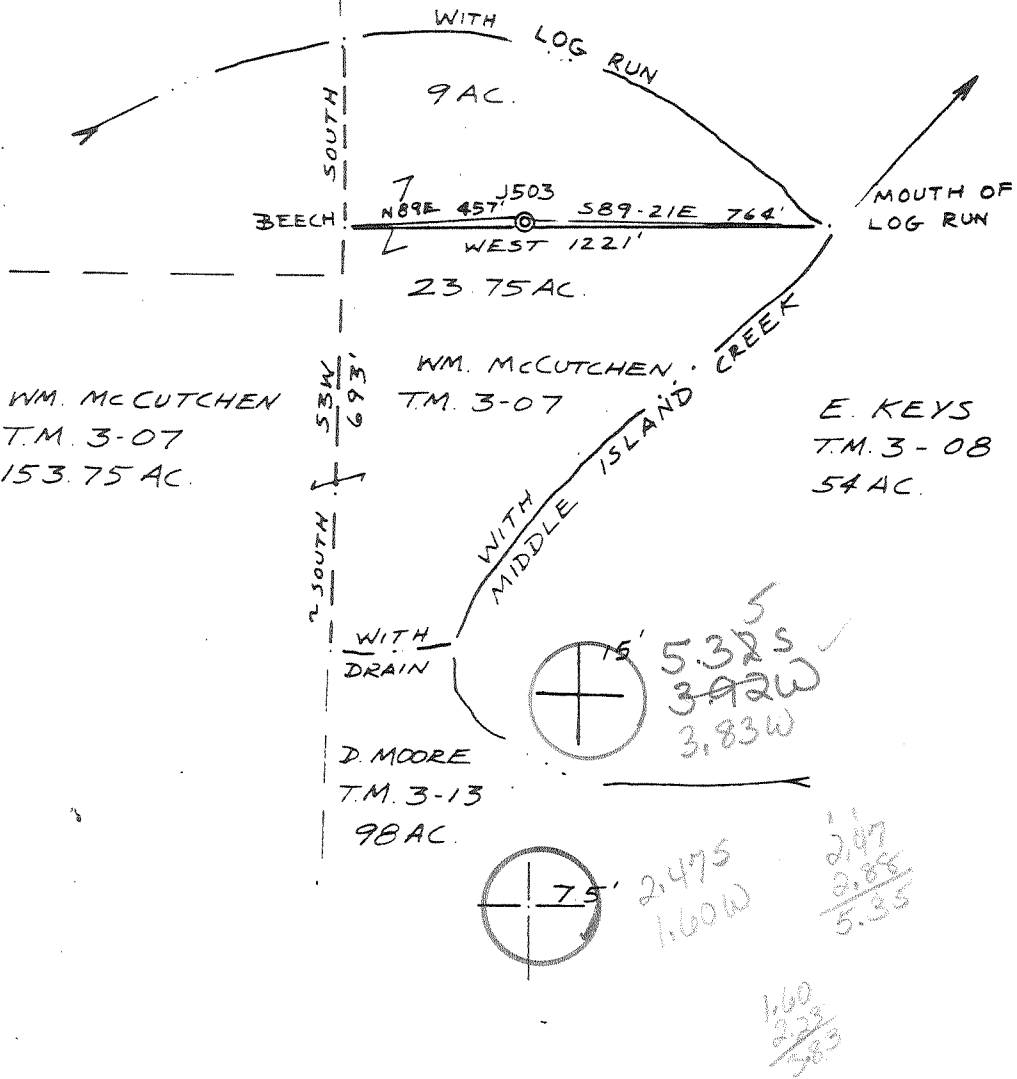


N. JOSEPH HRS.  
T.M. 3-04.1  
30 AC.

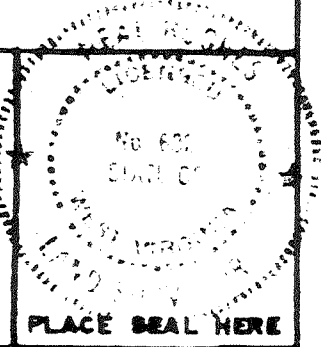
N. JOSEPH HRS.  
T.M. 3-04  
138 AC.



