

# HALLIBURTON

iCem<sup>®</sup> Service

## **TERRA ENERGY PARTNERS**

United States of America, COLORADO

### **For: Terra**

Date: Thursday, June 06, 2019

### **FEDERAL RWF 411-17 Surface**

### **API#05-045-24030**

GARFIELD, FEDERAL RWF 411-17

905750374

Job Date: Thursday, June 06, 2019

Sincerely,

**Grand Junction Cement Engineering**

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	6/5/2019	19:00:00	USER					REQUESTED ON LOCATION 6/6/19 @ 01:00
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	6/5/2019	22:55:00	USER					JSA COMPLETED
Event	3	Crew Leave Shop	Crew Leave Shop	6/5/2019	23:00:00	USER					
Event	4	Arrive At Loc	Arrive At Loc	6/6/2019	00:00:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	6/6/2019	00:10:00	USER					JSA COMPLETED
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/6/2019	00:25:00	USER					JSA COMPLETED
Event	7	Rig-Up Equipment	Rig-Up Equipment	6/6/2019	00:30:00	USER					
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/6/2019	02:30:00	USER					JSA COMPLETED, PRESSURIZED MUD SCALES CALIBRATED TO FRESH WATER
Event	9	Start Job	Start Job	6/6/2019	02:52:05	COM4					9 5/8"-36# CASING IN 13 1/2" OH, TD 1136', TP 1126', ST 44.9', MUD 9.2 PPG, WATER TEMP 55, PH 7, CHLORIDES 0
Event	10	Test Lines	Test Lines	6/6/2019	02:54:19	COM4			3000.00		TEST LINES TO 3000 PSI
Event	11	Pump Spacer 1	Pump Spacer 1	6/6/2019	02:58:35	COM4	4.00	8.33	115.00	20.00	20 BBLS FRESH WATER
Event	12	Pump Lead Cement	Pump Lead Cement	6/6/2019	03:04:55	COM4	8.00	12.30	500.00	53.00	53 BBLS LEAD CEMENT, 125 SKS @ 12.3 PPG / 2.38 YLD / 13.77 GAL/SK

Event	13	Pump Tail Cement	Pump Tail Cement	6/6/2019	03:12:15	COM4	8.00	12.80	530.00	65.80	65.8 BBLS TAIL CEMENT, 175 SKS @ 12.8 PPG / 2.11 YLD / 11.78 GAL/SK
Event	14	Drop Plug	Drop Plug	6/6/2019	03:22:44	COM4					PLUG AWAY
Event	15	Pump Displacement	Pump Displacement	6/6/2019	03:23:35	COM4	10.00	8.33	700.00	83.70	83.7 BBLS FRESH WATER DISPLACEMENT
Event	16	Bump Plug	Bump Plug	6/6/2019	03:39:24	COM4	2.00	8.33	270.00	83.70	PLUG BUMPED AT CALCULATED DISPLACEMENT, FINAL CIRCULATING PRESSURE 270 PSI @ 2 BBL/MIN, BROUGHT TO 925 PSI
Event	17	Other	CHECK FLOATS	6/6/2019	03:40:13	COM4					FLOATS HELD, .5 BBL BACK TO PUMP
Event	18	End Job	End Job	6/6/2019	03:41:50	COM4					PIPE LEFT STATIC, GOOD RETURNS THROUGHOUT, 19 BBLS CEMENT TO SURFACE
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/6/2019	03:45:00	USER					JSA COMPLETED
Event	20	Rig-Down Equipment	Rig-Down Equipment	6/6/2019	03:50:00	USER					
Event	21	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/6/2019	04:25:00	USER					JSA COMPLETED
Event	22	Crew Leave Location	Crew Leave Location	6/6/2019	04:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENTING OF GRAND JUNCTION, CO - RYAN MARTIN AND CREW

## 3.0 Attachments

### 3.1 905750374-Custom Results.png

