RECORD; Name James & Nancy Jarrett Address 1 Shinns Run Road Shinnston WV 26431

COAL LEASE SALE (IF MADE) TO: Unknown Address

Name Address

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

COAL LESSEE WITH DECLARATION ON RECORD; Name None Address

RECEIVED

DEC 15 1981

OIL AND GAS DIVISION WV DEPARTMENT 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 8/14, 1980, to the undersigned well operator from James F. Fazalare [said deed, lease, or other contract has been recorded:]

Recorded on 7/11, 1980, in the office of the Clerk of the County Commission of Harrison County, West Virginia, in Oil & Gas Lease Book 1093 at page 755. A permit is requested as follows:

PROPOSED WORK: Drill x / Drill deeper / Redrill / Fracture or stimulate x / Plug off old formation / Perforate new formation / Other physical change in well (specify)

Explained as shown on the work order on the reverse side hereof.

The above named well operator, coal owner(s), and coal lessee are hereby notified that any changes 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 before the day of the filing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL PHYSICAL LOSS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION, WASHINGTON STREET EAST, CHARLESTON, WV 25311 TELEPHONE: (304) 34E-3092

BLANKET BOND

J & J Enterprises, Inc. Well Operator By Peter Battles Geologist

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, Alexander

Estimated depth of completed well, 5400 feet Rotary X / Cable tools      /

Approximate water strata depths: Fresh, 650 feet; salt, 0 feet.

Approximate coal seam depths: 40 Is coal being mined in the area? Yes      / No X

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	11 3/4	H-40	42	x		30	30	0 sks. Kinds
Fresh water	8 5/8	ERW	23	x		1700	1700	200 sks. } CTS 200 sks. } Sizes
Coal	8 5/8	ERW	23	x		1700	1700	
Intermediate								
Production	4 1/2	J-55	10.5	x		5350	5350	535 400 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 § 22-4-8a 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, of the W. Va. Code, the location is hereby approved for Drilling Renewed. This permit shall expire if operations have not commenced by 8-16-82.

J. J. Hargrett  
Deputy Director - Oil & Gas Division

This permit shall be void unless it is countersigned 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

[08-78]

OCT 15 1982

Operator's Well No. J-442  
API Well No. 47-033-2576  
State County Permit

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

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: 1026 Watershed: Shinns Run  
District: Clay County: Harrison Quadrangle: Shinnston

WELL OPERATOR J&J Enterprises, Inc. DESIGNATED AGENT H.L. Barnett  
Address P.O. Box 48 Address P.O. Box 48  
Buckhannon, WV 26201 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 12/15, 1981 OIL & GAS INSPECTOR FOR THIS WORK:  
Name Stephen Casey  
(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Address Rt. # 2, Box 232-D  
Jane Lew, WV 26378

GEOLOGICAL TARGET FORMATION: Alexander Depth \_\_\_\_\_ feet  
Depth of completed well, 2701 feet Rotary X / Cable Tools \_\_\_  
Water strata depth: Fresh, 210,1240 feet; salt, 0 feet.  
Coal seam depths 147-55,543-50 Is coal being mined in the area? No  
Work was commenced 4/27, 1982, and completed 5/1, 1982

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 <sup>3</sup> / <sub>4</sub>	H-40	42	X		30	0	0 sks.	Winds	
Fresh water	8 <sup>5</sup> / <sub>8</sub>	ERW	23	X		707.35	707.35	250 sks.		
Coal	8 <sup>5</sup> / <sub>8</sub>	ERW	23	X		707.35	707.35	250 sks.	Sizes	
Intermediate										
Production	4 <sup>1</sup> / <sub>2</sub>	J-55	10.5	X		2640.15	2640.15	255 sks.	Downs set	
Tubing										
Liners									Perforations:	
									Top	Bottom
									2538	2554

OPEN FLOW DATA

Producing formation 5th Sand Pay zone depth 2538-54 feet  
Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d  
Final open flow, Too small to measure Mcf/d Final open flow, \_\_\_\_\_ Bbl/d  
DRY Time of open flow between initial and final tests, \_\_\_\_\_ hours  
Static rock pressure, \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in  
[If applicable due to multiple completion--]  
Second producing formation \_\_\_\_\_ Pay zone depth \_\_\_\_\_ 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

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

5th Sand: Perforations: 2538-54 (12 holes)

