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

API 47 - 087 _ 02436	County ROANE	I	District SMITHFIELD	
Quad LOONEYVILLE 7.5'	Pad Name CHAMBI		Field/Pool Name CLO\	/ER
Farm name W & B FARMS, INC.			Well Number 5	
Operator (as registered with the OOC	H.G. ENERGY LLC			
Address 5260 DuPONT ROAD	City_PARKI	ERSBURG	State WV	
As Drilled location NAD 83/UTM Top hole	Northing 4,288,541 M	Easti	ing 475,759 M	
Landing Point of Curve	Northing		ng	
Bottom Hole	Northing	Easti	ng	
Elevation (ft) 1,067' GL	Type of Well □Ne	ew <b>Existing</b>	Type of Report □Ir	nterim <b>B</b> Final
Permit Type   Deviated   I	Horizontal 🗆 Horizontal (	6A 🖪 Vertical	Depth Type	Deep   Shallow
Type of Operation □ Convert □	Deepen □ Drill □ Plu	ıg Back □ Redril	ling □ Rework ■ 5	Stimulate
Well Type ☐ Brine Disposal ☐ CB	M □ Gas ■ Oil □ Second	lary Recovery □ So	lution Mining   Storage	e 🗆 Other
Type of Completion ■ Single □ M	ultiple Fluids Produced	□ Brine □Gas	□ NGL ■ Oil □ C	Other
Drilled with ■ Cable □ Rotary				
Drilling Media Surface hole □ A	ir - Mud - Fresh Water	Intermediate h	ole 🗆 Air 🗆 Mud 🗆	Fresh Water □ Brine
Production hole Air  Mud		intermediate ii	ole dim dima	Tresh water 2 Dime
Mud Type(s) and Additive(s)	arresh water a binne			
N/A				
Date permit issued2/19/13	Date drilling commen	cedN/A	Date drilling cease	edN/A
Date completion activities began	6/26/13 I	Date completion activ	vities ceased7/	16/13
Verbal plugging (Y/N) N	Date permission granted		Granted by	
Please note: Operator is required to	submit a plugging applicatio	n within 5 days of ve	erbal permission to plug	=IVED
The state of the s				
Freshwater depth(s) ft	None O	pen mine(s) (Y/N) de	epths	Oil & Gas
Salt water depth(s) ft	1816' V	oid(s) encountered (	Y/N) depths DEC 2	7 21913
		avern(s) encountered	I (Y/N) denths	N
Is coal being mined in area (Y/N)	N		WV Depa	artment of
			Environmen	tale Percet section

