

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

API 47-039-06356 County KANAWHA District ELK
Quad BLUE CREEK 7.5' Pad Name N/A Field/Pool Name BLUE CREEK
Farm name R. P. SKINNER Well Number SKINNER NO. 6
Operator (as registered with the OOG) C. I. McKOWN & SON, INC.
Address P.O. BOX 711 City NEWTON State WV Zip 25266

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,254,007 Easting 463,496
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 1164' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)

Date permit issued 4/08/2013 Date drilling commenced 5/15/2013 Date drilling ceased 5/21/2013
Date completion activities began 5/30/2013 Date completion activities ceased 8/01/2013
Verbal plugging (Y/N) N/A Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft N/A Open mine(s) (Y/N) depths NO
Salt water depth(s) ft + or - 1350' Void(s) encountered (Y/N) depths NO
Coal depth(s) ft N/A Cavern(s) encountered (Y/N) depths NO
Is coal being mined in area (Y/N) NO

Reviewed by: _____

02/28/2014

WR-35
Rev. 8/23/13

API 47-039 - 06356 Farm name R. P. SKINNER Well number SKINNER NO. 6

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor							
Surface	8 7/8"	7"	691'	USED	20	167'	YES
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2315'	NEW/USED	10.5/11.6	N/A	YES
Tubing		2 3/8"	2267'	USED	4.6		
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	CLASS A	121	15.6	1.18	143	CTS	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50/50 POZ	230	14.2	1.29	297	115	N/A
Tubing							

Drillers TD (ft) 2360' Loggers TD (ft) 2355'
 Deepest formation penetrated WEIR Plug back to (ft) N/A
 Plug back procedure _____

Kick off depth (ft) N/A

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING PRODUCTION - 4 1/2" CASING CENTRALIZERS -
2157', 2189', 2231' & 2273'

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

RECEIVED
Office of Oil and Gas
DEC 12 2013
TVP - Department of
Environmental Protection

API 47- 039 - 06356 Farm name R. P. SKINNER Well number SKINNER NO. 6

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	5/30/13	2205'	2229'	22	WEIR
2	6/06/13	2169'	2183'	28	WEIR

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	6/06/13	20.4	2761	3968	1584	49,300	629	142 Mscf of N2
2	6/06/13	28.3	3148	4378	1744	47,400	629	62 Mscf of N2

Checked by
DEC 19 2013
Department of
Production

Please insert additional pages as applicable.

API 47- 039 - 06356 Farm name R. P. SKINNER Well number SKINNER NO. 6

PRODUCING FORMATION(S)	DEPTHS	
WEIR	2161' - 2233'	TVD 2161' - 2233' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 350 psi Bottom Hole _____ psi DURATION OF TEST 168 hrs

OPEN FLOW Gas 60 mcfpd Oil 5 bpd NGL _____ bpd Water TRACE bpd GAS MEASURED BY Estimated 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	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
REDROCK	0	20	0		
SHALE	20	50			
REDROCK	50	80			
SHALE	80	110			
REDROCK	110	170			
SHALE	170	290			
REDROCK	290	320			
SAND	320	350			
SHALE	350	450			
SAND	450	474			
SHALE	474	504			
SAND	504	571			
SHALE	571	602			
SAND	602	688			SEE ADDITIONAL PAGE

Please insert additional pages as applicable.

Drilling Contractor DECKER DRILLING INC.
Address 11565 STATE ROUTE 676 City VINCENT State OH Zip 45784

Logging Company PRECISION ENERGY SERVICES/WEATHEFORD
Address 500 WINSOTT ROAD City FORT WORTH State TX Zip 78126

Cementing Company UNIVERSAL WELL SERVICES
Address PO BOX 2437 City BUCKHANNON State WV Zip 26201

Stimulating Company UNIVERSAL WELL SERVICES
Address PO BOX 2437 City BUCKHANNON State WV Zip 26201

Please insert additional pages as applicable.

Completed by C. J. MCKOWN, II Telephone (304) 565-7318
Signature  Title PRESIDENT Date 12/10/2013

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

API 47- 039 - 06356

Farm name R. P. SKINNER

Well number SKINNER NO. 6

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	0		0		
CONTINUED					
SHALE	688	692			
SAND	692	696			
SHALE	696	783			
SAND	783	816			
SHALE	816	944			
SAND	944	994			
SHALE	994	1111			
SAND	1111	1616			
SHALE	1616	1734			
SAND	1734	1756			
SHALE	1756	1765			
LIME	1765	1985			
SHALE	1985	2161			
SAND	2161	2233			
SHALE	2233	2355			

[Faint, illegible text or stamp]

6 of 7

TREATMENT SUMMARY

Well Name: RP Skinner 6	Stage 1	Date: 6/6/2013
-------------------------	---------	----------------

DESCRIPTION OF JOB Energized Cross-Link Fracture

Pressures (psi)	Treatment Stats	Perforations (ft)
Well Open 355		Mid (TVD) 2018
Breakdown 3968	Avg Pressure 2761 psi	Top Depth (MD) 2205
ISIP 1584	Max Pressure 3903 psi	Middle (MD) 2218
		Bottom Depth (MD) 2230
Pumping Volumes (SCF)/(BBL)		Number of Perfs 22
Load & Breakdown 2	Avg Rate 5006.0 SCF/min	
Total Nitrogen 141736	Max Rate 5075.0 SCF/min	
Total Clean 629	Avg Rate 20.4 BPM	
Total Slurry 680	Max Rate 30 BPM	

Time	Rate (SCF/min)	Nitrogen Cum. Volume (SCF)	Slurry Rate (BPM)	Slurry Cum Vol. (BBL)	Pressure (psi)	Description of Stage or Event
16:11					6037	Pressure Test
16:13	0.0	0	3.2	0	355	Pump Pad
16:14	0.0	0	3.2	2	3968	Break Formation
16:14	0.0	0	16.9	8	3480	Bring in N2
16:15	3083.0	3065	29.4	25	4035	Establish Rate
16:18	3889.0	10594	29	106	3909	Start Sand @ 1.00# 20/40
16:21	3015.0	24907	19.5	200	3019	Start Sand @ 2.00# 20/40
16:30	5040.0	69343	19.3	373	2667	Start Sand @ 3.00# 20/40
16:43	5040.0	133289	19.6	620	2480	Start Sand @ 4.00# 20/40
16:44	5040.0	141736	19.6	645	2484	Drop Out N2
16:45	0.0	141736	3.2	655	1783	Pump Acid
16:49	0.0	141736	3.2	667	1597	Displace Acid
16:50	0.0	141736	22.7	680	2592	Shut down

Material Totals			
Proppant	20/40	493	sks

Additives	Nitrogen	141736	SCF
	Unigel 19XL	700	lbs
	15% HCL Acid	500	gal
	Cla Chek G	14	gal
	Super Surf	55	gal
	NE-90	12	gal
	Unilink 8.5	56	gal
	LEB-10X Breaker	1	gal



UNIVERSAL
WELL SERVICES, INC.