12,900'

FILE NO. JJ  
 DRAWING NO. 3  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION BM 751

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



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



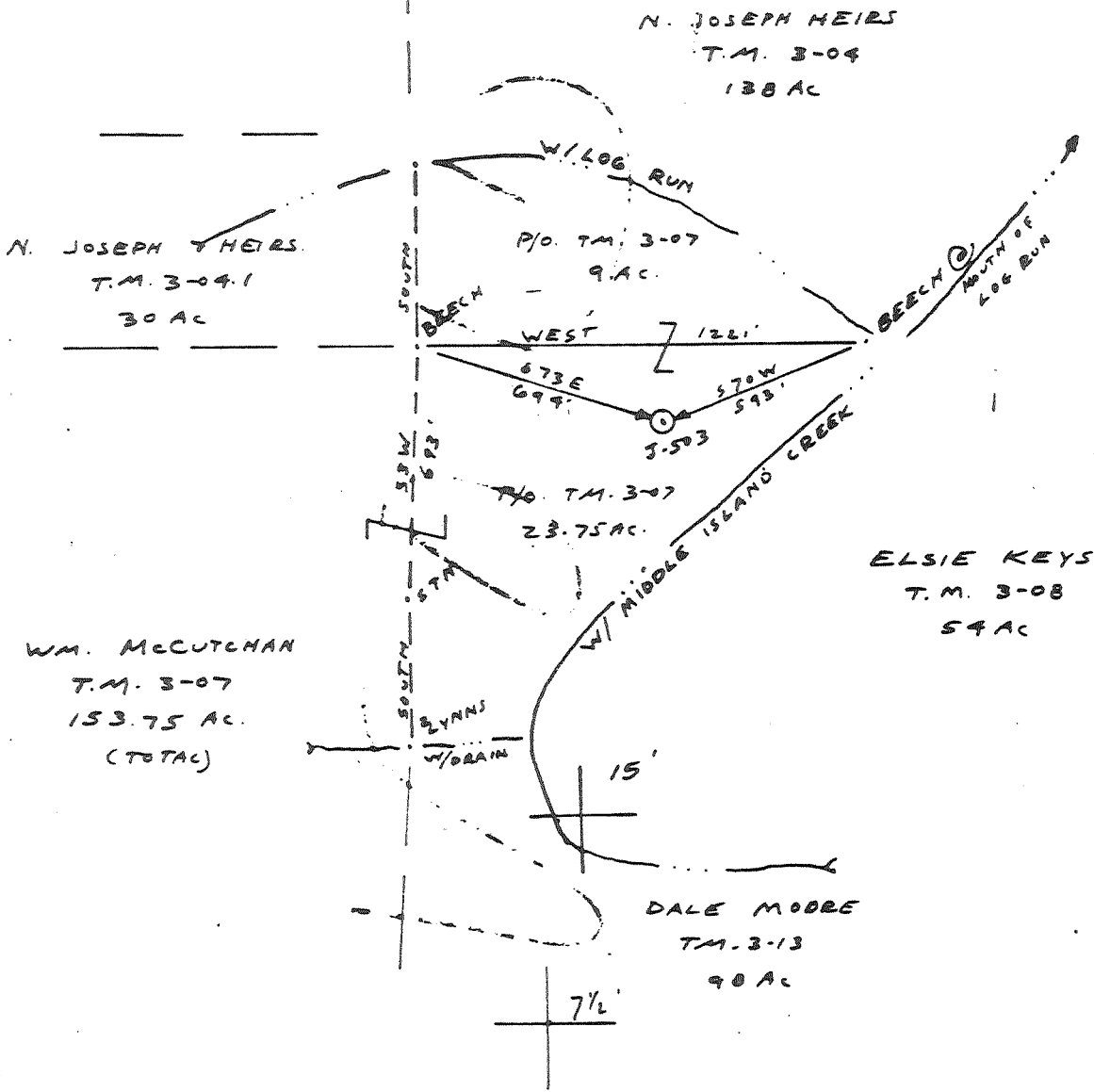
DATE JUNE 9, 19 81  
 OPERATOR'S WELL NO. J503  
 API WELL NO. 47-017-3023  
 STATE COUNTY PERMIT  
 Formerly: DOD-2998

