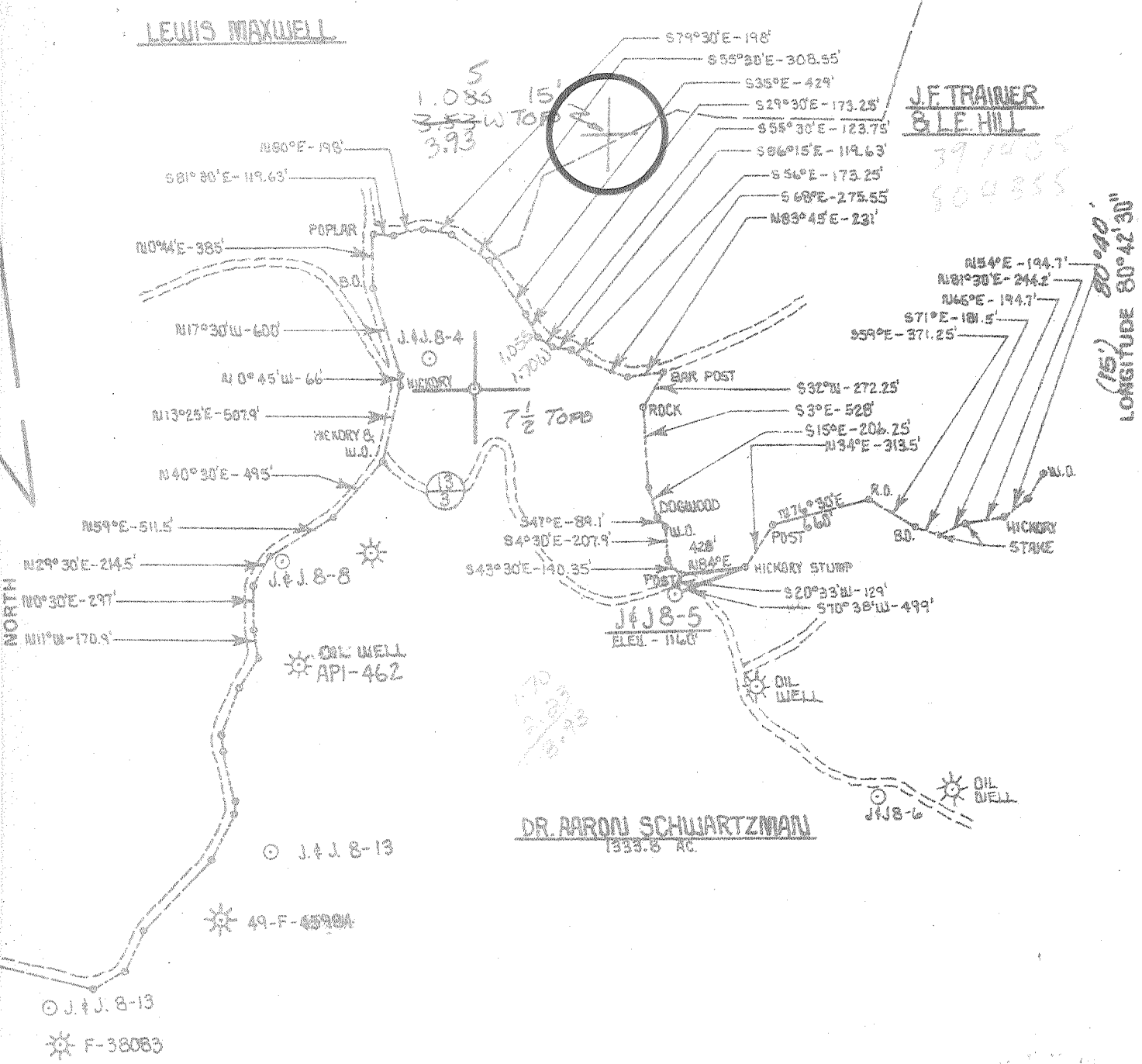


LATITUDE 39°15'00"



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1,000'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200'  
 PROVEN SOURCE OF ELEVATION 8.00 1300 NORTH OF WATER OF RT. 13 B, RT. 13/3 ELEV. 121.9"

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) Wm. 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)



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

DATE FEBRUARY 6, 19 80  
 OPERATOR'S WELL NO. J&J 8-5  
 API WELL NO. 47 - 017 - 2595  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1160' WATER SHED LICK RUN  
 DISTRICT NEW MILTON COUNTY DODDRIDGE  
 QUADRANGLE NEW MILTON 7.5' XADIS 15' NW  
 SURFACE OWNER DR. AARON SCHWARTZMAN ACREAGE 1333.8  
 OIL & GAS ROYALTY OWNER PORTER MAXWELL HEIRS LEASE ACREAGE 1333.8  
 LEASE NO. 141.9  
 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 5,350'  
 WELL OPERATOR J&J ENTERPRISES, INC. DESIGNATED AGENT HARRY BARNETT  
 ADDRESS P.O. BOX 48 BUCKHANNON, W.VA. 26201 ADDRESS P.O. BOX 48 BUCKHANNON, W.VA. 26201

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

WELL OPERATOR'S REPORT 10  
OF  
DRILLING, FRACURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 1160 Watershed: Lick Run  
District: New Milton County: Doddridge Quadrangle: New Milton 7.5'

WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT H.L. Barnett  
Address Box 48 Address Box 48  
Buckhannon, WV 26201 Buckhannon, WV 26

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 2-12, 19 80 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 St,  
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth 5120-84 feet  
Depth of completed well, 5336 feet Rotary  / Cable Tools   
Water strata depth: Fresh 185-240 feet; salt, 0 feet.  
Coal seam depths: None Is coal being mined in the area? No  
Work was commenced 4-9-80, 19 80, and completed 4-15-80, 19 80

