

2785'

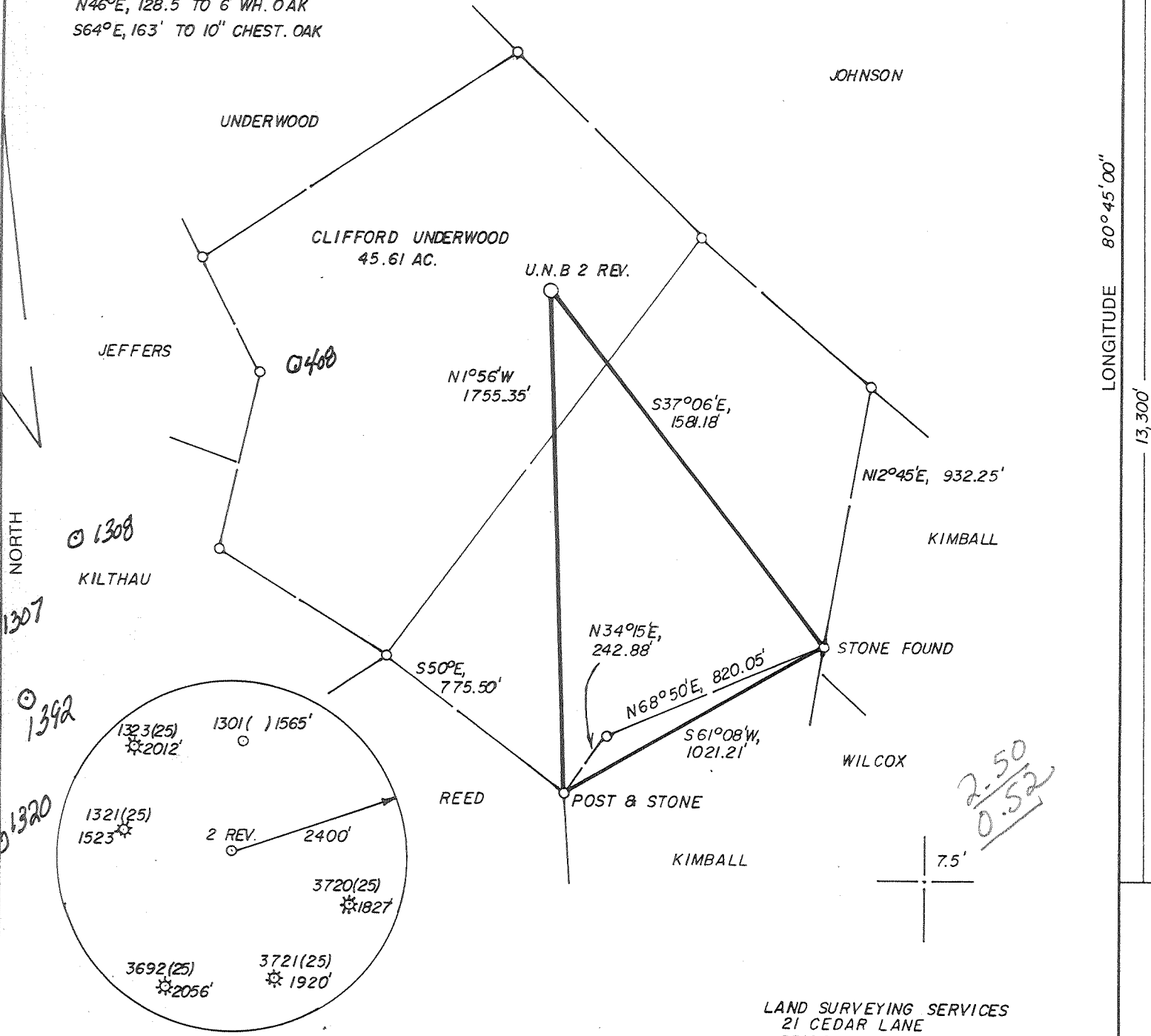
LATITUDE 39°25'00"

LONGITUDE 80°45'00"

13,300'

WELL REFERENCES:
N46°E, 128.5' TO 6" WH. OAK
S64°E, 163' TO 10" CHEST. OAK

Done 6/7/90



NORTH
01307
01308
01392
01320

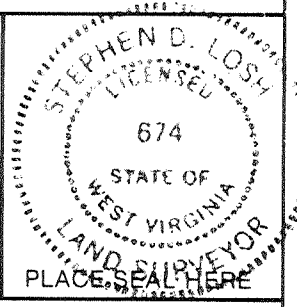
*2.50
0.52*

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 TOP OF KNOB 1285'
SW OF LOC. AT ELEV. 1219

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. NO. 674
STEPHEN D. LOSH



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE MAY 8, 19 90
 OPERATOR'S WELL NO. UN. NAT. BANK 2
 API WELL NO. REVISED
47 - 017 - 3826
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 902' WATERSHED SANDY RUN
 DISTRICT GRANT 3 COUNTY DODDRIDGE
 QUADRANGLE SHIRLEY West Union EC

SURFACE OWNER CLIFFORD UNDERWOOD ACREAGE 45.61
 OIL & GAS ROYALTY OWNER UNION NATIONAL BANK LEASE ACREAGE 45.61
 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 ALEXANDER ESTIMATED DEPTH 5450'
 WELL OPERATOR STONEWALL GAS CO. DESIGNATED AGENT JESSE SHELL
 ADDRESS P.O. DRAWER R 847 ADDRESS P.O. DRAWER R
JANE LEW, WV 26378-0080 JANE LEW, WV 26378-0080

