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

API <u>47</u> - <u>059</u> - <u>1</u>	874 County	MINGO	District MAC	GNOLIA	
Quad MAJESTIC	Pad Naı	ne	Field/Pool Na	me	2
Farm name PRATER, DC	NALD & DARLENE		Well Number	1731	
Operator (as registered with	the OOG) QUALIT	TY NATURAL GAS	, LLC		
Address P.O. BOX 480	1	City ALLEN	State	<u>ζΥ</u> Zip _	41601
As Drilled location NAD Top I Landing Point of Co Bottom F	nole Northing	nn as-drilled plat, prof	Easting		
Elevation (ft) 882'	GL Type	of Well ■New □ I	Existing Type of I	Report □Interim	■Final
Permit Type	□ Horizontal □	☐ Horizontal 6A	Vertical Depth T	уре 🗆 Deep	Shallow
Type of Operation □ Conve	ert 🗆 Deepen 🗆 I	Orill □ Plug Back	□ Redrilling □ Rev	work Stimulat	te
Well Type □ Brine Disposa	ıl □ CBM	Oil □ Secondary Rec	overy	; □ Storage □ Of	ther
Type of Completion □ Sing Drilled with □ Cable ■	gle å Multiple Flu Rotary	uids Produced 🗆 Brir	e ■ Gas □ NGL □	Oil □ Other	
Drilling Media Surface hol	le	Fresh Water In	termediate hole Air	□ Mud □ Fresh V	Water □ Brine
Production hole ■ Air □	Mud □ Fresh Water	r 🗆 Brine			
Mud Type(s) and Additive(s	s)				
Date permit issued10/2	0/00/00	img commenced	9/10/2009 Date di	rilling ceased	
Date completion activities be Verbal plugging (Y/N)	N Date permissi	ion granted	Granted by	RECEIVED	D Id Gas
Please note: Operator is req	uired to submit a plugg	ing application within	5 days of verbal permissi	on to plus 0 9 2	016
Freshwater depth(s) ft	NONE ENCOUNTE	Open min Void(s) er	e(s) (Y/N) depths	WV Departr	nent of Protection
Coal depth(s) ft	N	Cavern(s)	encountered (YAI) depths	N	
Is coal being mined in area (Y/N)	N	PROV	Review	wed by:
		NAME: DATE:	<i>M</i> 16-1-5-31-22		07/15/2016 07/15/16

DATE: 5=31-2016

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DATA of Conductor C Surface C Coal	/4" 9 5/ /8" 7'	/8"	Depth U 888' I 8386' I	ew or Used New New	L	S :	Basket Depth(s) 353.9', 64.2'	* Provid	ent circulate (Y/N) e details below* YES, 2 bbls
Conductor 17 1 Surface 12 1 Coal Intermediate 1 8 7/ Intermediate 2 Intermediate 3 Production 6 3/ Tubing Packer type and depth set Comment Details CEMENT Clara of Conductor C Surface C Coal Intermediate 1 C	/2" 13 3 /4" 9 5/ /8" 7'	/8" (3	88' 386' 121'	New New	L	S S			
Coal Intermediate 1 8 7/ Intermediate 2 Intermediate 3 Production 6 3/ Tubing Packer type and depth set Comment Details CEMENT Clar DATA of Conductor C Surface C Coal Intermediate 1 C	/4" 9 5/ /8" 7'	8" 3	121'				353.9', 64.2'		YES, 2 bbls
Intermediate 1 8 7/ Intermediate 2 Intermediate 3 Production 6 3/ Tubing Packer type and depth set Comment Details CEMENT Cla DATA of Conductor C Surface C Coal Intermediate 1 C		2	121'	New	L		· · · · · · · · · · · · · · · · · · ·	 	
Intermediate 2 Intermediate 3 Production 6 3/ Tubing Packer type and depth set Comment Details CEMENT Clarate of Conductor C Surface C Coal Intermediate I C				New	L				
Intermediate 3 Production 6 3/ Tubing Packer type and depth set Comment Details CEMENT Cla DATA of Conductor C Surface C Coal Intermediate I C	/8" 4 1/	2" 4	702'			.S	NONE	Y	ES, 17 bbls
Production 6 3/ Tubing Packer type and depth set Comment Details CEMENT Clare of Conductor C Surface C Coal Intermediate I C	/8" 4 1/	2" 4	702'						
Tubing Packer type and depth set Comment Details CEMENT Cla DATA of Conductor C Surface C Coal Intermediate I C	/8" 4 1 <i>/</i>	2" 4	702'	i					·
Packer type and depth set Comment Details CEMENT Cla DATA of Conductor C Surface C Coal Intermediate I C				New	L-	65	NONE	500' UP	INSIDE 7" CASING
CEMENT Cla DATA of Conductor C Surface C Coal Intermediate I C									
CEMENT Cla DATA of Conductor C Surface C Coal Intermediate I C									
DATA of Conductor C Surface C Coal Intermediate I C									
Surface C Coal Intermediate I C	ass/Type Cement	Number of Sacks	Slurry wt (ppg)		ield ³/sks)	Volume (ft ³)	Ceme Top (M		WOC (hrs)
Coal Intermediate 1 C	lass A								
Intermediate I C	lass A	200	15.5	1.	.18	236	Surfa	се	8
Intermediate 2	lass A	100, 200	15.6, 12.3	12.3 1.18, 1.84 118,		118, 368	368 Surface		8
				<u> </u>					
Intermediate 3									
	class A	165	13.6 1.90		313.5	500' up	in 7"	8	
Tubing			L	<u> </u>	l				
Drillers TD (ft) 4750 Deepest formation pen Plug back procedure	~~~~~~	SHALE			O (ft) 4759 to (ft)				
Kick off depth (ft)				_					
Check all wireline logs		-	•	□ deviate I gamma	d/direction		duction emperature	≜sonic	
Well cored □ Yes	B No □ C	onventional	□ Sidewall		We	ere cuttings	collected =	Yes □	
DESCRIBE THE CEN 4075, 3949.60, 3824.2, 3698.6, 3573.4,		ACEMENT U	JSED FOR EA	ACH CA	SING ST	RING 457	6.60, 4451.20, 432	5.80, 4200.4	10
· · · · · · · · · · · · · · · · · · ·									
WAS WELL COMPL	ETED AS SHO	T HOLE 🛭	Yes 🖪 No	DE	TAILS				
WAS WELL COMPL		OLE? □ Ye							

