

# HALLIBURTON

iCem<sup>®</sup> Service

**TEP ROCKY MOUNTAIN LLC**

**For: Terra**

Date: Tuesday, June 06, 2017

**CHEVRON TR 23-23-597 Surface**

**API#05-045-23461-00**

Sincerely,

**Grand Junction Cement Engineering**

## 2.0 Real-Time Job Summary

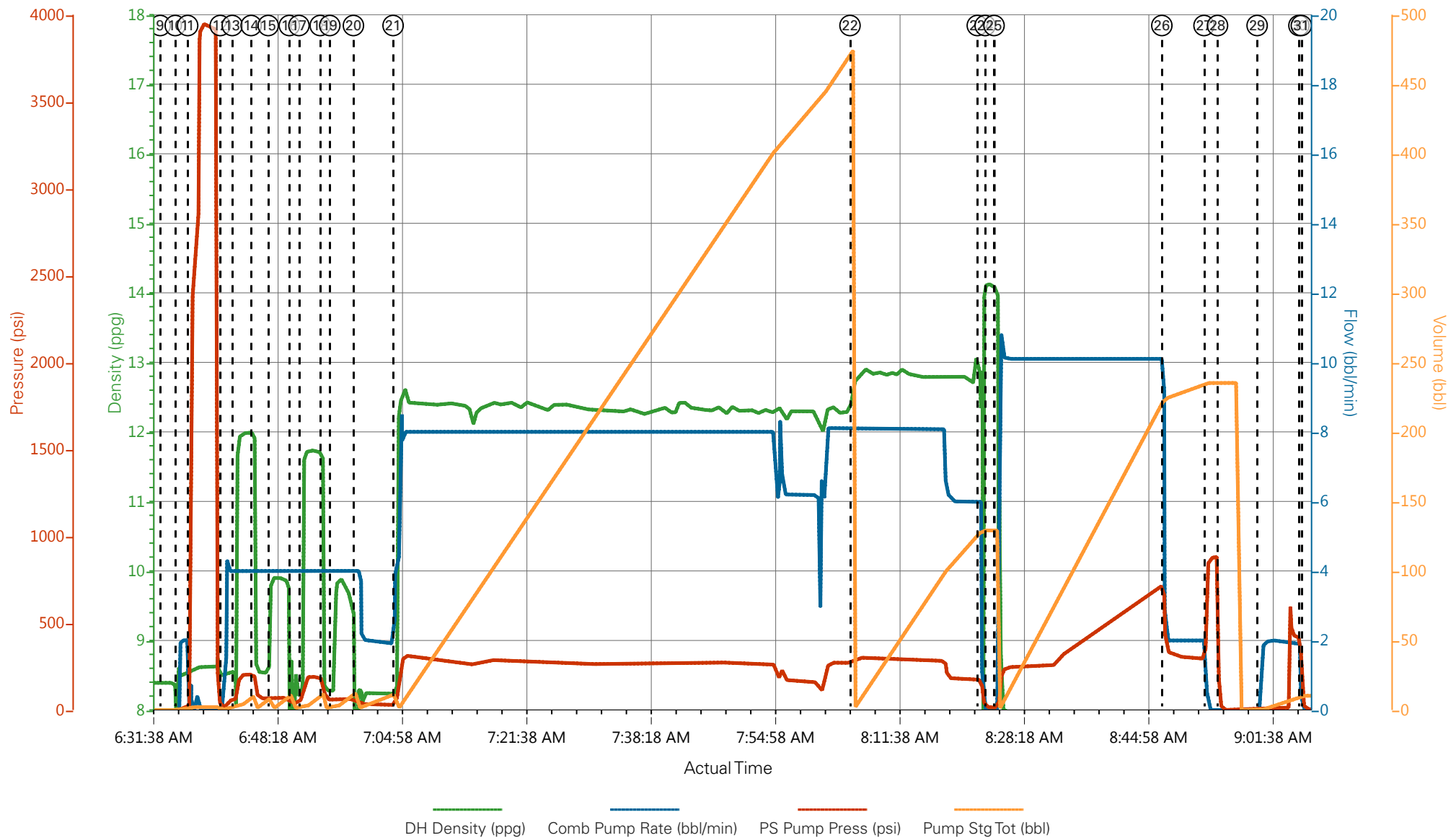
## 2.1 Job Event Log

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	6/5/2017	19:00:00	USER					ELITE #4
Event	2	Pre-Convoy Safety Meeting	6/5/2017	20:30:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	6/6/2017	00:00:00	USER					ARRIVED ON LOCATION 1 HOUR EARLY, RIG RUNNING CASING UPON HES ARRIVAL
Event	4	Meet With Company Rep	6/6/2017	00:15:00	USER					COMPANY REP OFFERED SDS WATER TEST
Event	5	Assessment Of Location Safety Meeting	6/6/2017	02:45:00	USER					ALL HES EMPLOYEES
Event	6	Pre-Rig Up Safety Meeting	6/6/2017	03:00:00	USER					ALL HES EMPLOYEES
Event	7	Rig-Up Equipment	6/6/2017	03:10:00	USER					1 HT-400 PUMP TRUCK (ELITE #4) 1 660 BULK TRUCK 1 TRANSPORT 3 SILOS
Event	8	Pre-Job Safety Meeting	6/6/2017	05:00:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRCULATED FOR 1 HOUR PRIOR TO THE JOB @ 265 GPM @ 265 PSI
Event	9	Start Job	6/6/2017	06:33:00	COM5					TD: 3009 TP: 3015 SJ: 29.38 CSG: 9 5/8 40# J-55 OH: 14 3/4 MUD WT 9.1 PPG
Event	10	Prime Lines	6/6/2017	06:35:00	COM5	8.33	2.0	25	2.0	PRIME LINES WITH 2 BBLS FRESH WATER
Event	11	Test Lines	6/6/2017	06:36:40	COM5	8.33	0.0	3950	2.0	PRESSURE TEST OK
Event	12	Pump H2O Spacer	6/6/2017	06:41:02	COM5	8.33	4.0	55	5	PUMP 5 BBL FRESH WATER SPACER
Event	13	Pump Superflush 100	6/6/2017	06:42:39	COM5	11.7	4.0	150	10	PUMP 10 BBL SUPERFLUSH 100 SPACER
Event	14	Pump H2O	6/6/2017	06:45:11	COM5	8.33	4.0	80	5.0	PUMP 5 BBL FRESH WATER SPACER
Event	15	Pump CaCL H2O	6/6/2017	06:47:28	COM5	9.8	4.0	70	10	PUMP 10 BBL CACL H2O SPACER

Event	16	Pump H2O	6/6/2017	06:50:18	COM5	8.33	4.0	75	5.0	PUMP 5 BBL FRESH WATER SPACER
