


FILE NO _____
 DRAWING NO _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION J. AND J. ENTERPRISES, INC.
 WELL P.S. 1#1 ELEV. 750'

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

PLACE SEAL HERE

BY NOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 DATE 8/15/80
 WELL TYPE OIL GAS LIQUID INJECTION WASTE DISPOSAL
 IF GAS: PRODUCTION STORAGE DEEP SHALLOW
 ELEVATION 840' WATER SHED MIDDLE ISLAND CREEK
 DISTRICT CENTERVILLE COUNTY TYLER
 QUADRANGLE WEST UNION 7.5' & 15' C
 LEASE OWNER EDWIN D. MULVAY, ET UX. ACREAGE 107 Ac.
 GAS ROYALTY OWNER A.E. PRATT ESTATE LEASE ACREAGE 107 Ac.
 LEASE NO. PS 28
 PROPOSED WORK: DRILL 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
 INFORMATION ALEXANDER ESTIMATED DEPTH 5200'
 OPERATOR J. AND J. ENTERPRISES, INC. DESIGNATED AGENT HARRY BARNETT
 PD BOX 48 ADDRESS PD. BOX 48
6-4 BUCKHANNON, WEST VIRGINIA 26201 WILBUR BUCKHANNON, WEST VIRGINIA 26201 92


STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE AUGUST 15th 19 80
 OPERATOR'S WELL NO J-315
 API WELL NO 47-095-0831
 STATE 47 COUNTY 095 PERMIT 0831

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

Date 12/4, 1980

FORM IV-35
(Obverse)

Operator's
Well No. J-315

[08-78]

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

API Well No. 47 - 095 - 0831
State County Permi

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

LOCATION: Elevation: 840 Watershed: Middle Island Creek
District: Centerville County: Tyler Quadrangle: West Union 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

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 8/6, 1980

OIL & GAS INSPECTOR FOR THIS WORK:

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED

Name Phillip Lee Tracy

Address Box 173 Dodd St.
Middlebourn, WV 26149

GEOLOGICAL TARGET FORMATION: Alexander Depth 4980-5030 feet

Depth of completed well, 5512 feet Rotary / Cable Tools

Water strata depth: Fresh 280,310 feet; salt None feet.

Coal seam depths: None Is coal being mined in the area? No

Work was commenced 11/14, 1980, and completed 11/19, 1980

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		36.20	36.20	0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		1131.30	1131.30	215 sks.	
Coal	8 5/8	ERW	23	x		1131.30	1131.30	215 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		4835.20	4835.20	205 sks.	Depths set
Tubing									
Liners									Perforations:
									Top Bottom
									4748 4752
									4319 4365

OPEN FLOW DATA

Producing formation Benson Pay zone depth 4748-52 feet

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Ebl/d

Combined Final open flow, 1,594 Mcf/d Final open flow, _____ Ebl/d

Time of open flow between initial and final tests, 4 hours

Static rock pressure, 1550 psig (surface measurement) after 24 hours shut in

[If applicable due to multiple completion--]

Second producing formation Riley Pay zone depth 4319-4365 feet

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Ebl/d

Final open flow, _____ Mcf/d Final open flow, _____ Ebl/d

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

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

JAN 2 1981

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

Benson: Perforations: 4748-4752 (13 holes)

Fracturing: 15,000 lbs. 80/100 sand: 45,000 20/40 sand: 500 Bbls. fluid.

Riley: Perforations: 4319-4365 (12 holes)

Fracturing: 500 gal. Acid: 15,000 lbs. 80/100 sand: 33,000 lbs. 20/40 sand: 376 Bbls. fluid.

WELL LOG

FORMATION	Color	Hard or Soft	24 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Top Soil			0	15	
Red rock			15	20	
Sand & shale			20	285	1 1/2" stream @ 280'
White sand			275	310	
Sand, shale & red rock			310	440	3" stream @ 310'
Sand, shale & red rock			440	500	
Sand, shale & red rock			500	755	
Sand & shale			755	780	
Red rock			780	785	
Sand & shale			785	1210	Damp @ 1300'
Sand & shale			1210	1620	
Little lime			1620	1645	
Blue Monday			1645	1650	Gas ck @ 1888 158/10-1 1/2" w/water
Big Lime			1650	1750	168,000 cu.ft.
Big Injun			1750	1883	
Sand & shale			1883	4319	Gas ck. @ 1919 50/10-2" w/water
Riley			4319	4365	298,000 cu.ft.
Sand & shale			4365	4730	Gas ck. @ 2199 60/10-2" w/water
Benson			4730	4752	227,000 cu.ft.
Sand & shale			4752	4980	Gas ck. @ 2786 54/10-2" w/water
<u>Alexander</u>			4980	5030	309,000 cu.ft.
Shale			5030	5512	Gas ck. @ 4248 32/10=2" w/water
				TD	243,000 cu.ft.
					Gas ck. @ 4373 50/10 2" w/water
					298,000 cu.ft.
					Gas ck. @ 4840 70/10-2" w/water
					353,000 cu.ft.
					Gas ck. @ 5057 50/10-2" w/water
					298,000 cu.ft.

(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."

Date: 8/5/80

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-315
API Well No. 47-095
State County 83

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

LOCATION: Elevation: 840 Watershed: Middle Island Creek
District: Centerville County: Tyler Quadrangle: West Union 7.5

WELL OPERATOR J&J Enterprises, Inc. DESIGNATED AGENT H.L. Barnett
Address P.O. Box 48 Address P.O. Box 48
Buckhannon W.V. 26201 Buckhannon W.V. 262

OIL & GAS ROYALTY OWNER A.E. Pratt : Edwin & Patricia Mulvay COAL OPERATOR None
Address Box 132 : Star Rt. Address
Washington Pa : West Union W.V. 26456

ACREAGE 107 COAL OWNER(S) WITH DECLARATION ON RECORD:
SURFACE OWNER Edwin & Patricia Mulvay Name Edwin & Patricia Mulvay
Address Star Rt. Address Star Rt.
West Union W.V. 26456 West Union W.V. 26456

ACREAGE 107 Name
FIELD SALE (IF MADE) TO: Address

Name Address
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Phillip Lee Tracy
Address Box 173 Dodd St.
Middlebourn W.V. 26149

COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address AUG - 6 1980

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 X / dated 4/20, 1980, to undersigned well operator from Petroleum Services

[If said deed, lease, or other contract has been recorded:]
Recorded on 5/3, 1980, in the office of the Clerk of the County Commission of Tyler County, West Virginia, in Deed Book 224 at page 472. 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 objection 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 plan 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, 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 Bottles
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 Co.
Address P.O. Box 48
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5200 feet Rotary Cable tools

Approximate water strata depths: Fresh, 125 feet; salt, None feet.

Approximate coal seam depths: None 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		
Conductor	11 3/4	H-40	42	X		30	0	0Sks Kinds
Fresh water	8 5/8	ERW	23	X		1600	1600	400Sks
Coal	8 5/8	ERW	23	X		1600	1600	400Sks Sizes
Intermediate								
Production	4 1/2	J-55	10.5	X		5175	5175	350Sks Depths set
Logging								
Packers								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 § 22-4-1a from the owner of any water well or drilling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well when this permit is posted at the well site. This permit must be posted at the well site. This permit is a 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 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 4-19-81.

[Signature]
Deputy Director - Oil & Gas Division

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