

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

United States of America, COLORADO

Date: Friday, October 19, 2018

PA 533-24 Surface

Terra PA 533-24 Surface

Job Date: Thursday, September 27, 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 <i>(psi)</i>	Comb Pump Rate <i>(bbl/min)</i>	DH Density <i>(ppg)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	9/26/2018	19:00:00	USER					REQUESTED ON LOCATION TIME 01:00
Event	2	Depart Yard Safety Meeting	9/26/2018	21:30:00	USER					WITH HES, 1 F-550, 1 ELITE CEMENTING UNIT, 1 660 BULK TRUCK, JSA COMPLETED
Event	3	Arrive At Loc	9/26/2018	23:15:00	USER					RIG RUNNING CASING UPON HES, ARRIVAL
Event	4	Assessment Of Location Safety Meeting	9/27/2018	00:01:00	USER					WITH HES, JSA COMPLETED, SDS OFFERED FOR ALL HES MATERIALS
Event	5	Pre-Rig Up Safety Meeting	9/27/2018	00:09:51	USER					WITH HES, JSA COMPLETED
Event	6	Rig-Up Equipment	9/27/2018	00:14:14	USER					1 LINE RAN TO THE FLOOR, 1 9.625 IN QUICK-LATCH PLUG CONTAINER
Event	7	Other	9/27/2018	00:14:15	USER					TD 1134 FT, CSG 1128.3 FT 9.625 IN 36 LB/FT J-55, HOLE 13.5 IN, SHOE 44.36FT
Event	8	Other	9/27/2018	00:14:17	USER					RIG CIRCULATION, 300 BBL, 10 BBL/MIN, 188 PSI, RAT HOLE LENGTH 5 FT, PIPE WAS STATIC, MW 9.2 LB/GAL WBM
Event	9	Other	9/27/2018	00:14:19	USER					WATER TEST PH 7.1, CHLOR 0, TEMP 63 DEG F
Event	10	Pre-Job Safety Meeting	9/27/2018	03:30:00	USER	6.00	0.00	8.54	0.00	WITH HES, TEP, AND HP 271
Event	11	Start Job	9/27/2018	03:40:55	COM4	7.00	0.00	8.54	0.00	
Event	12	Prime Pumps	9/27/2018	03:42:32	USER	50.00	2.00	8.57	0.90	4 BBL FRESH WATER, RETURNS AT 2 BBL AWAY

Event	13	Test Lines	9/27/2018	03:46:28	USER	3056.00	0.00	8.61	4.10	LOW TEST AT 1980 PSI, HIGH TEST AT 3056 PSI, PRESSURE HOLDING
Event	14	Pump Spacer 1	9/27/2018	03:49:33	USER	44.00	1.90	8.55	0.60	20 BBL FRESH WATER
Event	15	Pump Lead Cement	9/27/2018	03:58:19	USER	200.00	4.00	12.31	0.10	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	9/27/2018	04:05:59	USER	216.00	4.70	12.78	0.60	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	9/27/2018	04:14:50	USER	147.00	0.00	12.57	67.00	
Event	18	Drop Top Plug	9/27/2018	04:17:21	USER	4.00	0.00	14.90	67.00	PLUG LAUNCHED, CUSTOMER WITNESSED
Event	19	Pump Displacement	9/27/2018	04:19:53	USER	118.00	2.90	12.12	1.60	FRESH WATER
Event	20	Slow Rate	9/27/2018	04:31:06	USER	266.00	2.00	8.34	78.50	SLOWED AT 74 BBL AWAY TO 2 BBL/MIN
Event	21	Bump Plug	9/27/2018	04:33:11	USER	246.00	2.00	8.35	82.60	PLUG BUMPED AT CALCULATED DISPLACEMENT, 246 PSI
Event	22	Check Floats	9/27/2018	04:36:31	USER	912.00	0.00	8.36	83.00	FLOATS HOLDING, .5 BBL RETURNED TO THE TRUCK
Event	23	End Job	9/27/2018	04:38:00	USER	6.00	0.00	8.34	83.00	GOOD CIRCULATION, RIG USED HES TOP PLUG, RIG DID NOT USE SUGAR, NO ADD HOURS
Event	24	Pre-Rig Down Safety Meeting	9/27/2018	04:50:00	USER	15.00	18.60	8.35	44.50	WITH HES, JSA COMPLETD
Event	25	Rig Down Lines	9/27/2018	05:00:00	USER					
Event	26	Other	9/27/2018	05:13:00	USER					SPACER 20 BBL FRESH WATER, LEAD CEMENT 52.9 BBL, TAIL CEMENT 65.7 BBL, FINAL DISPLACEMENT 83.8 BBL, 25 BBL CEMENT CIRCULATED TO SURFACE, TOP OF TAIL CEMENT 411 FT
Event	27	Pre-Convoy Safety Meeting	9/27/2018	05:20:00	USER					WITH HES, JSA COMPLETED
Event	28	Crew Leave Location	9/27/2018	05:30:00	USER					THANKS FOR USING HALLIBURTON, JOHN KEANE AND CREW

2.0 Attachments

2.1 TEP-PA-533-24-SURFACE.png

