

HALLIBURTON

iCem[®] Service

TERRA ENERGY PARTNERS

For: Terra

Date: Saturday, April 29, 2017

TR 634-27-597 Surface PJR

API# 05-045-23502-00

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

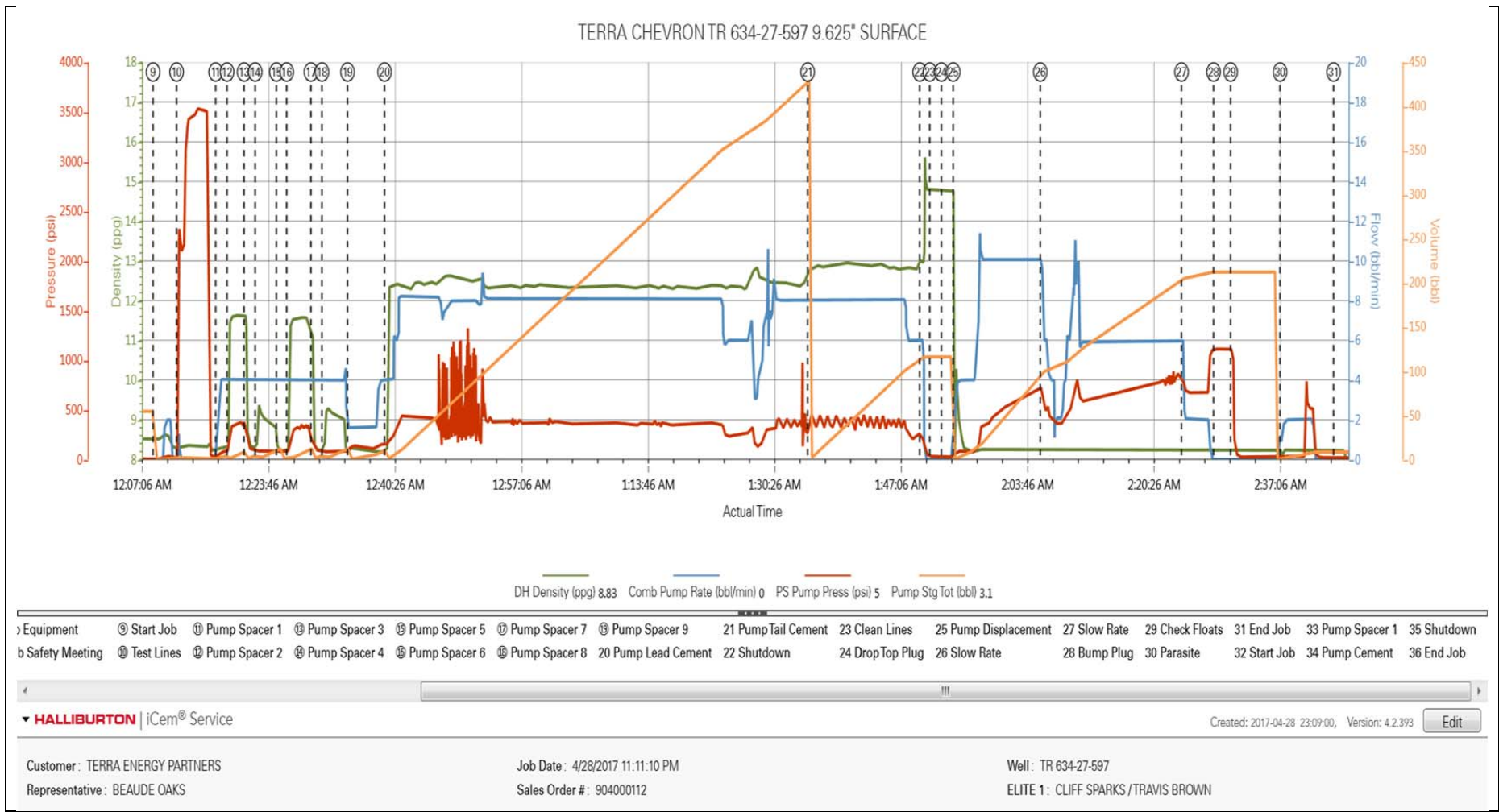
1.1 Job Event Log

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	4/28/2017	11:30:00	USER					REQUESTED ON LOCATION AT 19:00 4/28/17
Event	2	Pre-Convoy Safety Meeting	4/28/2017	13:45:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	4/28/2017	14:00:00	USER					1 ELITE PUMP, 1 660 BULK TRUCK, 1 550 PU. SUPER FLUSH TRUCK LEFT NEAR LOCATION
Event	4	Arrive At Loc	4/28/2017	18:00:00	USER					ARRIVED AN HOUR EARLY
Event	5	Assessment Of Location Safety Meeting	4/28/2017	18:05:00	USER					MET WITH CO REP TO GO OVER NUMBERS AND JOB PROCEDURE. CUSTOMER OFFERED SDS. DID A WALK AROUND OF LOCATION AND COLLECTED WATER SAMPLE. PH 7, CHL 0, TEMP 65F
Event	6	Pre-Rig Up Safety Meeting	4/28/2017	18:15:00	USER					FILLED OUT JSA AND SPOTTED TRUCKS ON TO LOCATION.
Event	7	Rig-Up Equipment	4/28/2017	18:30:00	USER					LINED OUT CREW FOR RIG UP AND HEADED OUT TO GET SUPER FLUSH TRUCK. ARRIVING BACK ON LOCATION AND RIG CREW WAS JUST LANDING CASING AND RIGGING CASING CREW DOWN
Event	8	Pre-Job Safety Meeting	4/28/2017	23:30:00	USER					MET WITH RIG CREW TO GO OVER JOB. ALL HES PRESENT
Event	9	Start Job	4/29/2017	00:08:49	COM5					TD 2839', TP 2837' FC 2798', 864' 40# J-55 9.625" AND 1934' OF 36# J-55 9.625" SC. OH 14.75" MW 9.2 PPG. RIG CIRCULATED AT 12 BPM 35PSI AND NO RETURNS.
Event	10	Test Lines	4/29/2017	00:11:55	COM5					TESTED TO 3535 PSI. KO'S FUNCTIONING. TESTED WELL

