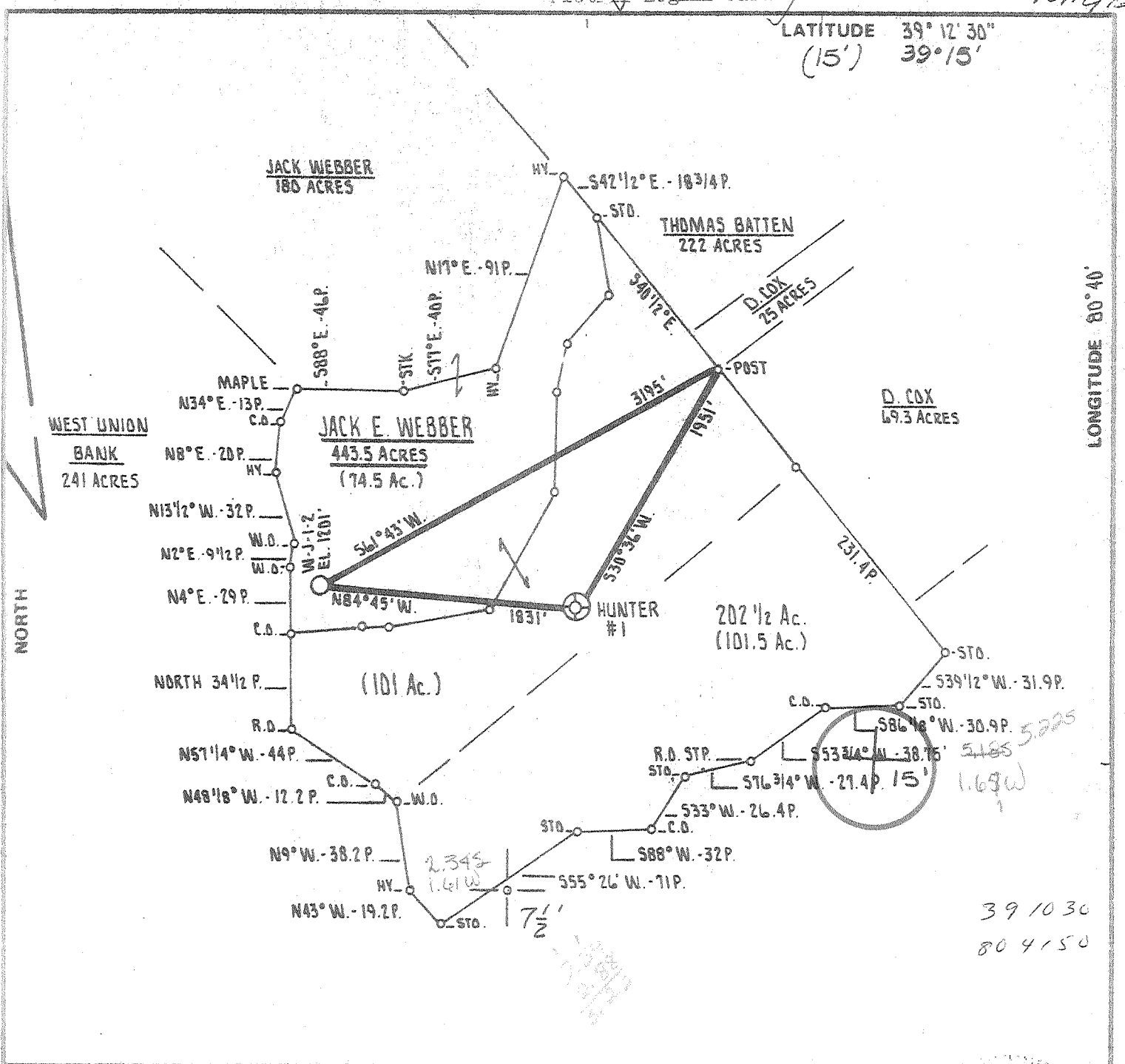


LATITUDE 39° 12' 30"
(15') 39° 15'

LONGITUDE 80° 40'



FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1 PART IN 200'
PROVEN SOURCE OF ELEVATION J. & J. ENTERPRISES, INC.
WELL # K-510-1 ELEVATION 932.0'

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) Amil B. Shuler
R.P.E. _____ L.L.S. 530



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



DATE OCTOBER 9th 19 79
OPERATOR'S WELL NO. J-J-27
API WELL NO. _____
47 - D17 - 2507
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 1201' WATER SHED BATTEN RUN
DISTRICT NEW MILTON COUNTY DODDRIDGE
QUADRANGLE NEW MILTON 7.5, VADIS 15'

SURFACE OWNER HAROLD J. HASTINGS ACREAGE 74.5 Ac
OIL & GAS ROYALTY OWNER JACK WEBBER LEASE ACREAGE 74.5 Ac.
LEASE NO. J-J-2-2

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 ___

TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5150' - 5750 OCT 25 1979
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

39 10 30
80 41 50

Handwritten notes and stamps

FEB - 7 1980

Date: February 5, 1980

Operator's Well No. JJ-2-#2
API Well No. 47 - 017 - 2507
State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
OIL & GAS DIVISION
DEPT. OF MINES
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: 1201 Watershed: Batten Run
District: New Milton County: Doddridge Quadrangle: New Milton 7 1/2

