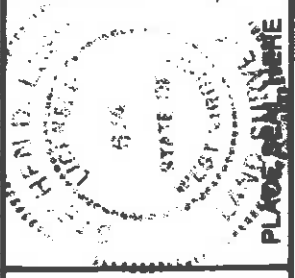


WELL REFERENCES:  
 N 11° 30' W, 159' TO 3" SASSAPRAS  
 S 11° 30' E, 130' TO 3" 7 FORKED SUGAR

LAND SURVEYING SERVICES  
 21 CEDAR LAKE  
 BRIDGEPORT, WV 26330  
 PHONE: 304-842-2018

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE \_\_\_\_\_ 1" = 500'  
 MINIMUM DEGREE OF \_\_\_\_\_  
 ACCURACY \_\_\_\_\_ 1 in 200  
 PROVEN SOURCE OF \_\_\_\_\_  
 ELEVATION TOP OF KNOB 1200' N.W.  
 OF LOCATION \_\_\_\_\_ ELEV. - 1336'

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) \_\_\_\_\_  
 R.P.E. \_\_\_\_\_ L.L.S. STEPHEN D. LOSH 674



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE APRIL 14, 1994  
 OPERATOR'S WELL NO. SHIRL NO. 1  
 API WELL NO. 47-017  
 STATE COUNTY PERMIT  
 47-017 51040

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL  
 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X  
 LOCATION: ELEVATION 1201' WATERSHED RALPHS RUN  
 DISTRICT Mc CLELLAN COUNTY DODDRIDGE  
 QUADRANGLE CENTER POINT 7.5 min.  
 SURFACE OWNER SHIRL UNDERWOOD ACREAGE 91.68  
 GAS ROYALTY OWNER WM. UNDERWOOD MEIRS LEASE ACREAGE 93

PROPOSED WORK: DRILL X CONVERT X DEEPER X REDRILL X FRACTURE OR  
 STIMULATE X PLUG OFF OLD FORMATION X PERFORATE NEW  
 FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON CLEAN OUT AND REPLUG  
 TARGET FORMATION BENSON ESTIMATED DEPTH 5350'  
 WELL OPERATOR STONEWALL GAS COMPANY DESIGNATED AGENT JESSE SHELL  
 ADDRESS P.O. DRAWER R 847 ADDRESS JANE LEW, WV 26378  
 JANE LEW, WV 26378

