

HALLIBURTON

iCem[®] Service

TEP ROCKY MOUNTAIN LLC

For: Terra

Date: Friday, June 02, 2017

Chevron TR 422-23-597 Surface

API #05-045-23458-00

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

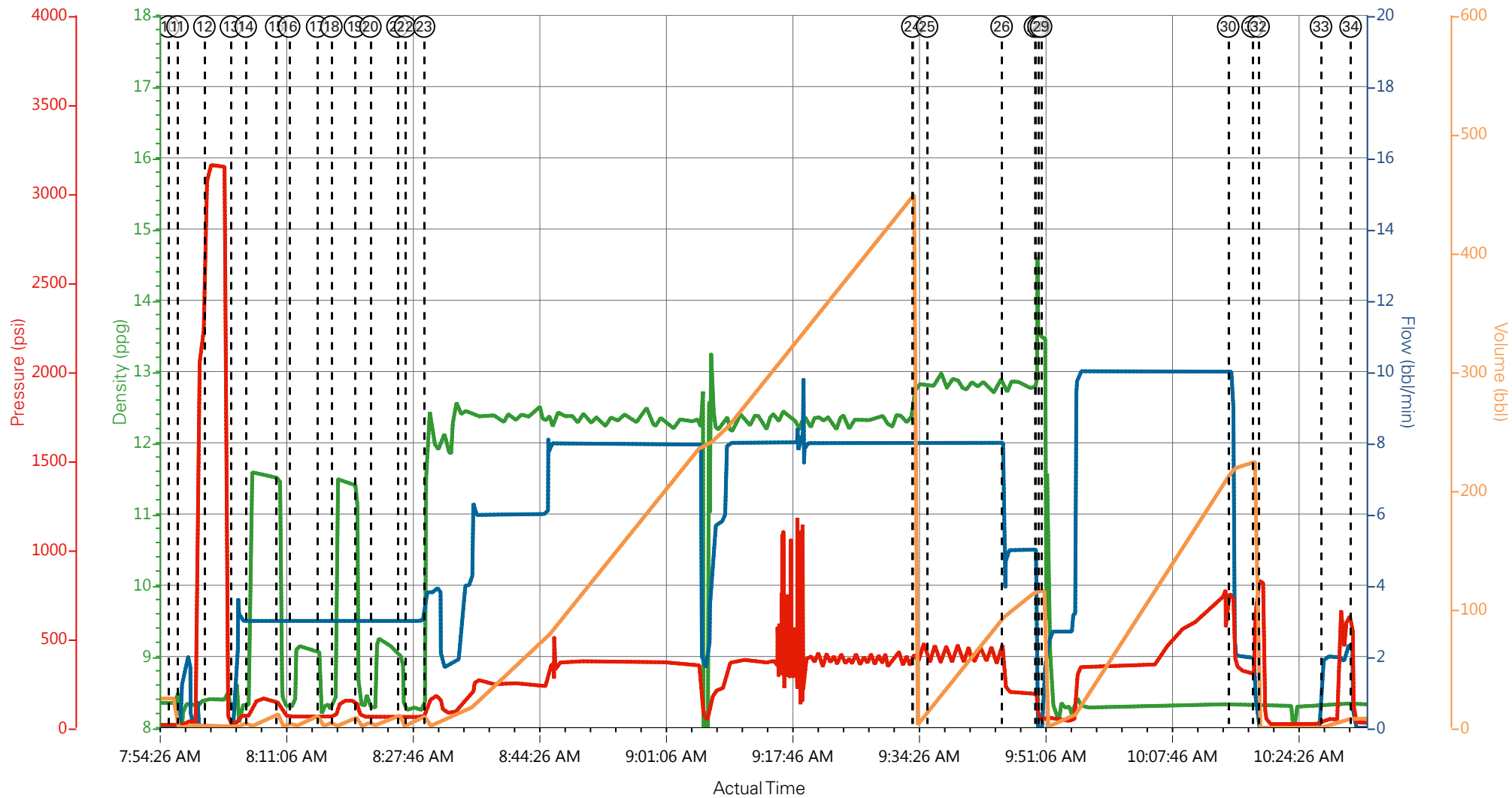
Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	6/1/2017	09:30:00	USER					REQUESTED ON LOCATION @ 03:30
Event	2	Pre-Convoy Safety Meeting	6/1/2017	11:45:00	USER					ALL HES EMPLOYEES PRESENT
Event	3	Crew Leave Yard	6/2/2017	00:00:00	USER					1 HT 400 PUMP TRUCK E1, 1 SUPERFLUSH TRANSPORT, 1 660 BULK TRUCK, 1 450 SERVICE PICKUP
Event	4	Arrive At Loc	6/2/2017	03:30:00	USER					HES ARRIVED TO UPPER STAGING AREA AT 3:30, HES SUPERVISOR WENT TO LOCATION TO ASSESS LOCATION. RIG WAS RUNNING CASING UPON ARRIVAL
Event	5	Assessment Of Location Safety Meeting	6/2/2017	03:45:00	USER					MET WITH COMP REP, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH- 8, CHLORIDES- 0, TEMP- 55F). COMP REP WAS OFFERED SDS FOR ALL CHEMICALS USED BY HES.
Event	6	Spot Equipment	6/2/2017	04:00:00	USER					1 HT 400 PUMP TRUCK E1, 1 SUPERFLUSH TRANSPORT, 1 660 BULK TRUCK, 1 450 SERVICE PICKUP
Event	7	Pre-Rig Up Safety Meeting	6/2/2017	05:00:00	USER					ALL HES EMPLOYEES PRESENT
Event	8	Rig-Up Equipment	6/2/2017	05:15:00	USER					1 HT 400 PUMP TRUCK E1, 1 SUPERFLUSH TRANSPORT, 1 660 BULK TRUCK, 1 450 SERVICE PICKUP
Event	9	Pre-Job Safety Meeting	6/2/2017	07:10:00	USER					ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 8.5 BPM WITH 100 PSI
Event	10	Start Job	6/2/2017	07:56:00	USER					TD 3007', TP 3014', CSG 9 5/8" J-55 40#, SJ 34', OH 14 3/4", MUD 8.8 PPG
Event	11	Prime Pumps	6/2/2017	07:57:12	USER	8.33	2.0	55	2	FRESH WATER
Event	12	Test Lines	6/2/2017	08:00:45	COM5			3165		ALL PRESSURE HELD ON LINES

