

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION B.M. AT INT. OF RT. 25 AND RT. 25/14 ELEVATION 1016'

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) Samuel L. Wheeler
 R.P.E. _____ L.L.S. 530


 PLACE SEAL HERE

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



DATE DECEMBER 16, 19 80
 OPERATOR'S WELL NO. J-222
 API WELL NO. _____
47 - 017 - 2938
 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 1220' WATER SHED LAUREL RUN
 DISTRICT GREENBLIER COUNTY DODDRIDGE
 QUADRANGLE BIG ISAAC T.5' VADKIS 15 NE
 SURFACE OWNER CHARLES W. BEECH ACREAGE 15 Ac.
 OIL & GAS ROYALTY OWNER LESSIE WARD - BESSIE ROSS LEASE ACREAGE 150 Ac.
 LEASE NO. H.S. 19
 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 ALEXANDER ESTIMATED DEPTH 5400'
 WELL OPERATOR J. & J. ENTERPRISES, INC. DESIGNATED AGENT HARRY BARNETT
 ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48
BUCKHANNON, WEST VIRGINIA 26201 BUCKHANNON, WEST VIRGINIA 26201

66 Big Isaacs (147)

FEB 23 1981

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

Date March 25, 1981

FORM IV-35
(Obverse)

Operator's
Well No. J-222

[08-78]

WELL OPERATOR'S REPORT OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

API Well No. 47-017-2938
State County Permit

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal /
(If "Gas", Production / Underground storage / Deep / Shallow /)
LOCATION: Elevation: 1220 Watershed: Laurel Run
District: Greenbrier County: Doddridge Quadrangle: Big Isaac 7.5'

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 / Convert / Drill deeper / Redrill / Fracture or stimulate /
Plug off old formation / Perforate new formation /
Other physical change in well (specify) _____

PERMIT ISSUED ON 1/12, 1981

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: Alexander Depth 5480-5514 feet

Depth of completed well, 5662 feet Rotary / Cable Tools

Water strata depth: Fresh, 295,600 feet; salt, 0 feet.

Coal seam depths: 292-95, 378-81, 422-25 Is coal being mined in the area? No

Work was commenced 2/11, 1981, and completed 2/18, 1981

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		0	0	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		798.50	798.50	235 sks.	
Coal	8 5/8	ERW	23	x		798.50	798.50	235 sks.	Sizes
Intermediate									
Production	4 ¹ / ₂	J-55	10.5	x		5600.35	5600.35	200 sks.	Deaths set
Tubing									
Liners									Perforations:
									Top Bottom
									5492 5514
									5265 5299
									4912 4924

RECEIVED
MAR 26 1981

OIL & GAS DIVISION
DEPT. OF MINES

OPEN FLOW DATA

Producing formation Elk Pay zone depth 5492-5514 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Ebl/d
Combined Final open flow, 1,100 Mcf/d Final open flow, _____ Ebl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 1750 psig (surface measurement) after 96 hours shut in

[If applicable due to multiple completion--]

Second producing formation Alexander & Benson Pay zone depth 4912-4924 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Ebl/d
Final open flow, _____ Mcf/d Final open flow, _____ Ebl/d

APR 13 1981

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

Benson: Perforations: 4912-24 (12 holes)
 Fracturing: 150 sks. 80/100 sand: 300 sks. 20/40 sand: 500 Bbls. fluid.

Alexander: 5265-99 (14 holes)
 Fracturing: 500 gal. Acid: 150 sks. 80/100 sand: 350 sks. 20/40 sand:
 600 Bbls. fluid.

Elk: Perforations: 5492-5514 (13 holes)
 Fracturing: 500 gal. Acid: 150 sks. 80/100 sand: 450 sks. 20/40 sand: 600 Bbls. fluid.

WELL LOG

FORMATION	Color	Hard or Soft	10 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Clay & Fill			0	10	
Sand & shale			10	292	
Coal			292	295	1/2" stream @ 295'
Sand & shale			295	378	1/2" stream @ 600'
Coal			378	381	
Sand			381	422	Gas ck @ 2180 5/10-1" w/water 15,839 cu.ft....
Coal			422	425	
Sand & shale			425	661	Gas ck @ 2694 3/10-1" w/water 13,043 cu.ft.
Red rock & shale			661	846	
Sand & shale			846	1310	Gas ck @ 2809 5/10-1" w/water 15,839 cu.ft.
Sand & shale			1310	1900	
Big Lime & Injun			1900	2115	
Sand & shale			2115	2710	Gas ck @ 4205 8/10-1" w/water 21,300 cu.ft.
Sand & shale			2710	3919	
Elk			3919	4905	
Shale			4905	4930	Gas ck @ 4793 18/10-1" w/water 31,950 cu.ft.
Benson			4930	5250	
Brown sand			5250	5299	
Alexander			5299	5480	Gas ck @ 5010 40/10-1" w/water 47,629 cu.ft.
Gray shale			5480	5514	
			5514	5662 TD	

(Attach separate sheets to complete as necessary)

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

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."

FORM IV-2 (Obverse)

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-222 API Well No. 47 - 017 - 2938 State County Permit

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

LOCATION: Elevation: 1220 Watershed: Laurel Run District: Greenbrier County: Doddridge Quadrangle: Big Isaac 7.5'

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

OIL & GAS LEASE & GAS COALTY OWNER Lessie Ward/ Bessie Ross Address C/O Charles L. Ross Route # 2

COAL OPERATOR None Address

ACREAGE 150 Bristol, WV 26332

COAL OWNER(S) WITH DECLARATION ON RECORD:

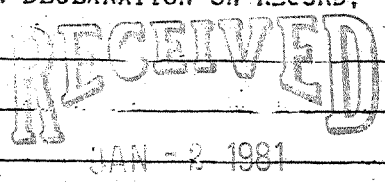
SURFACE OWNER Charles W. Beech Address 4429 Round Hills Road Alexandria, Va. 22310 Acreage 75

Name Eastern Association Coal Corporation Address Koppers Building Pittsburgh, Pa. 15219 Name Address

FIELD SALE (IF MADE) TO: Name Unknown Address

COAL LESSEE WITH DECLARATION ON RECORD:

OIL & GAS INSPECTOR TO BE NOTIFIED Name Paul Garrett Address 321 Beech St. 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 x / other contract x / dated Aug. 20, 1979; to the undersigned well operator from Hugh Spencer

If said deed, lease, or other contract has been recorded: recorded on August 28, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas lease Book 111 at page 393. 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)

as 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 application 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 or registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee 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 614 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 345-3097

BLANKET BOND

J & J Enterprises, Inc. Well Operator

By Peter Battles Geologist Its

[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 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, 115 feet; salt, None feet.
Approximate coal seam depths: 630 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 per ft, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths set, 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.

All operations being in accordance with the provisions of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 9-12-81

J. J. Huggins Deputy Director

The undersigned 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:

EA 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