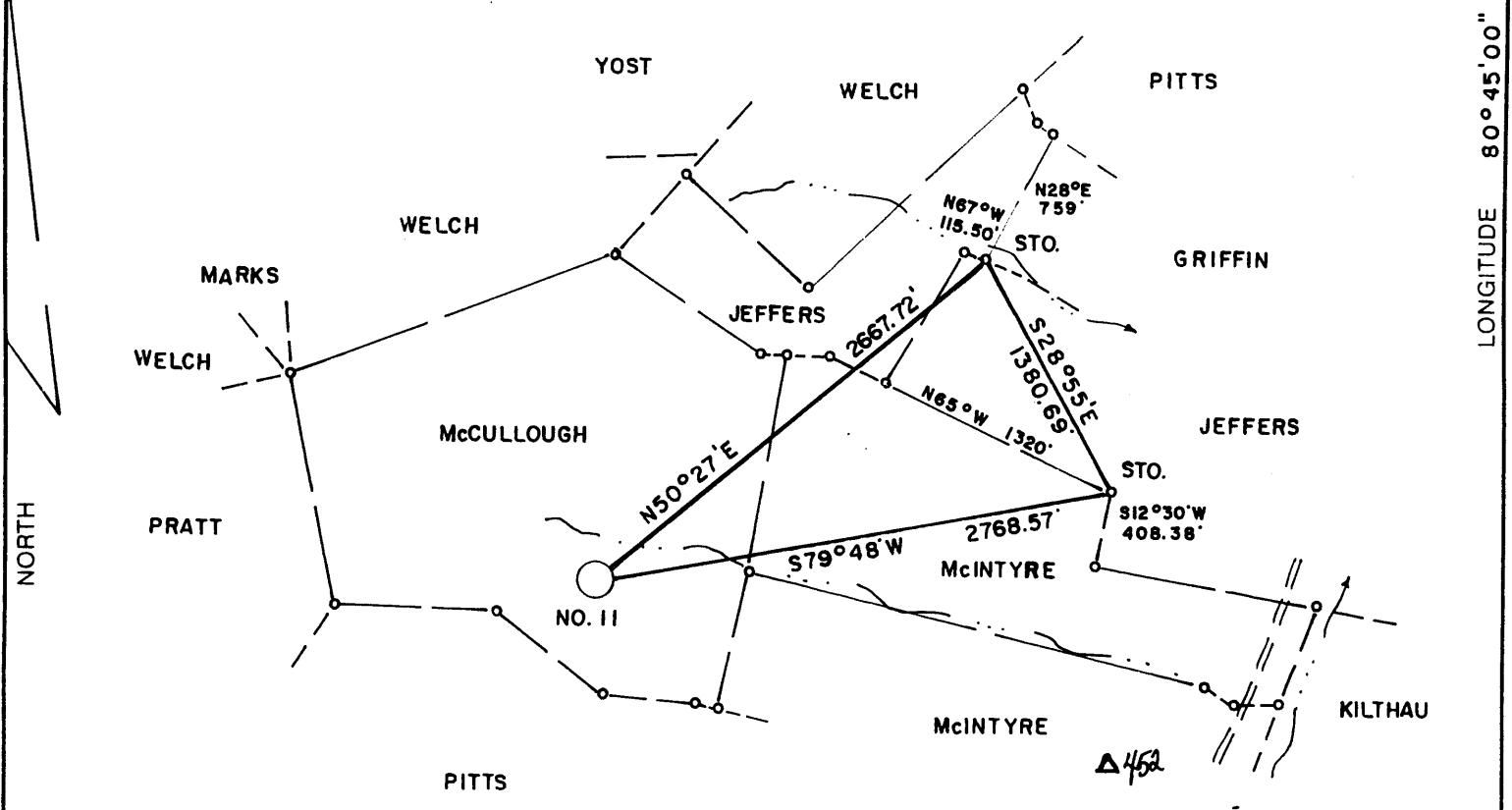


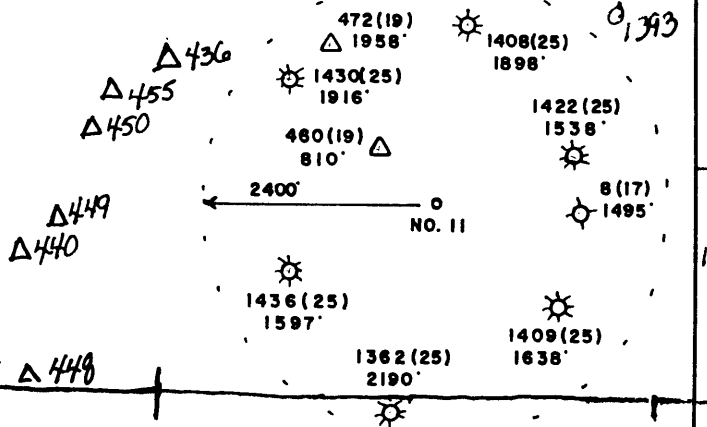
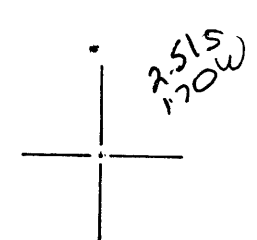
WELL REFERENCES:
 S04°15'E, 140' TO 12" R.OAK
 S58°E, 175' TO 5" BEECH

Genie 7/3/91

9000'
 LATITUDE 39°25'00"



*2.515
1.70W*



*SHIRLEY QUAD. Δ432 Δ449
 WEST UNION QUAD.*

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 EXIST. WELL 460
 ELEV. - 969'

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. 674
 STEPHEN D. LOSH

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE MAY 06 19 91
 OPERATOR'S WELL NO. McCULLOUGH NO. 1
 API WELL NO.

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 1061' WATER SHED SANDY RUN
 DISTRICT McELROY 5 COUNTY TYLER
 QUADRANGLE SHIRLEY 7.5 min. Union EC

47 095 1473
 STATE COUNTY PERMIT

SURFACE OWNER ENID McCULLOUGH ACREAGE 102.29
 OIL & GAS ROYALTY OWNER ENID McCULLOUGH LEASE ACREAGE 103

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 5550'

WELL OPERATOR STONEWALL GAS COMPANY DESIGNATED AGENT JESSE SHELL
 ADDRESS P.O. DRAWER R 847 ADDRESS P.O. DRAWER R
 JANE LEW, WV 26378 JANE LEW, WV 26378

JUL 08 1991

6-6 Wilbur (over)

FORM WW-6

COUNTY NAME

PERMIT

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

Well Operator's Report of Well Work

Aug 28 91
Division of Energy
Section

