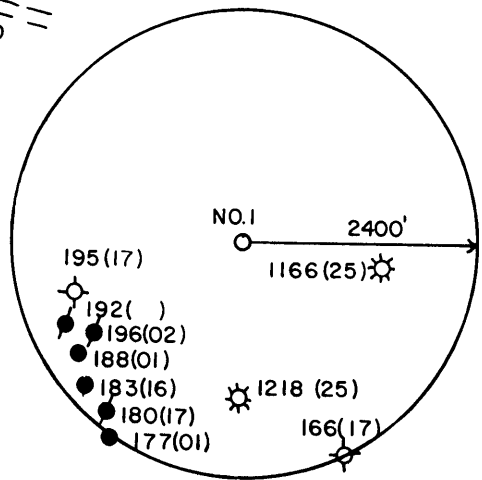
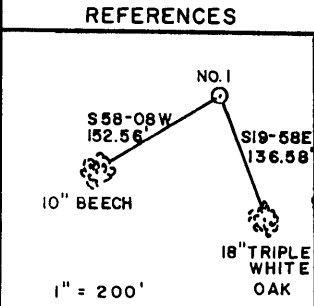
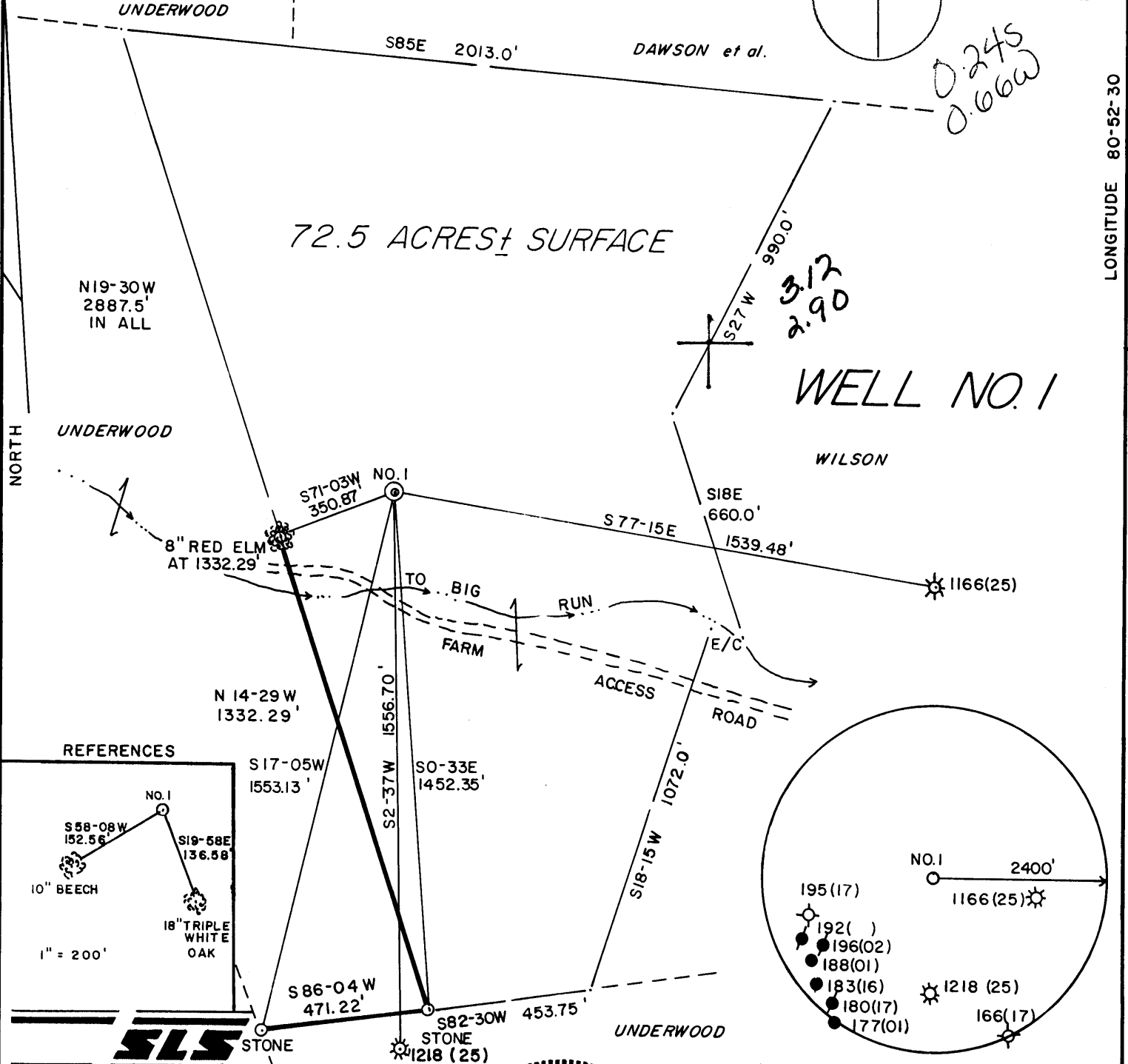
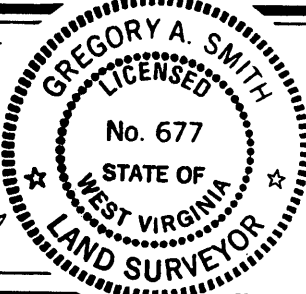


