

HALLIBURTON

iCem[®] Service

TEP ROCKY MOUNTAIN LLC

For: Abe Alexander & Lynn Cass

Date: Thursday, January 05, 2017

TR 323-21-597 SURFACE

API# 05-045-23350-00

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

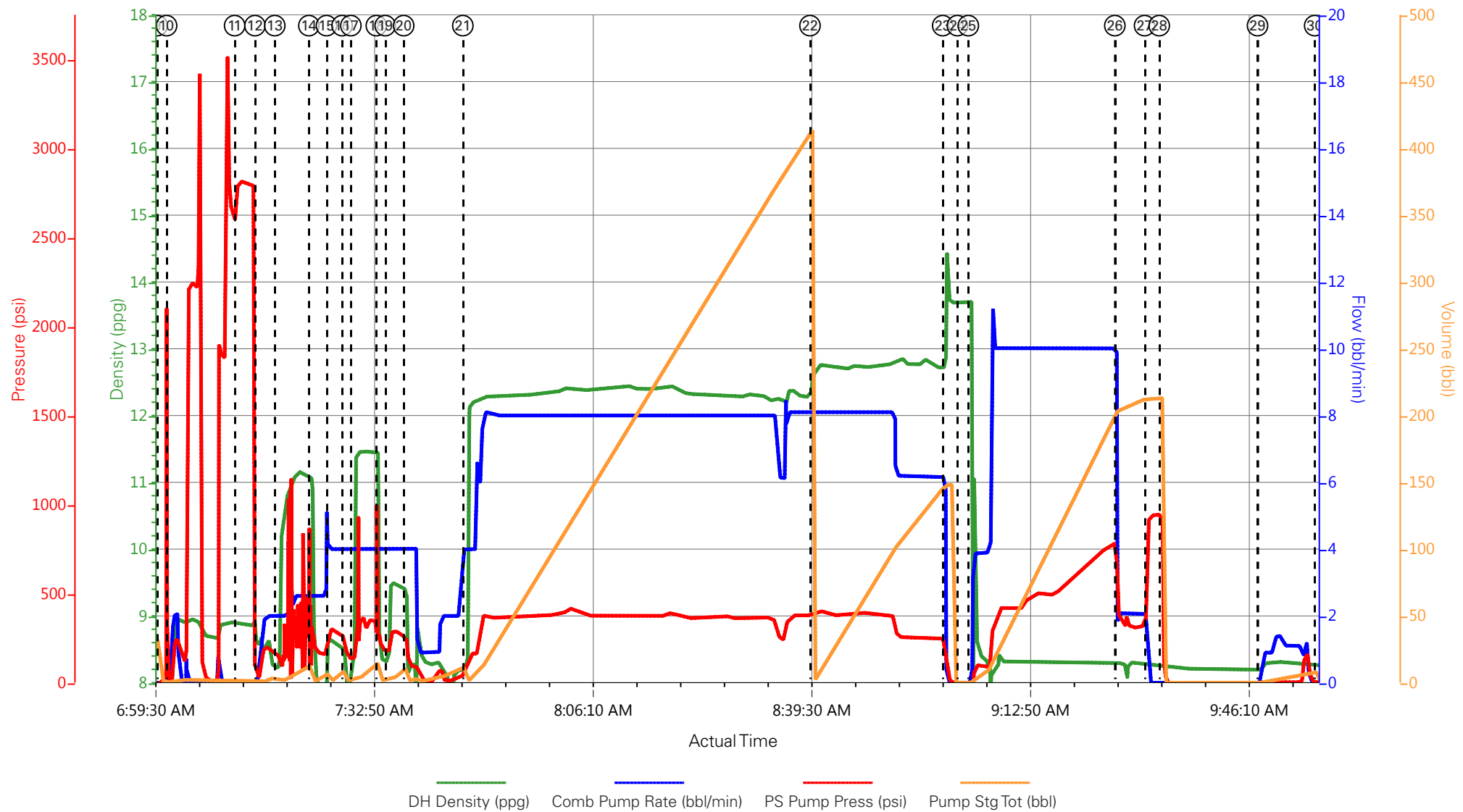
2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	1/4/2017	05:30:00	USER					ELITE #8
Event	2	Pre-Convoy Safety Meeting	1/4/2017	08:00:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	1/4/2017	12:30:00	USER					ARRIVED 30 MIN LATE STARTED HOURS UPON HES ARRIVAL
Event	4	Assessment Of Location Safety Meeting	1/4/2017	13:00:00	USER					ALL HES EMPLOYEES
Event	5	Pre-Rig Up Safety Meeting	1/4/2017	13:15:00	USER					ALL HES EMPLOYEES
Event	6	Rig-Up Equipment	1/4/2017	13:30:00	USER					1 HT-400 PUMP TRUCK (ELITE #8) 1 SUPERFLUSH TRANSPORT 3 SILO'S 1 F-550 PICKUP
Event	7	Comment	1/4/2017	13:45:00	USER					CUSTOMER WAS OFFERED SDS WATER TEMP @ 57 F CHLORIDES: 0 PPM PH: 7
Event	8	Pre-Job Safety Meeting	1/4/2017	14:00:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRCULATED FOR 30 MIN PRIOR TO JOB @ 8 BBLs/MIN WITH FULL RETURNS
Event	9	Start Job	1/5/2017	07:00:16	COM5					TD: 2670 TP: 2674 CSG: 9 5/8 36# SJ: 28.43 OH: 14 3/4 MUD WEIGHT: 9.0 PPG
Event	10	Prime Lines	1/5/2017	07:01:41	USER	8.33	2.0	270	2.0	PRIME LINES FRESH WATER
Event	11	Test Lines	1/5/2017	07:12:04	USER			2804.00		PRESSURE TEST OK
Event	12	Fresh Water Spacer	1/5/2017	07:15:10	COM5	8.33	4.0	120	5.0	5 BBL FRESH WATER SPACER
Event	13	Superflush 100	1/5/2017	07:18:11	COM5	9.5	4.0	154	10.0	10 BBL SUPERFLUSH 100
Event	14	Fresh Water Spacer	1/5/2017	07:23:23	COM5	8.33	4.0	243	5.0	5 BBL FRESH WATER SPACER
Event	15	CaCl Spacer	1/5/2017	07:26:04	COM5	11.0	4.0	306	10.0	10 BBL CACL SPACER (500 LBS)

