

WR-35 23-Sep-98 API # 47- 17-04021 F State of West Virginia
Division of Environmental Protection Section of Oil and Gas Well Operator's Report of Well Work SPIKER, SUIE ANN Operator Well No.: ASHLND/HOLLND 1 Farm name: LOCATION: Elevation: 1,244.00 Quadrangle: SMITHBURG County: DODDRIDGE District: NEW MILTON 13640 Feet South of 39 Deg. 17Min. 30 Sec. 10500 Feet West of 80 Deg. 42 Min. 30 Sec. Latitude: Longitude Company: EASTERN AMERICAN ENERGY C 501 56TH STREET Casing | Used in Left Cement CHARLESTON, WV 25304-0000 & Fill Up Tubing | Drilling in Well|Cu. Ft. Agent: JOHN PALETTI Size Inspector: MIKE UNDERWOOD 8 5/8" | 12/21/95 1371.05' 1371.05' | 335 sacks Permit Issued: Well work Commenced: 07/25/97 07/25/97 Well work Completed: Verbal Plugging 5336.55' 1820 Permission granted on: 12/21/95 Rotary Cable Total Depth (feet) Fresh water depths (ft) 38',

348' and 486'

Salt water depths (ft) None Is coal being mined in area (Y/N)? N Coal Depths (ft): _____ OPEN FLOW DATA Gordon Producing formation_ _Pay zone depth (/ft) Gas: Initial open flow 0 Final open flow --MCF/d Oil: Initial open flow -- MCF/d Final open flow _ Bb1/d Time of open flow between initial and final tests Hours Static rock Pressure ___ psig (surface pressure) after Hours Pay zone depth (ft) MCF/d Oil: Initial open flow Second producing formation_ Gas: Initial open flow_____ Bbl/d MCF/d Final open flow Bbl/d Final open flow_ Time of open flow between initial and final tests Hours Static rock Pressure___ psig (surface pressure) after

NOTE: ON BACK OF

LOG WHICH

THIS FORM PUT THE

IS A SYSTEMATIC DETAILED

INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

INTERVALS, FRACTURING OR STIMULATING,

1001F

FOLLOWING: 1). DETAILS OF PERFORATED

GEOLOGICAL RECORD OF ALL FORMATIONS,

For: EASTERN AMERICAN ENERGY CORP.

PHYSICAL CHANGE, ETC. 2). THE WELL

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: SPIKER, SUE ANN

Operator Well No.: ASHLND/HOLND #1

LOCATION: Elevation: 1,244.00 Quadrangle: SMITHBURG

District: NEW MILTON County: DODDRIDGE Latitude: 13640 Feet South of 39 Deg. 17Min. 30 Sec. Longitude 10500 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: EASTERN AMERICAN ENERGY C P. O. BOX N Casing | Used in | Left | Cement GLENVILLE, WV 26351-0000 & | Fill Up Tubing | Drilling | in Well Cu. Ft. Agent: DONALD C. SUPCOE Size Inspector: MIKE UNDERWOOD Permit Issued: 06/18/93 8-5/8" | 1371.05' | 1371.05' | 335 sxs Well work Commenced: 07/26/93 Well work Completed: 08/13/93 Verbal Plugging Permission granted on:
Rotary xy Cable Rig
Total Depth (feet) 5375' _____ 5336.55' 680 sxs Fresh water depths (ft) 51' Salt water depths (ft) None Is coal being mined in area (Y/N)?_N Coal Depths (ft): 5'-8'

OPEN FLOW DATA

& Riley (Commingled) Producing formation Alexander, Benson, 3rd Riley Pay zone depth (ft) 4110.5'

Gas: Initial open flow 934 MCF/d Oil: Initial open flow N/A Bbl/
Final open flow 799 MCF/d Final open flow N/A Bbl/
Time of open flow between initial and final tests 15 Hour 5238'-Static rock Pressure 1150 psig (surface pressure) after 24 Hour

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/ Bbl/ Hour Static rock Pressure_____psig (surface pressure) after ____ Hour

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATE INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WEL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS

INCLUDING	COAL	ENCOUNTERED	BY	THE WEL	LBORE.	1,000	.co or	ALL	run
Sign of the second	TML	F	or:	EASTERN	AMERICAN F	NERGY	CORP		<u> </u>

naled L. Nech Regional Drilling Mgr.