# UNDERWOOD LEASE 128.75 ACRES ±



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.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE NOVEMBER 5, 19 88  
 OPERATORS WELL NO. UNDERWOOD NO. 1  
 WVTYL000301  
 API WELL NO. 47 - 095 - 1293  
 STATE COUNTY PERMIT

L.L.S. Gregory A. Smith  
677

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 1945(26-17)  
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEV. = 1382' SCALE 1" = 400'

STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID WASTE IF  
 INJECTION  DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 957' WATERSHED BIG RUN West Union  
 DISTRICT CENTERVILLE 1 COUNTY TYLER QUADRANGLE PENNSBORO 7.5' 539  
 SURFACE OWNER RALPH J. UNDERWOOD et al. ACREAGE 72.5 133  
 ROYALTY OWNER RALPH J. UNDERWOOD et al. LEASE ACREAGE 72.5 OF 128.75 5  
 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 5050'

WELL OPERATOR EASTERN AMERICAN ENERGY CORP. DESIGNATED AGENT DONALD SWPCOF  
 ADDRESS BOX N GLENVILLE, WV 26351 ADDRESS BOX N GLENVILLE, WV 26351

Department of Energy  
 JUN 27 89  
 Office of Director  
 Oil and Gas Division

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

Well Operator's Report of Well Work

Farm name: UNDERWOOD, RALPH J. Operator Well No.: UNDERWOOD 1

LOCATION: Elevation: 957.00 Quadrangle: PENNSBORO

District: CENTERVILLE County: TYLER  
 Latitude: 1340 Feet South of 39 Deg. 22Min. 30 Sec.  
 Longitude 3530 Feet West of 80 Deg. 52 Min. 30 Sec.

Company: EASTERN AMERICAN ENERGY C  
 501 56TH ST.  
 CHARLESTON, WV 25304-0000

Agent: DONALD C. SUPCOE

Inspector: GLEN P. ROBINSON  
 Permit Issued: 04/11/89  
 Well work Commenced: 04/20/89  
 Well work Completed: 05/04/89

Verbal Plugging  
 Permission granted on: \_\_\_\_\_  
 Rotary  Cable \_\_\_\_\_ Rig  
 Total Depth (feet) 5110'  
 Fresh water depths (ft) 100', 550'

