Page	of
------	----

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

API <u>47</u> - 039 - 06327		vha	District_Elk		
Quad Big Chimney	Pad Name n/a			_{ime} n/a	
Farm name Central WV Region					
Operator (as registered with the O	OG) Reserve Oil and	Gas, Inc.			
Address 929 Charleston Road	City S	pencer	State W	V Zip 2	25276
As Drilled location NAD 83/UT Top hole Landing Point of Curve Bottom Hole	Northing 502,865/424		v, and deviation sur Easting 1,790,012 Easting Easting	vey (4 04 48 052) 78	<u>1. 5947549</u> ————
Elevation (ft) 785 G	L Type of Well	■New □ Existing	Type of F	Report Interim	& Final
Permit Type Deviated	Horizontal Horizo	ontal 6A 🖪 Vertic			■ Shallow
_	_		•	•	
•	-	_	edrilling Rev		
Well Type □ Brine Disposal □ C	BM BGas □Oil □Se	econdary Recovery	□ Solution Mining	□ Storage □ Ot	her
Type of Completion □ Single □]	Multiple Fluids Prod	uced 🗆 Brine 📕	Gas □ NGL □	Oil Dother	
Drilled with Cable Rotary	•				
Drilling Media Surface hole ■ Production hole ■ Air □ Mud Mud Type(s) and Additive(s) n/a			ate hole Air (⊃ Mud 🗂 Fresh W	'ater □ Brine
Date permit issued12/19/201	1 Date drilling com	menced 08/27/2	013 Date dri	illing ceased = 0	9/06/2013
Date completion activities began			activities ceased		EIVED -
Verbal plugging (Y/N) n/a	Date permission grante	ed n/a	Granted by		Alierio Gas
	_			NOV 2	2 5 2013
Please note: Operator is required to	submit a plugging applic	cation within 5 days	of verbal permissio	n to plug _V Dep	artment of
Freshwater depth(s) ft	n/a	Open mine(s) (Y/N		Environmen NO	tal Protection
	68, 1011	Void(s) encountered	·	RECERV	
Coal depth(s) ft106	2 - 1065	Cavern(s) encounter	ered (Y/N) denthe	Office of CNO.	ed Co-
Is coal being mined in area (Y/N)		-a. a.m(s) encount	orog (1114) dehuts		•
• • • • • •				OCT Review	ыЗ _{by:}

WR-35 Rev. 8/23/13									Page of
API 47- 039	06327	Farm n	ame_Centra	al WV Regi	ional Airpo	ort Well	number_Ye	ager#2	2
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)		nent circulate (Y/N) ide details below*
Conductor	17 1/2	13 3/8	18.00	New		48.0	none	No, cer	nent by hand to surface
Surface	12 1/4	9 5/8	336.00	New		26.0	1 at 84'		es, 5 bbls to pit
Coal									
Intermediate 1									
Intermediate 2									
Intermediate 3			•						
Production	8 3/4	7	1646.00	New		17.0	1 at 295'		res, 5 bbls to pit
Tubing									
Packer type and de	epth set								
CEMENT	Class/Type	Numl		Slurry	Yield	Volume			Woc
DATA	of Cement	of Sac	<u>ks ₩</u>	t (ppg)	(ft ³ /sks)	(ft.²)	Top ((hrs) 7
Conductor	Portland	7		44.0	1.4	168	G		13
Surface	Type 1	120	'	14.8	1,4	100			
Coal						 			
Intermediate 1 Intermediate 2						 			
Intermediate 2						 			
				14.8	1.4	315	- G	SL	16
Production Tubing	Type 1	225		14.0	1.4	1 0.0			
Drillers TD (ft Deepest forma Plug back pro	tion penetrated	Devonian Shale			ers TD (ft) 4 eack to (ft) _	336			
Kick off depth		■ caliper	densit	y □ de	eviated/direc		induction temperature	≣ sor	nic
	⊐Yes 🖺 No			Sidewall		_	gs collected		
DESCRIBE T		IZER PLACE	MENT USEL	FOR EAC	H CASING	STRING _			
9 5/8": 1 centralizer									
7": 3 centralizers us	ed at joints: 10, 20, 34								
WAS WELL	COMPLETED	AS SHOT HO	LE 🗆 Yes	∄ No	DETAILS				
WAS WELL	COMPLETED	OPEN HOLE?	■ Yes □	⊃ No I	DETAILS .				
WERE TRAC	CERS USED	□ Yes ■ No	TYPE C	F TRACER	k(S) USED				

