

August 18, 2014

VIA UPS NEXT DAY AIR

Mr. Gene Smith
West Virginia Department of Environmental Protection
Office of Oil & Gas
601 57th Street
Charleston, WV 25304

Re: WR-35 - Carl Rotter OHI 1H

Dear Mr. Smith:

Chesapeake Appalachia, L.L.C. submits the *Operator's Interim Report of Well Work* in duplicate for the above captioned well(s) located in Ohio County.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person of persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete.

If you have any questions or require additional information please feel free to contact me at (405)935-4158 or marlene.williams@chk.com.

Sincerely,

Chesapeake Appalachia, L.L.C

arter Williams

Marlene Williams Regulatory Analyst II

Enclosure(s)

cc: West Virginia Geological and Economic Survey

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

API <u>47</u> - 069 _ 00171	Ohio	Distr	ict Liberty	
Quad Valley Grove		Rotter OHI Field		
Farm name Carl Rotter OHI 1H		Wel	l Number 8377	' 50
Operator (as registered with the OO	G) Chesapeake Appa	ılachia, L.L.C.		
Address P.O. Box 18496	Okl	ahoma City	State OK	Zip 73154-0496
As Drilled location NAD 83/UTN Top hole Landing Point of Curve Bottom Hole	Attach an as-drille Northing 4439131.7 Northing Northing 4441580.1	d plat, profile view, and dev Easting Easting Easting	539000.9	
Elevation (ft) 1,340' GL	Type of Well	■New □ Existing	Type of Report	■ Interim □Final
Permit Type Deviated	Horizontal	tal 6A 🛛 Vertical	Depth Type	□ Deep ■ Shallow
Type of Operation □ Convert □	Deepen 🗏 Drill 🗆	Plug Back	□ Rework	□ Stimulate
Well Type □ Brine Disposal □ Cl	BM ■ Gas □ Oil □ Sec	ondary Recovery	on Mining 🗆 Sto	orage 🗆 Other
Type of Completion ■ Single □ M Drilled with □ Cable ■ Rotary	Multiple Fluids Produ	ced □ Brine ■Gas □	NGL □ Oil	□ Other
Drilling Media Surface hole	Air □ Mud ■Fresh Wa	ter Intermediate hole	■ Air □ Mud	■ Fresh Water □ Brine
Production hole Air Mud Mud Type(s) and Additive(s)				
SOBM				
Date permit issued 6-13-2013	Date drilling comr	nenced 12-2-2013	Date drilling c	eased12-31-2013
Date completion activities began		Date completion activities	s ceased	
Verbal plugging (Y/N)	_ Date permission granted	i (Granted by	
Please note: Operator is required to	submit a plugging applica	ation within 5 days of verbal	permission to pl	lug
Freshwater depth(s) ft	622'	Open mine(s) (Y/N) depths	S	N
Salt water depth(s) ft	830'	Void(s) encountered (Y/N)	depths	
Coal depth(s) ft	742'	Cavern(s) encountered (Y/	N) depths	N
Is coal being mined in area (Y/N) _	N			Reviewed by:

API 47- 069	API 47- 069 _ 00171 Farm name Carl Rotter OHI 1H Well number 837750										
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)		ment circulate (Y/ N) ride details below*		
Conductor	26"	20"	122'	New	J-5	5 / 94#			Υ		
Surface	17 1/2"	13 3/8"	765'	New	J-55	/ 54.5#			Υ		
Coal											
Intermediate 1	12 1/4"	9 5/8"	2,254'	New	J-5	5 / 40#			Υ		
Intermediate 2											
Intermediate 3											
Production	8 3/4" / 8 1/2"	5 1/2"	15,856'	New	P-1	10 / 20#			Y		
Tubing Tubing											
Packer type and depth set											
Comment Details											
CEMENT	Class/Type	Numbe	r Slu	пу	Yield	Volume	e C	ement	WOC		
DATA Conductor	of Cement	of Sack	`	1	ft ³ /sks)	(ft ³) 513.6		p (MD) urface	(hrs)		
Surface	A	225 / 20			1.20	8					
Coal	A 692 15.60 1.21 837.32 Surface 8										
Intermediate 1	^	A 793 15.60 1.18 935.74 Surface							0		
Intermediate 2	A 793 15.60 1.18 935.74 Surface 8										
Intermediate 3											
Production	H 927 / 2,308 15.60 1.18 3817.3 970' 8										
Tubing											
Drillers TD (ft) Loggers TD (ft) Deepest formation penetrated Marcellus Plug back to (ft) Plug back procedure Kick off depth (ft) 5,648'											
Check all wire	line logs run	■ caliper ■ neutron	■ density ■ resistivity		ted/directi na ray		induction temperature	e □son	ic		
Well cored	Yes No	Convention	onal Side	ewall	W	ere cutting	gs collected	■ Yes	□ No		
					'ASING S	TRING _					
		o of the first joint, top of the thi , 2nd at top of the first join									
WAS WELL O	COMPLETED A	AS SHOT HOLE	Yes 🗆	No D	ETAILS						
WAS WELL O	WAS WELL COMPLETED OPEN HOLE?										
WERE TRACE	WERE TRACERS USED Yes No TYPE OF TRACER(S) USED										