Salt water depths (ft) N/A

Is coal being mined in area (Y/N)? N  
 Coal Depths (ft): None

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11-3/4"	129'	129'	C.T.S.
8-5/8"	1107'	1107'	C.T.S.
4-1/2"	4951'	4951'	
1-1/2"	----	4843'	---

OPEN FLOW DATA

Producing formation Benson, Riley (Commingled) Pay zone depth (ft) 4875.5' to 4480'  
 Gas: Initial open flow 531 MCF/d Oil: Initial open flow --- Bbl/d  
 Final open flow 492 MCF/d Final open flow --- Bbl/d  
 Time of open flow between initial and final tests 15 Hours  
 Static rock Pressure 1200 psig (surface pressure) after 24 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.

Rich Heffelfinger  
 For: EASTERN AMERICAN ENERGY CORP.  
 Rich Heffelfinger  
 By: Vice President - Regional Operations  
 Date: June 16, 1989

JUN 30 1989

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

2-Stage Foam Frac

Stage 1: 8 holes (4875.5' to 4872.5') Breakdown @ 1800 psi, 60 Quality Foam, 25,000 lbs. 20/40 sand, 417,000 scf of N<sub>2</sub>

Stage 2: 12 holes (4510' to 4480') Breakdown @ 3150 psi, 75 Quality Foam, 26,500 lbs. 20/40 sand, 638,100 scf of N<sub>2</sub>

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fres and salt water, coal, oil and ga
Red Rock & Shale			0	50	
Sand			50	105	
Red Rock			105	145	Hole Damp @ 100'
Sandy Shale			145	175	
Sand			175	405	
Sand and Sandy Shale			405	1800	
Little Lime			1800	1819	Hole Wet @ 550' = 1/2" Water
Shale			1819	1837	Hole Wet @ 1490' = 1" Water
Big Lime			1837	1892	
Big Injun			1892	2045	
Sand & Sandy Shale			2045	3328	
Warren			3328	3381	
Sand & Shale			3381	4474	Gas Checks:
Riley			4474	4520	4863' - No Show
Sandy Shale			4520	4870	4956' - Gas Odor
Benson			4870	4879	T.D. - 18/10 thru 1" w/water
Sandy Shale			4879	T.D.	Collars - 16/10 thru 1" w/water

8508

(Attach separate sheets as necessary)



1) Date: April 3, 1989  
2) Operator's well number  
UNDERWOOD #1 WVTYL000301  
3) API Well No: 47 - 095 - 1293  
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 Ralph J. Underwood  
Address Rt. 2, Box 177  
Pennsboro, WV 26415
  - (b) Name Emery P. Underwood  
Address Rt. 4, Box 77  
Elizabeth, PA 15037
  - (c) Name Phillip Underwood  
Address 6210 Wild Oak  
Saginaw, MI 48603
- 5) (a) Coal Operator:  
Name N/A  
Address \_\_\_\_\_
- (b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- Name \_\_\_\_\_  
Address \_\_\_\_\_
- (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Glen P. Robinson  
Address Rt. 1 #6 Mt. Pleasant Est.  
Minerals Wells, WV 26150  
Telephone (304)- 489-9162

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  
XX Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

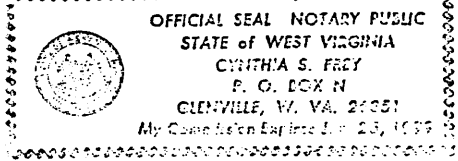
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 9 on the above named parties, by:

- \_\_\_\_\_ Personal Service (Affidavit attached)
- XX Certified Mail (Postmarked postal receipt attached) (1)
- \_\_\_\_\_ Publication (Notice of Publication attached) Surface & Inspector Hand Delivered

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 Eastern American Energy Corporation  
By: John M. Paletti  
Its: Designated Agent  
Address P. O. Box N  
Glenville, WV 26351  
Telephone 304/462/5781

Subscribed and sworn before me this 3rd day of March, 1989

My commission expires January 25, 1999 Notary Public