

DEPT. OF ENERGY

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

Well Operator's Report of Well Work

Farm name: SCHWARTZMAN, BEATRICE

Operator Well No.: BLAU/MAXWELL#20 W.B.

LOCATION:

Elevation: 991.00 Quadrangle: OXFORD

District: SOUTHWEST

County: DODDRIDGE

Latitude: 7040 Feet South of 39 Deg. 12Min. 30 Sec. Longitude 2200 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: EASTERN AMERICAN ENERGY C

P. O. BOX N

GLENVILLE, WV 26351-0000

Agent: DONALD C. SUPCOE

Inspector: MIKE UNDERWOOD Permit Issued: 03/07/90 Well work Commenced:

**05/**30/90 Well work Completed: 06/14/90

Verbal Plugging

Permission granted on:

Rotary X Cable Ric
Total Depth (feet) 5201' Fresh water depths (ft) 70'

Salt water depths (ft)

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

Casing	Used in	Left	Cement
Tubing	Drilling	in Well	Fill Up   Cu. Ft.
Size	 	 !	 
8-5/8"	1168.85'	1168.85'	C.T.S.
 	 	5068.70'	916
1-1/2"		4886.60'	
<b></b>   	   	' '	

### OPEN FLOW DATA

Riley (Commingled)

Producing formation Alexander/Benson/3rd Riley/ Pay zone depth (ft) 4975.5'-4207.5' Gas: Initial open flow 795 MCF/d Oil: Initial open flow N/A Final open flow 606 MCF/d Final open flow N/A Bb1/d Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 1010 psig (surface pressure) after 24 Hours

Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests Bb1/d Bbl/d 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: EASTERN AMERICAN ENERGY CORP.

Rich Heffelfinger, Vice President-Regional Operations Date: June 25, 1990

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

#### 3-Stage Foam Frac

- Stage 1: Alexander 13 holes (4975.5'-4909.5') Breakdown 1800 psi, 65 Quality foam, 20 lbs/1000 gals Gel, 60,000 lbs. 20/40 sand, 500 gals 15% HCl, 465,000 scf of N<sub>2</sub>
- Stage 2: Benson/3rd Riley: 12 holes (4637.5'-4554') Breakdown 1650 psi, 65 Quality foam, 20 lbs/1000 gals Gel, 30 lbs/1000 Gals Wac-9 in pad, 51,000 lbs 20/40 sand, 500 gals 15% HCl, 549,000 scf of N<sub>2</sub>
- Stage 3: Riley: 11 holes (4234.5'-4207.5') Breakdown 1500 psi, 65 Quality foam, 20 lbs/1000 gals Gel, 40 lbs/1000 gals Wac-9 in pad, 13,600 lbs 20/40 sand, 500 gals 15% HCl and 616,000 scf of  $\rm N_2$

#### WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Soil	0	5	
Red Rock and Shale	5	30	
Sand	30	70	
Sandy Shale	70	160	70' 1-1/2" stream water
Sand	160	240	555' 2" stream water
Sandy Shale	240	260	
Sand	260	340	
Sandy Shale	340	404	GAS CHECKS:
Shale and Red Rock	404	560	
Sand	560	710	1659' - No show
Sandy Shale	710	925	1751' - No show
Sand	925	960	1904' - 6/10 thru 2" w/water
Sandy Shale	960	13.30	2120' - 8/10 thru 2" w/water
Sand	1330	1355	2612' - 32/10 thru 2" w/water
Sand and Shale	1355	1642	2951' - 12/10 thru 2" w/water
Little Lime	1642	1649	3105' - 14/10 thru 2" w/water
Shale	1649	1666	3601' - 20/10 thru 2" w/water
Big Lime	1666	1728	4094' - 18/10 thru 2" w/water
Big Injun	1728	1804	4308' - 20/10 thru 2" w/water
Shale and Sandy Shale	1804	1958	4462* - 24/10 thru 2" w/water
Wier	1958	2077	4553' - 24/10 thru 2" w/water
Shale with Trace Sand	2077	2158	4769' - 30/10 thru 2" w/water
Berea	2158	2158	5014' - 24/10 thru 2" w/water
Shale with Minor Sand	2164	3032	1 Tub down - 8/10 thru 2" w/water
Warren	3032	3066	D.C 6/10 thru 2" w/water
Shale with Minor Sand	L :	4200	D.C 0/10 thin 2 w/water
	3066 4200	4200 4257	•
Riley	4257	4545	
Shale with Minor Sand	4237 4545	4545 4579	
3rd Riley		e i	·
Shale	4579	4633	
Benson	4633	4669	
Shale with Minor Sand	4669	4885	
Alexander	4885	4987	
shale with Minor Sand	4987	5201 T.D.	
	٠.		
		1	

