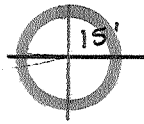


LATITUDE 39° 15'



0.780  
3.06W  
3.33W

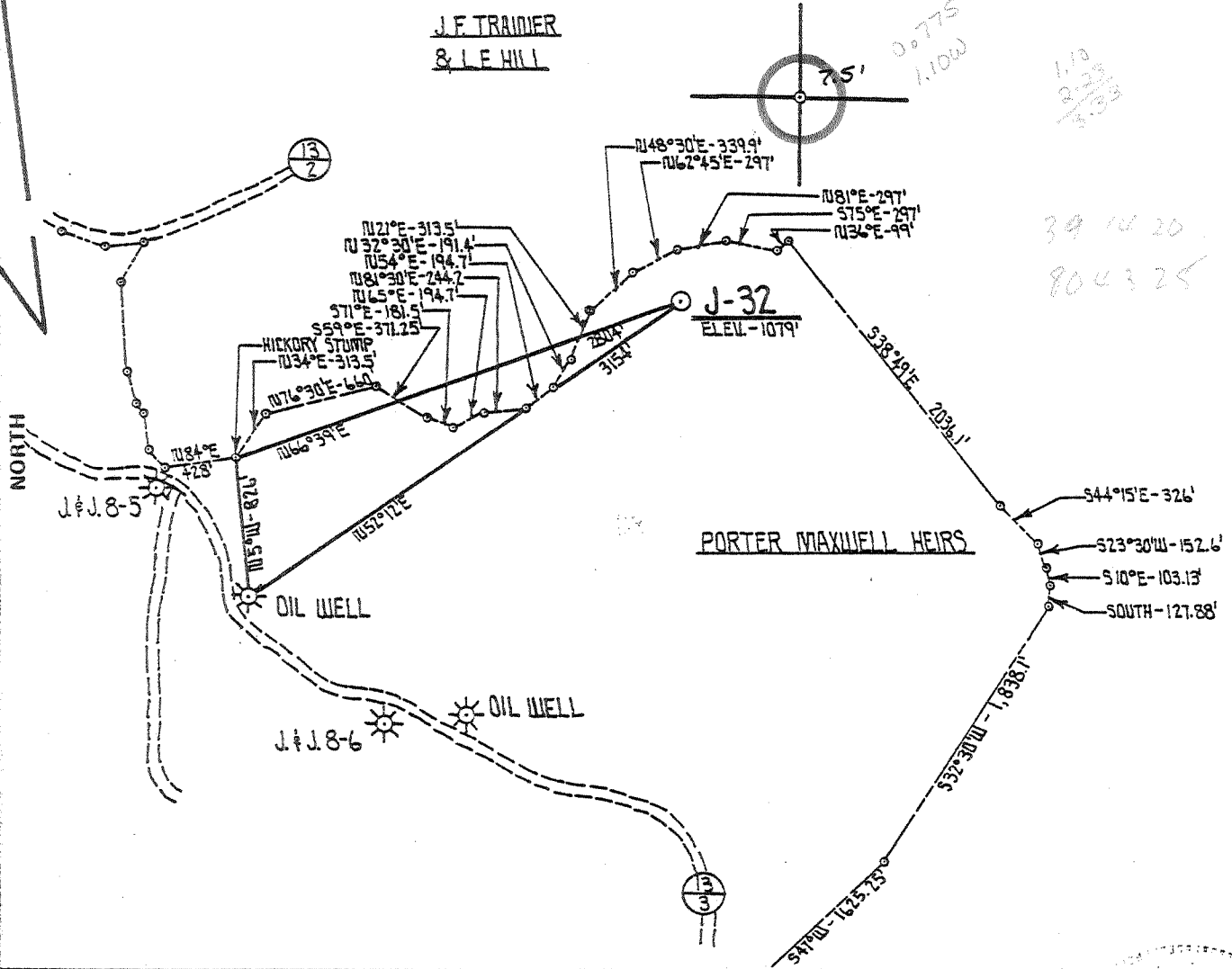


0.775  
1.10W

1.10  
2.25  
3.33

(15') 80° 40'  
LONGITUDE 80° 42' 30"

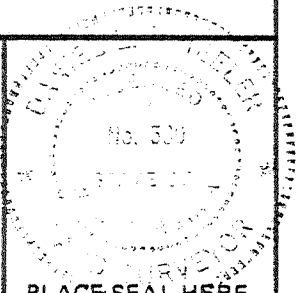
J.F. TRAINER  
& L.E. HILL



FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 1,000'  
MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
PROVEN SOURCE OF ELEVATION B.M. - 1800' NORTH OF INT. OF RTS. 13 & 13/3. ELEV. - 1269'