Event	17	Pump Superflush 100	6/6/2017	06:51:35	COM5	11.7	4.0	185	10	PUMP 10 BBL SUPERFLUSH 100 SPACER
Event	18	Pump H2O	6/6/2017	06:54:26	COM5	8.33	4.0	75	5.0	PUMP 5 BBL H2O SPACER
Event	19	Pump CaCl H2O	6/6/2017	06:55:43	COM5	9.8	4.0	80	10.0	PUMP 10 BBL CACL H2O SPACER
Event	20	Pump H2O	6/6/2017	06:58:53	COM5	8.33	4.0	80	10	PUMP 10 BBL FRESH WATER SPACER
Event	21	Pump Lead Cement	6/6/2017	07:04:12	COM5	12.3	8.0	300	440.8	1040 SKS 12.3 PPG 2.38 YIELD 13.76 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES 90#S TUF FIBER ADDED THROUGHOUT LEAD
Event	22	Pump Tail Cement	6/6/2017	08:05:25	COM5	12.8	8.0	295	129.6	345 SKS 12.8 PPG 2.11 YIELD 11.78 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	23	Shutdown	6/6/2017	08:22:28	USER					SHUTDOWN TO DROP TOP PLUG
Event	24	Drop Top Plug	6/6/2017	08:23:31	COM5					PLUG AWAY NO PROBLEMS WASHED UP ON TOP OF THE PLUG AS PER COMPANY REP
Event	25	Pump Displacement	6/6/2017	08:24:43	COM5	8.33	10.0	725	226.7	FRESH WATER DISPLACEMENT
Event	26	Slow Rate	6/6/2017	08:47:12	USER	8.33	2.0	300	216	SLOW RATE TO BUMP PLUG
Event	27	Bump Plug	6/6/2017	08:52:51	COM5	8.33	2.0	882	226.7	PSI BEFOR BUMPING PLUG @ 300 BUMPED PLUG UP TO 882 PSI PLUG BUMPED AT CACLULATED DISPLACEMENT
Event	28	Check Floats	6/6/2017	08:54:39	COM5					FLOATS HELD 1 BBL BACK TO DISPLACEMENT TANKS
Event	29	Clear Parasite	6/6/2017	08:59:58	COM5	8.33	2.0	605	10	PUMP 10 BBLS SUGAR WATER TO CLEAR PARASITE STRING PUMPED 7.5 BBLS AND PRESSURED UP TO 605 PSI TO CLEAR PARASITE
Event	30	Shutdown	6/6/2017	09:05:34	COM5					SHUTDOWN AND RIG UP FOR TOP OUT ON TR 323-23-597 WELL
Event	31	End Job	6/6/2017	09:05:53	COM5					NO CEMENT TO SURFACE PIPE STATIC THROUGHOUT JOB 10#S SUGAR USED
Event	32	Start Job	6/6/2017	09:40:00	COM5					START TOP OUT ON TR 323-23-597 WELL 10 BBLS SUPERFLUSH 100 DUMPED DOWN THE BACKSIDE PRIOR TO PUMPING CEMENT