Event	13	Pump Water	6/2/2017	08:04:14	COM5	8.33	3.0	70	5	FRESH WATER
Event	14	Pump Super Flush 100	6/2/2017	08:06:11	COM5	11.5	3.0	145	10	SUPER FLUSH 100
Event	15	Pump Water	6/2/2017	08:10:12	COM5	8.33	3.0	70	5	FRESH WATER
Event	16	Pump CaCl- Water	6/2/2017	08:11:54	COM5	9.1	3.0	63	10	CALCIUM CHLORIDE WATER (USED 10 SK CALCIUM CHLORIDE)
Event	17	Pump Water	6/2/2017	08:15:35	COM5	8.33	3.0	62	5	FRESH WATER
Event	18	Pump Super Flush 100	6/2/2017	08:17:28	COM5	11.5	3.0	140	10	SUPER FLUSH 100
Event	19	Pump Water	6/2/2017	08:20:34	COM5	8.33	3.0	63	5	FRESH WATER
Event	20	Pump CaCl- Water	6/2/2017	08:22:36	COM5	9.1	3.0	63	10	CALCIUM CHLORIDE WATER (USED 10 SK CALCIUM CHLORIDE)
Event	21	Pump Water	6/2/2017	08:26:10	COM5	8.33	3.0	62	10	FRESH WATER
Event	22	Check weight	6/2/2017	08:27:10	COM5					WEIGHT VERIFIED BY PRESSURIZED MUD SCALES
Event	23	Pump Lead Cement	6/2/2017	08:29:40	COM5	12.3	8.0	380	441	VARICEM LEAD CEMENT, 1040 SKS, 12.3PPG, 2.38 FT3/SK, 13.76 GAL/SK. 60 LBS TUFF FIBER ADDED THROUGH OUT LEAD CEMENT.
Event	24	Pump Tail Cement	6/2/2017	09:33:59	COM5	12.8	8.0	420	130	VARICEM TAIL CEMENT, 345 SKS, 12.8PPG, 2.11 FT3/SK, 11.78GAL/SK
Event	25	Check Weight	6/2/2017	09:35:55	USER					WEIGHT VERIFIED BY PRESSURIZED MUD SCALES
Event	26	Slow Rate	6/2/2017	09:45:45	USER					SLOWED TO END CEMENT
Event	27	Shutdown	6/2/2017	09:50:08	USER					END OF CEMENT
Event	28	Drop Top Plug	6/2/2017	09:50:37	USER					VERIFIED BY FLAG INDICATOR AND COMPANY REP.
Event	29	Pump Displacement	6/2/2017	09:50:57	COM5	8.33	10.0	750	216	FRESH WATER
Event	30	Slow Rate	6/2/2017	10:15:35	USER	8.33	2.0	320	10	SLOWED TO BUMP PLUG
Event	31	Bump Plug	6/2/2017	10:18:48	COM5	8.33	2.0	300	226	PLUG BUMPED. NO RETURNS THROUGHOUT JOB
Event	32	Check Floats	6/2/2017	10:19:36	USER			825		FLOATS HELD ¾ OF A BBL FLOW BACK

