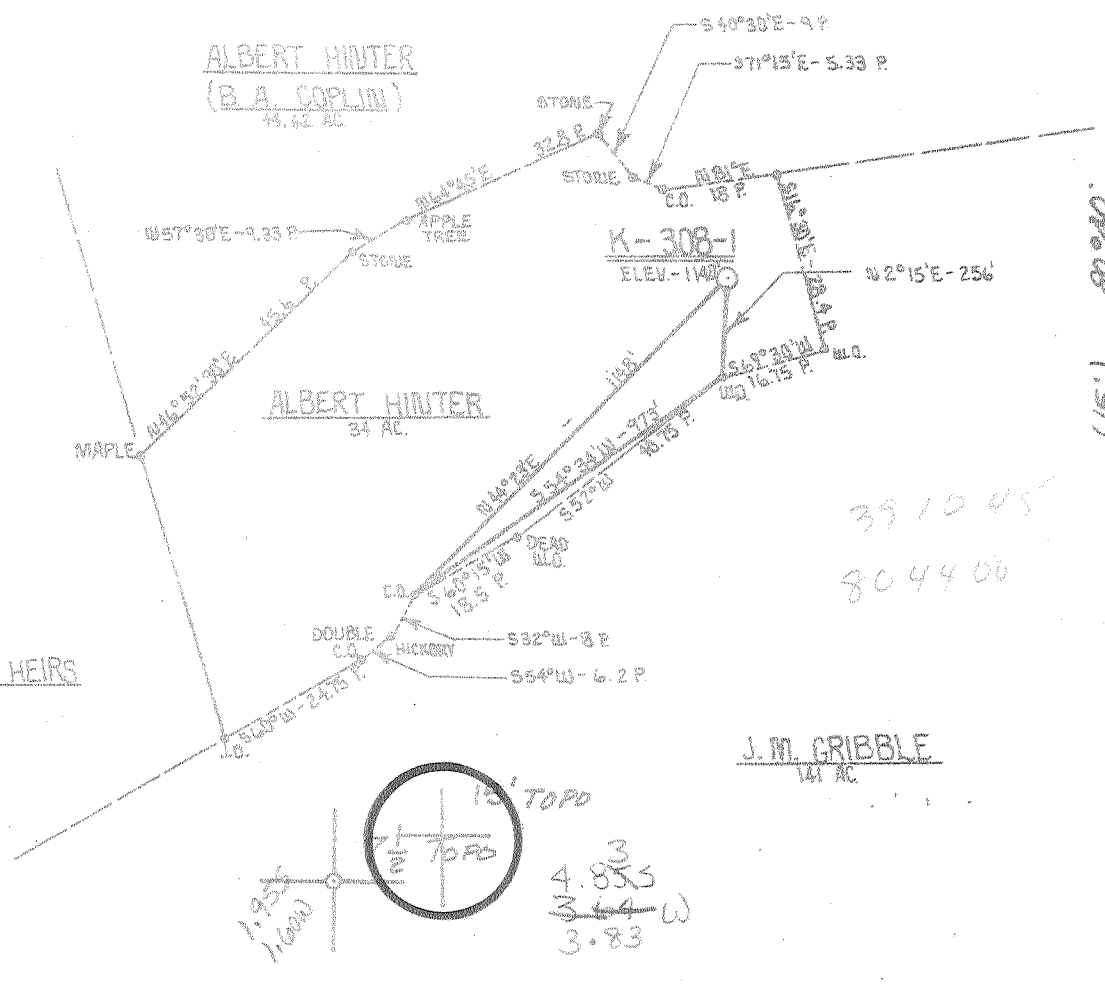


NORTH



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION INT. RT. 54 & RT. 54 1/2  
ELEV. - 868'

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) *David S. Wheeler*  
 R.P.E. \_\_\_\_\_ L.L.S. 530



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



DATE FEBRUARY 8, 19 80  
 OPERATOR'S WELL NO. K-308-1  
 API WELL NO. \_\_\_\_\_  
47 - 017 - 2598  
 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 1140' WATER SHED LITTLE TONS FORK  
 DISTRICT NEW MILTON COUNTY MCDONALD  
 QUADRANGLE NEW MILTON 7.5', KADIS NW  
 SURFACE OWNER ALBERT HINTER ACREAGE 34  
 OIL & GAS ROYALTY OWNER ALBERT HINTER LEASE ACREAGE 34  
 LEASE NO. K-308

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 5,150'  
 WELL OPERATOR J.E.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

[08-78,

WELL OPERATOR'S REPORT /4  
OF

API Well No. 47 - 017 - 2598  
State County Perms

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: 1140 Watershed: Little Tom's Fork

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 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 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 \_\_\_\_\_, 19 \_\_\_\_\_  
Name Paul Garrett  
Address 321 Beech St.  
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth \_\_\_\_\_ feet

Depth of completed well, 5622 feet Rotary  / Cable Tools \_\_\_\_\_

Water strata depth: Fresh, 180, 1640 feet; salt, None feet.

