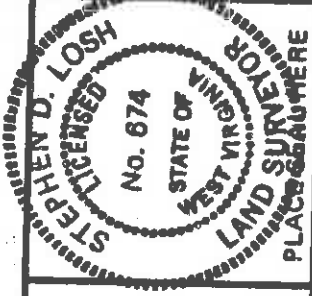


PREPARED BY:
 LAND SURVEYING SERVICES
 RT. 2, BOX 215E
 JANE LEW, WV 26376
 PHONE: 304-745-4426

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION EXIST. WELL 641-P
 ELEV. - 933'

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) *Stephen D. Losh*
 R.P.E. _____ L.L.S. 674
 STEPHEN D. LOSH
 LAND SURVEYOR
 PLACES GRAUWERE



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE MAY 17, 19 83
 OPERATOR'S WELL NO. FARROW NO. 1
 API WELL NO. _____

47 - 017 STATE COUNTY
 3226 PERMIT

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

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___

(IF "GAS,") PRODUCTION STORAGE DEEP ___ SHALLOW

LOCATION: ELEVATION 1008' WATER SHED TOMS FORK

DISTRICT NEW MILTON COUNTY DODDRIDGE

QUADRANGLE NEW MILTON 7.5 min. *Wadis 15' NW*

SURFACE OWNER SAMUEL FARROW, JR. ACREAGE 67.09

OIL & GAS ROYALTY OWNER SAMUEL FARROW, JR. LEASE ACREAGE 67.09

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 5300'

WELL OPERATOR STONEWALL GAS COMPANY DESIGNATED AGENT CHARLES CANFIELD

ADDRESS P. O. DRAWER F ADDRESS BUCKHANNON, WV 26201

H. T. HALL FORM NO. 1070 6-6 *Porto Rico (Stout)* (134)

Jan 21 1983

RECEIVED

IV-35 (Rev 8-81) NOV 2 1 1983

OIL & GAS DIVISION DEPT. OF MINES



State of West Virginia Department of Mines Oil and Gas Division

Date November 16, 1983 Operator's Well No. Farrow #1 191-S Farm Farrow API No. 47 - 017 - 3226

WELL OPERATOR'S REPORT OF

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: 1008 Watershed Toms Fork

District: New Milton County Doddridge Quadrangle New Milton 7.5

COMPANY Stonewall Gas Company

ADDRESS P.O. Drawer F, Buckhannon, WV

DESIGNATED AGENT Charles W. Canfield

ADDRESS P.O. Drawer F, Buckhannon, WV

SURFACE OWNER Samuel Farrow, Jr.

ADDRESS Rt. 1, Box 71, New Milton, WV

MINERAL RIGHTS OWNER Same as Surface ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK Stephen

Casey ADDRESS Jane Lew, WV 26378

PERMIT ISSUED June 16, 1983

DRILLING COMMENCED August 31, 1983

DRILLING COMPLETED September 10, 1983

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Table with 5 columns: Casing Tubing Size, Used in Drilling, Left in Well, Cement fill up Cu. ft.

GEOLOGICAL TARGET FORMATION Alexander

Depth of completed well 5565 feet Rotary X / Cable Tools

Water strata depth: Fresh 105 feet; Salt 781 feet

Coal seam depths: 360

Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Alexander

Pay zone depth 5296-5310 feet

Gas: Initial open flow 15 Mcf/d Oil: Initial open flow No Bbl/d

Final open flow 280 Mcf/d Final open flow Show Bbl/d

Time of open flow between initial and final tests 127 hours

Static rock pressure 1470 psig (surface measurement) after 72 hours shut in

(If applicable due to multiple completion--)

Second producing formation Benson

Pay zone depth 5008-5014 feet

Gas: Initial open flow 15 Mcf/d Oil: Initial open flow No Bbl/d

Final open flow 280 Mcf/d Oil: Final open flow Show Bbl/d

Time of open flow between initial and final tests 127 hours

Static rock pressure 1470 psig (surface measurement) after 72 hours shut in

NOV 05 1983

(Continue on reverse side)

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

Frac. 09-16-83					
1st Stage-Alexander	14 holes	39 shots	2900	1700	80,000 800 bbl 20# gel
5296-5310					
2nd Stage-Benson	6 holes	39 shots	2150	1460	60,000 600 20
5008-5014					
3rd Stage					
3450-3456					
3467-3470	9	39	2900	1150	70,000 700 20

