Reviewed by:

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

API <u>47</u> - 087 _ 04753	County ROANE	Ξ.	District SMITHFIE	ELD			
Quad LOONEYVILLE 7.5'	KEAD, S.B.	LOVER					
Farm name MAY, TIMOTHY D.	5B Kinkeo	rd.	_ Well Number 109				
Operator (as registered with the OOG)	H.G. ENERGY LL	.C					
Address 5260 DuPONT ROAD		RKERSBURG	State WV	Zip 26101			
As Drilled location NAD 83/UTM Top hole	Attach an as-drille Northing 4,285,442 M	ed plat, profile view, an	nd deviation survey sting 475,633 M				
	Northing		ting				
Bottom Hole	Northing 4,285,245 M	Eas	ting 475,464 M				
Elevation (ft) 1,110' GL	Type of Well	■New □ Existing	Type of Report	t □Interim 를Final			
Permit Type Deviated	orizontal 🗆 Horizon	ntal 6A D Vertical	Depth Type	□ Deep			
Type of Operation □ Convert □ □	eepen 🛢 Drill 🗆	Plug Back 🗆 Redr	illing Rework	□ Stimulate			
Well Type □ Brine Disposal □ CBM	1 □ Gas □ Oil ■ Sec	condary Recovery DS	olution Mining St	torage Other			
Type of Completion ■ Single □ Mul	tiple Fluids Produ	ıced □ Brine □Gas	□ NGL	□ Other			
Drilled with □ Cable ■ Rotary							
	□ Mud		hole	d ■ Fresh Water □ Brine			
Mud Type(s) and Additive(s) N/A							
				9			
Date permit issued 11/17/14	Date drilling comn	menced 1/28/15	Date drilling	ceased 2/1/15			
Date completion activities began	3/23/15	Date completion acti		3/26/15			
	Date permission granted	d		Received Office of Oil &			
Please note: Operator is required to su	bmit a plugging applica	ation within 5 days of v	verbal permission to p	ADD O Q 2015			
Freshwater depth(s) ft	None	Open mine(s) (Y/N) d	lepths	None			
	730'	Void(s) encountered (600	None			
Coal depth(s) ftNo	ne	Cavern(s) encountered		N			
Is coal being mined in area (Y/N)	N						

WR-35

Rev. 8/23/13										Page or
API 47- 087	04753	Farm n	ame_N	MAY, TIMO	THY D.		We	ll number_1	09	
CASING STRINGS	Hole Size	Casing Size	Ľ] Depth	New or Used	Grade wt/ft		Basket Depth(s)		ement circulate (Y/ N)
Conductor	12 1/4"	11 5/8"		30'	Used	11020	LS	Dopui(3)	<u> </u>	Sand In
urface	8 3/4"	7"	5	508'	New		LS	64'		Y
oal								01		<u> </u>
termediate 1										
termediate 2									_	
termediate 3		-								
roduction	6 1/4"	4 1/2"	25	83.3'	New		J-55			Y
ubing	0	7 1/2		00.0	11644		3-33	 -		
acker type and de	epth set			<u>_</u>						
CEMENT DATA onductor	Class/Type of Cement	Numbe of Sack		Slurry wt (ppg)		ield ³/sks)	Volume (ft ²)		ment (MD)	WOC (hrs)
urface										<u> </u>
oal	Reg Neat	130		15.6	_ 1	.18	153.4	Su	rface	8
termediate 1										1
termediate 2										
termediate 3										
oduction	F0 F0 F									
bing	50:50 Pozmix	x 115/12	5	13.2/14.2	1.64	/1.27	189/186	Su Su	rface	8
rillers TD (ft) eepest format ug back proc	tion penetrated	Big Injun	-		oggers TI lug back t					
ick off depth	(ft) 600.	,			_				,	
heck all wirel	ine logs run			•	å deviate å gamma		ional 🖺 i 🖺 i	nduction temperature	□so	nic
ell cored 🗆	Yes 🛭 No	Conventio	nal	Sidewall		W	ere cutting	s collected	■ Yes	□ No
ESCRIBE TH Centralizers overy 88 fro	HE CENTRALI om bottom on 4 1/2", Centra	ZER PLACEME	NT U						-	
										Descinad
									Offi	Received ce of Oil A. (
AS WELL CO	OMPLETED A	S SHOT HOLE	<u></u>	Yes 🖺 No	DE	TAILS				APR 0 9 2015
AS WELL CO	OMPLETED O	PEN HOLE?	□ Yes	s 🖺 No	DETA	ILS _				
ERE TRACE	RS USED 👨	Yes 🛭 No	ТУР	E OF TRAC	TER(S) II	SED				

API 47- 087 - 04753 Farm na

Farm name MAY, TIMOTHY D.

