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

API <u>47</u> . 041 _ 05687 County Let	wis	District	Hackers	Creek	
18/a-4 7 Cl					
Farm name Charles D. Cole II	_ Well Number Guy Alkire #3				
Operator (as registered with the OOG) Mike Ross, Ir	ic.	well Mut	nder	7 41410 170	
Address P O Box 219 City	Coalton	State	WV	Zip _	26257
Top hole Northing N/A  Landing Point of Curve Northing N/A  Bottom Hole Northing N/A  Elevation (ft) 1401' GL Type of Wel  Permit Type Deviated Horizontal Horizontal  Type of Operation Convert Deepen Drill  Well Type Brine Disposal CBM Gas Oil S  Type of Completion Single Multiple Fluids Pro  Drilled with Cable Rotary  Drilling Media Surface hole Air Mud Fresh Water Broduction hole Air Mud Fresh Water Broduction hole Air Mud Fresh Water Broduction hole	East East  East  East  Il BNew Existing  contal 6A B Vertical  Plug Back Redril  Secondary Recovery So  duced Brine BGas  Vater Intermediate h	ing N/A N/A N/A Type Dept ling □ lution Mir	of Report h Type Rework ning □ Stor	Deep  Stimulate rage Dot	Shallow e her
Mud Type(s) and Additive(s) N/A					
Date permit issued11/21/2013 Date drilling cor	nmenced 06/11/2014	Date	4-111		06/17/14
07/07/0044	Date completion activ	Date	drilling ce	ased 17/07/14	30/1//14
Verbal plugging (Y/N) N/A Date permission grant	ed N/A	Granted	by		
Please note: Operator is required to submit a plugging appli	ication within 5 days of ver	bal permi	ssion to plu	g	
Freshwater depth(s) it1 1/2" stream @ 200 ft	Open mine(s) (Y/N) de	oths		N/A	
Salt water depth(s) fi N/A	Void(s) encountered (Y			N/A	
Coal depth(s) ft524	Cavern(s) encountered (			N/A	
Is coal being mined in area (Y/N)N		•			
				Reviewe	d by:

Rev. 8/23/13							Page	ol	
API 47- 041	05687	Farm r	nameChar	les D. Cole	11	Well number	Guy Alkire #3		
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/fl	Basket Depth(s)		Did cement circulate (Y/N)  * Provide details below*	
Conductor	20"	16*	32'	New		Dep.iii(s)	Y	и-	
Surface	11 3/4"	8 5/8"	1077'	New	20#	200	Y		
Coal	11 3/4"	8 5/8"	1077'	New	20#	550			
Intermediate I	11 3/4"	8 5/8"	1077'	New	20#	- 550	Y		
Intermediate 2					20,7		1		
Intermediate 3				<del>                                     </del>					
Production	7 7/8"	4 1/2"	4284'	New	10:80	<del></del>	<del></del>		
Tubing	None				10.00		N		
Packer type and dep	oth set	None		.1					
CEMENT	Class/Type	Number	- 0						
DATA	of Cement	Numbe of Sack			ield Volu <sup>1</sup> /sks) (ft	1.			
Conductor	50-50 poz	10			, tr	<sup>2</sup> } Top (	MD) (hrs) 12 Hr		
Surface	50-50 poz	20					12 Hr		
Coal							12711		
Intermediate I	50-50 poz	225					12 Hr		
Intermediate 2							12 17		
Intermediate 3									
Production	50-50 poz	600				139	50' 240 Hr		
Tubing							240 111		
Drillers TD (ft) _ Deepest formation Plug back procedures Kick off depth (ft	dure 2% gel a			Loggers TE Plug back to					
Check all wirelin	e logs run	■ caliper	density resistivity	□ deviated		induction temperature	□sonic		
Well cored 🛛 Y	es 🛮 No	Convention	nal Sidew	vali	Were cuttir	ngs collected	Yes 🗆 No		
DESCRIBE THE	CENTRALI	ZER PLACEME	NT USED FOR	R EACH CAS					
4 1/2" 4220" - 3170" - 160	0.								
					·				
VAS WELL CON	MPLETED O	PEN HOLE?	□ Yes 🚦 No	DETAI	LS	W.d			
			······································						

API 47- 041 05687 Farm name Charles D. Cole II Well number Guy Alkire #3

## PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1st	07/07/14	4172	4184	10	Benson
2nd	07/07/14	2400	0070		
Ziiu	07/07/14	3100	2878	20	Balltown
3rd	07/07/14	2184	2262	14	Bayard
4th	07/07/14	1508	1514	10	Big Injun

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	07/07/14	23	2650	3000	2890	400 sks	460	71,236
2	07/07/14	27	2300	2700	3000	414 sks	473	55,242
3	07/07/14	24	2200	1200	2550	373 sks	418	47,400
4	07/07/14	30	2600	2100	1720	300 sks	382	28,900
<u> </u>								
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		·						

Please insert additional pages as applicable.

API 47- 04	1 _ 05687	Farm	name_ Chai	rles D. Cole	11	Well	numbe	r_Guy Alkire	#3
PRODUCING	FORMATION	(S)	<u>DEPTHS</u>						
Benson	TOWNATION	701	4180-4200						
Balitown		**************************************				М	)		
			2880-3110 - Strin	gers	····				
Bayard			2260-2270	<u> </u>		<del></del>			
Injun			1500-1520						
Please insert ac	dditional pages a	ıs applicable.							
GAS TEST	8 Build up						•		
SHUT-IN PRE	ESSURE Surf	ace 400	_psi Botto	om Hole N/A	psi	DURA	TION (	OF TEST 72	hrs
OPEN FLOW		Oil pd <u>0</u>	NGL bpd 0					JRED BY  Orifice	□ Pilot
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD				RECORD QUAN	ITITYAND . GAS, H2S, ETC)
N/A	0		0		,,,,,	(11d	201111711	N/A	(CAS, 113, E1C)
					-				
								······································	
		<u></u>							
		······							
Please insert ad	ditional pages as	applicable.	1		L				
Drilling Contrac	ctor Waco Oil	& Gas Compan	y, Inc.						
Address POBo			City	Glenville		State	WV	Zip 26351	
Logging Compa	any Weatherfo	rd							
Address <u>३६५ ४</u>		Sled.	City	Buckhannon		State	wv	Zip _26201	
Compating Com	Univers	al Well Services		·					
Cementing Com Address Route		3, 110,11 00,1100.	City	Buckhannon		State	wv	Zip 26201	
		al Well Services	•	<del></del>		_ State		Zip	
Stimulating Con Address Route 5		ar TVEII Services	city	Buckhannon		Ctoto	w	at. 26201	
Please insert add		applicable.				_ State		Zip <u>26201</u>	
Completed by	Mike Ross				Telephone	304-4	72-4289	)	
Signature	ille	Koss	Title C	Chairman of the I				2/12/2015	
Submittal of Hye	draulic Fracturis	ng Chemical D	isclosure Infor	mation A	ttach copy of	FRACE	ocus	Registry	