

M.F. 5/3/82

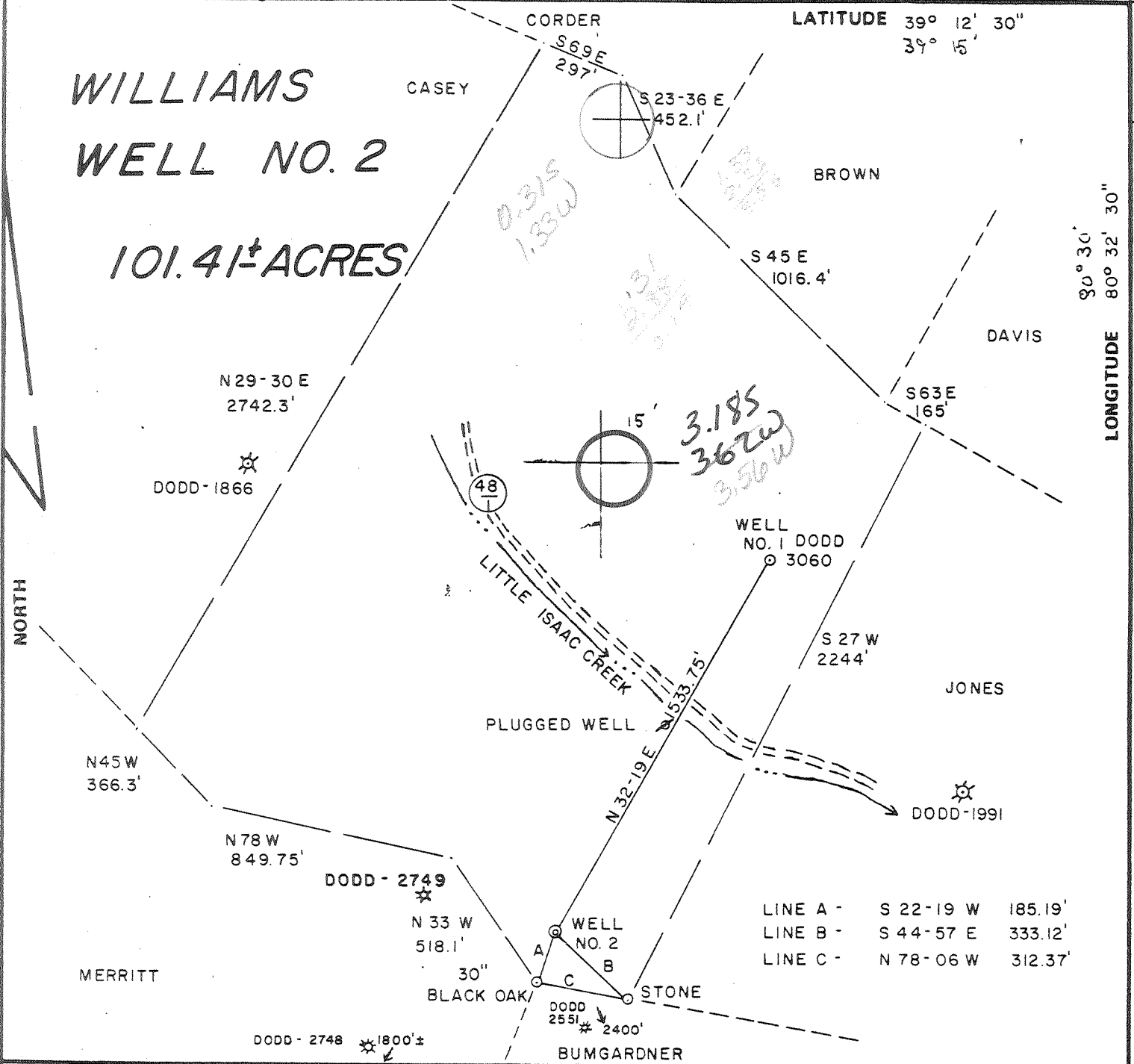
7080'

LATITUDE 39° 12' 30"
39° 15'

LONGITUDE 90° 30'
80° 32' 30"

