

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1,000'
 MINIMUM DEGREE OF ACCURACY 1 Part in 200'
 PROVEN SOURCE OF ELEVATION Rd. Fks. S.L.S. Rt. 40 @ S.L.S. 40/3 U.E. - 872'

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

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FORM IV-6 (8-78)



DATE October 22, 19 79
 OPERATOR'S WELL NO. H3-2
 API WELL NO. 47-017-2524
 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 1115' WATER SHED Grouse Run
 DISTRICT New Milton COUNTY Doddridge
 QUADRANGLE New Milton 7.5' VADIS'
 SURFACE OWNER Dr. Aaron Schwartzman ACREAGE 100
 OIL & GAS ROYALTY OWNER Robert Holland LEASE ACREAGE 100
 LEASE NO. N3-2
 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 5150'
 WELL OPERATOR J.J. Enterprises DESIGNATED AGENT Harry Barnett
 ADDRESS P.O. Box 48 ADDRESS P.O. Box 48
Buchannon, W. Va. 26201 Buchannon, W. Va. 26201

NOV 26 1979

[08-78]

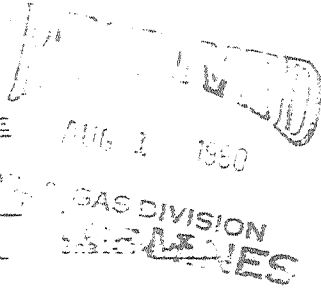
Date: August 18, 1980

Operator's Well No. J-103

API Well No. 017.2524
State County Permit

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
LOCATION: Elevation: 1115 Watershed: Grouse Run
District: New Milton County: Doddridge Quadrangle: New Milton 7 1/2

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 10-30, 19 79, OIL & GAS INSPECTOR FOR THIS WORK:
(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Paul Garrett
Address 321 Beech St.

_____, 19 _____, Alexander Clarksburg, WV 26201
GEOLOGICAL TARGET FORMATION: _____ Depth 5245-5325 feet

Depth of completed well, 5461 feet Rotary / Cable Tools _____
Water strata depth: Fresh, 565 feet; salt, 1240-85 feet.
Coal seam depths: None Is coal being mined in the area? No
Work was commenced June-26, 1980, and completed July-9, 1980

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	113/4H-40	42	x			32	0	0 sks.	Rinds
Fresh water	85/8ERW	23	x			1502	1502	340 sks.	
Coal	85/8ERW	23	x			1502	1502	340 sks.	Sizes
Intermediate									
Production	4 1/2J-55	10.5				5378	5378	800 sks.	Logans set
Tubing									5318
Liners									Perforations:
									Top Bottom
									6258 5318
									6338 3452
									4370 4518

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 5258-5316 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Combined Final open flow, 311 Mcf/d Final open flow, _____ Bbl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 1120 psig (surface measurement) after 72 hours shut in

[If applicable due to multiple completion--] 3450-52
Second producing formation Riley & Speechley Pay zone depth 4370-4518 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

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DETAILS OF PERFORATED INTERVALS, FRACTURING OF CEMENTS, PHYSICAL CHANGE, ETC.

Alexander: Perforations: 5258-5316 (13 holes)
Fracturing: 600 sks. 20/40 sand: 300 lbs. citric Acid:
600 Bbls. fluid.

Riley & Speechley: Perforations: 3450-52 (3 holes) 4370-4518 (6 holes)
Fracturing: 300 sks. 80/100 sand: 300 sks. 20/40
sand: 100 gal acid: 600 Bbls. fluid.

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of gas, oil, and salt water, coal, etc.
Fill			0	15	
Red Rock & Shale			15	20	
Red Rock			20	25	
Sand & Shale			25	35	
Red Rock & shale			35	40	
Sand			40	125	
Sand & Shale			125	160	Damp @ 145
Red Rock & Sand			160	190	
Red Rock & Shale			190	215	
Sand & Shale			215	235	
Sand			235	265	
Sand & Shale			265	300	
Sand			300	350	
Shale			350	360	
Sand			360	380	
Red Rock			380	390	
Sand & Shale			390	435	
Red Rock			435	450	
Sand & Shale			450	530	
Sand			530	560	Wet @ 565
Shale			560	590	
Sand			590	625	
Sand & Shale.			625	750	
Red Rock			750	780	
Sand & Shale			780	1240	
Salt Sand			1240	1285	
Sand & Shale			1285	1375	
Sand			1375	1395	
Sand & Shale			1440	1520	Damp @ 1460
Sand			1520	1990	
Big Lime			1990	2095	
Big Injun			2095	2130	

(Attach separate sheets to complete as necessary)

J & J Enterprises, Inc.
Well Operator
By Peter Battles
Peter Battles 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."

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks
					Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale			2130	2265	Gas ck @ 2100 10/10 thru
Sand			2265	2340	1" w/water
Sand			2340	3450	Gas ck @ 4997 8/10 thru
Riley			3450	3452	1/2" w/water
Sand & Shale			3452	4370	Gas ck @ 5090 2/10 thru
Speechley			4370	4518	1/2" w/water
Sand & Shale			4518	5030	Gas ck @ 5461 10/10 thru
Benson			5030	5035	1/2" w/water
Sand & Shale			5035	5245	
Shale			5245	5258	
Alexander			5258	5316	
Shale			5316	5461	
					T.D. 5461

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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, 5150 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

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		30	0	0	Kinds None
Fresh water	8 5/8	ERW	23	X		1200	1200	280 sks.	
Coal	8 5/8	ERW	23	X		1200	1200	280 sks.	Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X		5100	5100	250 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.

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 7-1-80.

Robert H. [Signature]
Deputy Director - Oil & Gas Division

The undersigned coal operator, owner, or 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.

W A I V E R

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Date: _____, 19____

By _____
Its _____