State of West Virginia

W2

EEC 3 0 2013

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

WV GEOLOGICAL SURVEY MORGANTOWN, WV

_{API 47} 103 _	1633	County WETZEL	Distric	green_		
Quad CENTERPOINT		Pad Name M.J. RE	Field/	Pool Name S7	RINGTOWN	
Farm name WV PUBLI			Well			
Operator (as registered w	rith the OOG)	H.G. ENERGY LLC				
Address 5260 DuPON	T ROAD	City PAR	KERSBURG St	ate WV	Zip 2610	1 .
As Drilled location NA		Attach an as-drilled orthing 4,371,215 M	plat, profile view, and devia			
Landing Point of		orthing	Easting			
Botto		orthing				
Elevation (ft) 1,438'	GL	Type of Well	New ■ Existing T	Type of Report	□Interim ■Fir	nal
Permit Type Devi	ated 🗆 Ho	rizontal Horizonta	l 6A Vertical	Depth Type	□ Deep ■	Shallow
Type of Operation □ Co	onvert 🗆 De	eepen □ Drill □ F	Plug Back	□ Rework	■ Stimulate	
Well Type ☐ Brine Disp	posal 🗆 CBM	□ Gas □ Oil ■ Seco	ndary Recovery	Mining 🗆 Sto	orage 🗆 Other	
Type of Completion ■ Drilled with □ Cable Drilling Media Surface Production hole ■ Air Mud Type(s) and Addit	■ Rotary chole ■ Air	□ Mud ■Fresh Wate	ed □ Brine □Gas □ N er Intermediate hole			•
N/A		,,,,,				
Date permit issued	10/25/13	Date drilling comm	enced N/A	Date drilling	ceascu	N/A
Date completion activiti	es began	11/21/13	Date completion activities	ceased	11/21/10	
Verbal plugging (Y/N)	I	Date permission granted	G	ranted by		
Please note: Operator is	required to su	bmit a plugging applica	tion within 5 days of verbal	permission to p	olug	
Freshwater depth(s) ft		None	Open mine(s) (Y/N) depths		N	
Salt water depth(s) ft			Void(s) encountered (Y/N)		N	
Coal depth(s) ft	NIa		Cavern(s) encountered (Y/I	-	N	
Is coal being mined in a		NI NI	(•
in com come minor in a	(2/27)				Reviewed	by:

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	_ 1633			BLIC LAND		VV C1.	l number_O		
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)		nt circulate (Y/N details below*
Conductor	·								Eviating
Surface		8 5/8"	710.85'	Existing					Existing
Coal									
ntermediate 1		· · · · · · · · · · · · · · · · · · ·							
ntermediate 2									
ntermediate 3									Eviotina
Production		4 1/2"	3566'	Existing					Existing
Tubing				1					
Packer type and de	epth set								
Comment Details									
CEMENT DATA	Class/Type of Cement			J	Yield t ³/sks)	Volume		ment (MD)	WOC (hrs)
Conductor									
Surface	Existing	290	1						
Coal									,,
ntermediate 1									
ntermediate 2									
ntermediate 3									
Production	Existing	300)						
Tubing									
Drillers TD (ft Deepest forma Plug back pro	tion penetrate	d Gordon			TD (ft) 364 t to (ft) N/A				
Kick off depth	ı (ft)								
Check all wire	eline logs run	□ caliper □ neutro			ted/directi na ray		induction temperature	e □sonio	;
Well cored	⊃Yes ■ No	Conven	tional Sid	ewall	W	ere cutting	gs collected	■ Yes □	No No
DESCRIBE T	HE CENTRA	LIZER PLACEN	MENT USED F	OR EACH C	CASING S	TRING _			
WAS WELL	COMPLETEI	O AS SHOT HO	LE □Yes	■ No D	ETAILS				
		OPENIAL EQ	37	No DE	CATT C				
WAS WELL	COMPLETE	OPEN HOLE?	🗆 Yes 📱	NO DE.	IAILS _				

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API 47- 103 - 1633	Farm name_WV PUBLIC LANDS	Well number O-19

PERFORATION RECORD

Stage No	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	Existing	3495'	3502'	35	Gordon
1	Existing	3506'	3517'	66	Gordon
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				-	

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	11/21/13	10	2627	2158	2571	11,000	377	

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Please insert additional pages as applicable.

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WV GEOLOGICAL SURVEY MORGANTOWN, WV Page 4 of 4 WR-35 Rev. 8/23/13 Farm name WV PUBLIC LANDS _Well number O-19 API 47- 103 _ 1633 **DEPTHS** PRODUCING FORMATION(S) 3494'-3534' MDTVD Gordon Please insert additional pages as applicable. OIL TEST

Flow

Pump □ Build up □ Drawdown □ Open Flow **GAS TEST** DURATION OF TEST _____hrs Surface psi Bottom Hole psi SHUT-IN PRESSURE Water Oil NGL GAS MEASURED BY **OPEN FLOW** Gas mcfpd bpd bpd **BOTTOM** LITHOLOGY/ TOP **BOTTOM** TOP DESCRIBE ROCK TYPE AND RECORD QUANTITYAND DEPTH IN FT DEPTH IN FT FORMATION DEPTH IN FT DEPTH IN FT TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC) MD MD NAME TVD TVD See original Well Record 0 0 Please insert additional pages as applicable. Drilling Contractor State Zip _____ City _____ Address Logging Company _____ State Zip _____ City Address Cementing Company City State Zip _____ Stimulating Company Producers Service Corp. ___Zip 43701 Address 109 South Graham Street ____ City Zanesville State OH Please insert additional pages as applicable.

Completed by Koser Heldman Title Operations Signature

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

Prepared for
H G Energy



	Appliates Agill:		
INVOICE #: 16034			_
WELL NAME: MJ Reilly #O-19			
STATE & COUNTY: WV/ Wetzel			
TOWNSHIP/FIELD: Stringtown		· .	
DATE of SERVICE: 11/21/2013			_
CUSTOMER PO#			<u> </u>
Description	Notes	Amount	ι
FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS		1	_
BLENDER CHARGE 0-10 BPM		1	
MILEAGE CHARGE PER UNIT ONE WAY	2 Units @ 70 Miles	140	
IC ACID 15%		300	_
PRO HIB II		0.5	_(
ACID DELIVERY		2	
PRO CLA LOK (KCL SUBSTITUTE)		20	_(
PRO NE-21		10	(
PRO GEL 4		250	
BUFFER I		50	
BUFFER II		50	
BIO CLEAR 750		1	
AP BREAKER		22	
BXL-A	·	15	(
BXL-10C		15	
SAND 20/40 ECONOPROP		109	
SAND DELIVERY / TON MILES		381.5	T
DATA VAN		1	S
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Customer Approval:			

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