

HALLIBURTON

iCem[®] Service

TEP ROCKY MOUNTAIN LLC

For: Terra

Date: Sunday, October 08, 2017

GM 323-4 Production

API#05-045-23506

Sincerely,
Grand Junction Cement Engineering

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	PS Pump Press <i>(psi)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	10/7/2017	15:00:00	USER					ELITE #8, REQUESTED ON LOCATION TIME 2100
Event	2	Pre-Convoy Safety Meeting	10/7/2017	17:00:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	10/7/2017	19:00:00	USER					ARRIVED ON LOCATION 2 HOURS EARLY, RIG RUNNING CASING
Event	4	Meet With Company Rep	10/7/2017	19:15:00	USER					COMPANY REP OFFERED SDS / WATER TEST: TEMP: 53 PH: 7 CHLORIDES: 0
Event	5	Assessment Of Location Safety Meeting	10/7/2017	19:55:00	USER					ALL HES EMPLOYEES
Event	6	Pre-Rig Up Safety Meeting	10/7/2017	20:00:00	USER					ALL HES EMPLOYEES
Event	7	Rig-Up Equipment	10/7/2017	20:05:00	USER					1 HT-400 PUMP TRUCK 1 660 BULK TRUCK 1 SILO 1 F-550 PICKUP
Event	8	Pre-Job Safety Meeting	10/7/2017	23:45:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG LOST RETURNS WHEN THE Y LANDED CSG. RIG THEN CIRCULATED 2 BOTTOMS UP ONCE THEY REGAINED RETURNS PRIOR TO THE JOB @ 465 GPM GAS @ 200 PRIOR STARTING
Event	9	Start Job	10/8/2017	03:23:00	COM5					TD 7785', TP 7779.63', SJ 30.3', SURFACE SHOE AT 1274', CASING 4.5" 11.6# P110, OH: 8.75", MUD WEIGHT 9.9 PPG.
Event	10	Prime Lines	10/8/2017	03:25:31	USER	8.33	2.0	150	3.0	PRIME LINES WITH 3 BBLs FRESH WATER
Event	11	Test Lines	10/8/2017	03:27:12	COM5	8.33	0.0	5500	3.0	5500 PSI. PRESSURE HELD.
Event	12	Pump Fresh Water Spacer	10/8/2017	03:31:35	COM5	8.33	3.0	235	10	PUMP 10 BBL FRESH WATER SPACER
Event	13	Pump Mud Flush III Spacer	10/8/2017	03:35:09	COM5	8.4	4.0	380	20	PUMP 20 BBL MUD FLUSH II SPACER
Event	14	Pump Cement	10/8/2017	03:41:10	COM5	12.5	8.0	1200	309	885 SKS. 12.5 PPG, 1.96 YIELD, 9.38 GAL/SK, CEMENT WEIGHT

VERIFIED VIA PRESSURIZED MUD SCALES

Event	15	Shutdown	10/8/2017	04:25:18	USER					SHUTDOWN TO CLEAN PUMPS AND LINES
Event	16	Clean Lines	10/8/2017	04:26:04	COM5	8.33			10	CLEAN PUMPS AND LINES TO WASH UP TROUGH
Event	17	Drop Top Plug	10/8/2017	04:28:02	COM5					PLUG AWAY NO PROBLEMS USED POSITIVE DISPLACEMENT. COMPANY REP PROVIDED LATCHDOWN PLUG
Event	18	Pump Displacement	10/8/2017	04:28:58	COM5	8.4	10.0	1575	120.1	1 GAL MMCR 3#S BE-6 12 BAGS KCL, FRESH WATER DISPLACEMENT
Event	19	Slow Rate	10/8/2017	04:40:39	USER	8.4	4.0	950	110	SLOW RATE TO BUMP PLUG
Event	20	Bump Plug	10/8/2017	04:43:17	COM5	8.4	4.0	2028	120.1	PSI BEFORE BUMPING PLUG @ 950 BUMPED PLUG UP TO 2028 PSI
Event	21	Check Floats	10/8/2017	04:47:06	USER					FLOATS HELD - 1 BBL BACK TO DISPLACEMENT TANKS
Event	22	End Job	10/8/2017	04:48:53	COM5					LOST RETURNS WITH 150 BBLS OF CEMENT PUMPED AND DIDNT REGAIN RETURNS UNTIL 50 BBLS PUMPED ON DISPLACEMENT - LOST APPROX 200 BBLS. PIPE RECIPROCATED THROUGHOUT JOB
Event	23	Pre-Rig Down Safety Meeting	10/8/2017	04:50:00	USER					ALL HES EMPLOYEES
Event	24	Rig-Down Equipment	10/8/2017	04:55:00	USER					
Event	25	Pre-Convoy Safety Meeting	10/8/2017	05:50:00	USER					ALL HES EMPLOYEES
Event	26	Crew Leave Location	10/8/2017	06:00:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, DUSTIN SMITH AND CREW

TEP - GM 323-4 - 4 1/2 PRODUCTION

