WR-35 Rev. 8/23/13 APPROVED
NAME: CONTENTS OF THE PARTY OF THE

Page ___ of ___

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

API <u>47</u> - 017	_ 06585	County Doddr	idge	Distri				
Quad Oxford		Pad Name Oxf	97	Field/Pool Name N/A				
Farm name Haessly	Land & Tin	nber, LLC			Number Oxf			
Operator (as registered	with the OOG)	Noble Energy,	Inc.			<u> </u>		
Address 1000 Nobl	e Energy D	rive _{City} Ca	nonsburg	S	tate PA	Zip _	15317	
Landing Point	Top hole 1 of Curve 1	Attach an as-drill Northing as drilled plat to be Northing upon completion Northing	of the well.	Easting Easting	ation survey			
Elevation (ft) 1335	GL	Type of Well	■New □ Exis	sting T	ype of Report	■Interim	□Final	
Permit Type Dev	iated □ Ho	orizontal A Horizon	ntal 6A 🛭 V	ertical l	Depth Type	□ Deep	Shallow	
Type of Operation \Box C	convert □ D	eepen 🖺 Drill (∃ Plug Back	□ Redrilling	□ Rework	□ Stimulat	te	
Well Type □ Brine Dis	sposal □ CBM	■ Gas □ Oil □ Se	condary Recove	ery 🗆 Solution	Mining □ Sto	rage □ Ot	ther	
Type of Completion □ Drilled with □ Cable	■ Rotary				[GL □ Oil			
Drilling Media Surface Production hole □ Air Mud Type(s) and Addit Synthetic Oil Bas	■ Mud □	□ Mud □Fresh Water □ Brin		mediate hole	≜ Air □ Mud	□ Fresh V	Vater □ Brine	
			<u> </u>		<u>. </u>			
Date permit issued 1	1/17/2014	_ Date drilling com	menced01/0	08/2015	Date drilling co	eased 0	6/03/2015	
Date completion activiti	es began	lot completed	_ Date comple	etion activities	ceased	ENEW EN	ED_	
Verbal plugging (Y/N)	I	ate permission grante			anted boffice	AZMI JEDIN CHAN IN	_	
Please note: Operator is	s required to su	omit a plugging applic						
Freshwater depth(s) ft Salt water depth(s) ft		503',810' d for offsets	Open mine(s) Void(s) enco	(Y/N) depths untered (Y/N)	WV Environ	Departr mental	nent of Protection	
Coal depth(s) ft	N	<u> </u>		countered (Y/N		N		
Is coal being mined in a	rea (Y/N)	No				Review	ved by:	

WR-35 Rev. 8/23/13										P	age of
API 47- 017	06585	Fa	rm name_	laessly La	nd & T	imber,	LLC_ _{Wel}	l numbe	er_Oxf	97 GH	
CASING STRINGS	Hole Size	Casing Size	г		lew or Used	Grade wt/ft		Basket Depth(s)			circulate (Y/ N)
Conductor	26"	20"		-	New		J-55		1	FIOVICE (ctans below
Surface	17.5"	13 3/8"		62.6'	New		I-55	 			Υ
Coal		10 010	-	52.0	11011			-			<u> </u>
Intermediate 1	12.38"	9 5/8"	20	98.4'	New	ш	K-55			-	N
Intermediate 2	12.00	3 3/0		30.4	4044	110	/K-33			_	IN .
Intermediate 3			-		-		- 1				
Production	8-3/4" & 8-1/2"	E 4/0"	20	005.61	Mann		440	_			
Tubing	8-3/4" & 8-1/2"	5 1/2"	20,	885.6'	New	P-	110				Y
Packer type and de	enth set					<u></u>	j				
Comment Details											
OTTA CONTRACT		_									
CEMENT DATA	Class/Type of Cement	-	lumber f Sacks	Slurry wt (ppg)		(ield : ³ /sks)	Volume (ft ³)		Cement Top (MD)	`	WOC
Conductor	OI COMMENT		DUCKS	Wr (ppg)	Τ . ("	. /38.3)	<u> </u>		TOP (MID)	/	(hrs)
Surface	Type 1 / Class	s A	930	15.6	1	.18	1097.4		18.5		8
Coal	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_		10.0	+ '	. 10	1007.			_	
Intermediate 1	Type 1 / Class	A stage	(1) 1185	15.6	Stage	(1) 1.18	1398.3		18.5		8
Intermediate 2	1,700 1,7 0,000	ord order	(1) 1100	10.0	Otage	(1) 1.10	1000.0		10.0		
Intermediate 3					+			-			
Production	Type 1 / Class	Δ Lead 5	10 Tail 4350	14.5	load 1.5	8 Tail 1.27	Total 633	220.2		_	8
Tubing	1700 17 01830	77 2000 0	- 1811 4885	17.5	lead 1.0	0 Tail 1.27	10(a) 000	0.5	18.5		
Drillers TD (ft Deepest forma Plug back prod	tion penetrated_	Marcellus				D (ft) <u>201</u> to (ft)					
Kick off depth Check all wire		□ cali	ner 🗆 d	ensity [– ⊐ deviate	ed/directi	onal di	nduction	,		
		□ neu	tron 🗆 r	esistivity c	⊒ deviate ⊒ gamma	ı ray	_ t	empera	ture i	□sonic	
Well cored DESCRIBE TI			entional	Sidewall	ACU C		ere cutting				
8 Centralizers on Surfa	HE CENTRALI: ace Casing 36 Centralize	rs on Intermedia:	e String (Bow st	ring centralizers on fi	rst two joints	then every th	ird joint to 100° fro	m surface).			
320 Centralizers or	n Production String (r	gid bow string	every joint to I	CP, rigid bow sp	ring every	third joint fro	om KOP to top	of cemen	t).		EIVED
		·							Off	ice of (Oll and Ga
WAS WELL C	COMPLETED A	S SHOT H	OLE 0	Yes ≜ No	DF	ETAILS				JAN	1 7 2017
									W	/V Den	artment of
WAS WELL C	COMPLETED O	PEN HOL	E? □Ye	s 🛮 No	DETA	AILS					ntal Protect

