WR-35 Rev. 8/23/13 APPROVED

NAME: 1/23/17

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

API 47 017 06481 County Doc	ldridge	District West Unio	on
Quad Oxford Pad Name O		Field/Pool Name N/	
Farm name Haessly Land & Timber, LLC		Well Number Oxf 9	97 AHS
Operator (as registered with the OOG) Noble Energ	y, Inc.		
Address 1000 Noble Energy Drive City		State PA	_{Zip} 15317
Top hole Northing as drilled plat Landing Point of Curve Northing Upon comple Bottom Hole Northing	tion of the well. East	tingtingting	
	-	-	
Permit Type □ Deviated □ Horizontal ■ Hor			□ Deep ■ Shallow
Type of Operation □ Convert □ Deepen ■ Drill	□ Plug Back □ Redri	illing □ Rework	□ Stimulate
Well Type □ Brine Disposal □ CBM ■ Gas □ Oil □	Secondary Recovery	olution Mining 🗆 Stor	age 🗆 Other
Type of Completion □ Single □ Multiple Fluids Pr	oduced Brine Gas	□ NGL □ Oil (□ Other
Drilled with □ Cable ■ Rotary			
Drilling Media Surface hole Air Mud Fresh Production hole Air Mud Fresh Water E Mud Type(s) and Additive(s) Synthetic Oil Based			□ Fresh Water □ Brine
<u></u>		REGEIV	/ED
N = 4 = = = = = = = = = = = = = = = = =	ommenced_ 12/23/201	4 Office of Oil Date drilling ce	ascu
Date completion activities beganNot completed		ivities ceased AN 1	
Verbal plugging (Y/N) Date permission graph Delease note: Operator is required to submit a plugging ap			rtment of al Protection
Freshwater depth(s) ft 266',503',810'	Open mine(s) (Y/N) o		N
Salt water depth(s) ft none noted for offsets	_ Void(s) encountered ((Y/N) depths	N
Coal depth(s) ft NA	Cavern(s) encountere	d (Y/N) depths	N
Is coal being mined in area (Y/N)No			Reviewed by:

API 47- 017	7_ 06481	Farm	name_	laessly L	_and & ⊺	imber,	LLC We	ell number_C	Oxf 97 A	MS
CASING STRINGS	Hole Size	Casing Size	Г	Depth	New or Used	Grade wt/ft		Basket Depth(s)		nent circulate (Y/ N) ide details below*
Conductor	26"	20"	5	8.4'	New	J	-55	1 1		
Surface	17.5"	13 3/8"	90	03.8'	New	J	l-55		iii	Υ
Coal										
Intermediate 1	12.38"	9 5/8"	29	99.8'	New	НС	K-55			N
Intermediate 2						· · · · · ·				
Intermediate 3									1	
Production	8-3/4" & 8-1/2"	5 1/2"	16.	725.2'	New	P-	110			Υ
Tubing			 						+1	
Packer type and d	epth set								- 	
Comment Details										
CEMENT DATA Conductor	Class/Type of Cement	Numb of Sac		Slurry wt (ppg)		rield ³ /sks)	Volume (ft ²)		ement (MD)	WOC (hrs)
Surface	Type 1 / Clas	O A 777		45.0	_	40	045.5	4	2.4	
Coal	Type 17 Clas	s A 778	-	15.6	1	.18	918.0	4 18	8.4	88
Intermediate 1	Type 1 / Class	n A otomo (4)	4405	45.0	01	(4) 4 40	4000			
Intermediate 2	Type 1 / Class	s A stage (1)	1100	15.6	Stage	(1) 1.18	1398.	3 10	8.4	8
Intermediate 3										
Production	Type 1 / Class	200		44.5		0.7	4007.0	- 4	2.4	
Tubing	Type 1 / Class	s A 380	1	14.5	_ _ '	.27	4827.2	7 1	8.4	8
Drillers TD (ft Deepest forma Plug back pro	tion penetrated	Marcellus			Loggers T Plug back					
Kick off depth					_					
Check all wire	line logs run	□ caliper □ neutron		ensity esistivity	□ deviate □ gamma		onal 🗆	induction temperature	□sonic	>
Well cored [Convent		Sidewa		We	ere cutting	S CHECE	NED :	No S
9 Centralizers on Surf 281 Centralizers of	HE CENTRALI ace Casing 38 Centralize n Production String (r	ZER PLACEM ers on Intermediate String rigid bow string ever	ENT U ng (Bow str y joint to h	SED FOR ing centralizers of OP, rigid bow	EACH CA on first two joints r spring every	SING ST then every thir third joint fro	TRINGO rd joint to 100' fo rm KOP to top	on surface). of cements	sed on cond	uctor.
	COMPLETED A							WV Dep	artmen	t of tection
			<u> </u>	Yes A N	10 DE	TAILS	- Er	Altoume	I Sport	
WAS WELL (COMPLETED C	PEN HOLE?	□ Ye	s 🖪 No	DETA	AILS				
WERE TRACI	ERS USED	Yes 🖪 No	TY	PE OF TRA	ACER(S) U	JSED				

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API 47- 017 06481

Farm name_ Haessly Land & Timber, LLC _Well number_ Oxf 97 AHS

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	well not complete				
	-				
		<u> </u>			
			<u> </u>		
	33				
	-				
				-	
 				1	
-					
		_			
	1,1				

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)
			5					
								_
					-			
						RE	CEIVED	Coc
	2			56		Office (of Oil and	Uas
							N 1 7 201	I
						JA	MILERI	
		_						nt of
				1		MAF	Jepartine	ntection.
				1		WV I	nental P	Ofection.
	8							

Please insert additional pages as applicable.

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API 47- 017	06481	Farm	_{name} Haessl	y Land & ⊺	imber, LL	C Well number Oxf 97 A	HS
PRODUCING	FORMATION(<u>(S)</u>	<u>DEPTHS</u>	TVD _		MD	
Please insert ac	iditional pages a	s applicable.		_			
GAS TEST	□ Build up □	Drawdown	□ Open Flow	0	IL TEST 🗆	Flow □ Pump	
SHUT-IN PRE	SSURE Surf	ace	_psi Botto	m Hole	psi	DURATION OF TEST	hrs
OPEN FLOW		Oil pd	NGL bpd			GAS MEASURED BY □ Estimated □ Orifice	□ Pilot
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD		ROCK TYPE AND RECORD QUAI LUID (FRESHWATER, BRINE, OIL	
	0		0				
<u> </u>							
<u> </u>						-	<u> </u>
			1				
Please insert ad	lditional pages a	s applicable.					
	ctor Whipstock 23						
Address 13646	Route 403 Hwy I	V / 5400D Big 1	yler Rd City	Clymer / Ch	arleston	State PA/WV Zip 15728	1-7815 / 25313
	any Baker Hug						
Address 400 16	echnology Drive		City	Canonsburg	<u> </u>	_ State PA FECEIVE	<u>D</u>
	mpany Schlumb					Office of Oil an	d Gas
Address 4600	J. Barry Ct., Suite	200	City	Canonsburg		State PA Zip 1531	7
Stimulating Co	mpany					9. 11. •	_
Address	114,4	,, ,,	City			State WV Departm	ent of
riease insert ad	ditional pages a	s applicable.				Environmental F	Protection
	Dee Swiger		.			724-820-3061	
Signature	// // // // /\	113.001	/ Tialo Ro	egulatory Ana	livef III	D-4- 01/09/2017	

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

Oxf 97

OAI 37		
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
Balltown 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	6790	6840
Onondaga	6840	

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01/27/2017