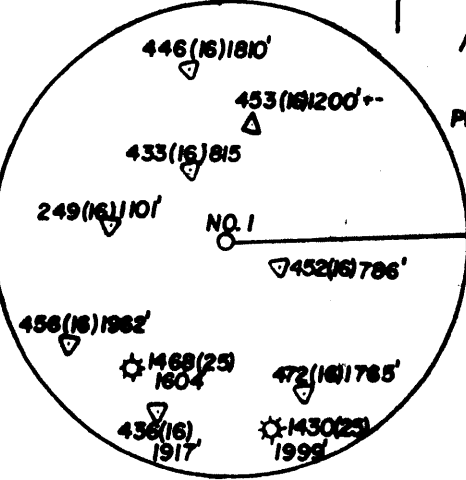


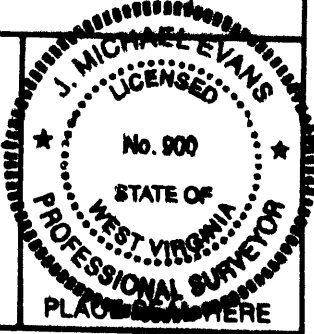
WELL REFEARANCES:  
 571°E, 108' TO 12" BL. WALNUT  
 93°W, 134' TO 10" TWIN BL. WALNUT



(+) 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 RD. JCT. 1000' NW. AT 78'

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) J. Michael Evans  
 R.P.E. \_\_\_\_\_ L.L.S. 900



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



DATE JUNE 8, 19 93  
 OPERATOR'S WELL NO. JACOB 1  
 API WELL NO. 47-095-1617  
 STATE COUNTY PERMIT

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 921' WATERSHED PRATT RUN  
 DISTRICT McELROY COUNTY TYLER  
 QUADRANGLE SHIRLEY 7.5 W4 EC

SURFACE OWNER JACOB CUMBERLEDGE ACREAGE 125  
 OIL & GAS ROYALTY OWNER JACOB CUMBERLEDGE LEASE ACREAGE 125  
 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) \_\_\_\_\_

PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION BENSON ESTIMATED DEPTH 5100'  
 WELL OPERATOR STONEWALL GAS CO. 847 DESIGNATED AGENT JESSE SHELL  
 ADDRESS P. O. DRAWER R ADDRESS P. O. DRAWER R

COUNTY NAME \_\_\_\_\_  
 PERMIT \_\_\_\_\_

State of West Virginia  
 Division of Environmental Protection  
 Section of Oil and Gas

AUG 23 1994

WV Division of well Operator's Report of Well Work  
 Environmental Protection

Farm name: CUMBERLEDGE, JACOB A Operator Well No.: 1 664-S

LOCATION: Elevation: 921.00 Quadrangle: SHIRLEY

District: MCELROY County: TYLER  
 Latitude: 10035 Feet South of 39 Deg. 25Min. Sec.  
 Longitude 10935 Feet West of 80 Deg. 45 Min. Sec.

Company: STONEWALL GAS COMPANY

909 E. MAIN ST., P.O. BOX 1575  
 RICHMOND, VA 23213-0000

Agent: JESSE A. SHELL

Inspector: MIKE UNDERWOOD  
 Permit Issued: 05/13/94  
 Well work Commenced: 06/18/94  
 Well work Completed: 06/29/94  
 Verbal Plugging  
 Permission granted on: \_\_\_\_\_  
 Rotary X Cable \_\_\_\_\_ Rig  
 Total Depth (feet) 5097  
 Fresh water depths (ft) 58

Salt water depths (ft) \_\_\_\_\_  
 NONE REPORTED

Is coal being mined in area (Y/N)? N  
 Coal Depths (ft): NONE REPORTED

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	103	103	65 SKS
8 5/8	1055	1055	270 SKS
4 1/2	5019	5019	800 SKS

OPEN FLOW DATA

Producing formation BENSON Pay zone depth (ft) 4939  
 Gas: Initial open flow \* \_\_\_\_\_ MCF/d Oil: Initial open flow 0 Bbl/d  
 Final open flow 1710 MCF/d Final open flow 0 Bbl/d  
 Time of open flow between initial and final tests 1 Hours  
 Static rock Pressure 1250 psig (surface pressure) after 168 Hours

Second producing formation RILEY Pay zone depth (ft) 4500  
 Gas: Initial open flow \* \_\_\_\_\_ MCF/d Oil: Initial open flow 0 Bbl/d  
 Final open flow COMMINGLED MCF/d Final open flow 0 Bbl/d  
 Time of open flow between initial and final tests 1 Hours  
 Static rock Pressure 1250 psig (surface pressure) after 168 Hours

