

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: TErra

Date: Monday, May 27, 2019

FEDERAL RWF 512-17 Surface

GARFIELD, FEDERAL RWF 512-17

API#05-045-24038

Job Date: Monday, May 27, 2019

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	5/27/2019	04:00:00	USER					REQUESTED ON LOCATION 5/27/19 @ 09:00
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	5/27/2019	06:55:00	USER					JSA COMPLETED
Event	3	Crew Leave Shop	Crew Leave Shop	5/27/2019	07:00:00	USER					
Event	4	Arrive At Loc	Arrive At Loc	5/27/2019	08:00:00	USER					RIG TOH WITH DRILL PIPE
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	5/27/2019	08:05:00	USER					JSA COMPLETED
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	5/27/2019	08:25:00	USER					JSA COMPLETED
Event	7	Rig-Up Equipment	Rig-Up Equipment	5/27/2019	08:30:00	USER					
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	5/27/2019	10:30:00	USER					JSA COMPLETED, PRESSURIZED MUD SCALES CALIBRATED TO FRESH WATER
Event	9	Start Job	Start Job	5/27/2019	11:03:00	COM4					9 5/8"-36# CASING IN 13 1/2" OH, TD 1147', TP 1140.2', ST 43.3', MUD 9.5 PPG, WATER TEMP 50, PH 7, CHLORIDES 0
Event	10	Test Lines	Test Lines	5/27/2019	11:07:39	COM4			3000.00		TEST LINES TO 3000 PSI
Event	11	Pump Spacer 1	Pump Spacer 1	5/27/2019	11:12:46	COM4	4.00	8.33	110.00	20.00	20 BBLS FRESH WATER
Event	12	Pump Lead Cement	Pump Lead Cement	5/27/2019	11:18:27	COM4	8.00	12.30	520.00	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	5/27/2019	11:26:16	COM4	8.00	12.80	560.00	65.80	65.8 BBLS TAIL CEMENT, 175 SKS @ 12.8 PPG / 2.11 YLD / 11.78 GAL/SK
Event	14	Pump Displacement	Pump Displacement	5/27/2019	11:38:31	COM4	10.00	8.33	710.00	84.80	84.8 BBLS FRESH WATER DISPLACEMENT
Event	15	Bump Plug	Bump Plug	5/27/2019	11:54:19	COM4	2.00	8.33	250.00	84.80	PLUG BUMPED AT CALCULATED DISPLACEMENT, FINAL CIRCULATING PRESSURE 250 PSI @ 2 BBL/MIN, BROUGHT TO 1000 PSI
Event	16	Other	CHECK FLOATS	5/27/2019	11:55:54	COM4					FLOATS HELD, .5 BBL BACK TO PUMP
Event	17	End Job	End Job	5/27/2019	11:56:31	COM4					PIPE LEFT STATIC, GOOD RETURNS THROUGHOUT, 14 BBLS CEMENT TO SURFACE
Event	18	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	5/27/2019	12:00:00	USER					JSA COMPLETED
Event	19	Rig-Down Equipment	Rig-Down Equipment	5/27/2019	12:05:00	USER					
Event	20	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	5/27/2019	12:25:00	USER					JSA COMPLETED
Event	21	Crew Leave Location	Crew Leave Location	5/27/2019	12:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING OF GRAND JUNCTION, CO - RYAN MARTIN AND CREW

3.0 Attachments

3.1 905726739-Custom Results.png

