

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: Terra

Date: Saturday, July 27, 2019

FEDERAL RWF 443-7 Surface

API#05-045-24036

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	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	Call Out	7/27/2019	00:00:00	USER					REQUESTED ON LOCATION 7/27/19 @ 06:00
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	7/27/2019	02:55:00	USER					JSA COMPLETED
Event	3	Crew Leave Shop	Crew Leave Shop	7/27/2019	03:00:00	USER					
Event	4	Arrive At Loc	Arrive At Loc	7/27/2019	05:00:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	7/27/2019	05:10:00	USER					JSA COMPLETED
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	7/27/2019	05:25:00	USER					JSA COMPLETED
Event	7	Rig-Up Equipment	Rig-Up Equipment	7/27/2019	05:30:00	USER					
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	7/27/2019	07:00:00	USER					JSA COMPLETED, PRESSURIZED MUD SCALES CALIBRATED TO FRESH WATER
Event	9	Start Job	Start Job	7/27/2019	07:23:00	COM4					9 5/8"-36# CASING IN 13 1/2" OH, TD 1114', TP 1107.9', ST 43.8', MUD 10.3 PPG, WATER TEMP 50, PH 7, CHLORIDES 0
Event	10	Test Lines	Test Lines	7/27/2019	07:24:59	COM4			3000.00		TEST LINES TO 3000 PSI
Event	11	Pump Spacer 1	Pump Spacer 1	7/27/2019	07:31:20	USER	4.00	8.33	110.00	20.00	20 BBLS FRESH WATER SPACER

Event	12	Pump Lead Cement	Pump Lead Cement	7/27/2019	07:38:49	COM4	8.00	12.30	400.00	53.00	53 BBLS LEAD CEMENT, 125 SKS @ 12.3 PPG / 2.38 YLD / 13.77 GAL/SK
Event	13	Pump Tail Cement	Pump Tail Cement	7/27/2019	07:46:13	COM4	5.00	12.80	190.00	65.80	65.8 BBLS TAIL CEMENT, 175 SKS @ 12.8 PPG / 2.11 YLD / 11.78 GAL/SK
Event	14	Drop Top Plug	Drop Top Plug	7/27/2019	08:01:49	COM4					PLUG AWAY
Event	15	Pump Displacement	Pump Displacement	7/27/2019	08:02:33	COM4	10.00	8.33	600.00	82.30	82.3 BBLS FRESH WATER DISPLACEMENT
Event	16	Bump Plug	Bump Plug	7/27/2019	08:19:57	COM4	2.00	8.33	250.00	82.30	PLUG BUMPED AT CALCULATED DISPLACEMENT, FINAL LIFT PRESSURE 250 PSI @ 2 BBL/MIN, BROUGHT TO 890 PSI
Event	17	Other	CHECK FLOATS	7/27/2019	08:22:52	COM4					FLOATS HELD, .5 BBL BACK TO PUMP
Event	18	End Job	End Job	7/27/2019	08:24:39	COM4					PIPE LEFT STATIC, GOOD RETURNS THROUGHOUT, 28 BBLS LEAD CEMENT TO SURFACE, NO SUGAR
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	7/27/2019	08:30:00	USER					JSA COMPLETED
Event	20	Rig-Down Equipment	Rig-Down Equipment	7/27/2019	08:35:00	USER					
Event	21	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	7/27/2019	09:25:00	USER					JSA COMPLETED
Event	22	Crew Leave Location	Crew Leave Location	7/27/2019	09:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING OF GRAND JUNCTION, CO - RYAN MARTIN AND CREW

3.0 Attachments

3.1 905866941-Custom Results.png

