

# HALLIBURTON

iCem® Service

**TEP ROCKY MOUNTAIN LLC**

**For: KARL SCHNEIDER**

Date: Saturday, May 27, 2017

**CHEVRON TR 21-23-597**

CHEVRON TR

Case 1

Job Date: Saturday, May 27, 2017

Sincerely,

**ANTHONY ANDREWS**

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Type	Seq. No.	Activity	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	Call Out	5/27/2017	08:30:00	USER					
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	5/27/2017	11:00:00	USER					
Event	3	Crew Leave Yard	Crew Leave Yard	5/27/2017	11:15:00	USER					
Event	4	Arrive At Loc	Arrive At Loc	5/27/2017	14:30:00	USER					
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	5/27/2017	14:40:00	USER					HES PERSONNEL
Event	6	Other	Spot Equipment	5/27/2017	14:45:00	USER					
Event	7	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	5/27/2017	14:50:00	USER					HES PERSONNEL
Event	8	Rig-Up Equipment	Rig-Up Equipment	5/27/2017	15:00:00	USER					
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	5/27/2017	15:39:29	USER					ALL HES AND RIG PERSONNEL
Event	10	Start Job	Start Job	5/27/2017	16:34:25	COM5					TD: 3033 TP:3039 SJ: 27.39 MW: 9.4 9 5/8" 40#/FTCSG IN 13 3/4"OH MUD: PV - 13 YP - 13 SGS 5/9/14 FLUID LOSS - 11.2 VIS - 60 WATER TEST: PH - 7 POTASSIUM - 700 SULFATES <200 TEMP 66 DEG
Event	11	Prime Pumps	Prime Pumps	5/27/2017	16:34:44	COM5	8.40	2.00	60.00	2.0	
Event	12	Test Lines	Test Lines	5/27/2017	16:36:38	COM5					3000 PSI TEST
Event	13	Pump Spacer 1	H2O SPACER 1	5/27/2017	16:40:10	COM5	8.33	4.00	60.00	5.00	FRESH H2O
Event	14	Pump Spacer 1	SUPERFLUSH	5/27/2017	16:41:46	COM5	11.00	4.00	160.00	10.00	SUPERFLUSH

Event	15	Pump Spacer 1	H2O SPACER 2	5/27/2017	16:44:27	COM5	8.33	4.00	130.00	5.0	FRESH H2O
Event	16	Pump Spacer 1	CACL SPACER	5/27/2017	16:45:46	COM5	8.50	4.00	93.00	10.0	CACL H2O
Event	17	Pump Spacer 1	H2O SPACER 3	5/27/2017	16:48:34	COM5	8.33	4.00	78.00	5.00	FRESH H2O
Event	18	Pump Spacer 1	SUPERFLUSH	5/27/2017	16:49:55	COM5	11.00	4.00	225.00	10.00	SUPERFLUSH
Event	19	Pump Spacer 1	H2O SPACER 4	5/27/2017	16:52:47	COM5	8.33	4.00	100.00	5.00	FRESH H2O
Event	20	Pump Spacer 1	CACL SPACER	5/27/2017	16:54:06	COM5	8.50	4.00	70.00	10.00	CACL H2O
Event	21	Pump Spacer 1	H2O SPACER 5	5/27/2017	16:56:53	COM5	8.33	4.00	76.00	10.00	FRESH H2O
Event	22	Pump Lead Cement	Pump Lead Cement	5/27/2017	17:01:05	COM5	12.3	8.00	450.00	440.8	1040 SKS @ 12.3 PPG 2.38 YLD 13.76 GAL/SK H2O
Event	23	Pump Tail Cement	Pump Tail Cement	5/27/2017	18:01:12	COM5	12.8	8.00	400.00	129.6	345 SKS @ 12.8 PPG 2.11 YLD 11.78 GAL/SK H2O
Event	24	Drop Top Plug	Drop Top Plug	5/27/2017	18:22:38	COM5					SHUTDOWN DROP TOP PLUG, CLEAN UP ON TOP OF PLUG
Event	25	Pump Displacement	Pump Displacement	5/27/2017	18:24:13	COM5	8.33	10.00	360.00	228.2	FRESH H2O DISPLACEMENT
Event	26	Other	Slow Rate	5/27/2017	18:48:57	COM5	8.33	2.00	550.00	218.0	PRESSURE WHEN WE SLOWED WENT FROM 1100 TO 550 PSI
Event	27	Bump Plug	Bump Plug	5/27/2017	18:52:08	COM5	8.33	2.00	1030	228.1	PLUG BUMPED AT CALCULATED DISPLACEMENT
Event	28	Other	Check Floats	5/27/2017	18:53:42	COM5					FLOATS HELD
Event	29	Circulate Well	Circulate Well	5/27/2017	18:56:06	COM5	8.33	3.00	350	10	PUMP DOWN PARASITE 10 BBL SUGAR WATER
Event	30	End Job	End Job	5/27/2017	19:01:01	COM5					RIG HAD CIRCULATION PRIOR TO STARTING JOB. GAINED CIRCULATION @ 110 BBL AWAY ON DISPLACEMENT. NO CEMENT TO SURFACE, PREP

