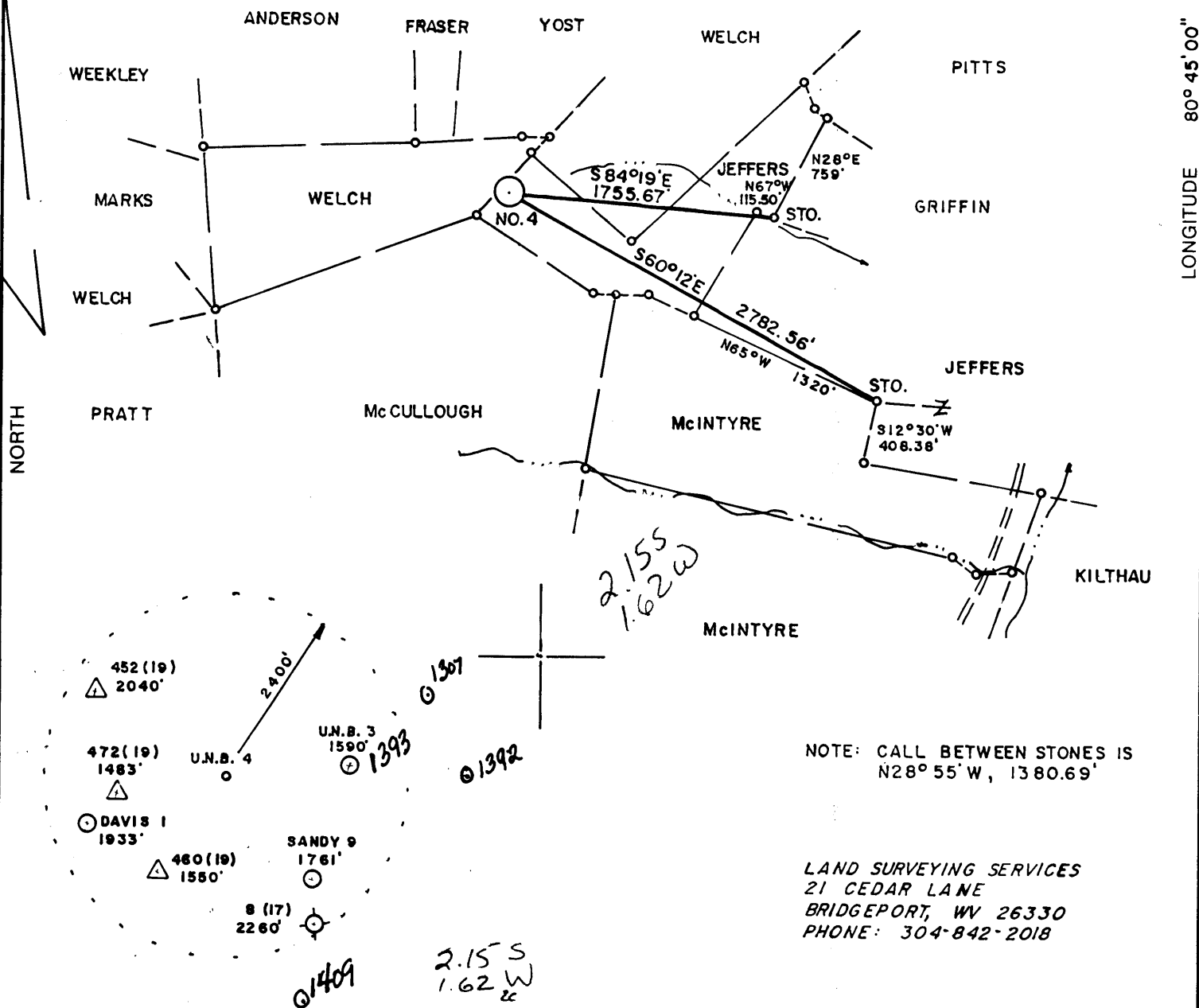


Jamie 7/3/90

8660' LATITUDE 39° 25' 00"

WELL REFERENCES:  
N00°30'W, 148.50' TO 4" W.OAK  
N35°E, 175' TO 16" POPLAR



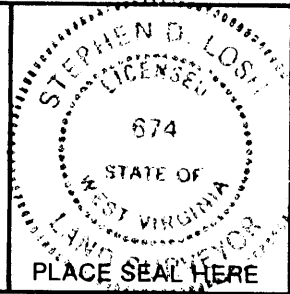
NOTE: CALL BETWEEN STONES IS N28° 55' W, 1380.69'

