

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: Terra

Date: Tuesday, October 30, 2018

CLOUGH NR 34-3 Surface

API# 05-045-23908-00

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	10/29/2018	12:30:00	USER					REQUESTED ON LOCATION 10/29/18 @ 20:30
Event	2	Depart Yard Safety Meeting	10/29/2018	14:55:00	USER					JSA COMPLETED
Event	3	Crew Leave Shop	10/29/2018	15:00:00	USER					
Event	4	Arrive At Loc	10/29/2018	17:00:00	USER					RIG DRILLING TO TD
Event	5	Assessment Of Location Safety Meeting	10/29/2018	17:15:00	USER					JSA COMPLETED
Event	6	Pre-Rig Up Safety Meeting	10/29/2018	17:25:00	USER					JSA COMPLETED
Event	7	Rig-Up Equipment	10/29/2018	17:30:00	USER					
Event	8	Pre-Job Safety Meeting	10/29/2018	23:00:00	USER					JSA COMPLETED, PRESSURIZED MUD SCALES CALIBRATED TO FRESH WATER
Event	9	Start Job	10/30/2018	00:51:50	COM4					9 5/8"-36# CASING IN 13 1/2" OH, TD 1137', TP 1131.8', ST 44.7', MUD 9.6 PPG, WATER TEMP 60, PH 7, CHLORIDES 0
Event	10	Test Lines	10/30/2018	00:53:55	COM4			3000.00		TEST LINES TO 3000 PSI
Event	11	Pump Spacer 1	10/30/2018	01:00:51	COM4	4.00	8.33	150.00	20.00	20 BBLS FRESH WATER SPACER
Event	12	Pump Lead Cement	10/30/2018	01:08:50	COM4	8.00	12.30	625.00	53.00	53 BBLS LEAD CEMENT, 125 SKS @ 12.3 PPG / 2.38 YLD / 13.77 GAL/SK
Event	13	Pump Tail Cement	10/30/2018	01:18:04	COM4	9.00	12.80	520.00	65.80	65.8 BBLS TAIL CEMENT, 175 SKS @ 12.8 PPG / 2.11 YLD / 11.78 GAL/SK
Event	14	Drop Top Plug	10/30/2018	01:27:03	COM4					PLUG AWAY
Event	15	Pump Displacement	10/30/2018	01:28:03	COM4	9.50	8.33	750.00	84.00	84 BBLS FRESH WATER DISPLACEMENT

Event	16	Bump Plug	10/30/2018	01:43:31	COM4	2.00	8.33	260.00	84.00	PLUG BUMPED AT CALCULATED, FINAL CIRCULATING PRESSURE 260 PSI @ 2 BBL/MIN, BROUGHT TO 960 PSI
Event	17	CHECK FLOATS	10/30/2018	01:46:38	COM4					FLOATS HELD, .5 BBL BACK TO PUMP
Event	18	End Job	10/30/2018	01:47:56	COM4					GOOD RETURNS THROUGHOUT, PIPE LEFT STATIC, 19 BBLs LEAD CEMENT TO SURFACE, 40# SUGAR AND TOP PLUG USED, NO ADD HOURS CHARGED
Event	19	Pre-Rig Down Safety Meeting	10/30/2018	02:15:00	USER					JSA COMPLETED
Event	20	Rig-Down Equipment	10/30/2018	02:20:00	USER					
Event	21	Pre-Convoy Safety Meeting	10/30/2018	02:55:00	USER					JSA COMPLETED
Event	22	Crew Leave Location	10/30/2018	03:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING OF GRAND JUNCTION, CO - RYAN MARTIN AND CREW

3.0 Attachments

3.1 905232221-Custom Results.png

