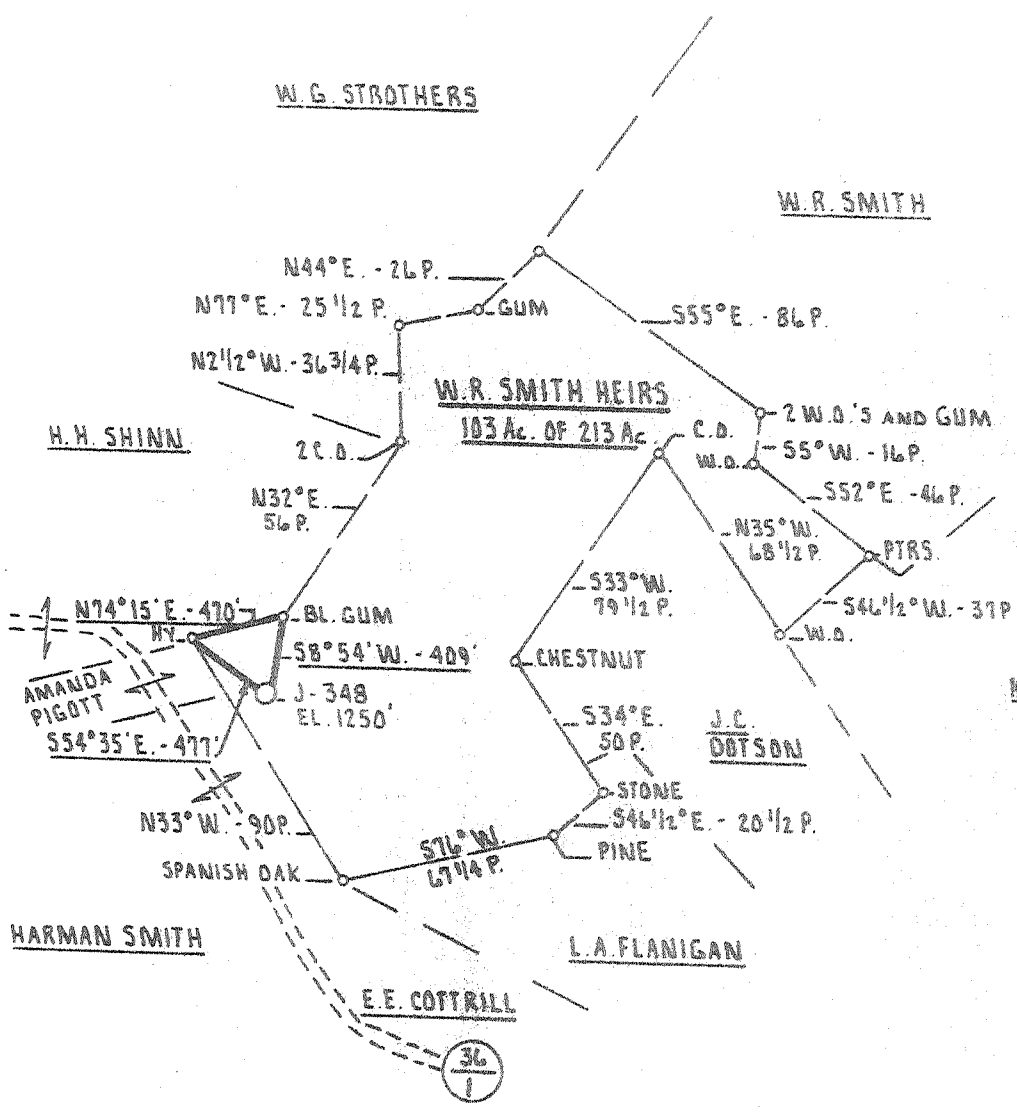


LATITUDE 39° 20' 00"

LONGITUDE 80° 50'

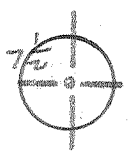
NORTH



2.575
0.18W

39 1750
80 50 15

MARY MILLER



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION INT. RT. 26 AND RT. 11
ELEVATION 755'

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) Samuel 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 JULY 23RD 19 80
 OPERATOR'S WELL NO. J-348
 API WELL NO. 47-017-2803
 STATE 47 COUNTY 017 PERMIT 2803

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1250' WATER SHED WILHELM RUN TO ARNOLD'S CREEK
 DISTRICT CENTRAL COUNTY DODDRIDGE
 QUADRANGLE WEST UNION 7.5' & 15' 50'
 SURFACE OWNER JAMES L. SMITH % NELLIE SMITH ACREAGE 53 Ac.
 OIL & GAS ROYALTY OWNER W.R. SMITH HEIRS % NELLIE SMITH LEASE ACREAGE 213 Ac.
 LEASE NO. H.S. - 4
 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

6-6 CENTRAL STATION

91

(Obverse)

[08-78]

WELL OPERATOR'S REPORT OF

Well No. J-348
API Well No. 47 - 017 - 2803
State County Permit

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas x / Liquid Injection / Waste Disposal
(If "Gas", Production x / Underground storage / Deep / Shallow x /)
LOCATION: Elevation: 1250 Watershed: Wilhelm Run
District: Central County: Doddridge Quadrangle: West Union 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 x / Convert / Drill deeper / Redrill / Fracture or stimulate x
Plug off old formation / Perforate new formation
Other physical change in well (specify)
NOV 19 1980

