

# HALLIBURTON

iCem® Service

## **CATAMOUNT ENERGY PARTNERS LLC-EBUS**

**For: Jake Richter**

Date: Monday, July 01, 2019

### **EAST BULL CREEK**

Catamount, East Bull Creek #4, 7"

Job Date: Monday, July 01, 2019

Sincerely,

**Jacob Ayers**

## Legal Notice

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## Table of Contents

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1.0	Job Design .....	4
1.1	Pump Schedule .....	4
2.0	Real-Time Job Summary .....	5
2.1	Job Event Log .....	5
3.0	Attachments.....	7
3.1	Catamount, East Bull Creek #4, 7" -Custom Results.png.....	7
3.2	Catamount, East Bull Creek #4, 7" -Custom Results (1).png .....	8

## 1.0 Job Design

### 1.1 Pump Schedule

Description	Stage No.	Density (ppg)	Rate (bbl/min)	Yield (ft <sup>3</sup> /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			20.00		4.00
PRB w/out CBL 2388560	3	12.30	6.00	2.4347	13.641	30.35	70.00	5.06
PRB w/ CBL 2388560	4	12.30	6.00	2.4347	13.641	45.53	105.00	7.59
PRB w CBL 2388561	5	13.50	6.00	1.8690	9.406	49.93	150.00	8.32
Top Plug/Start Displacement								
Fresh Water	6-1	8.33	6.00			65.00		10.83
Fresh Water	6-2	8.33	4.00			65.00		16.25
Fresh Water	6-3	8.33	2.50			10.25		4.10
<b>Total:</b>						<b>286.07</b>		<b>56.15</b>

*\*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	Depart Yard Safety Meeting	Depart Yard Safety Meeting	6/30/2019	00:30:00	USER					Pre Convoy safety meeting
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	6/30/2019	00:45:00	USER					Departed from yard
Event	3	Call Out	Call Out	6/30/2019	21:00:00	USER					Job Called out @ 2100
Event	4	Arrive At Loc	Arrive At Loc	7/1/2019	03:00:00	USER					Arrived on location @ 0300 rig was running in with casing
Event	5	Other	Well Info	7/1/2019	03:27:02	USER					Surface- 525' 9 5/8" 36# Intermediate- 3176' 7" 23# OH- 3214' 8 3/4" SJ- 43' Mud wt. 10#
Event	6	Other	Other	7/1/2019	03:27:04	USER					
Event	7	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	7/1/2019	03:27:06	USER					Pre-rig up safety meeting held with crew
Event	8	Safety Meeting - Pre Job	Safety Meeting - Pre Job	7/1/2019	03:27:09	USER					Safety meeting with all affected personnel on location
Event	9	Other	Other	7/1/2019	03:27:16	USER					
Event	10	Prime Pumps	Prime Pumps	7/1/2019	07:14:25	USER	7.00	8.21	2.30	0.40	pumped 3 bbl to prime lines
Event	11	Pressure Test	Pressure Test	7/1/2019	07:16:38	USER	4558.00	8.45	0.00	3.10	tested pumps and lines to 4500 psi
Event	12	Start Job	Start Job	7/1/2019	07:20:54	COM5	4150.00	8.40	0.00	3.10	
Event	13	Check Weight	Check Weight	7/1/2019	07:20:58	COM5	4145.00	8.40	0.00	3.10	
Event	14	Pump Spacer	Pump Spacer	7/1/2019	07:22:59	USER	18.00	8.25	0.30	3.10	pumped 10 bbl Spacer

Event	15	Pump Spacer 1	Pump Tuned Spacer	7/1/2019	07:24:45	USER	189.00	8.33	4.50	10.50	pumped 20 bbl spacer @10#
Event	16	Pump Lead Cement	Pump Lead Cement	7/1/2019	07:28:49	USER	184.00	11.62	4.50	18.40	95 sks@ 12.3# 2.3 yield 13.61 gal/sk= 39 bbl
Event	17	Check Weight	Check Weight	7/1/2019	07:29:53	COM5	154.00	12.37	4.50	3.60	
Event	18	Pump Cement	Pump Lead 2 Cement	7/1/2019	07:38:43	USER	53.00	12.22	5.00	0.60	105 sks@ 12.3# 2.43 yield 13.63 gal/sk= 45.4 bbl
Event	19	Check Weight	Check Weight	7/1/2019	07:45:40	COM5	39.00	12.52	5.00	35.40	
Event	20	Pump Tail Cement	Pump Tail Cement	7/1/2019	07:52:08	USER	40.00	12.66	5.00	67.90	150 sks@ 13.5 # 1.87 yield 9.4 gal/sk= 50 bbl
Event	21	Check Weight	Check Weight	7/1/2019	07:56:26	COM5	54.00	13.51	5.00	19.90	
Event	22	Drop Plug	Drop Plug	7/1/2019	08:07:48	USER	17.00	14.01	3.80	74.00	Dropped Halliburton Top plug on the fly
Event	23	Pump Displacement	Pump Displacement	7/1/2019	08:08:34	USER	38.00	8.03	5.00	2.90	Calculated 123 bbl to land plug.
Event	24	Cement Returns to Surface	Cement Returns to Surface	7/1/2019	08:29:08	USER	674.00	8.04	4.10	105.50	Calculated 32 bbl back to surface. 25 bbl good cmt Actually returned to surface.
Event	25	Bump Plug	Bump Plug	7/1/2019	08:34:53	USER	782.00	8.05	2.60	127.00	Calculated 765 psi to land plug. bumped plug @ 730 psi
Event	26	Check Floats	Check Floats	7/1/2019	08:38:19	USER	1464.00	8.07	0.00	127.70	Floats held 1 bbl back
Event	27	End Job	End Job	7/1/2019	08:44:27	COM5	56.00	8.03	0.00	0.00	

### 3.0 Attachments

#### 3.1 Catamount, East Bull Creek #4, 7" -Custom Results.png



3.2 Catamount, East Bull Creek #4, 7" -Custom Results (1).png

