

HALLIBURTON

iCem[®] Service

Terra Energy Partners

For: Terra Energy Partners

Date: Monday, March 06, 2017

TR 534-27-597 Surface PJR

API# 05-045-23331-00

Sincerely,

Grand Junction Cement Engineering

2.0 Real-Time Job Summary

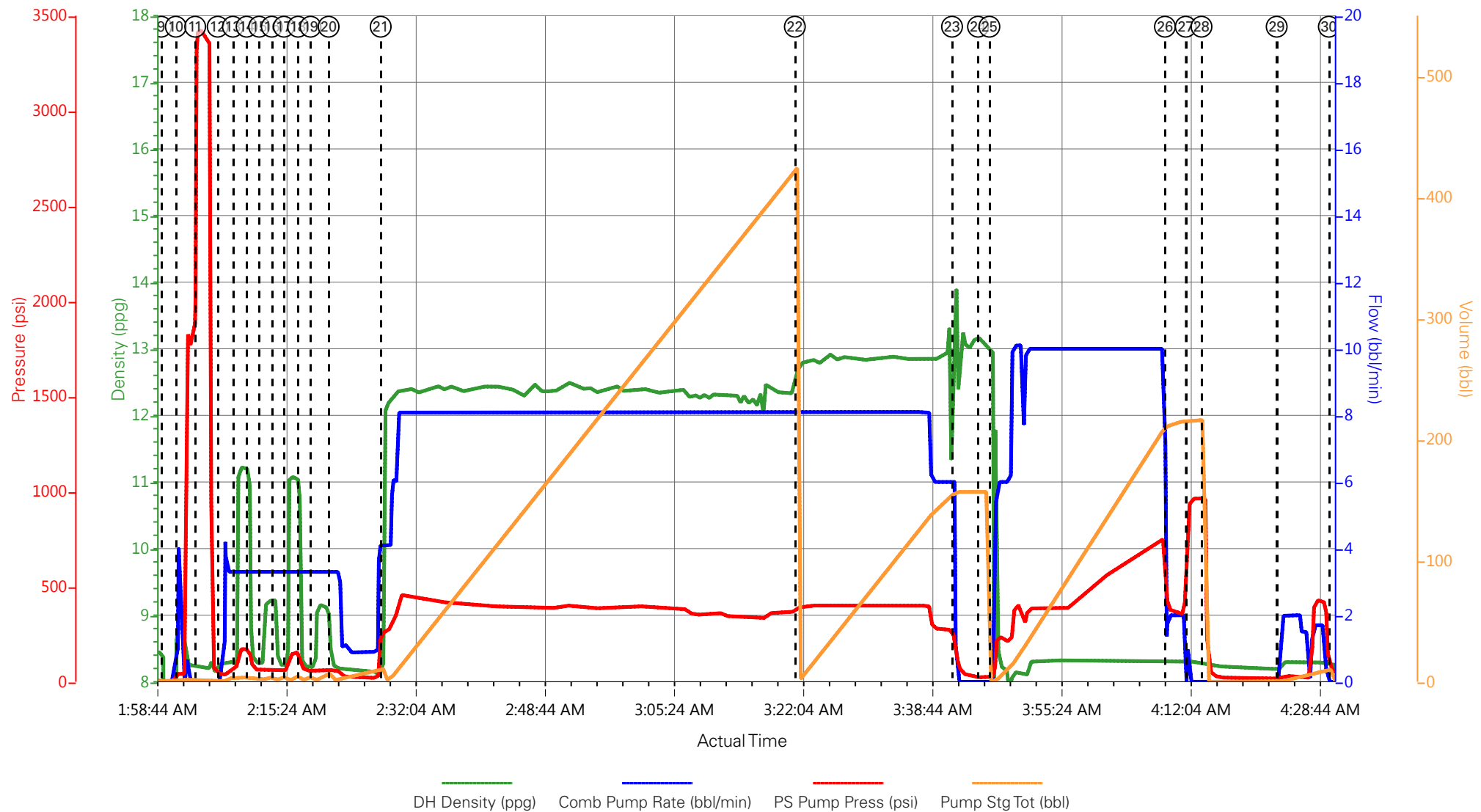
2.1 Job Event Log

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	3/5/2017	12:30:00	USER					ELITE #4
Event	2	Pre-Convoy Safety Meeting	3/5/2017	15:00:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	3/5/2017	19:00:00	USER					ARRIVED ON LOCATION 1 HOUR LATE RIG STILL RUNNING CASING UPON ARRIVAL
Event	4	Assessment Of Location Safety Meeting	3/5/2017	19:15:00	USER					ALL HES EMPLOYEES
Event	5	Pre-Rig Up Safety Meeting	3/5/2017	19:30:00	USER					ALL HES EMPLOYEES
Event	6	Rig-Up Equipment	3/5/2017	19:45:00	USER					1 HT-400 PUMP TRUCK(ELITE #4) 1 TRANSPORT 3-SILOS 1 F-550 PICKUP
Event	7	Comment	3/5/2017	19:55:00	USER					CUSTOMER WAS OFFERED SDS WATER TEMP AT 67 F CHLORIDES: 0 PPM PH: 7
Event	8	Pre-Job Safety Meeting	3/6/2017	01:30:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG PUMPED 150 BBLS AND SHUTDOWN
Event	9	Start Job	3/6/2017	01:59:39	COM5					TD: 2750 TP: 2750 CSG: 9 5/8 36# (1176 FT) 9 5/8 40# (974 FT) SJ: 24.83 OH:14 3/4 MW: 9.5 PPG
Event	10	Prime Lines	3/6/2017	02:01:32	USER	8.33	2.0	50	2.0	PRIME LINES FRESH WATER
Event	11	Test Lines	3/6/2017	02:04:02	COM5			3431	2.0	PRESSURE TEST OK
Event	12	Fresh Water Spacer	3/6/2017	02:06:56	COM5	8.4	4.0	39.00	0.0	5 BBL FRESH WATER SPACER
Event	13	Super Flush 100	3/6/2017	02:08:54	COM5	11.2	4.0	77.00	0.0	5 BBL SUPER FLUSH 100

Event	14	Fresh Water Spacer	3/6/2017	02:10:40	COM5	8.4	4.0	151.00	0.0	5 BBL FRESH WATER SPACER