PERMIT ISSUED ON 7-28, 19 80. OIL & GAS INSPECTOR FOR THIS WORK
Name Paul Garrett DEPT. OF MINES
Address 321 Beech St.
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Alexander Depth 5400-5460 feet
Depth of completed well, 5622 feet Rotary x / Cable Tools
Water strata depth: Fresh, 820 feet; salt 1532-65 feet
Coal seam depths: None Is coal being mined in the area? No
Work was commenced 8-2, 19 80, and completed 8-8, 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		Kind	Depth set
Conductor	11 3/4	H-40	42	x						
Open water	8 5/8	ERW	23	x		1690.30	1690.30			
1"	8 5/8	ERW	23	x		1690.30	1690.30			Sizes
Intermediate										
Production	4 1/2	J-55	10.5	x		5522	5522			Depth set
Logging										
Packers										Perforations:
										Top Bottom
										2472 2559
										3531 3583
										4039 4031
										4714 4717
										5119 5436

FLOW DATA
Producing formation Alexander Pay zone depth 5119-5436 feet
Gas: Initial open flow, Mcf/d Oil: Initial open flow, Ebl/d
Combined Final open flow, 440 Mcf/d Final open flow, Ebl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 800 psig (surface measurement) after 96 hours shut in
[If applicable due to multiple completion--] 2472 2559
3531 3583
Second producing formation Benson, Riley, Warren, Weir Pay zone depth 4039 4031 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
Static rock pressure, psig (surface measurement) after hours shut in

NOV 25 1980

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

Alexander: Perforations: 5382-5436 (16 Holes)
 Fracturing: 300 sks. 80/100 sand: 300 saks. 20/40 sand: 200 lbs. Citric
 Acid: 555 Bbls. fluid.

Benson & Riley: Perforations: 5119-23 (6 holes) 4712-15 (6 holes)
 Fracturing: 500 gal. Acid. 150 sks. 80/100 sand: 300 sks. 20/40 sand:
 500 Bbls. fluid.

Warren & Weir: Perforations: 3521-4041 (11 holes) 2461-2559 (12 holes)
 Fracturing: 500 lbs Acid: 250 sks. 80/100 sand: 600 sks. 20/40 sand:
 950 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	15	
Shale			15	20	
Red rock & shale			20	35	
Sand			35	45	
Red rock & sand			45	55	
Red rock & sand			55	73	
Red rock & sand			73	159	
Red rock, sand & shale			159	205	
Red rock			205	220	
Sand & red rock			220	255	
Red rock			255	275	
Sand & shale			275	290	
Sand, shale & red rock			290	345	
Red rock, sand & shale			345	452	
Sand & shale			452	530	
Red rock & shale			530	620	
Red rock & shale			620	785	Damp @ 785
Sand			785	810	
White sand			810	840	3/4" stream @ 820'
Sand & shale			840	865	
Red rock, shale & sand			865	940	
Shale & red rock			940	985	
Sand & shale			985	1000	
Red rock, sand & shale			1000	1030	
Red rock & shale			1030	1060	
Red rock & shale			1060	1115	
Red rock & shale			1115	1130	
Sand & shale			1130	1250	
Red rock & shale			1250	1300	
Sand & shale			1300	1532	
Salt, sand & shale			1532	1565	
Sand & shale			1565	1640	
Salt sand			1640	1670	
Sand & shale			1670	1900	Wet @ 1945
Sand			1900	2074	
Red rock, sand & Lime			2074	2095	
Red rock, sand & shale			2095	2110	
Red rock, sand & lime			2110	2128	

(Attach separate sheets to complete as necessary)

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

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all free and salt water, coal, oil and gas
Big Lime			2128	2165	
Injun			2165	2265	Wet @ 2162 Pressure 160/200
Sand & shale			2265	3265	
Sand			3265	3299	
Sand			3299	3521	Gas ck. @ 2353 6/10 thru 1/2" w/ water
Warren & Weir			3521	4041	
Sand & shale			4041	4470	Gas ck. @ 3848 4/10 thru 1/2" w/ water
Sand			4470	4500	
Sand			4500	5119	
Riley			5119	5125	
Benson			5125	5130	
Sand			5130	5382	
Alexander			5382	5460	
Shale			5460	5622	
				T.D. 5622	

017-2803

NOV 25 1980

Date: July 25, 1980

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. J-348

API Well No. 47 - 017-2803 State County Per

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

LOCATION: Elevation: 1250 Watershed: Wilhelm Run Deep / Shallow X (/)

District: Central County: Doddridge Quadrangle: West Union 7.5

WELL OPERATOR J&J Enterprises Inc Address P.O. Box 48 Buckhannon W.V. 26201

DESIGNATED AGENT H.L. Barnett Address P.O. Box 48 Buckhannon W.V. 26201

OIL & GAS ROYALTY OWNER W.R. Smith Heirs Address C/O Nellie Smith

COAL OPERATOR None Address

Front Street 26456 West Union, WV Acreage 213

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER W.R. Smith Heirs Address C/O Nellie Smith Front St., West Union, WV Acreage 53 26456

Name W.R. Smith Heirs C/O Nellie Smith Address Front Street West Union, WV 26456

FIELD SALE (IF MADE) TO: Name Address

COAL LESSEE WITH DECLARATION ON RECORD:

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

Name None Address

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 8-28, 1980, to the undersigned well operator from Hugh Spencer

If said deed, lease, or other contract has been recorded:] recorded on 10/23, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Oil & Gas 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 location 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 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 PHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION 10 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 548-3092

BLANKET BOND

J & J Enterprises, Inc. Well Operator By 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, 80 feet; salt, 1500 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	113/4	h40	42	X		30	30	0	Kinds
Fresh water	85/8	ERW	23	X		1600	1600	300sks.	
Coal	85/8	ERW	23	X		1600	1600	300sks	Sizes
Intermediate									
Production	4 1/2	J55	10.5	X		5350	5350	400sks.	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 § 22-4-6a 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 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 notice must be complied 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:

TA 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 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