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WR-35 Rev. 8/23/13 pm

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

API 47 - 033 - 0	05702 Cou	nty Harrison	Dis	trict Tenmile		
Quad Salem		Name Hubert		ld/Pool Name		
Farm name Hubert, Jr. &			W	ell Number Ford	Unit 1H	
Operator (as registered wit	h the OOG) Antero	Resources Co				
Address 1615 Wynkoop	Street	City_Denver		State CO	Zip	80202
As Drilled location NAI	hole Northing	4344995.60		537953.88		
Landing Point of		4345357.10		538188.23		
Bottom	Hole Northing	4347948.11	Easting	537394.04		
Elevation (ft) 1376'	GL T	ype of Well Ne	w 🗆 Existing	Type of Report	■Interim	□Final
Permit Type	ed 🗆 Horizontal	■ Horizontal 6	A D Vertical	Depth Type	□ Deep	■ Shallow
Type of Operation Con	vert Deepen	■ Drill □ Plu	g Back 🗆 Redrillin	g 🗆 Rework	□ Stimula	nte
Well Type □ Brine Dispo	sal □ CBM ■ Gas	□ Oil □ Second	ary Recovery Solut	ion Mining 🗆 St	orage □ C	ther
Type of Completion ■ Sin	ngle Multiple	Fluids Produced	□ Brine □Gas	NGL Oil	■ Other N	ot yet completed
	Rotary			21,02 2.01.		
Drilling Media Surface h Production hole	■ Mud □ Fresh W	□Fresh Water /ater ■ Brine	Intermediate hole	e ∎Air □Mud	□ Fresh	Water □ Brine
Mud- Polymer						
Date permit issued12/		drilling commend	ed3/22/2014	_ Date drilling		8/23/2014
Date completion activities	began W	OC D	ate completion activiti	es ceased		
Verbal plugging (Y/N)	N Date perm	nission granted	N/A	Granted by	N/A	
Please note: Operator is re	quired to submit a pl	ugging application	n within 5 days of verb	al permission to p	olug RECEIV	ED
Freshwater depth(s) ft	391'	Ор	en mine(s) (Y/N) dept	hsOffice	e of Ail a	and Gas
Salt water depth(s) ft	1832'	Vo	oid(s) encountered (Y/I	N) depths	NOV 1 (N	2014
Coal depth(s) ft	None Identified		vern(s) encountered (//N) depths	1	1
Is coal being mined in area	(Y/N)			WV	Depart	ment of
				Enviror	mertal	Protection

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API 47-033	05702	Γ.	Hubert	. Jr. &	Lorena Bland	337 - 11	umber	d Unit 1	H	
API 4/- 333		Farm na	me			well n	umber			
CASING	Hole	Casing	ъ.,		w or Grade		asket		nt circulate (Y/N)	
STRINGS Conductor	Size 24"	Size 20"	Depth 40'	T	sed wt/ft New S	94#	pth(s) N/A	Provide	details below*	
Surface	17- 1/2"	13- 3/8"	539'	- 		18#	N/A	+	Y	
Coal	17-172 13-370 335 New 40# N/A 1									
Intermediate 1	12-1/4"	9-5/8"	2604'		New 3	36#	N/A		Y	
Intermediate 2	12 174	0 0,0	2007	- '	1011	5011	1973	 	-	
Intermediate 3										
Production	8-3/4" & 8-1/2"	5-1/2"	16,966'	- -,	New 2	23#	N/A	 	Y	
Tubing			.0,000	- 					•	
Packer type and d	epth set									
Comment Details										
CEMENT	Class/Type	Number		иггу	Yield	Volume	Ceme		woc	
DATA Conductor	of Cement	of Sacks		(ppg)	(ft ³/sks)	(<u>ft ³</u>)	Top (M	ID)	(hrs)	
Surface	Class A	200 sx		5.6	1.18	38	0		8 Hrs.	
Coal	Class A	626 sx	1	5.6	1.18	374	0		8 Hrs.	
Intermediate 1	Olass A	047		F.C.	4.40	040	 			
Intermediate 2	Class A	947 sx		5.6	1.18	816	0		8 Hrs.	
Intermediate 3					_		 -			
Production	Class II	0050	. 44.51	1450 T-11	4.01 4.4.07 T-19	0.405	60011-1-1-1-1		0.11==	
Tubing	Class H	2650 s	(14.5 Lea	d 15.2 Tall	1.3 Lead 1.87 Tail	3405	~500' Into Interme	diate Casing	8 Hrs.	
	<u> </u>		L				1			
Drillers TD (fi	16,966' MD, 7546'	TVD; 7551' TVD (Deepe	est point drilled)	_ Lo	ggers TD (ft) 16,5	909,				
•	tion penetrated	Marcellus		Plu	g back to (ft) N/	\		<u>.</u>		
Plug back pro	cedure N/A									
										
