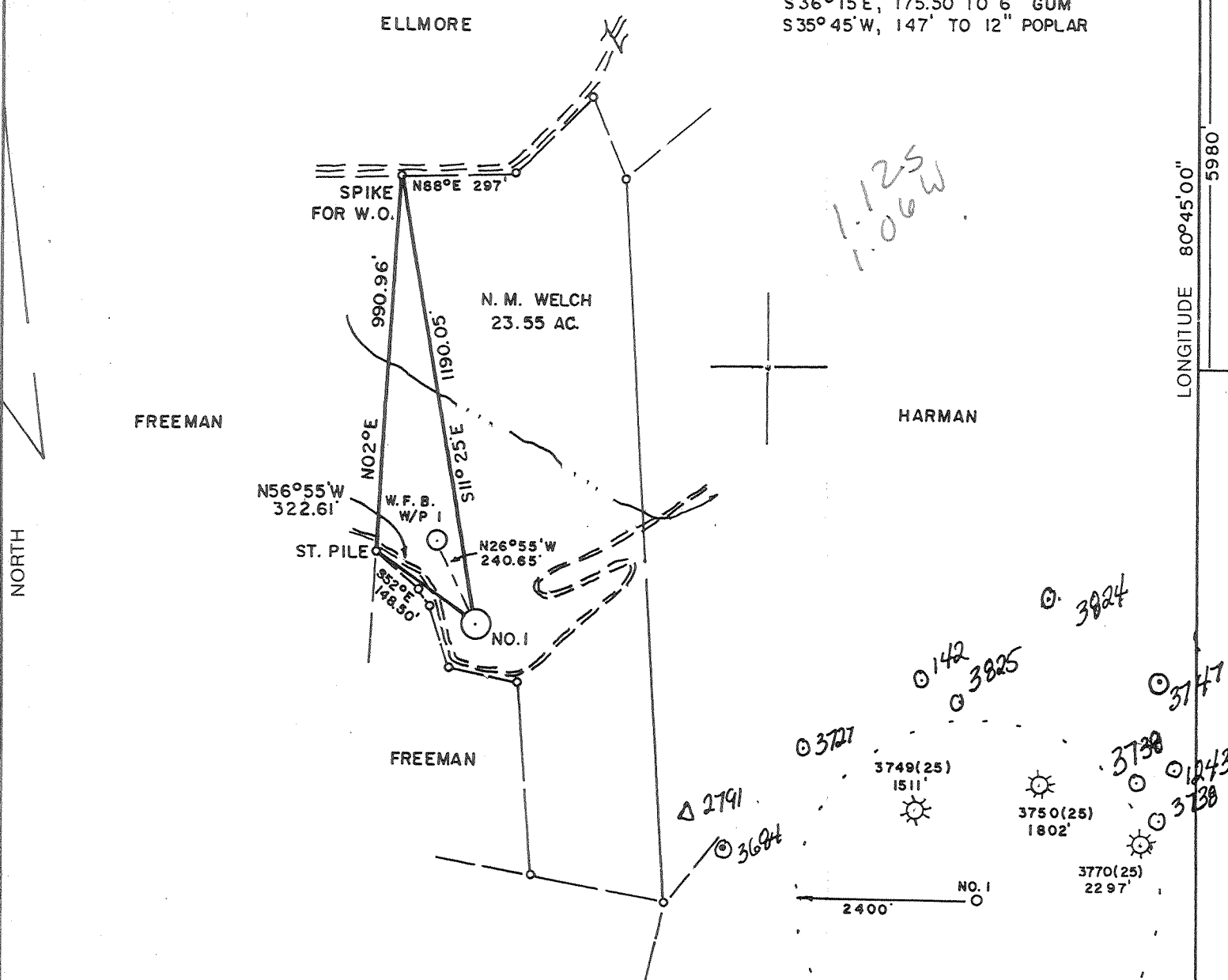


Janie 5/3/90

5660'

LATITUDE 39° 22' 30"

WELL REFERENCES:
 S36° 15' E, 175.50' TO 6" GUM
 S35° 45' W, 147' TO 12" POPLAR



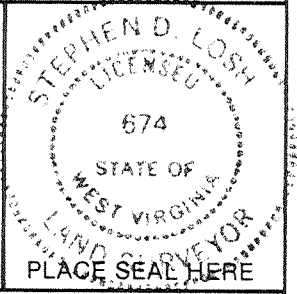
LAND SURVEYING SERVICES
 21 CEDAR LANE
 BRIDGEPORT, WV 26330
 PHONE: 304-842-2018

CHIPPS
 15' loc
 4.00 S
 1.06 W

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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION EXIST WELL 3749
 ELEV. 1270'

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 MAY 03, 1990
 OPERATOR'S WELL NO. WELCH NO. 1
 API WELL NO. _____

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 1082' WATER SHED KNIGHTS FORK OF LITTLE FLINT RUN
 DISTRICT GRANT COUNTY DODDRIDGE
 QUADRANGLE WEST UNION 7.5 min. 15' EC
 SURFACE OWNER N.M. WELCH & C.R. PIERSOL ACREAGE 23.55
 OIL & GAS ROYALTY OWNER N.M. WELCH & C.R. PIERSOL LEASE ACREAGE 23.55
 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 5450'
 WELL OPERATOR STONEWALL GAS COMPANY DESIGNATED AGENT JESSIE SHELL
 ADDRESS P.O. DRAWER R ADDRESS P.O. DRAWER R
 JANE LEW, WV 26378 JANE LEW, WV 26378

JUN 14 1990

6-6 Wilbur

(092)