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Top Soil	br	s	0	5	
Red Rock	rd	m	5	15	
Shale	g	s	15	60	
Red Rock & Shale	rd	h	60	157	
Shale	g	s	157	270	
Red Rock	rd	s	270	312	
Red Rock	rd	s	312	450	
Shale	g	m	450	670	
Red Rock & Shale	rd	m	670	830	put Soap on 980
Shale	g	m	830	1079	
Red Rock	rd	h	1079	1250	
Sand & Shale	br	h	1250	1468	
Shale	g	h	1468	1558	
Shale & Red Rock	g	s	1558	1900	
Shale	g	s	1900	2030	
Red Rock & Shale	br	m	2030	2045	
Little Lime	br	m	2045	2170	
Shale	g	m	2170	2230	
Big Lime	br	m	2230	2270	Gas check at 2374 No Show
Big Injun	br	m	2270	2600	Gas check at 2529 No Show
Sand Shale	g	h	2600	2950	Gas check at 3442 No Show
Shale	g	h	2950	3210	Gas check at 3560 No Show
Sand & Shale	br	m	3210	3815	Gas check 4131 1/10 thru 1"
Shale	g	m	3815	4540	Gas check 4601 1/10 thru 1"
Sand & Shale	br	m	4540	4580	Gas check 5036 1/10 thru 1"
Benson	br	h	4580	5222	Gas check 5256 1/0 thru 1"
Sand & Shale	br	h	5222	5300	Gas check 5410 & 5565 2/10 1"
Brown Sand	br	h	5300		
Shale and Sand	g	m	5300		

(Attach separate sheets as necessary)

STONEWALL GAS COMPANY
Well Operator

By: *Benjamin A. Hardesty*
Benjamin A. Hardesty, Vice President
Date: November 16, 1983

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 ^{logs}, encountered in the drilling of a well."



1) Date: May 31, 1982
2) Operator's Well No. Farrow 11 101-2
3) API Well No. 47 State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
OIL AND GAS WELL PERMIT APPLICATION

DRILLING CONTRACTOR:

4) WELL TYPE: A Oil Gas
B (If "Gas", Production Undergrnd storage Deep Shallow
5) LOCATION: Elevation: Watershed:
District: County: Quadrangle:
6) WELL OPERATOR
Address

11) DESIGNATED AGENT
Address
12) COAL OPERATOR
Address

8) SURFACE OWNER
Address
Acreage
13) COAL OWNERS WITH DECLARATION ON RECORD:
Name Address
Name Address

9) FIELD SALE (IF MADE) TO:
Address
10) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Address

15) PROPOSED WORK: Drill Drill deeper Fracture or stimulate
Plug off old formation Perforate new formation
Other physical change in well (specify)

16) GEOLOGICAL TARGET FORMATION,
17) Estimated depth of completed well, feet
18) Approximate water strata depths: Fresh, feet; salt, feet.
19) Approximate coal seam depths: feet. Is coal being mined in the area? Yes No

20) 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	Left in well		
Conductor								
Fresh water								
Coal								
Intermediate								
Production								
Tubing								
Liners								

21) EXTRACTION RIGHTS
Check and provide one of the following:
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)

22) ROYALTY PROVISIONS
Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No
23) Required Copies (See reverse side.)
24) 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.

Notary:
My Commission Expires
Signed: Its:

Permit number
OFFICE USE ONLY
DRILLING PERMIT

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector.** (Refer to No. 10) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)
Permit expires February 16, 1984

Bond: Agent: Plat: Casing Fee:
unless drilling is commenced prior to that date and prosecuted with due diligence.

NOTE: Keep one copy of this permit posted at the drilling location.

Line Item Explanation

- 1) Date of Application
- 2) Your well name and number
- 3) To be filled out by office of oil & gas
- 4A) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves underground reservoirs; "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil.
- 4B) "Shallow well" means any well drilled and completed in a formation above the top of the uppermost member of the "Onondaga Group" or a depth less than six thousand feet, whichever is shallower.
"Deep well" means any well drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group" or at a depth less than six thousand feet, whatever is shallower.
- 5) Where well is located
- 6) Before a permit can be issued in a corporation, company partnership, or fictitious name, the name must be registered with the Secretary of State Office
- 7) Use separate sheet if necessary
- 8) Present surface owner at time application is filed.
- 9) Optional
- 11) See Reg. 7.01 relating to code §22-4-1k
- 12) "Coal Operator" means any persons, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine. See Note 24
- 13 & 14) As per §22-4-20; See Note 24
- 15) Work that will be attempted—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.
- 16) Anticipated formation for which well will be completed
- 17) Self explanatory
- 18) Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in elevation
- 19) All coal seam depths
- 20) Proposed casing program and cementing refer to Code 22-4-5, 22-4-6, 22-4-7, 22-4-8, 22-4-8a Reg 9.01, 15.01, 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
- 21) Code 22-4-11(c) - In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a permit described herein may file the following:
(1) A brief description of the tract of land including the district and county wherein the tract is located;
(2) The identification of all parties to all leases or other continuing contractual agreements by which the right to extract, produce or market the oil or gas is claimed;
(3) The book and page number wherein each such lease or contract by which the right to extract, produce or market the oil or gas is recorded;
(4) A brief description of the royalty provisions of each such lease or contract.
- 22) Code 22-4-11(d) and 22-4-11(e).
- 23) 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.
- 24) **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.**

.....
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.

WAIVER

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 _____