

WR-35 Rev. 8/23/13

## Received Office of Oil & Gas

Page 1 of 4

OCT 3 0 2014
State of West Virginia
Department of Environmental Protection - Office of Oil and Gas Well Operator's Report of Well Work

API <u>47</u> - <u>043</u> <u>- 03456</u> County	LINCOLN	District DUVAL	
Quad GRIFFITHSVILLE 7.5' Pad No.	LINCOLN ume J.A. FOWLER	Field/Pool Name Gl	RIFFITHSVILLE
Farm name MCCLURE, ANDY J. & REBECO	CA TOTAL	Well Number 108	
Operator (as registered with the OOG) H.G. EN	ERGY LLC	7	
Address 5260 DuPONT ROAD	City PARKERSBURG	State WV	Zip 26101
		and deviation survey asting 416,276 M	
		asting	
Elevation (ft) 1,063' GL Typ			- 12
Permit Type   Deviated   Horizontal	☐ Horizontal 6A ■ Vertical	Depth Type	□ Deep ■ Shallow
Type of Operation □ Convert □ Deepen	Drill □ Plug Back □ Rec	Irilling   Rework	□ Stimulate
Well Type □ Brine Disposal □ CBM □ Gas □	Oil Secondary Recovery	Solution Mining	orage □ Other
Type of Completion ■ Single □ Multiple F  Drilled with □ Cable ■ Rotary	iulus Froduced 🗆 Brille 🗀 Ga	S HNGL BOIL	- Other
Drilling Media Surface hole ■ Air □ Mud	Fresh Water Intermediat	e hole ■ Air □ Mud	Fresh Water   Brin
Production hole ■ Air □ Mud □ Fresh Wat			
Mud Type(s) and Additive(s) N/A			
	Elitari.		
Date permit issued 6/17/2013 Date d		The second secon	
Date completion activities began 7/28/			
Verbal plugging (Y/N) N Date permis	sion granted	Granted by	
Please note: Operator is required to submit a plug	ging application within 5 days o	f verbal permission to p	lug
Freshwater depth(s) ft 440'	Open mine(s) (Y/N	) depths	N
Salt water depth(s) ft 1240', 1420'	Void(s) encountered	d (Y/N) depths	N
Coal depth(s) ft 647'-652'	Cavern(s) encounte	red (Y/N) depths	N
Is coal being mined in area (Y/N)	N	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
			Reviewed by:

## Received Office of Oil & Gas

OCT 30 2014

Page 2 of 4

WR-35 Rev. 8/23/13 API 47-043 -Farm name MCCLURE, ANDY J. & REBECCA Well number 108 03456 Basket Did cement circulate (Y/N) Grade **CASING** Hole Casing New or \* Provide details below\* Used wt/ft Depth(s) **STRINGS** Size Depth Size Conductor 12 1/4" Sand In Used LS 11 5/8" 30' Surface 84' Υ 8 3/4" 759 New LS Coal Intermediate 1 Intermediate 2 Intermediate 3 Production Υ 6 1/4" 4 1/2" 2716.75 New J-55 Tubing Packer type and depth set Comment Details Circulated Est. 50 sks to surface on 7" surface cement job. Circulated est. 18 sks to surface on 4 1/2" cement job. Volume WOC CEMENT Class/Type Number Slurry Yield Cement (ft 3/sks) (ft 2) Top (MD) DATA of Cement of Sacks wt (ppg) (hrs) Conductor Surface Surface Reg Neat 180 15.6 1.18 212 8 Coal Intermediate 1 Intermediate 2 Intermediate 3 Production 110 50:50 Pozmix 105/125 13.2/14.2 1.64/1.27 172/159 8 Tubing Drillers TD (ft) 2720' Loggers TD (ft) 2732' Deepest formation penetrated Berea Plug back to (ft) N/A Plug back procedure N/A Kick off depth (ft) N/A Check all wireline logs run acaliper = ■ 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 6 Centralizers every 84 from bottom on 4 1/2°. Centralizer placed mid string on 7° WAS WELL COMPLETED AS SHOT HOLE □ Yes 📱 No DETAILS WAS WELL COMPLETED OPEN HOLE? □ Yes 🖪 No DETAILS

TYPE OF TRACER(S) USED \_\_\_

WERE TRACERS USED □ Yes ■ No

WR-35 Rev. 8/23/13		Page 3 of 4
API 47- 043 _ 03456	Farm name MCCLURE, ANDY J. & REBECCA Well number 108	

## PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	7/29/14	2574'	2588'	84	Berea
		-			
				<del> </del>	
		L	L		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	7/29/14	5.2	958	1022	764		43	12 bbls HCL
								-
			-					
				_				
-								

Please insert additional pages as applicable. Received

Office of Oil & Gas

WR-35 Rev. 8/23/13								Page 4 of 4
API 47- 043	_ 03456	Farm	name_MCCLUF	RE, ANDY J	. & REBECC	A Well number	. 108	
PRODUCING	FORMATION(	<u>S)</u>	<u>DEPTHS</u>					
Berea			2574'-2588'	TVD		MD		Received
,							Offic	e of Oil & Gas
						_		
-		_					Ü	CT <b>3 0</b> 2014
Please insert ad	lditional pages a	as applicable.						
GAS TEST	□ Build up □	Drawdown	□ Open Flow	0	IL TEST 🗆 F	Flow   Pump		
SHUT-IN PRE	SSURE Surf	ace	_psi Botto	m Hole	psi	DURATION (	OF TEST	hrs
OPEN FLOW	Gas	Oil	NGL	1	Water	GAS MEASU		Dilet
	mci		bpd	_ opa	bpd	□ Estimated	ornice 1	Pilot
LITHOLOGY	TOP	DOTTOM	TOP	воттом				
LITHOLOGY/ FORMATION	TOP DEPTH IN FT	BOTTOM DEPTH IN FT			DESCRIBE	ROCK TYPE AND	RECORD QUAN	TITYAND
FORMATION	NAME TVD	TVD	MD	MD			TER, BRINE, OIL,	
Sand/Shale	0	647	0	WID	THEOFFE	OD (I KESHWA	LIN, DICHYL, OIL,	01.0, 1120, 1.10)
Pittsburgh Coal	647	652						
Sand/Shale	652	1830						
Big Lime	1830	2043						
Big Injun	2043	2143						
Shale	2143	2550						
Coffee Shale	2550	2572						
Berea	2572	2588						
Shale	2588	2720						
TD	2720							
Please insert ac	lditional pages a	as applicable.						
D (III)	Docker Dril	lling						
Address 11565	State Route 676	iiiig	C:t-	Vincent		State OH	Zip 45784	
Address 11000	Otate Modie 070		City	VIIICOIII		State OH	Zip _40704	
Logging Comp	any Weatherford	d International						
Address 777 No			City	Weston		State _WV	Zip _26452	
Cementing Cor	npany Universa	I Services						
Address 5252 R			City	Allen		State KY	Zip 41601	
Address			City	-		State	Zip	
Stimulating Co	Inpuny	ers Service Co	orp.					
Address 109 So	outh Graham Stree	t	City	Zanesville		State OH	Zip 43701	
Please insert ac	lditional pages a	as applicable.						
Completed by	Roger Heldman	1			Telephone	304-420-1107		
Signature	Den &	old	Title _O	perations Mana			10/14/14	
Submittal of U	vdraulie Frantus	ing Chamiacl	Disclosure Info	rmation	Attach conve	f ED ACEOCU	Pagistm:	
Submittal Of H	yuraune Fraciul	mg Chemical	Disclosure III(0)	illation	ratach copy o	f FRACFOCUS	registry	

Prepared for: Prepared by: HG Energy **Producers Service Corp Dustin Hendershot** Chris Bryan 304 771 5432 109 S. Graham St. SERVICE CORP. Zanesville, OH 43702 740-454-6253 **INVOICE #:** 16761 WELL NAME: J.A. Fowler #108 STATE & COUNTY: Lincoln, WV TOWNSHIP/FIELD: Griffthsville DATE of SERVICE: 7/29/2014 **CUSTOMER PO#** Description Notes **Unit Cost** Amount Units **Total Cost** ACID PUMP CHARGE 1000-2000 PSI 1 EA \$ MILEAGE CHARGE PER UNIT ONE WAY N/C 2nd Well Same Location 0 MI IC ACID 15% GAL 500 \$ ACID DELIVERY 2 \$ HR PRO HIB II 0.5 GAL PRO CLA FIRM LP 0.5 GAL PRO NE-1 0.5 GAL PRO PEN 0.5 GAL DATA VAN 1 STAGE \$

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Customer Approval:

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