

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

Date: Wednesday, November 21, 2018

SG 23-26 Surface

Terra SG 23-26 Surface

API# 05-045-23944-00

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	11/20/2018	18:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	11/20/2018	22:00:00	USER					
Event	3	Crew Leave Yard	11/20/2018	22:30:00	USER					CREW WAS ALREADY IN FIELD AWAITING CALLOUT FOR JOB.
Event	4	Arrive At Loc	11/20/2018	23:00:00	USER					REQUESTED ON LOC TIME WAS 00:00 11/21/18, CREW ARRIVED AT 2300 11/20/18. RIG WAS PULLING DP OUT OF HOLE
Event	5	Assessment Of Location Safety Meeting	11/20/2018	23:10:00	USER					
Event	6	Other	11/20/2018	23:15:00	USER					
Event	7	Pre-Rig Up Safety Meeting	11/20/2018	23:20:00	USER					
Event	8	Rig-Up Equipment	11/20/2018	23:25:00	USER					
Event	9	Pre-Job Safety Meeting	11/21/2018	03:00:00	USER					
Event	10	Start Job	11/21/2018	03:21:53	COM5					TD: 1043 TP: 1033 SJ: 44.04 MW: 9.2 PPG 9 5/8" 32.3#/FT CSG IN 13 1/2" OH WATER TEST: PH: 6.5 POTASSIUM: 700 CHLORIDES: 0 SULFATES: <200 TEMP: 68 DEGREES
Event	11	Test Lines	11/21/2018	03:24:11	COM5	8.25	0.00	3000.0		3000 PSI TEST SUCCESSFUL
Event	12	Pump Spacer 1	11/21/2018	03:28:44	COM5	8.33	4.00	77.00	20.0	FRESH H2O SPACER

Event	13	Pump Lead Cement	11/21/2018	03:36:06	COM5	12.30	8.00	460.00	42.4	100 SKS @ 12.3 PPG 2.38 YLD 13.77 GAL/SK H2O
Event	14	Pump Tail Cement	11/21/2018	03:42:13	COM5	12.80	8.00	477.00	65.8	175 SKS @ 12.8 PPG 2.11 YLD 11.78 GAL/SK H2O
Event	15	Shutdown	11/21/2018	03:50:57	USER					
Event	16	Drop Top Plug	11/21/2018	03:51:59	COM5					PLUG AWAY
Event	17	Pump Displacement	11/21/2018	03:52:49	COM5	8.33	10.00	560.00	77.8	FRESH H2O DISPLACEMENT. HAD TO SLOW RATE AND EVEN SHUTDOWN BRIEFLY DUE TO RIG'S RETURN LINE BEING PLUGGED UP.
Event	18	Slow Rate	11/21/2018	04:05:28	USER	8.33	2.00	290.00	67.0	
Event	19	Bump Plug	11/21/2018	04:10:11	COM5	8.33	0.00	746.00	77.80	PLUG BUMPED AT CALCULATED DISPLACEMENT
Event	20	Check Floats	11/21/2018	04:12:13	USER					FLOATS HELD, GAINED 0.5 BBL BACK TO PUMP
Event	21	End Job	11/21/2018	04:14:00	COM5					
Event	22	Post-Job Safety Meeting (Pre Rig-Down)	11/21/2018	04:20:00	USER					
Event	23	Rig-Down Equipment	11/21/2018	04:25:00	USER					GOOD CIRCULATION THROUGHOUT JOB. PIPE WAS LEFT STATIC. CIRCULATED 10 BBL CEMENT TO SURFACE. 50# SUGAR USED, TOP PLUG USED, NO ADD-HOURS CHARGED
Event	24	Depart Location Safety Meeting	11/21/2018	05:25:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING
Event	25	Crew Leave Location	11/21/2018	05:30:00	USER					ANTHONY ANDREWS AND CREW

TEP - SG 23-26 - 9 5/8" SURFACE

