



FILE NO. J&J  
DRAWING NO. J429  
SCALE 1"=500'  
MINIMUM DEGREE OF ACCURACY 1/200  
PROVEN SOURCE OF ELEVATION 360 @ R.O. INTERSECT.

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) Neal Hughes  
R.P.E. \_\_\_\_\_ L.L.S. 632

STATE OF WEST VIRGINIA  
LAND SURVEYOR  
PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
FORM IV-8  
(3-73)



DATE Dec 10, 19 80  
OPERATOR'S WELL NO J429  
API WELL NO. 47-017-2905  
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
(IF "GAS", PRODUCTION \_\_\_\_\_ STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
LOCATION: ELEVATION 820' WATER SHED ARNOLD CREEK  
DISTRICT WEST UNION COUNTY DODDRIDGE  
QUADRANGLE WEST UNION 7 1/2' West Union SE  
SURFACE OWNER NEAL VASTOLA ACREAGE 29.5  
OIL & GAS ROYALTY OWNER Robert D. Moss (Guardian) LEASE ACREAGE 29.5  
LEASE NO. 2901  
PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  PLUS OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUS AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUS \_\_\_\_\_  
TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5100  
WELL OPERATOR J&J ENTERPRISES DESIGNATED AGENT H.A. BARNET  
ADDRESS P.O. Box 48 ADDRESS P.O. Box 48  
BUCKHANNON WV BUCKHANNON WV  
26201 26201

RECEIVED

FEB 18 1981

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

OIL & GAS DIVISION DEPT. OF MINES WELL OPERATOR'S REPORT 22 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: 820 Watershed: Arnolds Creek District: West Union County: Doddridge Quadrangle: West Union

WELL OPERATOR J & J Enterprises, Inc Address Box 48 Buckhannon, WV 26201 DESIGNATED AGENT H.L. Barnett Address 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 12/16, 19 80, OIL & GAS INSPECTOR FOR THIS WORK: Name Steve Casey Address Rt. # 2, Box 232-D Jane Lew, WV 26378

GEOLOGICAL TARGET FORMATION: Alexander Depth 4920 feet Depth of completed well, 5100 feet Rotary X / Cable Tools 1075 Water strata depth: Fresh, 75,1048 feet; salt, 1135 feet. Coal seam depths: 0 Is coal being mined in the area? No Work was commenced 1/23, 1981, and completed 1/28, 1981

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New/Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depth)

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 4928-44 feet Gas: Initial open flow, Mscf/d Oil: Initial open flow, Bbl/d Final open flow, 1,555 Mscf/d Final open flow, Bbl/d Time of open flow between initial and final tests, 6 hours Static rock pressure, 1620 psig (surface measurement) after 96 hours shut in

Continue on reverse side

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

Alexander: Perforations: 4928-44 ( 14 holes)  
Fracturing: 250 sks. 80/100 sand: 420 sks. 20/40 sand: 8 gal Adomall: 341  
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
Dirty Fill			0	20	
Shale & sand			20	200	1" stream @ 75'
Sand, shale & red rock			200	260	
Sand, shale & red rock			260	490	½" more @ 1048'
Red rock & shale			490	535	
Sand & shale			535	1038	Gas ck @ 2154 8/10-½" w/water
White sand			1038	1075	5,324 cu.ft.
Salt sand			1075	1135	
Sand & shale			1135	1605	Gas ck @ 3181 6/10-½" w/water
Lime & shale			1605	1655	4,611 cu.ft.
Big Lime			1655	1720	Gas ck @ 3336 No show
Big Injun			1720	1775	
Sand & shale			1775	4620	Gas ck @ 4509 No show
Benson			4620	4625	
Shale			4625	4920	Gas ck @ 4883 No show
Alexander			4928	4944	
Shale			4944	5100	Gas ck @ T.D. 2/10-½" w/water
				TD	2,535 cu.ft.

(Attach separate sheets to complete as necessary.)

J & J Enterprises, Inc.

By Peter Battles  
Peter Battles  
Geologist

NOTE: Regulation 2.38(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]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-429

API Well No. 47 - 017 - 2905  
State County Permit

WELL TYPE: Oil  / Gas  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow  /)

LOCATION: Elevation: 820' Watershed: \_\_\_\_\_

District: West Union County: Doddridge Quadrangle: West Union

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

COAL & GAS LEASE OWNER Shirley Fleming C/O Robert D. Moss  
Address P.O. Box 307  
Barberton, OHIO 44203

COAL OPERATOR None  
Address \_\_\_\_\_

COAL SURFACE OWNER Neal A. Vastola & Alba Vastola  
Address Route # 1 Box 52  
West Union, WV 26456

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Shirley Fleming C/O Robert D. Moss  
Address P.O. Box 307  
Barberton, Ohio 44203

FIELD SALE (IF MADE) TO:  
Name Unknown  
Address \_\_\_\_\_

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DEC 19 1980

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address \_\_\_\_\_

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, WV 26301

OIL & GAS DIVISION  
DEPT. 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  / dated 7/30, 1979; to the undersigned well operator from Key Oil Co.

[If said deed, lease, or other contract has been recorded:]  
Recorded on Jan 24, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 107 at page 313. A permit is requested as follows:

PROPOSED WORK: Drill  / Drill deeper  / Redrill  / Fracture or stimulate  /  
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 well operator, coal owner(s), and coal lessee are hereby notified that any modifications they wish to make or are required to make by Code 5-22-4-3 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 prior to 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  
100 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 345-3092

BLANKET BOARD

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 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, 80 feet; salt, 500 feet.
Approximate coal seam depths: None Is coal being mined in the area? Yes / No x

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS. Rows include Conductor, Fresh water, Coal, Intermediate, Production Tubing, and Liners.

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 JV-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 8-22-81

Signature of Deputy Director: [Signature]
Deputy Director: [Signature] Division 1. [Signature] 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:

R I V E R

The undersigned coal operator / owner / lessee / of the coal under this well permit 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