Page	of
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02/03/2017

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

API <u>47</u> - 033 _ 05620	County Harriso	on	Distri	_{ct} Sardis		
Quad Wolf Summit			Field	Pool Name		
Farm name Jones, John R. & Catl	nerine W.		Well	Number Zirk	Unit 1H	
Operator (as registered with the OOG	Antero Resource	s Corportion				
Address 1615 Wynkoop St.	City De		S	tate CO	Zip _	80202
	Attach an as-dril Northing Northing Northing		Easting _ Easting _		rilled plat was	
Elevation (ft) 1176' GL	Type of Well	■New □ Ex	isting 7	Type of Report	□Interim	■Final
Permit Type Deviated H	lorizontal 🛔 Horizo	ontal 6A 🗆 🗅	Vertical	Depth Type	□ Deep	Shallow
Type of Operation □ Convert □ I	Deepen 📱 Drill	□ Plug Back	□ Redrilling	□ Rework	□ Stimula	te
Well Type □ Brine Disposal □ CBI	M. ■ Gas. ■ Oil □ Se	econdary Recov	very 🗆 Solution	n Mining 🗆 Sto	orage □ O	ther
Type of Completion □ Single □ Mu	ltiple Fluids Prod	uced □ Brine	⊓Gas ⊓ N	lGL □ Oil	□ Other	
Drilled with □ Cable ■ Rotary	1101001100			.02 201		
Drilling Media Surface hole ■ Ai Production hole □ Air □ Mud Mud Type(s) and Additive(s) Air- Foam & 4% KCL			rmediate hole	□ Air □ Mud	□ Fresh V	Vater □ Brine
Mud- Polymer						
Date permit issued 6/1/2012 Date completion activities began Verbal plugging (Y/N)Y	Date drilling com N/A - Well P&A Date permission grant	Date comp	i/3/2012 letion activities 2012 G	Date drilling of ceased N/A	A - Well P	
				Omea of (Dil and (วิลร
Please note: Operator is required to s	ubmit a plugging appli	cation within 5	days of verbal	permission to p	I^{\log} 2015	
	est 230'			WVD	No	
Salt water depth(s) ft	N/A	Void(s) ence	s) (Y/N) depths ountered (Y/N) acountered (Y/N	Vigamenta	I Project	if
Coal depth(s) ft Pad constructed on re	claimed PGH coal bench	Cavern(s) e	acountered (Y/N	N) depths	No let	Jion
Is coal being mined in area (Y/N)	No	AP	PRO		Ver SE	wed by:
		NAME: DATE:	Jan W 1/5/4	Jaral 7		02/03/20

WR-35 Rev. 8/23/13								Page of
API 47- 033	05620		Farm name_Jo	ones, John F	R. & Catherine	∍ W _{Well 1}	number_Zirl	k Unit 1H
CASING STRINGS	Hole Size	Casin Size			w or Grade sed wt/ft		Basket epth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24"	20)" 4	10' N	lew 94#	# H-40	N/A	Y
Surface								
Coal								
Intermediate 1								
Intermediate 2								
Intermediate 3								
Production								
Tubing		-						
Packer type and de	pth set	N/A						
Comment Details Cement Plug - From					lugged under continuous o			/VDEP Office of Oil & Gas on 6/6/2012.
CEMENT DATA	Class/Type of Cement		Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Ceme Top (N	= :
Conductor	Class A	530 sx		15.6	1.18	38	0'	8 Hrs.
Surface								
Coal								
Intermediate 1								
Intermediate 2								
Intermediate 3								
Production								
Tubing								
Drillers TD (ft					ggers TD (ft) N/			
Plug back pro	-				5 ****			
Kick off depth	(ft) <u>N/A</u>				-			
Check all wire	ine logs run		-	•	deviated/direct		duction mperature	□sonic
Well cored	Yes • No	_ C	Conventional	□ Sidewall	W	ere cuttings	collected [Yes 🗆 No
Conductor- 0				SED FOR EA	CH CASING S	TRING	DEAR	V / Down
Surface- 1 above guid	e shoe, 1 aboce insert	float, 1 every	4th joint to surface			CAR:	RECE	VEU
						OIII	CE OF OR	and Gas
WAS WELL O	COMPLETED .	AS SHO	THOLE =	Yes ■ No	DETAILS		DEC 0 1	2015

WV Department of Was well completed open Hole? □ Yes ■ No Details Environmental Protection

WERE TRACERS USED □ Yes ■ No TYPE OF TRACER(S) USED ____

WR-	35
Rev.	8/23/13

API	47- 033	05620	Farm name_Jones, Joh	n R. & Catherine W. Well	Zirk Unit 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
		*N/A - WEI	L PLUG	GED & A	BANDONED

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	N/A - WEL	L PLUG	GED &	ABAND	ОЙЕР	
						fice of Oil	1	_
						DEC 0 1	2015	
						WV Depar		
					Env	ronmenta	Protecti	on

Please insert additional pages as applicable.

WR-35								Page of
Rev. 8/23/13	0EG00	_	lanas lab	D 0 0-41	14/		Ab 11 2	41.4
API 47- 033	03620	Farm	name Jones, Jor	n R. & Cathen	ne vv.	Well number	Ahouse Unit	1H
PRODUCING	FORMATION(S	<u>s)</u>	<u>DEPTHS</u>					
N/A				TVD		MD		
			-			1,12		
				_				
Please insert ac	lditional pages a	s applicable.						
GAS TEST	□ Build up □	Drawdown	□ Open Flow	OI	LTEST DI	Flow 🗆 Pump		
SHUT-IN PRE	SSURE Surfa	ace	_psi Botto	m Hole	psi	DURATION O	F TEST	hrs
OPEN FLOW	Gas mcf	Oil pd <u></u>	NGL bpd <u></u>	W bpd		GAS MEASU		□ Pilot
LITHOLOGY/ FORMATION	TOP DEPTH IN FT	BOTTOM DEPTH IN FT	TOP DEPTH IN FT	BOTTOM DEPTH IN ET	DESCRIBE	ROCK TYPE AND	RECORD OUA	NTITVAND
	NAME TVD	TVD	MD	MD		UID (FRESHWAT	_	
Siltstone	0 0'	276'	0	276'				
Silistorie	0	210		270				
Please insert ad	ditional pages a	s applicable.						
	ctor Hall Drilling							
Address 981 Wa	ashington Avenue		City	Ellenboro		State _WV	Zip _26346	3
Logging Comp	any N/A							
Address			City			State	Zip	
Cementing Cor	npany Allied Oil	& Gas Service:	s, LLC			CEIVE	Digas	
Address 1036 E	ast Main Street		City	Bridgeport		State RECEVE fice of Oil a State O 1	n(kip 26330)
Stimulating Co	mpany N/A				Of	fice o'	2015	
Address	ditional nages a	s applicable	City			_ State C.U.	Zip	

Title Permitting Supervisor

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Completed by Ashlie Steele

Attach copy of FRACFOCUS Registry