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 900' WATER SHED MIDDLE ISLAND CREEK  
 DISTRICT WEST UNION COUNTY DODDRIDGE  
 QUADRANGLE WEST UNION 7.5' x 15' EC  
 SURFACE OWNER WM. MCCUTCHEM ACREAGE 32.75  
 OIL & GAS ROYALTY OWNER SAME LEASE ACREAGE 32.75  
 LEASE NO. JJ 1054  
 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 BENSON AT DEPTH 5050  
 WELL OPERATOR J&J ENTERPRISES, INC DESIGNATED AGENT ROGER BOLSTON  
 ADDRESS P.O. Box 48 ADDRESS P.O. Box 48  
BUCKHANNON, WV 26201 BUCKHANNON, WV 26201  
6-6 Wilbur (92)

LATITUDE 39°-22'-30"  
13,100' SOUTH  
8,200 WEST

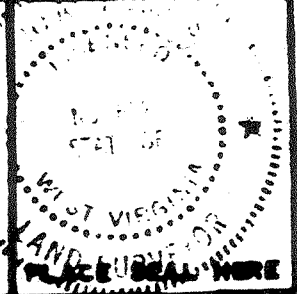


NORTH

13100 SOUTH

FILE NO. J-3  
 DRAWING NO. J 503  
 SCALE 1"=500'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION B.M. 751

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



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



DATE MARCH 31, 1981  
 OPERATOR'S WELL NO. 1503  
 API WELL NO. 47-017-2998  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

Cancelled  
 See: DOD-9023

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS", PRODUCTION \_\_\_\_\_ STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 LOCATION: ELEVATION 785' WATER SHED MIDDLE ISLAND CREEK  
 DISTRICT WEST UNION COUNTY DODDRIDGE  
 QUADRANGLE WEST UNION 7 1/2  
 SURFACE OWNER W.M. McCUTCHAN ET UX. ACREAGE 153.75  
 OIL & GAS ROYALTY OWNER W.M. McCUTCHAN ET UX. LEASE ACREAGE 32.75  
 LEASE NO. JJ 1054  
 PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  PLUS OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 TO PLUG AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION Alexander ESTIMATED DEPTH 5600  
 WELL OPERATOR J.T. Enterprises, Inc. DESIGNATED AGENT Roger Relston  
 ADDRESS P.O. Box 48 ADDRESS P.O. Box 48  
Buckhannon, WV 26201 Buckhannon, WV 26201

