



FILE NO. 5-13
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB
 ELEV. 1430'

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) _____
 R.P.E. _____ L.L.S. 677

PLACE SEAL HERE

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



DATE OCTOBER 22, 19 81
 OPERATOR'S WELL NO. 1
 API WELL NO. _____
47 - 017 - 3060
 STATE COUNTY PERMIT

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

**GUY BROWN et als
 Well No. 1**

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 1249' WATER SHED LITTLE ISAAC CREEK
 DISTRICT GREENBRIER COUNTY DODDRIDGE
 QUADRANGLE BIG ISAAC 7.5' Section 15 NE

SURFACE OWNER DANIEL H. & ANDREA CASEY ACREAGE 101.41
 OIL & GAS ROYALTY OWNER MARY WILLIAMS LEASE ACREAGE 101.41
 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 ELK ESTIMATED DEPTH 5600'
 WELL OPERATOR STONEWALL GAS DESIGNATED AGENT J. ROBERT HORNER
 ADDRESS P.O. BOX 225 ADDRESS P.O. BOX 225
CLARKSBURG, W.V. 26301 CLARKSBURG, W.V. 26301

6-6 MEATHOUSE FR. - BRISTOL 146

RECEIVED



IV-35
(Rev 8-81)

MAR 12 1982

State of West Virginia

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

Department of Mines
Oil and Gas Division

Date February 23, 1982
Operator's
Well No. 91-S
Farm Guy Brown
API No. 47 - 017 - 3060

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: 1249' Watershed Little Isaac Creek
District: Greenbrier County Doddridge Quadrangle Big Isaac 7.5'

COMPANY Stonewall Gas Company
ADDRESS P.O. Drawer F, Buckhannon, WV
DESIGNATED AGENT R. Dennis Xander
ADDRESS P.O. Drawer F, Buckhannon, WV 26201
SURFACE OWNER Daniel Casey, et. ux.
ADDRESS 1925 Quincy St., Arlington, VA 22204
MINERAL RIGHTS OWNER Guy Brown, et. als.
ADDRESS Rt. 3, Salem, WV 26426
OIL AND GAS INSPECTOR FOR THIS WORK
Steve Casey ADDRESS Jane Lew, WV 26378
PERMIT ISSUED 10/28/81
DRILLING COMMENCED 02/05/82
DRILLING COMPLETED 02/11/82
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		1401'	to surface
7			
5 1/2			
4 1/2		5650'	425 sacks (3400-5650)
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Elk and Benson Depth 5350 feet
Depth of completed well 5678 feet Rotary x / Cable Tools
Water strata depth: Fresh 110 feet; Salt ___ feet
Coal seam depths: 787' Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation ~~Elk and Benson~~ ^{ALEX} Pay zone depth 5060-5582 feet
Gas: Initial open flow 146 Mcf/d Oil: Initial open flow ___ Bbl/d
Final open flow 1,237 Mcf/d Final open flow ___ Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 2025 psig (surface measurement) after 4 hours shut in
(If applicable due to multiple completion--)
Days
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

(Continue on reverse side)

Done 8/1982

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

3/22/82 Water frac., 2 stage

WELL	PERFS.	HOLES	SAND	FLUID	BRKD	AV. RATE	AV. PRES.	ISIP
Alexander	(5403-5582)	12	75,000	633	2600	34	2500	1400
Johnson	(5055-5067)	12	75,000	614	2600	34	2700	1600

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sale & Silt	Gr	S	2080	2140	Water @ 110'
g Lime	Br	H	2140	2200	Coal @ 787'
g Injun	Wh	H	2200	2305	
ale	Gr	S	2305	2755	
nd	W	H	2755	2900	Gas @ 2800'
ale	Gr	S	2900	5060	
nson	Br	M	5060	5105	Gas @ 5070'
ale	Gr	S	5105	5345	
ltstone	Br	M	5345	5490	Gas @ 5400'
ale <i>ALEX</i>	Gr	S	5490	5678	
tal Depth			5678		

(Attach separate sheets as necessary)

Stonewall Gas Company
Well Operator
By: *Dennis Xander*
R. Dennis Xander
Date: March 10, 1982

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 sand, encountered in the drilling of a well."

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Unknown
Address _____

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5450 feet Rotary X / Cable tools _____ /

Approximate water strata depths: Fresh, 150 feet; salt, 800 feet.

Approximate coal seam depths: 225' & 820' 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		
Drill pipe	1 1/4		42		X	30'	None	Kinds
Production Water	8 5/8	ERW	23	X		1450'	1450'	335 sacks or to surface
Intermediate								Sizes
Production	4 1/2	J-55	10.5	X			5450'	545 220 sacks or as required by rule 15.01
Tubing								Depths set
Packers								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.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, this location is hereby approved for drilling. This permit shall expire if operations have not commenced by 7-12-82.

J. S. Murray
Deputy Director - Oil & Gas Division

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 _____