

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS-EBUS

United States of America, COLORADO

Date: Tuesday, March 12, 2019

SG 341-21 Surface

Terra SG 341-21 Surface

API# 05-045-24133-00

Job Date: Tuesday, March 12, 2019

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

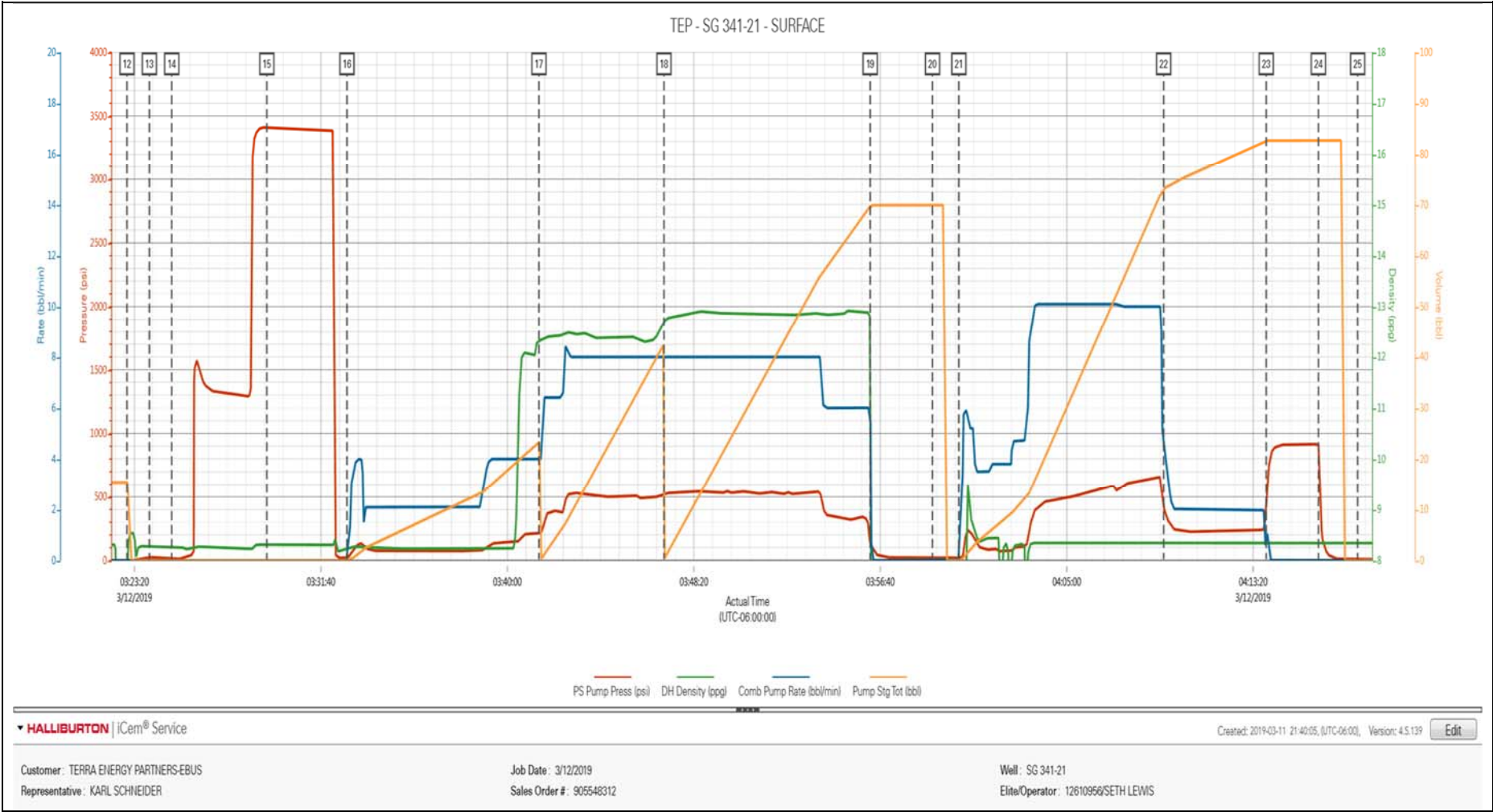
Type	Seq. No.	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	3/11/2019	17:00:00	USER					CREW CALLED OUT TO H&P 318 FOR TEP SURFACE JOB. REQUESTED ON LOCATION AT 22:00.
Event	2	Pre-Convoy Safety Meeting	3/11/2019	19:15:00	USER					WITH ALL HES PERSONNEL
Event	3	Crew Leave Yard	3/11/2019	19:30:00	USER					
Event	4	Arrive at Location	3/11/2019	21:00:00	USER					RIG WAS RUNNING CASING UPON HES ARRIVAL
Event	5	Assessment of Location Safety Meeting	3/11/2019	21:05:00	USER					WITH ALL HES PERSONNEL
Event	6	Spot Equipment	3/11/2019	21:10:00	USER					SPOT EQUIPMENT
Event	7	Pre-Rig Up Safety Meeting	3/11/2019	21:20:00	USER					WITH ALL HES PERSONNEL
Event	8	Rig-Up Equipment	3/11/2019	21:30:00	USER					1-RCM ELITE PUMP TRUCK, 1-660 FT3 BULK TRUCK, 1-PICKUP
Event	9	Rig-Up Completed	3/11/2019	22:15:00	USER					RIG UP COMPLETED. WAIT FOR RIG TO FINISH RUNNING CASING.
Event	10	Pre-Job Safety Meeting	3/12/2019	02:50:00	USER					WITH ALL PERSONNEL ON LOCATION
Event	11	Check Weight	3/12/2019	03:15:00	USER					PRESSURIZED MUD SCALES CALIBRATED USING FRESH WATER PRIOR TO JOB. ALL FLUID DENSITIES VERIFIED USING PRESSURIZED MUD SCALES THROUGHOUT JOB.
Event	12	Start Job	3/12/2019	03:23:00	USER					

