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

Office of Oil and Gas
OCT 12 2022
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Snvironmental Protect

API 47 087 _ 04801 County RO	ANE	District SMITHFIELD	) Totection
	KINKEAD, S.B	Field/Pool Name CLC	
Farm name ED ASBURY		Well Number 129	
Operator (as registered with the OOG) H.G. ENERG	Y LLC		
Address 5260 DuPONT ROAD City	, PARKERSBURG	State WV	Zip 26101
AddressCity			
As Drilled location NAD 83/UTM Attach an as-	-drilled plat, profile view, an		
Top hole Northing 4,285,176		sting 475,452 M.	
Landing Point of Curve Northing		ting	
Bottom Hole Northing _4,285,24	8 M Eas	ting 475,322 M	
Elevation (ft) 1,117' GL Type of W	Vell ■New □ Existing	Type of Report	Interim Final
Permit Type 💄 Deviated 🗆 Horizontal 🗆 Ho	orizontal 6A   Vertical	Depth Type	Deep 💄 Shallow
Type of Operation □ Convert □ Deepen ■ Drill	□ Plug Back □ Redr	illing 🗆 Rework 🛭	∃ Stimulate
Well Type □ Brine Disposal □ CBM □ Gas ■ Oil	□ Secondary Recovery □ S	olution Mining   Store	age 🗆 Other
Type of Completion ■ Single □ Multiple Fluids I	Produced □ Brine □Gas	□ NGL ■ Oil □	Other
Drilled with □ Cable ■ Rotary			
Drilling Media Surface hole ■ Air □ Mud ■Fres	h 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 issued5/24/22 Date drilling	commenced 6/24/22	Date drilling cea	7/14/22
0/0/00		ivities ceased	
Date completion activities began			
Verbal plugging (Y/N) N Date permission gr	ranted	Granted by	
Please note: Operator is required to submit a plugging a	pplication within 5 days of v	verbal permission to plug	r
	-		
Freshwater depth(s) ftN/A	Open mine(s) (Y/N)	lepths	None
Salt water depth(s) ft 1700'	Void(s) encountered (	(Y/N) depths	None
Coal depth(s) ft N/A	Cavern(s) encountere		None
Is coal being mined in area (Y/N)N	<u></u>		$\sim$

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API 47- 087	04801	Farm r	ame_ED ASB	URY		We	II number_1	129	
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)		ent circulate (Y/ N) de details below*
Conductor	15"	13 3/8"	11'	New	LS	S 54#			Sand In
Surface	8 7/8"	7"	512.06'	New	LS	S 17#			Υ
Coal									
Intermediate 1		. 3							
Intermediate 2		- 0							
Intermediate 3									
Production	6 1/4"	4 1/2"	2364.04'	New	J-5	5 10.5#			Υ
Tubing									
Packer type and d	epth set								
Comment Details	Circulated Est. 35 s	iks to surface on 7" jol	o. Circulated Est. 25 st	ks to surface on 4	1/2" job		3		
CEMENT DATA	Class/Type of Cement	Numb of Saci			(ield t <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )		ment (MD)	WOC (hrs)
Conductor									
Surface	Reg Neat	130	15.6	6	1.18	153	Su	rface	8
Coal									
Intermediate 1									
Intermediate 2									
Intermediate 3									
Production -	50:50 Pozmix	125/12	25 13.2/14	4.2 1.6	4/1.27	205/159	2	200'	8
Tubing									
Drillers TD (ft) Deepest formate Plug back prod	tion penetrated	Big Injun		Loggers T Plug back				Office o	CEIVED Oil and Gas
Kick off depth Check all wirel		a caliper	□ density □ resistivity		ed/directi ı ray		nduction emperature	WV Der Environmer □sonic	partment of otal Protection
Well cored	Yes 💄 No	Conventi	onal Sidev	wall	W	ere cuttings	collected	■ Yes □	No
	HE CENTRALI			R EACH CA	ASING ST	TRING _			
o centralizers every 88 fro	m bottom on 4 1/2°, Centraliz	er placed mid string and 42	IRON BOLLON OR F"						
WAS WELL C	OMPLETED A	S SHOT HOLE	B □ Yes ■	No DE	TAILS				
WAS WELL C	OMPLETED O	PEN HOLE?	□ Yes ≝ No	o DETA	AILS				
WERE TRACE	ERS USED 🗆	Yes 💄 No	TYPE OF TE	RACER(S) U	JSED				

