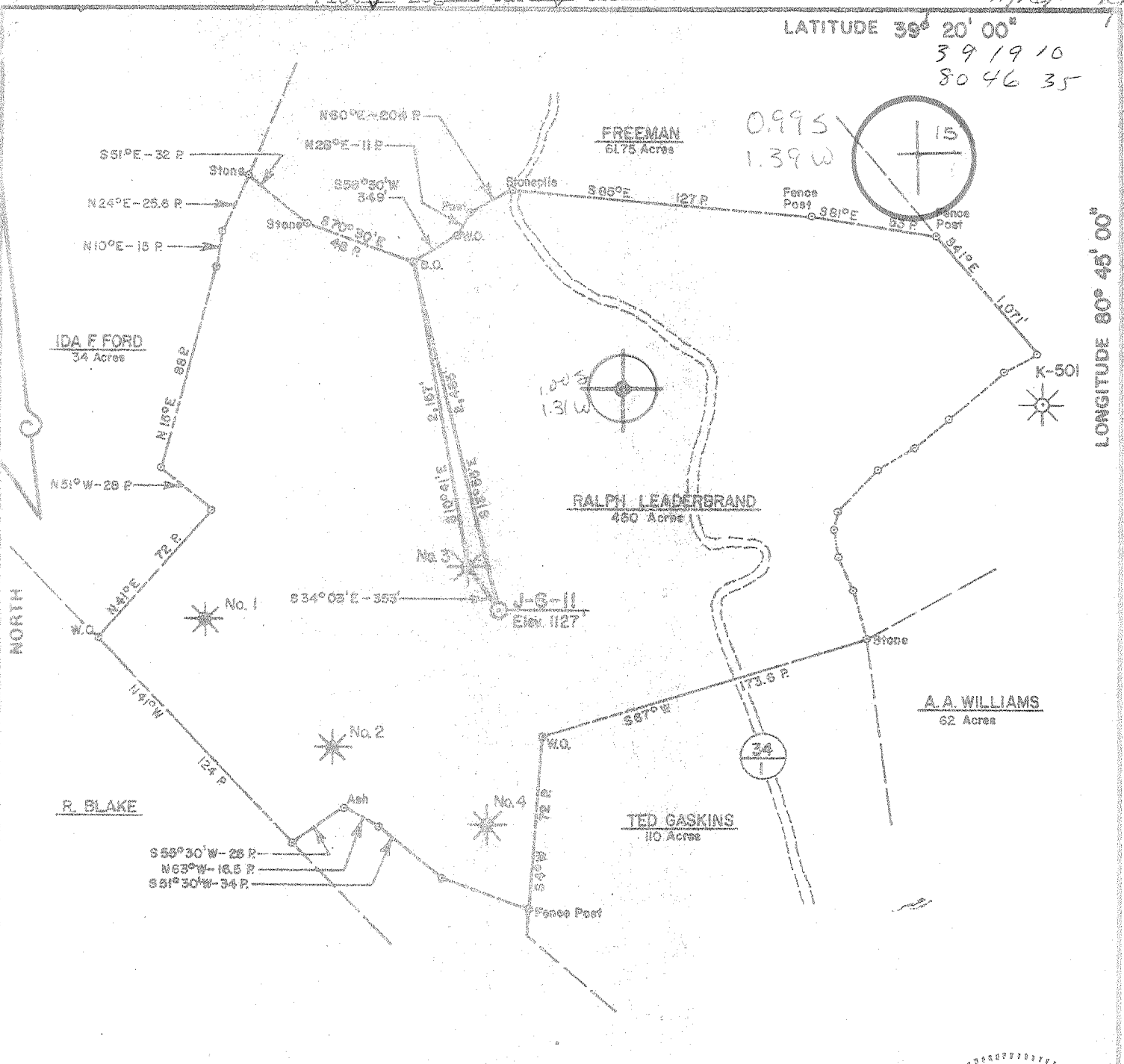


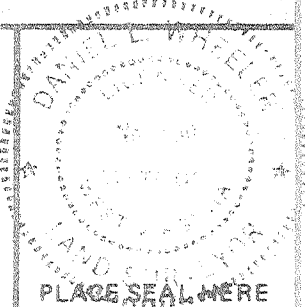
11/16/79

LATITUDE 39° 20' 00"
39 19 10
80 46 35



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1,000'
 MINIMUM DEGREE OF ACCURACY 1 Part in 200
 PROVEN SOURCE OF ELEVATION J. & J. Enterprises
 Well No. K-501 Elev. 1210'

