

HALLIBURTON

iCem[®] Service

CATAMOUNT ENERGY PARTNERS LLC-EBUS

United States of America, COLORADO

For: Jake Richter

Date: Saturday, September 15, 2018

E.Bull Creek #5

ARCHULETA, E.Bull Creek #5

Catamount, E.Bull Creek #5, Surface

Job Date: Sunday, September 16, 2018

Sincerely,

Jacob Ayers

Legal Notice

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1.0 Job Design

1.1 Pump Schedule

Description	Stage No.	Density (ppg)	Rate (bbl/min)	Yield (ft ³ /sack)	Water Req. (gal/sack)	Volume (bbl)	Bulk Cement (sacks)	Duration (min)
Spud Mud	1	8.40	3.00			0.00		0.00
Fresh Water	2	8.33	3.00			10.00		3.33
Surface Blend 2467065/1	3	15.80	3.50	1.1638	5.004	58.04	280.00	16.58
Top Plug/Start Displacement								
Fresh Water	4-1	8.33	3.50			28.00		8.00
Fresh Water	4-2	8.33	1.50			7.90		5.27
Total:						103.94		33.18

**Pump schedule may include additional rows for displacement if "Automatic Rate Adjustment" was enabled and ECDs approached the fracture gradient.*

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	PS Pump Rate (bbl/min)	PS Pmp Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	9/15/2018	11:00:00	USER					Job Called out @1100
Event	2	Safety Meeting	Safety Meeting	9/15/2018	13:00:00	USER					Pre convoy safety meeting with crew
Event	3	Depart Home for Location	Depart Home for Location	9/15/2018	13:30:00	USER					Departed from the yard @1330
Event	4	Arrive at Rig	Arrive at Rig	9/15/2018	16:00:00	USER					Arrived on location@1600 rig was about to run casing
Event	5	Other	Well Info	9/15/2018	17:24:45	USER					OH- 12 1/4" 524' Surface- 9 5/8" 519' SJ- 24.4'
Event	6	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	9/15/2018	17:24:46	USER					Pre rig up safety meeting with crew
Event	7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	9/15/2018	17:24:52	USER					Safety meeting held with all affected personnel on location
Event	8	Start Job	Start Job	9/15/2018	19:59:29	COM4	66.00	8.31	0.00	0.00	
Event	9	Pressure Test	Pressure Test	9/15/2018	20:29:38	USER	3619.00	8.25	0.00	2.10	test pumps and lines to 2500
Event	10	Pump Spacer	Pump Spacer	9/15/2018	20:37:31	USER	10.00	8.28	1.70	2.30	20 bbl water spacer
Event	11	Pump Cement	Pump Cement	9/15/2018	20:42:22	USER	125.00	10.35	4.90	0.60	280 sks 1.18 yield 5.24 wrq = 58.8bbl cmt @15.8#
Event	12	Check Weight	Check Weight	9/15/2018	20:43:39	COM4	146.00	16.36	4.90	6.90	
Event	13	Drop Plug	Drop Plug	9/15/2018	20:54:32	USER	131.00	15.86	2.80	54.20	dropped plug
Event	14	Pump Displacement	Pump Displacement	9/15/2018	20:55:06	USER	109.00	8.18	3.90	1.30	calculated 38.3 bbl to land plug
Event	15	Cement Returns to	Cement Returns to	9/15/2018	20:59:18	USER	228.00	8.01	3.90	18.00	calculated 28 bbl cmt back

		Surface	Surface								20 bbl actually returned to surface
Event	16	Bump Plug	Bump Plug	9/15/2018	21:05:53	USER	288.00	8.00	0.00	37.30	calculated 191 psi to land plug actually landed @240 psi
Event	17	Check Floats	Check Floats	9/15/2018	21:07:44	USER	306.00	7.99	0.00	37.30	floats held 1/4 bbl back
Event	18	End Job	End Job	9/15/2018	21:08:31	COM4	-3.00	8.03	0.00	0.00	

3.0 Attachments

3.1 Catamount, E. Bull Creek #5, Surface -Custom Results.png

