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

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SEP 2 6 2017

WV Department of

API 47 051 01592	County MARSH	ALL	District FRANKLI	Environmental Protection
Quad NEW MARTINSVILLE 7.5'	Pad Name GOUL			
Farm name_PPG INDUSTRIES, IN			_ Field/Pool Name _ _ Well Number GO	UDY 4H
	010715 510105	RATION USA INC	_ well Number	001 111
Operator (as registered with the OOG) Address 229 W MAIN STREET - 3			State WV	Zip 26301
As Drilled location NAD 83/UTM Top hole	Attach an as-drille Northing 4,398,554,27	d plat, profile view, a	and deviation survey asting 514,673.11	
	Northing N/A		sting N/A	
Bottom Hole	Northing 4,398,554.27	Ea	sting 514,673.11	
Elevation (ft) 1239' GL Permit Type Deviated H	Type of Well	□New		□Interim #Final
retinit Type Deviated D H	orizoniai = Horizon	tal 6A Vertical	Depth Type	□ Deep
Type of Operation □ Convert □ I	Deepen B Drill 🗆	Plug Back Rec	Irilling Rework	□ Stimulate
Well Type □ Brine Disposal □ CBM	M	ondary Recovery	Solution Mining D St	torage
Type of Completion ☐ Single ☐ Mu	ltiple Fluids Produ	ced □ Brine □Ga	s nNGL nOil	□ Other
Drilled with □ Cable ■ Rotary			21102 2011	5 July
Production hole	□ Fresh Water □ Brine	2		
Date permit issued 11/29/2012	Date drilling com	nenced_ 12/18/20	Date drilling	ceased 12/20/2012
Date completion activities began	N/A	Date completion a	ctivities ceased	
	Date permission grante			
1	P			
Please note: Operator is required to so	ubmit a plugging applic	ation within 5 days o	f verbal permission to	plug
Freshwater depth(s) ft N/A (NONE	ENCOUNTERED)	Open mine(s) (Y/N) depths	N
	N/A	Void(s) encountere		N
	I/A	Cavern(s) encounte		N
Is coal being mined in area (Y/N)	N	700		λ
	App	rovel by	- Jew-Il	Reviewed by:

Rev. 8/23/13									-
API 47- 051	01592	Farm	name PPG INI	DUSTRIES	, INC	We	il number G	OUDY 4	H
CASING STRINGS	Hole Size	Casing Size	Depth	New or Us ed	Grade wt/ft		Basket Depth(s)		ent circulate (Y/N) de details below*
Conductor	26"	20"	110'	NEW	T	54.5#/ft	N/A	1	Y
Surface			110	 	<u> </u>	,	107.1		•
Coal	 	-		 	l			 	
Intermediate 1				 	 				· · ·
Intermediate 2				 					
Intermediate 3				 	<u> </u>		<u> </u>	-	
Production									
Tubing				 				_	
	anth sat				<u> </u>				
Packer type and d	epin sei								
Comment Details the well to the perm	class/Type		r casing set at 110° TVI nder Gastar's ownershi	пту	Yield	Volume			ck and finished drilling WOC
DATA Conductor	of Cement	of Sa		1	t ³/sks)	(0.2)	Top ((hrs)
	CLASS "A" TYI	PE 1 29	7 15.	.6	1.19	353	SF	C	12
Surface									
Coal									
Intermediate 1						·			
Intermediate 2									
Intermediate 3								-050	ED
Production							- 64	ica of Oil	and Gas
Tubing									and Gas
D. 111		-	_		- (A)		-	2Eb 2 0	
Drillers TD (fl		CHEACE MATERIA		Loggers T				ns Denar	tment of i Protection
•	tion penetrated	SUFACE MATERIA		_ Plug back	ю (п)		Env	ULOULUSUTE	i bloree
Plug back pro	cedure MA				 .				
Kick off depth	(ft) <u>N/A</u>								
Check all wireline logs run									
Well cored	Yes A No	Conven	tional Side	ewall	We	ere cutting	gs collected	□ Yes ■	ı No
DECORING T	HE OPERED AT	17CD DI 40C	ACNOT LICED D	OB E 40110	A CINIO CO	ronic ·	JIA		
DESCRIBE I	HE CENTRAL	IZEK PLACEN	MENT USED FO	JK EACH C	ASING SI	KING _	<u> </u>		
•									
WAS WELL	COMPLETED	AS SHOT HOL	LE □Yes ■	No DI	ETAILS .		<u>.</u>		
WAS WELL (COMPLETED	OPEN HOLE?	□ Yes ■ N	No DET	AILS				
_	. <u> </u>								
WERE TRAC	ERS USED C	Yes A No	TYPE OF T	TRACER(S)	USED	. <u></u>			

API 47- 051 _ 01592 Farm name PPG INDUSTRIES, INC Well number GOUDY 4H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft	Perforated to MD ft.	Number of Perforations	Formation(s)
	N/A				
					- CD
					Official of Oil and Gas SEP 26 2017
					Officia 0.
					SEP 26 2011
					SEP 20 Co
					WW. Waller Hail Plots
					Eliv

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)
	N/A							
					_	-		
							-	
						-		

Please insert additional pages as applicable.

API 47- 051 - 01592		Farm	name_PPG IN	DUSTRIES,	NCWell number_GOUDY 4H			
PRODUCING :	FORMATION	(S)	<u>DEPTHS</u>					
N/A				_TVD _		MD		
						_		
Please insert ad	ditional pages	as applicable.		_				
GAS TEST			- Onan Flow	OII	TEST -I	Zlove = Due		
SHUT-IN PRE	SSURE Sur	face	_psi Botto	om Hole	psi	DURATION	OF TES	Thrs
OPEN FLOW		Oil fpd	NGL bpd		ater bpd	GAS MEAS		
LITHOLOGY/ FORMATION	TOP DEPTH IN FT	BOTTOM DEPTH IN FT	TOP DEPTH IN FT	BOTTOM DEPTH IN FT MD				D QUANTITYAND NE, OIL, GAS, H ₂ S, ETC)
Surface Material	NAME TVD 0	TVD	MD 0	110				dstone), no fluids reported
								S S SOLL
							(Q)	Soil and
							C.E.Co	5 2 6 3017
							SF	M Deberge Legen
							- 1	N Departa Protes
							ENV	TOTHE
	1	1		1	-			
Please insert ad	ditional pages	as applicable.						
			CAVATING					
Drilling Contra Address 56461			City	SHADYSIDE		State OH	Zin	43947
Address	CENTRE AND INC	1,0	City	4141414144		State		
Logging Compa	any							
Address			City			State	Zip	
Cementing Con	npany BAKER	HUGHES						
Address 837 PH			City	CLARKSBURG	;	State WV	Zip	26301
Stimulating Co.	22.210							
Stimulating Con Address	mpany		City			State	Zip	
Please insert ad	ditional pages	as applicable.	City			- State		
					Autor of	704 740 000		
Completed by	11/1.5	Titals R	egulatory Analysi	Telephone 724-749-8388 Date 08/14/2017				
Signature	nathan	witte	Title is	-general / maryon		Date	22,71120	
0 1 1	1 11 11			and the same of the	Acres Comments	CED LOCOCI	10 D	rate and a second secon

Goudy 4H Cement Additives

Surface: Class A + 3% CaCl + 1/4 #per sack flake

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SEP 26 2017

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