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

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION RD. INTER. 4500' S.E. OF LOCATION ELEV. 812'

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. 674  
 STEPHEN D. LOSH



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE MARCH 26, 19 90  
 OPERATOR'S WELL NO. UNION NATL. BANK NO. 4  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 1280' WATERSHED SANDY RUN  
 DISTRICT McELROY 5 COUNTY TYLER  
 QUADRANGLE SHIRLEY 7.5 min. West Union EC  
 SURFACE OWNER JAMES JEFFERS ACREAGE 25.50 of 87.23  
 OIL & GAS ROYALTY OWNER UNION NATIONAL BANK LEASE ACREAGE 25.50  
 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) \_\_\_\_\_

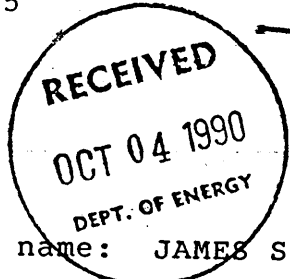
PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION BENSON ESTIMATED DEPTH 5650'  
 WELL OPERATOR STONEWALL GAS COMPANY DESIGNATED AGENT JESSIE SHELL  
 ADDRESS P.O. DRAWER R 847 ADDRESS P.O. DRAWER R  
 JANE LEW, WV 26378 JANE LEW, WV 26378

JUL 20 1990

6-6 Wilbur (092)

FORM WW-6 HALLS INC. 068065

COUNTY NAME PERMIT



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

Well Operator's Report of Well Work

Farm name: JAMES S. JEFFERS Operator Well No.: UNION NAT'l 4

LOCATION: Elevation: 1280.00 Quadrangle: SHIRLEY

District: MCELROY County: TYLER  
Latitude: 11370 Feet South of 39 Deg. 25Min. 0 Sec.  
Longitude 8660 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: STONEWALL GAS COMPANY  
909 E. MAIN ST. P.O. BOX 1575  
RICHMOND, VA 23219-1575

Agent: JESSE A. SHELL

Inspector: GLEN P. ROBINSON  
Permit Issued: 07/16/90  
Well work Commenced: 09-04-90  
Well work Completed: 09-10-90  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary  Cable \_\_\_\_\_ Rig  
Total Depth (feet) 5500  
Fresh water depths (ft) \_\_\_\_\_  
75  
Salt water depths (ft) \_\_\_\_\_  
1065 & 1775  
Is coal being mined in area (Y/N)? N  
Coal Depths (ft): N/A

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	99	99	50 SKS
8 5/8	1331	1331	310 SKS
4 1/2	5314	5314	710 SKS

OPEN FLOW DATA

Producing formation BENSON Pay zone depth (ft) 5272  
Gas: Initial open flow \* \_\_\_\_\_ MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 1302 MCF/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 1 Hours  
Static rock Pressure 1625 psig (surface pressure) after 168 Hours

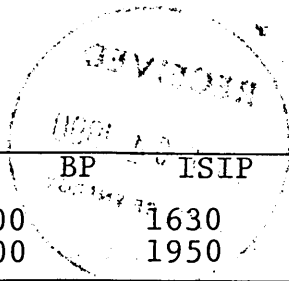
Second producing formation RILEY Pay zone depth (ft) 4832  
Gas: Initial open flow \* \_\_\_\_\_ MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 1302 MCF/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 1 Hours  
Static rock Pressure 1625 psig (surface pressure) after 168 Hours  
\* UNABLE TO DETERMINE DUE TO NATURAL FLOW FROM INJUN

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: OCTOBER 2, 1990 PETROLEUM ENGINEER

OCT 5 1990



STAGE	2	FRAC	WATER	DATE	09-20-90
ZONES	PERFS	HOLE	BBL	BP	ISIP
BENSON	5272-5278	18	700	1900	1630
RILEY	4832-4850	16	600	2300	1950

