WR-35 Rev. 8/23/13

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

API 47 - 087 - 04	779 County ROAN	E	District SMITHE	TELD	
Quad LOONEYVILLE 7.5	o' Pad Name FISO	Field/Pool Name CLOVER			
Farm name KING, WILLIE			Well Number _20		
Operator (as registered with t	the OOG) H.G. ENERGY L	LC	3 ( ) () (1 ( ) ( ) ( )		
Address 5260 DuPONT R	City PA	ARKERSBURG	State WV	Zip 26101	
As Drilled location NAD 8  Top he Landing Point of Cu	ole Northing 4,285,299 M		and deviation survey asting 476,133 M		
Bottom H	ole Northing 4,285,378 M	Ea	asting 475,951 M		
Elevation (ft) 1,038'  Permit Type  Deviated		■New □ Existing		ort Interim #Final	
Permit Type   Deviated	□ Horizontal □ Horizo	ontai 6A     Verticai	Depth Type	□ Deep ■ Shallow	
Type of Operation   Conver	rt 🗆 Deepen 📱 Drill	□ Plug Back □ Red	Irilling   Rework	□ Stimulate	
Well Type □ Brine Disposal	□ CBM □ Gas ■ Oil □ Se	econdary Recovery	Solution Mining	Storage   Other	
			1 0 1 2 1 50		
Type of Completion  Singl	A SECTION AND A SECTION AND AND	luced □ Brine □Ga	s □ NGL ♣ Oil	🗆 Other	
Drilled with □ Cable ■ F	Rotary				
Drilling Media Surface hole Production hole ■ Air □ I	e ∄Air □ Mud ∄Fresh W Mud □ Fresh Water ∄ Brit		ehole BAir □M	ud Fresh Water Brine	
Mud Type(s) and Additive(s) N/A					
Date permit issued4/24		nmenced6/25/15	Date drillin	ng ceased 6/28/15	
Date completion activities beg	gan 7/7/15	Date completion ac		7/9/15 Oil all	
Verbal plugging (Y/N)	N Date permission grante	ed	Granted by	AUG 2 7 2015	
				AUG 2	
Please note: Operator is requi	ired to submit a plugging appli	cation within 5 days of	verbal permission to	11000	
Freshwater depth(s) ft	None	Open mine(s) (Y/N)	depths	ENone	
Salt water depth(s) ft	1730'	Void(s) encountered		None	
Coal depth(s) ft	None	Cavern(s) encounter		None	
Is coal being mined in area (Y	//N) N		44444	Davious d hou	
				Reviewed by:	

10/23/2015

Rev. 8/23/13								<b>-</b> -	
API 47- 087	04779	Farm na	ıme_KING, V	VILLIE		Well	number 203		
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	or Grade		Basket Depth(s)	Did cement circulate (Y/N)  * Provide details below*	
Conductor	12 1/4"	11 5/8"	30'	Used	T T		Depui(s)	Sand In	
Surface	8 3/4"	7"	507'	New	LS		64'	Y	
Coal				_	1		<u> </u>	·	
Intermediate 1				`	+				
Intermediate 2					<del>                                     </del>				
Intermediate 3									
Production	6 1/4*	4 1/2"	2410.4'	New	<del>† ,</del>	J-55		Y	
Tubing									
Packer type and d	epth set	1		·					
Comment Details CEMENT	Circulated Est. 60  Class/Type	sks to surface on 7" surf		ту	Yield	on 4 1/2" cement j	ob.	nt WOC	
DATA Conductor	of Cement	of Sacks			t ³/sks)	( <u>ft²</u> )	Top (M		
Surface							+		
Coal	Reg Neat	130	15.	ь	1.18	154	Surfac	e 8	
Intermediate 1									
Intermediate 2									
ntermediate 3									
Production	50.50	25//25		40	444.67	4,500.00	<del></del>		
Tubing	50:50 Pozmi	x 95/125	13.2/1	4.2   1.6	34/1.27	156/186	74'	8	
Drillers TD (ft) Deepest format Plug back prod	tion penetrated cedure NA	Big Injun		Loggers T Plug back					
Check all wirel	line logs run	a caliper	A density  A resistivity		ed/directi a ray		duction emperature	□sonic	
Well cored 🛚	Yes 🖪 No	Conventio	nal Side	wall	w	ere cuttings	collected	Yes □ No	
DESCRIBE TH	E CENTRALI	ZER PLACEME	NT USED FO	OR EACH CA	ASING S	TRING			
		alizor placed mid string on 7"							
						•			
VAS WELL C	OMPLETED A	AS SHOT HOLE	□ Yes ■	No Di	ETAILS		Off	RECEIVED ice of Oil and Gas	
VAS WELL C	OMPLETED C	PEN HOLE?	□Yes 🖺 N	lo DET.	AILS _			AUG 2 7 2015	
VERE TRACE	ERS USED 🗆	Yes 🖪 No	TYPE OF T	RACER(S)	USED _		V	vv Department of	
		<del></del>					Envi	ronmental Protect 10/23/20	