WR-35 Rev. 8/23/13

STRINGS   Size   Size   Depth   Used   wt/ft   Depth(s)   Provide details below	API 47- 087	02436	Farm n	<sub>ame_</sub> W&BF	ARMS, INC	Σ	Well	number_5		
STRINGS   Size   Size   Depth   Used   we/ft   Depth(s)   *Provide details below   Conductor   10'   350'   Existing     Existing   Existing   Existing   Existing   Existing   Existing     Existing     Existing     Existing	CASING	Hole	Casing		New or	Grade	1	Basket	Did cer	nent circulate (Y/ N
Surface	STRINGS	Size	•	Depth	Used	wt/ft				•
Coal			10'	350'	Existing					Existing
Intermediate 1	Surface		8 5/8"	1064'	Existing					Existing
Intermediate 2	Coal									
Intermediate 3	Intermediate 1		6 5/8"	2062'	Existing					Existing
Production 5 3/16" 2171' Used Pulled	Intermediate 2									
Tubing 4 1/2" 2166.5 New N  Packet type and depth set  Comment Details  CEMENT Class/Type Number of Sacks wt (ppg) (ft 2) Top (MD) (hrs) Conductor Surface Coal (ft 2) Top (MD) (hrs) Coal Intermediate 1 Intermediate 2 Intermediate 3 Production 50/50 Pozmix 50 14.2 1.27 63.5 1550' 8 Top (MD)  Differs TD (ft) 2228* Loggers TD (ft) 2224*  Deepest formation penetrated 89 hijun Plug back to (ft) NAA  Plug back procedure NA  Kick off depth (ft)  Check all wireline logs run	Intermediate 3									
Packer type and depth set  Comment Details  CEMENT Class/Type Number of Sacks wit (ppg) (ft 7/sks) (ft 2/sks)	Production		5 3/16"	2171'	Used				1	Pulled
CEMENT Class/Type Number Slurry Yield Volume Cement WOC Office of Sacks wit (ppg) (n 7 loss) (n 2 loss) Top (MD) (hrs)  Surface Coal Intermediate 1 Intermediate 2 Intermediate 3 Production 50/50 Pozmix 50 14.2 1.27 63.5 1550' 8 Production 50/50 Pozmix 50 14.2 1.27 63.5 1550' 8 Publing Loggers TD (ft) 2228' Loggers TD (ft) 2228' Deepest formation penetrated Big Injun Plug back to (ft) N/A  Plug back procedure NA  Kick off depth (ft) Check all wireline logs run	Tubing		4 1/2"	2166.5'	New				1	N
CEMENT Class/Type Number of Sacks wit (ppg) (n ½sks) (n ½	Packer type and de	epth set			<del>_</del>	L				
DATA of Cement of Sacks wt (ppg) (ft. ½sks) (ft. ½) Top (MD) (hrs) conductor	Comment Details									
Conductor Surface Coal Intermediate 1 Intermediate 2 Intermediate 2 Intermediate 3 Production 50/50 Pozmix 50 14.2 1.27 63.5 1550' 8  Tubing Coal Coal Coal Coal Coal Coal Coal Coal										
Coal   Intermediate	Conductor									
Intermediate 1   Intermediate 2   Intermediate 2   Intermediate 3   Intermediate 4   Intermediate 5   Interm	Surface									
Intermediate 2 Intermediate 3 Intermediate 4 Interm	Coal						-			
Production   50/50 Pozmix   50   14.2   1.27   63.5   1550'   8	Intermediate 1								-	
Production 50/50 Pozmix 50 14.2 1.27 63.5 1550' 8  Tubing	Intermediate 2									
Describing   Loggers TD (ft)   2228'   Loggers TD (ft)   2224'   Plug back to (ft)   N/A   Plug back procedure   N/A   Plug back to (ft)   N/A   Plug back procedure   N/A   Plug back to (ft)   N/A   Plug back procedure   N/A   Plug back to (ft)   N/A   Plug back procedure   N/A   Plug back to (ft)   N/A   Plug back procedure   N/A   Plug back to (ft)   N/A   Plug back procedure   Plu	Intermediate 3									
Drillers TD (ft) 2228'  Deepest formation penetrated Big Injun  Plug back to (ft) N/A  Plug back procedure N/A  Kick off depth (ft)  Check all wireline logs run	Production	50/50 Pozmi	x 50	14.:	2	1.27	63.5	15	50'	8
Deepest formation penetrated Big Injun	Tubing									
Check all wireline logs run	Deepest forma	tion penetrated	Big Injun							
neutron   resistivity   gamma ray   temperature   sonic     Well cored   Yes   No   Conventional   Sidewall   Were cuttings collected   Yes   No     DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING     6 centralizers placed every other coller off bottom     WAS WELL COMPLETED AS SHOT HOLE   Yes   No   DETAILS   Set formation packer shoe @ 2166.5°, Drilled out formation packer shoe, Final TD 2228°  WAS WELL COMPLETED OPEN HOLE?   Yes   No   DETAILS	Kick off depth	ı (ft)								
DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING  6 centralizers placed every other collar off bottom  WAS WELL COMPLETED AS SHOT HOLE  Yes   No   DETAILS   Set formation packer shoe @ 2166.5', Drilled out formation packer shoe, Final TD 2228'  WAS WELL COMPLETED OPEN HOLE?   Yes   No   DETAILS	Check all wire	eline logs run	•	=					□soni	ic
WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS Set formation packer shoe @ 2166.5', Drilled out formation packer shoe, Final TD 2228'  WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS	Well cored	Yes 🖪 No	Conventi	onal Side	ewall	We	ere cuttings	collected	□ Yes !	■ No
WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS Set formation packer shoe @ 2166.5', Drilled out formation packer shoe, Final TD 2228'  WAS WELL COMPLETED OPEN HOLE?  Yes No DETAILS			IZER PLACEM	ENT USED FO	OR EACH CA	ASING ST	TRING			
packer shoe, Final TD 2228'  WAS WELL COMPLETED OPEN HOLE?   Yes No DETAILS	6 centralizers placed eve	ry other collar on bottom								
packer shoe, Final TD 2228'  WAS WELL COMPLETED OPEN HOLE?   Yes No DETAILS										
			AS SHOT HOLI	E AYes 🗆	No DI	ETAILS _	Set formation pa	acker shoe @ 21	166.5', Drilled	out formation
AVEDE TO A CED CHEED V B. N. TVDE OF TO A CED (C) LIGHT	WAS WELL	COMPLETED (	OPEN HOLE?	□ Yes ■ N	No DET	AILS				
WEDE TO ACTED OURD - V N. TWOLLING OF APPOINT HOUR							<u>-</u>			

