Received
Office of Oil & Gas
OCT 29 2014

WR-35
Rev. 8/23/13

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

API 47- 39 - 02736 W County Kanawha District Union
Quad Pocatalico Pad Name _____ Field/Pool Name C.E. Bailey
Farm name Jones, Ralph D. Well Number #2
Operator (as registered with the OOG) Reserve Oil and Gas, Inc.
Address 929 Charleston Road City Spencer State WV Zip 25276

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 519,055 NAD83 / 4253021 UTM NAD83 Easting 1,763,973 NAD83 / 0437680 UTM NAD83
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 868 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)
N/A

Date permit issued 02/25/2014 Date drilling commenced 7/24/2014 4/19/1976 Date drilling ceased 7/31/2014 5/6/1976
Date completion activities began 5/7/1976 8/20/2014 Date completion activities ceased 5/7/1976 8/20/2014
Verbal plugging (Y/N) No Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 95 FT Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1447 FT Void(s) encountered (Y/N) depths No
Coal depth(s) ft 210 FT (8") Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:
R.F.

10/31/2014

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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		9 5/8"	229 FT	Existing	H-40 / 32#	N/A	CTS (Existing)
Coal							
Intermediate 1		7"	2415 FT	Existing	K-55 / 20#	N/A	150 sks (Existing)
Intermediate 2							
Intermediate 3							
Production		4 1/2"	4206 FT	New	11.6#		150 sks
Tubing		2 3/8"	4218 FT	Existing	J-55 4.6#	N/A	Removed
Packer type and depth set							

Comment Details clean out existing hole to original TD, and set 4 1/2" production casing, and removed 2 3/8" tubing from well.

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	N/A	100	N/A	N/A	N/A	N/A	N/A
Coal							
Intermediate 1	N/A	200	N/A	N/A	N/A	N/A	N/A
Intermediate 2							
Intermediate 3							
Production	Stronglite 250	150	12.3	2.41	361.5	0	24 hrs
Tubing							

Drillers TD (ft) 4223 FT Loggers TD (ft) 3805 FT
Deepest formation penetrated white shale Plug back to (ft)
Plug back procedure

Kick off depth (ft)

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
9 5/8" N/A
7" N/A
4 1/2" N/A

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

10/31/2014

WR-35
Rev. 8/23/13

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	5/7/1976	3088	4223	N/A	Brown Shale; Black Shale; White Shale
1	8/20/2014	2756	3796	60	Sand; Shale; Brown Shale

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	5/7/1976	N/A	N/A	N/A	N/A	N/A	8200 #	80% Glycerin
1	8/20/2014	43,916	3230	4260	2709	N/A	680 gallon	14,499.85
							15% HCL	CSCF

Please insert additional pages as applicable.

10/31/2014

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PRODUCING FORMATION(S)	DEPTHS			
Sand & Shale	2756	TVD	3033	MD
Brown Shale	3033		3796	

Please insert additional pages as applicable.

GAS TEST ☐ Build up ☐ Drawdown ☒ Open Flow OIL TEST ☐ Flow ☐ Pump

SHUT-IN PRESSURE Surface 120 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW	Gas	Oil	NGL	Water	GAS MEASURED BY
	189 mcfpd	____ bpd	____ bpd	____ bpd	☐ Estimated ☒ Orifice ☐ Pilot

LITHOLOGY/ FORMATION NAME	TOP DEPTH IN FT 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_2S, ETC)
	0		0		
					See Attachment A for formation info

Please insert additional pages as applicable.

Drilling Contractor Kanawha Valley Drilling
Address 929 Charleston Road City Spencer State WV Zip 25276

Logging Company Nabors Completion and Production Services Inc
Address 515 West Greens Road, Suite 1100 City Houston State TX Zip 77067

Cementing Company Universal Well Services Inc
Address Rt 5 Hall Road City Buckhannon State WV Zip 26201

Stimulating Company Universal Well Services Inc.
Address Rt 5 Hall Road City Buckhannon State WV Zip 26201

Please insert additional pages as applicable.

Completed by Ryan Fields Telephone 304-927-5033
Signature Ryan Fields Title office assistant Date 10/22/2014

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

10/31/2014

33.02736

C. E. Bailey #2 47-39-02736 Attachment A

Formation	TOP (TVD)	BOTTOM (TVD)	TOP (MD)	BOTTOM (MD)	Remarks
Top Soil			0	15	
Red Rock			15	250	Coal 188
Sand			250	265	
Red Rock			265	275	
Gray Slate			275	325	
Sandy Slate			325	355	
Sand			355	385	
Sandy Shale			385	420	
Slate			420	450	
Sand			450	480	
Sandy Slate			480	505	
Gray Slate			505	1110	
Sand			1110	1270	
Salt Sand			1270	1500	salt water
Sand			1500	1702	
Big Lime			1702	1860	
Slate			1860	1885	
Big Injun			1885	1925	
Slate			1925	2260	
Berea			2260	2275	gas and oil
Slate Shell			2275	2450	
Sand & Shale			2450	3033	
Brown Shale			3033	4200	gas
Black Shale			4200	4209	
White Shale			4209	4223	

10/31/2014