



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

DIVISION OF OIL & GAS

DEPT. OF ENERGY Operator's Report of Well Work

Farm name: LEGGETT, CARSON EUGENE Operator Well No.: BRITTON 3

LOCATION: Elevation: 1121.00 Quadrangle: OXFORD

District: WESTUNION County: DODDRIDGE Latitude: 5210 Feet South of 39 Deg. 15Min. 0 Sec. Longitude 7560 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: EASTERN AMERICAN ENERGY C

501 56TH ST.

CHARLESTON, WV 25304-0000

Agent: DONALD C. SUPCOE

Inspector: MIKE UNDERWOOD
Permit Issued: 04/27/89
Well work Commenced: 06/12/89
Well work Completed: 06/18/89

Verbal Plugging

Permission granted on:

Rotary X Cable Rig
Total Depth (feet) 5332'

Fresh water depths (ft) $\frac{78', 400', 1426'}{1435'}$, Salt water depths (ft) None

Is coal being mined in area (Y/N)?

Is coal being mined in area (Y/N)? N Coal Depths (ft): 1420'-1424'

Casing	Used in	Left	Cement Fill Up
Tubing	Drilling	in Well	Cu. Ft.
Size		document of the second of the	
11-3/4"	177.75'	177.75'	C.T.S.
8-5/8"	1587.60'	1587.60	C.T.S.
4-1/2"	5272.05'	5272.05	625
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OPEN FLOW DATA

Balltown, Speechley, Warren (Commingled)

Producing formation Alexander, Riley, Bradford, Pay zone depth (ft)^{5183'-3221'}
Gas: Initial open flow 2768 MCF/d Oil: Initial open flow N/A Bbl/d Final open flow 2398 MCF/d Final open flow N/A Bbl/d Time of open flow between initial and final tests 15 Hours Static rock Pressure 1450 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.

For: EASTERN AMERICAN ENERGY CORP.

By: Rich Heffelfinger, Vice President - Regional Operations

Date: September 13, 1989

FORM NR -35 (REVERSE)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 4 STAGE FOAM FRAC.

- STACE 1: Alexander: 14 holes (5183'-5139') Breakdown 1565 psi, 60 quality foam, 50,000 lbs. 20/40 sand, 500 gals 15% HCl, 514,000 scf of N₂
- STAGE 2: Riley/Bradford: 11 holes (4438.5'-4309') Breakdown 1570 psi, 75 quality foam, 30,000 lbs. 20/40 sand, 500 gals 15% HCl, 550,000 scf of N₂
- STAGE 3: Balltown: 11 holes (3799'-3744.5') Breakdown 1680 psi, 75 quality foam, 25,000 lbs. 20/40 sand, 500 gals 15% HCl, 514,000 ecf of N2 1000 sand, 25,000 lbs. 20/40 sand, 25/40 sand
- STAGE 4: Speechley/Warren: 12 holes (3383'-3221') Breakdown 3300 psi, 75 quality foam, 25,000 lbs. 20/40 sand 650 gals 28% HCl, 464,000 scf of N₂

WELL LOG

1			REMARKS
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	
Clay and File	0	15	· =
Shale	15	80	1/2" water @ 78'
Sand .	80	190	
Sandy Shale	190	2 1 5	Hole damp @ 400'
Sand	215	400	<u> </u>
Shale and Red Rock	400	530	1" water @ 1435'
Sand	530	558	
Shale and Red Rock	558	935	· ·
Sand	935	950	
Sand and Sandy Shale	950	1420	n.
Coal.	1420	1424	Character 1
Sand	1424	1590	GAS CHECKS:
Sand and Sandy Shale	1590	1817	
Lime	1817	1825	1856' - 24/10 thru 2" w/water
Shale and Sand	1825	1860	2815' - 20/10 thru 2'' w/water
Big Lime	1860	1934	3759' - 20/10 thru 2'' w/water
Sand and Shale	1934	1996	4407' - 12/10 thru 2'' w/water
Shale	19%	2155	4715' - 14/10 thru 2" w/water
Weir Sand	2155	2277	4932' - 16/10 thru 2'' w/water
Shale w/Trace of Sand	2277	3214	T.D 12/10 thru 2" w/water
Warren	3214	3285	
-Shale w/Trace of Sand	.3285	4290	California de la Califo
Riley	4290	- 4334	
Shale	4334	4417	No.
Lower Riley Sand	4417	4448	
Shale w/Trace of Siltstone	4448	4833	STATE OF THE PROPERTY OF THE P
Benson Sand	4833	4874	REGISTRA
Shale w/Trace of Sand	4874	5104	Name of the state
Alexander	5104	5196	VII.
Shale	5196	5331 T.D.	
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			611
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	Para Control C	1	· ·
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FCRM WW-2B