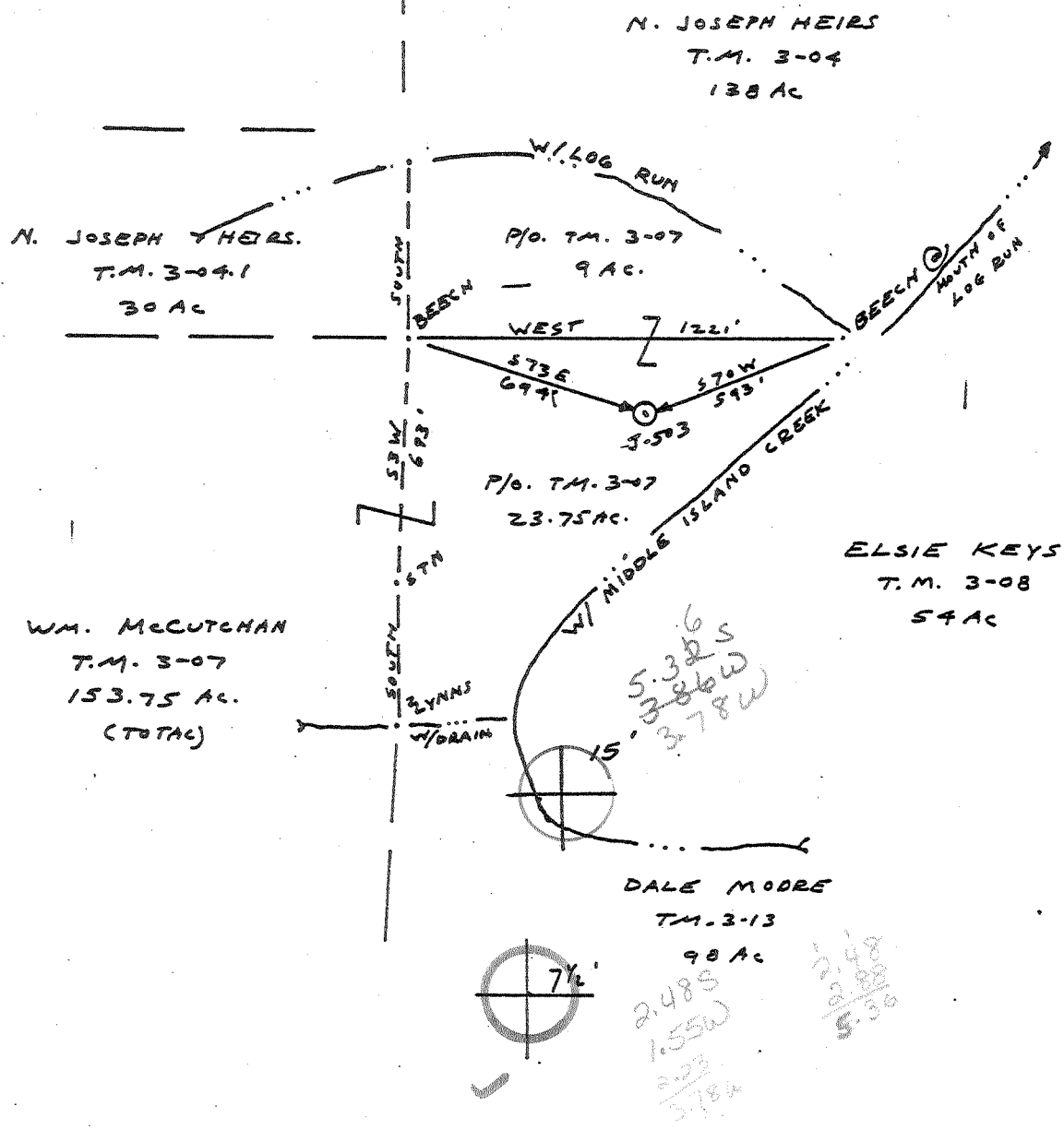
JUL 09 1981

ch

Plot Card CSD

8200 WEST 39° 25'

LATITUDE 39°-22'-30"  
13,100' SOUTH  
8,200 WEST

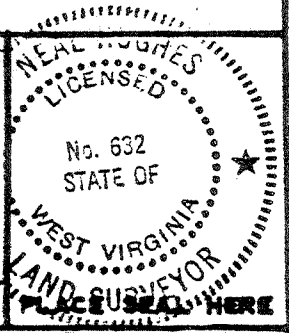


80° 45'  
LONGITUDE 80°-47'-30"

PLATS SOUTH 31001

FILE NO. J.J  
 DRAWING NO. J 503  
 SCALE 1"=500'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION B.M. 751

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



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



DATE MARCH 31, 1981  
 OPERATOR'S WELL NO. 1503  
 API WELL NO. was: 2998  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

now: 3023

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS", PRODUCTION \_\_\_\_\_ STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 LOCATION: ELEVATION 785' WATER SHED MIDDLE ISLAND CREEK  
 DISTRICT WEST UNION COUNTY DODDRIDGE  
 QUADRANGLE WEST UNION 7 1/2 + 15 EC  
 SURFACE OWNER W.M. McCutchan, et ux. ACREAGE 153.75  
 OIL & GAS ROYALTY OWNER W.M. McCutchan, et ux. LEASE ACREAGE 32.75  
 LEASE NO. JJ 1054  
 PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUS AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION Alexander ESTIMATED DEPTH 5600  
 WELL OPERATOR J.J. Enterprises, Inc. DESIGNATED AGENT Roger Ralston  
 ADDRESS P.O. Box 48 ADDRESS P.O. Box 48  
Buckhannon, WV 26201 Buckhannon, WV 26201

MAY 21 1981

RECEIVED

OCT 19 1981

OIL AND GAS DIVISION WV DEPARTMENT OF MINES

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

Date: October 12, 1981  
 Operator's Well No. J-503  
 API Well No. 47-017-3023  
 State County Permit

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: 900 Watershed: Middle Island Creek  
 District: West Union County: Doddridge Quadrangle: West Union

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT James R. Willett  
 Address P.O. Box 48 Address P.O. Box 48  
Buckhannon, WV 26201 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 6/25, 1981  
 OIL & GAS INSPECTOR FOR THIS WORK:  
 Name Stephen Casey  
 Address Rt. 2, Box 232-D  
Jane Lew, WV 26378

