

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: Terra

Date: Wednesday, April 11, 2018

Federal RU 523-17 Surface PJR

API #: 05-045-23735

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	4/10/2018	20:00:00	USER					REQUESTED ON LOCATION TIME 4/11/18 @ 01:00
Event	2	Depart Yard Safety Meeting	4/10/2018	22:55:00	USER					JSA COMPLETED
Event	3	Crew Leave Shop	4/10/2018	23:00:00	USER					
Event	4	Arrive At Loc	4/11/2018	01:00:00	USER					
Event	5	Assessment Of Location Safety Meeting	4/11/2018	01:05:00	USER					JSA COMPLETED
Event	6	Pre-Rig Up Safety Meeting	4/11/2018	01:55:00	USER					JSA COMPLETED
Event	7	Rig-Up Equipment	4/11/2018	02:00:00	USER					
Event	8	Pre-Job Safety Meeting	4/11/2018	03:00:00	USER					JSA COMPLETED
Event	9	Start Job	4/11/2018	05:17:09	COM4					CASING 9 5/8" IN 13 1/2" OPEN HOLE, TD 1140', TP 1135.7', SJ 39.4', MUD 9.8 PPG, WATER TEST TEMP 60, PH 7, CHLORIDES 0
Event	10	Test Lines	4/11/2018	05:19:25	COM4					TEST LINES TO 3000 PSI
Event	11	Pump Spacer 1	4/11/2018	05:23:55	COM4	4.00	8.33	140.00	20.0	20 BBL H2O SPACER, 140 PSI
Event	12	Pump Lead Cement	4/11/2018	05:31:27	COM4	8.00	12.3	600.0	53.0	PUMP LEAD CEMENT, 53 BBL, 125 SKS @ 12.3 PPG / 2.38 YLD / 13.77 GAL/SK H2O REQ, 600 PSI
Event	13	Pump Tail Cement	4/11/2018	05:38:37	COM4	8.00	12.8	650.0	65.8	PUMP TAIL CEMENT, 65.8 BBL, 175 SKS @ 12.8 PPG /

										2.11 YLD / 11.78 GAL/SK H2O REQ, 650 PSI
Event	14	Shutdown	4/11/2018	05:47:08	USER					
Event	15	Drop Top Plug	4/11/2018	05:48:23	COM4					PLUG AWAY
Event	16	Pump Displacement	4/11/2018	05:49:22	COM4	10.0	8.33	870.0	86.3	PUMP 86.3 BBL H2O DISPLACEMENT, 870 PSI
Event	17	Slow Rate	4/11/2018	05:58:41	USER	2.00	8.33	870.0	76.0	SLOW RATE AT 76 BBL AWAY TO 2 BBL/MIN, 870 PSI
Event	18	Bump Plug	4/11/2018	06:03:11	COM4	2.00	8.33	280.0	86.3	PLUG BUMPED AT CALCULATED, FINAL CIRCULATING PRESSURE 280 PSI
Event	19	Check Floats	4/11/2018	06:06:12	USER					FLOATS HELD 1/2 BBL BACK TO PUMP
Event	20	End Job	4/11/2018	06:07:27	COM4					GOOD CIRCULATION THROUGHOUT JOB, PIPE LEFT STATIC, 40 LBS SUGAR USED, 14 BBL CEMENT TO SURFACE
Event	21	Pre-Rig Down Safety Meeting	4/11/2018	06:15:00	USER					JSA COMPLETED
Event	22	Rig-Down Equipment	4/11/2018	06:20:00	USER					
Event	23	Pre-Convoy Safety Meeting	4/11/2018	06:55:00	USER					JSA COMPLETED
Event	24	Crew Leave Location	4/11/2018	07:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING OF GRAND JUNCTION, CO - RYAN MARTIN AND CREW

TEP - FEDERAL RU 523-17 - 9 5/8" SURFACE

