WR-35 Rev. 8/23/13 APPROVED

NAME: 1/23/17

State of West Virginia

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

API <u>47</u> - 017	06586 Cou	nty Doddridge	District West U	Inion		
Quad Oxford	Pac		Field/Pool Name N/A			
Farm name Haessly L	and & Timber, I		Well Number O			
Operator (as registered wi	th the OOG) Nobl	e Energy, Inc.				
Address 1000 Noble	Energy Drive	City Canonsbur	g State PA	Zip 15317		
As Drilled location NA To Landing Point of Botton	p hole Northing Curve Northing	ach an as-drilled plat, proj as drilled plat to be submitted by CN upon completion of the well.	Easting			
Elevation (ft) 1335	GL	Type of Well ■New □	Existing Type of Repo	ort ∎Interim □Final		
Permit Type Deviat	ted Horizontal	■ Horizontal 6A	Vertical Depth Type	□ Deep ■ Shallow		
Type of Operation Con	nvert 🗆 Deepen	■ Drill □ Plug Back	□ Redrilling □ Rework	z □ Stimulate		
Well Type □ Brine Dispo	osal 🗆 CBM 🛢 Gas	□ Oil □ Secondary Re	covery Solution Mining	Storage Other		
Type of Completion □ S	ingle □ Multiple	Fluids Produced Brit	ne □Gas □ NGL □ Oil	⊓ Other		
	■ Rotary					
Drilling Media Surface Production hole Air Mud Type(s) and Additiv Synthetic Oil Base	■ Mud □ Fresh Ve(s)	d □Fresh Water In Vater □ Brine	ntermediate hole ■ Air □ M	ud □ Fresh Water □ Brine		
Date permit issued11	/17/2014 _{Dat}	e drilling commenced C	Date dried projection activities cea	GENERAL SP2172015		
Date completion activities	began Not co	mpleted Date cor	1 - A SAN TOWN	W : 113		
Verbal plugging (Y/N) _	Date per	mission granted	Granted by	1AN 19 2011		
Please note: Operator is r	equired to submit a p	lugging application within		V. Dapartment of Onmental Protection		
Freshwater depth(s) ft _	266',503',8	310' Open min	e(s) (Y/N) depths	N		
Salt water depth(s) ft	none noted for a	offsets Void(s) e	ncountered (Y/N) depths	N		
Coal depth(s) ft	NA		encountered (Y/N) depths	N		
Is coal being mined in are	a (Y/N)	No				
				Reviewed by:		

API 47- 01	7_ 06586	Farm na	me_Ha	essly Lar	nd & Tin	nber,	LLC Well n	umber_Ox	f 97 HHS
CASING STRINGS	Hole Size	Casing Size	De		ew or Jsed	Grade wt/ft		sket pth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	26"	20"	58		lew	J-55		<u> </u>	
Surface	17.5"	13 3/8"	904	1.7'	Vew	J-55			Y
Coal									
Intermediate 1	12.38"	9 5/8"	299	1 4' N	lew	НС	CK-55		N
Intermediate 2	12.00	0 0,0			-	- 110	JR 00		Tr.
Intermediate 3	 - 								
Production	8-3/4" & 8-1/2"	5 1/2"	20,46	3/1 Q1 N	lew	D	110		Y
Tubing	0 014 0 0172	0 1/2	20,70	54.5	4014		110		<u> </u>
Packer type and	depth set			· · · · · · · · · · · · · · · · · · ·					
Comment Details	S							_	
CEMENT DATA	Class/Type of Cement	Number of Sacks		Slurry wt (ppg)	Yiel (ft ³/s		Volume (ft ³)	Ceme Top (M	
Conductor	OI COMICILE	OI BEOKS		Wr (ppg)	1 (10.78	180)	111111111111111111111111111111111111111	Top(IV	(115)
Surface	Type 1 / Class	A 830		15.6	1.1	8	979.4	18.5	5 8
Coal	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		\dashv	10.0	— ···		070.4	10.	-
Intermediate 1	Type 1 / Class	A stage (1) 1	185	15.6	Stage (1) 1 18	1398.3	18.	5 8
Intermediate 2	1300 17 0.000	71 olago (1) 1	100	10.0	- Clage (, 1.10	1000.0	10.	0
Intermediate 3									
Production	Type 1 / Class	A Lead 515 Tail	1273	14.5	lead 1.58 T	ail 1 27	Total 6240.41	18.	5 8
Tubing	Type 17 Olass	A Lead 515 Tall	7210	14.0	10au 1.00 t	ess 1.27	10tai 0240.4 i	10.	-
Plug back pro	ation penetrated bocedure	//arcellus			ggers TD		443'		
Kick off depti	<u> </u>	□ caliper □ neutron	□ der		deviated			uction perature	□sonic
Well cored	□ Yes □ No	Convention	nal	Sidewall		W	ere cuttings co	ollected 🗆	Yes 🗆 No
8 Centralizers on Su	THE CENTRALIZ rface Casing 36 Centralizer on Production String (ri	s on Intermediate String	(Bow strin	g centralizers on fir	st two joints the	n every th	ird joint to 100' from s	urface).	ed on conductor.
	COMPLETED A			es ■ No		AILS	0	PE6	EIVED Oil and Gas
WAS WELL	COMPLETED O	PEN HOLE?	□ Yes	■ No	DETAI	LS _		JAN	1 7 2017
WERE TRAC	ERS USED	Yes a No	TYP	E OF TRAC	ER(S) US	ED _		MV Den	artmant of