Event	33	Clear Parasite	6/2/2017	10:27:49	COM5	8.33	2.0	680	10	10 BBL SUGAR H2O (USED 10 LBS SUGAR) TO CLEAR PARASITE
RIG-UP TO TOP OUT										
Event	34	Shutdown / Rig-up For Topout	6/2/2017	10:31:43	USER					
Event	35	Start Topout	6/2/2017	11:32:36	USER					TOPOUT ON TR 322-23-597 USED 144 SKS (30.5 BBLS) OF 15.6 PPG 1.19 FT3/SK, 5.24 GAL/SK. DUMPED 6 BAGS CALCIUM CHLORIDE DOWN THE BACK SIDE.
Event	36	Pump H2O	6/2/2017	11:32:41	USER					PUMPED WATER TO CHECK FOR FLOW
Event	37	Check weight	6/2/2017	11:33:54	COM5					WEIGHT VERIFIED BY PRESSURIZED MUD SCALES
Event	38	Shutdown	6/2/2017	11:44:50	USER					END OF TOPOUT ON TR 322-23-597
Event	39	Super Flush 100	6/2/2017	11:55:14	USER					GRAVITY FED 10 BBLS SUPER FLUSH 100 DOWN BACKSIDE
Event	40	Start Topout	6/2/2017	11:58:43	USER					1ST TOPOUT ON TR 422-23-597 USED 191 SKS (40.4 BBLS) OF 15.6 PPG, 1.19 FT3/SK, 5.24 GAL/SK. DUMPED 8 BAGS DOWN BACKSIDE
Event	41	Pumped H2O	6/2/2017	12:35:37	USER					PUMPED H2O TO CLEAR LINE TO CELLUR
Event	42	Washup	6/2/2017	12:37:53	USER					WASHED UP INTO PIT
Event	43	Super Flush 100	6/2/2017	12:44:38	USER					GRAVITY FED 10 BBLS SUPER FLUSH 100 DOWN BACKSIDE
WEIGHT VERIFIED BY PRESSURIZED MUD SCALES										
Event	44	Check weight	6/2/2017	12:51:08	COM5					
Event	45	Start Topout	6/2/2017	12:52:04	USER					2ND TOPOUT ON TR 422-23-597 USED 57 SKS (12 BBLS) OF 15.6 PPG, 1.19 FT3/SK, 5.24 GAL/SK.