API 47- 069 - 00171 Farm name Carl Rotter OHI 1H Well number 837	750
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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
<u></u>					
-					
		L	l	L	

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)
	:							

Please insert additional pages as applicable.

WR-35 Rev. 8/23/13

API 47- 069	_ 00171	Farm	name Carl Rotte	r OHI 1H			Well i	number	837750	
PRODUCING :	FORMATION(S	5)	<u>DEPTHS</u>							
	CHAMITTOTAL									
Marcellus			6555	_ TVD	6955		MD			
										
Please insert ad	ditional pages a	s applicable.								
GAS TEST	□ Build up □	Drawdown	□ Open Flow		OIL T	ΓEST □	Flow [2 Pump		
SHUT-IN PRE	SSURE Surf	ace	_psi Botto	m Hole		psi	DURA	TION O	F TEST	hrs
OPEN FLOW	Gas	Oil	NGL		Wate	er	GAS N	1EASU	RED BY	
		pd 1	opd	bpd _		bpd			□ Orifice	e 🗆 Pilot
				_						
LITHOLOGY/	TOP	воттом	TOP	воттом	1					
FORMATION	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	DEPTH IN	FT I	DESCRIBE	ROCK TY	PE AND	RECORD Q	UANTITYAND
	NAME TVD	TVD	MD	MD		TYPE OF FL	UID (FRE	SHWAT	ER, BRINE,	OIL, GAS, H2S, ETC)
	0		0							
SS/Sh	0	200	0	200				Sandsto	ne and Sha	le
SS/Sh/Minor LS	200	742	200	742			Sandstor	ne, Shale	, and Minor	Limestone
Pitts Coal	742	752	742	752				Pittsb	urgh Coal	
SS/Sitstone/Sh	752	1520	752	1520					itstone, and	
Shale/Minor SS	1520	1780	1520	1780			Sha	ale with N	/linor Sands	stone
Big Lime	1780	1822	1780	1822				Bi	g Lime	
Big Injun SS	1822	2097	1822	2097				Big Injur	n Sandston	10
Grey Shale	2097	6386	2097	6566				Grey De	vonian Shal	le
Geneseo Sh	6386	6404	6566	6597				Gene	seo Shale	
Tully LS	6404	6437	6597	6656	_				_imestone	
Hamilton Sh	6437	6555	6656	6955	_				Iton Shale	
Marcellus Sh	6555	TD	6955	TD				Marce	ellus Shale	
TD	1:4:1	6486		15856					TD	
Please insert ad	ditional pages a	s applicable.								
Drilling Contra	ctor Nomac Drill	ling								
Address 171 Lo	cust Ave Extension		City	Mt. Morris			State	PA	Zip _15	349
	Nomes Drilli	in a								
	any Nomac Drill		G! ·	Mt. Morris			G	DΛ	1 <u>5</u>	340
Address 171 Lo	cust Ave Extension	l	City	IVIL. IVIORIS			State	<u> </u>	Zip <u> 15</u>	343
Cementing Cor	npany Schlumbe	erger								
Address 1080 U	.S. 33		City	Weston			State	WV	Zip 26	452
Stimulating Co	mpany				_					
-			City	4			State		Zip	
Please insert ad	ditional pages a	s applicable.								
O1-1-1	Marlene William	ne			-	Calamba	405-935	-4158		
- 1 1	Marlene William	11 1. 10 %	ny Title R	egulatory Ans		relephone			/18/14	
Signature	1 ame	week	THE THE	Salutory / Wil	, ot 11		-	Date _	, 5/ 1 /	
G. J 144-1 - 677-		lus Obsustant I	N1		A 44	_1	EED ACI	200110	D = =!=t	