WR-35 Rev. 8/23/13							Page of
API 47- 039	_ 06327	Farm	name_Central V	W Regional A	irport	Well number_	-
PRODUCING	FORMATION	<u>((S)</u>	<u>DEPTHS</u>				
Berea			2031-2043	TVD		MD	
Shale			2043-2123				
Huron			2123-3663				
Devonian Shal	е	<u></u>	3663-4319				
Please insert a	dditional pages	as applicable.					
GAS TEST						Flow 🗆 Pump	
SHUT-IN PRE	ESSURE Sur	face 0	psi Bott	om Hole 180	psi	DURATION OF	TEST 7 hrs
OPEN FLOW		Oil	NGL		Water	GAS MEASUR	
	84 mc	fpd	bpd	_ bpd	bpd		
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD 0	BOTTOM DEPTH IN FI MD			CORD QUANTITYAND , BRINE, OIL, GAS, H2S, ETC)
			1 -		 		
				<u> </u>			
						······································	
			 -				
			 				
		 					
		 			<u> </u>		
					†		
						· · · · · · · · · · · · · · · · · · ·	
Diago import od	مانان	1: 11				See Attachment	for Formations
Please insert ad							
Drilling Contra		/alley Drilling					
Address 929 Ch	aneston Road		City	Spencer		State	Zip 25276
Logging Compa	any Nabors Con	npletion & Produ	uction Services	Co.			
Address 515 We	st Greens Road, S	Suite 1100	City	Houston		_State TX	Zip_77067
Cementing Com	many Baker Hu	idhes					
Address 17015 A			City	Houston		State TX	Zip_77073
Stimulating Cor			Ony			_ State _···	
Address			City			_ State	Zip_
Please insert add	ditional pages a	s applicable.					
Completed by	Ryan Fields	<i>*</i>			Telephone	304-927-5033	

Date

WR-	35
Rev.	8/23/13

Page	of	
1 45V		

API 47	₇₋ 039 -	06327	Farm nameCentral WV Regional Airport	Well number#2
--------	---------------------	-------	--------------------------------------	---------------

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	101010102				no perforations
\vdash					
					
			<u> </u>		
L					
-					
					
ļ					

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.		Tuto (DI M)						no stimulation
_								
								RECEIVED
		-					Calcu	
								1UV \$ 5 ZUB
_							VVV	Deparenem of
							Envilor	mental Protect
						 		
						 		
	<u> </u>					-	RECE	IVED
						10	ice of O	IVED Land Gas

Please insert additional pages as applicable.

OCT 1 5 2013

Formation	TOP (TVD)	BOTTOM (TVD)	TOP (MD)	BOTTOM (MD)	Remarks	
KB to GL			0	7	768', hole wet	1
Rock	0	53	7	60	start soap	1
Sand & Shale	53	108	60	115	pump	
Shale	108	208	115	215		1
Sand	208	245	215	252	1011', 3" stream	1
Shale	245	661	252	668		1
Salt Sand	661	1055	668	1062	1974', crude oil	1
Coal	1055	1058	1062	1065		
Shale	1058	1089	1065	1096	2005', gas,	1
Maxton	1089	1199	1096	1206	4/10th thru 2"	1
Shale	1199	1209	1206	1216		1
Sand	1209	1341	1216	1348	4326', gas,	
Little Lime	1341	1372	1348	1379	4/10th thru 2"	1
Shale	1372	1375	1379	1382		1
Big Lime	1375	1558	1382	1565		1
njun	1558	1584	1565	1591	<u> </u>	1
Squaw	1584	1595	1591	1602		1
Shale	1595	2031	1602	2038		1
Brea	2031	2043	2038	2050		1
Shale	2043	2123	2050	2130		
Huron	2123	3663	2130	3670		
Devonian Shale	3663	4319	3670	4326		
					Hill Collyby	
					files of On an	u Vidb
					NOV 252011	
	<u> </u>				A CLE CO	make in the
					NY Caperdina	III UI ana adilan
				E i i	ironmental Pr	otection
				REC	EIVED	
				Office of	Cil and Gas	
				001	5 2013	
<u> </u>				lanem		
				CEC VV DOD	Priment of tall Pr 1:2/9:6/2	