**WILLIAMS
WELL NO. 2
101.41± ACRES**

NORTH



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) Gregory A. Smith
R.P.E. _____ L.L.S. 677

PLACE SEAL HERE

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

FORM IV-6 (878)



DATE MARCH 11, 19 82
OPERATOR'S WELL NO. 2
API WELL NO. 47-017-3102
STATE WEST VIRGINIA COUNTY GREENBRIER PERMIT 146

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

WELL TYPE OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
LOCATION ELEVATION 1289' WATER SHED LITTLE ISAAC CREEK
DISTRICT GREENBRIER COUNTY DODDRIDGE
QUADRANGLE BIG ISAAC 7.5' Wade 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 CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 6-6

PLUG AND ABANDON CLEAN OUT AND REPLUG MEATHOUSE FR- BRISTOL
TARGET FORMATION ELK ESTIMATED DEPTH 5650' MAY 10 1982
WELL OPERATOR STONEWALL GAS CO. DESIGNATED AGENT R. DENNIS XANDER
ADDRESS P.O. DRAWER F ADDRESS P.O. DRAWER F
BUCKHANNON, W.V. 26201 BUCKHANNON, W.V. 26201



IV-35
(Rev 8-81)

Date August 27, 1982

RECEIVED State of West Virginia

Operator's Well No. 143-SH

SEP - 9 1982

Department of Mines
Oil and Gas Division

Farm Brown #2

API No. 47 - 017 - 3102

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

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: 1289 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 Charles Canfield

ADDRESS P.O. Drawer F, Buckhannon, WV

SURFACE OWNER Daniel Casey et ux

ADDRESS 1925 S. Quincy St., Arlington, VA

MINERAL RIGHTS OWNER Guy R. Brown et al

ADDRESS Rt. 3, Salem, WV 26426

OIL AND GAS INSPECTOR FOR THIS WORK Stephen

Casey ADDRESS Jane Lew, WV

PERMIT ISSUED April 7, 1982

DRILLING COMMENCED 7-24-82

DRILLING COMPLETED 7-30-82

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	1445	1445	To surface
7			
5 1/2			
4 1/2		5796.25	4700-5805
3			
2 3/8		5064	with packer
Liners used			

GEOLOGICAL TARGET FORMATION Elk Depth 5300-5400 feet

Depth of completed well 5805 feet Rotary X / Cable Tools

Water strata depth: Fresh 95 feet; Salt - feet

Coal seam depths: 858 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Benson Pay zone depth 5130-42 feet

Gas: Initial open flow 33 Mcf/d Oil: Initial open flow -- Bbl/d

Final open flow 298 Mcf/d Final open flow -- Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1875 psig (surface measurement) after 168 hours shut in

(If applicable due to multiple completion--)

Second producing formation Elk ALX Pay zone depth 5470-5647 feet

Gas: Initial open flow 33 Mcf/d Oil: Initial open flow -- Bbl/d

Final open flow 298 Mcf/d Oil: Final open flow -- Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1875 psig (surface measurement) after 168 hours shut in

SEP 20 1982

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

FORMATION	PERFS	HOLES	SAND BRKD	FLUID	AV.PR.	AV.RT.	ISIP
* Elk ALEX	5470-5647	12	66,000	2000	565		1500
Benson	5130-5142		35,000	2600	315		1375

*Frac through 2 3/8 tubing and packer set at 5064'

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale	g	s	0	15	Hole damp at 95'
Shale	g	s	15	25	
Shale	red	s	25	33	Coal at 858
Sand	w	h	33	85	
Shale & Sand	g	s	85	145	
Sand	w	h	145	170	
Sand & Shale	g	s	170	295	
Sand	w	h	295	330	
Sand & Shale	g	s	330	365	
Shale	red	s	365	858	✓ Gas at 3016 no show
Coal	bl	s	858	861	✓ Gas at 4655 8/10 1" P w/w
Sand & Shale	g	s	861	2000	✓ Gas at 5059 6/10 1" P w/w
Shale	red&g	s	2000	2195	✓ Gas at 5121 4/10 1" P w/w
Big Lime	G	h	2195	2255	✓ Gas at 5307 6/10 1" P w/w
Big Injun	w	h	2255	2295	✓ Gas at TD 10/10 1" P w/w
Sand & Shale	g	s	2295	5110	
Benson	br	m	5110	5125	
Shale	g	s	5125	5430	
Elk ALEX	br	m	5430	5495	
Shale	gr	s	5495	5823	
Total Depth				5823	

(Attach separate sheets as necessary)

STONEWALL GAS COMPANY

Well Operator

By:

Date:

Charles W. Casfield

SEP 07 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 coal, encountered in the drilling of a well."