ASHLAND/HOLLAND #1 47-017-4021

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, EIC. 3 STAGE FRAC

Stage One

16 holes (5184.5'-5238'), fraced w/energized water (150 scf/bb1), 30 lbs Alexander: gel/1000 gals, 50,000 lbs of 20/40 sand, 500 gals of 15% HCL acid and

93,000 scf of N2.

Stage Two

Benson/3rd Riley: 15 holes (4806.5'-4902'), fraced w/energized water (150 scf/bbl), 301bs gel/1000 gals, 50,000 lbs of 20/40 sand, 500 gals of 15% HCL acid and

101,000 scf of N2.

Stage Three

Alexander Shale

15 holes (4110.5'-4143'), fraced w/energized water (150 scf/bbl), 30 lbs gel/1000 gals, 40,000 WELL 10X lbs of 20/40 sand, 500 gals of 15% HCL Riley:

acid and 74,0		105.0	1 20/40 sand, 500 gais of 15% HCL
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Clay and Shale	0	5 5	51' - 1/2" stream water
Coal	. 5	8	
Sand and Shale	8	80	
Sand, Shale, and Red Rock	80	488 .	Gas Checks
Sand and Shale	488	521	1853' - No Show
Sand, Shale and Red Rock	.521	1135	1979' - No Show
Sandy Shale	1135	1360	2170' - No Show
Sand	1360	1445	2170 - No Show
	- 10 m	100	2362! - 32/10 - 2" w/water
Black Shale	: 1445	1460	2552' - 32/10 - 2" w/water
Sand and Shale	1460	1832	2804' - 40/10 - 2" w/water
Little Lime	1832	1844	3150' - 38/10 - 2" w/water.
Sand . :	1844	1876	3464' - 38/10 - 2" w/water
			3907' - 38/10 - 2" w/water
Big Lime	1876	1946	4380' - 32/10 - 2" w/water
Keener	1946	1973	4507' - 32/10 - 2" w/water
Big Injun	1973	2027	4697' - 30/10 - 2" w/water
Shale	2027	2174	4853' - 30/10 - 2" w/water
Weir	217/	2220	5296' - 40/10 - 2" w/water
Shale	2174 2330	2330	5375' - 34/10 - 2" w/water
Berea	2388	2388 2394	DC - 32/10 - 2" w/water
Shale	2394	2600	
Dilate	2334	2000	
Gordon	2600	2624	
Shale and Sandy Shale	2624	3240	DF _ 424
Warren	3240	3290	
Shale and Sandy Shale	3290	4006	DE 1-439 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
**************************************		ianu pada Aladika	
Balltown	4006	4050	The state of the s
Shale and Sandy Shale	4050	4450	
Riley	4450	4476	
Shale	4476	4804	
			13"
3rd Riley	4804	4828	,13."
Shale	4828	4898	
Benson	4898	4904	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Shale	4904	5146	