						DUMPED 5 BAGS CALCIUM CHLORIDE DOWN BACKSIDE
Event	46	Pumped H2O	6/2/2017	13:03:54	USER	PUMPED H2O TO CLEAR LINE TO CELLUR
Event	47	Shutdown	6/2/2017	13:07:04	USER	END OF TOPOUT, CMT TO SURFACE ON BOTH WELLS
Event	48	End Job	6/2/2017	13:07:32	USER	NO RETURNS THROUGHOUT JOB. USED 60 LBS TUF-FIBER IN LEAD CMT, 10 LBS SUGAR TO CLEAR PARISITE, 40 BBLS SUPERFLUSH 100, 39 BAGS CALCIUM CHLORIDE, 392 SKS OF TOPOUT TOTAL 144 SKS ON WELL TR 322-23-597 AND 248 SKS ON 422-23-597, 2 ADD HRS AND 10 HRS FOR SUPERFLUSH TRANSPORT.
Event	49	Post-Job Safety Meeting (Pre Rig-Down)	6/2/2017	13:15:00	USER	ALL HES EMPLOYEES PRESENT
Event	50	Pre-Convoy Safety Meeting	6/2/2017	14:45:00	USER	ALL HES EMPLOYEES PRESENT
Event	51	Crew Leave Location	6/2/2017	15:00:00	USER	THANK YOU FOR CHOOSING HALLIBURTON CEMENT, DUSTIN HYDE AND CREW

