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

API <u>47</u> -087 - 0	04777	County ROANE		District SMITHFIEL	_D
API 47 - 067 - Quad LOONEYVILLE 7	'.5'	Pad Name MCGRA	W, CHARLES	Field/Pool Name Cl	OVER
Quad LOOKE TILLE !		rad Name		Well Number 207	
Farm name KING, WILLI	<u>-</u>	C ENERGY LLC			
Operator (as registered wit	h the OOG) _	I.G. ENERGY LLO	EDEBLIDG	State WV	Zip <u>26101</u>
Address 5260 DuPONT	ROAD	City PARK	EKOBUKO	State	Zip
As Drilled location NAI Top Landing Point of Bottom Elevation (ft) 1,057' Permit Type Deviat Type of Operation Cor Well Type Brine Disport Type of Completion Some Some Some Some Some Some Some Some	D 83/UTM o hole No Curve No i Hole No i Hole No invert Dee cosal CBM ingle Multip i Rotary hole Air	□ Gas ■ Oil □ Seconole Fluids Produce □ Mud ■Fresh Wate	New Existing I 6A Vertical Plug Back Recondary Recovery I d Brine Ga	asting 476,177 M Insting 466,809 M Type of Report Depth Type drilling Rework Solution Mining States In NGL Coll	□Interim ■Final □ Deep ■ Shallow □ Stimulate orage □ Other
N/A					
Date permit issued	3/31/15	Date drilling comm	enced6/9/1	5 Date drilling	ceased6/11/15
Date completion activitie	a bagan	6/24/15	Date completion	activities ceased	
Verbal plugging (Y/N)	N_ D	ate permission granted		Granted by	OFIVED.
, dram p. 20. 5 () 2				RE	CEIVED
Please note: Operator is	required to sub	mit a plugging applica	tion within 5 days	of verbal permittion to	AND COS
		.l	0	AN depths	JG Whome II
Freshwater depth(s) ft		None	Open mine(s) (Y/)	-1 (N/AT) donths -	A CATANABIT OF
Salt water depth(s) ft		710'	Void(s) encounter	N) depthsAl ed (Y/N) depths tered (Y/N) depths One	Departmental Managection
Coal depth(s) ft	A I		Cavern(s) encoun	tered (Y/N)EFTVIFONI	mental Maggection
Is coal being mined in a		N			Reviewed by:

WR-35									1 agc 01
Rev. 8/23/13							007		
API 47- 087	- 04777	Farm na	me KING, W	ILLIE		Well i	number 207		
CASING	Hole	Casing		New or	Grade		lasket		ent circulate (Y/N)
STRINGS	Size	Size	Depth	Used	wt/ft		epth(s)	* Provid	de details below* Sand In
Conductor	12 1/4"	11 5/8"	30'	Used		LS	0.41		Y
Surface	8 3/4"	7"	507'	New	<u> </u>	LS	64'		T
Coal					ļ				
Intermediate 1									
Intermediate 2					ļ		· <u>···</u>		
Intermediate 3					ļ				
Production	6 1/4*	4 1/2"	2319.25'	New	J	-55			<u> </u>
Tubing								l	
Packer type and de	epth set				<u> </u>				
CEMENT	Class/Type	ks to surface on 7" surf Number of Sacks	Slur	гу	s to surface or Yield t ³ /sks)	Volume	cemer		WOC (hrs)
DATA Conductor	of Cement	OI Sacks	1 11.10	PB/					
Surface	Reg Neat	130	15.0	6	1.18	153	Surfa	ce	8
Coal	reg roat								
Intermediate 1									
Intermediate 2		_							
Intermediate 3									
Production Production	50.50 Denni	x 90/125	13.2/1	14.2 1.0	64/1.27	148/186	78'		8
Tubing	50:50 Pozmi	30,120	, , , , , , ,						
Drillers TD (ft	tion penetrated	Big Injun		Loggers 2	TD (ft) 234 c to (ft) N/				
Kick off depth	r (tj) eco.								
Check all wire	eline logs run	■ caliper ■ neutron	西 density 图 resistivit			≜ to	nduction emperature	□son	
	Yes B No	Conventi	• • • • • • • • • • • • • • • • • • • •	ewall			collected •		
DESCRIBE T	THE CENTRAL from boltom on 4 1/2*, Cen	IZER PLACEM	ENT USED F	OR EACH (CASING S	STRING			
							- RF	CEIV	/ED
WAS WELL	COMPLETED	AS SHOT HOLI	E □Yes 6	No I	DETAILS		Office o	f Oil a	and Gas —
								202	
WAS WELL	COMPLETED	OPEN HOLE?	🗆 Yes 💄	No DE	TAILS _				
	1			TRACER(S) HGED	Er	WV Dep Ivironme	Dartm Dial D	ent of Protection
WERE TRAC	CERS USED	□ Yes 🛔 No	TYPE OF	I KACEK(S) Vacu _				rotection

API 47- 087 - 04777 Farm name KING, WILLIE Well number 207

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	6/24/15	2173'	2183'	40	Big Injun
<u> </u>	0/2 1/ 10				
	_				
\vdash					
_					
					
		<u> </u>	 		
				<u> </u>	L

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	7/2/15	5	692	1147	622	2,500	146	
 -	172710							
				 				
1						_		·
						ļ		
								
 								
	1						<u> </u>	
	 						700	
				_			04:	CEIVED
						- 	†''™ce oi	Oil
								CEIVED Oil and Gas
							AHE	100
———	 						1	20 2015
	1	i		_1			14	

Please insert additional pages as applicable.

