



Jackie M. Scholar
Regulatory Reporting Coordinator

May 10, 2016

CERTIFIED MAIL: 7015 0640 0001 0567 4468

WV DEP
Office of Oil and Gas
601 – 57th Street
Charleston, WV 25304

RE: Amended Well Operator's Report of Well Work WR-35
Berger 6H

Dear Sir/Madam,

Enclosed here within please find one (1) Amended Well Operator's Report of Well Work WR-35 for the **Berger 6H, (API 47-051-01706)**. The following items have been amended:

- **Production Information due to start of production**

If you have any questions, please contact me at (724) 564-3721. Thank you.

Sincerely,
Chevron Appalachia, LLC

Jackie M. Scholar

Enclosures

AMENDED

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

API 47-051-01706 County Marshall District Clay
Quad Glen Easton Pad Name Berger Field/Pool Name _____
Farm name Berger Well Number 6H
Operator (as registered with the OOG) Chevron Appalachia, LLC
Address 800 Mountain View Drive City Smithfield State PA Zip 15478

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 44313866.68 Easting 520984.62
Landing Point of Curve Northing 4414064.54 Easting 520722.54
Bottom Hole Northing 4415186.02 Easting 519813.42

Elevation (ft) 1292 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)
Surface sections were drilled on air. The Intermediate and Production sections were drilled on SBM loss control, emulsifier, and shale stabilizer additives.

Date permit issued 2/26/2014 Date drilling commenced 6/19/2014 Date drilling ceased 1/16/2015
Date completion activities began 8/4/2015 Date completion activities ceased 12/23/2015
Verbal plugging (Y/N) N 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 169' Open mine(s) (Y/N) depths No
Salt water depth(s) ft _____ Void(s) encountered (Y/N) depths No
Coal depth(s) ft 768'-769', 784'-785', 830'-837', 1411'-1413', 1415'-1418' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No but not sealed

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10/28/2016

API 47-051 01706 Farm name Berger Well number 6H

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	36	30	40	New	X-42; 118.76		
Surface	17 1/2	13 3/8	301	New	J-55; 54.50		
Coal							
Intermediate 1							
Intermediate 2	12 1/4	9 5/8	2666	New	N-80; 40		
Intermediate 3							
Production	8 1/2	5 1/2	11765	New	P-110; 20		
Tubing							
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	Bulk	60					
Surface	Bulk	382	15.60	1.21			
Coal							
Intermediate 1							
Intermediate 2	A	874	15.60	1.24			
Intermediate 3							
Production	A	2405	15.20	1.31			
Tubing							

Drillers TD (ft) 11777 Loggers TD (ft) 11777
 Deepest formation penetrated _____ Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) 5708

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 A bow spring centralizer every two joints on the Water and
intermediate strings. The production string has two centralizers every joint in the lateral and curec, then one every two joints from KOP to surface.

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS please see attached perforation and stimulation reports

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS MAY 13 2016

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

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Environmental Protection

API 47- 051 01706 Farm name Berger Well number 6H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
		SEE	ATTACHED		

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)
		SEE	ATTACHED					
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Please insert additional pages as applicable.

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API 47- 051 - 01706 Farm name Berger Well number 6H

PRODUCING FORMATION(S)	DEPTHS		
		TVD	MD
Marcellus (S2B)	6439	7178	

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1430 psi Bottom Hole 3900 psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 75 mcfpd Oil 26 bpd NGL n/a bpd Water 424 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
Dunkard Group Sand	160	169	169	169	Fresh Water 169' MD 1" stream
Pittsburgh Coal	830	837	830	837	Coal
Salt Sand	1538	1568	1540	1570	Gas Show @ 1550' 6101 units
Big Lime	1848	1928	1850	1930	Limestone: crm-wh, hd, crpxln
Burgoon (Big Injun)	1927	2117	1930	2120	SS: offwh, wh, cons, cl, trans, lcemt, fg-mg
Weir Sand	2277	2297	2280	2300	SLTST: ltgy-mgy, occ mgy, hrd, vf-fg, tcmt, bio, arg, sl calc
Berea Sand	2507	2530	2510	2533	SS: wh, cl, trans, ltgy-gy, cns, lcmt, mg-fg, sbang-ang, arg, maph, non calc, tr fior, exl fast cut, fnt odr, lse pyr
Burket Shale	6285	6303	6386	6427	SH: drkgy, v. drkgy, frm, slty, grty, sbblky-sbfiss, modcalc, embd calc, lse calct
Tully Limestone	6303	6338	6427	6536	LS: ltgy, gy, mgy, frm-hrd, dns, cln, mic-fxin, v. arg
Hamilton Shale	6338	6377	6536	6771	SH: drkgy, v. drkgy, frm, slty, grty, sbblky-sbfiss, carb, modv. calc, lse calct, w/LS
Marcellus Shale	6377		6771		SH: drkgy, v. drkgy, frm, slty, grty, sbblky-sbfiss, non calc, lse calct, lse pyr, w/LS: gy, ltgy, hrd, mott, mic, fxln, v. arg

Please insert additional pages as applicable.

Drilling Contractor SEE ATTACHED
Address _____ City _____ State _____ Zip _____

Logging Company ALS Group USA Corp
Address 3352 128th Avenue City Holland State MI Zip 49424

Cementing Company SEE ATTACHED
Address _____ City _____ State _____ Zip _____

Stimulating Company Schlumberger Technology Corp
Address 4600 J Barry Court, Suite 200 City Canonsburg State _____ Zip 15307

Please insert additional pages as applicable.

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Completed by Jackie M. Scholiar Telephone 724-564-1971
Signature [Signature] Title Regulatory Compliance Team Lead Date 5/10/2016

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

WV Department of Environmental Protection

[Signature] 10/28/2016