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

022 052	County HARRIS	SON D	istrict TEN MILE	
API <u>47</u> - <u>033</u> - <u>032</u>	Pad Name HIRA		ield/Pool Name WC	OLF SUMMIT
Quad WOLF SUMMIT 7.5	Pad Name		Vell Number 210	
Farm name_JUNKINS, EAR	H.G. ENERGY II	C		
Operator (as registered with the Address 5260 DuPONT RO	OAD H.G. ENERGY LL	RKERSBURG	State WV	Zip 26101
Permit Type □ Deviated Type of Operation □ Conve Well Type □ Brine Disposa Type of Completion ■ Sing Drilled with □ Cable ■ Drilling Media Surface hole	ole Northing 4,348,661 M rve Northing ole Northing GL Type of Well Horizontal Horizontal Deepen Drill CBM Gas Oil Seedle Multiple Fluids Productions Rotary Mud Fresh Water Bri	Easting New Existing Intal 6A Vertical Plug Back Redril condary Recovery Souced Brine Gas	ng 544,322 M ng Type of Report Depth Type ling □ Rework lution Mining □ Sto	□Interim
Date permit issued7/3	31/13 Date drilling cor	ERIS - 03/15/12 mmenced N/A	Date drilling	ceased N/A
Date completion activities b	2/16/16	To delicate not	ivities ceased	- 1
Verbal plugging (Y/N)	N Date permission gran	ted	Granted by 605	Oll & Gas
Please note: Operator is rec	quired to submit a plugging app	lication within 5 days of	verbal permission to	10gg S01/2
	News	Open mine(s) (Y/N)		N
Freshwater depth(s) ft			(Y/N) depths	N
Salt water depth(s) ft	246'-253'		ed (Y/N) depths	N
Salt water depth(s) ft Coal depth(s) ft Is coal being mined in area	(V/N) N	Cavern(s) encountered	ca (1711) acpails	
Is coal being mined in area	(1/14)			Reviewed by:

API 47- 033	_ 05255	Farm n	ame_JUNKIN	S, EARL &	BELVA	Wel	I number_21	10	
CASING STRINGS Conductor	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)	Did ce	ment circulate (Y/ N) ide details below*
Surface	8 3/4"	7"	353'	existing		LS	64'	-	Eviating
Coal	0 3/4	· ·	333	existing		23	04	-	Existing
Intermediate 1	<u> </u>							+	
Intermediate 2	ļ			 					
Intermediate 3				<u> </u>	<u> </u>				
Production	6 1/4"	4 1/2"	2696.4'	existing	<u> </u>	I-55			Existing
Tubing	0 1/4	2 3/8"	2562'	existing		I-55			Existing
Packer type and d	epth set	Baker Lock Set Pa		CAISTING		1-00			
Comment Details									
CEMENT DATA	Class/Type of Cement				ield ³/sks)	Volume <u>(ft ²)</u>	Cem Top (WOC (hrs)
Conductor									
Surface	Reg Neat	85	15.6	5 1	1.18		Exis	ting	Existing
Coal									
Intermediate 1									
Intermediate 2									
Intermediate 3									
Production	50:50 Pozm	ix 150	14.2	14.2 1.	.27 191		Existing		Existing
Tubing									
Drillers TD (ft) Deepest format Plug back prod	tion penetrated	Fifth Sand		Loggers Tl Plug back					
Kick off depth	(ft)								
Check all wirel	ine logs run	□ caliper □ neutron	□ density □ resistivity	□ deviate □ gamma			nduction emperature	□soni	:
Well cored	Yes 🖪 No	Convention	onal Sidev	wall	We	ere cuttings	collected [⊃Yes ∎	■ No
DESCRIBE TH	E CENTRAL	IZER PLACEME	ENT USED FO	R EACH CA	SING ST	TRING			
WAS WELL C		AS SHOT HOLE	□ Yes ■	No DE	TAILS _				
WAS WELL C	OMPLETED (OPEN HOLE?	□ Yes ■ No	o DETA	ILS				
WERE TRACE	RS USED \Box	Yes • No	TYPE OF TE	RACER(S) U	SED				

API 47- 033 _ 05255 Farm name JUNKINS, EARL & BELVA __Well number_ 210

PERFORATION RECORD

(e)	Formation(s)	Number of Perforations	Perforated to MD ft.	Perforated from MD ft.	Perforation date	Stage No.
ind	Fifth Sand	44	2596'	2585'	9/29/09	1
		 				
		 				
			 			
						
						
						
		_				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	3/24/15	10	2015	3418	1864	10,000	202	Tyldogerbother (units)
						10,000	202	
				 		 		
								
								
<u> </u>								
							-	
				 				
-								
				1				
								
								
 						 		
								

Please insert additional pages as applicable.

