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

Re-work			
		District TEN MILE	
	Name LYNCH, HIRAM	Field/Pool Name WC	
Farm name JUNKINS, EARL & BELVA		Well Number 109	
Operator (as registered with the OOG) H.G. El	NERGY LLC		
Address 5260 DuPONT ROAD	City PARKERSBURG	State WV	_{Zip} <u>26101</u>
Top hole Northing		Easting 543,948 M Easting Easting	
Elevation (ft) 1,058' GL Ty	pe of Well Dew Existing	Type of Report	⊐Interim
Permit Type Deviated Horizontal		•	□ Deep
Type of Operation □ Convert □ Deepen □	□ Drill □ Plug Back □ R	dedrilling - Rework	Stimulate
Well Type □ Brine Disposal □ CBM □ Gas	□ Oil ■ Secondary Recovery	□ Solution Mining □ Store	age 🗆 Other
Type of Completion Single Multiple Drilled with Cable Rotary	Fluids Produced 🗆 Brine 🗆 🗅 C	Gas □ NGL #Oil □	Other
Drilling Media Surface hole Air Mud Production hole Air Mud Mud Type(s) and Additive(s) N/A		ate hole	■ Fresh Water □ Brine
Date nermit issued 11/5/13 Date of			
Date perimit issued Date of	Irilling commenced		ased 2/19/13
- <u> </u>	•	donvinos ocused	2/10/10
veroal plugging (17N) Date permit	ssion granted	Granted by	
Please note: Operator is required to submit a plug	gging application within 5 days	of verbal permission to plu	9
Freshwater depth(s) ft None	Open mine(s) (Y/I	N) depths	N
Salt water depth(s) ft1700'	Void(s) encounter	ed (Y/N) depths	N
Coal depth(s) ft 315'- 322'	Cavern(s) encount	ere Rosply Ad	N
Is coal being mined in area (Y/N)	Of	fice of Oil & Gas	
PPROVED		JAN 1 9 2016	Reviewed by:
ME. Onale in Alaman ta			07/08/20

WR-35 Rev. 8/23/13

API 47- 033	04879	Farm n	ame_JUNKINS	S, EARL &	BELVA	·Wel	l number_10)9	
CASING	Hole	Casing		New or	Grade		Basket		nent circulate (Y/ N
STRINGS	Size	Size	Depth	Used	wt/ft		Depth(s)		de details below*
Conductor	12 1/4"	11 5/8"	30'	Used		LS	• •		Sand In
Surface	8 3/4"	7"	386'	New		LS	64'		Existing
Coal									
Intermediate 1									
Intermediate 2	i								
Intermediate 3								 	···
Production	6 1/4"	4 1/2"	2737.8'	New		J-55		1	Existing
Tubing							 		
Packer type and d	epth set			<u> </u>	<u> </u>	L			
Comment Details									
CEMENT DATA	Class/Type of Cement	Numbe of Sack			rield t³/sks)	Volume <u>(ft.³</u>)	Cen Top (nent (MD)	WOC (hrs)
Conductor									
Surface	Reg Neat	95	15.6	1	1.18	112.1	Exis	ting	8
Coal									
Intermediate 1									
Intermediate 2									
Intermediate 3									
Production	50:50 Pozmi	x 150	14,2	1	1.27	191	Exis	sting	8
Tubing									
Drillers TD (ft Deepest forma Plug back prod	tion penetrated	Fifth Sand		Loggers T Plug back					
Kick off depth	(ft)								
Check all wire	line logs run	a caliper neutron	A density Resistivity		ed/direction		nduction emperature	□sonic	;
Well cored 🛚	Yes A No	Convention	nal Sidew	vall	W	ere cuttings	collected i	■ Yes ⊏	. No
					••				
DESCRIBE TH	HE CENTRALI	ZER PLACEMI	ENT USED FOR	R EACH CA	ASING ST	TRING			
								anaive	ed .
WAS WELL C	COMPLETED A	S SHOT HOLE					rı,		
WAS WELL C	COMPLETED C	PEN HOLE?	□ Yes ■ No	DETA	AILS		JA	N 1 9 2	016
WERE TRACE	ERS USED 🗆	Yes B No	TYPE OF TR	RACER(S) I	JSED				
	-	··•							

API 47- 033 - 04879 Farm name JUNKINS, EARL & BELVA Well number 109

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	10/18/11	2646'	2659'	78	Fifth Sand

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	12/19/13		1759	1799	1789	10,000	297 bbls	
					·			
			·					
							Danah	
							Receiv	90
						Om	ce of Oi	⊁ Gas
			·				JAN 1 9 2	016
							07.11. 2 0	
						l		

Please insert additional pages as applicable.

WR-35 Rev. 8/23/13								Page 4 of 4
API 47- 033	_ 04879	Farm	_{name} JUNKIN	IS, EARL	& BELVA	Weil numb	_{er_} 109	····
PRODUCING Fifth Sand	FORMATION		<u>DEPTHS</u> 2645'- 2660'	TVD		MD		
Please insert ad	Iditional pages	as applicable.						
GAS TEST	🗆 Build up	□ Drawdown	□ Open Flow		OIL TEST	Flow 🗆 Pum	ıp	
SHUT-IN PRE	SSURE Sur	face	_psi Botto	m Hole	psi	DURATION	OF TEST _	hrs
OPEN FLOW		Oil fpd	NGL bpd	_ bpd _	Water bpd	GAS MEAS □ Estimated	URED BY	□ Pilot
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD		BOTTOM DEPTH IN MD	FT DESCRIB	E ROCK TYPE AN	-	ANTITYAND L, GAS, H₂S, ETC)
	0		0				WR35 Well Re	
								
							- Door	ived
							Hece	oived Oil & Gas
							Office or	9 2016
							JAN 1	9 7010
Please insert ad	ditional pages	as applicable.	•					
Drilling Contract	ctor							
Address			City		 	State	Zip	
Logging Compa	any							
Address			City			State	Zip	
Cementing Con	ipany							
Address			City			State	Zip	
Stimulating Cor					_			
Address 109 Sou			City	Zanesville		State OH	Zip <u>4370</u>	1
Please insert add	uttonal pages a	is applicable.						
Completed by	Roger Heldman	1				e 304-420-1107		
Signature	gw (14		Title Or	erations Ma	nager	Date	1/13/16	

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Prepared for:

H G Energy



Prepared by:

Producers Service Corp

Jason Stanbery

109 S. Graham St.

Zanesville, OH 43702

Total Cost

740-454-6253

INVOICE #:

16049

WELL NAME:

Hiram Lynch #109

STATE & COUNTY: Harrison / WV

TOWNSHIP/FIELD: Wolf Summit

DATE of SERVICE: 12/19/2013

CUSTOMER PO#

Customer Approval: _

Notes	Amount	Units	Unit Cost
	1	EA	
	1	EA	
2 Units @ 70 Miles	140	MI	
	300	GAL	
	0.5		
	2	HR	
	10		
	250		
	50	LB	
	50	LB	
	1		
			E
	1	STAGE	
			<u> </u>
		2	
			-
			10
			-
	17110	2 Units @ 70 Miles 140 300 0.5 2 2 20 10 250 50 50 1 22 15	1 EA 1 EA 2 Units @ 70 Miles 140 MI 300 GAL 0.5 GAL 2 HR 20 GAL 10 GAL 250 LB 50 LB 50 LB 1 LB 22 LB 15 GAL 100 CWT 350 TMILE

Office of Oil & Gas
JAN 1 9 2016