FOR TOPOUT.

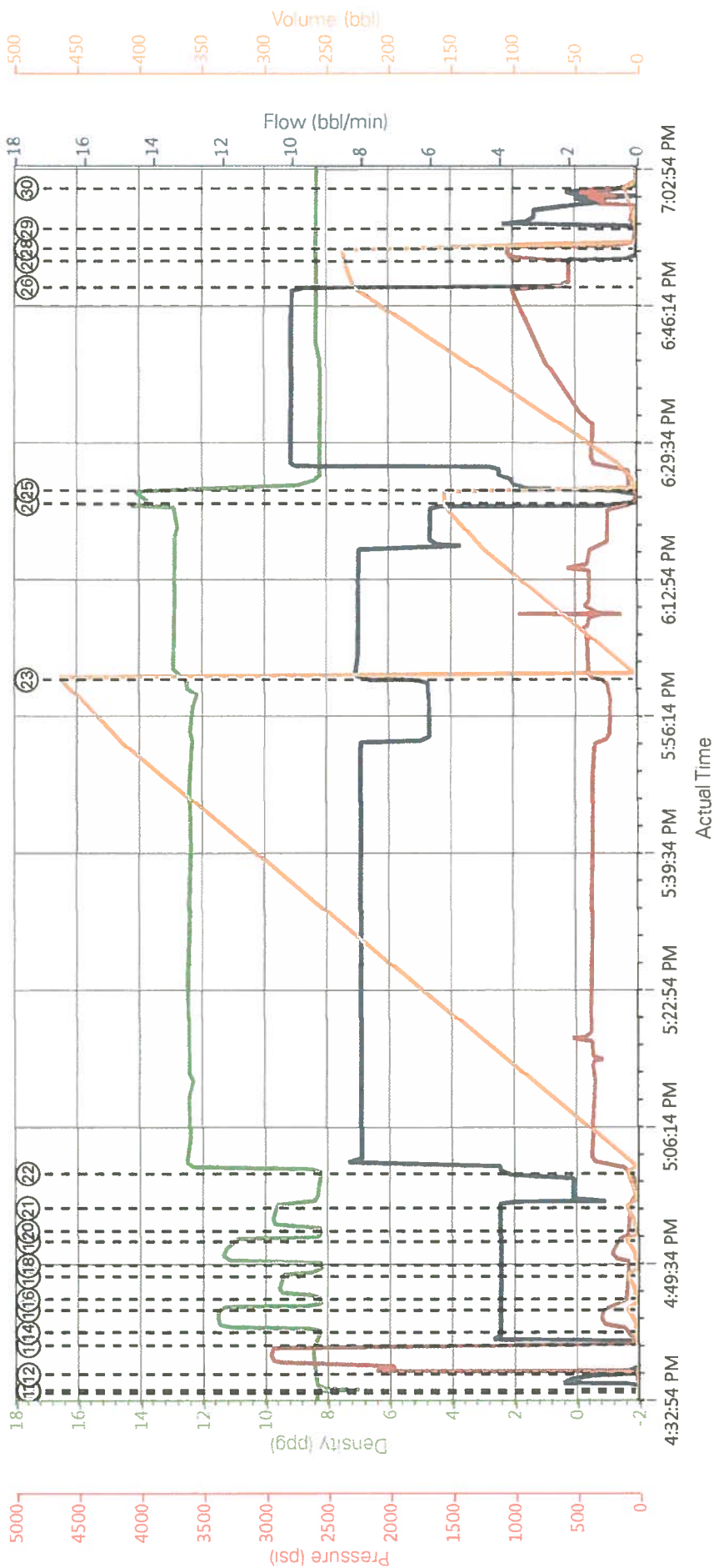
Event	31	Start Job	Start Job	5/27/2017	19:54:09	COM5													TOP OUT THE TR 321-23-597 WELL
Event	32	Pump Cement	Pump Cement	5/27/2017	19:58:51	COM5	15.6	2	30	9.5									MIXED AND PUMPED 9.5 BBL CMT (APPROX 55 SKS) 15.6 PPG 1.19 YLD 5.24 GAL/SK H2O
Event	33	Other	Flush Lines	5/27/2017	20:09:55	COM5	8.33	2	30	2									FLUSH PUMPING LINES W/ CLEAN WATER
Event	34	Clean Lines	Clean Lines	5/27/2017	20:20:42	COM5													SWAP TO PIT AND CLEAN UP
Event	35	Other	Pump Superflush	5/27/2017	21:15:37	COM5	11.0	2.00	30.00	5.0									TOPOUT THE 21-23-597 WELL. PUMP SUPERFLUSH SPACER 5 BBL
Event	36	Pump Cement	Pump Cement	5/27/2017	21:23:13	COM5	15.6	2.0	40.00	21									MIX AND PUMP 21 BBL CMT @15.6 PPG 1.19 YLD 5.24 GAL/SK H2O. CMT TO SURFACE (105 SKS)
Event	37	Clean Lines	Clean Lines	5/27/2017	21:42:35	COM5													PUMPED A TOTAL OF 160SKS TOPOUT. NO ADD HOURS CHARGED, USED 10# SUGAR.
Event	38	End Job	End Job	5/27/2017	21:49:08	COM5													
Event	39	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	5/27/2017	22:00:00	USER													
Event	40	Rig-Down Equipment	Rig-Down Equipment	5/27/2017	22:15:00	USER													
Event	41	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	5/27/2017	23:15:00	USER													
Event	42	Crew Leave Location	Crew Leave Location	5/27/2017	23:30:00	USER													

