

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Abe Alexander and Lynn Cass

Date: Monday, January 09, 2017

Trail Ridge 523-21-597 Surface

API#05-045-23352-00

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

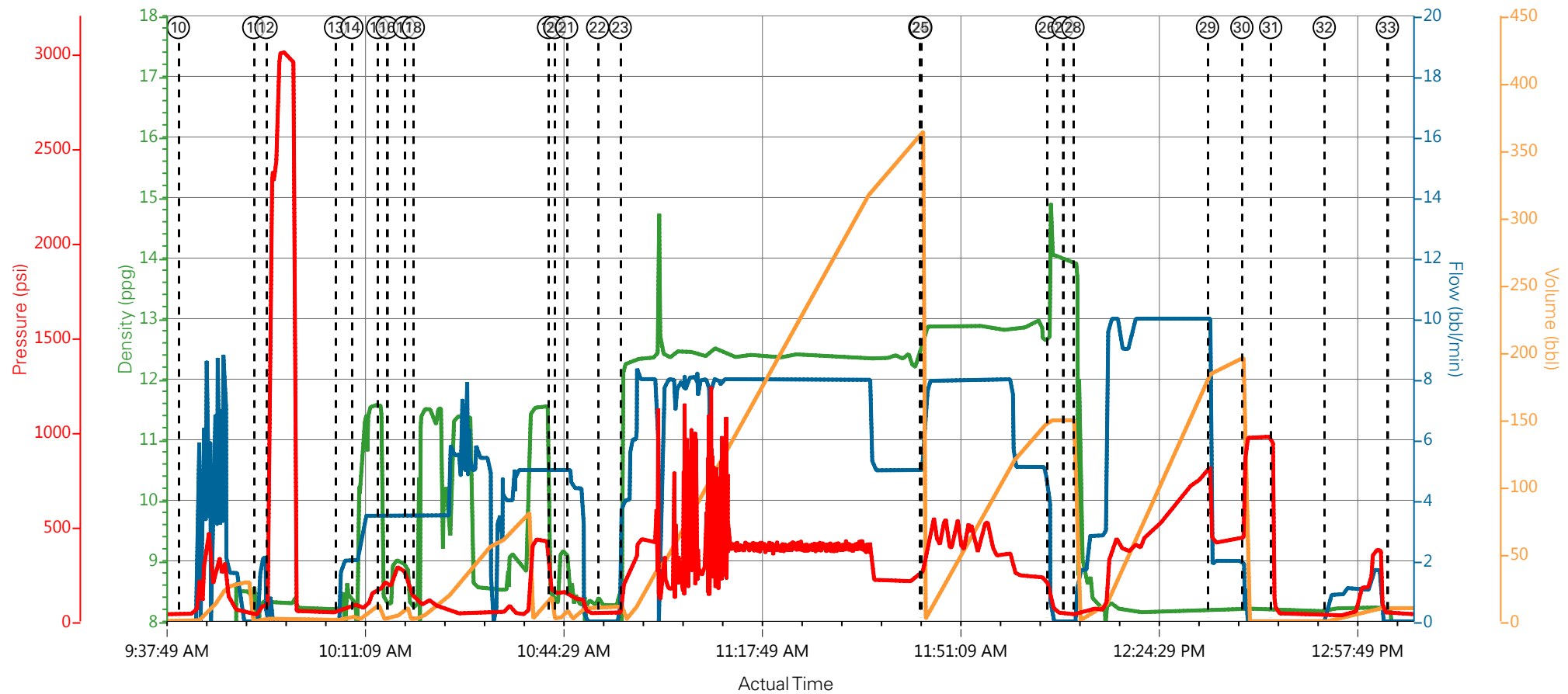
2.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pump Stage Total (bbl)	Pass-Side Pump Pressure (psi)	Comments
Event	1	Call Out	1/8/2017	18:00:00	USER					ALL HES CALLED OUT, ON LOCATION TIME 02:30
Event	2	Pre-Convoy Safety Meeting	1/8/2017	20:45:00	USER					LEVEL 2 JOURNEY CREATED, JOURNEY APPROVED, ALL HES INVOLVED IN SAFETY MEETING
Event	3	Crew Leave Yard	1/8/2017	21:00:00	USER					1-F-550 PICKUP, 1-ELITE PUMP TRUCK, 1-TRANSPORT
Event	4	Arrive At Loc	1/9/2017	01:30:00	USER					ALL HES ARRIVED ON LOCATION 1 HOUR EARLY
Event	5	Assessment Of Location Safety Meeting	1/9/2017	01:45:00	USER					RIG WAS RUNNING CASING, HES REP. WENT AND SPOKE WITH COMPANY REP PRIOR TO SPOTTING EQUIPMENT
Event	6	Pre-Rig Up Safety Meeting	1/9/2017	02:30:00	USER					JSA FILLED OUT AND REVIEWED BY ALL HES PERSONNEL
Event	7	Rig-Up Equipment	1/9/2017	02:45:00	USER					RIG UP IRON TO THE STAND PIPE, IRON TO THE CELLAR FOR TOP-OUT JOB, WATER HOSES TO BOTH UPRIGHTS, CEMENT SILOS TO PUMP TRUCK, SUPERFLUSH TRANSPORT TO PUMP TRUCK
Event	8	Rig-Up Completed	1/9/2017	04:30:00	USER					RIG UP COMPLETED SAFELY
Event	9	Pre-Job Safety Meeting	1/9/2017	07:30:00	USER					ALL HES, RIG CREW AND COMPANY REP INVOLVED TO DISCUSS JOB PROCEDURES
Event	10	Start Job	1/9/2017	09:40:22	USER					TD: 2587FT TP: 2591FT CSG SET AT: 2587FT SJ: 27FT CSG: 9.625 36# J-55 PARASITE LINE: 2474FT OH: 14.75 CONDUCTOR CSG: 18" TO 87FT MUD WT: 9PPG VISC: 43 WTR TEST- TEMP: 70 CHLOR: 0 PH: 7
Event	11	Fill Lines	1/9/2017	09:53:02	USER	8.32	2	2	115	FILL LINES TO PRESSURE TEST
Event	12	Test Lines	1/9/2017	09:55:06	COM5				3019	PRESSURE TEST LINES TO 3000 PSI, PRESSURE TEST OK
Event	13	Fresh Water	1/9/2017	10:06:47	COM5	8.34	2	5	278	5 BBLS OF FRESH WATER PUMPED
Event	14	SuperFlush	1/9/2017	10:09:31	COM5	11	3.5	10	190	10 BBLS OF SUPERFLUSH 100

