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## State of West Virginia Department of Environmental Protection - Office of Oil and Gas Well Operator's Report of Well Work

Received

DEC 2 1 2015

Re-work				Office of Oil and Ga WV Dept. of Environmental I
API 47 - 033 - 0493	<del></del>	ISON	District TEN MILE	
Quad WOLF SUMMIT 7.5'		RPENTER, W.B.	_ Field/Pool Name	
Farm name JUNKINS, EARL			_ Well Number 100	
Operator (as registered with the				<del></del>
Address 5260 DuPONT RO	AD City P/	ARKERSBURG	State WV	Zip 26101
As Drilled location NAD 83/ Top hole Landing Point of Curv Bottom Hole	Northing 4.348,068 M Northing	Ea	sting 542,682 M	
Elevation (ft) 1,428'	GL Type of Well	□New <b>≜</b> Existing	Type of Report	□Interim BFinal
Permit Type Deviated	□ Horizontal □ Horizo	ontal 6A 🛔 Vertical	Depth Type	□ Deep ■ Shallow
Type of Operation   Convert	□ Deepen □ Drill	□ Plug Back □ Red	rilling	□ Stimulate
Well Type   Brine Disposal	□ CBM □ Gas □ Oil ■ S	econdary Recovery	Solution Mining 🗆 St	orage 🗆 Other
Drilled with	B Air □ Mud BFresh W		ehole BAir □Mud	■ Fresh Water □ Brine
Date permit issued 10/17	/14 Date drilling com	nmenced N/A	Date drilling	ceased N/A
Date completion activities bega	44/40/44		tivities ceased	11/20/14
Verbal plugging (Y/N) N		ed	Granted by	· · · · · · · · · · · · · · · · · · ·
Please note: Operator is require	d to submit a plugging appli	cation within 5 days of	verbal permission to p	lug
Freshwater depth(s) ft	None	Open mine(s) (Y/N)	depths	N
Salt water depth(s) ft	None	Void(s) encountered	(Y/N) depths	N
Coal depth(s) ft	N/A	Cavern(s) encounter	ed (Y/N) depths	N
<b>TPPRO</b>	VED	<del>.</del>		Reviewed by:
NATE CARLINGAL	am aa ta			07/08/201

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API 47- 033	04930	Farm n	ame_JUNKINS	S, EARL &	BELVA	We!	ll number_10	00	
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)		ment circulate (Y/N)
Conductor	12 1/4"	11 5/8"	30'	Used		LS			Sand In
Surface	8 3/4"	7*	740	New		LS			Existing
Coal						ĺ			
Intermediate 1									
Intermediate 2									
Intermediate 3									
Production	6 1/4"	4 1/2"	3252.8'	New	Ι.	J-55			Existing
Tubing		,						+	
Packer type and o	lepth set	1		<b>!</b>	<u></u>			ł	
Comment Details									
CEMENT DATA Conductor	Class/Type of Cement	Numbe of Sack			Yield t³/sks)	Volume (ft.²)	Cen Top (		WOC (hrs)
Surface	Reg Neat	185	15.6	;	1.18	218	Exis	ting	8
Coal									
Intermediate 1									
Intermediate 2									
Intermediate 3									<u> </u>
Production	50:50 Pozmi	x 150	14.2	<u> </u>	1.27	186	Exis	ting	8
Tubing									
Drillers TD (fi Deepest forma Plug back pro Kick off depth	ation penetrated ocedure <u>WA</u>	Fifth Sand		Loggers T Plug back		A			
Check all wire		□ caliper □ neutron	□ density □ resistivity	□ deviat	ed/directi a ray		nduction emperature	□soni	c
Well cored C	Yes B No	Convention	nal Sidev	vall	w	ere cuttings	collected (	⊐Yes ı	■ No
	HE CENTRALI		NT USED FOI	R EACH CA	ASING ST	TRING			
							Re	cei	ved
WAS WELL (	COMPLETED A	S SHOT HOLE	□ Yes ■	No DE	ETAILS		DEC	2 1	2015
WAS WELL (	COMPLETED C	PEN HOLE?	□ Yes ■ No	DETA	AILS _			of Oil an	d Gas ental Protection
WERE TRAC	ERS USED 🛚	Yes  No	TYPE OF TR	RACER(S) U	JSED				

API 47- 033 - 04930

Farm name\_JUNKINS, EARL & BELVA Well number\_100

## PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	Existing	3112'	3121'	72	Fifth Sand

Please insert additional pages as applicable.

## STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	11/20/14	10	1786	2410	2097	15,000	231	
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						477	P Dept. or an	
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Please insert additional pages as applicable.

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API 47- 033	- 04930		Farm	name_JUNK	NS, EARL	. & BEL'	VA	Well	number_	100	
PRODUCING	FORMA1	ION(S	)	DEPTHS							
Fifth Sand				3111'- 3122'	TVD			MD			
				<u> </u>	14D			IVIL			
			<del></del>		<del></del>						
	···		<del></del>		<u>-</u>						
Please insert ad	lditional p	ages as	applicable.		<u>-</u>		<del></del> _				
GAS TEST	🗆 Build u	ip ol	Drawdown	□ Open Flow	v	OIL TE	ST 🗆 F	Flow (	⊃ Pump		
SHUT-IN PRE	SSURE	Surfa	се	psi Bot	tom Hole_		_psi	DURA	TION O	F TES	ST hrs
OPEN FLOW	Gas		Oil	NGL		Water		GASI	мEASUI	RED I	ВY
		mcfp	d	bpd	bpd		_ bpd	Esti	mated	□ Ori	fice Dilot
LITHOLOGY/	TOP		BOTTOM DEDTH BLET	TOP	BOTTO		י ייינומטי	ארטע דיי	DE AND	iECOP	D OUANITITY AND
FORMATION	DEPTH I		DEPTH IN FT TVD	DEPTH IN FI MD	MD MD						'D QUANTITYAND INE, OIL, GAS, H₂S, ETC)
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				<del> </del>					VAV D	Offic ent of	Environmental Protection
									WV D	cpt. o.	
Please insert ad	ditional pa	iges as	applicable.	<u> </u>	- A	I					
Drilling Contra	ctor										
Drilling Contract Address				Cit	······································			State		7in	
							•	_ 5.4.0		_ <i>2</i> .p	
Logging Compa	any			<del> </del>	<del></del>						
Address				Cit	y			_ State		_ Zip	
Cementing Con	ากลทบ										
Address								State		Zin	
Stimulating Cor					7			_	Οh		42704
				City	Zanesville			_ State	Un	_Zip	43701
Please insert add	uitional pa	iges as	applicable.								
Completed by	Roger-He	dman	11.			Tele	ephone	304-420	-1107		
Completed by Signature	11/1	~ /	Weds	Title	Operations Ma	anager			Date 12/	17/15	
7	10										

Prepared for: H G Energy



Prepared by:
Producers Service Corp
Jason Stanbery
109 S. Graham St.
Zancsville, OH 43702

		740-454-62	253
INVOICE #:	17190		
WELL NAME:	WB Carpenter 100		
STATE & COUNTY:	WV/ Harrison		
TOWNSHIP/FIELD:	Wolf Summit		
DATE of SERVICE:	11/20/2014		
CUSTOMER PO#			

Description	Notes	Amount	Units	Unit Cost	Total Cost
FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS		1	EA	4	
BLENDER CHARGE 0-10 BPM		1	EA		
MILEAGE CHARGE PER UNIT ONE WAY	2 Units @ 70 Miles	140	ML		
IC ACID 15%		500	GAL		
PRO HIB II		0.5	GAL		
ACID DELIVERY		2	HR		
PRO CLA LOK (KCL SUBSTITUTE)		20	GAL		
PRO NE-21		10	GAL		
PRO GEL 4		250	LB		
BUFFERI		50	LB		
BUFFER II		50	LB		
BIO CLEAR 750		1	LB		
AP BREAKER		22	LB		
BXL-A		15	GAL		
BXL-10C		15	GAL	1	
SAND 20/40 OTTAWA		150	CWT		
SAND DELIVERY / TON MILES		525			
DATA VAN		1	STAGE		

Customer Approval:

DEC 2 1 2015

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