_____Well number_109

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	3/23/15	2398'	2408'	40	Big Injun
					.,
	-				
		-			

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	3/26/15	5	2300	2320	3153	2,500	122	
	, ,				-			
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				1				
<u> </u>		-					<u> </u>	
		<u>-</u>		 	-			
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							C	office of Circle A Ca
	ļ							Heceived office of Oil & Ga APR 0 9 2015

Please insert additional pages as applicable.

API 47- 087	04753	Farm	name MAY, T	IMOTHY D.		_Well	number	. 109	
PRODUCING	FORMATION	(S)	DEPTHS						
Big Injun				mun 23	183' 2425'	1.00			
			2148'- 2165'	IVD	100 - 2420	MD			
				_					
Please insert ac	lditional pages	as applicable.							
GAS TEST	□ Build up □	□ Drawdown	□ Open Flow	OI	L TEST 🗆 F	low [Pump		
SHUT-IN PRE	SSURE Surf	face	_psi Botto	om Hole	psi	DURAT	TION C	F TEST _	hrs
OPEN FLOW	Gas	Oil	NGL	W	ater	GAS N	⁄IEASU	RED BY	
	mci	fpd	bpd	_ bpd	bpd	□ Estin	nated	□ Orifice	□ Pilot
LITHOLOGY/	TOP	воттом	TOP	воттом					
FORMATION	DEPTH IN FT		DEPTH IN FT		DESCRIBE R	OCK TYI	PE AND	RECORD OU	ANTITYAND
200017	NAME TVD	TVD	MD	MD					IL, GAS, H ₂ S, ETC)
Sand/Shale	0	1665	0	1724		,			, 512, 125, 275)
Sand	1665	1671	1724	1730					
Shale	1671	1677	1730	1738					
Sand	1677	1790	1738	1878					
Shale	1790	1809	1878	1904					
Sand	1809	1972	1904	2139					
Little Lime	1972	1987	2139	2162					
Pencil Cave	1987	1998	2162	2176					
Big Lime	1998	2119	2176	2356					
Keener	2119	2148	2356	2383					
Big Injun	2148	2165	2383	2425	Dri	lled direct	tional S	41° W a distar	nce of 771'
Shale	2165	2312	2425	2630					
TD	2312		2630						
Please insert add	ditional pages a	s applicable.							
	Decker Drill	ing		-				7. 1424	
ddress 11565 S	state Route 6/6		City	Vincent		State	OH	Zip _4578	4
ogging Compa	ny Weatherford	International							
ddress 777 Nor			City	Weston		State	WV	Zip 2645	2
	11.1		-						
	pany Universal	Services	100.1	D. 11			145	222	2.0
ddress Hall Rd			City	Buckhannon		State	WV	_ Zip _2620	Received
timulating Con	npany Produce	ers Service Cor	p.						Deceived
	th Graham Street		City	Zanesville		State	ОН	7in 4370	Office of Oil & G
ddress 109 Sou									

Prepared for:
H G Energy

Dustin Hendershot
304-481-7342

INVOICE #:
WELL NAME:
COUNTY/STAT
TOWNSHIP/FIEL
DATE of SERVIC
CUSTOMER PO



Prepared by:
Producers Service Corp
Daniel L Graham
109 S. Graham St.
Zanesville, OH 43702
740-454-6253

17989 SD Kinkead#109 WELL NAME: COUNTY/STATE: Roane/WV TOWNSHIP/FIELD: Clover Field/Roane Co Wy DATE of SERVICE: 3/26/2015 CUSTOMER PO#: **Unit Cost Total Cost** Amount Units Notes EA FLUID PUMP CHARGE 0-3000 PSI MIN CHARGE 4 HRS EA BLENDER CHARGE 0-10 BPM 40 MI 2 Units @40Miles MILEAGE CHARGE PER UNIT ONE WAY 250 GAL IC ACID 15% 0.5 GAL PRO HIB II 2 HR ACID DELIVERY 15 GAL PRO CLA LOK (KCL SUBSTITUTE) GAL 5 PRO NE-21 150 LB PRO GEL 4 50 LB **BUFFER I** 50 LB BUFFER II 1 LB BIO CLEAR 750 15 LB AP BREAKER 10 GAL BXL-A 10 GAL BXL-10C 25 CWT SAND 20/40 OTTAWA 100 TMILE SAND DELIVERY / TON MILES 1 STAGE DATA VAN 1 EA 2 INCH FLOW METER Customer Approval:

Office of Oil & Gas