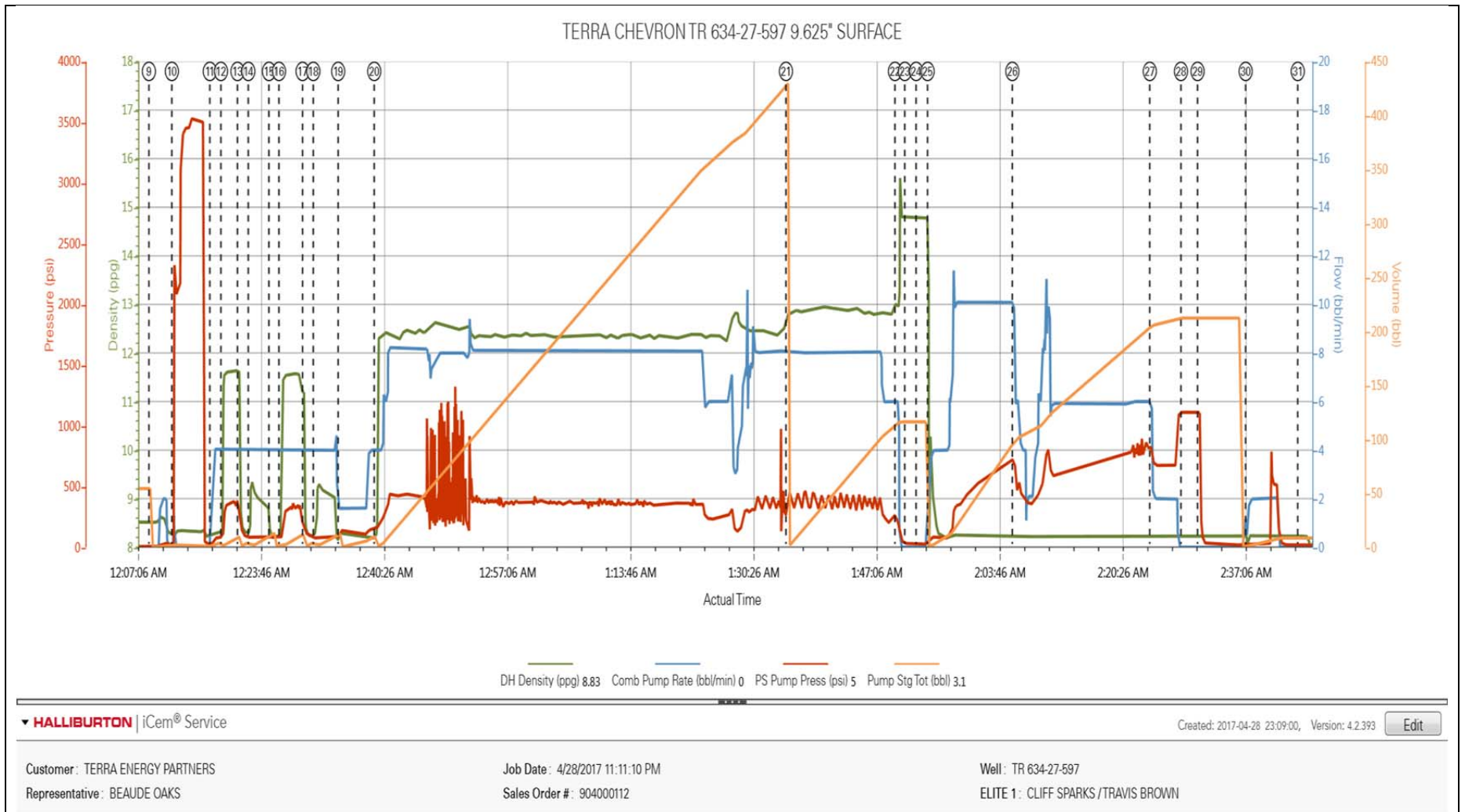
Event	11	Pump Spacer 1	4/29/2017	00:17:03	COM5	8.33	4	35	5	5 BBLS FRESH WATER
Event	12	Pump Spacer 2	4/29/2017	00:18:34	COM5	11.4	4	320	10	10 BLS SUPER FLUSH
Event	13	Pump Spacer 3	4/29/2017	00:20:48	COM5	8.33	4	35	5	5 BBLS FRESH WATER
Event	14	Pump Spacer 4	4/29/2017	00:22:16	COM5	9.1	4	35	10	10 BBLS CALCIUM CHLORIDE
Event	15	Pump Spacer 5	4/29/2017	00:25:04	COM5	8.33	4	35	5	5 BBLS FRESH WATER
Event	16	Pump Spacer 6	4/29/2017	00:26:25	COM5	11.4	4	350	10	10 BBLS SUPER FLUSH
Event	17	Pump Spacer 7	4/29/2017	00:29:37	COM5	8.33	4	35	5	5 BBLS FRESH WATER
Event	18	Pump Spacer 8	4/29/2017	00:31:04	COM5	9.1	4	35	10	10 BBLS CALCIUM CHLORIDE
Event	19	Pump Spacer 9	4/29/2017	00:34:26	COM5	8.33	4	35	10	10 BBLS FRESH WATER
Event	20	Pump Lead Cement	4/29/2017	00:39:19	COM5	12.3	8	420	400	945 SKS (400 BBLS) 12.3 PPG, 2.38 FT3/SK, 13.76 GAL/SK WITH 90# TUFF FIBER
Event	21	Pump Tail Cement	4/29/2017	01:35:04	COM5	12.8	8	430	130	345 SKS (130 BBLS) 12.8 PPG, 2.11 FT3/SK, 11.78 GAL/SK
Event	22	Shutdown	4/29/2017	01:49:50	USER					END OF CEMENT
Event	23	Clean Lines	4/29/2017	01:51:10	USER					10 BBLS WASHED ON TOP
Event	24	Drop Top Plug	4/29/2017	01:52:42	USER					PLUG WENT. WITNESSED BY CO REP
Event	25	Pump Displacement	4/29/2017	01:54:15	COM5	8.33	10	720	215	215 BBLS FRESH WATER. GOT GOOD CEMENT RETURNS AT 127 BBLS AWAY TOTAL CEMENT 88 BBLS.