API 47- 059 - 1874 Farm name PRATER, DONALD & DARLENE Well number 1731

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	6/23/2015	4545	4675	35	BROWN/HARRELL SHALE
2	6/24/2015	3058	3066	9	BEREA

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)
1	6/24/15	101	3994	4038	2546	NONE	NONE	800mscf/12bbl 15% HCI
2	6/24/15	104	3583	3691	1802	NONE	NONE	800mscf/12bbl 15% HCl
			 -					
						-		
			-					
						-	RE	OF Oil and Gas
							Office	of Oil and
						<u> </u>	a	DR 0 9 2016
								Department of mental Protection
							WN	Departi Protection
							Environ	merica
							<u> </u>	

Please insert additional pages as applicable.

API 47- 059	_ 1874	Farm 1	name PRATER,	DONALD & DA	ARLENE	_Well numb	er_1731		
PRODUCING FORMATION(S) BEREA			<u>DEPTHS</u> 3045-3092'	_TVD		MD			
DEVONIAN SH	IALE		3092-4226-						
1 1 2 1			To the		11. 8	_			
Please insert ac	dditional pages a	s applicable.				_			
GAS TEST	□ Build up □	Drawdown	■ Open Flow	OI	L TEST 🗆 F	low 🗆 Pur	np		
SHUT-IN PRE	SSURE Surfa	ace 790	_psi Botto	m Hole	psi	DURATION	OF TEST 120 hrs	3	
OPEN FLOW		Oil pd l		bpd		GAS MEAS	SURED BY d ■ 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			ND RECORD QUANTITYANE ATER, BRINE, OIL, GAS, H ₂ S		
SEE ATTACHED	0		0						
					II.				
Please insert ac	lditional pages a	s applicable.							
Drilling Contro	actor MOUNTAIN	RIDGE							
Address 72 OLI			City	BARBOURVIL	LE	State KY	Zip 40906		
	WEATHER	OBD	•						
Address	any WEATHERF	-OKD	City	LONDON		State KY	Zip 40741		
F 47-361						_ State	Zip		
Cementing Con Address 580 HA	mpany C & J EN	ERGY SERVIC		NORTON		State VA	7: 24273		
	Array .		City	,,o,tion		_ State VA	Zip 24273		
and the second s	ompany C&JE	NERGY SERV		NODTON		1/4	0.4070		
Address 580 HA	dditional pages a	s annlicable	City	NORTON		_State _VA	Zip <u>24273</u>		
i icase miseri ac	aditional pages a	s аррисаоте.							
	Darrell Fluharty				Telephone	606-874-804		_	
Signature Title Field Supervisor						Date 3-4-16			

WELL #1731

API#47-5901874

WELL #1/31	1		API#47-39018	1	DESCRIBE ROCK TYPE AND RECORD
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H2S, ETC)
SAND/SLATE	0	142			
SAND	142	195			
SAND/SLATE	195	232			
SAND	232	250			
SAND/SLATE	250	430			
SAND	430	537			
SAND/SLATE	537	553			
SAND	553	660			
SLATE	660	724			
SAND	724	892			
SAND/SLATE	892	930			
SAND	930	982			
SAND/SLATE	982	1040			
SAND	1040	1388			
SAND/SLATE	1388	1404			
SAND	1404	1470			
SAND/SLATE	1470	1644			
RED ROCK	1644	1690			
SAND	1690	1870			
SAND/SLATE	1870	1930			
SAND	1930	2050			
SAND/SLATE	2050	2070			
SAND/FALSE LIME	2070	2080			
SAND/SLATE	2080	2110			
DARK LIME	2110	2158			
BIG LIME	2158	2390			
INJUN	2390	2420			Office of Oil and Gas
WEIR	2420	2424			Office of Cit dire
NJUN	2424	2490			MAR 0 9 2316
WEIR	2490	2690			lant Of
SHALE	2690	3018			WV Department of Environmental Protection

WELL #1731

API#47-5901874

WELL #1731	API#47-5901874							
	700	2011	TOD	DOTTOM	DESCRIBE ROCK TYPE AND RECORD			
	TOP DEPTH IN FT	BOTTOM DEPTH IN FT	TOP DEPTH IN FT	BOTTOM DEPTH IN FT	QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H2S,			
LITHOLOGY/ FORMATION	NAME TVD	TVD	MD	MD	ETC)			
COFFEE SHALE	3018	3064						
BEREA	3064	3190						
SHALE	3190	3360						
BROWN SHALE	3360	3460						
WHITE SHALE	3460	3900						
BROWN SHALE	3900	4070						
WHITE SHALE	4070	4118						
BROWN SHALE	4118	4238						
WHITE SHALE	4238	4510						
MARCELLOUS	4510	4740						
HARRELL SHALE	4740	4750						
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