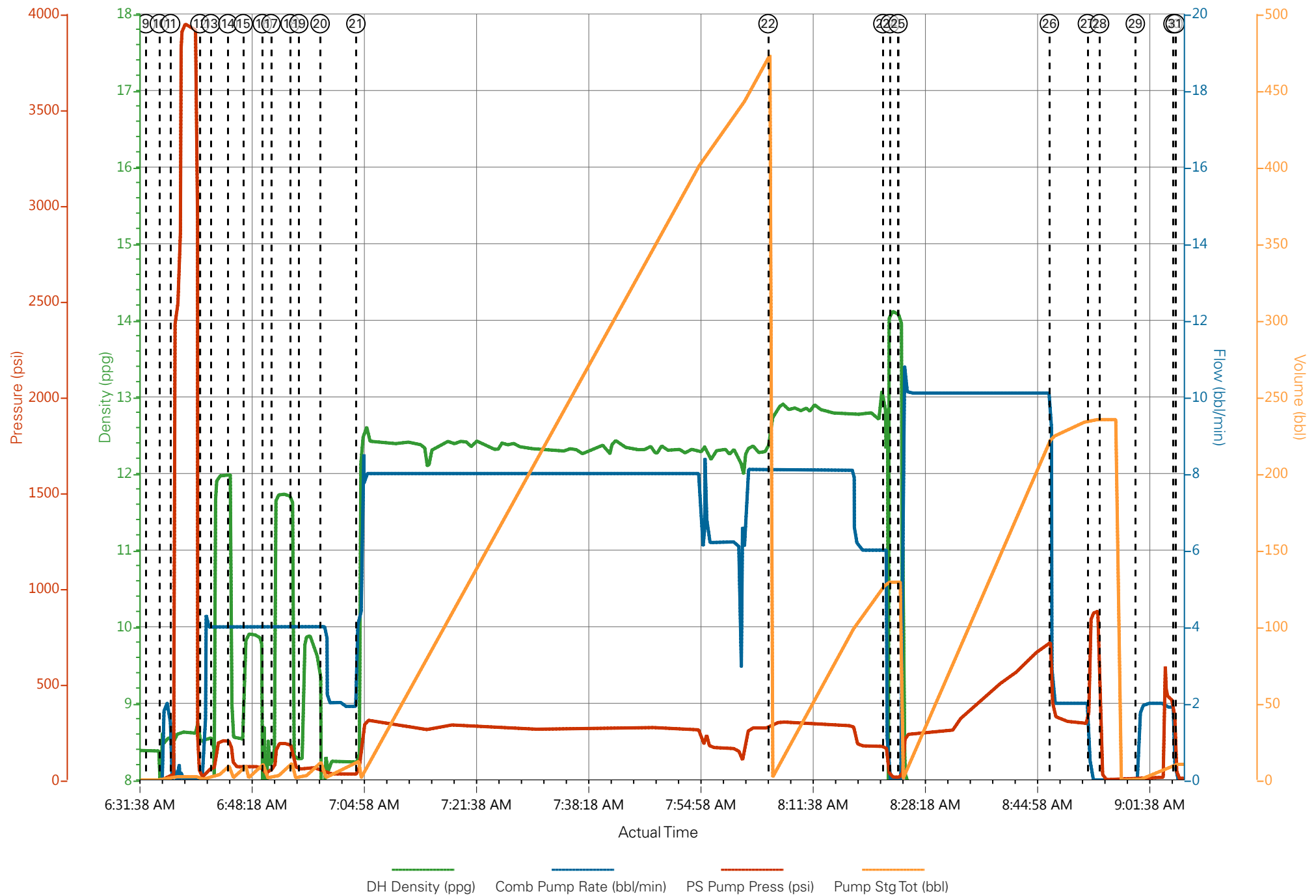
Event	33	Pump Cement	6/6/2017	09:42:34	COM5	15.6	3.0	90	23.78	112 SKS ( 23.7 BBLS) 15.6 PPG 1.19 YIELD 5.24 GAL/SK CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES 4 BAGS CACL DUMPED DOWN THE BACKSIDE
Event	34	Clean Lines	6/6/2017	09:58:09	COM5	8.33	3.0	50	2.0	CLEAN LINES TO CELLAR
Event	35	End Job	6/6/2017	10:23:45	USER					END TOP OUT ON TR 323-23-597 CEMENT TO SURFACE. WAIT TO TOP OUT ON TR 23-23-597
Event	36	Start Job	6/6/2017	11:33:30	USER					START TOP OUT ON TR 23-23-597 10 BBLS SUPERFLUSH 100 DUMPED DOWN THE BACKSIDE PRIOR TO PUMPING CEMENT
Event	37	Pump Cement	6/6/2017	11:34:49	COM5	15.6	3.0	90	29.7	140 SKS (29.7 BBLS) 15.6 PPG 1.19 YIELD 5.24 GAL/SK CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES 4 BAGS CACL DUMPED DOWN THE BACKSIDE
Event	38	Shutdown	6/6/2017	11:45:33	USER					
Event	39	End Job	6/6/2017	11:46:40	COM5					END JOB NO CEMENT TO SURFACE ON TR 23-23-597 AS PER COMPANY REP WILL TOP OUT WELL WHEN THE FIRST PRODUCTION JOB CALLS OUT
Event	40	Pre-Rig Down Safety Meeting	6/6/2017	12:00:00	USER					ALL HES EMPLOYEES
Event	41	Rig-Down Equipment	6/6/2017	12:15:00	USER					
Event	42	Pre-Convoy Safety Meeting	6/6/2017	13:20:00	USER					ALL HES EMPLOYEES
Event	43	Crew Leave Location	6/6/2017	13:30:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, DUSTIN SMITH AND CREW