Kick off depth	(ft) ^{4920'}						**	t This is a suit		
•	, ,				•		wi	reline logs on	sequent well. Antero only ru one well on a multi-well pac	
Check all wire	line logs run	□ caliper	□ density		deviated/directi	onal 🗆 ind	HATIAN		API# 47-033-05687). Please reline logs submitted with Fo	
		□ neutron	□ resistivi	ity 🗆	gamma ray	□ ten			lellie Unit 2H. A Cement Bo cluded with this submittal.	
								-		
Well cored	⊃Yes ■ No	□ Convention	onal 🗆 Sid	dewall	W	ere cuttings c	ollected 🗆	Yes ■	No	
DESCRIBE T	HF CENTRAL	IZER PLACEME	NT USED I	OR FA	CH CASING S	TRING				
Conductor- 0	THE CENTIONE		OGED I	ORL						
		float, 1 every 4th joint to su		-						
	-	at collar, 1 every 4th joint to to								
								RECE	IVFD	
WAS WELL	COMPLETED	AS SHOT HOLE	□ Yes	■ No	DETAILS	Waiting on Compt	etion Offic	e of Oi	lved Land Gas	
					-					
WASWEIL	COMPLETED (OPEN HOLE?	□ Yes ■	No	DETAILS W	aiting on Completio	n /	NOV 1 0	2014	
MAD WELL	COMITED LED	JI LIN FIULE!	□ 1 C 2 ■	INO	DETAILS W	and ou combietto				
							WV	Depart	ment of	
WERE TRAC	ERS USED	Yes 🖪 No	TYPE OF	TRAC	ER(S) USED w	aiting on Completio	Environ	mental	ment of Protection	
									· oracilou	

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API 47- 033 - 05702	Farm nameHubert, Jr. & Lorena Bland	Fo	rd Unit 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
		* WA	ITING ON	COMPLI	ETION

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)
			_					
			T. 3377 3223.					
			_ * WAITI	NG ON CO	MPLET	TION		-
			-					
						-		
-								- -
						Office	RECEIVE	D
						Ollice	of Oil a	ED nd Gas
	<u> </u>		_			<u> </u>	0/100	
Please	insert additio	nal pages as a	pplicable.			11	OV 1 0 201	14