Coal seam depths: None Is coal being mined in the area? No

Work was commenced 9-4, 19 80, and completed 9-12, 19 80

LOGGING AND TUBING PROGRAM

LOGGING 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		27	27	0 sks.	Winds
Fresh water	8 5/8	ERW	23	x		1509.95	1509.95	370 sks.	
Gal	8 5/8	ERW	23	x		1509.95	1509.95	370 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	x		3696.70	3696.70	330 sks.	Depth set
Casing									
Packers									Perforations:
									Top Bottom
									2552 2556
									2352 2356
									3428 3541

RECEIVED  
OCT 29 1980

OIL & GAS DIVISION

DEPT. OF MINES

WELL FLOW DATA

Producing formation Speechley Pay zone depth 3428-3541 feet

Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d

Combined Final open flow, 133 Mcf/d Final open flow, \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests, 4 hours

Static rock pressure, 950 psig (surface measurement) after 96 hours shut in.

[if applicable due to multiple completion--]

Second producing formation Berea, Weir Pay zone depth 2352-2420 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.

NOV 25 1980

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

Speechley: Perforations: 3428-3541 (12 holes)  
Fracturing: 300 lbs. Citric Acid: 500 sks. 80/100 sand: 850 sks. 20/40 sand;

Berea: Perforations: 2552-56 (13 holes).  
Fracturing: 150 sks. 80/100 sand: 250 sks. 20/40 sand: 500 gal. Acid;

Weir: Perforations: 2352-2420 (12 holes)  
Fracturing: 300 lb. Citric Acid: 200 sks. 80/100 sand: 400 sks. 20/40 sand

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Shale			0	95	
Sand & shale			95	260	
Shale			260	380	1/2" stream water @ 180'
Sand			380	440	
Shale			440	1550	
Sand & shale			1550	1950	
Shale			1950	2140	1" stream water @ 1640'
Big Lime			2140	2210	
Sand			2210	2352	
Weir			2352	2420	
Shale			2420	2552	
Berea			2552	2256	
Shale			2256	2680	
Sand & shale			2680	2860	
Shale & sand			2860	3045	
Sand & shale			3045	3170	
Shale & sand			3170	3260	
Shale & sand			3260	3400	
Sand			3400	3428	
Speechley			3428	3541	
Shale			3541	4130	
Sandy shale			4130	4210	
Shale & sand			4210	4970	
Sand & shale			4210	4970	
Shale & sand			4370	4493	
Sand & shale			4493	4970	
Sand & shale			4970	5055	
Alexander			5055	5145	
Shale			5145	5285	
			5285	5622	
				T.D.	

(Attach separate sheets to complete as necessary)

J & J Enterprises, Inc.  
 Well Operator \_\_\_\_\_  
 By Peter Battles  
 Peter Battles  
 Its \_\_\_\_\_  
 Geologist

REG: Regulation 2.02(i) 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. K-308-#1  
API Well No. 47-017-2598  
State County Permit

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

LOCATION: Elevation: 1140 Watershed: Little Toms Fork  
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 Albert, Mamie, & Ernest Hinterer  
Address Route 1, Box 77  
New Milton, West Virginia 26411

COAL OPERATOR None  
Address

SURFACE OWNER Albert Hinterer  
Address Route 1, Box 77  
New Milton, W. Va. 26411  
Acreage 34

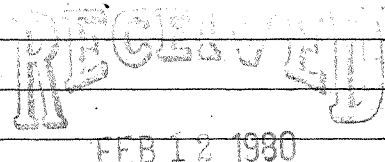
COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Albert & Ernest Hinterer  
Address Route 1, Box 77  
New Milton, W. Va. 26411

FIELD SALE (IF MADE) TO:  
Name  
Address

Name  
Address

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

COAL LESSEE WITH DECLARATION ON RECORD:  
Name None  
Address



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 X / other contract / dated September 11, 1978, to the undersigned well operator from Albert & Mamie Hinterer

[If said deed, lease, or other contract has been recorded:]  
Recorded on October 23, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas Lease Book 105 at page 193. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate X /  
Perforate new formation /  
Other physical change in well (specify)

Attached as part of the work order on the reverse side hereof.  
The above named well operator, coal owner(s), and coal lessee are hereby notified that any regulations or rules that may be 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 declaration 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  
SEISMOLOGICAL 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  
GEOLOGIST

BLANKET BOND

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, 80 feet; salt, 1420 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		Kind	Depth
Conductor	11 3/4	H-40	42	X		32	32	0 sks.	None	
Fresh water	8 5/8	ERW	23	X		1500	1500	280 sks.		
Coal	8 5/8	ERW	23	X		1500	1500	280 sks.	Sizes	
Intermediate										
Production	4 1/2	J-55	10.5	X		5520	5520	320 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.

THIS PERMIT ~~MUST BE POSTED AT THE WELL SITE~~ 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 10-13-80

*[Signature]*

Deputy Director - Oil & Gas Division

This permit is valid only when posted by the coal operator and by any coal owner or coal lessee. See Code § 22-4-20, if the permit is not posted within 15 days of receipt thereof:

HAIVER

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