

HALLIBURTON

iCem[®] Service

CATAMOUNT ENERGY PARTNERS LLC-EBUS

For: Jake Richter

Date: Monday, July 16, 2018

Catamount, Jaques #11, Production

Job Date: Monday, July 16, 2018

Sincerely,

Jacob Ayers

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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)
WBM	1	10.00	6.00			0.00		0.00
Tuned Spacer	2	11.50	5.00			15.00		3.00
PRB w/out CBL 2388560	3	12.30	6.00	2.4347	13.641	26.02	60.00	4.34
PRB w/ CBL 2388560	4	12.30	6.00	2.4347	13.641	65.04	150.00	10.84
PRB w CBL 2388561	5	13.50	6.00	1.8690	9.406	51.60	155.00	8.60
Top Plug/Start Displacement								
Fresh Water	6-1	8.33	6.00			40.00		6.67
Fresh Water	6-2	8.33	4.00			40.00		10.00
Fresh Water	6-3	8.33	2.50			11.29		4.51
Total:						248.94		47.96

*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)	Recirc Density (ppg)	Comments
Event	1	Call Out	Call Out	7/16/2018	00:00:00	USER						Job Called out @1200
Event	2	Safety Meeting	Safety Meeting	7/16/2018	02:45:00	USER						Pre convoy safety meeting with crew
Event	3	Depart Home for Location	Depart Home for Location	7/16/2018	03:00:00	USER						Departed from the yard @ 300
Event	4	Arrive at Rig	Arrive at Rig	7/16/2018	07:00:00	USER						Arrived on location@ 700 rig was washing down casing
Event	5	Other	Well Info	7/16/2018	07:01:00	USER						surface- 8 5/8 24# 396' oh-3900' 7 7/8" production- 5 1/2" 17# 3880' sj-58' mud wt-9.1#
Event	6	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	7/16/2018	07:05:00	USER						Pre rig up safety meeting with crew
Event	7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	7/16/2018	08:00:00	USER	-23.00	0.00	0.00	0.00	0.00	Safety meeting held with all affected personnel on location
Event	8	Start Job	Start Job	7/16/2018	08:08:31	COM4	-17.00	8.30	0.00	0.00	7.63	
Event	9	Pressure Test	Pressure Test	7/16/2018	09:54:47	USER	4335.00	8.59	0.00	3.00	8.10	test pumps and lines to 2600
Event	10	Check Weight	Check Weight	7/16/2018	09:59:27	COM4	4150.00	8.54	0.00	3.00	11.79	
Event	11	Pump Spacer	Pump Spacer	7/16/2018	10:00:28	USER	-14.00	8.29	0.00	3.00	11.77	10bbl water spacer
Event	12	Pump Spacer 2	Pump Spacer 2	7/16/2018	10:02:17	USER	324.00	8.37	4.90	9.80	11.74	Pumped 15 bbl tuned spacer @11.5#
Event	13	Pump Lead Cement	Pump Lead Cement	7/16/2018	10:05:45	USER	525.00	12.57	4.90	1.50	13.01	60 sks 2.43 yield 13.61 wrq = 26 bbl cmt @12.3 #

Event	14	Check Weight	Check Weight	7/16/2018	10:08:42	COM4	378.00	12.64	4.90	16.10	12.35	
Event	15	Pump Lead Cement	Pump Lead 2 Cement	7/16/2018	10:11:08	USER	225.00	12.85	4.90	1.90	13.35	150 sks 2.43 yield 13.61 wrq = 65 bbl cmt@ 12.3#
Event	16	Check Weight	Check Weight	7/16/2018	10:13:22	COM4	173.00	12.58	4.90	12.90	12.18	
Event	17	Check Weight	Check Weight	7/16/2018	10:19:39	COM4	87.00	12.31	4.90	43.90	12.28	
Event	18	Pump Tail Cement	Pump Tail Cement	7/16/2018	10:29:18	USER	40.00	13.08	4.90	0.20	13.90	155 sks 1.87 yield 9.4 wrq= 51.6 bbl @13.5#
Event	19	Check Weight	Check Weight	7/16/2018	10:30:49	COM4	48.00	13.56	4.90	7.70	13.51	
Event	20	Drop Plug	Drop Plug	7/16/2018	10:42:23	USER	51.00	13.61	4.90	64.70	0.43	shut down dropped plug washed up on top of plug per company man.
Event	21	Pump Displacement	Pump Displacement	7/16/2018	10:45:14	USER	-25.00	28.42	1.50	0.10	8.32	calculated 88.8 bbl to land plug
Event	22	Cement Returns to Surface	Cement Returns to Surface	7/16/2018	11:07:03	USER	928.00	7.55	2.40	93.90	8.69	calculated 20 bbl cmt back did not get good cement back to surface. all tuned spacer returned to surface.
Event	23	Bump Plug	Bump Plug	7/16/2018	11:08:10	USER	1475.00	7.60	0.00	95.60	8.70	calculated 900 psi to land plug actually landed @ 1000 psi
Event	24	Standby Other	Check Floats	7/16/2018	11:12:02	USER	1531.00	7.60	0.00	95.60	8.71	floats held 1bbl back
Event	25	End Job	End Job	7/16/2018	11:14:55	COM4	-34.00	7.52	0.00	0.00	8.69	

3.0 Attachments

3.1 Catamount, Jaques #11, Production -Custom Results.png

