

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: CRIAG BROGSTEDE

Date: Thursday, August 29, 2019

PA 413-24 Production

API# 05-045-23896-00

Job Date: Thursday, August 29, 2019

Sincerely,

Rock Springs 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	8/29/2019	06:00:00	USER					REQUESTED ON LOCATION @ 13:00
Event	2	Pre-Convoy Safety Meeting	8/29/2019	09:00:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	8/29/2019	09:05:00	USER					1 HT 400 PUMP TRUCK, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	8/29/2019	12:00:00	USER					RIG RUNNING CASING WHEN HES ARRIVED AT LOCATION
Event	5	Assessment Of Location Safety Meeting	8/29/2019	12:10:00	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-72F). COMP REP WAS OFFERED SDS FOR ALL CHEMICALS USED BY HES. CALIBRATED MUD SCALES ON WATER.
Event	6	Pre-Rig Up Safety Meeting	8/29/2019	12:15:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	8/29/2019	12:20:00	USER					HES RIGGED UP 1 HT 400 PUMP TRUCK, 1 660 BULK TRUCK, 1 CEMENT SILOS, 2" DISCHARGE IRON, AND 4" SUCTION HOSE WITHOUT ENTERING RED ZONE.
Event	8	Pre-Job Safety Meeting	8/29/2019	14:45:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT. RIG CIRCULATED @ 10 BPM PRIOR TO JOB. PRESSURE WAS 1200PSI. 78 UNITS OF GAS.
Event	9	Start Job	8/29/2019	15:07:21	COM4					TD 8935', TP 8925', SJ 31.51', SURFACE CSG 9 5/8" 36# J55 SET @ 1121' PRODUCTION CSG 4 1/2" 11.6# P-110, OH 8 3/4", MUD 13.6 PPG
Event	10	Prime Lines	8/29/2019	15:08:33	USER	8.33	2	350	2	FRESH WATER
Event	11	Test Lines	8/29/2019	15:10:25	COM4			6160		ALL LINES HELD PRESSURE AT 6160 PSI
Event	12	Pump H2O Spacer	8/29/2019	15:13:39	COM4	8.33	4	450	10	10BBLs FRESH WATER

Event	13	Pump Mud Flush	8/29/2019	15:18:06	COM4	8.4	5	1000	20	20BBLs MUD FLUSH
Event	14	Pump Lead Cement	8/29/2019	15:22:13	COM4	14.2	8	1300	318	1030 SKS THERMACEM CMT 14.2PPG, 1.73 FT3/SK, 7.78 GAL/SK.
Event	15	Check Weight	8/29/2019	15:22:50	COM4					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	16	Shutdown	8/29/2019	16:07:59	USER					END OF CEMENT. CLEAN PUMPS AND LINES TO PIT.
Event	17	Drop Top Plug	8/29/2019	16:12:59	COM4					VERIFIED BY FLAG INDICATOR
Event	18	Pump Displacement	8/29/2019	16:13:02	COM4	8.4	10	2930	137	1 GAL MMCR IN FIRST 10 BBLs, 3 LBS BE-6 IN FIRST 30 BBLs, 1 50 LB. BAG KCL THROUGHOUT DISPLACEMENT
Event	19	Slow Rate	8/29/2019	16:26:53	USER	8.4	4	2300	127	SLOW RATE TO 4 BPM TO BUMP PLUG
Event	20	Bump Plug	8/29/2019	16:29:45	COM4	8.4	4	2500	137	LANDED PLUG AT 2500 PSI, BROUGHT UP TO 3260 PSI
Event	21	Check Floats	8/29/2019	16:31:14	USER					2BBLs BACK TO TRUCK, FLOATS HELD
Event	22	End Job	8/29/2019	16:32:29	COM4					HAD GOOD RETURNS THROUGHOUT JOB. PIPE WAS RECIPRICATED. NO SUGAR USED. NO CEMENT TO SURFACE.
Event	23	Post-Job Safety Meeting (Pre Rig-Down)	8/29/2019	16:40:00	USER					ALL HES PRESENT
Event	24	Rig-Down Equipment	8/29/2019	16:45:00	USER					ALL HES PRESENT
Event	25	Pre-Convoy Safety Meeting	8/29/2019	17:45:00	USER					ALL HES PRESENT
Event	26	Crew Leave Location	8/29/2019	18:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT, SHAWN BLOSSOM AND CREW.

2.0 Attachments

2.1 CHART 1.png

