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

RECEIVED Office of Oil and Gas

JUL 7 2017

API 47 - 085 - 09974 Count	_y 085-Ritchie	District 02-Grant	WV Department of nvironmental Protection
F44 Detroleum	-		
Farm name Betty W. Metz		Field/Pool Name	
ALLIE	D ENERGY, INC.	Well Number Valer	101110 #4
Operator (as registered with the OOG) ALLIEL Address 35 Ridgewood Blvd	City Belpre	State OH	_{Zip} <u>45714-8218</u>
Top hole Northing _ Landing Point of Curve Northing _	an as-drilled plat, profile	Easting	
Elevation (ft) 679' GL Tyl	pe of Well ■New □ Ex	tisting Type of Report	■Interim □Final
Permit Type Deviated Horizontal	□ Horizontal 6A .	Vertical Depth Type	□ Deep Shaffow
Type of Operation □ Convert □ Deepen □	Drill 🗆 Plug Back	□ Redrilling □ Rework	□ Stimulate
Well Type □ Brine Disposal □ CBM ■ Gas ■	■ Oil □ Secondary Reco	very □ Solution Mining □ Stor	rage □ Other
Type of Completion Single Multiple Drilled with Cable Rotary Drilling Media Surface hole Air Mud Production hole Air Mud Fresh Wa Mud Type(s) and Additive(s)		□Gas □ NGL □ Oil n	□ Other
•			
Date permit issued 08/29/2012 Date d	ACT (1)	Date drilling ce	
Date completion activities began	Date comp	letion activities ceased WELL No	OT COMPLETED
Verbal plugging (Y/N) Date permis	ssion granted	Granted by	
Please note: Operator is required to submit a plug Freshwater depth(s) ft	Open mine(days of verbal permission to pluss) (Y/N) depths	
Salt water depth(s) ftNo	Void(s) enc	ountered (Y/N) depths	No
Coal depth(s) ft 610, 990, 1030, 1300 see	ee .	ncountered (Y/N) depths	No
Is coal being mined in area (Y/N)	No		Reviewed by:

Rev. 8/23/13

API 47-085	09974	Farm nar	ne_Betty W.	. Metz	JUL	7 2017 Wel	l number_V	'alentin	e #4
CASING STRINGS	Hole Size	Casing Size	Depth	New or Er		tal Protection	n Basket	Did ce	ment circulate (Y/N)
Conductor	15"	13 3/8"	80'	N.	wt/ft	н	Depth(s)	* Prov	vide details below*
Surface	12"	9 3/8"	305'	N	1	N-500		-}- -	sanded in
Coal	8 7/8"	7"	715"	N	 	k-500		_	
Intermediate 1					 	1-500			
Intermediate 2					 				
Intermediate 3							· · · · · · · · · · · · · · · · · · ·		
Production	6 3/8"	4 1/2"	2800	N		J-55			
Tubing					 	J-55		Cas	sing not complete
Packer type and d	epth set				1				
Comment Details CEMENT	Classiff								
DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)		/ield : ³/sks)	Volume		ment	woc
Conductor			The state of the s		/SES	f	LOP	(MD)	(brs)
Surface	Α	11.5	15.6	1	.18				
Coal									
Intermediate 1	Α	1.20	15.2		.26				
Intermediate 2									
Intermediate 3									
Production							 		
Tubing									<u> </u>
	ion penetrated			Loggers T Plug back					
Kick off depth	(fi)								
Check all wirel	ine logs run	□ caliper □ neutron	□ density □ resistivity	□ deviate □ gamma			duction mperature	□soni	c
Well cored	Yes A No	Convention	al Sidewa	.11	W	ere cuttings	collected	n Yes 1	■ No
						_			
DESCRIBE TH	IE CENTRALIZ	ER PLACEMEN	T USED FOR	ЕАСН СА	SING S7	TRING			
				-					
	-								
									
WAS WELL C	OMPLETED AS	SHOT HOLE	□ Yes ■ N	lo DE	TAILS				
WAS WĘĻĻ C	owyteted of	ĖN HOĻĒ?	Yes 🐧 No	ĎĖŢA	virs —				
WERE TRACE	RS USED DY	es 🖺 No	TYPE OF TRA	ACER(S) U	ISED				

API 47- 085 _ 09974 Farm name_ Betty W. Metz Well number_ Valentine #4

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
					Well not completed
 					
				<u> </u>	

Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

WV Department of Environmental Protection

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)
<u> </u>								
	1	1		<u> </u>				

Please insert additional pages as applicable.