TEP - CHEVRON TR 422-23-597 - 9 5/8" SURFACE



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

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

▼ **HALLIBURTON** | iCem® Service

Created: 2017-06-02 05:47:46, Version: 4.2.393

Edit

Customer : TEP ROCKY MOUNTAIN LLC

Job Date : 6/2/2017

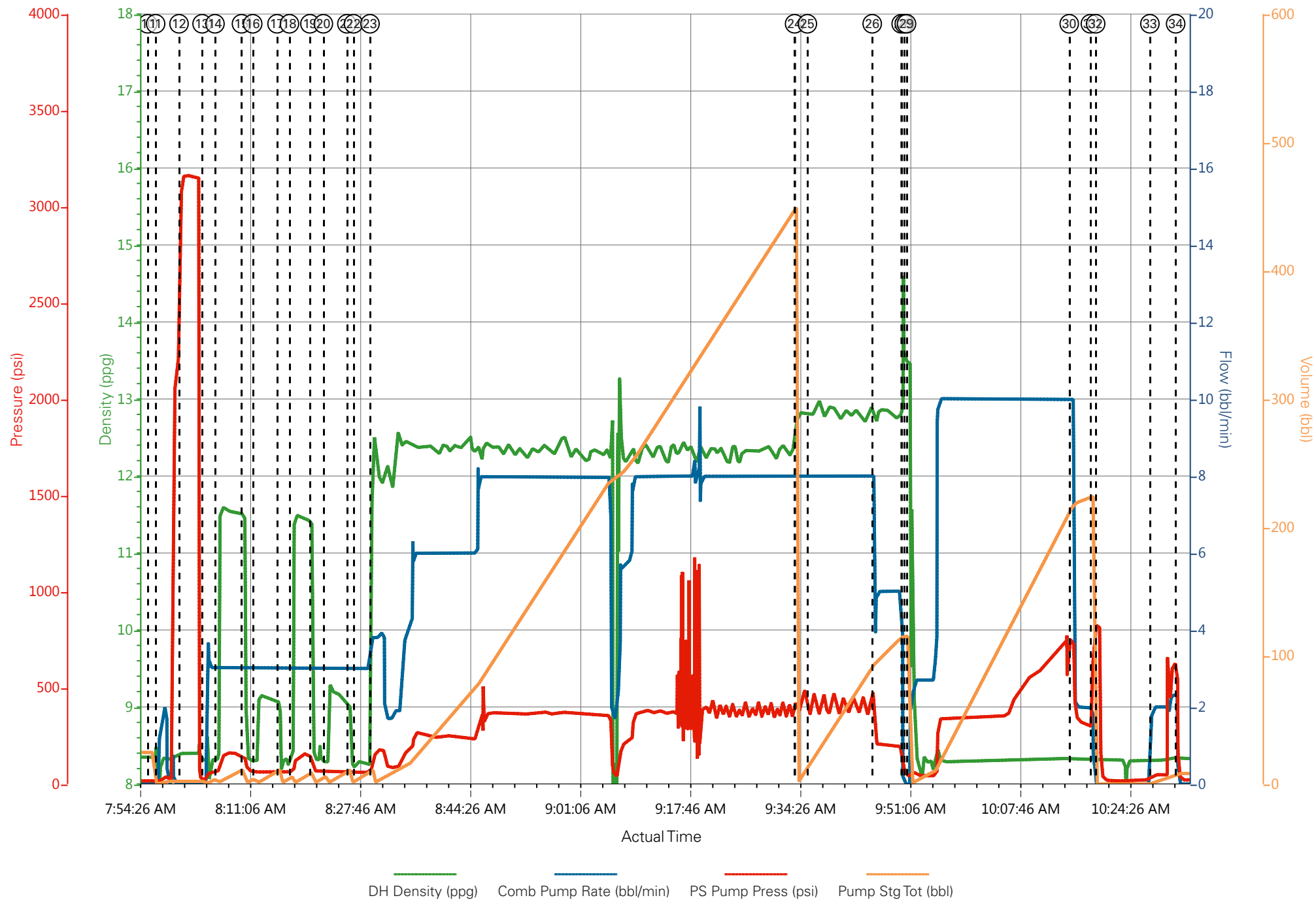
Well : Chevron TR 422-23-597

Representative : COY BURR

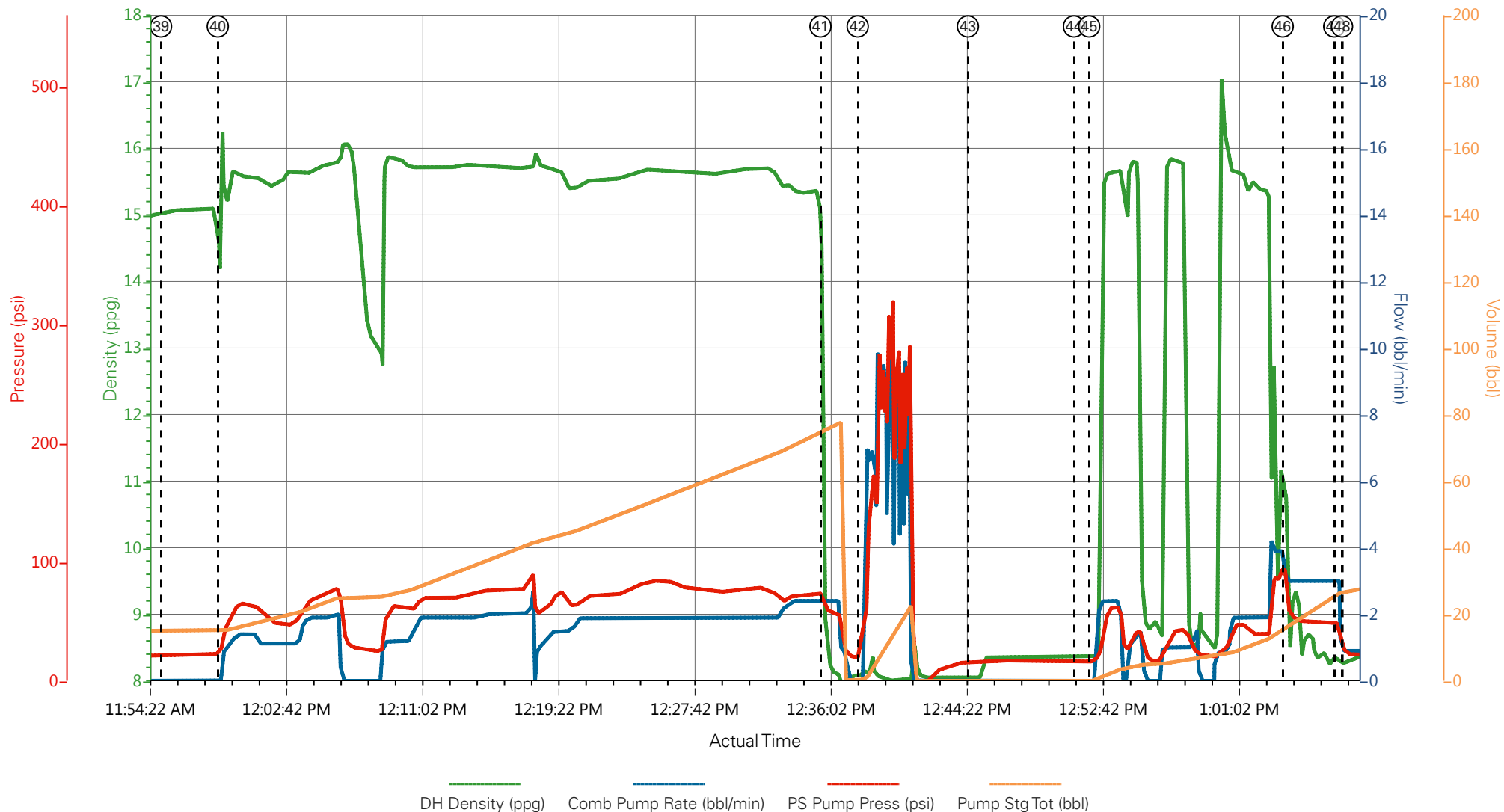
Sales Order # : 904073355

ELITE #1 : D.HYDE/A.ANGELO

TEP - CHEVRON TR 422-23-597 - 9 5/8" SURFACE



TEP - CHEVRON TR 422-23-597 - TOPOUT



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|---|--------------------------|------------------------|----------------------|---------------------------------|--------------------|
| ① Call Out | ⑨ Pre-Job Safety Meeting | ⑰ Pump Water | 25 Check Weight | 33 Clear Parasite | 41 Pumped H2O |
