DATE: 6/2/2 API: 47.097-03747 HECEIVED Office of Oil & Ga

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

JUL 3 0 2012

		W	ell Operator	s Repo	rt of We	ell Work		WV De	partment
Farm Nam	e: Ha	artzel Marp	le	Oper	ator We	ell No	En	sines7487 e	orted30 rate
LOCATIO	N: Elevation: 1448.15'				Quadrangle:				
	District:	Wa	rren		С	ounty: _		Upshu	ır
	Latitude:	2990'	Feet S. of	39	_ Deg.	05 N	/lin.	00 S	ec.
	Longitude:	9450'	Feet W. of	80	_Deg.	15N	/lin.	<u>00</u> s	Sec.
Company:	Devonian C	Sas Produc	tion,Inc.	····	_				
			1	Casii	na &	Used	lin 🏻		Cement fill
Address:	PO Box 90	7		Tub		Drilli	11	Left in We	up Cu. Ft.
	Jane Lew,	·		9 5		30		conductor	
				7		113		1136'	to surface
Agent:		Jo	hn Haskins	4 1		110	-	5226'	200 sks
Inspector:			Bill Hatfield	<u> </u>		-			
Date Perm			07/12/10						1
	Work Comn	nenced:	11/12/10						1
	Work Comp		12/03/10						1
Verbal Plu	gging:			-			1		1
	ission Gran	ted on:							1
Rotary X	Cable	Rig		**			1		1
Total Dept	th (ft):		5260'	*****					1
	ter Depth (ft)):	n/a						
							1		
Salt Wate	r Depth (ft):		NA						
		the area (Y	′N)?	N	_				
	ng mined in Depths (ft):	n/a							····
Coal	_	n/a	<u> </u>						
Coal	Depths (ft):		Bradfe	ord		Pav zon	e depti	ı (ft)	3909'
Coal	Depths (ft):		Bradfo Bens		_	Pay zon	e depti	ı (ft)	3909' 4725'
Coal	Depths (ft):		Bens	on	_ _	Pay zon	e depti	n (ft)	4725'
Coal	Depths (ft):			on	- -	Pay zon	e depti	n (ft)	
Coal	Depths (ft):		Bens	on	- - -	Pay zon	e depti	n (ft) 	4725'
Coal	Depths (ft):		Bens	on	- - - -	Pay zon	e depti	n (ft)	4725'
Coal	Depths (ft): OW DATA Producing	formations	Bens Elk	on	- - - -		·		4725' 5111'
Coal	Depths (ft): OW DATA Producing	formations	Bens Elk odor	on Mcf/d. (Oil: Initi	al open	flow _		4725' 5111'
Coal	Depths (ft): OW DATA Producing Gas: Initial	formations I open flow I open flow	Bens Elk odor	Mcf/d. (flow flow		4725' 5111'

Signed: Am Makeny

Date: (1/12/11_

record of all formations, including coal encountered by the wellbore.

HYDRAULIC FRACTURING DETAILS

STAGE	FORMATION	PERFORATIONS	SAND
		# of shots	20/40
1st Stage	Elk	12	40,000
2nd Stage	Benson	12	40,000
3rd Stage	Bradford	9	30,000

DRILLERS LOG

DRILLERS LOG					
FORMATION	FROM	ТО			
Fill	0	15			
sand & shale	15	225			
red rock & shale	225	577			
sand & shale	577	1,115			
red rock & shale	1,115	1,325			
Little Lime	1,325	1,457			
red rock	1,457	1,840			
Big Lime	1,840	2,040			
Injun	2,040	2,050			
sand & shale	2,050	2,670			
Fifth Sand	2,670	2,750			
Bayard	2,750	2,810			
sand & shale	2,810	3,909			
Bradford	3,909	3,960			
sand & shale	3,960	4,725			
Benson	4,725	4,730			
sand & shale	4,730	5,110			
Elk	5,110	TD			

ELECTRIC LOG

FORMATION	DEPTH
Big Lime	1,840
Big Injun	2,050
Fifth Sand	2,670
Bayard	2,750
Bradford	3,905
Benson	4,700
Eik	5,090