

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 3240'  
SE. OF LOC. AT ELEV. 1307'


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 ENERGY.

(SIGNED) *[Signature]*

R.P.E. \_\_\_\_\_ L.L.S. NO. 674  
STEPHEN D. LOSH

PLACE SEAL HERE

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



DATE FEB. 21, 19 89  
 OPERATOR'S WELL NO. DOAK 4  
 API WELL NO. 47-017-3697

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

LOCATION: ELEVATION 1242' WATERSHED LITTLE FLINT RUN  
 DISTRICT GRANT 3 COUNTY DODDRIDGE  
 QUADRANGLE WEST UNION 7.5' 671 1336 +15' EC

SURFACE OWNER WILLIS W. BROWN ACREAGE 50.  
 OIL & GAS ROYALTY OWNER A. DOAK LEASE ACREAGE 191.  
 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 5800'  
 WELL OPERATOR STONEWALL GAS CO. DESIGNATED AGENT CHARLES CANFIELD  
 ADDRESS P.O. DRAWER R 847 ADDRESS P.O. DRAWER R

JANE LEW, WV 26378-0080 JANE LEW, WV 26378-0080

MAR 24 1989

6-6 Swiger (Flint Run) (097)

FORM WW-6  
 HT. HALL 5-8073

COUNTY NAME  
 PERMIT

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: BROWN, WILLIS Operator Well No.: DOAK 4-397-S

LOCATION: Elevation: 1242.00 Quadrangle: WEST UNION

District: GRANT County: DODDRIDGE  
Latitude: 4090 Feet South of 39 Deg. 22Min. 30 Sec.  
Longitude 1700 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: STONEWALL GAS CO.  
P. O. BOX 1575  
RICHMOND, VA 23213-1575

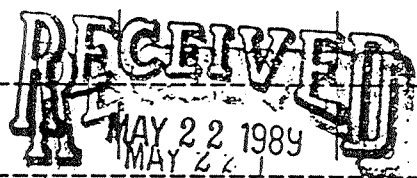
Agent: CHARLES R. CANFIELD

Inspector: MIKE UNDERWOOD  
Permit Issued: 03/15/89  
Well work Commenced: 04-19-89  
Well work Completed: 04-25-89  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary  Cable \_\_\_\_\_ Rig  
Total Depth (feet) 5469  
Fresh water depths (ft) 175

Salt water depths (ft) 1480

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): NA

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
11 3/4	220	220	100 SKS
8 /58	1632	1632	370 SKS
4 1/2	5372	5372	300 SKS



DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

OPEN FLOW DATA

Producing formation BENSON Pay zone depth (ft) 5230  
Gas: Initial open flow 23 MCF/d Oil: Initial open flow NA Bbl/d  
Final open flow 880 MCF/d Final open flow NA Bbl/d  
Time of open flow between initial and final tests 4 Hours  
Static rock Pressure 1600 psig (surface pressure) after 72 Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: STONEWALL GAS CO.

By: [Signature] PRESIDENT  
Date: MAY 12, 1989

MAY 26 1989

FRAC ONE ZONE 05-02-89

PERFS	HOLES	BBL	SAND	BD	ISIP
BENSON 5231 TO 37	21	845	70,000	1700	1825

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GROUND LEVEL	GREY	SOFT	0	10	HOLE DAMP 10*
RED ROCK	RED	SOFT	10	380	
SAND & SHALE	GREY	SOFT	380	1857	GAS CK @ 2272 NO SHOW
SHALE	GREY	SOFT	1857	2230	
BIG LIME	GREY	HARD	2230	2310	GAS CK @ 2428 2/10 1" H <sub>2</sub> O
BIG INJUN	GREY	HARD	2310	2425	
SAND & SHALE	GREY	SOFT	2425	2945	GAS CK @ 3081 2/10 1" H <sub>2</sub> O
GORDON	GREY	SOFT	2945	3000	
SHALE	GREY	SOFT	3000	4805	GAS CK 4891 8/10 1" H <sub>2</sub> O
RILEY	GREY	SOFT	4805	4865	
SHALE	GREY	SOFT	4865	5230	GAS CK 5287 12/10 2" H <sub>2</sub> O
BENSON	BROWN	SOFT	5230	5335	
				5469	GAS CK TD 4/10 1" H <sub>2</sub> O

TD

TD 5469

**RECEIVED**  
MAY 22 1989

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

MAY 26 1989

2/1/8

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

- 1) Well Operator: STONEWALL GAS COMPANY 47850, 3, 670
2) Operator's Well Number: DOAK #4 397-S 3) Elevation: 1242'
4) Well type: (a) Oil / or Gas X/ (b) If Gas: Production X/ Underground Storage / Deep / Shallow /
5) Proposed Target Formation(s): BENSON
6) Proposed Total Depth: 5550' feet
7) Approximate fresh water strata depths: 145' 987', 402'
8) Approximate salt water depths: 1502' 1370'
9) Approximate coal seam depths: NA 640'-643'
10) Does land contain coal seams tributary to active mine? Yes / No X/
11) Proposed Well Work: Drill & Stimulate New Well
12)

CASING AND TUBING PROGRAM

Table with columns: TYPE, SPECIFICATIONS (Size, Grade, Weight per ft.), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT (Fill-up). Includes handwritten notes like 'Casing in Oil' and 'Cement to surface'.

PACKERS : Kind Sizes Depths set

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For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

Fee(s) paid Well Work Permit Reclamation Fund WPCP Plat WW-9 WW-2B Bond 503/umpet Agent (Type)

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MAR 14 1989

**DIVISION OF OIL & GAS** 3)  
**DEPARTMENT OF ENERGY**

Date: MARCH 14, 1989  
Operator's well number  
DOAK #4 397-S  
API Well No: 47 - 017 - 3697  
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
- (a) Name WILLIS BROWN  
Address RT 2, BOX 294  
WEST UNION, WV 26456
- (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
- (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:  
Name N/A  
Address \_\_\_\_\_
- (b) Coal Owner(s) with Declaration  
Name SAME AS SURFACE  
Address \_\_\_\_\_
- (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector MIKE UNDERWOOD  
Address RT 2, BOX 114  
SALEM, WV 26426  
Telephone (304)- 782-1043

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR

X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through \_\_\_\_\_ on the above named parties, by:

- X Personal Service (Affidavit attached)  
\_\_\_\_\_ Certified Mail (Postmarked postal receipt attached)  
\_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator STONEWALL GAS COMPANY  
By: Benj. A. Hunt  
Its: PRESIDENT  
Address PO DRAWER R  
JANE LEW, WV 26378-0080  
Telephone 304-884-7881

Subscribed and sworn before me this 14TH day of MARCH, 1989

Richard K. Edsall

My commission expires OCTOBER 14, 1993

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