WV Department of Environmental Protection 8/2014

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API 47- 033 - 05702 Farm name Hubert, Jr. & Lorena Bland Well number Ford Unit 1H PRODUCING FORMATION(S) Marcellus - WOC 7456' TVD 7626' MD Please insert additional pages as applicable. GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump SHUT-IN PRESSURE Surface psi Bottom Hole psi DURATION OF TEST brs OPEN FLOW Gas Oil NGL Water GAS MEASURED BY meripd bpd bpd Estimated Orifice Pilot LITHOLOGY TOP BOTTOM	WR-35 Rev. 8/23/13								Page of
Please insert additional pages as applicable. GAS TEST	API 47- 033	_ 05702	Farm	name Hubert, Jr	. & Lorena	Bland	Well number	Ford Unit 1H	
Please insert additional pages as applicable. GAS TEST	PRODUCING	FORMATION(S)	DEPTHS					
Please insert additional pages as applicable. GAS TEST					TVD	7826'	MD		
GAS TEST									
GAS TEST									
GAS TEST					_				
SHUT-IN PRESSURE Surface	Please insert ad	lditional pages a	s applicable.						
OPEN FLOW	GAS TEST	□ Build up □	Drawdown	□ Open Flow		OIL TEST □	Flow Pump		
ELITHOLOGY/ FORMATION DEPTH IN FT TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H,S, ETC) **PLEASE SEE EXHIBIT 1** **PLEASE SEE	SHUT-IN PRE	SSURE Surf	ace	_psi Botto	m Hole_	psi	DURATION C	F TEST	hrs
FORMATION DEPTH IN FT DEPTH IN	OPEN FLOW	Gas mcf	Oil	NGL bpd	bpd	Water bpd	GAS MEASU	RED BY	Pilot
FORMATION DEPTH IN FT DEPTH IN FT DEPTH IN FT DEPTH IN FT DESCRIBE ROCK TYPE AND RECORD QUANTITYAND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC) O **PLEASE SEE EXHIBIT 1 **Please insert additional pages as applicable. Drilling Contractor Patterson - UTI Drilling Company LLC Address 207 Carlton Drive City Eight Four State PA Zip 15330 Logging Company Rush Wellsite Services Address 600 Alpha Drive City Canonsburg State PA Zip 15317 Cementing Company Nabors Completion & Production Services, Co.	LETHOLOGY:								
* PLEASE SEE EXHIBIT 1 ** Please insert additional pages as applicable. ** Please insert additional pages as applicable. ** Please insert additional pages as applicable. ** Problem of the problem of the please of the							ROCK TYPE AND	RECORD QUANT	TTYAND
* PLEASE SEE EXHIBIT 1 * PLEASE SEE EXHIBIT 1 Please insert additional pages as applicable. Drilling Contractor Patterson - UTI Drilling Company LLC Address 207 Carlton Drive City Eight Four State PA Zip 15330 Logging Company Rush Wellsite Services Address 600 Alpha Drive City Canonsburg State PA Zip 15317 Cementing Company Nabors Completion & Production Services, Co.			TVD		MD	TYPE OF F	LUID (FRESHWAT	ER, BRINE, OIL, O	GAS, H ₂ S, ETC)
Please insert additional pages as applicable. Drilling Contractor Patterson - UTI Drilling Company LLC Address 207 Carlton Drive City Eight Four State PA Zip 15330 Logging Company Rush Wellsite Services Address 600 Alpha Drive City Canonsburg State PA Zip 15317 Cementing Company Nabors Completion & Production Services, Co.		0		0					
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Address 600 Alpha Drive City Canonsburg State PA Zip 15317 Cementing Company Nabors Completion & Production Services, Co.			Dr. Bresente	City	Light 1 oc		State	Zip	
Cementing Company Nabors Completion & Production Services, Co.			ite Services	City	Canonshi	ura	State PA	7: 15317	
Cementing Company Nabors Completion & Production Services, Co. Address 1650 Hackers Creek City Jane Lew State WV Zip 26378					-	uig	State	Zip	
RECEIVED			completion & Pr	r-3a3		-	State WV	7in 26378	
· · · · · · · · · · · · · · · · · · ·				City	-		F	ECEIVED	
Stimulating Company N/A - WOC Address City State State State	(1.1. 1.1. 1.1. 1.1. 1.1. 1.1. 1.1. 1.1	mpany N/A - V	VOC	City		-	Office	of Oil and	Gas
Please insert additional pages as applicable. NOV 1 0 2014	SW ATTENDED	lditional pages a	s applicable.	City	-		State	7V 7 0 2044	
Completed by Ashlie Steele Telephone 303-357-7323	Completed Av	Ashlie Steele				Telephone		1 2 0 2014	
C: A A A A A A A A A A A A A A A A A A A	1	Phlieste	ele	Title P	ermitting Su		VVV	021/2014nent	of
Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry	Submittal of U	udraulia Eraatuu	ing Chemical I	Dicalogues Infa	rmation	Attach com	Livironm	iental Prote	ection

API 47-033-05702 Farm Name Hubert Jr & Lorena Bland. Well Number Ford Unit 1H									
EXHIBIT 1									
TOP BOTTOM TOP									
LITHOLOGY/	DEPTH	DEPTH	DEPTH	воттом					
FORMATION	(TVD)	(TVD)	(MD)	DEPTH (MD)	ROCK TYPE	FLUID PRODUCED			
Big Lime	est. 2280'	2393'	est. 22801	2393'	Limestone				
Big Injun	est. 2394'	2781'	est. 2394'	2781'	Sandstone				
Gantz Sand	est. 2782'	2879'	est. 2782'	2879'	Sandstone				
Fifty Foot Sandstone	est. 2880'	2990'	est. 2880'	2990'	Sandstone				
Gordon	est. 2991'	3314'	est. 2991'	3314'	Sandstone				
Fifth Sandstone	est. 3315'	3349'	est. 3315'	3349'	Sandstone				
Bayard	est. 3350'	3919'	est. 3350'	3919'	Sandstone	·			
Speechley	est. 3920'	4429'	est. 3920'	4429'	Sandstone				
Baltown	est. 4430'	4759'	est. 4437'	4786'	Sandstone				
Bradford	est. 4760'	5280'	est. 4787'	5353'	Sandstone				
Benson	est. 5281'	5558'	est. 5354'	5658'	Sandstone				
Alexander	est. 5559'	5788'	est. 5659'	5906'	Sandstone	i			
Elk	est. 5789'	6900'	est. 5907'	7074'	Sandstone				
Sycamore	6901'	7118'	7075'	7312'	Sandstone				
Middlesex	7119'	7269'	7313'	7486'	Shale				
Burkett	7270'	7297'	7487'	7521'	Shale	Gas			
Tully	7298'	7455'	7522'	7825'	Limestone	N/A			
Marcellus	7456'	7551'	7826'		Shale	Gas			

^{*}Please note Antero determines formation tops based on wireline logs that are only run on one well on a multi-well pad (Please reference Nellie Unit 2H #47-033-05687). The measured depth (MD) data on subsequent wells may be slightly different due to the well's unique departure.