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



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



DATE November 7, 19 79
 OPERATOR'S WELL NO. J-6-11
 API WELL NO. 47-017-2537
 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 1127' WATERSHED Middle Island Creek
 DISTRICT West Union COUNTY Doddridge
 QUADRANGLE West Union 7.5', 15' SE
 SURFACE OWNER Homer Martin Jr. ACREAGE 450
 OIL & GAS ROYALTY OWNER Ralph Leaderbrand; J.M. Smith LEASE ACREAGE 450
 LEASE NO. J-6-11
 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 5625 DEC 6 1979
 WELL OPERATOR J. & J. Enterprises, Inc. DESIGNATED AGENT Harry Barnett
 ADDRESS P.O. Box 48 ADDRESS P.O. Box 48
Buckhannon, W.Va. 26201 Buckhannon, W.Va. 26201

Handwritten notes and stamps:
FEB 28 1980
STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL & GAS DIVISION WELL OPERATOR'S REPORT II

DEPT. EXAMINES

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

LOCATION: Elevation: 1127 Watershed: Middle Island Creek
District: West Union County: Doddridge 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. Va. 26201 Buckhannon, W. Va. 26201

PERMITTED WORK: Drill Convert Drill deeper Re-drill Fracture to stimulate
Plug off old formation Perforate new formation
Other physical change in well (specify):

PERMIT ISSUED ON November 16, 1979 OIL & GAS INSPECTOR FOR THIS WORK
(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Paul Garrett
Address 321 Beech St.
Clarksburg, W. Va. 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth: 5400 Feet
Depth of completed well, 5593 feet Rotary Cable Tools
Water strata depth: Fresh, 90 feet; salt, 610 feet.
Coal seam depths: 530-534 Is coal being mined in the area? No
Work was commenced January 24, 1980, and completed January 30, 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				
Conductor	11 3/4	H-40	42	X		27.8	27.8	0 sks.	None
Fresh water	8 5/8	ERW	23	X		1145	1145	275 sks.	
Coal	8 5/8	ERW	23	X		1145	1145	275 sks.	Slips
Intermediate									
Production	4 1/2	J-55	10.5	X		5563	5563	660 sks.	Down hole
Tubing									
Liners									
									Perf. intervals: Top Bottom 5393-5451 5053-5080 3472-3516 2411-2603

OPEN FLOW DATA

Producing formation Alexander & Benson Pay zone top 5053-5450 feet

Handwritten notes:
Ben Alex
10 530
5053-5450

TESTING

Gas: Initial open flow, N/A 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

Second producing formation Speechley & Weir Pay zone depth 2411-3516 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

08-78

TABLES OF PERFORATED INTERVALS, FRACTURING OF PERFORATING, PHYSICAL PROPERTIES, ETC.

Alexander- Perforations: 5393-5451 (20 holes) 813 total fluid, 60,000 lbs. 20/40 sand rate 38.6 pres. 2800 H.H.P. 2650 150 lb. J-166; 300 lbs. L-40, 15 gal. F-52
 Benson: 5053-5080 (16 holes) 536 total fluid, 30,000 lbs. 20/40 sand, rate 26.2 pres. 3400 H.H.P. 2184 100 lb. J-166, 10 gal. F-52, 500 gal. HCL-X.
 Speechley: 3472-3516, (16 holes), 467 total fluid; 20,000 lbs. 20/40 sand, 75 lbs. J-166, 200 lbs. L-41; 10 gal. F-52; 500 gal. HCL-X. rate 22.7 pres. 3500 H.H.P. 1948.
 Weir & Gordon: 2411-2603 (20 holes) 652 total fluid, rate 44 pres. 3400 H.H.P. 3667, 40,000 lbs. 20/40 sand, 125 lbs. J-166; 200 lbs. KO; 250 lbs. L-41; 500 gal. HCL-X.