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

API 47 069 001	71 County Ohio		District_Liberty	
Quad Valley Grove		l Rotter OHI	Field/Pool Name	
Farm name Carl Rotter OHI			Well Number 8377	
Operator (as registered with th	ne OOG) Chesapeake Ap	palachia, L.L.C.		
Address P.O. Box 18496	City C		State OK	_{Zip_} 73154-0496
As Drilled location NAD 83 Top ho Landing Point of Cur Bottom Ho	le Northing 4439131.7 ve Northing		, and deviation survey Easting 539000.9 Easting 537549.9	
Elevation (ft) 1,340'	_ GL Type of Wel	l New 🗆 Existing	Type of Report	■Interim □Final
Permit Type Deviated	□ Horizontal 🖪 Horiz	contal 6A	al Depth Type	□ Deep ■ Shallow
Type of Operation □ Convert	Deepen ■ Drill	□ Plug Back □ R	edrilling 🗆 Rework	□ Stimulate
Well Type □ Brine Disposal	□ CBM ■ Gas □ Oil □ S	Secondary Recovery	□ Solution Mining □ Sto	orage 🗆 Other
Type of Completion ■ Single Drilled with □ Cable ■ R	e □ Multiple Fluids Pro otary	duced □ Brine ■C	Gas □ NGL □ Oil	□ Other
Drilling Media Surface hole Production hole Air A Mud Type(s) and Additive(s) SOBM			ate hole ■ Air □ Mud	■ Fresh Water □ Brine
Date permit issued6-13-		mmenced 12-2-2		
Date completion activities beg Verbal plugging (Y/N)				
Please note: Operator is requi	red to submit a plugging appl	lication within 5 days	of verbal permission to pl	ug
Freshwater depth(s) ft	622'	Open mine(s) (Y/I	N) depths	N
Salt water depth(s) ft	830'	Void(s) encounter	ed (Y/N) depths	N
Coal depth(s) ft	742'		ered (Y/N) depths	
Is coal being mined in area (Y	(N) N			Reviewed by:

API 47- 069	_ 00171	Farm na	_{me} Carl Rot	ter OHI 1F	1	We	ell number8	337750				
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)		ement circulate (Y/N) vide details below*			
Conductor	26"	20"	122'	New	J-5	5 / 94#			Υ			
Surface	17 1/2"	13 3/8"	765'	New	J-55	5 / 54.5#			Y			
Coal				•								
Intermediate 1	12 1/4"	9 5/8"	2,254'	New	J-5	5 / 40#			Υ			
Intermediate 2												
Intermediate 3												
Production	8 3/4" / 8 1/2"	5 1/2"	15,856'	New	P-1	10 / 20#			Υ			
Tubing			,									
Packer type and d	epth set			<u> </u>	_L		<u> </u>					
Comment Details												
CEMENT	Class/Type	Number	Slun	ry	Yield	Volume	e Ce	ement	WOC			
DATA	of Cement	of Sacks			ft ³/sks)	(ft 3)		(MD)	(hrs)			
Conductor	Α	225 / 20	3 15.6		1.20	513.6		ırface	8			
Surface	A	A 692 15.60 1.21 837.32 Surface										
Coal												
Intermediate 1	A 793 10,00 1.10 933.74 Odilace 8											
	ntermediate 2											
Intermediate 3												
Production	Н	927 / 2,30	08 15.6	0	1.18	3817.3	3 9	970'	8			
Tubing												
-	tion penetrated _											
Check all wire		■ caliper ■ neutron	density ■ resistivity		ted/directi a ray		induction temperature	□son	ie			
Well cored	Yes ■ No	Conventio	nal Side	wall	W	ere cutting	s collected	■ Yes	□ No			
DESCRIBE TI		ZER PLACEME of the first joint, top of the third	NT USED FO jt and every 4th joint to st	OR EACH C.								
WAS WELL C	COMPLETED A	S SHOT HOLE	□ Yes □	No Di	ETAILS							
WAS WELL C	COMPLETED O	PEN HOLE?	□ Yes □ N	o DET	AILS _							
WERE TRACI	ERS USED 🗆 🖰	Yes □ No	TYPE OF T	RACER(S)	USED _							

API 47- US - US	/III T/		Well number
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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft,	Perforated to MD ft.	Number of Perforations	Formation(s)
					·

Please insert additional pages as applicable.