Event	15	Fresh Water	1/9/2017	10:13:51	COM5	8.34	3.5	5	190	5 BBLS OF FRESH WATER
Event	16	Calcium Chloride Water	1/9/2017	10:15:26	COM5	10	3.5	10	220	10 BBLS OF 15% CALCIUM CHLORIDE WATER
Event	17	Fresh Water	1/9/2017	10:18:20	COM5	8.34	3.5	5	134	5 BBLS OF FRESH WATER
Event	18	SuperFlush	1/9/2017	10:19:50	COM5	11	3.5	10	140	10 BBLS OF SUPERFLUSH 100 PUMPED
Event	19	Fresh Water	1/9/2017	10:42:33	COM5	8.34	5	5	150	5 BBLS OF FRESH WATER
Event	20	Calcium Chloride Water	1/9/2017	10:43:35	COM5	10	5	10	150	10 BBLS OF 15% CALCIUM CHLORIDE WATER
Event	21	Fresh Water	1/9/2017	10:45:35	COM5	8.34	5	10	120	10 BBLS OF FRESH WATER
Event	22	Check weight	1/9/2017	10:50:48	COM5	12.3				WEIGHED UP AND VERIFIED WEIGHT OF FIRST TUB OF CEMENT
Event	23	Pump Lead Cement	1/9/2017	10:54:35	COM5	12.3	8	366.6	450	865 SKS OF VARICEM CEMENT (366.6BBLS) 12.3PPG 2.38YIELD 13.77GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT LEAD CEMENT
Event	24	Pump Tail Cement	1/9/2017	11:44:54	COM5	12.8	8	129.6	490	345 SKS OF VARICEM CEMENT (129.6BBLS) 128PPG 2.11YIELD 11.78GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT TAIL CEMENT
Event	25	Check weight	1/9/2017	11:45:04	COM5	12.8				VERIFIED WEIGHT OF CEMENT
Event	26	Shutdown	1/9/2017	12:06:14	USER	12.8				SHUTDOWN END OF CEMENT, HES WASHED UP ON TOP OF THE PLUG
Event	27	Drop Top Plug	1/9/2017	12:08:55	USER					TOP PLUG AWAY NO PROBLEMS
Event	28	Pump Displacement	1/9/2017	12:10:38	COM5	8.34	10	188.2	800	FRESH WATER DISPLACEMENT
Event	29	Slow Rate	1/9/2017	12:33:14	USER	8.34	2	10	445	SLOW RATE TO BUMP THE PLUG
Event	30	Bump Plug	1/9/2017	12:39:00	COM5	8.34	2	198.2	445	HES BUMPED THE PLUG AT 2BBLS/MIN, FINAL LIFT PRESSURE WAS 445 PSI
Event	31	Check Floats	1/9/2017	12:43:50	USER				976	FLOATS HELD 3/4 BBLS BACK TO TANKS
Event	32	Flush Parasite Line	1/9/2017	12:52:50	COM5	8.34	2	10	385	HES PUMPED 10 BBLS OF SUGAR WATER TO CLEAR PARASITE LINE, 5 BBLS INTO PUMPING SUGAR WATER, HES CAUGHT PRESSURE, TOP PRESSURE WAS 325 PSI
Event	33	Shutdown	1/9/2017	13:03:27	USER					HES SHUTDOWN, RIG BLEW ALL IRON DOWN TO THE PUMP TRUCK, HES DRAINED AND BLEW DOWN PUMP