API 47- 03	3 _ 05255	Farm	name_JUNK	INS, EAR	L & BELVA	Well numb	_{oer} 210	
PRODUCING	FORMATION	I(S)	DEPTHS					
Fifth Sand								
Film Sanu			2581'- 2597'	TVD		MD		
								
Please insert ac	dditional pages	as applicable.						
GAS TEST	□ Build up	□ Drawdown	□ Open Flow	1	OIL TEST	□ Flow □ Pun	ıp	
SHUT-IN PRE	SSURE Sur	face	psi Bot	tom Hole	psi	DURATION	OF TEST	hrs
OPEN FLOW		Oil					_	
		fpd				GAS MEAS		
			ори	opu	bpo	d □ Estimated	□ Orifice	□ Pilot
LITHOLOGY/	ТОР	воттом	ТОР	DOTTO				
FORMATION	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	BOTTOI DEPTH IN	··-			
	NAME TVD	TVD	MD	MD MD		E ROCK TYPE AN		
Sand/Shale	0	246	0	I IND	TIPEOF	FLUID (FRESHWA	TER, BRINE, OI	L, GAS, H₂S, ETC)
Pittsburgh Coal	246	253						-
Sand/Shale	253	1598						
Big Lime	1598	1690						
Big Injun	1690	1745						
Shale	1745	2168						
Fifty Foot	2168	2182						
Shale	2182	2260						
Sand	2260	2434						
Shale	2434	2581						-
Fifth Sand	2581	2597						
Shale	2597	2750						
TD	2750							
Diago investo d	1'4'							
Please insert add	litional pages as	s applicable.			-			
Drilling Contrac	tor				•			
Address			City			State	7in	
							ZiP	
Logging Compa	ny							
Address			City	Weston		State	Zip	
Cementing Com	pany							
Address			City			State	7:	
						State	z _{ıp}	
Stimulating Company Producers Service Corp.								
Address 109 South Graham Street City Zanesville State OH Zip 43701 Please insert additional pages as applicable.								
r icase insert add	ilionai pages as	applicable.						
Completed by					Telenhone	304-420-1107		
Signature /	er 14	ldn	Title Op	erations Man	ager			

Prepared for: Prepared by: H G Energy **Producers Service Corp** Daniel L Graham **Dustin Hendershot** 109 S. Graham St. 304-481-7342 SERVICE CORP. Zanesville, OH 43702 740-454-6253 INVOICE #: 17985 WELL NAME: HIRAM LYNCH #210 COUNTY/STATE: WV/Harrison TOWNSHIP/FIELD: Wolf Summit DATE of SERVICE: 3/24/2015 CUSTOMER PO#: Description Notes Amount Units **Unit Cost** FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS 1 EA BLENDER CHARGE 0-10 BPM 1 EA MILEAGE CHARGE PER UNIT ONE WAY 2 Units @70 Miles 70 MI IC ACID 15% 250 GAL PRO HIB II 0.5 GAL ACID DELIVERY 3 HR PRO CLA LOK (KCL SUBSTITUTE) 20 GAL PRO NE-21 10 GAL PRO GEL 4 250 LB **BUFFER I** 50 LB BUFFER II 50 LB **BIO CLEAR 750** 1 LB AP BREAKER 22 LB BXL-A 15 GAL BXL-10C 15 GAL SAND 20/40 OTTAWA 100 CWT SAND DELIVERY / TON MILES 5 Ton @ 70 Mile 350 TMILE DATA VAN 1 STAGE 2 INCH FLOW METER EA

Customer Approval: _

Received Office of Oil & Gas APR 23 2015

Total Cost