



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION INT. RT. 19 AND 19/11
ELEVATION 853'

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) Donal 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)



DATE JULY 23RD 19 80
 OPERATOR'S WELL NO. J-220
 API WELL NO. 47 - 017 - 2804
 STATE WEST VIRGINIA COUNTY DODDRIDGE PERMIT 2804

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 1040' WATER SHED LOWER RUN
 DISTRICT SOUTHWEST COUNTY DODDRIDGE
 QUADRANGLE OXFORD 7.5' HOLBROOK 15' NC
 SURFACE OWNER SOPHIA HILEMAN HEIRS 2/3 KENNETH HILEMAN 24 Ac.
 OIL & GAS ROYALTY OWNER HILEMAN HEIRS 2/3 KENNETH HILEMAN LEASE ACREAGE 24 Ac.
 LEASE NO. H. S. - 7

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 AND J ENTERPRISES INC. DESIGNATED AGENT HARRY BARNETT
 ADDRESS P.O. BOX 48 ADDRESS P.O. BOX 48
BUCKHANNON, WEST VIRGINIA 26201 BUCKHANNON, WEST VIRGINIA 26201

AUG 15 1980

6-4 STRAIGHT FK-BLUESTONE CR

[08-78]

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: 1040 Watershed: Lower Run

District: Southwest County: Doddridge Quadrangle: Oxford 7.5'

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

DESIGNATED AGENT H.L. Barnett
Address Box 48
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 7-28, 1980

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 5025 -5085 feet

Depth of completed well, 5245 feet Rotary / Cable Tools

Water strata depth: Fresh, ¹⁰⁰1320 feet; salt, ¹³¹⁰⁻⁶⁰1530-90 feet.

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

Work was commenced 8-9, 1980, and completed 8-14, 1980

CEMENTING AND TUBING PROGRAM

CEMENTING 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			0 sks.	Kinds
Fresh water	8 5/8	ERW	23	x		1654.75	1654.75	440 sks.
Coal	8 5/8	ERW	23	x		1654.75	1654.75	440 sks. Sizes
Intermediate								
Production	4 1/2	J-55	10.5	x		5161.07	5161.07	420 sks. Depths set
Tubing								
Liners								Locations: For Bottom
								5017 5070

RECEIVED
SEP 16 1980
OIL & GAS DIVISION
DEPT. OF MINES

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 5025-5070 feet

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Ebl/d

Final open flow, 1,143 Mcf/d Final open flow, _____ Ebl/d

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

Static rock pressure, 1850 psig (surface measurement) after 72 hours shut in.

(If applicable due to multiple completion--)

Second producing formation _____ Pay zone depth _____ feet

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Ebl/d

Final open flow, _____ Mcf/d Final open flow, _____ Ebl/d

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

OCT 9 1980

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

Alexander: Perforations: 5017-5070 (17 holes)

Fracturing: 300 sks. 80/100 sand: 600 sks. 20/40 sand: 300 lbs. citric acid:
680 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 & shale			0	12	
Red rock			12	15	
Red rock & shale			15	20	
Sand & shale			20	35	
Red rock & shale			35	50	
Red rock & shale			50	75	
Red rock, sand & shale			75	155	Damp @ 80'
Red rock, sand & shale			155	160	1/2" stream @ 100'
Red rock			160	168	
Sand, shale & red rock			168	255	
Sand & shale			255	310	
Red rock, sand & shale			310	390	
Red rock			390	476	
Red rock, sand & shale			476	575	
Red rock & shale			575	600	
Sand & shale			600	800	
Red rock & shale			800	810	
Red rock			810	850	
Shale & red rock			850	880	
Sand & shale			880	970	
Red rock & shale			970	1030	
Sand & shale			1030	1310	
Sand & shale			1310	1360	1" stream @ 1320
Salt sand			1360	1530	
Sand & shale			1530	1590	
Salt sand			1590	1755	
Sand & shale			1755	1780	
Little lime			1780	1785	
Blue Monday			1785	1860	
Big Lime			1860	1970	
Injun			1970	4735	
Sand & shale			4735	4740	
Benson			4740	5017	
Alexander			5017	5085	
Sand & shale			5085	5245	

(Attach separate sheets to complete as necessary)

I & J Enterprises, Inc.
Well Operator

By Peter Battles
Peter Battles Geologist

NOTE: 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. J-220

API Well No. 47 - 017-2804
State County Per

WELL TYPE: Oil ___ / Gas X /
(If "Gas", Production X / Underground storage ___ / Deep ___ / Shallow X /)
LOCATION: Elevation: 1040 Watershed: Lower Run
District: Southwest County: Doddridge Quadrangle: Oxford 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 Kenneth N. Hileman, etal
Address Rt. # 1
West Union, WV 26456

COAL OPERATOR None
Address _____

SURFACE OWNER Kenneth N. Hileman, etal
Address Rt. # 1
West Union, WV 26456
Acreage 24

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name Kenneth N. Hileman, etal
Address Rt. # 1
West Union, WV 26456
Name _____

FIELD SALE (IF MADE) TO:
Name _____
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address _____

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

RECEIVED
JUL 28 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 X / dated Aug. 28, 1979, to the undersigned well operator from Hugh Spencer

[If said deed, lease, or other contract has been recorded:]
Recorded on Oct. 3, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & GAS lease Book 111 at page 390. 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 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 plot 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
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 548-3092

BLANKET BOND

J & J Enterprises, Inc.
Well Operator
Peter Battles
Peter Battles
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 Box 48
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5400 feet Rotary / Cable tools /

Approximate water strata depths: Fresh, 28 feet; salt, 1800 feet.

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

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	13/4	H-40	42	x		30	0	0 sks.	Kinds
Fresh water	85/8	ERW	23	x		1600	1600	400 sks.	
Coal	85/8	ERW	23	x		1600	1600	400 sks.	Sizes
Intermediate									
Production	41/2	J-55	10.5	x		5300	5300	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 drilling 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.

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 3-30-81

[Signature]
Deputy Director - Oil & Gas Division

The following values must be supplied 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:

REIVER

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