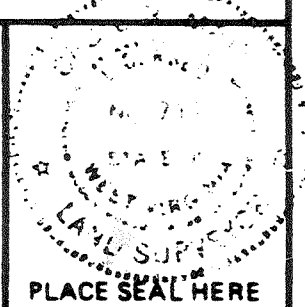


GENE J. CRISS
SURF., OIL AND GAS
50 ACRES

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1000'
MINIMUM DEGREE OF
ACCURACY 1 PART IN 200
PROVEN SOURCE OF
ELEVATION B.M. 2500' NORTH OF
INT. DF. RT. # 11 AND RT. # 15
ELEV. 909'

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 REGU-
LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
MENT OF MINES.
(SIGNED) Carl R. Mann
R.P.E. _____ L.L.S. 711



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



DATE JUNE 4th, 19 81
OPERATOR'S WELL NO. # 86
API WELL NO. _____
47 - 085 - 5202
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 1040' WATER SHED NORTH FORK HUGHES RIVER
DISTRICT GRANT COUNTY ITCHIE
QUADRANGLE PETROLEUM 7.5' ELG. 15' EC
SURFACE OWNER GENE J. CRISS ACREAGE 50 Ac.
OIL & GAS ROYALTY OWNER GENE J. CRISS LEASE ACREAGE 50 Ac.
LEASE NO. _____
PROPOSED WORK: DRILL X 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 5500'
WELL OPERATOR STONEWALL GAS DESIGNATED AGENT DENNIS XANDER
ADDRESS P.O. BOX 225 ADDRESS P.O. BOX 225
CLARKSBURG, WEST VIRGINIA 26301 CLARKSBURG, WEST VIRGINIA 26301

JUL 09 1981

DEEP WELL 6-636 BURNING SPRINGS N 112



Date: June 15, 1981

Operator's Well No. 86-S

API Well No. 47 - 085 - 5202

State County Permit

STATE OF WEST VIRGINIA DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL AND GAS WELL PERMIT

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

LOCATION: Elevation: 1040' Watershed: Buffalo Run District: Grant County: Ritchie Quadrangle: Petroleum 7.5'

WELL OPERATOR Stonewall Gas Company DESIGNATED AGENT R. Dennis Xander Address P. O. Box 225 Clarksburg, WV 26301

OIL & GAS ROYALTY OWNER Gene J. Criss (fee simple) COAL OPERATOR Gene J. Criss (fee simple) Address 1306 24th Street Vienna, WV 26105

Acreege 43 3/4 COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Gene J. Criss (fee simple) Name Address SEE ABOVE

FIELD SALE (IF MADE) TO: Address

OIL & GAS INSPECTOR TO BE NOTIFIED Name K. Paul Goodnight Address Smithville, WV 26178 477-3660

RECEIVED JUN 26 1981 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 March 5, 1977, from Gene J. Criss, et. ux to Ralph Kuhn, and subsequently assigned to the undersigned well operator.

Recorded on June 9, 1977, in the office of the Clerk of the County Commission of Ritchie County, West Virginia in O/G Book 123 at page 380. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate / 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 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.

Stonewall Gas Company [Signature] Well Operator

By R. Dennis Xander Its Manager

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMIS- STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 348-3092

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) _____
Address _____

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5500 feet Rotary X / Cable tools _____ /

Approximate water strata depths: Fresh, 85 feet; salt, 1390 feet.

Approximate coal seam depths: _____ 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	11 3/4	K-55	47		X	40	-	None	Kinds
Fresh Water	8 3/4	J-55	23	X		1600	1600	to surface	
Coal									Sizes
Intermediate									
Production	4 1/2	ERW	10.5	X		5500	5500	⁵³⁰ 420 SX or <i>as reqd. by sub 15.07</i>	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.

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 3-2-82.

Fred B. Burnett
Deputy Director - Oil & Gas Division

No coal in this area. Lessors are fee simple owners.

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.

(FEE SIMPLE)

Date: _____, 19 _____

By _____

Its _____

RECEIVED



JUN 24 1982

IV-35
(Rev 8-81)

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division

Date June 8, 1982
Operator's
Well No. 86-H
Farm Gene Criss #1
API No. 47 - 085 - 5202

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas xx / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production ___ / Underground Storage ___ / Deep ___ / Shallow XX /)

LOCATION: Elevation: 1040' Watershed Buffalo Run
District: Grant County Ritchie Quadrangle Petroleum 7.5'

COMPANY Stonewall Gas Company
ADDRESS P.O. Drawer F, Buckhannon, WV 26201
DESIGNATED AGENT R. Dennis Xander
ADDRESS P. O. Drawer F, Buckhannon, WV 26201
SURFACE OWNER Gene J. Criss (fee Simple)
ADDRESS 1306 24th St., Vienna, WV 26105
MINERAL RIGHTS OWNER Gene J. Criss (fee Simple)
ADDRESS 1306 24th St., Vienna, WV 26105
OIL AND GAS INSPECTOR FOR THIS WORK Deo
Mace ADDRESS Rt. 1, Box 5, Sand Ridge
PERMIT ISSUED 06-26-81 WV
DRILLING COMMENCED 11-14-81
DRILLING COMPLETED 11-21-81
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8		1851'	
7			
5 1/2			
4 1/2		5743'	440 Sks.
3			(3000-5773)
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shales Depth 2500-5700 feet
Depth of completed well 5795 feet Rotary X / Cable Tools _____
Water strata depth: Fresh 62' feet; Salt 1830 feet
Coal seam depths: 73-77 Is coal being mined in the area? _____

OPEN FLOW DATA
Producing formation Devonian Shales Pay zone depth 3423-3550 feet
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow None Bbl/d
Final open flow 603 Mcf/d Final open flow 25 Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 875 psig (surface measurement) after 120 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 _____ Bbl/d
Final open flow _____ Mcf/d Oil: 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

JUN 28 1982
(Continue on reverse side)

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

Formation	Perfs	Holes	BRKD	Sand	Av. Pre.	Av. Rate	Fluid	ISIP	Nitrogen
Devonian Shale	3423-3550 <i>Huron</i>	38	1100	120,000	2400	36	501	500	1,100,000

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	gr	s	0	195	
Sand	w	h	195	310	
Shale	gr	s	310	1050	
Sand	w	h	1050	1105	
Shale	gr	s	1105	1395	
Sand	w	h	1395	1535	
Shale	gr	s	1535	1665	
Sand	w	h	1665	1710	Water 62', 1830'
Big Lime	br	h	1710	1760	Coal at 73'-77'
Big Injun	w	h	1760	1865	
Shale	g	s	1865	2265	
Berea	br	s	2265	2290	
Shale	gr	s	2290	5795	Show gas at 4545' & 5710'
TD	<i>Annular</i>			5795	

Annular 5795
Onond 5710

*5795
2290
3505*

(Attach separate sheets as necessary)

STONEWALL GAS COMPANY

Charles W. Canfield
Well Operator

By: Charles W. Canfield

Date: June 22, 1982

5795
3550
2245 explor. H.

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 ~~encountered~~, encountered in the drilling of a well."