Event	16	Fresh Water Spacer	1/5/2017	07:28:27	COM5	8.33	4.0	225	5.0	5 BBL FRESH WATER SPACER
Event	17	Superflush 100	1/5/2017	07:29:47	COM5	11.0	4.0	147	10.0	10 BBL SUPERFLUSH 100
Event	18	Fresh Water Spacer	1/5/2017	07:33:40	COM5	8.33	4.0	241	5.0	5 BBL FRESH WATER SPACER
Event	19	CaCl Spacer	1/5/2017	07:35:01	COM5	9.5	4.0	176	10.0	10 BBL CACL SPACER (500 LBS)
Event	20	Fresh Water Spacer	1/5/2017	07:37:50	COM5	8.33	4.0	228	10.0	10 BBL FRESH WATER SPACER
Event	21	Pump Lead Cement	1/5/2017	07:46:51	COM5	12.3	8.0	385	381.5	900 SKS (381.5 BBLS) 12.3 PPG 2.38 YIELD 13.77 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	22	Pump Tail Cement	1/5/2017	08:39:46	COM5	12.8	8.0	380	114.6	305 SKS (114.6 BBLS) 12.8 PPG 2.11 YIELD 11.78 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSUIZED MUD SCALES
Event	23	Shutdown	1/5/2017	09:00:00	USER					
Event	24	Drop Top Plug	1/5/2017	09:02:14	COM5					PLUG AWAY NO ISSUES
Event	25	Pump Displacement	1/5/2017	09:03:54	COM5	8.4	10.0	810	204.5	204.5 BBL FRESH WATER DISPLACEMENT WASH UP ON TOP OF PLUG AS PER COMPANY REP REQUEST
Event	26	Slow Rate	1/5/2017	09:26:14	COM5	8.4	2.0	300	194.5	SLOW RATE PRIOR TO BUMPING PLUG
Event	27	Bump Plug	1/5/2017	09:30:46	COM5	8.4	2.0	320	204.5	PRESSURE PRIOR TO BUMPING PLUG @ 320 PSI BUMPED PLUG UP TO 940 PSI
Event	28	Check Floats	1/5/2017	09:33:00	COM5	8.4		940	204.5	FLOATS HOLDING 1 BBL BACK TO TRUCKS TANK
Event	29	Clear Parasite	1/5/2017	09:47:59	COM5	8.4	1.0	120 PSI	10.0	PUMP 10 BBL SUGAR WATER SPACER PRESSURED UP TO 120 PSI AT 7 BBLS
Event	30	End Job	1/5/2017	09:56:42	COM5					RETURNS WERE GOOD UNTIL 50 BBLS AWAY OF TAIL NEVER GAINED RETURNS AFTER PIPE WAS STATIC THROUGHOUT JOB
Event	31	Start Job	1/5/2017	13:37:31	COM5					START TOPOUT
Event	32	Pump Superflush 100	1/5/2017	13:37:45	USER	11.0			10.0	POURED 10 BBLS SUPERFLUSH 100 DOWN BACKSIDE PRIOR TO CEMENT
Event	33	CaCl Spacer	1/5/2017	13:38:15	COM5	9.5	2.0	120	5.0	5 BBL CACL SPACER (100 LBS)
Event	34	Pump Cement	1/5/2017	13:47:59	COM5	15.6	2.0	120	18.6	88 SKS (18.6 BBLS) 15.6 PPG 1.19 YIELD 5.24 GAL/SK

										CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES 50 LBS CACL ADDED INTO CEMENT
Event	35	Clean Lines	1/5/2017	14:14:30	COM5	8.4	2.0	80	5.0	CLEAN LINES FRESH WATER
Event	36	End Job	1/5/2017	14:17:10	COM5					PUMPED 88 SKS TO TOPOUT
Event	37	Pre-Rig Down Safety Meeting	1/5/2017	15:30:00	USER					ALL HES EMPLOYEES
Event	38	Rig-Down Equipment	1/5/2017	15:45:00	USER					
Event	39	Pre-Convoy Safety Meeting	1/5/2017	16:45:00	USER					ALL HES EMPLOYEES
Event	40	Crew Leave Location	1/5/2017	17:00:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT DAVID CAMPBELL AND CREW

TERRA - TR 323-21-597 - 9 5/8 SURFACE



① Call Out	⑧ Pre-Job Safety Meeting	⑮ CaCl Spacer	⑳ Pump Tail Cement	㉑ Clear Parasite
② Pre-Convoy Safety Meeting	⑨ Start Job	⑯ Fresh Water Spacer	㉒ Shutdown	㉓ End Job
③ Arrive At Loc	⑩ Prime Lines	⑰ Superflush 100	㉔ Drop Top Plug	㉕ Start Job
④ Assessment Of Location Safety Meeting	⑪ Test Lines	⑱ Fresh Water Spacer	㉖ Pump Displacement	㉗ CaCl Spacer
⑤ Pre-Rig Up Safety Meeting	⑫ Fresh Water Spacer	㉙ CaCl Spacer	㉘ Slow Rate	㉚ Pump Cement
⑥ Rig-Up Equipment	⑬ Superflush 100	㉛ Fresh Water Spacer	㉜ Bump Plug	㉝ Clean Lines
⑦ Comment	⑭ Fresh Water Spacer	㉞ Pump Lead Cement	㉟ Check Floats	㊱ End Job

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Created: 2017-01-04 08:02:23, Version: 4.2.393