WV Department of Environmental Protection 10/23/2015 WR-35 Rev. 8/23/13

PRODUCINO	C EODMATION				
	J PUKIMA HUINI	S)	DEPTHS		
Big Injun				mm '	2159'- 2100'
big injun	i		2009 - 2096	_TVD _4	2158'- 2190' MD
	····				
				_	
Please insert a	dditional pages a				
		••	a Onen Flour		DIL TEST - Flow - Pump
UND ILDI	D Dania ap	Diawuowii	Li Open Plow		TEST CITION CITAMP
SHUT-IN PRI	ESSURE Surf	ace	_psi Botto	m Hole	psi DURATION OF TESThrs
OPEN FLOW	Gas	Oil	NGI.	,	Water GAS MEASURED BY
OI EIVI EO W	mef	ind J	bnd	bnd	bpd Estimated Orifice Pilot
		· `		- op	
LITHOLOGY/	TOP	воттом	ТОР	воттом	
FORMATION	DEPTH IN FT		DEPTH IN FT		DESCRIBE ROCK TYPE AND RECORD QUANTITYAND
Junited	NAME TVD	TVD	MD	MD	TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
Sand/Shale	0	1258	0	1276	
Sand	1258	1310	1276	1332	
Shale	1310	1408	1332	1434	
Sand	1408	1437	1434	1467	
Shale	1437	1600	1467	1643	
Sand	1600	1908	1643	1980	
Little Lime	1908	1920	1980	1994	
Pencil Cave	1920	1926	1994	2000	
Big Lime	1926	2046	2000	2132	
Keener	2046	2069	2132	2158	
Big Injun	2069	2098	2158	2190	Drilled directional S 84° W a distance of 488'
Shale	2098	2245	2190	2350	
TD	2245		2350		
Please insert a	dditional pages a	s applicable.			
Drilling Contr	actor Decker Drill	lina			
Address 11565	State Route 676		City	Vincent	State OH Zip 45784
-					
Logging Comp	oany Weatherford	International			
Address 777 N	orth River Avenue		City	Weston	State WV Zip 26452
	Hairamal	Socios			
	mpany Universal	Services	0	Buckhannon	State WV Zip 26201
Address Hall R	<u> </u>		City	Duckileialon	
Stimulating Cr	ompany Produc	ers Service Cor	р.		Office of Orton
Address 109 S	outh Graham Street		City	Zanesville	State OH Zip 48704 Dd
	dditional pages a				Office Of OH State OH State OH State OH State OH State OH State OH
					~ ~ U Z015
Completed by	Roger Heldman	1			m + 1 304-42040/0/
Signature/	Ken 1	elan-	<u> </u>	perations Man	Attach copy of FRACFOCUS Registry rotection 23/2
					19776162 - 111 OF
	lydraulic Fracturi				A Mach service EP A CENCILE Period Proto

87-04777

Prepared for: H G Energy

Dustin Hendershot

304-481-7342



Prepared by:

Producers Service Corp

Daniel L Graham

109 S. Graham St.

Zanesville, OH 43702

740-454-6253

		/ /10-101-0205
INVOICE #:	18541	10
WELL NAME:	Megraw 207	
COUNTY/STATE:		
TOWNSHIP/FIELD:	Clover Field	
DATE of SERVICE:	7/2/2015	
CHETOMED DO#.		

Description	Notes	Amount	Units	Unit Cost	Total Cost
FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS		1	EA		
FLUID PUMP CHARGE 0-3000 PSI WIN CHARGE 4 TING		1	EA		
BLENDER CHARGE 0-10 BPM	2 Units @150Miles		Mi		
MILEAGE CHARGE PER UNIT ONE WAY	Z Offics @ Isolatics	250	GAL	ī.,	
IC ACID 15%		0.5	GAL		
PRO HIB II		2	HR	3	
ACID DELIVERY		15		9	
PRO CLA LOK (KCL SUBSTITUTE)		5	GAL	3	
PRO NE-21		150	LB	7	
PRO GEL 4		50		7	
BUFFERI		50		T	
BUFFER II		1	LB	7	
BIO CLEAR 750		15		1	
AP BREAKER		10		1	
BXL-A		10			
BXL-10C		25		-	
SAND 20/40 OTTAWA		100			
SAND DELIVERY / TON MILES		100	STAGE	-	
DATA VAN			STAGE	-	
	1				
				-	
				-	
		-		Ti	

Customer Approval:

Office of Oil and Gas

AUG 2 0 2015

WV Department 0/23/2015

Environmental Protection

HG Energy, LLC

Roane County, West Virginia C. McGraw #207 C. McGraw #207

Wellbore #1

Design: Wellbore #1

Survey Report - Geographic

16 June, 2015