LONGITUDE 80° 45' 00" 5985

COUNTY NAME

PERMIT

REC'D
Division of Energy
AUG 27 1990
Permitting
Oil and Gas Section

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

Well Operator's Report of Well Work

Farm name: WELCH, MARY MAXINE Operator Well No.: 1-448-S

LOCATION: Elevation: 1082.00 Quadrangle: WEST UNION

District: GRANT County: DODDRIDGE
Latitude: 5980 Feet South of 39 Deg. 22Min. 30 Sec.
Longitude 5660 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: 07-25-90
Well work Completed: 07-30-90
Verbal Plugging _____
Permission granted on: _____
Rotary X Cable _____ Rig _____
Total Depth (feet) 5300
Fresh water depths (ft) 71

Salt water depths (ft) _____
1010 & 1875

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	172	172	95 SKS
8 5/8	1300	1300	290 SKS
4 1/2	5145	5145	710 SKS

OPEN FLOW DATA

Producing formation BENSON Pay zone depth (ft) 5064
Gas: Initial open flow 189/428 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1100 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 1 HR Hours
Static rock Pressure 1400 psig (surface pressure) after 168 Hours

Second producing formation SPEECHLY Pay zone depth (ft) 3570
Gas: Initial open flow 239 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1100 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 1 Hours
Static rock Pressure 1400 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

SEP 6 1990

By: [Signature] PETROLEUM ENGINEER
Date: AUGUST 24, 1990

STAGE	2	FRAC WATER	DATE	08-08-90		
ZONES	PERFS	HOLES	BBL	BP	ISIP	
BENSON	5064-5068	16	700	1860	1700	
SPEECHLY	3570-3574	16	600	1350	1390	

FORMATION	COLOR	HARD/SOFT	TOP	BOTTOM	REMARKS
RR & SHALE	BROWN	HARD	0	71	1/2 H ₂ O @ 71'
SAND	BROWN	SOFT	71	88	
RR & SHALE	GRAY	HARD	88	143	HOLE DAMP @ 1010
SAND & SHALE	GRAY	HARD	143	185	
SAND	BROWN	SOFT	185	225	2" H ₂ O @ 1875
SAND & SHALE	BROWN	SOFT	225	270	
RR & SHALE	GRAY	HARD	270	340	GAS CK 2245 4/10 2" W/W
SAND	BROWN	SOFT	340	450	
RR & SHALE	GRAY	HARD	450	500	GAS CK 2432 4/10 2" W/W
SAND & SHALE	GRAY	HARD	500	730	
COAL	GRAY	SOFT	730	736	GAS CK 2896 26/10 2" W/W
SAND & SHALE	BROWN	HARD	736	740	
SAND	BROWN	SOFT	740	749	GAS CK 3796 32/10 2" W/W
SAND & SHALE	GRAY	SOFT	749	1300	GAS CK TD 20/10 2" W/W
SHALE	GRAY	HARD	1300	1350	
SAND & SHALE	GRAY	HARD	1350	1712	
SAND	BROWN	SOFT	1712	1792	
SAND, SHALE, RR	GRAY	SOFT	1792	1963	
LITTLE LIME	BROWN	HARD	1963	1973	
SHALE	GRAY	HARD	1973	2003	
BIG LIME	BROWN	SOFT	2003	2115	
BIG INJUN	BROWN	SOFT	2115	2144	
SAND & SHALE	BROWN	SOFT	2144	2785	
GORDON	GRAY	HARD	2785	2800	
SAND & SHALE	GRAY	HARD	2800	4618	
RILEY	BROWN	SOFT	4618	4640	
SAND & SHALE	BROWN	SOFT	4640	5300	
TD			5300		

10684

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

- 1) Well Operator: STONEWALL GAS COMPANY 47850 (3) 670
 2) Operator's Well Number: WELCH #1 (448-S) 3) Elevation: 1082'
 4) Well type: (a) Oil / or Gas X /
 (b) If Gas: Production / Underground Storage /
 Deep / Shallow X /
 5) Proposed Target Formation(s): BENSON 435
 6) Proposed Total Depth: 5250' feet
 7) Approximate fresh water strata depths: 30', 150' OK possibly @ 210'
 8) Approximate salt water depths: 1980' OK
 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 & 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#	130'	130' CTS	88CSR18-11.3
Fresh Water					175'	0.6 M.U.
Coal						
Intermediate	8 5/8"		20#	1276'	1276' CTS	88CSR18-11.2.2
Production	4 1/2"		10.5#	5190'	5190'	88CSR18-11.1
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

RECEIVED
 Division of Energy
 MAY 21 90
 Permitting
 Oil and Gas Section

For Division of Oil and Gas Use Only

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

1) Date: MAY 17, 1990
2) Operator's well number
WELCH #1 448-S
3) API Well No: 47 - 017 - 3827
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
Permit
Oil and Gas

4) Surface Owner(s) to be served:
(a) Name MARY MAXINE WELCH
Address PO BOX 4308
PARKERSBURG, WV 26101
(b) Name BERTHA PIERSOL
Address C/O MARY WELCH
PO BOX 4308 PARKERSBURG, WV 26101
(c) Name _____
Address _____
6) Inspector MIKE UNDERWOOD
Address RT 2, BOX 135
SALEM, WV 26426
Telephone (304)- 782-1043

5) (a) Coal Operator:
Name N/A
Address _____
(b) Coal Owner(s) with Declaration
Name SEE ATTACHED SHEET
Address _____
Name _____
Address _____
(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: *Benjamin A. Hunt*
Its: PRESIDENT
Address PO DRAWER R
JANE LEW, WV 26378-0080
Telephone 304-884-7881

Subscribed and sworn before me this 21 day of MAY, 1990

Dorothy Queen
My commission expires MAR 14, 2000 Notary Public

