

# HALLIBURTON

iCem® Service

## **TERRA ENERGY PARTNERS**

**For: Craig Borgstede**

Date: Wednesday, September 25, 2019

**PA 322-24**

**API#05-045-23895**

Job Date: Wednesday, September 25, 2019

Sincerely,

**Rock Springs Engineering**

iCem® Service

(v. 5.0.161.0)

Created: Wednesday, September 25, 2019

## 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)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	9/29/2019	09:15:00	USER					Requested on location at 1600
Event	2	Depart Yard Safety Meeting	9/29/2019	14:15:00	USER					All HES Present
Event	3	Depart from Service Center	9/29/2019	14:30:00	USER					
Event	4	Arrive at Location	9/29/2019	15:30:00	USER					Met with customer to go over job parameters and procedure. Walk around location and collected water sample (PH - 7, Chlorides - 0, Temp - 65F). Customer was offered SDS For all chemicals used by HES.
Event	5	Assess Location	9/29/2019	15:45:00	USER					All HES Present
Event	6	Spot Equipment	9/29/2019	15:50:00	USER					1 F550, 1 Elite Pump Truck, 1 660 Bulk Truck & 1 Cement Silo
Event	7	Pre-Rig Up Safety Meeting	9/29/2019	15:55:00	USER					All HES Present
Event	8	Rig Up Equipment	9/29/2019	16:00:00	USER					Equipment rigged up without entering the red zone
Event	9	Pre-Job Safety Meeting	9/29/2019	18:15:00	USER					Discuss all job related safety issues and pump schedule with Company Rep., HES crew, and rig crew.
Event	10	Start Job	9/29/2019	18:37:55	USER					TD 9200', TP 9195.7', SJ 30.4', OH 8.75'', CSG 4.5'' 11.6# P-110, MUD 13.4 PPG. Surface Csg. 9 5/8'' 36# J-55 @ 1144'
Event	11	Fill Lines	9/29/2019	18:39:54	USER	8.4	2	530	2	Fresh Water
Event	12	Test Lines	9/29/2019	18:42:07	USER	8.4	.5	5320	.5	HES lines held 5320 psi for 2 Minutes
Event	13	Fresh Water Spacer	9/29/2019	18:45:52	COM4	8.4	3	620	10	10 bbls Fresh Water
Event	14	Mud Flush III Spacer	9/29/2019	18:49:45	COM4	8.4	4	840	20	20 bbls Mud Flush III

Event	15	Check Weight	9/29/2019	18:53:27	COM4					Density verified with pressurized mud scales
Event	16	Pump Lead Cement	9/29/2019	18:56:13	COM4	14.2	7.5	1480	320.4	NeoCem 1040 sks (320.4 bbls), 14.2 ppg, 1.73 ft3/sk, 7.78 gal/sk, 15 gallons liquid D-Air used through out.
Event	17	Shutdown	9/29/2019	19:49:26	USER					
Event	18	Wash Pumps/Lines	9/29/2019	19:52:37	USER					Blow rig air back from manifold on floor. Wash up pumps and lines to pit.
Event	19	Drop Top Plug	9/29/2019	19:56:17	USER					Customer witnessed releasing the top plug.
Event	20	Pump Displacement	9/29/2019	19:58:22	COM4	8.4	7	2460	142.1	Fresh water (142.1 bbls) 3 lbs. BE-6, 1 gal MMCR & 14 sks KCL
Event	21	Slow Rate	9/29/2019	20:31:56	USER	8.4	4	2830	132.1	Slow to 4 bpm to land plug
Event	22	Bump Plug	9/29/2019	20:35:58	USER	8.4	4	3320	142.1	Bump plug at 2830 psi and held 500 psi over for 2 minutes
Event	23	Check Floats	9/29/2019	20:39:11	USER					Floats held, 1 bbl back to the truck.
Event	24	End Job	9/29/2019	20:41:38	USER					Good returns throughout job, Pipe was not reciprocated, 15 gals D-Air, 1 gal MMCR, 3# of BE-6 Used. No sugar used.
Event	25	Post-Job Safety Meeting (Pre Rig-Down)	9/29/2019	20:45:00	USER					All HES Present
Event	26	Rig-Down Equipment	9/29/2019	21:00:00	USER					All HES Present
Event	27	Pre-Convoy Safety Meeting	9/29/2019	21:50:00	USER					All HES Present
Event	28	Depart Location	9/29/2019	22:00:00	USER					Thank you for using Halliburton Cement, Ryan Muhlestein and Crew

2.0 Attachments

2.1 Chart .png