THANK YOU FOR CHOOSING  
HALLIBURTON CEMENTING  
OF GRAND JUNCTION,  
COLORADO  
ANTHONY ANDREWS  
ANDREW

iCem® Service

(v. 4.2.393)  
Created: Saturday, May 27, 2017

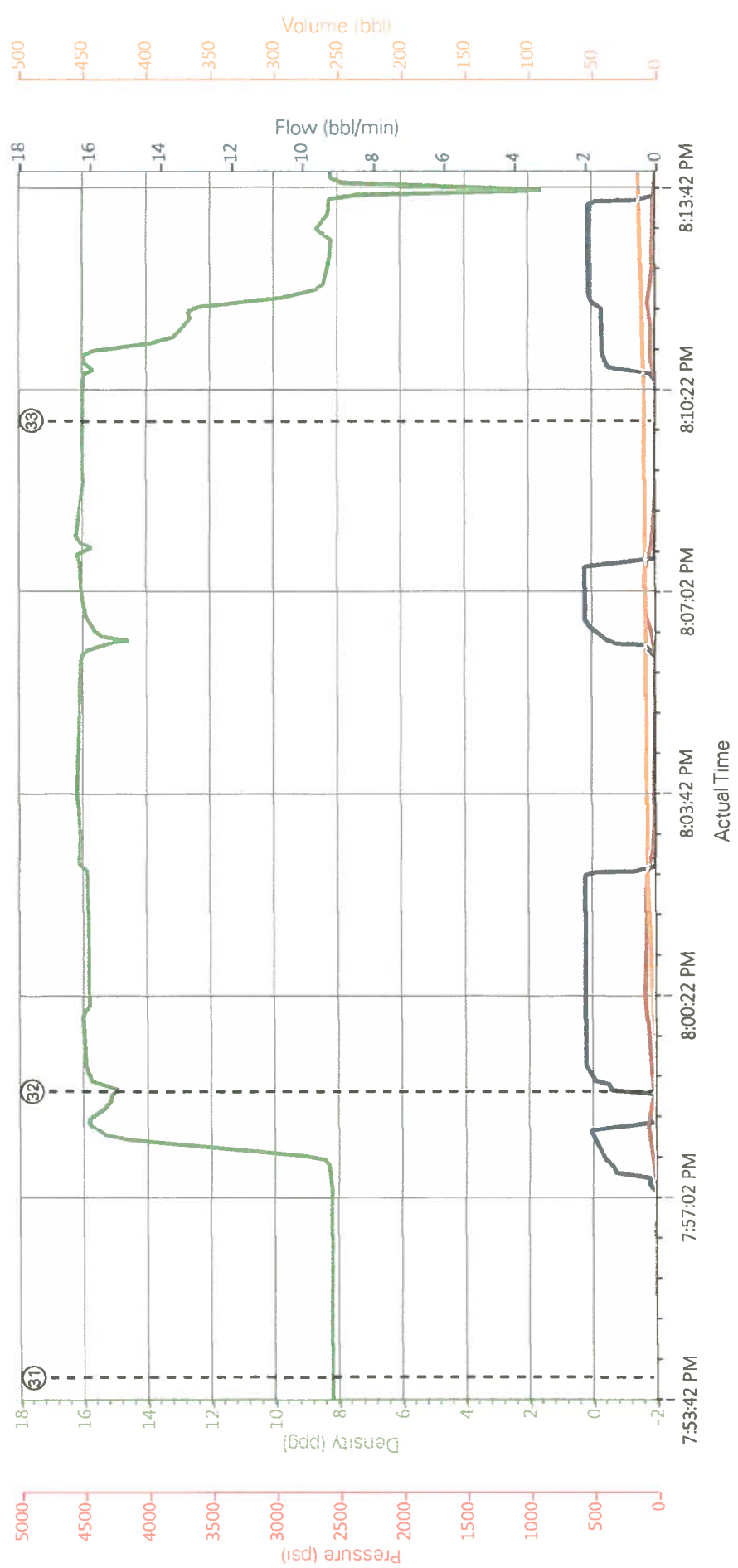
TEP - CHEVRON TR 21-23-597 - 9 5/8" SURFACE



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

- |  |   |  |
|--|---|--|
| 1 Call Out n/a, n/a, n/a, n/a                              | 21 H2O SPACER 5 9 58.4; 75.56; 6.24       | 31 Start Job 8 2.1; 1.1; 7.3           |
| 2 Pre-Convoy Safety Meeting n/a, n/a, n/a, n/a             | 22 Pump Lead Cement 8 21.4; 85.6 51       | 32 Pump Cement 15 14.1; 3.29 25; 1.05  |
| 3 Crew Leave Yard n/a, n/a, n/a, n/a                       | 23 Pump Tail Cement 12 78.8; 2.401; 455.2 | 33 Flush Lines 16 03.0; 1.9; 5         |
| 4 Arrive At Loc n/a, n/a, n/a, n/a                         | 24 Drop Top Plug 13 83.0; 15.155.7        | 34 Clean Lines 8.34; 1.7; 18 23; 14.82 |
| 5 Assessment Of Location Safety Meeting n/a, n/a, n/a, n/a | 25 Pump Displacement 9 55.3 6; 88; 1.4    | 35 Other 8 04.0; 7.0                   |
| 6 Spot Equipment n/a, n/a, n/a, n/a                        | 26 Slow Rate 8 32.2; 557; 230             | 36 Pump Cement 8 38.0; 7.0             |
| 7 Pre-Rig Up Safety Meeting n/a, n/a, n/a, n/a             | 27 Bump Plug 8 34.0; 99729; 236           | 37 Clean Lines 16.2; 46; 20.2          |
| 8 Rig-Up Equipment n/a, n/a, n/a, n/a                      | 28 Check Floats 8 32.0; 124.15.0          | 38 End Job 8 08.0; 5.0                 |
| 9 Pre-Job Safety Meeting n/a, n/a, n/a, n/a                | 29 Circulate Well 8 31.0 9.6 25; 0        |  |
| 10 Start Job 8 14.0; 2.0                                   | 30 End Job 8 32.0; 13; 10.3               |  |

