

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" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION RD. INTER. 1050' E. OF LOCATION
 ELEV. 781'

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 APRIL 29, 1994
 OPERATOR'S WELL NO. JACOB NO. 3
 API WELL NO. 47-095-1620
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 967' WATERSHED PRATT RUN
 DISTRICT McELROY COUNTY TYLER
 QUADRANGLE SHIRLEY 7.5 min. WU EC

SURFACE OWNER JACOB CUMBERLEDGE ACREAGE 123.15
 OIL & GAS ROYALTY OWNER JACOB CUMBERLEDGE LEASE ACREAGE 125
 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 BENSON ESTIMATED DEPTH 5150'
 WELL OPERATOR STONE WALL GAS COMPANY DESIGNATED AGENT JESSE SHELL
 ADDRESS P.O. DRAWER R ADDRESS P.O. DRAWER R
JANE LEW, WV 26378 JANE LEW, WV 26378

COUNTY NAME
 PERMIT
 LONGITUDE 80°47'30"
 9386
 0128
 0154

AUG 23 1994

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

WV Division of Environmental Protection Well Operator's Report of Well Work
Farm name: CUMBERLEDGE, JACOB A. Operator Well No.: JACOB #3 672-S

LOCATION: Elevation: 967.00 Quadrangle: SHIRLEY

District: MCELROY County: TYLER
Latitude: 9380 Feet South of 39 Deg. 25Min. Sec.
Longitude 800 Feet West of 80 Deg. 47 Min. 30 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: 05/23/94
Well work Commenced: 06/25/94
Well work Completed: 07/15/94
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5152
Fresh water depths (ft) 100
Salt water depths (ft) 1474

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	164	164	80 SKS
8 5/8	1087	1087	270 SKS
4 1/2	5098	5098	800 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) 4932
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1524 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 1 Hours
Static rock Pressure 1325 psig (surface pressure) after 168 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 COMPANY

By: B. A. Hardesty B. A. HARDESTY,
Date: AUGUST 19, 1994 PRESIDENT

1994

1	STAGES	WATER	FRAC	07-22-94	DATE		
ZONES	PERFS		HOLES		BBL	BP	ISIP
BENSON	4932-4936		16	700		1824	1737

FORMATION	COLOR	HARD/SOFT	TOP	BOTTOM	REMARKS
SHALE AND SAND	BROWN	SOFT 0 40			
SAND, SHALE, RR	GRAY	SOFT 40 185			GAS CK @ 1928 NO SHOW
SHALE & SAND	BROWN	SOFT 185 410			1959 NO SHOW
RR, SHALE, SAND	GRAY	HARD 410 777			1989 NO SHOW
SAND & SHALE	GRAY	HARD 777 867			2021 8/10 2" W/W
SAND	BROWN	SOFT 867 906			2053 12/10 2" W/W
SAND & SHALE	GRAY	SOFT 906 1010			2084 12/10 2" W/W
RR	RED	HARD 1010 1020			2859 12/10 2" W/W
SAND & SHALE	GRAY	HARD 1020 1425			4580 12/10 2" W/W
WHITE SAND	WHITE	SOFT 1425 1500			5028 12/10 2" W/W
SAND & SHALE	GRAY	SOFT 1500 1582			12/10 2" W/W
SAND	BROWN	HARD 1582 1628			
SAND & SHALE	GRAY	HARD 1628 1648			
WHITE SAND	WHITE	SOFT 1648 1740			
SAND & SHALE	GRAY	HARD 1740 1822			
L. LIME	GRAY	SOFT 1822 1835			
SHALE	GRAY	HARD 1835 1856			
B. LIME	BROWN	SOFT 1856 1970			
INJUN	GRAY	SOFT 1970 2080			
SAND & SHALE	GRAY	HARD 2080 2640			
SAND	GRAY	HARD 2640 2700			
SAND & SHALE	GRAY	HARD 2700 4956			
BENSON	BROWN	SOFT 4956 4962			
SAND & SHALE	GRAY	SOFT 4962 5152			
		5152			

8E161

RECEIVED

095-1620

FORM WW-2B

Page of

STATE OF WEST VIRGINIA

Issued 05/23/94

MAY 0

DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

WELL WORK PERMIT APPLICATION

Expires 05/23/96

Well Operator: Stonewall Gas Company 47850 607

Operator's Well Number: Jacob #3 (672-S) 3) Elevation: 967'

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: 5100' feet

7) Approximate fresh water strata depths: 65', 185', 465'

8) Approximate salt water depths: N/A

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#	165'	165'	CSR 38 18-11.1
Fresh Water						
Coal						
Intermediate	8 5/8"		20#	1070'	1070'	CSR 38 18-11.2.2
Production	4 1/2"	J 55	10.5#	5050'	5050'	CSR 38 18-11.1
Tubing						
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

19138

8288/15

(1)

1) Date: MAY 4, 1994
2) Operator's well number
JACOB #3 (672-S)
3) API Well No: 47 - 095 - 1620
State - County - Permit

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

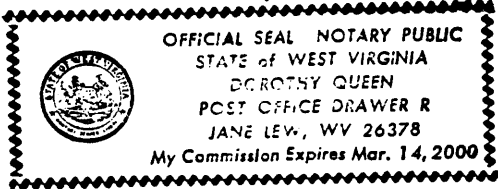
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 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 _____
- 6) Inspector MIKE UNDERWOOD
Address RT 2 BOX 135
SALEM, WV 26426
Telephone (304)- 782-1043
- (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
 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.



Well Operator STONEWALL GAS COMPANY
 By: [Signature] B.A. HARDESTY
 Its: PRESIDENT
 Address PO DRAWER R
JANE LEW, WV 26378
 Telephone _____

Subscribed and sworn before me this 4TH day of MAY, 19 94
[Signature] Notary Public
 My commission expires MARCH 14, 2000