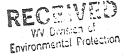
5146

5250

5250

5375

TD 5375



FORM WW-24N 0 2 93

1504ed 06/18/93
Expus 06/18/95

Permitting STATE OF WEST VIRGINIA CAPULA OG/18/9

WELL WORK PERMIT APPLICATION

17371	Well One	rator:	Eastern Am	259 merican Ener	gy Corporation	14980 (610
_							evation: 1244
				or 'Gas			
\$ 1					 xx/ Undergr	ound Storag	
	• .	(2)	L. Gas.		439	Shallo	
5)	Proposed	l Target E	ormation	(s):	Alexander		
6)	Proposed	l Total De	epth:	5380	feet		
7)	Approxim	nate fresi	water s	trata dept	hs: 38', 2	49°, 348°, 48	61
8)	Approxim	nate salt	water de	pths:	None		
9)	Approxim	mate coal	seam dep	ths:	None		
10)	Does lar	nd contain	n coal se	ams tribut	cary to acti	ve mine? Y	/es/ No_ <u>XX</u> /
11)	Proposed	Well Wo	rk: Drill	and complet	e new well.		
12)							
			CASIN	G AND TUB	ING PROGRAM		· .
TYPE		S	PECIFICAT	IONS	FOOTAGE IN	ITERVALS	CEMENT
•		Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Cond	luctor	11-3/4"	F-25	32.0	40 '	-	
	h Water	8-5/8''	F-25	20.0	1350'	1350	C.T.S. 38CSR18-11.3
							38CSR18-11.2.2
Coal		*					
	ermediate					52951	38CSR18-11.1
Prod	luction	4-1/2"	J-55	10.5			38C3K10-11.1
Tubi	ing						
Line * OI	ers PTIONAL:	Based upo	n coal or	excessive	e amounts of	waten heir	ng encountered
PACK	1220 0 1/20	nd zes				below the	gencountered 55/8 casing.
		pths set					

377

Fee(s) paid:

Well Work Perwit

Reclamation Fund

WPCF

Bond

For Divison of Oil and Gas Use Only

P	a	g	e		1		0	£		8	
F	0	r	m		W	W	2	¢##	A		•
	1	0	-	9	1)					

1) Date: May 28, 1993

2) Operator's well number

ASHLAND/HOLLAND #1

3) API Well No: 47 - 017 - 4021 State - County - Permit

STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4)	Surface O	wner(s) to be served:	5) (a) Coal Operator:
	(a) Name	Sue Ann Spiker	Name N/A
	Address _	Rt. 1 Box 161 S	Address
	(h) 17	Jane Lew, WV 26378	
	(b) Name Address		(b) Coal Owner(s) with Declaration
	Address _		NameN/A
	(c) Name		Address
	Address		Name
	*************		Address
			Add1688
6)	Inspector	Mike Underwood	(c) Coal Lessee with Declaration
	Address	Rt. 2Box 135	Name N/A
		Salem, WV 26426	Address
	Telephone	(304) - 782-1043	
		TO THE PERSON(S) NAME	D ABOVE TAKE NOTICE THAT:
	Included	is the lease or lease:	or other continuing contract or
conti	racts by w	hich I hold the right	to extract oil and gas OR
XX	Included .	is the information red	muired by Chapter 22B. Article 1.
Secti	ron 8(d) o:	f the Code of West Vi	ginia (see page 2)
	I certify	that as required unde	er Chapter 22B of the West Virginia Code
I hav	e served	copies of this notice	and application, a location plat, and
accon	mpanying do	ocuments pages 1 throu	igh 8 on the above named parties, by:
	Perso	onal Service (Affidavi	t attached)
	<u>XX</u> Cert	ified Mail (Postmarked	l postal receipt attached)
	Publ:	ication (Notice of Pub	plication attached)
	_	COME COME COME COME COME COME COME COME	
	I have rea	ad and understand Chap	oter 22B and 38 CSR 11-18, and I agree
to th	ne terms an	nd conditions of any p	permit issued under this application.
	I certify	under penalty of law	that I have personally examined and am
tamil	liar with	the information submit	ted on this application form and all
attac	chments, and	nd that based on my ir	quiry of those individuals immediately
respo	onsible for	cobtaining the inform	mation, I believe that the information
ls tr	ue, accura	ate, and complete.	
	I am aware	that there are signi	ficant penalties for submitting false
ruror	mation, in	icluding the possibili	ty of fine and imprisonment.
		Well Operat	Or Eastern American Energy Corporation
		By: John	M) fallso
			Designated Agent
			P.O. Box 820
			Glenville, WV 26351
Subso	ribod and	Telephone _	(304) 462-5781
Jubsc	Tiped and	sworn before me this	<u>28th</u> day of <u>May</u> , 19 93
			May 11 Ray
MV CC	mmission e	expiresFebruary 28,	Mauly V. Sea Notary Public
- _X CC		redruary 28,	CHICAGO SAL NOTARY 2 USLIC
			STATE OF WEST VINCINIA
			ACREAN 11. CAR