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

1)	Well	Ope	rator:	Eastern	American En	ergy Corporat	ion 14980	(8) 5-25
2)	Opera	ator	's Wel	l Number:_	BRITTON #3	WVD0D000903	3) El	evation: 1,121'
4)	Well	type	e: (a)	0i1 <u>/</u> /	or Ga:	5 <u>XX</u> /		
			(p)	If Gas:	Production Deep	n <u>XX</u> / Underg P/	round Storage Shallo	
5)	Propo	sed	Targe	t Formatio	n(s): Ale:	xander 43의		
6)	Propo	sed	Total	Depth:	5,350	feet	,	
7)	Appro	xima	ate fr	sh water	strata dep	ths: 145, 8	825 480°	1420 601
8) 9 963	1 WAR	00	//5-	-1115 2185-	epths:	7,	12 ' 1171' 121' 562'-56	3' 982'-987
10)	Does	land	l conta	ain coal s	eams tribut	ary to act	ive mine? Ye	es/ No_XX/
11)	Propo	sed	Well V	Vork: Dri	ll and comple	ete new well.		
12)				CASII	NG AND TUBI	NG PROGRAM		
TYPE		i		SPECIFICAT	TIONS	FOOTAGE I	TERVALS	CEMENT
			Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
<u>Condu</u>	ctor		11'	F-25	37.5			
Fresh	Wate	r	8 5/8'	J-55	20.0	1,221	1,22/2	C.T.S.
Coal								38CSR18-11.2 2
Inter	media	te						
Produ	ction		4 1/2"	J-55	10.5	5,275	5,275	38€SR18=11.1
<u>Tubin</u>	g		1 1/2"	н-40	2.75		11/25	W V IN
Liner	s						GG AP	R 12 1989
PACKE		Size					DIVISIOA DEPARTMI	OF OIL & GAS
1532					20 06 063 -			
The state of	Fee(s) pa	id: 1	hyzwell w	ork Permit	nd Gas Use	amation Fund	WPCP
LEMY!	Plat	Jan	WW-9	WW-	28 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	***************************************	Type)	Agent Agent

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DIVISION OF OIL & GAS 3) DEPARTMENT OF ENERGY

Date:	April 7, 1989				
Operator's well number					
BRITTON #3 - WVDOD000903					
API Well	No: 47 - 017	_	3714		
	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:	5) (a) Coal Operator:		
	(a) Name <u>Carson Eugene Leggett</u>	Name None		
	Address Rt. 1	Address		
	West Union, WV 26456			
	(b) Name	(b) Coal Owner(s) with Declaration		
	Address	Name		
		Address		
	(c) Name			
	Address	Name		
		Address		
6)	Inspector Mike Underwood	(c) Coal Lessee with Declaration		
- ,	Address Route 2, Box 135			
	Salem, WV 26426	Name		
	3alem, wv 20420	Address		
	Telephone (304)- 782-1043			
	TO THE PERSON(S) NAMED AB	OVE TAKE NOTICE THAT:		
	Included is the lease or leases or	other continuing contract or		
cont	racts by which I hold the right to	extract oil and das OR		
XX	Included is the information requir	ed by Chapter 22B Article 1		
Sect	ion 8(d) of the Code of West Virgin	in (see name 2)		
Jec C	T combite that an engine of west virgin	ia (see page 2)		
	i dertify that as required under C	hapter 22B of the West Virginia Code		
I na	ve served copies of this notice and	application, a location plat, and		
acco	mpanying documents pages 1 through	8 on the above named parties, by:		
	Personal Service (Affidavit a	ttached)		
		stal receipt attached) Surface Owner &		
	Publication (Notice of Public	ation attached) Inspector Hand-		
	rabifedcion (Motice of Public	Delivered		
	I have read and understand Chapter	22B and 38 CSR 11-18, and I agree		
CO C1	he terms and conditions of any perm	it issued under this application.		
	I certify under penalty of law tha	t I have personally examined and am		
fami.	liar with the information submitted	on this application form and all		
atta	chments, and that based on my inqui	ry of those individuals immediately		
respo	onsible for obtaining the informati	on. I believe that the information		
is t	rue, accurate, and complete.	only a positive dude due intoxudetou		
		ant penalties for submitting false		
info	rmation including the are signific	ant penalties for submitting raise		
THEOL	rmation, including the possibility	of fine and imprisonment.		
	. Well Operator	Eastern Amedican Energy Aproporation		
	By: <u>John M. Pa</u>	aletti John M. Jalla		
	Its: <u>Designated</u>	Agent //		
	Address <u>P.O. B</u>	Box N		
		lle, WV 26351		
	Telephone (304)			
Subso	cribed and sworn before me this 29	adday of March , 1989		
\	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	1307		
· · ·	- Jacobsons	Notary Public		
My commission expires July 2, 1996				
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