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

API 47-085-10153 County Ritchie District Murphy
Quad Smithville 7.5' Pad Name none Field/Pool Name Eva Field
Farm name BBGJ, Inc. Well Number Cox Heirs M1
Operator (as registered with the OOG) Murvin & Meier Oil Co.
Address P. O. Box 396 City Olney State IL Zip 62450

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,321,320 Easting 496,593
Landing Point of Curve Northing n/a Easting n/a
Bottom Hole Northing 4,321,320 Easting 496,593

Elevation (ft) 995' 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)
soap

Date permit issued September 16, 2014 Date drilling commenced October 27, 2014 Date drilling ceased November 5, 2014
Date completion activities began November 18, 2014 Date completion activities ceased November 21, 2014
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 50' (damp) 580' (damp) Open mine(s) (Y/N) depths N
Salt water depth(s) ft None Void(s) encountered (Y/N) depths N
Coal depth(s) ft None Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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Reviewed by:

02/06/2015

API 47-085 - 10153 Farm name BGJ, Inc. Well number Cox Heirs M1

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	17 1/2"	16"	20'	new			
Surface	15"	11 3/4"	301'	new	AT 50 / 42#	42'	Y
Coal							
Intermediate 1	11"	8 5/8"	1899'	new	J-55 24#	42'	Y
Intermediate 2							
Intermediate 3							
Production	7 7/8"	4 1/2"	6113'	new	WT 65 10.5#	4174' 3792'	N
Tubing							
Packer type and depth set							

Comment Details production basket - 3414'

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	Type 1	180	15.6	1.18	212	CTS	8
Coal							
Intermediate 1	Type 1	450	14.8	1.38	621	CTS	8
Intermediate 2							
Intermediate 3							
Production	CBL Poz	500	13.6	1.54	770	2980'	
Tubing							

Drillers TD (ft) 6131' Loggers TD (ft) 6141'
 Deepest formation penetrated Rhinestreet Plug back to (ft) n/a
 Plug back procedure n/a

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 4 1/2" x 7 7/8": 6094' 5922' 5750' 5579' 5279' 5193'
5064' 4937' 4682' 4598' 4513' 4047' 3920' 3835'

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 _____

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Office of Oil & Gas

JAN 22 2015

API 47- 085 - 10153 Farm name BBGJ, Inc. Well number Cox Heirs M1

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	11-19-14	6020	6106	22	Rhinestreet
2	11-19-14	5546	5820	20	Rhinestreet / 2nd Elk
3	11-20-14	4672	4996	23	Alexander/Benson/Riley
4	11-20-14	3920	4442	22	Bradford/Balltown
5	11-20-14	3382	3792	20	Balltown/Warren

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	11/19/14	30	2780	1700	1148	35,000	791	
2	11/19/14	30	1830	2930	1013	36,000	850	
3	11/20/14		2680	3387	2023	-	-	650,000 scf
4	11/20/14		2390	2560	1876	-	-	650,000 scf
5	11/20/14		2420	2590	1835	-	-	700,000 scf

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Office of Oil & Gas
JAN 22 2015

02/06/2015

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PRODUCING FORMATION(S)	DEPTHS	
	TVD	MD
same as perforation record		

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1200 psi Bottom Hole _____ psi DURATION OF TEST 72 hrs

OPEN FLOW Gas 100 mcfpd Oil _____ bpd NGL _____ bpd Water _____ 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	8	0	8	
Fill	8	10	8	10	
Clay	10	12	10	12	
Sd, Sh, RR	12	15	12	15	
Sand	15	20	15	20	
Sd, Sh	20	30	20	30	
Sh, RR	30	38	30	38	
Sand	38	50	38	50	
Sd, Sh, RR	50	1047	50	1047	
Sand	1047	1110	1047	1110	
Sd, Sh	1110	1142	1110	1142	
Sand	1142	1191	1142	1191	
Sd, Sh	1191	1232	1191	1232	
RR, Sh	1232	1276	1232	1276	

Please insert additional pages as applicable.

Drilling Contractor Nexus Drilling Corporation
Address P. O. Box 903 City Jane Lew State WV Zip 26378

Logging Company Weatherford Wireline
Address 777 N River Avenue City Weston State WV Zip 26452

Cementing Company Universal Well Services, Inc.
Address P. O. Box 200969 City Dallas State TX Zip 75320

Stimulating Company Universal Well Services, Inc.
Address P. O. Box 200969 City Dallas State TX Zip 75320

Please insert additional pages as applicable.

Completed by Kate M. Blackford Telephone 618-395-4405
Signature *Kate M. Blackford* Title Executive Vice-President Date 12-30-2014

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

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Office of Oil & Gas
JAN 22 2015

Lithology / Formation	Top Depth in FT Name TVD	Bottom Depth in FT TVD	Top Depth in FT MD	Bottom Depth in FT MD	Described Rock Type and Record Quantity and Type of Fluid (Freshwater, Brine, Oil, Gas, H2S, etc.)
Sand	1276	1903	1276	1903	
Shale	1903	1919	1903	1919	
Big Lime	1919	1958	1919	1958	
Keener	1958	1982	1958	1982	
Sd, Sh	1982	1996	1982	1996	
Big Injun	1996	2034	1996	2034	
Sd, Sh	2034	2396	2034	2396	
Berea	2396	2397	2396	2397	
Sd, Sh	2397	3360	2397	3360	
Warren	3360	3428	3360	3428	
Shale	3428	3782	3428	3782	
Balltown	3782	4052	3782	4052	
Shale	4052	4403	4052	4403	
Bradford	4403	4424	4403	4424	
Shale	4424	4669	4424	4669	
Riley	4669	4694	4669	4694	
Shale	4694	4728	4694	4728	
Benson	4728	4751	4728	4751	
Shale	4751	4940	4751	4940	
Alexander	4940	5000	4940	5000	
Shale	5000	5228	5000	5228	
First Elk	5228	5304	5228	5304	
Shale	5304	5539	5304	5539	
Second Elk	5539	5578	5539	5578	
Shale	5578	5720	5578	5720	
Upper Rhinestreet	5720	6018	5720	6018	
Lower Rhinestreet	6018	6113	6018	6113	
Shale	6113	6141	6113	6141	
Total Depth	6141		6141		

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