| ② Pre-Convoy Safety Meeting | ⑩ Start Job | ⑱ Pump Super Flush 100 | 26 Slow Rate | 34 Shutdown / Rig-up For Topout | 42 Washup |
| ③ Crew Leave Yard | ⑪ Prime Pumps | ⑲ Pump Water | 27 Shutdown | 35 Start Topout | 43 Super Flush 100 |
| ④ Arrive At Loc | ⑫ Test Lines | 20 Pump CaCl- Water | 28 Drop Top Plug | 36 Pump H2O | 44 Check weight |
| ⑤ Assessment Of Location Safety Meeting | ⑬ Pump Water | 21 Pump Water | 29 Pump Displacement | 37 Check weight | 45 Start Topout |
| ⑥ Spot Equipment | ⑭ Pump Super Flush 100 | 22 Check weight | 30 Slow Rate | 38 Shutdown | 46 Pumped H2O |
| ⑦ Pre-Rig Up Safety Meeting | ⑮ Pump Water | 23 Pump Lead Cement | 31 Bump Plug | 39 Super Flush 100 | 47 Shutdown |
| ⑧ Rig-Up Equipment | ⑯ Pump CaCl- Water | 24 Pump Tail Cement | 32 Check Floats | 40 Start Topout | 48 End Job |

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Job Date : 6/2/2017

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TEP - CHEVRON TR 422-23-597 - TOPOUT

