

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

Date: Saturday, November 3, 2018

NR-443-3 Surface

Terra NR-443-3 Surface

API # 05-045-23919

Job Date: Tuesday, October 23, 2018

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	10/23/2018	03:00:00	USER					REQUESTED ON LOCATION TIME 08:00
Event	2	Depart Yard Safety Meeting	10/23/2018	05:30:00	USER					WITH HES, 1 F-450, 1 ELITE CEMENTING UNIT, 1 660 BULK TRUCK, JSA COMPLETED
Event	3	Arrive At Loc	10/23/2018	07:35:00	USER					RIG RUNNING CASING UPON HES, ARRIVAL
Event	4	Assessment Of Location Safety Meeting	10/23/2018	07:45:00	USER					WITH HES, JSA COMPLETED, SDS OFFERED FOR ALL HES MATERIALS
Event	5	Pre-Rig Up Safety Meeting	10/23/2018	07:50:00	USER					WITH HES, JSA COMPLETED
Event	6	Rig-Up Equipment	10/23/2018	08:10:00	USER					1 LINE RAN TO THE FLOOR, 1 9.625 IN QUICK-LATCH PLUG CONTAINER
Event	7	Other	10/23/2018	09:47:13	USER					TD 1135 FT, CSG 1131.6 FT 9.625 IN 36 LB/FT J-55, HOLE 13.5 IN, SHOE 44.38 FT
Event	8	Other	10/23/2018	09:47:14	USER					RIG CIRCULATION, 300 BBL, 10 BBL/MIN, 175 PSI, RAT HOLE LENGTH 4 FT, PIPE WAS STATIC, MW 9.7 LB/GAL WBM
Event	9	Other	10/23/2018	09:47:18	USER					WATER TEST PH 8.1, CHLOR 0, TEMP 75 DEG F
Event	10	Pre-Job Safety Meeting	10/23/2018	10:05:01	USER	20.00	8.63	0.00	0.00	WITH HES, TEP, AND H&P 318
Event	11	Start Job	10/23/2018	10:10:00	USER	18.00	8.64	0.00	0.00	
Event	12	Prime Pumps	10/23/2018	10:14:57	USER	48.00	8.42	1.30	0.80	2 BBL FRESH WATER, RETURNS AT 2 BBL AWAY

Event	13	Test Lines	10/23/2018	10:21:40	USER	2838.00	8.48	0.00	2.00	LOW TEST AT 880 PSI, HIGH TEST AT 2816 PSI, PRESSURE HOLDING
Event	14	Pump Spacer 1	10/23/2018	10:26:39	USER	76.00	8.42	2.00	1.30	20 BBL FRESH WATER
Event	15	Pump Lead Cement	10/23/2018	10:35:52	USER	268.00	12.24	4.00	0.70	MIXED AT 12.3 LB/GAL, 125 SKS, 2.38 FT3/SK, 13.77 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES
Event	16	Pump Tail Cement	10/23/2018	10:45:18	USER	684.00	12.84	8.00	6.00	MIXED AT 12.8 LB/GAL, 175 SKS, 2.11 FT3/SK, 11.78 GAL/SK, DENSITY VERIFIED USING PRESSURIZED MUD SCALES
Event	17	Shutdown	10/23/2018	10:53:30	USER	411.00	12.82	6.00	66.90	
Event	18	Drop Top Plug	10/23/2018	10:56:25	USER	16.00	14.11	0.00	67.60	PLUG LAUNCHED, CUSTOMER WITNESSED
Event	19	Pump Displacement	10/23/2018	10:58:37	USER	55.00	10.12	1.70	0.90	FRESH WATER, 84 BBL
Event	20	Slow Rate	10/23/2018	11:09:47	USER	843.00	8.44	9.80	72.60	SLOWED AT 74 BBL AWAY TO 2 BBL/MIN
Event	21	Bump Plug	10/23/2018	11:13:21	USER	272.00	8.42	2.00	82.60	PLUG BUMPED AT CALCULATED DISPLACEMENT, 268 PSI
Event	22	Check Floats	10/23/2018	11:15:12	USER	791.00	8.44	0.00	83.10	FLOATS HOLDING, .5 BBL RETURNED TO THE TRUCK
Event	23	End Job	10/23/2018	11:20:00	USER	17.00	8.42	0.00	83.10	GOOD CIRCULATION, RIG USED HES TOP PLUG, RIG USED 30 LBS SUGAR, NO ADD HOURS
Event	24	Pre-Rig Down Safety Meeting	10/23/2018	11:20:00	USER	17.00	8.42	0.00	83.10	WITH HES, JSA COMPLETD
Event	25	Rig Down Lines	10/23/2018	11:25:00	USER	16.00	0.00	0.00	83.10	
Event	26	Other	10/23/2018	11:30:00	USER	19.00	0.00	0.00	0.00	SPACER 20 BBL FRESH WATER, LEAD CEMENT 52.9 BBL, TAIL CEMENT 65.7 BBL, FINAL DISPLACEMENT 84 BBL, 20 BBL CEMENT CIRCULATED TO SURFACE, TOP OF TAIL CEMENT 412 FT
Event	27	Pre-Convoy Safety Meeting	10/23/2018	12:00:00	USER					WITH HES, JSA COMPLETED
Event	28	Crew Leave Location	10/23/2018	12:10:00	USER					THANKS FOR USING HALLIBURTON, JOHN KEANE AND CREW

2.0 Attachments

2.1 TEP-SURFACE.png