Event	15	CaCl Spacer	3/6/2017	02:12:17	COM5	9.5	4.0	62.00	0.0	5 BBL CACL SPACER
Event	16	Fresh Water Spacer	3/6/2017	02:13:55	COM5	8.4	4.0	65.00	0.0	5 BBL FRESH WATER SPACER
Event	17	Super Flush 100	3/6/2017	02:15:29	COM5	11.2	4.0	59.00	0.0	5 BBL SUPER FLUSH 100
Event	18	Fresh Water Spacer	3/6/2017	02:17:18	COM5	8.4	4.0	90.00	6.0	5 BBL FRESH WATER SPACER
Event	19	CaCl Spacer	3/6/2017	02:18:55	COM5	9.5	4.0	57.00	0.0	5 BBL CACL SPACER
Event	20	Fresh Water Spacer	3/6/2017	02:21:15	COM5	8.4	4.0	61.00	7.8	10 BBL FRESH WATER SPACER
Event	21	Pump Lead Cement	3/6/2017	02:27:58	COM5	12.3	8.0	470	392	925 SKS (392 BBLS) 12.3 PPG 2.38 YIELD 13.77 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES 90 LBS TUFF FIBER ADDED THROUGHOUT
Event	22	Pump Tail Cement	3/6/2017	03:21:24	COM5	12.8	8.0	402	129.6	345 SKS (129.6 BBLS) 12.8 PPG 2.11 YIELD 11.78 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	23	Shutdown	3/6/2017	03:41:41	USER					
Event	24	Drop Top Plug	3/6/2017	03:45:02	COM5					PLUG AWAY NO ISSUES
Event	25	Pump Displacement	3/6/2017	03:46:30	COM5	8.4	10.0	750	209.2	FRESH WATER DISPLACEMENT WASH UP ON TOP OF PLUG AS PER COMPANY REP REQUEST
Event	26	Slow Rate	3/6/2017	04:09:09	COM5	8.4	2.0	360	199.2	SLOW RATE PRIOR TO BUMPING PLUG
Event	27	Bump Plug	3/6/2017	04:11:50	COM5	8.4	2.0	360	209.2	PRESSURE PRIOR TO BUMPING PLUG @ 360 PSI BUMPED PLUG UP TO 960 PSI
Event	28	Check Floats	3/6/2017	04:13:52	COM5			960	209.2	FLOATS HOLDING 1 BBL BACK TO TRUCKS TANK
Event	29	Clear Parasite	3/6/2017	04:23:34	COM5	8.4	2.0	280	10.0	10 BBL SUGAR WATER TO CLEAR PARASITE LINE
Event	30	End Job	3/6/2017	04:30:18	USER					NO CIRCULATION THROUGHOUT JOB PIPE WAS STATIC THROUGHOUT JOB NO CEMENT TO SURFACE