										TRUCK, RIGGED IRON UP INTO THE CELLAR IN PREPERATIONS TO TOP OUT	
Event	34	Start Job	1/9/2017	16:09:00	COM5					HES PRIMED UP PUMP TRUCK AND BEGAN TOPOUT STAGE OF CEMENT JOB	
Event	35	Check weight	1/9/2017	16:11:11	COM5	15.6					WEIGHED UP AND VERIFIED WEIGHT OF CEMENT
Event	36	Pump Cement	1/9/2017	16:13:46	COM5	15.6	1.5	19.6	76	92.5SKS OF TYPE I-II CEMENT WITH 2% CALCIUM CHLORIDE (19.6BBLS) WEIGHT OF CEMENT VERIFIED VIA MUD SCALES PRIOR TO PUMPING TOPOUT CEMENT	
Event	37	Check weight	1/9/2017	16:28:55	COM5	15.6					VERIFIED WEIGHT OF CEMENT
Event	38	Shutdown	1/9/2017	16:48:57	USER	15.6					SHUTDOWN, CEMENT TO SURFACE
Event	39	End Job	1/9/2017	16:53:23	USER					END OF CEMENT JOB, THERE WERE NO RETURNS THROUGHOUT PRIMARY CEMENT JOB, HES WAITED 3.5 HOURS BEFORE BEGINNING TOPOUT JOB, 92.5 SKS OF TOPOUT CEMENT WAS USED WITH 2% CALCIUM CHLORIDE, RIG USED 40 POUNDS OF SUGAR, HES USED 25BBLS OF SUPERFLUSH 100, CEMENT WAS BROUGHT TO SURFACE AND DID NOT FALL ANY	
Event	40	Pre-Rig Down Safety Meeting	1/9/2017	17:16:33	USER					JSA REVIEWED, ALL HES INVOLVED IN SAFETY MEETING	
Event	41	Rig-Down Equipment	1/9/2017	17:20:00	USER					WASH UP AND BLOW DOWN PUMP TRUCK, RIG DOWN ALL LINES AND EQUIPMENT	
Event	42	Rig-Down Completed	1/9/2017	18:20:00	USER					RIG-DOWN COMPLETED SAFELY	
Event	43	Pre-Convoy Safety Meeting	1/9/2017	18:45:00	USER					JOURNEY WILL BE COMPLETED WHEN HES REACHES CELL PHONE SERVICE, ALL HES INVOLVED IN SAFETY MEETING	
Event	44	Crew Leave Location	1/9/2017	19:00:00	USER					1-F-550 PICKUP, 1-ELITE PUMP TRUCK, 1-SUPERFLUSH TRANSPORT	

