

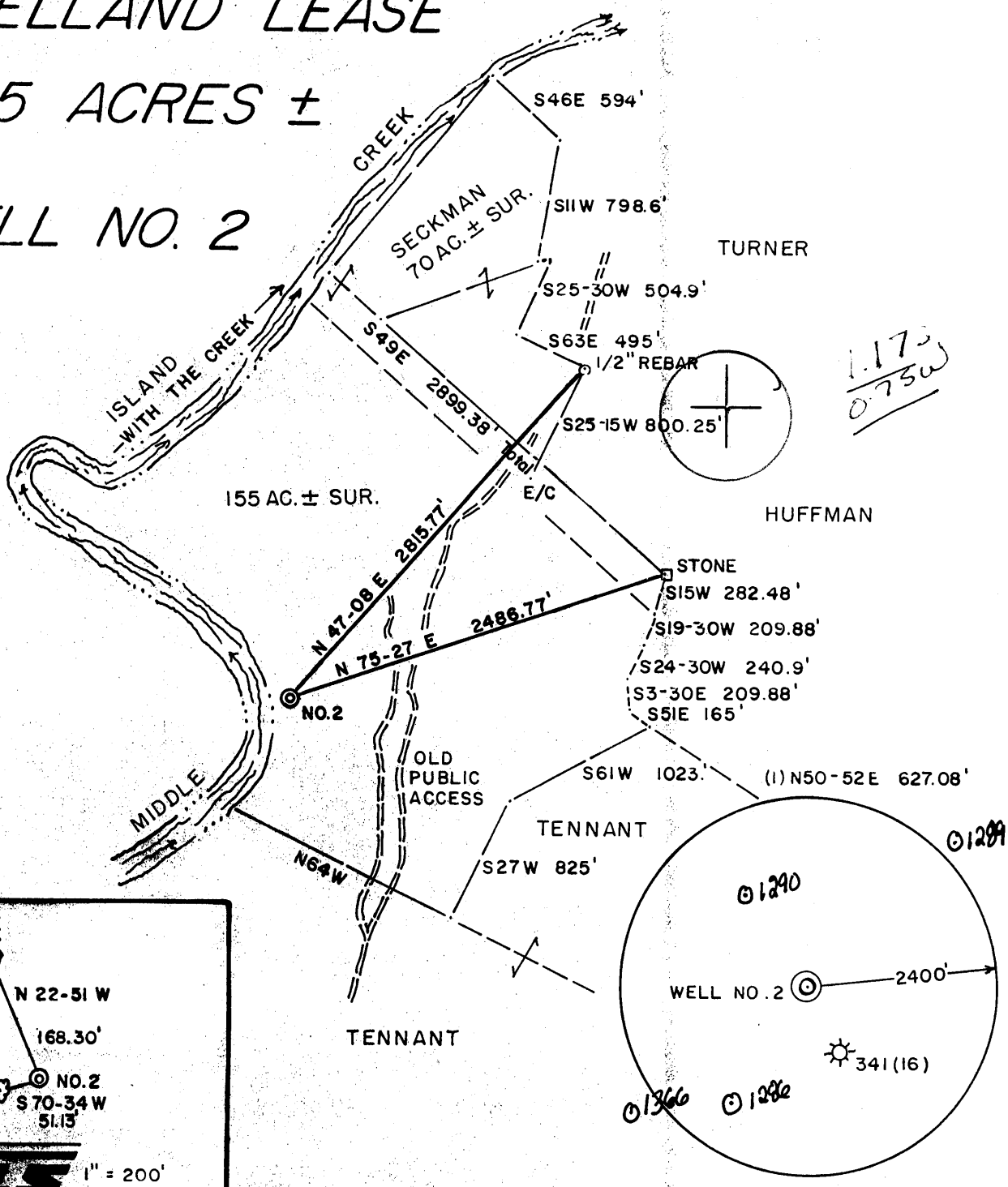
CLELLAND LEASE

225 ACRES ±

WELL NO. 2

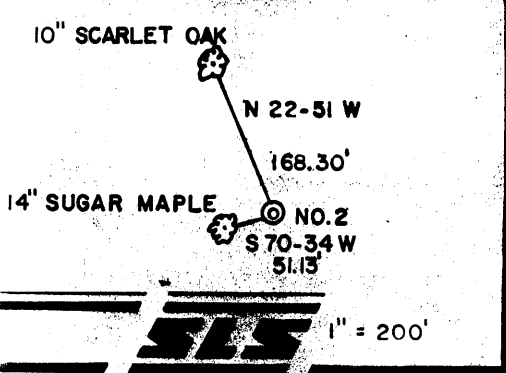
NORTH

LONGITUDE 80-50-00



1.175
0.750

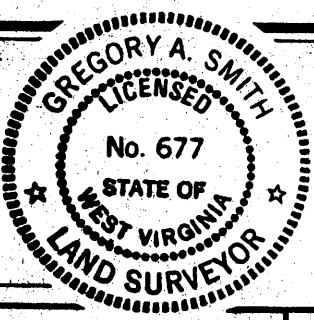
REFERENCES



SLS 1" = 200'

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.