GEOLOGICAL TARGET FORMATION: Alexander Depth 5055-5125 feet  
 Depth of completed well, 5305 feet Rotary X / Cable Tools \_\_\_  
 Water strata depth: Fresh 240, 520 feet; salt, 0 feet.  
 Coal seam depths: None Is coal being mined in the area? NO  
 Work was commenced 8/15, 1981, and completed 8/19, 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		28	28	0 sks.	Kinds	
Fresh water	8 5/8	ERW	23	X		1112.50	1112.50	295 sks.		
Coal	8 5/8	ERW	23	X		1112.50	1112.50	295 sks.	Sizes	
Intermediate										
Production	4 1/2	J-55	10.5	X		5214.55	5214.55	220 sks.	Depths set	
Tubing										
Liners									Perforations:	
									Top Bottom	
									4828 4830	
									5123 5155	

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 5123-55 feet  
 Gas: Initial open flow, \_\_\_ Mcf/d Oil: Initial open flow, \_\_\_ Bbl/d  
 Combined Final open flow, 984 Mcf/d Final open flow, \_\_\_ Bbl/d  
 Time of open flow between initial and final tests, 4 hours  
 Static rock pressure, 1550 psig (surface measurement) after 96 hours shut in  
 [If applicable due to multiple completion--]  
 Second producing formation Benson Pay zone depth 4828-30 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

True Hole Pressure f=Pwe XGLS

$$50 + (0.0075 \times 5214) + 459.7 = 559 \times \frac{1}{53.35} \times 559 = \frac{1}{29823} = 0.0000335 \text{ Pf} = 1550 \times 2.72^{0.10} = 1550 \times 1.105$$

NOV 5 1981

[08-78]

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

Alexander: 5123-55 (13 holes)

Fracturing: 10,000 lbs. 80/100 sand: 40,000 lbs. 20/40 sand: 500 gal. Acid:  
555 Bbls. fluid.

Benson: 4828-30 (8 holes)

Fracturing: 10,000 lbs. 80/100 sand: 30,000 lbs. 20/40 sand: 500 gal. Acid:  
520 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
Top Soil			0	5	
Red rock & sand			5	18	
Sand & shale			18	48	Damp @ 240'
Sand, shale & red rock			48	90	Wet @ 520'
Sand & shale			90	155	Gas Ck @ 2764 8/10-1/2" w/water
Red rock			155	160	5,650 cu.ft.
Red rock, sand & shale			160	400	Gas ck @ 4343 6/10-1/2" w/water
White sand			400	435	4,611 cu.ft.
Sand, shale & red rock			435	635	
Sandy shale			635	680	Gas ck @ 4715 No show
Shale & red rock			680	785	
Sandy shale & red rock			785	820	Gas ck @ 4870 80/10-1/2" w/water
Red rock & shale			820	850	18,839 cu.ft.
Red rock & shale			850	1450	
Black shale			1450	1457	Gas ck. 2/10-1/2" w/water
Sand & shale			1457	1730	2,333 cu.ft.
Lime			1730	1745	
Blue Monday			1745	1763	Gas ck after lay down 10 jts.
Big Lime			1763	1825	40/10-1/2" w/water
Injun			1825	1927	11,927 cu.ft.
Sand, shale & red rock			1927	2745	
Sand & shale			2745	4795	
Benson			4795	4830	
Sand & shale			4830	5055	
Alexander			5055	5155	
Sand & shale			5155	5305	
				T.D.	

(Attach separate sheets as complete as necessary)

J & J Enterprises, Inc.

Well Operator

By

*Peter Battles*  
Peter Battles

Its

Geologist

NOTE: Regulation 2.02(f) 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-503

API Well No. 47 - 017 <sup>was</sup> 2998  
State County Permit

now: 3023

WELL TYPE: Oil  / Gas  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow  /  
ELEVATION: 785 Watershed: Middle Island Creek  
District: West Union County: Doddridge Quadrangle: West Union

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

DESIGNATED AGENT Roger Rolston  
Address P.O. Box 48  
Buckhannon, WV 26201

LAND & GAS INTEREST OWNER Wm. McCutchan, et ux  
Address 300 Wood St.  
West Union, WV 26456

COAL OPERATOR None  
Address

ACREAGE 32.75  
SURFACE OWNER Wm. McCutchan, et ux  
Address 300 Wood St.  
West Union, WV 26456

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Wm. McCutchan  
Address 300 Wood St.  
West Union, WV 26456

ACREAGE 153.75  
WELL SALE (IF MADE) TO:  
None  
Address

Name  
Address

INSPECTOR TO BE NOTIFIED Stephen Casey  
Address Rt. # 2, Box 232-D  
Jane Lew, WV 26378

