

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

Date: Friday, October 19, 2018

NR 323-3 Surface

Terra NR 323-3 Surface

Job Date: Friday, September 28, 2018

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	9/27/2018	14:30:00	USER					Requested on Location @ 20:30
Event	2	Pre-Convoy Safety Meeting	9/27/2018	15:45:00	USER					All HES Present
Event	3	Crew Leave Yard	9/27/2018	16:00:00	USER					1 Elite, 1 660, 1 pickup
Event	4	Arrive at Location from Service Center	9/27/2018	18:00:00	USER					Rig drilling
Event	5	Assessment Of Location Safety Meeting	9/27/2018	18:15:00	USER					JSA completed - Customer offered/received SDS - water test pH 7.0, CI <200, temp 60 degrees
Event	6	Pre-Rig Up Safety Meeting	9/27/2018	21:45:00	USER					1 hardline to standpipe, water hoses to upright, bulk hose to 660.
Event	7	Other	9/27/2018	22:45:00	USER					Rig Circulated 30 mins prior to cement job at 400 gpm 160 psi
Event	8	Pre-Job Safety Meeting	9/27/2018	22:45:00	USER					All HES personnel, rig crew, and company rep
Event	9	Other	9/27/2018	23:22:00	USER	8.37	0.00	6.00	0.00	TD-1136', TP-1130.53 SET @ 1126', SJ-44.47', CSG-9.625" 36# H40, OH-13.5", MUD-9.7PPG
Event	10	Other	9/27/2018	23:23:21	USER	8.29	1.00	40.00	2.90	Fresh Water
Event	11	Test Lines	9/27/2018	23:26:31	USER	8.44	0.00	3120.00	2.90	Held pressure 2 minutes no leaks
Event	12	Pump Spacer 1	9/27/2018	23:29:18	USER	8.37	4.00	150.00	20.00	Fresh Water
Event	13	Check Weight	9/27/2018	23:36:05	USER					Density Verified via Mud Scales

Event	14	Pump Lead Cement	9/27/2018	23:37:52	USER	12.30	8.00	650.00	52.90	125 Sks 12.3 ppg 2.38 yield 13.77 gal/sk
Event	15	Pump Tail Cement	9/27/2018	23:44:58	USER	12.80	8.00	623.00	65.80	175 Sks 12.8 ppg 2.11 yield 11.78 gal/sk
Event	16	Shutdown	9/27/2018	23:55:19	USER					Wash up on top of plug
Event	17	Drop Top Plug	9/27/2018	23:57:49	USER					Plug away
Event	18	Pump Displacement	9/27/2018	23:58:11	USER	8.33	10.00	780.00	83.95	Fresh Water
Event	19	Slow Rate	9/28/2018	00:09:51	USER	8.30	2.90	255.00	74.00	Slow Rate 10 bbls to calculated displacement
Event	20	Bump Plug	9/28/2018	00:14:46	USER	8.31	2.00	273.00	83.95	Plug Bumped at 273 psi, Brought up to 818psi
Event	21	Check Floats	9/28/2018	00:17:51	USER	8.31	0.00	818.00	0.00	Floats held – ½ bbl back to the truck
Event	22	Other	9/28/2018	00:18:43	USER	8.30	0.00	6.00	0.00	Good returns throughout job, 17.5 bbls of cement to surface.
Event	23	Pre-Rig Down Safety Meeting	9/28/2018	00:25:00	USER					All HES Present
Event	24	Pre-Convoy Safety Meeting	9/28/2018	01:15:00	USER					All HES Present
Event	25	Crew Leave Location	9/28/2018	01:30:00	USER					Thanks For Using Halliburton Cement. Andrew Brennecke And Crew.

2.0 Attachments

2.1 NR 323-3-Custom Results.png

