

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

API 47 - 033 - 05053 County HARRISON District TEN MILE
Quad WOLF SUMMIT 7.5' Pad Name LYNCH, HIRAM Field/Pool Name WOLF SUMMIT
Farm name JUNKINS, EARL & BELVA Well Number 113
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,348,267 M Easting 544,158 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4,348,091 M Easting 543,913 M

Elevation (ft) 1,080' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 3/25/15 Date drilling commenced _____ Date drilling ceased _____
Date completion activities began 8/24/15 Date completion activities ceased 8/27/15
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 52', 390' Open mine(s) (Y/N) depths N
Salt water depth(s) ft None Void(s) encountered (Y/N) depths N
Coal depth(s) ft 346'- 354' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: _____

API 47-033 - 05053 Farm name JUNKINS, EARL & BELVA Well number 113

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	12 1/4"	11 5/8"	30'	Used	LS		Sand In
Surface	8 3/4"	7"	422'	New	LS	64'	Existing
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	3074.25'	New	J-55		Existing
Tubing							
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	100	15.6	1.18	118	Existing	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	150	14.2	1.27	191	Existing	8
Tubing							

Drillers TD (ft) ^{3122'} _____ Loggers TD (ft) ^{3092'} _____
 Deepest formation penetrated Fifth Sand Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) ^{1150'} _____

Check all wireline logs run caliper density deviated/directional induction
 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 _____

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft	Perforated to MD ft	Number of Perforations	Formation(s)
1	7/31/08	2998'	3012'	84	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	8/27/15	10	2323	2428	2272	20,000	243 bbls	

Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
Fifth Sand	2998'- 3012'	TVD _____ MD _____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs
 OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY
 Estimated Orifice Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP DEPTH IN FT NAME TVD</u>	<u>BOTTOM DEPTH IN FT TVD</u>	<u>TOP DEPTH IN FT MD</u>	<u>BOTTOM DEPTH IN FT MD</u>	<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)</u>
	0		0		See Original WR35 Well Record
					Drilled directional S 55°12' W a distance of 980'

Please insert additional pages as applicable.

Drilling Contractor _____
 Address _____ City _____ State _____ Zip _____

Logging Company _____
 Address _____ City _____ State _____ Zip _____

Cementing Company _____
 Address _____ City _____ State _____ Zip _____

Stimulating Company Producers Service Corp.
 Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman Telephone 304-420-1107
 Signature *Roger Heldman* Title Operations Manager Date 1/12/16

FRAC

Prepared for:

HG Energy
Dustin Hendershot



Prepared by:

Producers Service Corp

Daniel Graham

109 S. Graham St.

Zanesville, OH 43702

740-454-6253

INVOICE #: 18883

WELL NAME: Hiram Lynch #113

COUNTY/STATE: Harrison/WV

TOWNSHIP/FIELD: Wolf Summit

DATE of SERVICE: 8-27-15

CUSTOMER PO#:

Description	Notes	Amount	Units	Unit Cost	Total 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		2	HR		
SAND 20/40 OTTAWA		200	CWT		
PRO CLA LOK (KCL SUBSTITUTE)		20	GAL		
PRO NE-21		10	GAL		
PRO A GEL		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		
FLOW METER 2INCH		1	EA		
DATA VAN		1	STAGE		
SAND DELIVERY / TON MILES		700	TMILE		

Customer Approval: