

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

For: TEP

Date: Friday, December 07, 2018

GM 422-8 Surface PJR

API #: 05-045-24016

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	12/6/2018	14:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	12/6/2018	16:25:00	USER					
Event	3	Crew Leave Yard	12/6/2018	16:30:00	USER					
Event	4	Arrive At Loc	12/6/2018	18:30:00	USER					REQUESTED ON LOC TIME WAS 2000 12/6/18, CREW ARRIVED AT 1830, RIG WAS PULLING BHA.
Event	5	Assessment Of Location Safety Meeting	12/6/2018	18:40:00	USER					
Event	6	Spot Equipment	12/6/2018	18:45:00	USER					
Event	7	Pre-Rig Up Safety Meeting	12/6/2018	18:50:00	USER					
Event	8	Rig-Up Equipment	12/6/2018	18:55:00	USER					
Event	9	Pre-Job Safety Meeting	12/6/2018	22:45:00	USER					PRESSURIZED MUS SCALES VERIFIED ON DRINKING WATER PRIOR TO JOB
Event	10	Start Job	12/6/2018	23:17:58	COM5					TD: 1038 TP: 1043 SJ: 32' MW: 9.4 PPG 13 3/8" 54.5#/FT CSG IN 17 1/2" OH WATER TEST: POTASSIUM: 700 PH: 6.5 CHLORIDES: 0 SULFATES: <200 TEMP: 58 DEGREES
Event	11	Test Lines	12/6/2018	23:20:48	COM5			3000		3000 PSI TEST SUCCESSFUL
Event	12	Pump Spacer 1	12/6/2018	23:24:50	COM5	8.33	4.00	150.00	20.0	FRESH H2O SPACER
Event	13	Pump Lead Cement	12/6/2018	23:31:52	COM5	12.30	7.00	426.00	74.20	175 SKS @ 12.3 PPG 2.38 YLD 13.77 GAL/SK H2O
Event	14	Pump Tail Cement	12/6/2018	23:44:09	COM5	12.80	7.10	328.00	80.80	215 SKS @ 12.8 PPG 2.11 YLD 11.78 GAL/SK H2O
Event	15	Shutdown	12/7/2018	00:01:45	USER					

Event	16	Drop Top Plug	12/7/2018	00:03:58	COM5					PLUG AWAY
Event	17	Pump Displacement	12/7/2018	00:04:19	COM5	8.33	8.00	415.00	156.20	FRESH H2O DISPLACEMENT
Event	18	Slow Rate	12/7/2018	00:28:34	USER	8.33	2.00	221.00	146.00	
Event	19	Bump Plug	12/7/2018	00:31:45	COM5	8.33	2.00	810.00	156.20	PLUG BUMPED AT CALCULATED DISPLACEMENT
Event	20	Check Floats	12/7/2018	00:32:31	COM5					FLOATS HELD, GAINED 1 BBL BACK TO PUMP
Event	21	End Job	12/7/2018	00:33:00	USER					
Event	22	Post-Job Safety Meeting (Pre Rig-Down)	12/7/2018	00:40:00	USER					GOOD CIRCULATION THROUGHOUT JOB. PIPE WAS LEFT STATIC. CIRCULATED 51 BBL CEMENT TO SURFACE.
Event	23	Rig-Down Equipment	12/7/2018	00:45:00	USER					NO SUGAR USED, NO ADD HOURS CHARGED, CUSTOMER SUPPLIED TOP PLUG.
Event	24	Pre-Convoy Safety Meeting	12/7/2018	01:50:00	USER					
Event	25	Crew Leave Location	12/7/2018	02:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING ANTHONY ANDREWS AND CREW

TEP - FEDERAL GM 422-8 - 13 3/8" SURFACE