WERE TRACERS USED □ Yes ■ No TYPE OF TRACER(S) USED _____

WR-	35
Rev.	8/23/13

Page ___ of ___

API 47- 017 06585

Farm name Haessly Land & Timber, LLC Well number Oxf 97 GHS

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	well not complete				
		1			
m .					
			<u> </u>		
15		V		-	
17		7			
ř.					
		0		-	
-				- 1	
		115			

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)
								g.
	l l			2.0				
						10		
				A		4	REC Office of	CEIVED Oil and Gas
							JAN	1 7 2017
	171						MAY Do	artment of

Please insert additional pages as applicable.

Environmental Protection

R-35 ev. 8/23/13									Page of
PI 47- 017	06585	Far	_{rm name} Haess	y Land &	Timber, L	LC Well	number	Oxf 97 GH	IS
RODUCING	FORMATIC	N(S)	<u>DEPTHS</u>						
				TVD	-	MD			
									
ease insert ad	ditional page	es as applicable							
AS TEST	□ Build up	□ Drawdowr	□ Open Flow		OIL TEST	Flow	Pump		
IUT-IN PRE	SSURE S	urface	psi Botto	m Hole	psi	DURA	TION O	F TEST	hrs
PEN FLOW	Gas r	Oil mcfpd	NGL bpd		Water bpd			RED BY	⊐ Pilot
THOLOGY/ RMATION	TOP DEPTH IN F NAME TVI			BOTTOM DEPTH IN I	FT DESCRIB			RECORD QUAN' ER, BRINE, OIL,	
	0	, IVB	0	MD	TIPEOF	rLUID (FRE	SHWAII	ER, BRINE, UIL,	GAS, H₂S, ETC)
								<u>.</u>	
		Į.							
				Ē	-				
	_								
ase insert ad	ditional page	s as applicable	· · · · · · · · · · · · · · · · · · ·						
_			Precision 543 Horizo		Charleston	State	PA/W	V Zip 15728-	7815 / 25313
gging Compa	any Baker H	lughes							
dress 400 Te			City	Canonsbu	ırg	State	PA	_Zip _15317	
menting Com dress 4600 J			City	Canonsbu	ırg	State	PA	Zip 15817	OFNER
	<u></u>	-							CEIVED f Oil and Ga
mulating Con dress	прапу	-	City		-	State		7in	on and Ga
	ditional page	s as applicable				State		- Zip JAN	1 7 2017
mpleted by	Dee Swide	r			rr-1- 1	- 724 <u>-</u> 926	J_3U64		partment of
mbieren bă	272 24190	wigw	Title R		Telephon	e 124-02	U-300 I	<u> vv v De</u>	partment of Intal Protect

Submittal of Hydraulic Fracturing Chemical Disclosure Information

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
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

6840

Onondaga