L.L.S. 677 Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE MARCH 18, 19 89
 OPERATORS WELL NO. CLELLAND NO. 2
 API WELL NO. 47 - 095 - 1379
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 1984 (26-35)
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV. = 970' SCALE 1" = 1000'

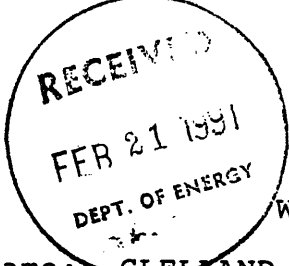
STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 905' WATERSHED MIDDLE ISLAND CREEK West Union C
 DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE SHIRLEY 7.5'
 SURFACE OWNER PAUL R. CLELLAND ACREAGE 155
 ROYALTY OWNER PAUL R. CLELLAND LEASE ACREAGE 155 OF 225
 PROPOSED WORK: LEASE NO. _____
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER _____
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION BENSON
 ESTIMATED DEPTH 5100'

WELL OPERATOR ANVIL OIL CO., INC. DESIGNATED AGENT JUSTIN HENDERSON
 ADDRESS P.O. BOX 1230 FAIRMONT, WV 26554-1230 ADDRESS P.O. BOX 1230 FAIRMONT, WV 26554-1230

6-6 Wilbur

(092)



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

Well Operator's Report of Well Work

Farm name: CLELLAND, PAUL R.

Operator Well No.: CLELLAND #2

LOCATION: Elevation: 905.00 Quadrangle: SHIRLEY

District: CENTERVILLE County: TYLER
Latitude: 6210 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 3960 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: ANVIL OIL CO., INC.
2099 PLEASANT VALLEY ROAD
FAIRMONT, WV 26554-1230

Agent: JUSTIN L. HENDERSON

Inspector: GLEN P. ROBINSON
Permit Issued: 03/26/90
Well work Commenced: 1/25/91
Well work Completed: 1/30/91
Verbal Plugging
Permission granted on:
Rotary X Cable _____ Rig
Total Depth (feet) 5100'
Fresh water depths (ft) 475', 1406'

Salt water depths (ft) 1800'

Is coal being mined in area (Y/N)? N
Coal Depths (ft): N/A

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
11 3/4	129'	129'	65sk ⁵ CTS 77ft ³
8 5/8	1099'	1099'	CTS 250sk ⁵ 295ft ³
4- 1/2	-----	4965' (1500)	235sk ⁵ 313ft ³

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4878-82
 Gas: Initial open flow 600 MCF/d Oil: Initial open flow n/a Bbl/d
 Final open flow ? MCF/d Final open flow n/a Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure 1550 psig (surface pressure) after 24 Hours

Second producing formation Riley (Comingled) Pay zone depth (ft) 4467-69
4498-4500
 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: ANVIL OIL CO., INC.

By: [Signature]
Date: 2/18/91

FEB 25 1991

Perf 4878-82 with 5 holes (.39)
 Perf 4498-4500 with 2 holes (.39)
 4467-69 with 2 holes (.39)

Stimulate with 500 gal. HCL, 25,000# sand in 300 Bbl fluid. Average Pressure 3105psi, average rate 20.9 BPM, average HHP 1599 and 40 mscf N₂

2) Red rock and shale	0-86'		
sand	86'-90'	H ₂ O at 475' and 1406	
shale	90'-110'		
sand	112'-130'	Gas at odor 3050'to TD	
sand and shale	130'-900'	<u>Log tops</u>	
shale and sand	900'-962'		
red rock and shale	962'-1050'	Little lime	1704-1750
sand and shale	1050'-1070'	Big lime	1808-1874
sand	1070'-1090'	Injun	1952-2020
sand and shale	1090'-1706	Weir	2188-2271
limestone	1706'-1755	Riley	4380'-4550
sand and shale	1755-1813	Benson	4850-4901'
limestone	1813-1896		
sand and shale	1896-1950		
sand	1950-1975		
sand and shale	1975-4900		
sand	4900-4920		
sand and shale	4920-5100		
TD	5100		

10353

FORM WW-2B (10)
 MAR 21 1990
 DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

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

Page ____ of ____
 Issued 3/26/90
 Expires 3/26/92

Well Operator: ANVIL OIL CO., INC. ⁰⁰⁴⁸ 2275 (1) 606

- 2) Operator's Well Number: CLELLAND WELL NO. 2 3) Elevation: 905'
- 4) Well type: (a) Oil ___ / or Gas X /
 (b) If Gas: Production X / Underground Storage ___ /
 Deep ___ / Shallow X /
- 5) Proposed Target Formation(s): Benson Gas
- 6) Proposed Total Depth: 5100 feet
- 7) Approximate fresh water strata depths: 130'
- 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 & 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"			120'	120'	CTS
Fresh Water	8-5/8"			1780'	1780'	By Rule 38 CSR 18-11.3
Coal						
Intermediate						
Production	4-1/2"			5100'	5100'	By Rule 38 CSR 18-11.1
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

3447
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Agent Agent
 (Type)

RECEIVED
MAR 21 1990

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

1) Date: 9-28-89
2) Operator's well number
Clelland #2
3) API Well No: 47 - 095 - 1379
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 Paul R. Clelland
Address Rt. 9, Box 280
Fairmont, WV 26554
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Glen P. Robinson
Address Route 1
Mineral Wells, WV 26150
Telephone (304)- _____

5) (a) Coal Operator:
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name _____
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
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 Anvil Oil Co., Inc.
By: Justin L. Henderson
Its: President
Address P.O. Box 1230
Fairmont, WV 26554
Telephone (304) 363-1362

Subscribed and sworn before me this 19th day of March, 1990

My commission expires _____, Notary Public