API 47- 087 - 02436 Farm name W & B FARMS, INC. Well number 5

## PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	Shot Hole	2166.5'	2217'		Big Injun
					Big Injun * Packer set @ 2166.5'
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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	7/16/13	35	1121	1179	841	40,000	701	
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Please insert additional pages as applicable.

API 47- 087	_ 02436		_ Farm	name W & B I	FARMS,	INC.		Well	number	. 5	
PRODUCING	<u>FORMAT</u>	ION(S)		<u>DEPTHS</u>							
Big Injun					TVD	2170	0'-2217'	MD			
								<del></del>			
Please insert ad											
GAS TEST	□ Build u	p 🗆 Dr	awdown	□ Open Flow		OIL	TEST o	Flow (	⊐ Pump		
SHUT-IN PRE	SSURE	Surface		psi Botto	om Hole_		psi	DURA'	TION O	OF TEST	hrs
OPEN FLOW	Gas	mcfpd		NGL bpd	_ bpd	Wat	ter bpd	GAS N	MEASU mated	RED BY	ilot
LITHOLOGY/ FORMATION	TOP DEPTH I NAME 1	N FT DI	BOTTOM EPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTO DEPTH II MD	N FT				RECORD QUANTIT ER, BRINE, OIL, GA	
	0	T T	110	0	MID		TITEOFIL			al Well Record	5, H <sub>2</sub> 5, ETC)
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Please insert ad	ditional pa	ages as ap	plicable.	<u> </u>		L					
Drilling Contra	ctor Perki	ns Oil and	Gas								
Address P.O. Bo				City	Pennsbo	ro		State	wv	Zip 26415	
Logging Comp	Annal	achian W	ell Surveys								
Address P.O. Bo	any <u>7455.</u> ox 1058		<u> </u>	City	Cambridg	ge		State	ОН	Zip 43725	
		or Hugha				_					
Cementing Cor Address 2228 P	npany hilippi Pike	Nei Hugile		City	Clarksbu	- rg		State	wv	Zip 26301	
<u> </u>						<u> </u>		5.0.0		2.17	<del></del>
Stimulating Co Address 109 So	mpany <u>F</u>	roducers	Service Co		Zanesville			Ctata	ОН	Zip 43701	
Please insert ad			plicable.	City				State	<del></del>	Zip <u>10.01</u>	<del></del>
		CO /	Hol	Smar Title _			Telenhana	3n	4-4	() , - li a Z	
Completed by Signature	TZa	1) The	da	Title	DOLA	Zini	rerepnone //	<u>_ フリ</u>	Date	14/26/13	<del></del>
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Prepared for:

HG Energy LLC.



INVOICE #:			_
WELL NAME: Chambers Heirs #5			
DATE of SERVICE:			
CUSTOMER PO#			-
Description	Notes	Amount	Uni
FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS		2	E
BLENDER CHARGE 35 BPM		1	E
MILEAGE CHARGE PER UNIT ONE WAY	3 Units @ 70 Miles	210	N
IC ACID 15%		300	G/
PRO HIB II		0.5	G/ H
ACID DELIVERY		600	L
PRO GEL 4		30	G/
PRO CLA FIRM LP		30	G
PRO NE-1		100	L
IRONTROL		50	L
FLC		1	
PRO BREAKER 4 PER QUART		60	_
BUFFER I		30	G
PRO FLO II		410	
SAND 20/40 OTTAWA	20.5 Tons @ 70 Mi.	1435	
SAND DELIVERY / TON MILES DATA VAN	20.0 10110 @ 10 1111	1	ST
DATA VAN			