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)



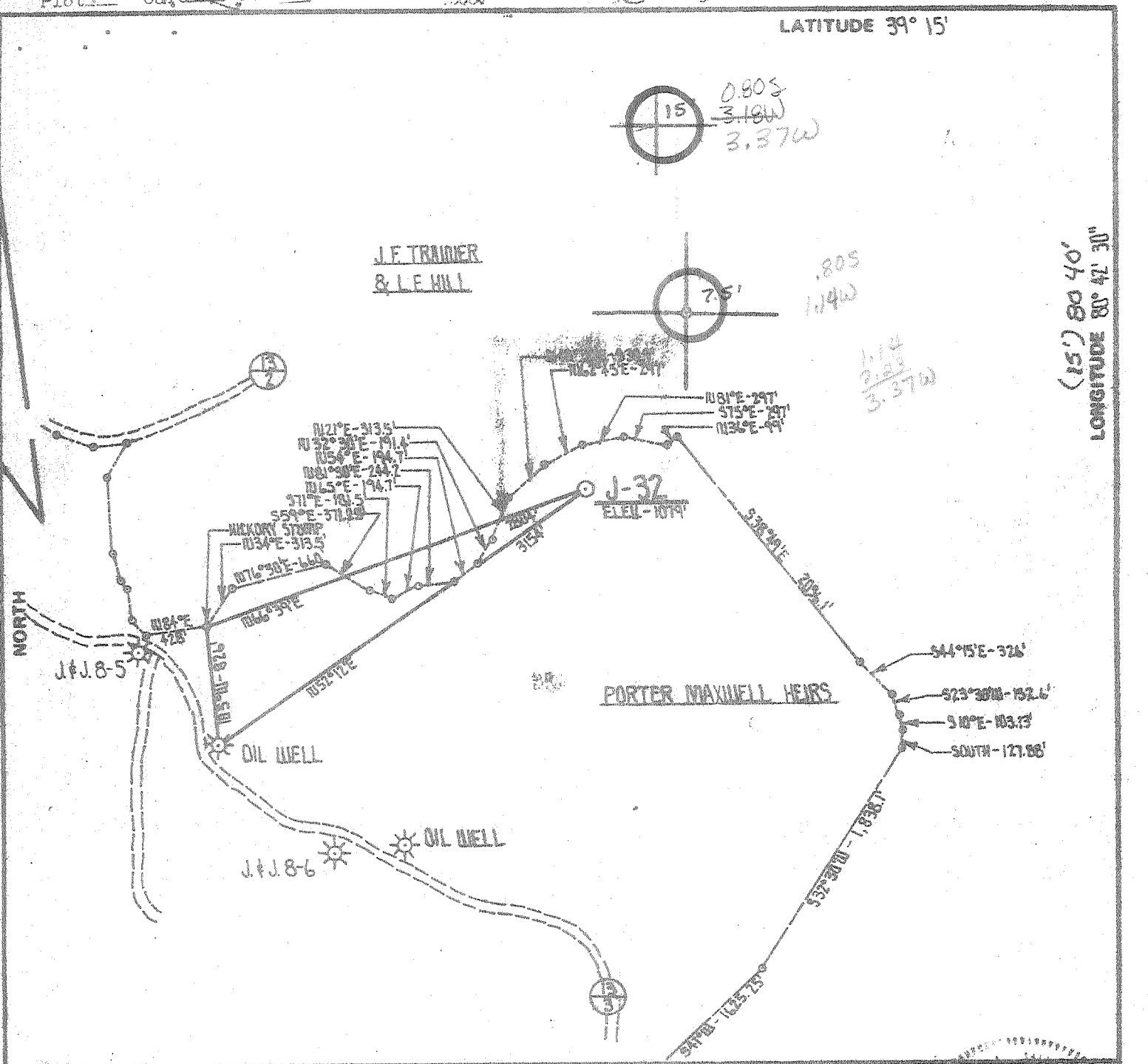
DATE APRIL 29, 1980  
OPERATOR'S WELL NO. J-32  
API WELL NO. \_\_\_\_\_  
STATE COUNTY PERMIT  
47 - 017 - 2945 -  
Formerly: 017 - 2731