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Please insert additional pages as applicable.

WR-35 Rev. 8/23/13

API 47- 069 - 00171		Farm :	Farm name Carl Rotter OHI 1H			Well number 837750				
PRODUCING	FORMATION(S)	DEPTHS							
Marcellus	•		6555	min.	60	55	1 (0)			
			0000	TVD			MD			
										
Please insert ad	lditional pages a	s applicable.								
GAS TEST	□ Build up □	Drawdown	□ Open Flow		OIJ	LTEST of	Flow [2 Pump		
SHUT-IN PRE	SSURE Surf	ace	_psi Botto	m Hole		psi	DURA	TION O	F TES	T hrs
OPEN FLOW	Gas	Oil	NGL		W	ater	GASN	⁄/EASU	RED F	BY
	mcf	pd t						nated		
LITHOLOGY/	TOP	BOTTOM	TOP	BOTTO	M					
FORMATION	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	DEPTH IN	FT	DESCRIBE	ROCK TY	PE AND	RECOR	D QUANTITYAND
	NAME TVD	TVD	MD	MD		TYPE OF FL	UID (FRE	SHWATI	ER, BRI	NE, OIL, GAS, H₂S, ETC)
	0		0							
SS/Sh	0	200	0	200				Sandsto		
SS/Sh/Minor LS	200	742	200	742		Sandstone, Shale, and Minor Limestone				
Pitts Coal	742	752	742	752		Pittsburgh Coal				
SS/Sitstone/Sh	752	1520	752	1520		Sandstone, Siltstone, and Shale Shale with Minor Sandstone				
Shale/Minor SS	1520	1780	1520	1780			Sna			andstone
Big Lime	1780	1822	1780 1822	1822 2097					g Lime	ntono
Big Injun SS Grey Shale	1822 2097	2097 6386	2097	6566				Big Injur Grey De		· · · · · · · · · · · · · · · · · · ·
Geneseo Sh	6386	6404	6566	6597				•	seo Sha	
Tully LS	6404	6437	6597	6656					imesto.	
Hamilton Sh	6437	6555	6656	6955					ton Sha	
Marcellus Sh	6555	TD	6955	TD					llus Sha	
TD		6486	0000	15856					TD	
	ditional pages a			10000						
	Nomae Drill	ina								
Drilling Contra	ctor Nomac Drill cust Ave Extension	ing	C!+	Mt. Morris			C4-4-	PΔ	7!	15349
Address 17 Lo	cust Ave Extension	I	City	WIL, WOITIS			State	PA	Zip	100-10
Logging Compa	any Nomac Drilli	ng								
	cust Ave Extension		City	Mt. Morris			State	PA	_ Zip	15349
	0.444.									-
	npany Schlumbe	erger		14/			~	14/1/		06450
Address 1080 U	.5. 33		City	Weston			State		_ Zip	20402
Stimulating Con	mpany									
Address	* ·······		City		_		State		Zip	
	ditional pages a	s applicable.							г	
	Marlene William	S				Telephone				
Signature	1 plane	Willia	74 Title Re	egulatory An	nalyst	11		Date <u>8/</u>	18/14	
Submittal of Hy	draulic Fracturi	ng Chemical D	isclosure Infor	mation	At	tach copy o	f FRACF	OCUS	Regist	ry



UPS Shipping Form



Request ID: 00093416

Carrier Information

Carrier UPS

Destination Domestic

Addressee

Company Shipping To WV DEP

Attention To Mr. Gene Smith

Address: Office of Oil & Gas

601 57th Street

City Charleston

State WV

Country US

Postal Code 25304

Ostal Code 25504

Phone 3049260499

Email Gene.C.Smith@wv.gov

Service Type -

Next Day Air

Delivery typically by 10:30 a.m.

This service provides guaranteed next-business-day delivery from and to most addresses in the US 50 and Puerto Rico, with some limitations in Alaska and Hawaii.

Shipment Details

Package Reference 1 Interim completion

Signature Required

Sender Info

Sender Name Marlene Williams

Sender Email marlene.williams@chk.com

Carl Rotter OHI 14