TEP - CHEVRON TR 321-23-597 - TOPOUT



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

1	Call Out	n/a, n/a, n/a, n/a	21	H2O SPACER	5 9 58.4; 75 56; 6.24	31	Start Job	8 22.0; -4; 0
2	Pre-Convoy Safety Meeting	n/a, n/a, n/a, n/a, n/a	22	Pump Lead Cement	8 21.4; 85; 6.51	32	Pump Cement	15 14.1; 3; 29 25; 105
3	Crew Leave Yard	n/a, n/a, n/a, n/a, n/a	23	Pump Tail Cement	12 78.8; 2; 401.4; 5.2	33	Flush Lines	16 03.0; 1; 9.5
4	Arrive At Loc	n/a, n/a, n/a, n/a, n/a	24	Drop Top Plug	13 93.0; 15; 155.7	34	Clean Lines	8 34.1; 7; 18 23; 14 82
5	Assessment Of Location Safety Meeting	n/a, n/a, n/a, n/a, n/a	25	Pump Displacement	9 55.3; 6; 88.14	35	Other	8 04.0; -7; 0
6	Spot Equipment	n/a, n/a, n/a, n/a, n/a	26	Slow Rate	8 32.2; 557; 230	36	Pump Cement	8 38.0; -7; 0
7	Pre-Rig Up Safety Meeting	n/a, n/a, n/a, n/a, n/a	27	Bump Plug	8 34.0; 99729; 236	37	Clean Lines	16 2; 46; 20.2
8	Rig-Up Equipment	n/a, n/a, n/a, n/a, n/a	28	Check Floats	8 32.0; 124.15; 0	38	End Job	8 08.0; -5; 0
9	Pre-Job Safety Meeting	n/a, n/a, n/a, n/a, n/a	29	Circulate Well	8 31.0; 9; 6 25; 0			
10	Start Job	8 14.0; -2; 0	30	End Job	8 32.0; 13; 10.3			

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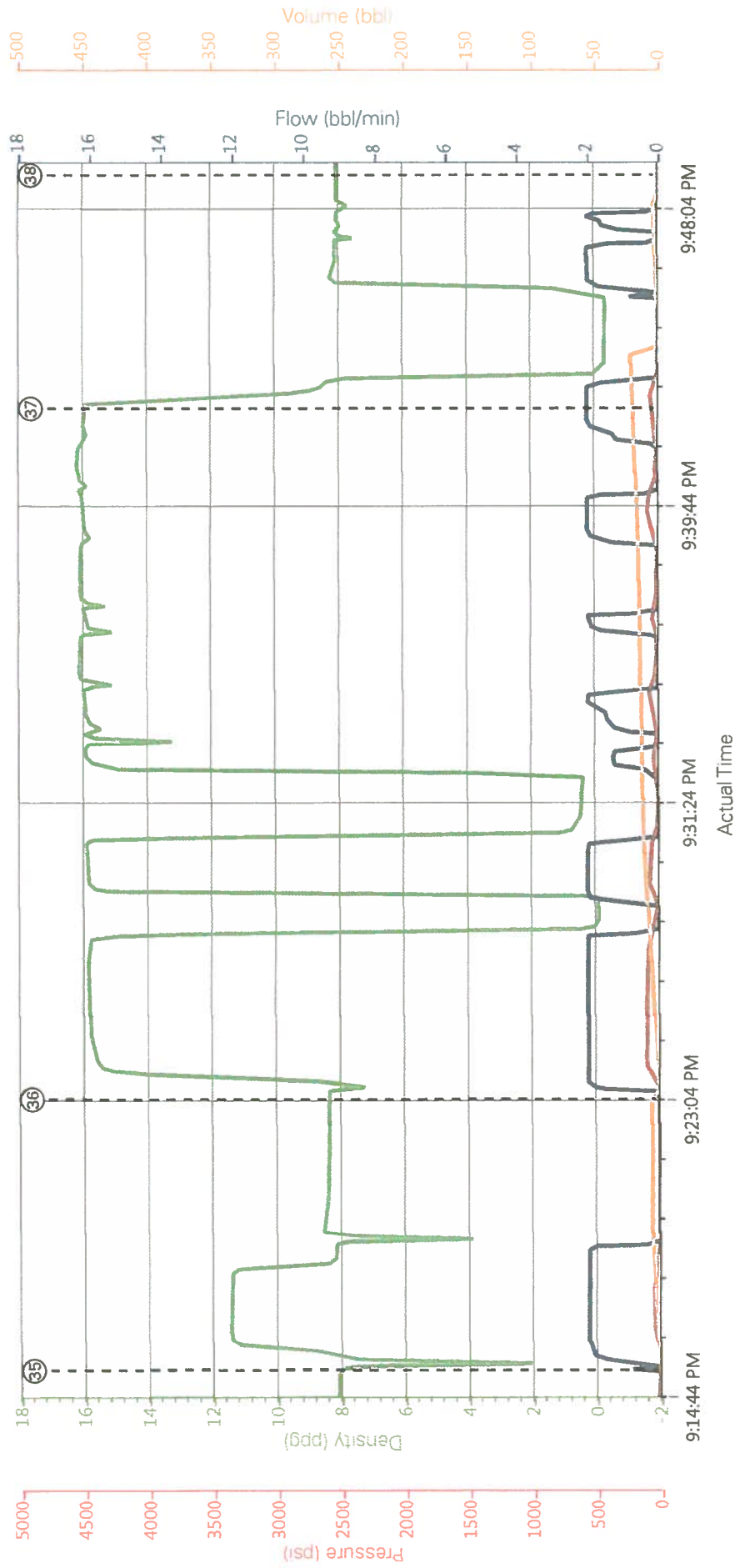
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Customer : TEP ROCKY MOUNTAIN LLC  
Representative : KARL SCHNEIDER