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 1142' WATER SHED LICK RUN  
DISTRICT NEW MILTON COUNTY DODDRIDGE  
QUADRANGLE NEW MILTON T5 VADIS 15 NW  
SURFACE OWNER DR. BARON SCHWARTZMAN ACREAGE 1333.8  
OIL & GAS ROYALTY OWNER PORTER MAXWELL HEIRS LEASE ACREAGE 1333.8  
LEASE NO. J&J-8

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 5400'  
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



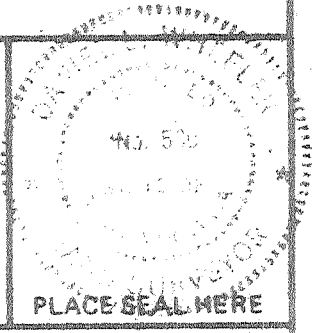
LONGITUDE 80° 40' 30"

J.F. TRAMER & L.E. HILL

PORTER MAXWELL HEIRS

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1,000'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 700  
 PROVEN SOURCE OF ELEVATION B.M. - 1500' NORTH OF INT. OF RTS. 13 & 13 1/3, ELEV. - 1269'

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 APRIL 29, 19 80  
 OPERATOR'S WELL NO. J-32  
 API WELL NO. \_\_\_\_\_  
 WAS: 47 - 017 - 2731  
 STATE COUNTY PERMIT  
 NOW: 017 - 2945

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 1142' WATER SHED LICK RUN  
 DISTRICT NEW MILTON COUNTY DODDRIDGE  
 QUADRANGLE NEW MILTON 75' VADIS 15' NW  
 SURFACE OWNER DR. ARON SCHWARTZMAN ACREAGE 1333.8  
 OIL & GAS ROYALTY OWNER PORTER MAXWELL HEIRS LEASE ACREAGE 1333.8  
 LEASE NO. J+J-8  
 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 5400'  
 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  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil  / Gas  / Liquid Injection  / Waste Disposal   
 (If "Gas", Production  / Underground storage  / Deep  / Shallow   
 LOCATION: Elevation: 1142 Watershed: Right Hand Fork of Lick Run  
 District: New Milton County: Doddridge Quadrangle: New Milton 7.5'  
 WELL OPERATOR J & J Enterprises, Inc. DESIGNATED AGENT Roger Rolston  
 Address P.O. Box 48 Address P.O. Box 48  
Buckhannon, WV 26201 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 1/13, 1981, OIL & GAS INSPECTOR FOR THIS WORK:  
 (IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Stephen Casey  
 Address Rt. # 2, Box 232-D

\_\_\_\_\_, 19\_\_\_\_, Jane Lew, WV 26378  
 BIOLOGICAL TARGET FORMATION: Alexander Depth 5115-5210 feet

Depth of completed well, 5372 feet Rotary  / Cable Tools   
 Water strata depth: Fresh, 125 feet; salt, 1090 feet.  
 Coal seam depths: None Is coal being mined in the area? No  
 Work was commenced 3/6, 1981, and completed 3/14, 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		32	32	0 sks.	Rinds
Fresh water	8 5/8	ERW	23	x		1136.20	1136.20	280 sks.	
Coal	8 5/8	ERW	23	x		1136.20	1136.20	280 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		5251.05	5251.05	775 sks.	Depos set
Tubing									
Liners									Perforations:
									The Bottom
									3214 3307
									3939 4132
									4389 4843
									5122 5158

**RECEIVED**  
JUN 24 1981

OPEN FLOW DATA

OIL & GAS DIVISION  
 DEPT. OF MINES  
 Producing formation Alexander Pay zone depth 5122 - 5158 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, 1400 psig (surface measurement) after 96 hours shut in  
 (If applicable due to multiple completion--)

Second producing formation Benson, Riley & Speechley Pay zone depth 4389 - 4843 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

Bottom Hole Pressure Pf=Pwe XGLS

Pw=1400 psia e=2.72 x  $\frac{1}{53.34 T} = \frac{1}{53.34(559.1)} = \frac{1}{29827}$  T=60+(5251 x 0.0075)+ 459.7 T=559.1x0.0000335

Pf=(1400) (2.72) (0.0000335) (0.650) (4186) (0.9) Pf+(1400) (2.72) (0.082) = (1400) (1.086) JUN 31 1981

Pf=1520 psia

[08-78]

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

Alexander: Perforations: 5122-5158 (15 holes)  
Fracturing: 250 lbs. Citric Acid: 130 sks. 80/100 sand: 320 sks. 20/40 sand;  
500 Bbls. fluid.

Benson & Riley: Perforations: 3939-4843 (1- holes)  
Fracturing: 100 sks. 80/100 sand: 280 sks. 20/40 sand: 500 Bbls. fluid.