Please insert additional pages as applicable. Drilling Contractor Rallph Carr, Drilling Consultant Address c/o Allied Energy, Inc,; P.O.Box 401 City Petroleum State WV Zip 26160401 Logging Company ___ Address City State Cementing Company FormationCementing Inc. Address P.O./Box 2667 Zanesville State OH City Zip 43702-2667 Stimulating Company Producers Service Corporation Address 109 South Graham Street City Zanesville State OH Zip 43701 Please insert additional pages as applicable. Completed by David W. Wiggers, Agent Telephone (740) 423-8820 Signature David W. Wiggers Title Bookkeeper/Agent Date 3 July 2017

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JUL 7 2017

ADI 47 085 09974 County 085-Ritch	nie _{District} 02-Grant	WV Department of Environmental Protection
All 1 — — — — — — — — — — — — — — — — — —	Field/Pool Name	
Quad 544-Petroleum Pad Name	Well Number Valentir	ne #4
Farm name_Betty W. Metz	/ INC.	
Operator (as registered with the OOG) Address Address Address Address	e State OH	Zip <u>45714-8218</u>
As Drilled location NAD 83/UTM Attach an as-drilled Top hole Northing Landing Point of Curve Northing Bottom Hole Northing Elevation (ft) 679' GL Type of Well Permit Type Deviated Horizontal Horizontal Type of Operation Convert Deepen Drill	plat, profile view, and deviation survey Easting Easting Easting New Existing Type of Report Index Depth Type Plug Back Redrilling Rework Index Recovery Solution Mining Storaged Brine Gas NGL Oil Oil er Intermediate hole Air Mud Index Air Mud Index Intermediate Inte	nterim □Final Deep
09/20/2012	nenced Date drilling cea	ased
Bute permit toutes	Date completion activities ceased WELL NC	OT COMPLETED
Date completion activities began	Granted by	
Verbal plugging (Y/N) Date permission granted	1Granica oy	
Please note: Operator is required to submit a plugging application	ation within 5 days of verbal permission to plu	g
Freshwater depth(s) ft	Open mine(s) (Y/N) depths	
No No	Void(s) encountered (Y/N) depths	No
Coal depth(s) ft610, 990, 1030, 1300 see offset	Cavern(s) encountered (Y/N) depths	No
Is coal being mined in area (Y/N)No		Reviewed by:

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EAA Detroleum		District 02-Grant Field/Pool Name Well Number Vale	
		State OH	Zip <u>45714-8218</u>
Top hole North Landing Point of Curve North	ing ing ing	Easting	
Permit Type Deviated Horizor			□ Deep ■ Shaffow
Type of Operation □ Convert □ Deeper Well Type □ Brine Disposal □ CBM ■ C	n □ Drill □ Plug Back	□ Redrilling □ Rework	□ Stimulate
Type of Completion Single Multiple Drilled with Cable Rotary Drilling Media Surface hole Air Mud Fres Mud Type(s) and Additive(s)	∕Iud □Fresh Water Into	e □Gas □ NGL □ Oil ermedîate hole ■ Aîr □ Mud	
· mark marchine			
		Date drilling c	
Date completion activities began Date p		oletion activities ceased WELL N	
Please note: Operator is required to submit	a plugging application within	5 days of verbal permission to pl	ug
Freshwater depth(s) ft 15' Salt water depth(s) ft No Coal depth(s) ft 610, 990, 1030, 1300 Is coal being mined in area (Y/N)	Void(s) end O see offset Cavern(s) e	countered (Y/N) depthsncountered (Y/N) depths	No No
			Reviewed by:

WERE TRACERS USED □ Yes ■ No

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API 47-085	_ 09974	Farm na	_{ime} Be	etty W. M	etz		We	ell numb	_{er_} Valenti	ne #4
CASING STRINGS	Hole Size	Casing Size	Dep	Ne	w or sed	Grade wt/ft		Basket Depth(s)	Did	cement circulate (Y/N)
Conductor	15"	13 3/8"	80		N	T	H			sanded in
Surface	12"	9 3/8"	305		N	A	\-500			
Coal	8 7/8"	7"	715	5"	N	<u> </u>	\-500			
Intermediate 1										=-
Intermediate 2										
Intermediate 3										
Production	6 3/8"	4 1/2"	280	0	N	† 	J-55		C	asing not complete
Tubing										
Packer type and de	epth set			X						ECEIVED
	<u>,</u>								Office	ECEIVED of Oil and Gas
Comment Details							•••		JUL	7 2017
CEMENT	Class/Type	Numbe	г	Slurry		Yield	Volum	e	WV (Environi Cement	Department of mental Protection WOC
DATA Conductor	of Cement	of Sack	s	wt (ppg)	(1	t ³ /sks)	(ft. ³)	J	Top (MD)	(hrs)
Surface		44.5		4= 0	ļ	4.40	 			
Coal	Α	11.5		15.6	ļ <u>.</u>	1.18				
Intermediate 1		4.00		45.0		4.00	1		-	
Intermediate 2	Α	1.20		15.2	ļ	1.26			-	
Intermediate 3					 		1			
Production					<u> </u>		 			
Tubing			-	· · · · · · · · · · · · · · · · · · ·	}		1			
	· · · · · · · · · · · · · · · · · · ·		<u>l</u>		<u></u>					
Drillers TD (ft)										
_	-			Plu	g back	to (ft) _				
Plug back pro	cedure				_					
Kick off depth	(ft)					•				
Check all wire	line logs run	□ caliper □ neutron		sity 🗆		ed/direct		inductio tempera		onic
Well cored	Yes 🖪 No	Convention	onal	Sidewall		W	Vere cutting	gs collec	ted 🗆 Yes	■ No
DESCRIBE T	HE CENTRAL	IZER PLACEMI	ENT US	ED FOR EA	СН С	ASING S	TRING _			
				····						
WAS WELL C	COMPLETED	AS SHOT HOLE	: - Ye	es 🖪 No	D)	ETAILS				
								-		
WAS WĘĻĻ C	COMPLETED	OPĘN HOLĘ?	□ Yes	₿ No	DĖŢ	AĮĻS _				

TYPE OF TRACER(S) USED _____

API 47- 085 - 09974 Farm name Betty W. Metz Well number Valentine #4

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
					Well not completed

Please i	insert additional nag	res as annlicable	L	. <u>l</u> l	Office of Oil and Gas

Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

WV Department of Environmental Protection

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)
L						,		

Please insert additional pages as applicable.

API 47- 085	_ 09974	Farm	name_Betty V	V. Metz		Well number	Valentine #4
PRODUCING	FORMATION(Je	<u>DEPTHS</u>				
		-					
Please insert ac	lditional pages a	s applicable.					
GAS TEST	□ Build up □	Drawdown	□ Open Flow	C	DIL TEST	Flow Pump	
SHUT-IN PRE	SSURE Surf	ace	_psi Botto	m Hole	psi	DURATION C	OF TEST hrs
OPEN FLOW		Oil pd	NGL bpd	bpd		GAS MEASU □ Estimated	
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN F			RECORD QUANTITYAND ER, BRINE, OIL, GAS, H_2 S, ETC
	0		0		1		
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	-						JUL 7 2017
				V2			WV Department of Environmental Protection
and the state of t							
	Iditional pages a	**					
	nctor_Rallph Ca lied Energy, Inc,			Petroleum		State WV	Zip 26160401
	any					State	Zip
Cementing Con Address P.O./E	mpany Formati Box 2667	onCementing	lnc. City	Zanesville		State OH	Zip 43702-2667
Address 109 S	ompany Production Production	reet	Corporation City	Zanesville		State OH	Zip 43701
Please insert ac	lditional pages a	s applicable.					
Completed by	David W. Wig	gers, Agent			Ţeļepḥone	(740) 423-88	
Signature De	David W. Wig) iggers	Title B	ookkeeper/A	gent	Date 3	July 2017