

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