Farm name: McCULLOUGH, ENID Operator Well No.: 1 599-S

LOCATION: Elevation: 1061.00 Quadrangle: SHIRLEY

District: MCELROY County: TYLER
Latitude: 13220 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 9000 Feet West of 80 Deg. 45 Min. 0 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: 07/05/91
Well work Commenced: 07/18/91
Well work Completed: 07/23/91
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5200
Fresh water depths (ft) 50, 160,
705
Salt water depths (ft) _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	127	127	26 SKS
8 5/8	1012	1012	245 SKS
4 1/2	5152	5152	680 SKS

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

OPEN FLOW DATA

Producing formation BENSON Pay zone depth (ft) 5047
 Gas: Initial open flow 353 MCF/d Oil: Initial open flow 0 Bbl/d
 Final open flow 2518 MCF/d Final open flow 0 Bbl/d
 Time of open flow between initial and final tests 1 Hours
 Static rock Pressure 1600 psig (surface pressure) after 168 Hours

Second producing formation RILEY Pay zone depth (ft) 4608
 Gas: Initial open flow 353 MCF/d Oil: Initial open flow 0 Bbl/d
 Final open flow 2518 MCF/d Final open flow 0 Bbl/d
 Time of open flow between initial and final tests 1 Hours
 Static rock Pressure _____ psig (surface pressure) after 168 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 COMPANY

