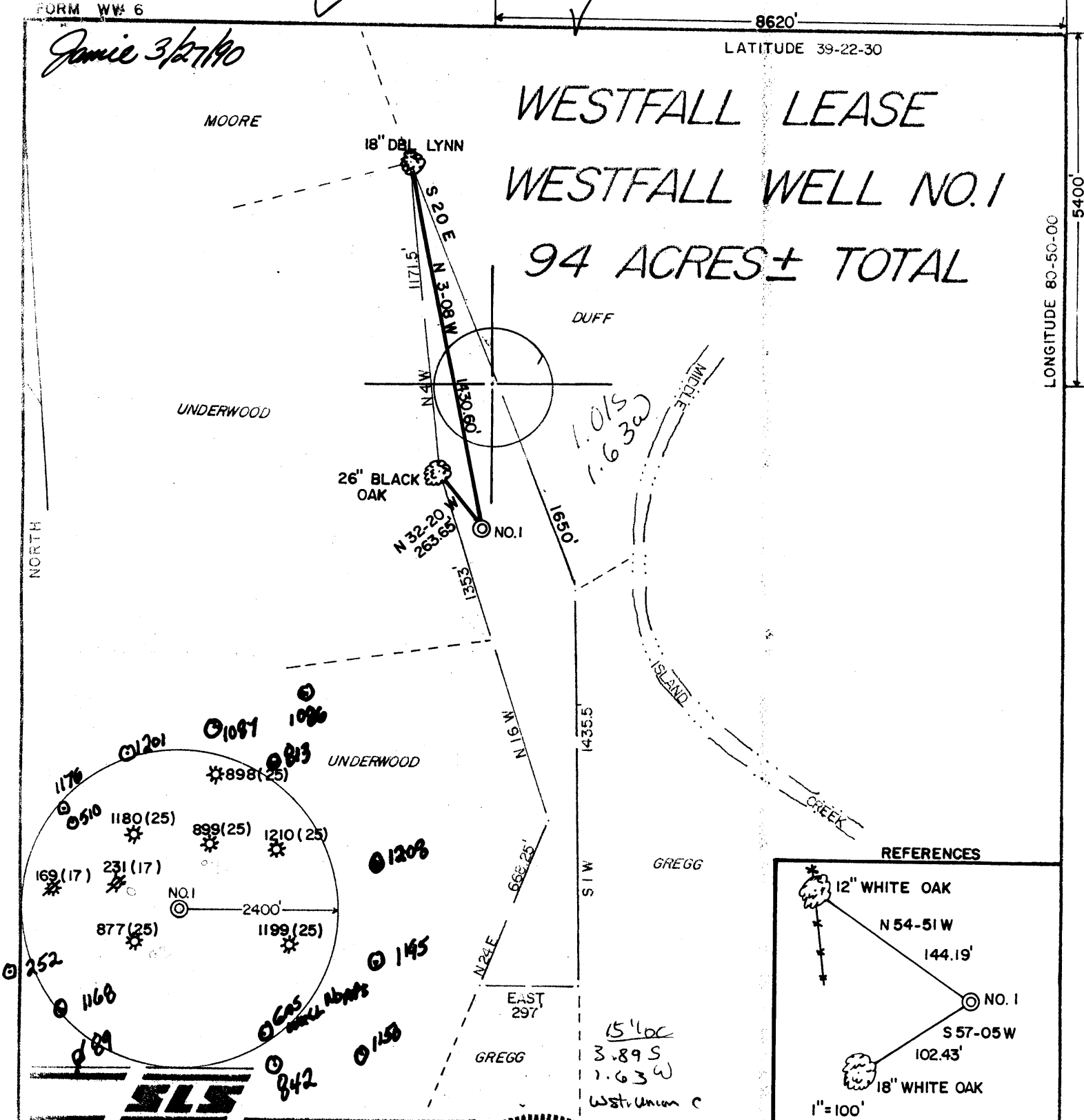


Janie 3/27/90

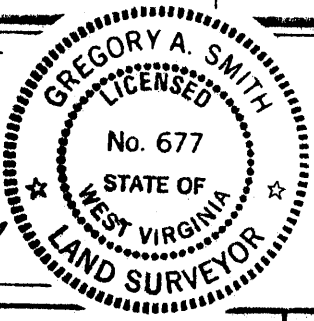
# WESTFALL LEASE WESTFALL WELL NO. 1 94 ACRES ± TOTAL

LONGITUDE 80-05-00



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. 577 Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE DECEMBER 11, 19 89  
 OPERATORS WELL NO. WESTFALL NO. 1  
 API WELL NO. 47 - 095 - 1384  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 1767 (28-66)  
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV. 1199' SCALE 1" = 500'

STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION

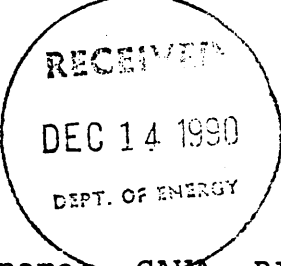


WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 971' WATERSHED MIDDLE ISLAND CREEK

DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE WEST UNION 75'  
 SURFACE OWNER KEITH J. & KATHLEEN H. DUFF AND LOIS DUFF ACREAGE 12  
 ROYALTY OWNER RALPH J. WESTFALL LEASE ACREAGE 12 OF 94

PROPOSED WORK: 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 5400'

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



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

Well Operator's Report of Well Work

Farm name: CAVA, RICHARD T. Operator Well No.: WESTFALL # 1

LOCATION: Elevation: 971.00 Quadrangle: WEST UNION

District: CENTERVILLE County: TYLER  
Latitude: 5400 Feet South of 39 Deg. 22Min. 30 Sec.  
Longitude 8620 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: 04/04/90  
Well work Commenced: 5-4-90  
Well work Completed: 6-9-90

Verbal Plugging  
Permission granted on: ---  
Rotary XX Cable --- Rig  
Total Depth (feet) ---  
Fresh water depths (ft) ---  
wet 100'

Salt water depths (ft) ---

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	137	127	127 sks
8 5/8	1840	1794	480 sks
4 1/2	5120	4970	450 sks

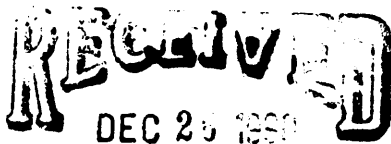
OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4848  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow --- Bbl/d  
Final open flow 840 MCF/d Final open flow --- Bbl/d  
Time of open flow between initial and final tests 4 Hours  
Static rock Pressure 1350 psig (surface pressure) after 48 Hours

Second producing formation Riley 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

Riley commingled with Benson

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: 12-12-90

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

DEC 28 1990

Fracturing-

Perforate Benson 4862 - 70 with 14 holes  
Frac with 350 sks sand, 411 treated fluid.

87,000 scf N<sub>2</sub>                      Avg rate = 234                      Avg psi = 2535

Perforate Riley                      4462 94 with 16 holes

Frac with 300 sks sand 364 bbls treated fluid

73,000 N<sub>2</sub>                      Avg rete = 202                      Avg psi = 2517

Sand	0	40	
Sh/sd	40	850	damp 100'
RR	850	900	
Sd/ah	900	1810	
Lime	1810	1875	
Sd	1875	1940	
Sh/sd	1940	5120	gas 2407' 2 <sup>1</sup> / <sub>10</sub> thru 2"

E log tops

Big Lime                      1834

Berea                      2372

Benson                      4848

**RECEIVED**  
DEC 25 1980

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

10337

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

- 1) Well Operator: ANVIL OIL CO., INC. 2275 (1) 670 <sup>0048</sup>
- 2) Operator's Well Number: WESTFALL WELL NO. 1 3) Elevation: 971'
- 4) Well type: (a) Oil  / or Gas  /  
(b) If Gas: Production  / Underground Storage  /  
Deep  / Shallow    
*Issued 4/4/90  
Expires 4/4/92*
- 5) Proposed Target Formation(s): Benson <sup>435</sup>
- 6) Proposed Total Depth: 5400' feet
- 7) Approximate fresh water strata depths: 120' *0320' 303'*
- 8) Approximate salt water depths: N/A
- 9) Approximate coal seam depths: N/A *Probable coal blown @ 246'*
- 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	Fill-up (cu. ft.)
<i>PPH 3/14/90</i> Conductor	11-3/4"			120'	120'	CTS
Fresh Water	8-5/8"			1850'	1850'	By Rule 38 CSR 18-11.3 <i>38CSR18-11.2.2</i>
Coal						
Intermediate						
Production	4-1/2"			5400'	5400'	By Rule 38 CSR 18-11.1
Tubing						
Liners						

PACKERS : Kind \_\_\_\_\_  
 Sizes \_\_\_\_\_  
 Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only

3443  
 #6  
 Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond \_\_\_\_\_  Agent  
 (Type)

**RECEIVED**  
MAR 19 1990

1) Date: 3-1-90  
2) Operator's well number  
Westfall #1  
3) API Well No: 47 - 095 - 1384  
State - County - Permit

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY  
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 Richard T. Cava  
Address 314 West 105th St. #3C  
New York, NY 10025  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Glen Robinson  
Address Route 1  
Mineral Wells, WV  
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 3631362

Subscribed and sworn before me this 16<sup>th</sup> day of March, 1990

[Signature] Notary Public  
My commission expires July 8, 1990