Job Date : 5/27/2017 3:47:35 PM  
Sales Order # : 904060154

Well : CHEVRON TR 21-23-597  
ELITE 4 : ANTHONY ANDREWS/TRAVIS BROWN

TEP - CHEVRON TR 21-23-597 TOPOUT



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

①	Call Out	n/a, n/a, n/a, n/a	⑪	Prime Pumps	8	4	0	0	21	H2O SPACER	5	53	4	75	56	6	24	31	Start Job	8	22	0	-4	0			
②	Pre-Convoy Safety Meeting	n/a, n/a, n/a, n/a	⑫	Test Lines	8	44	0	20	22	Pump Lead Cement	8	21	4	85	6	51	32	Pump Cement	15	14	1	3	29	25	1	05	
③	Crew Leave Yard	n/a, n/a, n/a, n/a	⑬	H2O SPACER	18	4	0	20	23	Pump Tail Cement	12	78	8	2	401	465	2	33	Flush Lines	16	03	0	1	9	5		
④	Arrive At Loc	n/a, n/a, n/a, n/a	⑭	SUPERFLUSH	8	47	4	100	24	Drop Top Plug	13	83	0	15	155	7	34	Clean Lines	8	34	1	7	18	23	1	4	82
⑤	Assessment Of Location Safety Meeting	n/a, n/a, n/a, n/a	⑮	H2O SPACER	2	8	9	4	25	25	Pump Displacement	9	55	3	6	88	14	35	Other	7	33	0	4	0			
⑥	Spot Equipment	n/a, n/a, n/a, n/a	⑯	CACL SPACER	8	4	4	93	26	Slow Rate	8	32	2	55	7	230	36	Pump Cement	8	38	0	-7	0				
⑦	Pre-Rig Up Safety Meeting	n/a, n/a, n/a, n/a	⑰	H2O SPACER	3	8	94	4	84	27	Bump Plug	8	34	0	99	7	29	37	Clean Lines	16	2	46	20	2			
⑧	Rig-Up Equipment	n/a, n/a, n/a, n/a	⑱	SUPERFLUSH	8	53	4	76	28	Check Floats	8	32	0	124	15	0	38	End Job	8	08	0	-5	0				
⑨	Pre-Job Safety Meeting	n/a, n/a, n/a, n/a	⑲	H2O SPACER	4	9	15	4	146	29	Circulate Well	8	31	0	9	6	25	30	End Job	8	22	0	13	10	3		
⑩	Start Job	8	14	0	-2	0																					

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