Speechley: Perforations: 3214-3307 (18 holes)  
Fracturing: 500 gal Acid: 100 sks. 80/100 sand: 280 sks. 20/40 sand: 500 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	15	
Red rock & sand			15	30	Damp @ 125'
Sand, shale & red rock			30	140	
Sand, shale & red rock			140	200	Gas ck @ 2361 16/10-1/2" w/water 7,530 cu.ft.
Sand & shale			200	250	
Red rock, shale & sand			250	640	Gas ck @ 4722 6/10-1/2" w/water 4,611 cu.ft.
Red rock			640	660	
Sand & shale			660	1090	Gas ck @ 4969 15/10-1/2" w/water 7,291 cu.ft.
Salt Sand			1090	1204	
Sand & shale			1204	1780	Gas ck @ 5372 @ T.D. 20/10-1/2" w/water
Sand, Lime & shale			1780	1925	8,419 cu.ft.
Big Lime			1925	1970	
Big Injun			1970	2040	
Sand & shale			2040	3214	
Speechley			3214	3307	
Sand & shale			3307	3939	
Riley			3939	4132	
Sand & shale			4132	4389	
Benson			4389	4843	
Sand & shale			4843	5122	
Alexander			5122	5158	
Sand & shale			5158	5372 TD	

(Attach separate sheets to complete as necessary.)

J & J Enterprises, Inc.

Well Operator

By Peter Battles

Is Geologist

NOTE: Regulation 2.02(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."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-32

API Well No. 47 - 0172731  
State County Permi

now - 017-2945

WELL TYPE: Oil  / Gas  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow  /  
LOCATION: Elevation: 1142 Watershed: Right Hand Fork of Lick Run  
District: New Milton County: Doddridge Quadrangle: New Milton 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

OIL & GAS ROYALTY OWNER Porter Maxwell Heirs  
Address Box 2190  
Clarksburg, WV 26301

COAL OPERATOR  
Address

ACREAGE 1333.8  
SURFACE OWNER Dr. Aaron Schwartzman  
Address 2007 Dr. Martin Luther King Ave.  
Washington, D.C. 20070  
ACREAGE 1333.8

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

FIELD SALE (IF MADE) TO:  
Name  
Address

Name  
Address

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address APR 30 1980

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

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 10-24, 1979, to the undersigned well operator from Delmur Oil Company

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

Recorded on 10-30, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 112 at page 337. 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 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  
601 WASHINGTON STREET EAST  
CHARLESTON, WV 25311

TELEPHONE: (304) 348-3392

J & J Enterprises, Inc.  
Well Operator

By Peter Battles  
Its Peter Battles Geologist

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[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-32  
API Well No. 47 - 0172945  
State County Permi  
old no. 2731

WELL TYPE: Oil  / Gas   
(If "Gas", Production  / Underground storage  / Deep  / Shallow  )  
LOCATION: Elevation: 1142 Watershed: Right Hand Fork of Lick Run  
District: New Milton County: Doddridge Quadrangle: New Milton 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

OIL & GAS ROYALTY OWNER Porter Maxwell Heirs  
Address Box 2190  
Clarksburg, WV 26301

COAL OPERATOR  
Address

ACREAGE 1333.8  
SURFACE OWNER Dr. Aaron Schwartzman  
Address 2007 Dr. Martin Luther King Ave.  
Washington, D.C. 20070  
ACREAGE 1333.8

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Aaron & Veatrice Schwartzman  
Address 2007 Nichols 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, WV 26301

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address  
**RECEIVED**  
JAN 13 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 10-24, 1979, to the undersigned well operator from Delmur Oil Company

[If said deed, lease, or other contract has been recorded:]  
Recorded on 10-30, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 112 at page 337. 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 application they wish to make or are required to make by Code § 20-4-3 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 SUBMIT COPIES OF ALL TECHNICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
100 WASHINGTON STREET EAST  
CHARLESTON, WV 25301  
TELEPHONE: (304) 348-3392

J & J Enterprises, Inc.  
Well Operator  
BY Peter Battles  
Peter Battles Geologist

BLANKET BOARD

[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, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5340 feet Rotary X Cable tools / Approximate water strata depths: Fresh, 910 feet; salt, 1100 feet. Approximate coal seam depths: 300 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, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS. Rows include Conductor, Fresh water, Coal, Intermediate, Production, Tubing, and Liners.

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-6 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 9-14-81

J. G. Muzzey 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 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.

\_\_\_\_\_, 19\_\_\_\_

By \_\_\_\_\_ Its \_\_\_\_\_