TEP - CHEVRON TR 523-21-597 - 903761061 - SURFACE



DH Density (ppg) -0.25 Comb Pump Rate (bbl/min) 6.7 Pump Stg Tot (bbl) 10.8 PS Pump Press (psi) 49

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|---|---------------------------|------------------------|
| ① Call Out | ⑫ Test Lines | 23 Pump Lead Cement |
| ② Pre-Convoy Safety Meeting | ⑬ Fresh Water | 24 Pump Tail Cement |
| ③ Crew Leave Yard | ⑭ SuperFlush | 25 Check weight |
| ④ Arrive At Loc | ⑮ Fresh Water | 26 Shutdown |
| ⑤ Assessment Of Location Safety Meeting | ⑯ Calcium Chloride Water | 27 Drop Top Plug |
| ⑥ Pre-Rig Up Safety Meeting | ⑰ Fresh Water | 28 Pump Displacement |
| ⑦ Rig-Up Equipment | ⑱ SuperFlush | 29 Slow Rate |
| ⑧ Rig-Up Completed | ⑲ Fresh Water | 30 Bump Plug |
| ⑨ Pre-Job Safety Meeting | 20 Calcium Chloride Water | 31 Check Floats |
| ⑩ Start Job | 21 Fresh Water | 32 Flush Parasite Line |
| ⑪ Fill Lines | 22 Check weight | 33 Shutdown |