Event	13	Pump Water	3/12/2019	03:24:00	USER	50	8.33		2	PUMP 2 BBL H2O AHEAD TO PRIME LINES. PUMPED WITH 6X5 PUMP WITH 50 PSI
Event	14	Shutdown	3/12/2019	03:25:00	USER					SHUTDOWN TO LINE OUT VALVES ON MANIFOLD FOR PRESSURE TEST
Event	15	Pressure Test	3/12/2019	03:29:15	USER	3400				SET KICKOUTS TO 500 PSI FOR LOW TEST TO ENSURE KICKOUTS ARE FUNCTIONING PROPERLY. BROUGHT PRESSURE UP TO 3,400 PSI FOR HIGH TEST.
Event	16	Pump Spacer	3/12/2019	03:32:50	USER	135	8.33	4	20	PUMP 20 BBL H2O SPACER. PUMPED AT 4 BPM WITH 135 PSI.
Event	17	Pump Lead Cement	3/12/2019	03:41:25	USER	520	12.3	8	42.4	PUMP 42.4 BBL VARICEM GJ1 LEAD CEMENT. 100 SKS AT 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK. PUMPED AT 8 BPM WITH 520 PSI
Event	18	Pump Tail Cement	3/12/2019	03:47:00	USER	550	12.8	8	65.8	PUMP 65.8 BBL VARICEM GJ1 TAIL CEMENT. 175 SKS AT 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK. PUMPED AT 8 BPM WITH 550 PSI
Event	19	Shutdown	3/12/2019	03:56:13	USER					SHUTDOWN TO DROP TOP PLUG.
Event	20	Drop Top Plug	3/12/2019	03:59:00	USER					DROP HES TOP PLUG. PLUG LAUNCHED. WITNESSED BY CUSTOMER REP.
Event	21	Pump Displacement	3/12/2019	04:00:11	USER	680	8.33	10	68.2	PUMP 68.2 BBL H2O DISPLACEMENT AT 10 BPM WITH 680 PSI.
Event	22	Slow Rate	3/12/2019	04:09:20	USER	240	8.33	2	10	SLOW RATE TO 2 BPM 10 BBL PRIOR TO CALCULATED DISPLACEMENT TO BUMP PLUG.
Event	23	Bump Plug	3/12/2019	04:13:55	USER	910				PLUG BUMPED AT 2 BPM. FCP-240 PSI. BROUGHT PRESSURE UP TO 910 PSI. TOTAL DISPLACEMENT-78.2 BBL
Event	24	Check Floats	3/12/2019	04:16:15	USER					FLOATS HOLDING. RETURNED 1 BBL FLUID TO TRUCK
Event	25	End Job	3/12/2019	04:18:00	USER					PIPE WAS STATIC DURING JOB. GOOD CIRCULATION THROUGHOUT JOB.
Event	26	Pre-Rig Down Safety Meeting	3/12/2019	04:20:00	USER					WITH ALL HES PERSONNEL
Event	27	Rig-Down Equipment	3/12/2019	04:30:00	USER					

Event	28	Rig-Down Completed	3/12/2019	05:15:00	USER	
Event	29	Pre-Convoy Safety Meeting	3/12/2019	05:20:00	USER	WITH ALL HES PERSONNEL
Event	30	Crew Leave Location	3/12/2019	05:30:00	USER	
Event	31	Well Info	3/12/2019	05:31:00	USER	TD-1,040', TP-1,034.84', SHOE-41.55', HOLE 13 1/2", MUD-9.7 PPG WBM, CSG-9 5/8" 32.3 LB/FT H-40
Event	32	Rig Info	3/12/2019	05:32:00	USER	RIG ON BOTTOM AT 02:30, CIRCULATED AT 10 BPM WITH 80 PSI, 255 BBL CIRCULATED
Event	33	Job Info	3/12/2019	05:33:00	USER	ESTIMATED TOP OF TAIL CEMENT-317', RETURNED 15 BBL LEAD CEMENT TO SURFACE. USED 80 LBS SUGAR IN CEMENT RETURNS. TOP PLUG WAS USED FOR JOB.
Event	34	Comment	3/12/2019	05:34:00	USER	THANK YOU FOR USING HALLIBURTON CEMENT DEPARTMENT. JEREMY YOUNG AND CREW.

2.0 Attachments

2.1 TEP SG 341-21 SURFACE-WITH EVENTS.png



2.2 TEP SG 341-21 SURFACE-WITHOUT EVENTS.png