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Farm name_Haessly Land & Timber, LLC _Well number_Oxf 97 HHS

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	well not complete				
11					
		-			
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-				+	
				-	
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18 4					
))					
		U.			
		Y i		<u> </u>	

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)
					(The grap of the control of the contr
		V.						
II.		3						
19		8			· ·			
R.		r).						
9		0						
		\$1 = 1						
<u>(i)</u> :								
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		1				Office	- 報の色 Ai	zD
						011106	or Ull al	D nd Gas
		1					AN 1 7 20	
22							11/20	1/

Please insert additional pages as applicable.

WV Department of Environmental Protection

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	_ 06586	Farm	name Haess	ly Land & `	Timber, LL	C Well no	_{mber} Oxf 97 H	HHS
		-			<u> </u>	w ch ha	moci	<u> </u>
PRODUCING	FORMATION((<u>S)</u>	<u>DEPTHS</u>					
				TVD		MD		
Please insert ad	lditional pages	as applicable.						
GAS TEST	□ Build up	□ Drawdown	□ Open Flow	·	DIL TEST []	Flow D	ump	
SHUT-IN PRE	SSURE Suri	face	psi Bott	om Hole	psi	DURATIO	ON OF TEST _	hrs
OPEN FLOW		Oil fpd	NGL bpd				EASURED BY ted \square Orifice	□ Pilot
LITHOLOGY/	TOP	воттом	TOP	воттом				
FORMATION	DEPTH IN FT	DEPTH IN FT			T DESCRIBE	ROCK TYPE	AND RECORD QUA	ANTITYAND
	NAME TVD 0	TVD	MD 0	MD	TYPE OF FI	LUID (FRESH	IWATER, BRINE, O	IL, GAS, H₂S, ETC)
					_	_		
-								
					1		 -	<u> </u>
							-	
						.		
							<u> </u>	
Diago insert ad	diain not make	1:1-1-			10			
Please insert ad Drilling Contra			recision 543 Horis	zontal Pia				
Address 13646					harleston	State _F	PA/WV Zip 1572	28-7815 / 25313
Logging Compa	any Baker Huç	ghes						
Address 400 To	echnology Drive)	City	Canonsbur	g	State F	PA PEG 53	17
Cementing Con	npany Schlum	berger				_	Office of OII	and Geo
Address 4600	J. Barry Ct., Suit	e 200	City	Canonsbur	g		JAN 197	la.
Stimulating Co. Address	mpany		Cit			S444 N	// Desc	קוט
Please insert ad	lditional pages a	ıs applicable.	City			Envir	onmental a	ent of
Completed by	Dee Swiger				Telephone	724-820-	V Departmonmental P	rotection

Title Regulatory Analyst, III

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Completed by Dee Swiger

Signature

Attach copy of FRACFOCUS Registry

Date 01/09/2017

Telephone 724-820-3061

Oxf 97		
Formations	Тор	Base
Shale and Sandstone	0	2123
Big Lime & Big Injun	2123	2323
Price	2323	2623
Shale and Sandstone	2623	2890
Fourth	2890	2907
Shale and Sandstone	2907	2982
Fifth	2982	2990
Shale and Sandstone	2990	3570
Speechley	3570	3601
Shale	3601	4107
Bailtown A	4107	4132
Shale and Sandstone	4132	4321
Balltown B	4321	4378
Shale and Sandstone	4378	4366
Bradford	4366	4377
Shale and Sandstone	4377	4625
Riley	4625	4647
Shale and Sandstone	4647	5157
Benson	5157	5189
Shale and Sandstone	5189	5437
Alexander	5437	5484
Shale	5484	6474
Cashaqua	6474	6602
Middlesex	6602	6651
West River	6651	6727
Burkett	6727	6756
Tully Limestone	6756	6759
Hamilton	6759	6790

Marcellus

Onondaga