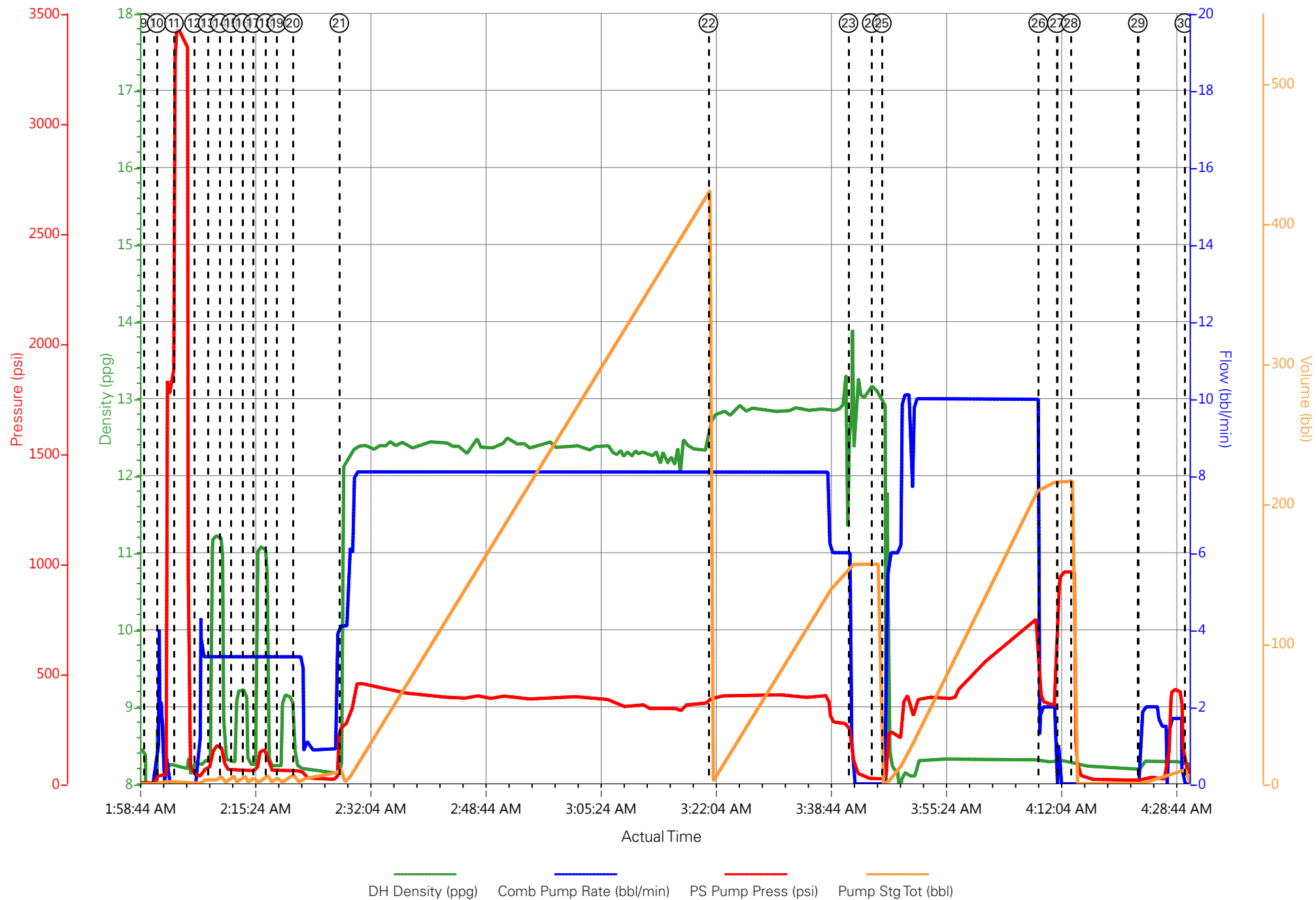
Event	31	Start Topout 1	3/6/2017	05:19:00	USER					
Event	32	Pump Cement	3/6/2017	05:19:21	COM5	15.6	3.0	160	48.3	228 SKS (48.3 BBLS) 15.6 PPG 1.19 YIELD 5.24 GAL/SK TOPOUT CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	33	Shutdown	3/6/2017	05:37:19	USER					
Event	34	End Topout 1	3/6/2017	05:38:00	USER					
Event	35	Start Topout 2	3/6/2017	10:13:44	USER					
Event	36	Pump Cement	3/6/2017	10:14:21	COM5	15.6	3.0	170	49.0	232 SKS (49 BBLS) 15.6 PPG 1.19 YIELD 5.24 GAL/SK TOPOUT CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	37	End Topout 2	3/6/2017	12:30:00	USER					CREW RELEASED AT 12:30 PM
Event	38	Pre-Rig Down Safety Meeting	3/6/2017	12:45:00	USER					ALL HES EMPLOYEES
Event	39	Rig-Down Equipment	3/6/2017	13:00:00	USER					
Event	40	Pre-Convoy Safety Meeting	3/6/2017	13:45:00	USER					ALL HES EMPLOYEES
Event	41	Crew Leave Location	3/6/2017	14:00:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT DAVID CAMPBELL AND CREW