By: Ray M. Frear, Jr. RAY M. FREAR, JR.
Date: AUGUST 14, 91 PETROLEUM ENGINEER

SEP 16 1991

ZONES	2	STAGES	WATER	FRAC	08/01/91	DATE		
	PERFS			HOLES	BBL	BP	ISIP	
BENSON	5047-5051			16	700	1920	1800	
RILEY	4608-4614			18	700	1850	1880	

FORMATION	COLOR	HARD/SOFT		TOP	BOTTOM	REMARKS
RED ROCK	RED	HARD	0	20		
SAND & SHALE	GRAY	HARD	20	35	GAS CK 2051	4/10 2" W/W
SAND	GRAY	HARD	35	43	2093	6/10 2" W/W
RR & SHALE	GRAY	HARD	43	90	2115	50/10 2" W/W
SAND & SHALE	BROWN	SOFT	90	198	2178	52/10 2" W/W
SAND	BROWN	SOFT	198	220	2796	32/10 2" W/W
SAND & SHALE	GRAY	HARD	220	340	3077	54/10 2" W/W
RR & SHALE	GRAY	HARD	340	420	3515	38/10 2" W/W
SAND & SHALE	GRAY	SOFT	420	704	3950	70/10 2" W/W
SAND	BROWN	SOFT	704	720	4167	64/10 2" W/W
SAND & SHALE & RR	GRAY	SOFT	720	966	4664	60/10 2" W/W
SAND	BROWN	HARD	960	1004	5100	60/10 2" W/W
SHALE & RR	BROWN	HARD	1004	1913	5200	70/10 2" W/W
LITTLE LIME	GRAY	SOFT	1913	1926		
SAND & SHALE	GRAY	HARD	1926	1945		
BIG LIME	BROWN	HARD	1945	2025		
BIG INJUN	BROWN	SOFT	2025	2175		
SAND & SHALE	GRAY	SOFT	2175	2700		
GORDON	GRAY	SOFT	2700	2775		
SAND & SHALE	GRAY	SOFT	2775	4565		
RILEY	BROWN	HARD	4565	4640		
SHALE	GRAY	HARD	4640	5030		
BENSON	GRAY	HARD	5044	5050		
SAND & SHALE	GRAY	HARD	5050	5200		
TD			5200			

12-4/8

RECEIVED
JUN 18 1991

095 - 1473
Issued 07/05/91
page of
Expired 07/05/93

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

- 1) Well Operator: 847 STONEWALL GAS COMPANY 47350 (5) 606
- 2) Operator's Well Number: MCCULLOUGH #1 (599-S) 3) Elevation: 1061'
- 4) Well type: (a) Oil / or Gas X/
(b) If Gas: Production X/ Underground Storage /
Deep / Shallow X/
- 5) Proposed Target Formation(s): BENSON 435
- 6) Proposed Total Depth: 5200 feet
- 7) Approximate fresh water strata depths: 40', 200', 450', 940'
- 8) Approximate salt water depths: 1650'
- 9) 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

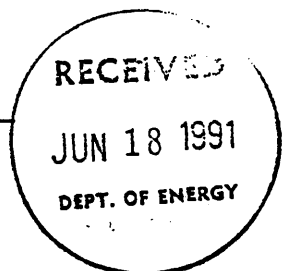
TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4"		27#	100'	100'	CSR 38 18-11.1
Fresh Water						
Coal						
Intermediate	8 5/8"		20#	1000'	1000'	CSR 38 18-11.2.2
Production	4 1/2"	J-55	10.5#	5140'	5140'	CSR 38 18-11.3
Tubing						
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

7353
18

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-28 Bond CD Blanket Agent



1) Date: JUNE 17, 1991
2) Operator's well number
MCCULLOUGH #1 (599-S)
3) API Well No: 47 - 095 - 1473
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 ENID MC CULLOUGH
Address 621 THIRD ST
CHESTER, WV 26034
 - (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
y 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: JANE LEW
Its: PRESIDENT
Address PO DRAWER R
JANE LEW, WV 26378
Telephone 304-884-7881



Subscribed and sworn before me this 17TH day of JUNE, 19 91

Dorothy Queen Notary Public
My commission expires MARCH 14, 2000