Edit

Customer: TEP ROCKY MOUNTAIN LLC

Job Date: 1/5/2017

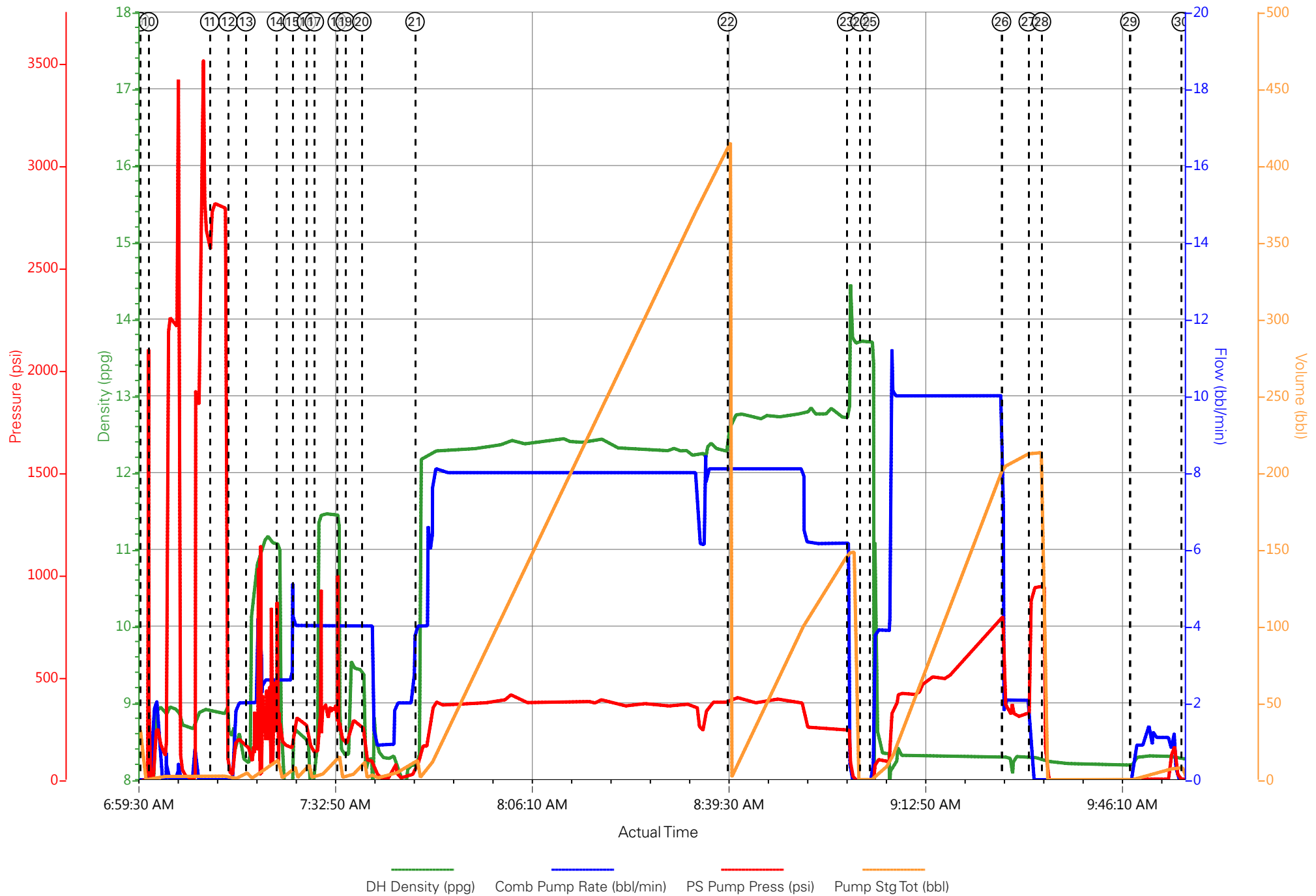
Well: TR 323-21-597

Representative: TED RAGSDALE

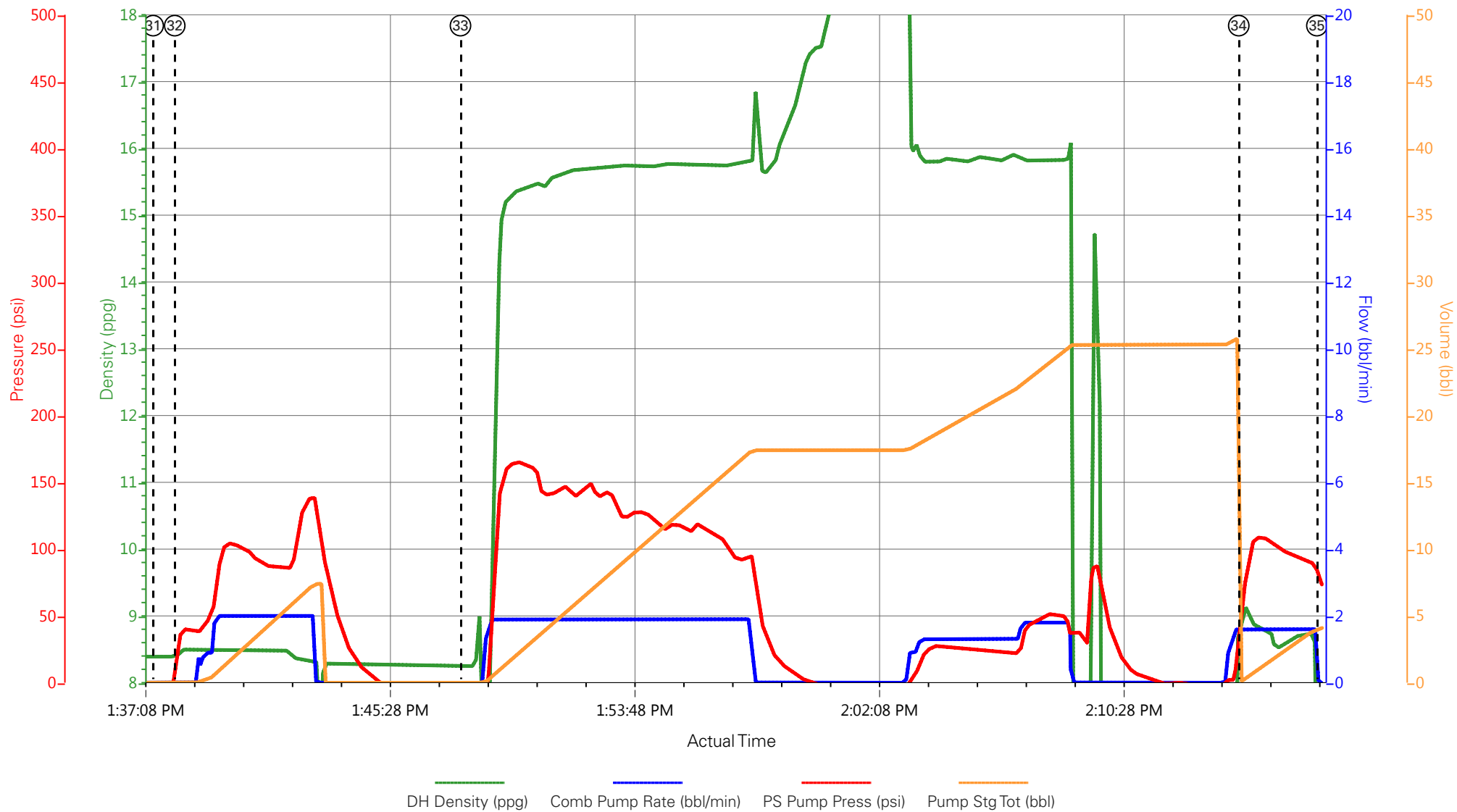
Sales Order #: 0903760009

ELITE #8: DAVID CAMPBELL / CLIFF SPARKS

TERRA - TR 323-21-597 - 9 5/8 SURFACE



TERRA - TR 323-21-597 - TOPOUT



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|---|--------------------------|-----------------------|----------------------|-------------------|
| ① Call Out | ⑧ Pre-Job Safety Meeting | ⑮ CaCl Spacer | 22 Pump Tail Cement | 29 Clear Parasite |
| ② Pre-Convoy Safety Meeting | ⑨ Start Job | ⑯ Fresh Water Spacer | 23 Shutdown | 30 End Job |
| ③ Arrive At Loc | ⑩ Prime Lines | ⑰ Superflush 100 | 24 Drop Top Plug | 31 Start Job |
| ④ Assessment Of Location Safety Meeting | ⑪ Test Lines | ⑱ Fresh Water Spacer | 25 Pump Displacement | 32 CaCl Spacer |
| ⑤ Pre-Rig Up Safety Meeting | ⑫ Fresh Water Spacer | ⑲ CaCl Spacer | 26 Slow Rate | 33 Pump Cement |
| ⑥ Rig-Up Equipment | ⑬ Superflush 100 | 20 Fresh Water Spacer | 27 Bump Plug | 34 Clean Lines |
| ⑦ Comment | ⑭ Fresh Water Spacer | 21 Pump Lead Cement | 28 Check Floats | 35 End Job |

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