TERRA - TR 534-27-597 - 9 5/8 SURFACE

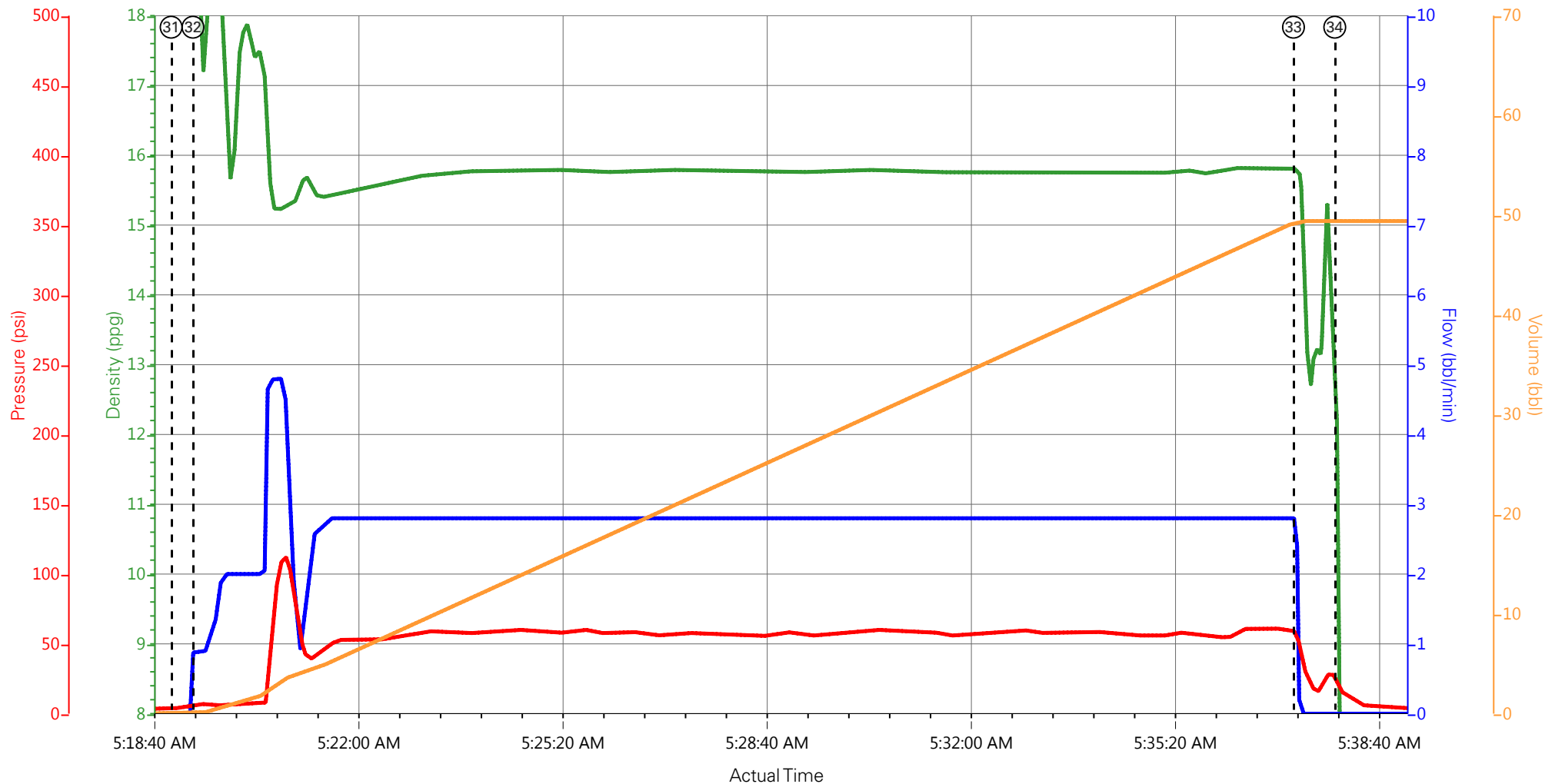


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|---|--------------------------|----------------------|---------------------|------------------|
| ① Call Out | ⑧ Pre-Job Safety Meeting | ⑮ CaCl Spacer | ⑳ Pump Tail Cement | ⑲ Clear Parasite |
| ② Pre-Convoy Safety Meeting | ⑨ Start Job | ⑯ Fresh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

