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

API 47-085 - 10110 Co	District Ellenboro				
Quad Pennsboro Pa	d Name PEN 20	Field/Pool Name N			
Farm name_Lawrence & Angela Coke		Well Number PEN			
Operator (as registered with the OOG) Nob	le Energy, Inc.				
Address 1000 Noble Energy Drive		State PA	Zip 15317		
Top hole Northin Landing Point of Curve Northin	tach an as-drilled plat, profile view g as drilled plat to be submitted by CNX g upon completion of the well.	EastingEasting			
Elevation (ft) 1081 GL	Type of Well ■New □ Existing	Type of Report	■Interim □Final		
Permit Type Deviated Horizonta			□ Deep ■ Shallow		
Type of Operation □ Convert □ Deepen	■ Drill □ Plug Back □ F	tedrilling Rework	□ Stimulate		
Well Type □ Brine Disposal □ CBM ■ Ga	s 🗆 Oil 🗆 Secondary Recovery	□ Solution Mining □ Sto	orage Other		
Type of Completion □ Single □ Multiple Drilled with □ Cable ■ Rotary	Fluids Produced Brine	Gas □ NGL □ Oil	□ Other		
Drilling Media Surface hole ■ Air □ Mu	ud □Fresh Water Intermed	iate hole ■ Air □ Mud	□ Fresh Water □ Brine		
Production hole □ Air ■ Mud □ Fresh	Water Brine				
Mud Type(s) and Additive(s) Synthetic Oil Based			NED		
			RECEIVED Gas		
	44,00	05	RECEIVED Gas		
Date permit issued 08/05/2014 Da	tte drilling commenced 11/02/	Date drilling c	eased AN 17 /LXU 14		
Date completion activities began Not co	ompleted Date completion	activities ceased	NV Department of		
Verbal plugging (Y/N) Date per	rmission granted	Granted by	WV Department of WV Dep		
Please note: Operator is required to submit a	plugging application within 5 days	of verbal permission to p	lug		
Freshwater depth(s) ft 398'	50 C 07 C 08	Sa tala	N		
rreshwater depth(s) it	rr .	N) depths	N		
Suit water depth(s) it	(515(5) 515 515 515 515 515 515 515 515 515	red (Y/N) depths	N		
Coal depth s) ti	No Cavern(s) encour	itered (Y/N) depths			
NAME: Muhaul Do			Reviewed by: 02/03/201		
DATE: 1/30/17					

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API 47- 085	- 10110	Farm	name	.awience	x Ange	eia Cuk	eley_Well n	umber	N ZUCHS	<u> </u>
CASING	Hole	Casing			lew or	Grade	В	asket	Did cement ci	• •
STRINGS Conductor	Size 26"	Size			Used	wt/ft		epth(s)	* Provide de	tails below*
Surface		20"	+		New	 	H-36			
Coal	17.5"	13 3/8"	58	38.1'	New	<u> </u>	l-55			
Intermediate 1	10.000		 						 	Υ
Intermediate 2	12.38"	9 5/8"	54	98.8'	New	HC	K-55_			Υ
Intermediate 3										
Production	0.2/4" 0.0.4/2"		15	000 01	Nous		110			
Tubing	8-3/4" & 8-1/2"	5 1/2"	15,	009.0'	New	P-	110			<u> </u>
Packer type and d	epth set		l							
Comment Details	*approved ceme	ent variance of 2%	accelera	tor (S001) 0.2%	Antifoam	(D046) 0.1	25 lb/sk Polyeste	er Flake (D130))	
CEMENT DATA	Class/Type of Cement	Numl of Sa		Slurry wt (ppg)		Yield t ³/sks)	Volume (ft ²)	Cemer Top (M		WOC (hrs)
Conductor										
Surface	PJSM Ceme	ent 52	<u> </u>	8.6	 	1.20	633.6	0		8
Coal						.				
Intermediate 1	Type 1 / Clas	S A stage (1) 980 st	age (2) 300	15.6	Stage (1) 1	.93 Stage (2) 1.19	total 2248.4	1 0		8
Intermediate 2				ļ	 					
Intermediate 3				440				106	 -	
Production Tubing	Type 1 / Clas	s A lead 491 ta	ail 1868	14.8	Lead 1	.62 tail 1.37	total 3354.5	8 496)	8
Tuonig	<u> </u>			<u> </u>			<u> </u>			
Drillers TD (f	15020'			L	oggers T	D (ft) 14	990'			
•	ition penetrated	Marcellus		P	lug back	to (ft)				
Plug back pro	cedure									
Kick off depth	ı (ft) <u>5441'</u>	-			_					
Check all wireline logs run										
Well cored □ Yes □ No Conventional Sidewall Were cuttings collected □ Yes □ No										
DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING No centralizers used on conductor. 6 Centralizers on Surface Casing 68 Centralizers on Intermediate String (Bow string centralizers on first two joints then every third joint to 100' from surface).										
241 Centralizers	n Production String	(rigid bow string eve	ry joint to	KOP, rigid bow s	pring even	third joint fr	om KOP to top of	cement).		
		- 							ECEIVE:	<u></u>
Office of Oil and Gas										
WAS WELL COMPLETED AS SHOT HOLE										
WAS WELL	COMPLETED	OPEN HOLE?	□ Y	es 🖪 No	DET	AILS _		14414		
								Zoviron	epartme	nt or
WERE TRACERS USED Yes No TYPE OF TRACER(S) USED Environmental Protection										