\* UNABLE TO DETECT DUE TO OPEN FLOW FROM KEENER

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 COMPANY

By: Ray M. Frear, Jr. RAY M. FREAR, JR.  
 Date: JULY 15, 1994 PETROLEUM ENGINEER

AUG 26 1994

STAGES	WATER	FRAC	07/07/94	DATE		
ZONES	PERFS	HOLES	BBL	BP	ISIP	
BENSON	4939-4943	16	700	1865	1776	
RILEY	4500-4528	16	700	2727	1650	

FORMATION	COLOR	HARD/SOFT	TOP	BOTTOM	REMARKS
SHALE & RR	BROWN	SOFT	0	40	GAS CK @ 1866 NO SHOW
RR & SAND	GRAY	SOFT	40	123	1897 100/10 2" W/M
SAND & SHALE	BROWN	HARD	123	225	1928 28/10 7" W/W
SHALE, SAND, RR	BROWN	HARD	225	718	1959 24/10 7" W/W
SAND & SHALE	GRAY	SOFT	718	836	1990 22/10 7" W/W
WHITE SAND	WHITE	SOFT	836	866	2020 22/10 7" W/W
BLACK SHALE	BLACK	HARD	866	873	2052 20/10 7" W/W
SAND & SHALE	GRAY	HARD	873	968	2675 12/10 7" W/W
RR & SHALE	GRAY	SOFT	968	984	4536 10/10 7" W/W
SAND & SHALE	BROWN	SOFT	984	1060	4923 10/10 7" W/W
SHALE & SAND	BROWN	SFOT	1060	1120	
SANDY SHALE	GRAY	HARD	1120	1390	
WHITE SAND	WHITE	HARD	1390	1494	
SAND & SHALE	GRAY	SOFT	1494	1548	
SAND	GRAY	SOFT	1548	1593	
SAND & SHALE	GRAY	SOFT	1593	1654	
WHITE SAND	WHITE	HARD	1654	1747	
SAND & SHALE	GRAY	HARD	1747	1815	
BIG LIME	GRAY	HARD	1815	1894	
SHALE	GRAY	SOFT	1894	1900	
BIG INJUN	GRAY	SOFT	1900	2015	
SAND & SHALE	BROWN	SOFT	2015	3515	
SAND	GRAY	HARD	3515	3540	
SAND & SHALE	GRAY	HARD	3540	4470	
SAND	GRAY	SOFT	4470	4500	
SHALE & SAND	GRAY	SOFT	4500	4920	
BENSON	GRAY	HARD	4920	4924	
SAND & SHALE	GRAY	HARD	4924	5097	
TD			5097		

19083

23

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

WELL WORK PERMIT APPLICATION

Expires 05/13/96 607

1) Well Operator: <sup>847</sup> Stonewall Gas Company 47856 <sup>(5)</sup>

2) Operator's Well Number: Jacob #1 (664-S) 3) Elevation: 921'

4) Well type: (a) Oil \_\_\_ / or Gas X / (b) If Gas: Production X / Underground Storage \_\_\_ / Deep \_\_\_ / Shallow X /

Proposed Target Formation(s): Benson 435

Proposed Total Depth: 5070' feet

Approximate fresh water strata depths: 30', 120', 200', 420'

Approximate salt water depths: N/A

Approximate coal seam depths: N/A

10) Does land contain coal seams tributary to active mine? Yes \_\_\_ / No X /

11) Proposed Well Work: Drill and 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 (cu. ft.)). Rows include Conductor, Fresh Water, Coal, Intermediate, Production, Tubing, and Liners.

PACKERS : Kind \_\_\_ Sizes \_\_\_ Depths set \_\_\_

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP Plat WW-9 WW-2B Bond Agent

19083

Handwritten notes: 8217/14

1) Date: APRIL 19, 1994  
2) Operator's well number  
JACOB #1 (664-S)  
3) API Well No: 47 - 095 - 1617  
State - County - Permit

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
- (a) Name JACOB A. CUMBERLEDGE  
Address HCR 74 BOX 106  
ALMA, WV 26320
  - (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 \_\_\_\_\_
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Coal Lessee with Declaration  
Name N/A  
Address \_\_\_\_\_
- 6) Inspector MIKE UNDERWOOD  
Address RT 2 BOX 135  
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:

- \_\_\_\_\_ Personal Service (Affidavit attached)
- X 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: B.A. Hardesty B.A. HARDESTY  
 Title: PRESIDENT  
 Address PO DRAWER R  
JANE LEW, WV 26378  
 Telephone 304-884-7881

Subscribed and sworn before me this 19TH day of APRIL, 1994

[Signature] Notary Public  
My commission expires MARCH 14, 2000