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address  
**RECEIVED**  
MAY - 1 1981

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 1/7, 1981, to the undersigned well operator from Wm. Paul McCutchan & Va. Lee McCutchan, His wife [said deed, lease, or other contract has been recorded:]

Recorded on 1/14, 1981, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas lease Book 118 at page 663. 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 coal operator, coal owner(s), and coal lessee are hereby notified that any changes 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 before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE RETURN COPIES OF ALL PHYSICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
100 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

BLANKET BOND

J & J Enterprises, Inc.  
Well Operator  
By Peter Battles  
Its 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 P.O. Box 48
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5600 feet Rotary x / Cable tools /
Approximate water strata depths: Fresh, 100 feet; salt, 1000 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 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 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 PERMIT SITE.

THIS PERMIT MUST BE POSTED AT THE WELL SITE
All provisions being in compliance with Chapter 22, of the W. Va. Code are hereby approved for drilling. The permit shall expire if operations have not commenced by 1-5-82

Deputy Director - Oil & Gas Division

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:

WAIVER

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

Operator's Well No. J-503 (Revised) 3023  
 API Well No. 47-017 State County Perma  
 TYPE: Oil      / Gas X /  
 (If "Gas", Production X / Underground storage      / Deep      / Shallow X /)  
 Elevation: 785 Watershed: Middle Island Creek  
 District: West Union County: Doddridge Quadrangle: West Union

OPERATOR J & J Enterprises, Inc.  
 Address P.O. Box 48  
Buckhannon, WV 26201  
 GAS  
 COAL OWNER Wm. McCutchan, et ux  
 Address 300 Wood St.  
West Union, WV 26456  
 acreage 32.75  
 COAL OWNER Wm. McCutchan, et ux  
 Address 300 Wood St.  
West Union, WV 26456  
 acreage 153.75  
 SALE (IF MADE) TO:  
None  
 Address       
 GAS INSPECTOR TO BE NOTIFIED  
Stephen Casey  
 Address Rt. # 2, Box 232-D  
Jane Lew, WV 26378

DESIGNATED AGENT Roger Rolston  
 Address P.O. Box 48  
Buckhannon, WV 26201  
 COAL OPERATOR None  
 Address       
 COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Name Wm. McCutchan  
 Address 300 Wood St.  
West Union, WV 26456  
 Name       
 Address       
 COAL LESSEE WITH DECLARATION ON RECORD:  
 Name None  
 Address     

**RECEIVED**  
 JUN 25 1981

OIL & GAS DIVISION  
 DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above  
 on under a deed      / lease      / other contract X / dated 1/7, 1981, to the  
 signed well operator from Wm. Paul McCutchan & Va. Lee McCutchan, His wife  
& deed, lease, or other contract has been recorded:  
 on 1/14, 1981, in the office of the Clerk of the County Commission of Doddridge  
West Virginia, in Oil & Gas lease Book 118 at page 663. 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  
 they wish to make or are required to make by Code § 22-4-3 must be filed with the Department  
 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  
 registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee.  
 before the day of the mailing or delivery of this Permit Application to the Department of Mines at  
 Charleston, West Virginia.

SUBMIT COPIES OF ALL  
 ORIGINAL LOGS DIRECTLY TO:  
 WEST VIRGINIA OIL AND GAS  
 PERMITS COMMISSION  
 100 MONROE STREET EAST  
 CHARLESTON, WV 25311  
 PHONE: (304) 345-3092

**BLANKET BOND**

J & J Enterprises, Inc.  
 Well Operator  
 By Peter Batties  
 Peter Batties  
 Its       
 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 P.O. Box 48

Buckhannon, WV, 26201

GEOLOGICAL TARGET FORMATION,

Alexander

Estimated depth of completed well, ~~500~~ 5050 feet

Rotary  / Cable tools  /

Approximate water strata depths: Fresh, 100 feet; salt, 1000 feet.

Approximate coal seam depths: None Is coal being mined in the area? Yes  / No

DRILLING AND TUBING PROGRAM

DRILLING 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	0	0 sks.	Kinds
Fresh water	6 5/8	ERW	23	x		1600	1600	400 sks.	
Coal	8 5/8	ERW	23	x		1600	1600	400 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		5550	5550	350 sks.	Depths set
Tubing									
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 § 22-4-8a 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 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 3-1-82

Deputy Director - Oil & Gas Division

This permit must be obtained 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.

By

Its