TERRA - TR 534-27-597 - 9 5/8 SURFACE



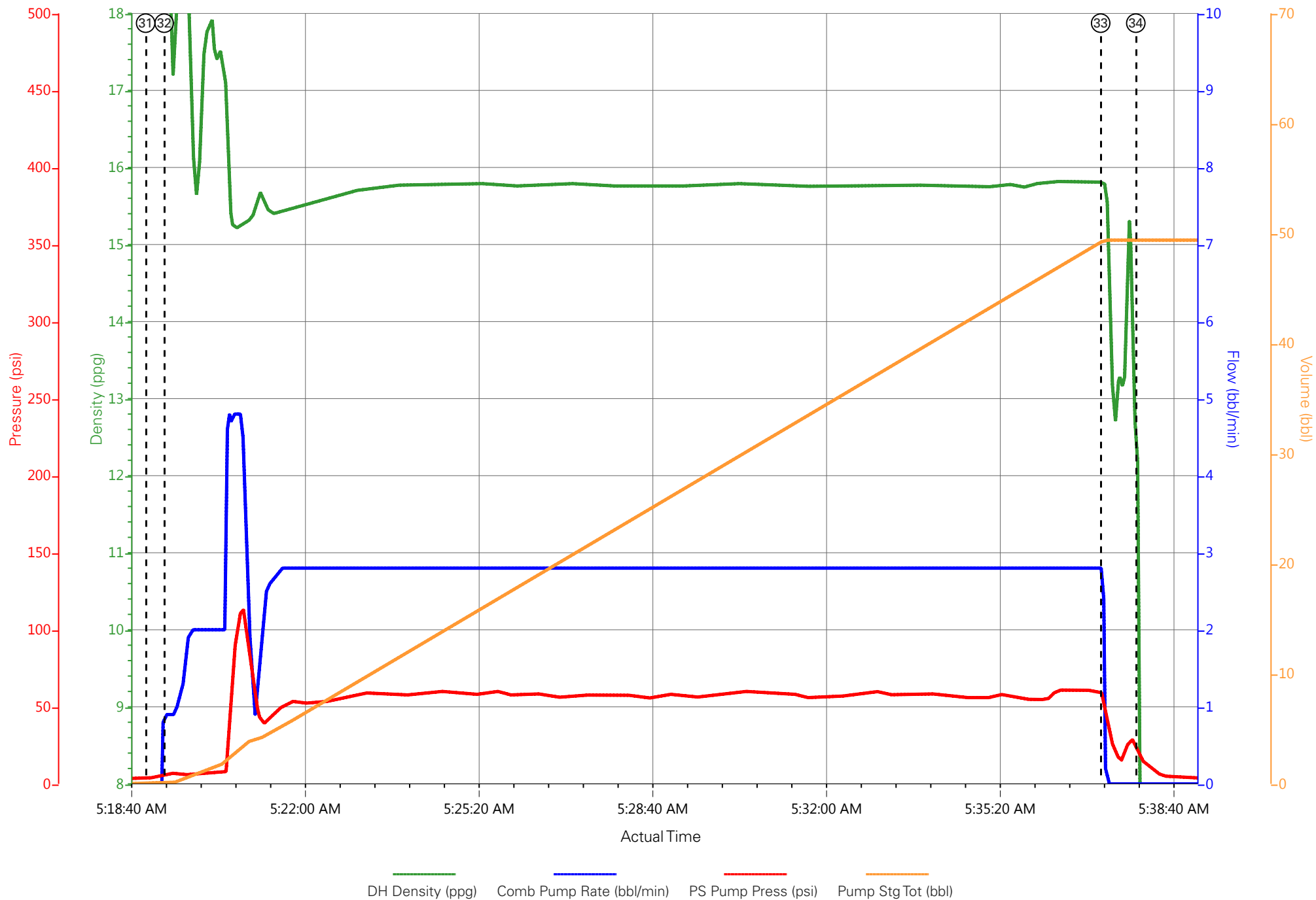
TERRA - TR 534-27-597 - TOPOUT 1