Fracturing: 50,000 lbs. 20/40 sand: 191 Bbls. fluid: Nitrogen

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Shale & Clay			0	18	
Limestone, sand & shale			18	147	
Coal & shale			147	155	Damp @ 50'
Sand & shale			155	208	
Sand & shale			208	250	Damp @ 210'
Sand & shale			250	317	
Sand & shale			317	378	Damp @ 1240
Red rock and shale			378	408	
Sand & shale			408	430	Gas ck @ 1785 40/10 - 1 1/2" w/water 74,420 cu.ft.
Coal & shale			430	433	
Sand, shale & red rock			433	505	
Sand & shale			505	543	Gas ck @ 2267 20/10-1 1/2" w/water 52,623 Cu.ft.
Coal & shale			543	550	
Sand & shale & red rock			550	725	
Lime			725	1472	Gas ck @ 2492 30/10 - 1 1/2" w/water 64,410 cu.ft.
Sand & shale			1472	1479	
Sand & shale			1479	1500	
Big Lime & Big Injun			1500	1628	Gas ck @ 2588 20/10 - 1 1/2" w/water 52,623 cu. ft.
Sand & shale			1628	2100	
White sand			2100	2208	
Sand, shale & red rock			2208	2445	
Shale & brown sand			2445	2460	
Sand & shale			2460	2538	
5th Sand			2538	2554	
Sand			2554	2567	
Sand & shale			2567	2701	

T.D.

(Attach separate sheets to complete as necessary)

J&J Enterprises, Inc.  
Well Operator  
By Peter Battles  
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]

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, Alexander

Estimated depth of completed well, 5400 feet Rotary X / Cable tools    /  
Approximate water strata depths: Fresh, 650 feet; salt, 0 feet.  
Approximate coal seam depths: 40 Is coal being mined in the area? Yes    / No X

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	30	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		700	700	200 sks.	
Coal	8 5/8	ERW	23	x		700	700	200 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		5350	5350	400 sks.	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

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 § 22-4-8a 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, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 12-13-81.

[Signature]  
Deputy Director - Oil & Gas Division

This permit shall be issued 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.

By     
Its

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-442  
API Well No. 47 - 033 - 2576  
State County Permit

WELL TYPE: Oil \_\_\_ / Gas x /  
(If "Gas", Production x / Underground storage \_\_\_ / Deep \_\_\_ / Shallow x /)  
LOCATION: Elevation: 1026 Watershed: Shinns Run  
District: Clay County: Harrison Quadrangle: Shinnston 7.5'

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

DESIGNATED AGENT Roger Rolston  
Address P.O. Box 48  
Buckhannon, WV 26201

LAND & GAS LEASE OWNERS James Jarrett  
Address 1 Shinns Run Road  
Shinnston, WV 26431

COAL OPERATOR None  
Address

ACREAGE 12.5  
SURFACE OWNER James S. Jarrett  
Address 1 Shinns Run Road  
Shinnston, WV 26431  
ACREAGE 12.5

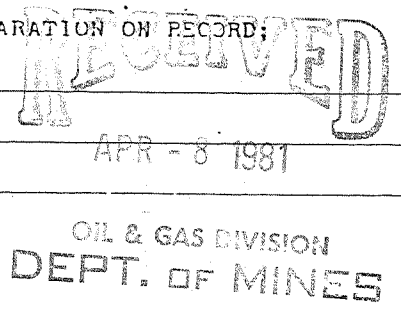
COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name James & Nancy Jarrett  
Address 1 Shinns Run Road  
Shinnston WV 26431

PREVIOUS SALE (IF MADE) TO:  
Name Unknown  
Address

Name  
Address

LAND & 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 None  
Address  
APR - 8 1981



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 8/14, 1980, to the undersigned well operator from James F. Fazalare  
[if said deed, lease, or other contract has been recorded:]

Recorded on 7/11, 1980, in the office of the Clerk of the County Commission of Harrison County, West Virginia, in Oil & Gas Lease Book 1093 at page 755. A permit is requested as follows:

PROPOSED WORK: Drill x / Drill deeper \_\_\_ / Redrill \_\_\_ / Fracture or stimulate x /  
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 changes 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 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 PHYSICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
10 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

BLANKET BOND

J & J Enterprises, Inc.  
Well Operator  
By Peter Battles  
Geologist