017 3797 Issued 3/7/90 Expures 3/7/92

# DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS WELL WORK PERMIT APPLICATION

			Writh M		APPLICATIO	<u> </u>	
1)	Well Op	erator:_	Eastern ,	ع59 <u>American Ene</u>	rgy Corporati	on 14980	(7) 525
				Blauser/W.B.	Maxwell #20		levation: 991
			0il_/	WADODOO	<b>1120</b> s <u>X</u> X/		
		(b)	If Gas:	Productio	n <u>XX</u> / Underq	round Stora	αe /
				Dee	P/ 439	Shall	
5) I	Propose	d Target	Formation	n(s): Ale	xander		
6) E	Proposed Total Depth: 5075 feet						
7) 2	Approxi	mate fres	h water s	strata dep	ths: 104	', 741' , //4'	,264
8) <i>I</i>	Approxi	mate salt	water de	epths:	None	11081	163' *
9) 2							
10) [	oes lar	nd contai	n coal se	eams tribut	tary to act	ive mine? }	les/ No_XX_
				and complet			
12)							
			CASIN	IG AND TUB]	NG PROGRAM		
TYPE		S:	PECIFICAT	IONS	FOOTAGE II	NTERVALS	CEMENT
		Size	Grade	Weight	For	Left in	Fill-up
Conduc	tor	11 "		per ft.	drilling	well	(cu. ft.)
		11	F-25	37.5	30 <b>°</b>		C.T.S.
	Water	8-5/8"	J-55	20.0	1145'	1145'	38CSR18-11.3 38CSR18-11.2.
oal							
nterm	ediate						-
roduc	tion	4-1/2"	J-55	10.5	4990'	4990'	38CSR18-11.1
ubing		1-1/2"	H-40	2.75		1100	
iners						D.C.	TI VISIO
<u>ACKERS</u>	S: Kin					Sis FER	14 (22)
	Size Dep	es ths set _				D.AisiCit	2F.0% 8 0%
		Fo	r Divisor	n of Oil a	nd Gas Use	CEPA 2TIAE;	IT OF ENERGY
Fee(s) paid:   Well Work Permit   Reclamation Fund   WPCP							
Plat 1 WW-9 1 WW-2B 1 Bond Auth 1 Agent							
(Type)							

Page	1 of 9 11	) Date: <u>January 29, 1990</u>		
Form	WW2-A 280 FEB 1 100 2			
(09/8	37)	Blauser/W.B. Maxwell #20 - WVD0D001120		
File	Copy 8.04.01.01.01-1.042 3	) API Well No: 47 - <u>017</u> - <u>3797</u>		
	DEMARTMENT OF LINERGY	State - County - Permit		
		EST VIRGINIA		
		DIVISION OF OIL AND GAS		
	DEFINITION OF BREKGI,	DIVISION OF OIL AND GAS		
	NOTICE AND APPLICATION	N FOR A WELL WORK PERMIT		
		,		
4)	Surface Owner(s) to be served:			
	(a) Name Beatrice Schwartzman	Name None		
	Address 2520 30th Street, N.W. Washington, DC 20008	Address		
•	(b) Name	(b) Coal Owner(s) with Declaration		
	Address			
		NameAddress		
	(c) Name			
	Address	Name		
		Address		
<i>C</i> )	T-			
6)	Inspector <u>Mike Underwood</u> Address <u>Rt. 2, Box 135</u>			
	Salem, WV 26426	Name Address		
	Telephone (304) - 782-1043			
	TO THE PERSON(S) NAMED	ABOVE TAKE NOTICE THAT:		
<del></del>	Included is the lease or leases	or other continuing contract or		
CONTI	acts by which I hold the right	to extract oil and gas <u>OR</u>		
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 (Affidavi	t attached)		
	XX Certified Mail (Postmarked	postal receipt attached)		
Publication (Notice of Publication attached)				
	I have word and understand Observe			
to th	I have read and understand Chapte	ter 22B and 38 CSR 11-18, and I agree ermit issued under this application.		
	I certify under nenalty of law t	that I have personally examined and am		
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all				
attac	chments, and that based on my inc	quiry of those individuals immediately		
responsible for obtaining the information, I believe that the information				
is tr	ue, accurate, and complete.			
	I am aware that there are signif	ficant penalties for submitting false		
intor	mation, including the possibility	ty of fine and imprisonment.		
		Paletti ( Marie Regy Corporation		
		ignated Agent		
	Address P.	O. Box N		
		Glenville, WV 26351		
_ 1	Telephone _	(304) 462-5781		
Subsc	ribed and sworn before me this	30th day of January, 1990		
Mv cc	ommission expires	Notary Public		
,	July	- 7, 1776		