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	113/4	H-40	42	X		30	0	0 sks	Rinds
Fresh water	85/8	ERW	23	X		1117	1117	290 sks	
Coal	85/8	ERW	23	X		1117	1117	290 sks	Sizes
Intermediate									
Production	1/2	J-55	10.5			5199.45	5199.45	600 sks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom
									5168 5136
									4394 4400
									4840 4844

**RECEIVED**  
MAY 15 1980

OPEN FLOW DATA

OIL & GAS DIVISION  
DEPT. OF MINES  
Producing formation Alexander Pay zone depth 5136-68 feet  
Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d  
**Combined** Final open flow, 421 Mcf/d Final open flow, \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests, 4 hours  
Static rock pressure, 1325 psig (surface measurement) after 60 hours shut in  
[If applicable due to multiple completion--] 4394-4400  
Second producing formation Benson & Riley Pay zone depth 4840-4844 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]

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

Alexander: Perforating- 5168-5136 (20 holes)

Benson & Riley: Perforating: 4394-4400 (6holes) 4840-44 (9 holes)  
Fracturing: 250 gal acid: 360 lbs. 80/100 sand: 1902 lbs  
20/40 sand , 700 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
Fill			0	12	
Shale			12	25	
Red Rock			25	36	
Sand			36	40	
Red Rock			40	75	
Sand & Shale			75	130	
Sand			130	170	
Sand & Shale			170	220	Damp @ 185'
Red Rock & Shale			220	235	
Sand			235	250	
Sand & Shale			250	265	
Red Rock & Shale			265	295	
Sand			295	305	
Red Rock & Shale			305	310	
Sand			310	325	
Sand & Shale			325	4000	
Red Rock & Shale			400	410	
Sand & Shale			410	420	
Red Rock & Shale			420	430	
Sand & Shale			430	445	
Red Rock			445	455	Water @ 455'
Sand, Shale & Red Rock			455	565	
Sand			565	596	
Red Rock			596	605	
Sand & Shale			605	620	
Red Rock			620	630	
Sand & Shale			630	720	
Red Rock			720	735	
Sand & Shale			735	750	
Red Rock			750	760	
Sand & Shale			760	835	
Red Rock			835	845	Damp @ 1100'
Sand & Shale			845	1125	

(Attach separate sheets to complete as necessary)

J & J Enterprises, Inc.

Well Operator

By Daniel Stark  
Daniel Stark  
Geologist

NOTE: Regulation 2.0214 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."

Sand	1125	1275	
Sand & Shale	1275	1290	
Shale & Sand	1290	1621	10
Sand & Shale	1620	1840	
Big Lime	1840	1970	
Big Injun	1970	2000	
Shale	2000	2126	
Weir	2126	2214	Gas @ 2057 20/10 thru 1 w/ water
Sand & Shale	2214	3189	
Speechley	3188	3320	
Sand & Shale	3320	4380	Gas @ 3417 40/10 thru 1" w/water
Riley	4380	4410	
Sand & Shale	4410	4840	
Benson	4840	4844	
Sand & Shale	4844	5120	Gas @ 4904 20/10 thru 1" w/ water
Alexander	5120	5184	Gas @ 5243 54/10 thru 1 w/ wate
Shale	5184	5336	
		ED 5336	

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. JJ-8-#5

API Well No. 47-017-2595  
State County Permit

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

LOCATION: Elevation: 1160 Watershed: Lick Run  
District: New Milton County: Doddridge Quadrangle: New Milton 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 Porter Maxwell Heirs  
Address Box 2190  
Clarksburg, W. Va. 26301

COAL OPERATOR None  
Address

SURFACE OWNER Dr. Aaron Schwartzman  
Address 2007 Dr. Martin Luther King Ave.  
Washington, D. C. 20020

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Aaron & Veatrice Schwartzman  
Address 2007 Nicholas Ave., S. E.  
Washington, D. C. 20020

FIELD SALE (IF MADE) TO:  
Name  
Address

Name  
Address

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

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address  
FEB 12 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  / dated October 24, 1979, to the undersigned well operator from Delmur Oil Company

[If said deed, lease, or other contract has been recorded:]  
Recorded on October 30, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease 112 at page 337. A permit is requested as follows:

PROPOSED WORK: Re-drill  / Redrill  / Fracture or stimulate   
Perforate new formation   
Other work to be done in well (specify)

The work order on the reverse side hereof.  
The coal owner(s), and coal lessee are hereby notified that any work to be done in the well as 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  
100 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

J & J ENTERPRISES, INC.  
Well Operator

By Peter Battles  
PETER BATTLES  
Its GEOLOGIST

BLANKET BOND

[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, 5550 feet Rotary x / Cable tools      /  
Approximate water strata depths: Fresh, 330 feet; salt, 1330 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	Kinds
Conductor	113/4	H-40	42	X		30	0	0 sks.	None
Fresh water	8 5/8	ERW	23	X		1420	1420	355 sks.	
Coal	8 5/8	ERW	23	X		1420	1420	355 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X		5530	5530	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 ~~THIS PERMIT MUST BE POSTED AT THE WELL SITE~~ 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 10-13-80.

*Robert R. [Signature]*

Deputy Director - Oil & Gas Division

... by the coal operator and by any coal owner... Declaration under Code § 22-4-20, if the permit... days of receipt thereof:

W A I V E R

I, the undersigned coal operator / owner / lessee / of the coal under this well... proposed well location. If a mine map exists which covers the area of the well location, the 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 regulations of the West Virginia Code and the governing regulations.

Date:     , 19    

By       
Its