TYPE OF TRACER(S) USED _

WERE TRACERS USED □ Yes ■ No

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ΔPI	47_	085	_ 1	IC)1	l 1	0	
VLI.	4/-		-	_			_	

Farm name_Lawrence & Angela Cokeley Well number_PEN 20CHS

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	well not complete				

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)
140.	Date	Rate (BI WI)	r ressure (1 31)	1 1033410 (1 51)	1011 (101)	Troppane (100)	,, a.c. (55.5)	· · · · · · · · · · · · · · · · · · ·
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Please insert additional pages as applicable.

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API 47- 085	_ 10110	Farm	_{name} Lawren	ce & Ange	la Cokeley	Well n	umber_	PEN	20CHS	3
PRODUCING	FORMATION	<u>(S)</u>	<u>DEPTHS</u>	_TVD		MD				
		_				-				
Please insert ad	ditional pages	as applicable.				_				
			□ Open Flow	OI	LTEST 🗆 F	Flow 🗆	Pump			
SHUT-IN PRE	SSURE Sur	face	_psi Botto	m Hole	psi	DURAT	ION O	F TES	Γ	hrs
OPEN FLOW	Gas mc	fpd Oil	NGL bpd	bpd	ater bpd	GAS M				Pilot
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE R					ΓYAND AS, H ₂ S, ETC)
	0		0							
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Please insert ad	lditional pages	as applicable.								
Drilling Contra	ctor Nomac 7	8 Drilling								
Address 171 L	ocust Ave. Ext.		City	Mt. Morris		_ State	PA	_ Zip	15349	
Logging Comp	any Baker Hu	ighes								
Address 400 T			City	Canonsburg		_ State	PA	_ Zip	15317	-
Cementing Cor	npany Schlun	nberger								
Address 4600	J. Barry Ct., Su	ite 200	City	Canonsburg		_ State	PA		15317	Par North
Stimulating Co	mpany							0	fice of	CEIVED
Address			City			_ State		Zip		on and Ga
Please insert ac	lditional pages	as applicable.							JAN	CEIVED Oil and Ga 1 7 2017
Completed by	Dee Swiger				Telephone	724-82	0-3061	W	VD-	artment of tal Protection
Signature	che Duig	4.1	Title B	egulatory Ana			Date D	1/09/20	J17 epa	artment

Pen 20 Wells		
Formations	Тор	Base
Shale and Sandstone	0	1222
Sandstone	1222	1346
Shale and Sandstone	1336	1506
Sandstone	1506	1548
Shale and Sandstone	1548	1650
Maxton Sand	1650	1733
Shale and Sandstone	1733	1856
Big Lime	1856	1911
Big Injun	1911	2046
Price	2046	2318
Weir	2318	2357
Shale	2357	2637
Gordon	2637	2654
Shale and Sandstone	2654	2834
5th Sand	2834	2846
Shale	2846	2989
Sandstone	2989	3003
Shale	3003	3411
Warren	3411	3473
Shale	3473	3807
Sandstone	3807	3844
Shale and Sandstone	3844	4838
Benson	4838	4900
Shale	4900	5060
Alexander	5060	5128
Shale	5128	5638
Rheinstreet	5638	5964
Cashaqua	5964	6056
Middlesex	6056	6085
West River	6085	6129
Burkett	6129	6172
Tully Limestone	6172	6173
Hamilton	6173	6174
Marcellus	6174	6233
Onondaga	6233	

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