JUL 25 1994

COUNTY NAME PERMIT



1 STAGES WATER FRAC 10-18-94 DATE  
 ZONES PERFS HOLES BBL BP ISIP

BENSON 5325-5329 16 700 BBL 1644 1590

RMATION	COLOR	HARD/SOFT	TOP	BOTTOM	REMARKS
ED ROCK	RED	HARD	0	6	
AND	BROWN	HARD	6	20	
AND & SHALE	GRAY	SOFT	20	95	
AND	BROWN	SOFT	95	130	
ED ROCK	RED	SOFT	130	150	
AND	BROWN	SOFT	150	185	
ED ROCK & SHALE	BROWN	HARD	185	205	
AND & SHALE	GRAY	SOFT	205	280	
ED ROCK	RED	SOFT	280	290	
AND & SHALE	GRAY	SOFT	290	319	
ED ROCK	RED	HARD	319	337	
AND & SHALE	GRAY	HARD	337	441	
ED ROCK	RED	HARD	441	450	
AND & SHALE	GRAY	SOFT	450	531	
ED ROCK	RED	SOFT	531	537	
AND & SHALE	GRAY	SOFT	537	660	
CAL	BLACK	SOFT	660	663	
AND & SHALE	BROWN	HARD	663	900	
AND	BROWN	HARD	900	1005	
ED ROCK	RED	HARD	1005	1093	
AND	GRAY	SOFT	1093	1104	
AND & SHALE	GRAY	SOFT	1104	1117	
AND	GRAY	HARD	1117	1226	
AND & SHALE	GRAY	HARD	1226	1325	
AND	BROWN	HARD	1325	1345	
AND & SHALE	BROWN	SOFT	1445	1676	
AND	BROWN	SOFT	1676	1720	
AND & SHALE	GRAY	HARD	1720	1787	
HALE & RED ROCK	GRAY	SOFT	1787	1794	
AND & SHALE	GRAY	SOFT	1794	1847	
ED ROCK	RED	HARD	1847	1850	
AND & SHALE	RED	SOFT	1850	1894	
ED ROCK	RED	SOFT	1894	1905	
HALE	GRAY	SOFT	1905	1940	
ED ROCK	RED	SOFT	1940	1945	
AND & SHALE	GRAY	HARD	1945	1968	
AND	BROWN	HARD	1968	1984	
AND & SHALE	BROWN	HARD	1984	2015	
AND	GRAY	SOFT	2015	2096	
ANDY SHALE	GRAY	SOFT	2096	2130	
HALE	GRAY	SOFT	2130	2150	
HALE	BROWN	HARD	2150	2165	
LITTLE LIME	BROWN	SOFT	2165	2184	
HALE	BROWN	SOFT	2184	2290	
IG LIME	BROWN	SOFT	2290	2306	
AND & SHALE	GRAY	HARD	2306	2404	
NJUN	GRAY	HARD	2404	2977	
SAND & SHALE	GRAY	SOFT	2977	3340	
CRDON	GRAY	SOFT	3340	4831	
HALE	GRAY	SOFT	4831	4887	
HALE	GRAY	HARD	4887	5315	
LLEY	GRAY	HARD	5315	5320	
ANDY SHALE	GRAY	SOFT	5320	5490	
ENSON	GRAY	SOFT	5490	5490	
ANDY SHALE	GRAY	SOFT	5490		

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

WELL WORK PERMIT APPLICATION  
 Expires 07/21/96

Well Operator: Stonewall Gas Company 847 47850 (5) 286  
 Operator's Well Number: Shirl #1 (674-S) 3) Elevation: 1201'

Well type: (a) Oil  / or Gas  /

(b) If Gas: Production  / Underground Storage  /  
 Deep  / Shallow  /

5) Proposed Target Formation(s): Benson 435

6) Proposed Total Depth: 5440' feet

7) Approximate fresh water strata depths: 30', 105', 660', 750'

8) Approximate salt water depths: N/A

9) Approximate coal seam depths: 630'

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

11) Proposed Well Work: Drill and Stimulate new gas well.

12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11 3/4"		27#	120'	120'	CSR 38 18-11.1
Fresh Water						
Coal						
Intermediate	8 5/8"		20#	1300'	1300'	CSR 38 18-11.2.2
Production	4 1/2"	J-55	10.5#	5390'	5390'	CSR 38 18-11.3
Tubing						
Liners						

*OK initial*

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

For Division of Oil and Gas Use Only

8263/24 Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP

Plat  WW-9  WW-28  Bond  Agent  51

RECEIVED  
WV

1) Date: JUNE 30, 1994  
2) Operator's well number  
SHIRL #1 (674-S)  
3) API Well No: 47 - 017 - 4140  
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 SHIRL UNDERWOOD  
Address STAR RT. BOX 106  
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 \_\_\_\_\_

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

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)

Certified Mail (Postmarked postal receipt attached)

\_\_\_\_\_ Publication (Notice of Publication attached)

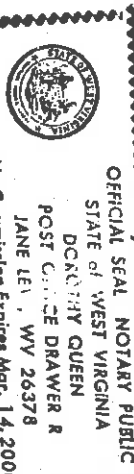
I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

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.

By: Stonewall Gas Company B.A. HARDESTY  
President

ITS: \_\_\_\_\_  
Address \_\_\_\_\_



PO DRAWER R  
JANE LEW, WV 26378  
Telephone 304-884-7881

Subscribed and sworn before me this 30TH day of JUNE, 1994

B.A. Hardesty Notary Public  
My commission expires MARCH 14, 2000