ELD 100

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	REMARKS Including indicators of gas, oil, and salt water, etc.
fill			0	10	
ed Rock			10	25	
hale			25	30	
ed Rock			30	35	
hale			35	40	
and & Shale			40	530	Damp at 90' 7 305"
oal			530	534	Coal
and & Shale			534	575	
ed Rock			575	585	
and & Shale			585	782	1/2" Stream at 610'
and			782	814	
and & Shale			814	1870	
hale			1870	1935	
and			1935	1955	
hale			1955	2005	
and & Shale			2005	2025	
ig Lime			2025	2150	
ig Injun			2150	2260	
hale			2260	2390	
eir			2390	2480	
hale			2480	2600	
ordon			2600	2603	
haley Sand			2603	2800	
and			2800	2840	
hale			2840	2880	
haley Sand			2880	3200	
hale			3200	3470	
peechley			3470	3560	
haley Sand			3560	3800	
hale			3800	3840	
haley Sand			3840	4050	
hale			4050	4190	
haley Sand			4190	4300	

(Attach separate sheets to complete as necessary.)

J & J ENTERPRISES, INC.
 Well Operator
 By Peter Battles
 Peter Battles GEOLOGIST

NOTE: Regulation 2.22(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."

47-017-2537

WELL LOG JJ-6-#11 continued

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of gas, oil, and salt water, sand, etc.
shale			4300	4420	
and			4420	4500	
shaley Sand			4500	4600	
shale			4600	4680	
and			4680	4710	
shale			4710	4900	
shaley Sand			4900	5040	
enson ✓			5040	5070	Gas @ 5050'
shale			5070	5120	
shaley Sand			5120	5380	
Alexander ✓ 5380-5450			5380	5460	
shale			5460	5595	
			TD	5595	

MAR 10 1960

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's
Well No. JJ-6-#11

API Well No. 47 - 017 - 2537
State County Permit

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

LOCATION: Elevation: 1127 Watershed: Middle Island Creek
District: West Union County: Doddridge Quadrangle: West Union 7.5'

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 J. M. L. Smith
Address 405 W. Main Street
West Union, W. Va. 26456

COAL OPERATOR None
Address _____

Acreage 450

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Homer Martin, Jr.
Address Star Route
West Union, W. Va. 26456
Acreage 450

Name J. M. L. Smith
Address 405 W. Main Street
West Union, W. Va. 26456

FIELD SALE (IF MADE) TO:

Name _____
Address _____

Name _____
Address _____

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

OIL & GAS DIVISION
DEPT. OF MINES

NOV 16 1979

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 September 27, 1979, to the undersigned well operator from Leaderbrand.

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

Recorded on October 16, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 111 at page 540. 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 typical change in well (specify) _____

--- attached to this work order on the reverse side hereof.

The above named well operator, coal owner(s), and coal lessee are hereby notified that any additional information which is 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 PHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
WASHINGTON STREET EAST
LESTON, WV 25311
PHONE: (304) 348-3092

BLANKET BOND

J & J ENTERPRISES, INC.
Well Operator
By Peter Battles
PETER BATTLES
Its 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 Company
Address P. O. Box 48
Buckhannon, W. Va. 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5625 feet Rotary X / Cable tools /
Approximate water strata depths: Fresh, 60 feet; salt, 1540 feet.
Approximate coal seam depths: 307, 418 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	0	0 sks. Kinds None
Fresh water	8 5/8	ERW	23	X		1000	1000	280 sks.
Coal	8 5/8	ERW	23	X		1000	1000	280 sks. Sizes
Intermediate								
Production	4 1/2	J-55	10.5	X		5600	5600	300 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 7-16-80.


Deputy Director - Oil & Gas Division

It is hereby declared 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