API	47-	087	_	04779
-----	-----	-----	---	-------

Farm name\_KING, WILLIE

\_\_\_\_Well number\_203

## PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	7/7/15	2256'	2266'	40	Big Injun
			· · · · · · · · · · · · · · · · · · ·		
				-	
·				<u> </u>	
				<del></del>	
<del></del>	· · · · · · · · · · · · · · · · · · ·				
<del>                                     </del>			_		
		<del></del>		ļ	
<u> </u>					
		<del></del>			

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	7/9/15	5	1105	1803	846	2,500	146	
						1		
	-							
							D	ECEIVED
						-	000-0	ECEIVED of Oil and Gas
				† · · · · · · · · · · · · · · · · · · ·			Office	ei <del>Oir iinti Gas</del>
						<b></b>	Δ	JG 2 7 2015

API 47- 087	<u> </u>	Farm	<sub>name</sub> KING, \	WILLIE	Well number 203
PRODUCING	FORMATION	<b>(S)</b>	<u>DEPTHS</u>		
Big Injun			2061'- 2092'	TVD 2	2231'- 2272' MD
			2001-2002	_ 1VD _	MD
<del></del>	-				
	••	<del></del> .			
Please insert ac	ditional pages	as applicable.		<del></del>	<del></del>
GAS TEST	□ Build up	Drawdown	□ Open Flow	C	DIL TEST - Flow - Pump
SHUT-IN PRE	SSURE Suri	face	_psi Botto	om Hole	psi DURATION OF TEST hrs
OPEN FLOW	Gas	Oil	NGL	1	Water GAS MEASURED BY
	mci	fpd i			bpd Destimated Orifice Pilot
			•	- '	
LITHOLOGY/	TOP	воттом	TOP	воттом	
FORMATION	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT		DESCRIBE ROCK TYPE AND RECORD QUANTITYAND
	NAME TVD	TVD	MD	MD	TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
Sand/Shale	0	1588	1 0	1635	1112012 (112012)
Sand	1588	1716	1635	1788	
Shale	1716	1722	1788	1796	
Sand	1722	1756	1796	1840	
Shale	1756	1788	1840	1880	
Sand	1788	1914	1880	2040	
Little Lime	1914	1919	2040	2046	
Pencil Cave	1919	1926	2046	2054	
Big Lime	1926	2038	2054	2200	
Keener	2038	2061	2200	2231	
Big Injun	2061	2092	2231	2272	Drilled directional N 59.6° W a distance of 635'
Shale	2092	2226	2272	2435	
TD	2226		2435		
lease insert ad	ditional pages a	s applicable.			
	_				
Address 11565 S	Decker Drill	ıııg	0':	Vincent	o OH 2: 45794
Address 11303 C	DIBIO INCUIO CITO		City	Vincent	State OH Zip 45784
ogging Compa	ny Weatherford	International			
Address 777 Nor	th River Avenue		City	Weston	State WV Zip 26452
<del></del>					
	pany Universal	Services			
Address Hall Rd			City	Buckhannon	State WV Zip 26201
	npany Produce	ere Senvice Con			
Madrocc 109 Sou	npany 1 roduce th Graham Street			Zanesville	State OH Zip 43701CEIVED Office of Oil and Gas
		o o national la	City	Zaliesville	State OH Zip 43701 Cill and Gas
iease mseri add	litional pages as	s applicable.			•
Completed by	Roger Heldman	1			Telephone 304-420-1107 AUG 2 7 2015
Signature /	Ten 1	udi-	Title Or	perations Mana	ger Date 8/20/15
シラ	8				WV Department of
ubmittal of Hy	draulic Fracturi	ng Chemical D	isclosure Infor	mation A	Attach copy of FRACFOCUS Registry men 10/23/20

Customer Approval:

Prepared by: Prepared for: **Producers Service Corp** H G Energy Daniel L Graham 109 S. Graham St. **Dustin Hendershot** Zanesville, OH 43702 304-481-7342 SERVICE CORP. 740-454-6253 INVOICE #: 18543 Fischer 203 WELL NAME: Roane/WV COUNTY/STATE: TOWNSHIP/FIELD: Clover Field 7/9/2015 DATE of SERVICE: CUSTOMER PO#: **Total Cost** Units Unit Cost Description Amount Notes FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS EA BLENDER CHARGE 0-10 BPM 1 EA 150 MILEAGE CHARGE PER UNIT ONE WAY 2 Units @150Miles MI 250 GAL IC ACID 15% 0.5 GAL PRO HIB II ACID DELIVERY 2 HR PRO CLA LOK (KCL SUBSTITUTE) 15 GAL 5 GAL PRO NE-21 150 PRO GEL 4 LB **BUFFER I** 50 LB 50 LB **BUFFER II** 1 LB **BIO CLEAR 750** 15 LB AP BREAKER 10 GAL BXL-A 10 BXL-10C GAL 25 CWT SAND 20/40 OTTAWA 100 SAND DELIVERY / TON MILES TMILE 1 STAGE DATA VAN

Office of Oil and Gas

AUG 2 7 2015

WV Department of
Environmis 10/23/2015