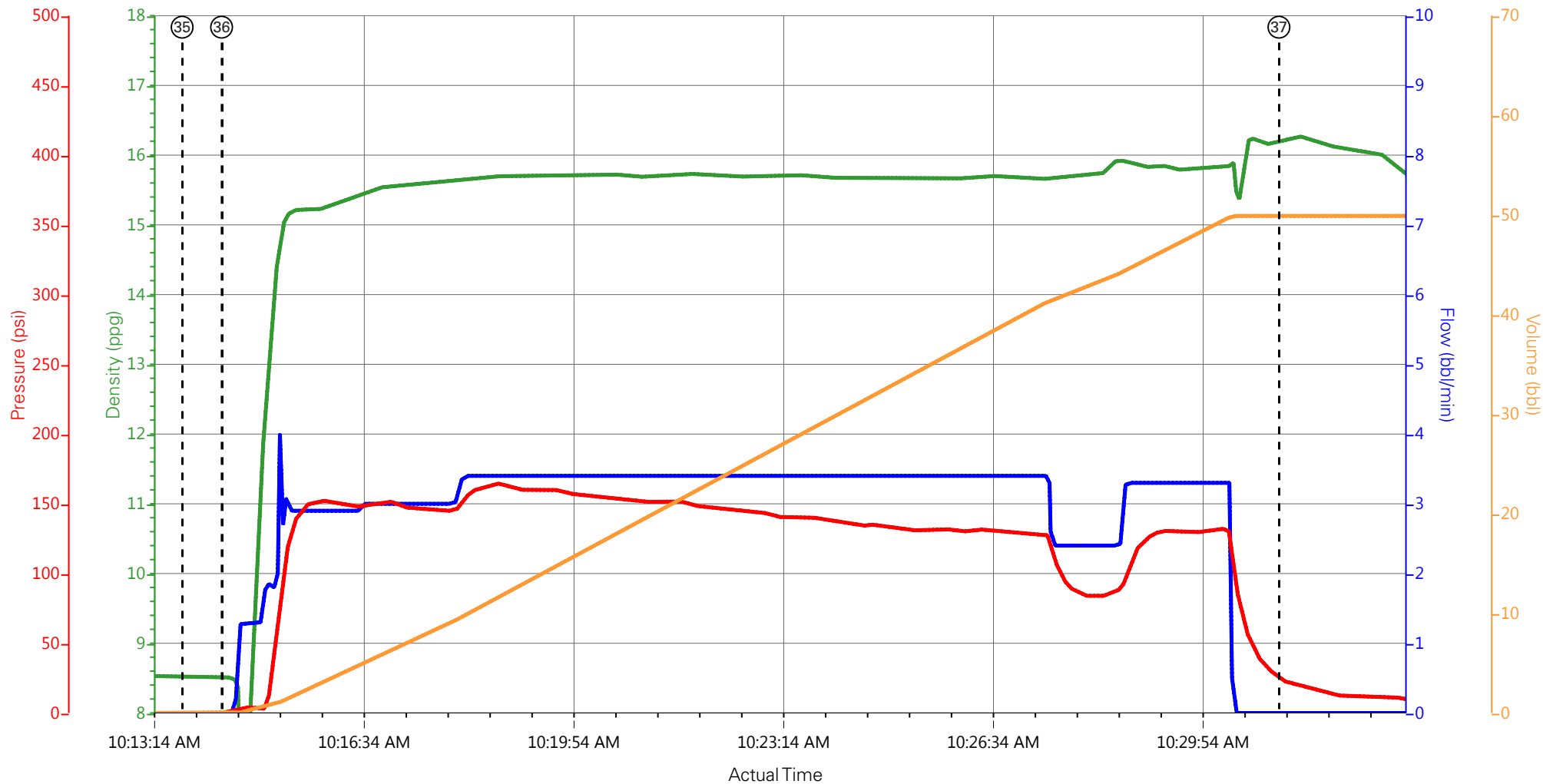
— DH Density (ppg)
 — Comb Pump Rate (bbl/min)
 — PS Pump Press (psi)
 — Pump Stg Tot (bbl)