JUN 14 1990

6-6 Swiger (Flint Run) (097)

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

AUG 16 90

Well Operator's Report of Well Work

Farm name: UNDERWOOD, CLIFFORD Operator Well No.: 2- 464-S

LOCATION: Elevation: 902.00 Quadrangle: SHIRLEY

District: GRANT County: DODDRIDGE
Latitude: 13300 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 2785 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: MIKE UNDERWOOD
Permit Issued: 06/11/90
Well work Commenced: 07/11/90
Well work Completed: 07/16/90

Verbal Plugging
Permission granted on: _____

Rotary X Cable _____ Rig

Total Depth (feet) 5100

Fresh water depths (ft) 75'

Salt water depths (ft) 904

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	128	128	65 SKS
8 5/8	1094	1094	220 SKS
4 1/2	5046	5046	710 SKS

OPEN FLOW DATA

Producing formation BENSON Pay zone depth (ft) 4912
Gas: Initial open flow * _____ MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 1555 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests 1 HR Hours
Static rock Pressure 1650 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

* UNABLE TO DETERMINE DUE TO LARGE OPEN FLOW UP HOLE

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: [Signature] PETROLEUM ENGINEER
Date: AUGUST 13, 1990

STAGE 1	FRAC WATER	DATE 07-26-90			
ZONES	PERFS	HOLES	BBL	BP	ISIP
BENSON	4912-4918	18	750	1800	2120

FORMATION	COLOR	HARD/SOFT	TOP	BOTTOM	REMARKS
SOIL	BROWN	SOFT	0	15	
SAND & SHALE	GRAY	SOFT	15	50	1/2" H ₂ O @ 75'
SAND	BROWN	HARD	50	75	
SHALE	GRAY	HARD	75	150	HOLE DAMP @ 904
SAND & SHALE	BROWN	HARD	150	192	
RED ROCK	RED	HARD	192	205	GAS CK @ 1895 16/10 2" W/W
SAND	BROWN	SOFT	205	420	GAS GK @ 2020 40/10 2" W/M
SAND & SHALE	GRAY	SOFT	420	558	
COAL	GRAY	SOFT	558	562	GAS CK 2081 50/10 2" W/M
SAND	GRAY	SOFT	562	585	
SAND & SHALE	GRAY	HARD	585	970	GAS CK 2428 50/10 2" W/M
SAND	BROWN	HARD	970	990	
SAND & SHALE	BROWN	HARD	990	1165	GAS CK 3019 22/10 2" W/M
SHALE	GRAY	HARD	1165	1280	GAS CK 4046 20/10 2" W/M
SAND & SHALE	GRAY	SOFT	1280	1725	
SAND	BROWN	SOFT	1725	1733	GAS CK TD 24/10 2" W/M
SHALE & RR	BROWN	SOFT	1733	1786	
LITTLE LIME	GRAY	SOFT	1786	1797	
SHALE	GRAY	SOFT	1797	1820	
BIG LIME	BROWN	HARD	1820	1892	
BIG INJUN	BROWN	SOFT	1892	2037	
SAND & SHALE	GRAY	SOFT	2037	2585	
GORDON	GRAY	SOFT	2585	2605	
SAND & SHALE	GRAY	SOFT	2605	4445	
RILEY	GRAY	SOFT	4445	4484	
SAND & SHALE	GRAY	SOFT	4484	4920	
BENSON	BROWN	HARD	4920	4935	
SAND & SHALE	BROWN	HARD	4935	5100	
TD			5100		

10/3/90

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

- 1) Well Operator: ⁸⁴⁷ STONEWALL GAS COMPANY 47850 (3) 606
- 2) Operator's Well Number: UNION NAT'L BANK #2 (464-S) 3) Elevation: 902'
- 4) 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: 5100' feet
- 7) Approximate fresh water strata depths: 20', 150', 260' OK
- 8) Approximate salt water depths: N/A OK
- 9) Approximate coal seam depths: 40' 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
Conductor	11 3/4"		27#	130'	130' CTS	38CSR18-11.3
Fresh Water						<i>50K MLL</i>
Coal						
Intermediate	8 5/8"		20#	1088'	1088' CTS	38CSR18-11.2
Production	4 1/2"		10.5#	5030'	5030'	38CSR18-11.1
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

RECEIVED
 Division of
 May 21 9
 Permitting
 Oil and Gas

For Division of Oil and Gas Use Only

Fee(s) paid: 36 Well Work Permit 13 Reclamation Fund 1 WPCP

1) Date: MAY 21, 1990
2) Operator's well number
UNION NATIONAL BANK #2 (464-S)
3) API Well No: 47 - 017 - 3826
State - County - Permit

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

RECEIVED
Division of Energy
MAY 21 1990
Mining
Gas Section

4) Surface Owner(s) to be served:
(a) Name CLIFFORD UNDERWOOD
Address C/O DONNA THOMAS
PO BOX 51
(b) Name SHIRLEY, WV 26434
Address _____
(c) Name _____
Address _____

5) (a) Coal Operator:
Name N/A
Address _____
(b) Coal Owner(s) with Declaration
Name SEE ATTACHED SHEET
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
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: Bey A. Hunt
Its: PRESIDENT
Address PO DRAWER R
JANE LEW, WV 26378
Telephone 304-884-7881



OFFICIAL SEAL NOTARY PUBLIC
STATE OF WEST VIRGINIA
DOROTHY QUEEN
POST OFFICE DRAWER R
JANE LEW, WV 26378
My Commission Expires Mar. 14, 2000

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

Dorothy Queen
My commission expires MAR 14, 2000 Notary Public