# TEP - CHEVRON TR 23-23-597 - 9 5/8 SURFACE



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|---|-----------------------------|-----------------------|-----------------------|----------------------|-------------------|----------------|
| ① Call Out                              | ⑥ Pre-Rig Up Safety Meeting | ⑪ Test Lines          | ⑮ Pump H2O            | 21 Pump Lead Cement  | 26 Slow Rate      | 31 End Job     |
| ② Pre-Convoy Safety Meeting             | ⑦ Rig-Up Equipment          | ⑫ Pump H2O Spacer     | ⑯ Pump Superflush 100 | 22 Pump Tail Cement  | 27 Bump Plug      | 32 Start Job   |
| ③ Arrive At Loc                         | ⑧ Pre-Job Safety Meeting    | ⑬ Pump Superflush 100 | ⑰ Pump H2O            | 23 Shutdown          | 28 Check Floats   | 33 Pump Cement |
| ④ Meet With Company Rep                 | ⑨ Start Job                 | ⑭ Pump H2O            | ⑱ Pump CaCl H2O       | 24 Drop Top Plug     | 29 Clear Parasite | 34 Clean Lines |
| ⑤ Assessment Of Location Safety Meeting | ⑩ Prime Lines               | ⑮ Pump CaCL H2O       | 20 Pump H2O           | 25 Pump Displacement | 30 Shutdown       |                |

# TEP - CHEVRON TR 23-23-597 - 9 5/8 SURFACE



# TEP - CHEVRON TR 23-23-597 - TOP OUT