▼ **HALLIBURTON** | iCem® Service

Created: 2017-01-09 04:28:21, Version: 4.2.393

Edit

Customer : TERRA ENERGY PARTNERS

Job Date : 1/9/2017 9:17:36 AM

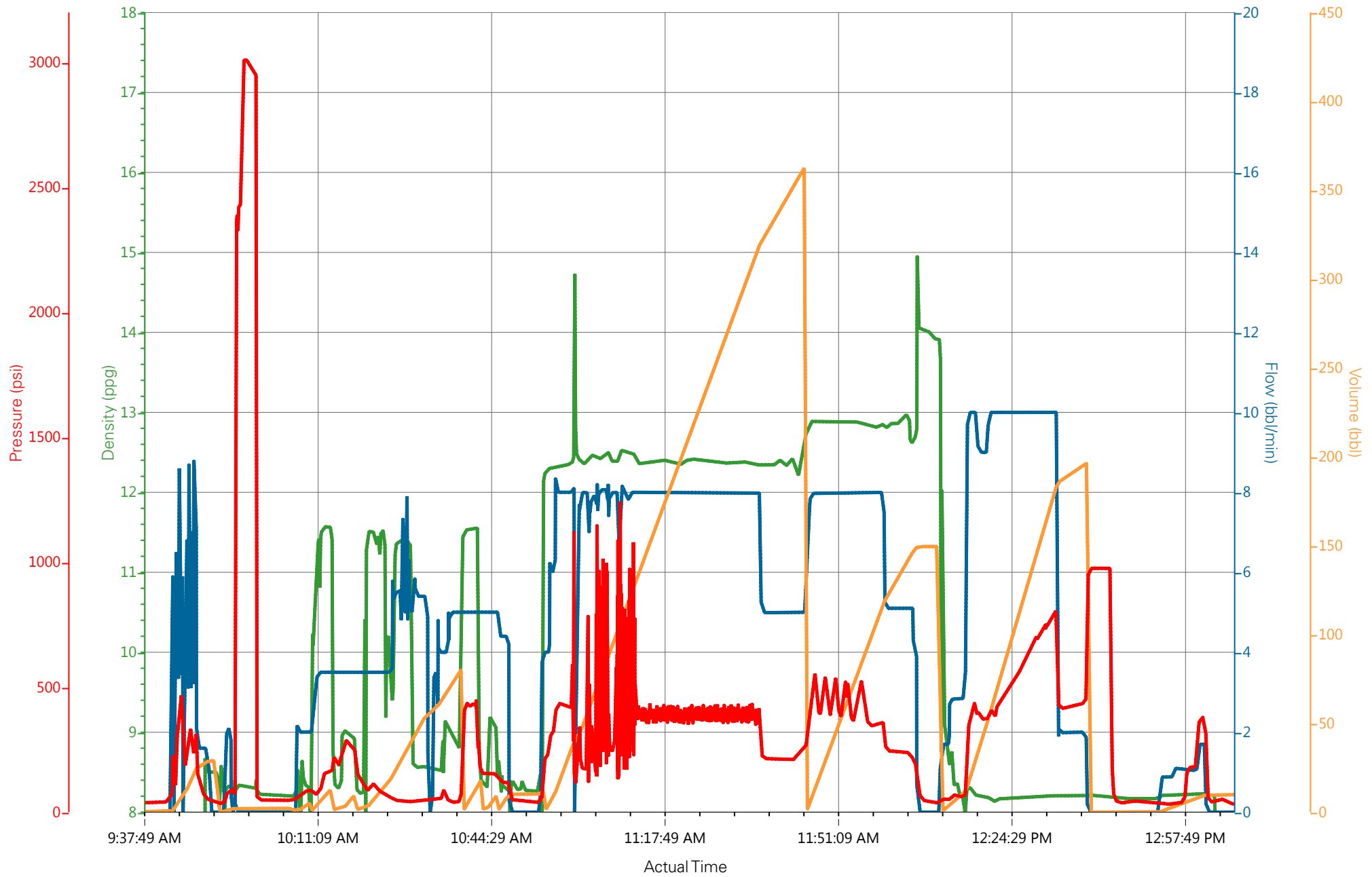
Well : Chevron TR 523-21-597

Representative : Ted Ragsdale

Sales Order # : 903761061

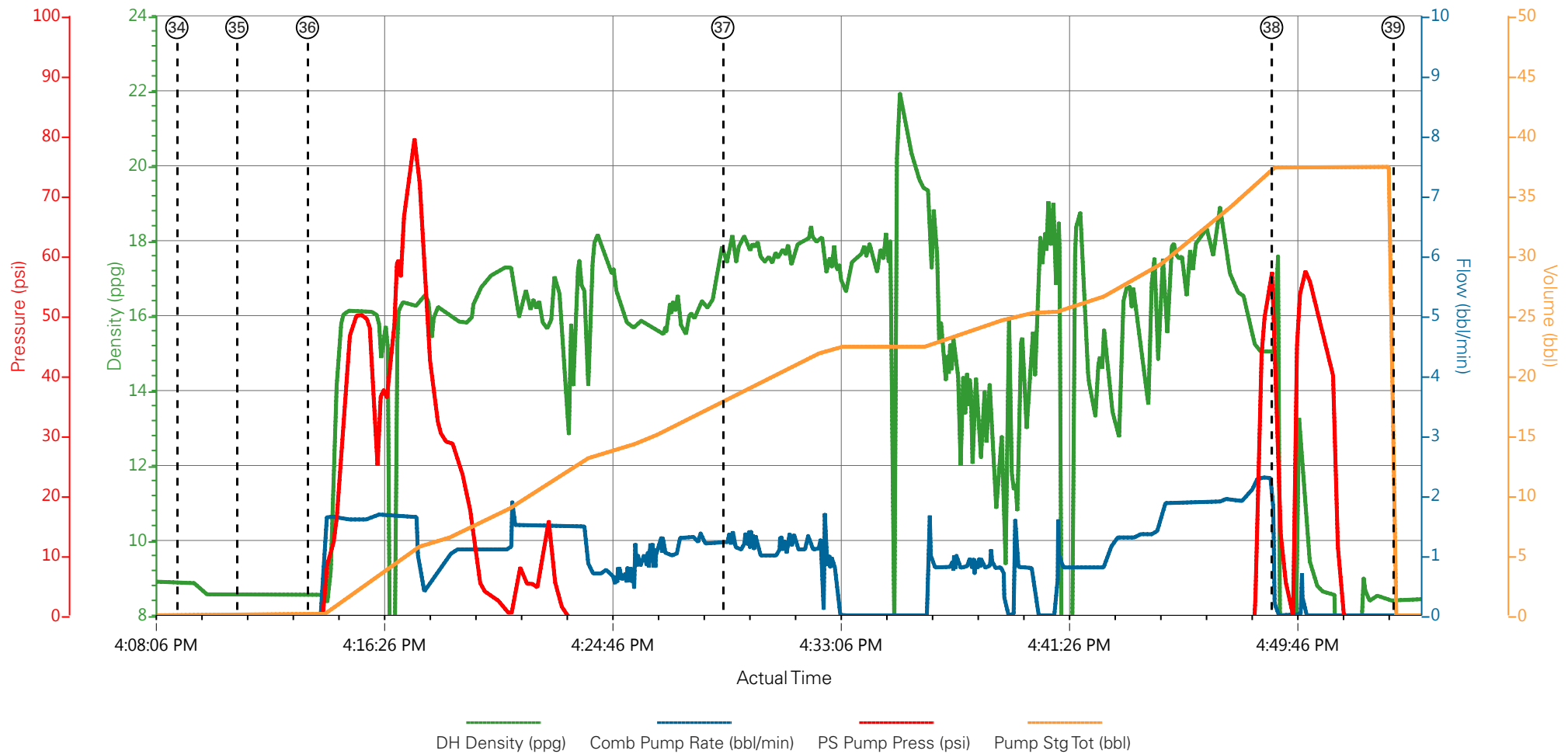
Elite 1 : Adam Angelo/Carlton Kukus

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DH Density (ppg) -0.25 Comb Pump Rate (bbl/min) 6.7 Pump Stg Tot (bbl) 10.8 PS Pump Press (psi) 49

TEP - CHEVRON TR 523-21-597 - 903761061 - TOPOUT



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|---|---------------------------|------------------------|--------------------------------|
| ① Call Out | ⑫ Test Lines | 23 Pump Lead Cement | 34 Start Job |
| ② Pre-Convoy Safety Meeting | ⑬ Fresh Water | 24 Pump Tail Cement | 35 Check weight |
| ③ Crew Leave Yard | ⑭ SuperFlush | 25 Check weight | 36 Pump Cement |
| ④ Arrive At Loc | ⑮ Fresh Water | 26 Shutdown | 37 Check weight |
| ⑤ Assessment Of Location Safety Meeting | ⑯ Calcium Chloride Water | 27 Drop Top Plug | 38 Shutdown |
| ⑥ Pre-Rig Up Safety Meeting | ⑰ Fresh Water | 28 Pump Displacement | 39 End Job |
| ⑦ Rig-Up Equipment | ⑱ SuperFlush | 29 Slow Rate | 40 Pre-Rig Down Safety Meeting |
| ⑧ Rig-Up Completed | ⑲ Fresh Water | 30 Bump Plug | 41 Rig-Down Equipment |
| ⑨ Pre-Job Safety Meeting | 20 Calcium Chloride Water | 31 Check Floats | 42 Rig-Down Completed |
| ⑩ Start Job | 21 Fresh Water | 32 Flush Parasite Line | 43 Pre-Convoy Safety Meeting |
| ⑪ Fill Lines | 22 Check weight | 33 Shutdown | 44 Crew Leave Location |

TEP - CHEVRON TR 523-21-597 - 903761061 - TOPOUT

