

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Terra

Date: Monday, June 10, 2019

RWF 411-17 Production

API# 05-045-24030-00

Job Date: Monday, June 10, 2019

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	6/9/2019	22:00:00	USER					REQUESTED ON LOCATION @ 05:00
Event	2	Pre-Convoy Safety Meeting	6/10/2019	00:10:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	6/10/2019	00:30:00	USER					1 HT 400 PUMP TRUCK, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	6/10/2019	04:00:00	USER					RIG RUNNING CASING WHEN HES ARRIVED AT LOCATION
Event	5	Assessment Of Location Safety Meeting	6/10/2019	04:10:00	USER					MET WITH COMP REP, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH-7.0, CHLORIDES-500, TEMP-60F). COMP REP WAS OFFERED SDS FOR ALL CHEMICALS USED BY HES. CALIBRATED MUD SCALES ON WATER.
Event	6	Pre-Rig Up Safety Meeting	6/10/2019	04:15:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	6/10/2019	04:20:00	USER					HES RIGGED UP 1 HT 400 PUMP TRUCK, 1 660 BULK TRUCK, 2 CEMENT SILOS, 2" DISCHARGE IRON, AND 4" SUCTION HOSE WITHOUT ENTERING RED ZONE.

Event	8	Pre-Job Safety Meeting	6/10/2019	11:30:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT. RIG CIRCULATED @ 10 BPM PRIOR TO JOB. PRESSURE WAS 840PSI. 300 UNITS OF GAS
Event	9	Start Job	6/10/2019	11:42:30	COM4					TD 8944', TP 8934', SJ 29.16', SURFACE CSG 9 5/8" 36# J55 SET @ 1126' PRODUCTION CSG 4 1/2" 11.6# P-110, OH 8 3/4", MUD 11.2 PPG
Event	10	Prime Lines	6/10/2019	11:43:19	USER	8.33	2	54	2	FRESH WATER
Event	11	Test Lines	6/10/2019	11:44:03	COM4			5200		ALL LINES HELD PRESSURE AT 5200 PSI
Event	12	Pump H2O Spacer	6/10/2019	11:47:24	COM4	8.33	2	54	10	10BBLS FRESH WATER
Event	13	Mud Flush	6/10/2019	11:52:43	COM4	8.4	4	330	20	20BBLS MUD FLUSH
Event	14	Pump Lead Cement	6/10/2019	11:57:55	COM4	12.5	8	1300	387	1080 SKS NEOCEM CMT 12.5PPG, 2.01 FT3/SK, 10.32 GAL/SK.
Event	15	Check Weight	6/10/2019	11:58:54	COM4					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	16	Pump Tail Cement	6/10/2019	12:50:51	COM4	13.3	8	850	210	660 SKS THERMACEM CMT 13.3PPG, 1.78 FT3/SK, 8.39 GAL/SK.
Event	17	Check Weight	6/10/2019	12:53:04	COM4					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	18	Clean Lines	6/10/2019	13:21:42	COM4					END OF CEMENT. CLEAN PUMPS AND LINES TO PIT.
Event	19	Drop Top Plug	6/10/2019	13:28:46	COM4					VERIFIED BY FLAG INDICATOR

Event	20	Pump Displacement	6/10/2019	13:29:14	COM4	8.4	9.5	2580	138	1 GAL MMCR IN FIRST 10 BBLs, 3 LBS BE-6 IN FIRST 30 BBLs, 1.50 LB. BAG KCL THROUGHOUT DISPLACEMENT
Event	21	Slow Rate	6/10/2019	13:45:52	USER	8.4	4	2000	128	SLOW RATE TO 4 BPM TO BUMP PLUG
Event	22	Bump Plug	6/10/2019	13:47:44	COM4	8.4	4	2080	138	LANDED PLUG AT 2080 PSI, BROUGHT UP TO 2848 PSI
Event	23	Check Floats	6/10/2019	13:50:20	USER					FLOATS DID NOT HOLD, 5BBLs BACK TO TRUCK
Event	24	Bump Plug	6/10/2019	13:53:58	USER	8.4	2	1900	5	PUMPED 5BBLs TO REBUMP PLUG PER CO-REP. LANDED PLUG AT 1900 PSI, BROUGHT UP TO 2850 PSI
Event	25	Check Floats	6/10/2019	13:59:19	USER					FLOATS DID NOT HOLD, 5BBLs BACK TO TRUCK
Event	26	Bump Plug	6/10/2019	14:02:34	USER	8.4	2	1900	5	PUMPED 5BBLs TO REBUMP PLUG PER CO-REP. LANDED PLUG AT 1900 PSI, BROUGHT UP TO 2950 PSI
Event	27	Check Floats	6/10/2019	14:10:07	USER					FLOATS DID NOT HOLD, 5BBLs BACK TO TRUCK
Event	28	Bump Plug	6/10/2019	14:12:46	USER	8.4	2	2200	5	PUMPED 5BBLs TO REBUMP PLUG PER CO-REP. LANDED PLUG AT 1900 PSI, BROUGHT UP TO 2200 PSI AND SHUT IN WELL.
Event	29	End Job	6/10/2019	14:14:35	COM4					HAD GOOD RETURNS THROUGHOUT JOB. PIPE WAS RECIPRICATED. 40# SUGAR USED. FLOATS DID NOT HOLD SHUT IN WELL WITH 2200PSI.

Event	30	Post-Job Safety Meeting (Pre Rig-Down)	6/10/2019	14:20:00	USER	ALL HES PRESENT
Event	31	Rig-Down Equipment	6/10/2019	14:30:00	USER	ALL HES PRESENT
Event	32	Pre-Convoy Safety Meeting	6/10/2019	15:30:00	USER	ALL HES PRESENT
Event	33	Crew Leave Location	6/10/2019	15:45:00	USER	THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW.

3.0 Attachments

3.1 CHART .png