FORMATION	COLOR	HARD/SOFT	TOP	BOTTOM	REMARKS
TOP SOIL	BROWN	0	5		HOLE DAMP 1065
RR & SHALE	GRAY	5	25		
SAND & SHALE	GRAY	25	90		GAS CK 2214 NO SHOW
RR & SHALE	GRAY	90	102		GAS CK 2245 30/10 2" W/M
SAND & SHALE	BROWN	102	210		GAS CK 2277 30/10 2" W/M
COAL	BLACK	210	215		
SAND & SHALE	GRAY	215	440		GAS CK 2307 30/10 2" W/M
SAND	TAN	440	535		GAS CK 2369 20/10 2" W/M
SAND & SHALE	GRAY	535	723		GAS CK 3051 20/10 2" W/M
SAND	TAN	723	765		
SAND & SHALE	GRAY	765	912		GAS CK 3486 20/10 2" W/M
COAL	BLACK	912	917		GAS CK 4263 20/10 2" W/M
SAND & SHALE	GRAY	917	2129		GAS CK 4823 20/10 2" W/M
L-LIME	BROWN	2129	2140		
SAND & SHALE	GRAY	2140	2160		GAS CK TD 5500 20/10 2" W/M,
B-LIME	BROWN	2160	2241		
INJUN	GRAY	2241	2382		
SAND & SHALE	GRAY	2382	2950		
GORDON	GRAY	2950	2995		
SAND & SHALE	GRAY	2995	4790		
RILEY	BROWN	4790	4798		
SAND & SHALE	GRAY	4798	5235		
BENSON	BROWN	5235	5280		
TD		5500			

10851

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

- 1) Well Operator: STONEMALL GAS COMPANY <sup>549</sup> 47850  
 2) Operator's Well Number: UNION NAT'L BANK #4 47800 (5) 606 3) Elevation: 1280'  
 4) Well type: (a) Oil  / or Gas  /  
 (b) If Gas: Production  / Underground Storage   
 Deep  / Shallow   
 5) Proposed Target Formation(s): BENSON  
 6) Proposed Total Depth: 5375 feet  
 7) Approximate fresh water strata depths: 80' 210'  
 8) Approximate salt water depths: 475' & 590' OK  
 9) Approximate coal seam depths: 420' OK  
 10) Does land contain coal seams tributary to active mine? Yes  / No   
 11) Proposed Well Work: DRILL & STIMULATE New Well  
 12)

**CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
<u>GR 4/18/90</u> Conductor	11 3/4"		28#	100	100 CTS	38 CSR 18-11.3
Fresh Water						
Coal						
Intermediate	8 5/8"		20#	1350	1350 CTS	38 CSR 18-11.2 .2
Production	4 1/2"		10.5#	5325	5325	38 CSR 18-11.1
Tubing						
liners						

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

RECEIVED  
 JUN 25 1990  
 Permitting  
 Oil and Gas Section

For Division of Oil and Gas Use Only

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

1) Date: JUNE 21, 1990  
2) Operator's well number  
UNION NATIONAL BANK #4 442-S  
3) API Well No: 47 - 095 - 1408  
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

Division of Energy  
**JUN 25 90**  
Permitting  
Oil and Gas Section

4) Surface Owner(s) to be served:  
(a) Name JAMES S. JEFFERS  
Address 1101 S. PAUL STREET  
BALTIMORE, MD 21202

(b) Name \_\_\_\_\_  
Address \_\_\_\_\_

(c) Name \_\_\_\_\_  
Address \_\_\_\_\_

5) (a) Coal Operator:  
Name N/A  
Address \_\_\_\_\_

(b) Coal Owner(s) with Declaration  
Name UNION NATIONAL BANK OF WV  
Address T/U/A FOR S.A. SMITH &  
C. BURKE MORRIS PO BOX 2330  
Name GLARKSBURG, WV 26301  
Address \_\_\_\_\_

6) Inspector GLEN P. ROBINSON  
Address RT 1 #6 MT PLEASANT EST.  
MINERALWELLS, WV 26150  
Telephone (304)-489-2736

(c) Coal Lessee with Declaration  
Name N/A  
Address \_\_\_\_\_

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: *Benj. A. Huntz*  
Its: PRESIDENT  
Address PO DRAWER R  
JANE LEW, WV 26378  
Telephone 304-884-7881

Subscribed and sworn before me this 21ST day of JUNE, 19 90

*Dorothy Jones*

My commission expires MARCH 14, 2000

Notary Public