

# HALLIBURTON

iCem<sup>®</sup> Service

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

United States of America, COLORADO

**For: JAKE RICHTER**

Date: Tuesday, September 11, 2018

### **ECB-9**

ARCHULETA, ECB-9

CATAMOUNT ENERGY PARTNERS - ECB-9

Job Date: Tuesday, September 11, 2018

Sincerely,

John Keane

## Legal Notice

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## 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)
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)	PS Pump Rate (bbl/min)	DH Density (ppg)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	9/11/2018	04:30:00	USER					REQUESTED ON LOCATION TIME 10:00
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/11/2018	07:00:00	USER					WITH HES, 1 F-450, 1 RED TIGER CEMENTING UNIT, 1 660 BULK TRUCK, JSA COMPLETED
Event	3	Arrive At Loc	Arrive At Loc	9/11/2018	10:00:00	USER					RIG RUNNING CASING, UPON HES ARRIVAL
Event	4	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	9/11/2018	10:30:00	USER					WITH HES, JSA COMPLETED, SDS OFFERED FOR ALL HES MATERIALS
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	9/11/2018	10:45:00	USER					WITH HES, JSA COMPLETED
Event	6	Rig-Up Equipment	Rig-Up Equipment	9/11/2018	10:50:00	USER					1 LINE RAN TO THE FLOOR, 1, 9.625 IN. QUICK-LATCH PLUG CONTAINER
Event	7	Other	Water Test	9/11/2018	11:07:03	USER					WATER TEST: TEMP 78 DEG F, CHLOR 0, PH 7.1
Event	8	Other	Other	9/11/2018	11:07:04	USER					TD 532 FT, TP 522.2 FT, CSG 9.625 IN 36 LB/FT J-55, HOLE 12.25 IN, SHOE 22.87 FT,
Event	9	Other	Other	9/11/2018	11:07:05	USER					RIG CIRCULATION, 120 BBL, 4 BBL/MIN, 50 PSI, PIPE WAS STATIC, RAT HOLE LENGTH 10 FT, MWT 8.7 LB/GAL, WBM
Event	10	Pre-Job Safety Meeting	Pre-Job Safety Meeting	9/11/2018	14:00:00	USER	-8.00	0.00	8.25	0.00	WITH HES, CATAMOUNT, AND MO-TE, JSA

COMPLETED										
Event	11	Start Job	Start Job	9/11/2018	14:15:00	USER	-9.00	0.00	8.25	0.00
Event	12	Prime Pumps	Prime Pumps	9/11/2018	14:35:40	USER	35.00	1.90	8.18	1.00
Event	13	Test Lines	Test Lines	9/11/2018	14:37:10	USER	3382.00	0.00	8.34	1.10
Event	14	Check Weight	Check Weight	9/11/2018	14:41:16	COM4	3286.00	0.00	8.35	0.00
Event	15	Pump Spacer 1	Pump Fresh Water Spacer	9/11/2018	14:43:18	USER	54.00	3.80	8.20	1.30
Event	16	Pump Cement	Pump Cement	9/11/2018	14:46:23	USER	107.00	3.90	15.77	3.00
Event	17	Shutdown	Shutdown	9/11/2018	15:00:50	USER	40.00	4.00	15.89	60.50
Event	18	Drop Top Plug	Drop Top Plug	9/11/2018	15:01:34	USER	-2.00	0.00	15.53	0.00
Event	19	Pump Displacement	Pump Displacement	9/11/2018	15:02:18	USER	32.00	4.20	8.58	1.50
Event	20	Slow Rate	Slow Rate	9/11/2018	15:08:58	USER	196.00	2.70	8.20	28.50
Event	21	Bump Plug	Bump Plug	9/11/2018	15:13:03	USER	254.00	2.90	8.22	39.60
Event	22	Check Floats	Check Floats	9/11/2018	15:18:34	USER	886.00	0.00	8.29	40.00
Event	23	End Job	End Job	9/11/2018	15:25:00	USER				
Event	24	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	9/11/2018	15:30:00	USER				
Event	25	Rig Down Lines	Rig Down Lines	9/11/2018	15:35:00	USER				
Event	26	Other	Other	9/11/2018	15:40:00	USER				

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							WATER, CEMENT 57.8 BBL, FINAL DISPLACEMENT 38.6 BBL, 28 BBL CEMENT CIRCULATED TO SURFACE
Event	27	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/11/2018	15:45:00	USER	WITH HES, JSA COMPLETED
Event	28	Crew Leave Location	Crew Leave Location	9/11/2018	15:50:00	USER	THANKS FOR USING HALLIBURTON, JOHN KEANE AND CREW

## 3.0 Attachments

### 3.1 CATAMOUNT ENERGY PARTNERS - ECB-9 - Surface.png