Date: April 5, 1982

Operator's Well No. Guy Brown #2, 143-SH

API Well No. 47 017 3102

State County Permit

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

FORM IV-2 (Obverse) (12-81)

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

LOCATION: Elevation: 1289' Watershed: Little Isaac Creek District: Greenbrier County: Doddridge Quadrangle: Big Isaac 7.5'

WELL OPERATOR Stonewall Gas Company DESIGNATED AGENT R. Dennis Xander Address P. O. Drawer F Buckhannon, WV 26201

OIL & GAS ROYALTY OWNER Guy R. Brown, et. als. Address Route 3 Salem, WV 26426

COAL OPERATOR NONE Address

ACREAGE 101.41 SURFACE OWNER Daniel Casey, et. ux. Address 1925 S. Quincy Street Arlington, VA 22204

COAL OWNER(S) WITH DECLARATION ON RECORD: Willis G. Tetrick, Maxwell Sutton, Name Union National Bank, Trustees Address P. O. Box 2330 Clarksburg, WV 26302

FIELD SALE (IF MADE) TO: Address

Name Address

OIL & GAS INSPECTOR TO BE NOTIFIED Name Steven Lee Casey Address Jane Lew, WV 26378 884-7470

COAL LESSEE WITH DECLARATION ON RECORD: Name Address APR 7 - 1982

OIL AND GAS DIVISION WV DEPARTMENT 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 October 23, 1981, to the undersigned well operator from Clarence W. Mutschelknaus, which agreement is being recorded, and which covers that certain lease.

Recorded on June 9, 1980, in the office of the Clerk of the County Commission of Doddridge County, West Va., in Lease Book 115 at page 501. 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.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION 1615 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 348-3092

Stonewall Gas Company Well Operator By R. Dennis Xander Vice President

BLANKET COPY

PROPOSED WORK ORDER

(12-81)

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

DRILLING CONTRACTOR (IF KNOWN) _____

Address _____

GEOLOGICAL TARGET FORMATION, Elk

Estimated depth of completed well, 5650 feet Rotary X / Cable tools _____ /

Approximate water strata depths: Fresh, 150 feet; salt, 840 feet.

Approximate coal seam depths: 830' 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		42		X	30'		NONE	Kinds
Fresh Water									
Coal									Sizes
Intermediate	8 5/8	ERW	23	X		1390'	1390'	260 sacks or to fill up	
Production	4 1/2	ERW	10.5	X		5650'	5650'	565 sacks or as required	Depths set
Tubing								by rule 15.01	
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.

THIS PERMIT MUST BE POSTED AT THE WELL SITE
ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY
APPROVED FOR drilling. THIS PERMIT SHALL EXPIRE
IF OPERATIONS HAVE NOT COMMENCED BY 1-4-83
BY [Signature]

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 [Signature]
Its _____

(12-81)

PROPOSED WATER WELL

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

DRILLING CONTRACTOR (IF KNOWN) Union Drilling
Address Drawer 40
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Devonian Shale

Estimated depth of completed well, 5000 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 1450 feet; salt, feet.

Approximate coal seam depths: 400 Is coal being mined in the area? Yes / No X /

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths set, Perforations: Top, Bottom). Rows include Conductor, Fresh Water, Coal, Intermediate, Production, Tubing, and Liners.

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,
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY
APPROVED FOR drilling; THIS PERMIT SHALL EXPIRE
IF WORKINGS HAVE NOT COMMENCED BY 1-11-83.
BY [Signature]

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 agent for owners X / 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: 16 April, 1982

By Willio G. Tetrick Jr
Its Agent