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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 Super Flush 100 | 24 Drop Top Plug | 31 Start Topout 1 |
| ④ Assessment Of Location Safety Meeting | ⑪ Test Lines | ⑱ Fresh Water Spacer | 25 Pump Displacement | 32 Pump Cement |
| ⑤ Pre-Rig Up Safety Meeting | ⑫ Fresh Water Spacer | ⑲ CaCl Spacer | 26 Slow Rate | 33 Shutdown |
| ⑥ Rig-Up Equipment | ⑬ Super Flush 100 | 20 Fresh Water Spacer | 27 Bump Plug | 34 End Topout 1 |
| ⑦ Comment | ⑭ Fresh Water Spacer | 21 Pump Lead Cement | 28 Check Floats | |

TERRA - TR 534-27-597 - TOPOUT 1



TERRA - TR 534-27-597 - TOPOUT 2



DH Density (ppg) Comb Pump Rate (bbl/min) PS Pump Press (psi) Pump Stg Tot (bbl)

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|---|--------------------------|-----------------------|----------------------|-------------------|--------------------------------|
| ① Call Out | ⑧ Pre-Job Safety Meeting | ⑮ CaCl Spacer | 22 Pump Tail Cement | 29 Clear Parasite | 36 Pump Cement |
| ② Pre-Convoy Safety Meeting | ⑨ Start Job | ⑯ Fresh Water Spacer | 23 Shutdown | 30 End Job | 37 End Topout 2 |
| ③ Arrive At Loc | ⑩ Prime Lines | ⑰ Super Flush 100 | 24 Drop Top Plug | 31 Start Topout 1 | 38 Pre-Rig Down Safety Meeting |
| ④ Assessment Of Location Safety Meeting | ⑪ Test Lines | ⑱ Fresh Water Spacer | 25 Pump Displacement | 32 Pump Cement | 39 Rig-Down Equipment |
| ⑤ Pre-Rig Up Safety Meeting | ⑫ Fresh Water Spacer | ⑲ CaCl Spacer | 26 Slow Rate | 33 Shutdown | 40 Pre-Convoy Safety Meeting |
| ⑥ Rig-Up Equipment | ⑬ Super Flush 100 | 20 Fresh Water Spacer | 27 Bump Plug | 34 End Topout 1 | 41 Crew Leave Location |
| ⑦ Comment | ⑭ Fresh Water Spacer | 21 Pump Lead Cement | 28 Check Floats | 35 Start Topout 2 | |

TERRA - TR 534-27-597 - TOPOUT 2