Event	26	Slow Rate	4/29/2017	02:05:44	USER	8.33	6	870	100	HAD TO ADJUST RATES DUE TO THE CELLAR PUMP NOT KEEPING UP
Event	27	Slow Rate	4/29/2017	02:24:20	USER	8.33	2	680	205	SLOWED TO 2 BBLS/MIN TO LAND THE PLUG
Event	28	Bump Plug	4/29/2017	02:28:34	COM5			675	215	PLUG BUMPED AT 675 PSI AND WENT TO 1100 PSI
Event	29	Check Floats	4/29/2017	02:30:49	USER			1100		FLOATS HELD. 1 BBLS BACK
Event	30	Parasite	4/29/2017	02:37:19	COM5	8.34	2	790	10	PUMPED 10 BBLS SUGAR WATER THROUGH

PARASITE. PRESSURED UP TO 790 AT 7 BBLS GONE										
Event	31	End Job	4/29/2017	02:44:23	USER	GOOD RETURNS DURING TAIL AND DISPLACEMENT. 88 BBLS OF GOOD CEMENT TO SURFACE				
Event	32	Start Job	4/29/2017	08:07:00	COM5	START TOP-OUT. CEMENT 70' DOWN.				
Event	33	Pump Spacer 1	4/29/2017	08:08:24	USER	8.33	2	10	1	1 BBL FRESH WATER TO ESTABLISH FLOW
Event	34	Pump Cement	4/29/2017	08:10:02	COM5	15.6	2	50	8.4	40 SKS (8.4 BBLS) 15.6 PPG, 1.19 FT3/SK, 5.24 GAL/SK 1% CALCIUM CHLORIDE
Event	35	Shutdown	4/29/2017	08:16:39	USER	CEMENT TO SURFACE				
Event	36	End Job	4/29/2017	08:19:19	COM5	THANK YOU FOR USING HALLIBURTON CEMENT. CLIFF SPARKS AND CREW				

2.2 CHART WITH EVENTS.png



2.3 CHART WITHOUT EVENTS.png



2.0 Attachments

2.1 TOP OUT CHART.png