API 47- 087 - 04801

Farm name\_ED ASBURY

\_Well number\_129

## PERFORATION RECORD

Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
8/2/22	2256'		32	Big Injun
0,2,22				
		1.1		
				To the second se
				RECEIVED Office of Oil and Gas
	Perforation date 8/2/22	Perforation date MD ft.  8/2/22 2256'	Perforation date MD ft. MD ft. 8/2/22 2256' 2264'	Perforation date         MD ft.         Perforations           8/2/22         2256'         2264'         32

Please insert additional pages as applicable.

OCT 1 2 2022

## STIMULATION INFORMATION PER STAGE

WV Department of Environmental Protection

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	8/4/22	16	985	3300	538	3000	164	250 gals HCL
	· · · ·							
				1				
				-				
								-51

Please insert additional pages as applicable.

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10/14/2022

API 47- 007	7_04801	Farm	Farm name ED ASBURY			Well number_129				Well number_129			
PRODUCING	FORMATION	(S)	DEPTHS										
Big Injun				TVD	2216'- 2265'	MD	RECEIVED Office of Oil and Gas						
							OCT 1 2 2022						
				_	(-		WV Department of Environmental Protection						
Diagra insert a	dditional pages a	es annlicable			1	======	Environmental Protection						
	udiuonai pages a  □ Build up		□ Onen Flour		OII TEST -	Flory = - Dr	Imp						
GAS IESI	~		~				_						
SHUT-IN PRE	ESSURE Surf	face	_psi Botto	om Hole	psi	DURATIO	N OF TEST hrs						
OPEN FLOW	Gas mcf	Oil fpd	NGL bpd	_ bpd .	Water bpd	GAS ME	ASURED BY ed   Orifice   Pilot						
LITHOLOGY/	TOP	воттом	TOP	BOTTON	М								
FORMATION	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	DEPTH IN	FT DESCRIBE	ROCK TYPE A	AND RECORD QUANTITYAND						
0 1/0	NAME TVD	TVD	MD	MD	TYPE OF F	LUID (FRESH	WATER, BRINE, OIL, GAS, H₂S, ETC						
Sand/Shale	1060	1969	0	2040									
Little Lime Pencil Cave	1969	1994	2040	2068									
Big Lime	2003	2132	2008	2216									
Big Injun	2132	2180	2216	2265	Di	rilled directions	al N 61.8° W a distance of 484'						
Shale	2180	2323	2265	2417									
TD	2323		2417										
					-								
Please insert ad	l Iditional pages a	s applicable.											
Drilling Contra	actor Noah Horn Sandy Valley Lane	well billing	City	Vansant		State VA	Zip 24656						
			City	Variount		State	Zip 2.1000						
Logging Compa	any Appalachian	Well Surveys											
Address 10291	Ohio Avenue		City	Cambridge		State Of	-1 Zip 43725						
C	npany Lightning	Energy Service	s										
Address PO Box	mpany <u>Lightning</u> x 580	Lilorgy Corrido	City	Bridgeport		State W	V Zip 26330						
			·			51410							
Stimulating Cor	mpany Relianc	e Well Services			2		40505						
	anberry Street Suite		City	Erie		_State PA	Zip 16507						
Please insert ad	lditional pages as	s applicable.											
Completed by	Roger Heldman				Telephone	304-420-110	07						
Signature		lellia	Title Or	erations Ma	nager		e 10/3/22						
- 2	700 10												
Submittal of Hy	ydraulic Fracturi	ng Chemical D	isclosure Infor	mation	Attach copy of	f FRACFOC	US Registry						
							10/14						
							<b>10/14</b>						