FORM	WABSEI	VED		DIT CIO			Page_3_of_9
	WY Divisio Environmental	ing in the second of the secon	STAT VIEONMEN	E OF WEST	VIRGINIA TION. OFFIC	E OF OIL	AND GAS 017 402
	DEC 05		WELL WO	RK PERMIT	APPLICATIO	N	Mac
	Well Ope	rator: Ea	stern Ameri	can Energy	Corporation	14980	6 61
333	Permitti Permitti	ng &Gamell N	Number: As	shland/Holla	and #1 Recompl	ete 3)	Elevation: 1244'
7 2 1	Well tvp	e: (a) (oil /	or Gas	5 /		Spaced 12/21/95
			Washington .	Production	 n/ Undergi		
	Transaci	Margar I		Deer (s):	<u> </u>	Sna	llow/
<i>a</i> 3							
6)				inal 5380			- B
7)					:hs: 38', 249'	, 348", 486) v
8)	Approxim	ate salt	water de	pths:	None		
9)	Approxim	ate coal	seam dep	ths:	None		
10)	Does lan	d contair	n coal sea	ams tribu	tary to act:	ive mine?	Yes/ No_X_/
11)	Proposed	l Well Wo	rk: Set te	mporary plu- production	g. Frac Gordo	on Comming	le with existing
12)			-				
			CASIN	G AND TUB	ING PROGRAM		
TYPE		<u>S</u>	PECIFICAT	IONS	FOOTAGE I	NTERVALS	CEMENT
		Size	PECIFICAT Grade	Weight per ft.	For	Left in well	
enable condition of the			and a finish that Condeted by constructing and the page 12 state 11 state 11 state 12 state 11 state 11 state 1	Weight	For	Left i	n Fill-up
Cond	uctor		and a finish that Condeted by constructing and the page 12 state 11 state 11 state 12 state 11 state 11 state 1	Weight	For	Left i	r Fill-up (cu. ft.)
Cond	uctor h Water	Size	Grade	Weight per ft.	For drilling	Left in well	n Fill-up (cu. ft.)
Cond Fres Coal	uctor h Water	Size	Grade	Weight per ft.	For drilling	Left in well	r Fill-up (cu. ft.)
Cond Fres Coal	uctor h Water rmediate	Size 8-5/8"	Grade F-25	Weight per ft.	For drilling	Left in well	CTS 335 Sacks 38CSR18-11.2.2 Cement top 1820
Cond Fres Coal Inte	uctor h Water rmediate uction	Size	Grade	Weight per ft.	For drilling	Left in well	CTS 335 Sacks 38CSR18-11.2.2
Cond Fres Coal	uctor h Water rmediate uction	Size 8-5/8"	Grade F-25	Weight per ft.	For drilling	Left in well	CTS 335 Sacks 38CSR18-11.2.2 Cement top 1820
Cond Fres Coal Inte	uctor h Water rmediate uction	Size 8-5/8"	Grade F-25	Weight per ft.	For drilling	Left in well	CTS 335 Sacks 38CSR18-11.2.2 Cement top 1820
Cond Fres Coal Inte Prod Tubi	uctor h Water rmediate uction ng rs	8-5/8" 4-1/2"	Grade F-25	Weight per ft.	For drilling	Left in well	CTS 335 Sacks 38CSR18-11.2.2 Cement top 1820
Cond Fres Coal Inte Prod Tubi	uctor h Water rmediate uction ng rs ERS : Kin	Size 8-5/8" 4-1/2"	Grade F-25	Weight per ft.	For drilling	Left in well	CTS 335 Sacks 38CSR18-11.2.2 Cement top 1820
Cond Fres Coal Inte Prod Tubi	uctor h Water rmediate uction ng rs ERS : Kin	Size 8-5/8" 4-1/2" and zes oths set	Grade F-25	Weight per ft.	For drilling	Left in well 1371.05'	CTS 335 Sacks 38CSR18-11.2.2 Cement top 1820
Cond Fres Coal Inte Prod Tubi	uctor h Water rmediate uction ng rs ERS : Kir	8-5/8" 4-1/2" add zes ths set	Grade F-25 J-55 For Office	Weight per ft.	For drilling 1371.05'	Left in well 1371.05'	CTS 335 Sacks 38CSR18-11.2.2 Cement top 1820 from bond log.
Cond Fres Coal Inte Prod Tubi	uctor h Water rmediate uction ng rs ERS : Kin	8-5/8" 4-1/2" add zes ths set	Grade F-25 J-55 For Office	Weight per ft. 20.0 10.5 cof Oil attack Permi	For drilling 1371.05'	Left in well 1371.05' 5336.55	CTS 335 Sacks 38CSR18-11.2.2 Cement top 1820 from bond log.