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT H. L. Barnett
Address P. O. Box 48 Address P. O. Box 48
Buckhannon, W. Va. 26201 Buckhannon, W. Va. 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 October 12, 1979 OIL & GAS INSPECTOR FOR THIS WORK:
(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Paul Garrett
Address 321 Beech Street
Clarksburg, W. Va. 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth 5625-5700 feet
Depth of completed well, 5833 feet Rotary X / Cable Tools
Water strata depth: Fresh, 780, 2045 feet; salt, 0 feet.
Coal seam depths: 388-394 Is coal being mined in the area? No
Work was commenced January 17, 1980, and completed January 26, 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		20	0	0 sks.	Kinds None
Fresh water	8 5/8	ERW	23	X		1741	1741	510 sks.	
Coal	8 5/8	ERW	23	X		1741	1741	510 sks.	Sides
Intermediate									
Production Tubing	4 1/2	J-55	10.5	X		4033.02	4033.02	480 sks.	Bottom set
Liners									Penetrations:
									Top Bottom
									3913 3915
									2636 2641
									2720 2726

OPEN FLOW DATA

Producing formation Balltown Pay zone depth 3705-3915 feet
Gas: Initial open flow, show Mcf/d Oil: Initial open flow, None bbl/d
Final open flow, Mcf/d Final open flow, bbl/d
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 Weir & Big Injun Pay zone depth 2636-2641 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
Static rock pressure, psig (surface measurement) after hours shut in

(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OF STRATIGRAPHIC UNITS, PHYSICAL PROPERTIES, ETC.

Balltown: Perforations: 3705-3711 (6 holes), 3723-3727, (4 holes), 3913-3915, (2 holes)
 Fracturing: 500 gal. Acid; 20,000 lbs. sand 80/100 wire mesh; 30,000 lbs sand 20/40 wire mesh; 497 Bbls. Fluid.

Weir: Perforations: 2636-2641, (14 holes).
 Fracturing: 500 gal. Acid; 5000 lbs. Sand 80/100 wire mesh; 20,000 lbs. Sand 20/40 wire mesh; 277 Bbls. Fluid.

Big Injun: Perforations: 2420-2426, (14 holes).
 Fracturing: 500 gal. Acid, 10,000 lbs. Sand 80/100 wire mesh; 20,000 lbs. Sand 20/40 wire mesh; 314 Bbls. Fluid.

Well 100

FORMATION	Color	Hard or Soft	45 Top Feet	Bottom Feet	Remarks Including inclusion of and salt water, etc.
Red Clay			0	20	
Shale			20	23	
Sand			23	80	
Sandy Shale			80	130	
Red Rock & Shale			130	175	
Sand			175	220	
Red Rock			220	280	
Shale			280	388	
Coal			388	394	Coal
Shale & Red Rock			394	760	
Sand			760	795	
Shale			795	1000	
Sand			1000	1040	1/2" Stream water 1125'
Red Rock & Shale			1040	1165	
Shale			1165	1310	
Red Rock & Shale			1310	1380	
Sand			1380	1420	
Shale			1420	1470	
Sand			1470	2000	
Shale			2000	2220	Water at 2045'
Sand			2220	2250	
Shale			2250	2310	
Big Lime			2310	2405	
Injun			2405	2470	
Shale			2470	2565	
Sand			2565	2685	
Shale			2685	3615	Gas @ 3331' 50/10-2" with water
Sandy Shale			3615	4085	Gas @ 3921' 95/10-2" with water
Shale			4085	4250	
Sandy Shale			4250	4900	Gas @ 4725' 114/10-2" with water
Riley			4900	4911	
Shale			4911	5400	Gas @5004' 114/10-2 " with water
Benson			5400	5405	

(Attach separate sheets to complete as necessary.)

J & J ENTERPRISES, INC.

Well Operator

By

PETER BATTLES GEOLOGIST

NOTE: Regulation 2.02(1) 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."

FORMATION	Color	Hard or Soft	45 Feet	Bottom Feet	Including Indication of Gas, Salt Water, etc.
Sandy Shale			5405	5625	
<u>Alexander</u>			5625	5700	
Shale			5700	5833	
			TD	5833	

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's J&J-2-#2
Well No. _____

API Well No. 47-017-2507
State County Permit

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

LOCATION: Elevation: 1201' Watershed: Batten Run
District: New Milton County: Doddridge Quadrangle: New Milton 7 1/2

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

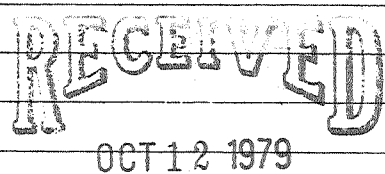
DESIGNATED AGENT H. L. Barnett
Address P. O. Box 48
Buckhannon, W. Va. 26201

OIL & GAS ROYALTY OWNER Jack Webber
Address Route 2,
West Union, W. Va. 26456

COAL OPERATOR None
Address _____

ACREAGE 74.5
SURFACE OWNER Harold J. Hastings
Address 6221 Springhill Court
Greenbelt, Maryland 20770
ACREAGE 74.5

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name None
Address _____
Name _____
Address _____



FIELD SALE (IF MADE) TO:
Name _____
Address _____

OIL & GAS DIVISION
DEPT. OF MINES
COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address _____

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

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed ____ / lease X / other contract ____ / dated March 26, 1974, to the undersigned well operator from Jack Webber

[If said deed, lease, or other contract has been recorded:]

Recorded on March 26, 1974, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease 88 at page 462. 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 § 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 on 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
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

J & J ENTERPRISES, INC.
Well Operator
By H. L. Barnett
H. L. BARNETT
DESIGNATED AGENT

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, W. Va. 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5750 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 1100 feet; salt, 0 feet.

Approximate coal seam depths: None 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		Kinds
Fresh water	8 5/8	ERW	23	X		1400	1400	350	
Coal									Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X		5650	5650	300	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 6-12-80.


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