raye	T OT -2	•		2)	Operator					
(6/0/	PECEIVE C. W. Division of Environmental Prote			2)						7
(0/94	Takinivision of			3)	Ashland/Ho API Well	Mand	#1_Re	complete	2	
rire	Environmental Prote	ection		3)	API WEII	NO:			- 40	21-F
							State	County		Permit
	DEC 0 5 19	195			·					
		RIVIE OF			BUREAU OF			ent		
	Permitting	DIVI	SION OF E	ENVIRON	MENTAL PRO)TECT:	ION			
			OFFIC	e of oi	L AND GAS					
	Office of Oil &	Gas								
		NOTICE A	ADDITC	ATTON F	OR A WELL	WORK	DEDM	יחידי		
				<u> </u>	<u> </u>			and the same of th		
4.5	G	· · · · · · · · · · · · · · · · · · ·			5) (a) 0	1 0				
4)	Surrace C	wner(s) t	o pe serv	ea:						•
	(a) Name	Sue Ann Sp. Rt. 1 Box	ıker		Name	N/A				
	Address _	Rt. 1 Box	161 S.		Address					
		Jane Lew,	√V 26378						*-	
	(b) Name				(b) Coal	Owne	r(s)	with D	eclar	ation
	Àddress				Name					
					Address	14/11	····			
	(a) Nome				11002 000					
	(C) Name				NT					
~	Address _		·		Name					
				·	Address					
6)	Inspector	Mike Under	wood :		(c) Coal	Less	ee wi	th Dec	:larat	ion
	Address	Rt. 2 Box	135		Name	N/A				
		Salem, WV			Address					
	Telephone	≥ (304)-								
	10102110111				***************************************			,	*******	
I ha	I certify ive served impanying of Personal Certify Certify I	copies o documents sonal Serv tified Mai	required f this no pages 1 trice (Affi	under otice a chrough davit a orked po	Chapter 2: nd applica 9 on th attached) ostal rece	ation e abo	, a l ove na attach	ocatio amed pa	n pla	t, and
	Pub.	lication (Notice of	Public	cation att	ache	1)			
to t	he terms	and condit	ions of a	any peri	r 22-6 and mit issued at I have	l unde	er th:	is appl	licati	lon.
atta	liar with chments,	the info	rmation so	submitt my inqu	ed on thi liry of th tion, I be	s ap	plica [:] indiv	tion f iduals	orm a	nd all liately
is t	rue, accu	rate, and	complete.	•						
					icant pen	altie	s for	submi	ittina	false
info					of fine a					
	งหมายเลยเลยเกร	_			Eastern Am					
.001004	012a.		By:	Om	(Sall Har			<u> </u>		
The State of M. W.	Co. 10.	37 P 7 1 W	Its:	107m Tel	Docionation	1 7~			<u></u>	
130	CHANDRA	 한 최고 교육 보는 그는 그를 보는 경우를 보고 있다. 			Designated		<u> </u>			
	2 (a) 1/2	in desirence de la companya de la co	Address	š	P.O. Box 8					
By Walk St	- 1 . S	nys but the S		· "n	Glenville,		26351			
	ร <i>ากกากกากกากการการก</i> า	anaanskynsons	Telepho		(304) 462-					
		d sworn, be	efore me	this 4	th/day of	Decem	ber			, 19 <u>95</u>
		(Ma	ndra Z	700	5 Rinne	12		N	otary	Public
Мус	commission	expires	October 10	, 2000	,					