

HALLIBURTON

iCem[®] Service

Terra Energy Partners LLC

For: Lynn Cass & Abe Alexander

Date: Friday, January 27, 2017

TR 413-21-597 Surface PJR

API #05-045-23344-00

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

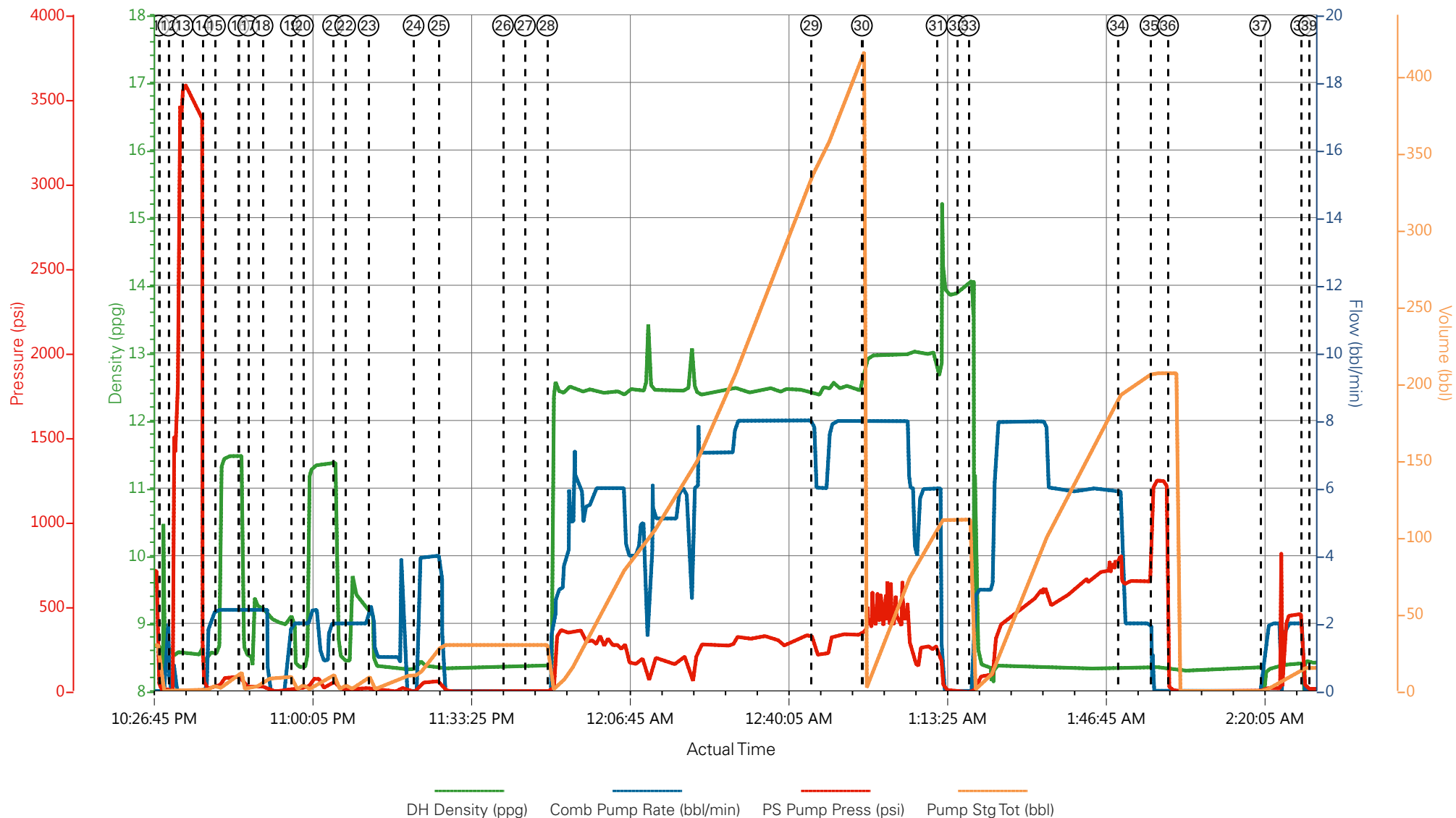
Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	1/26/2017	09:00:00	USER					REQUESTED ON LOCATION @ 18:00
Event	2	Pre-Convoy Safety Meeting	1/26/2017	11:45:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	1/26/2017	12:00:00	USER					1 HT 400 PUMP TRUCK E1, 1 SUPER FLUSH TRANSPORT, 2 550 SERVICE PICKUP'S WITH A COMPRESSOR AND A HEATER TRAILER
Event	4	Arrive At Loc	1/26/2017	17:00:00	USER					HES ARRIVED TO MTW @15:00 AS REQUESTED AND DROVE TO STAGING AREA DESIGNATED BY ROAD BOSS AND STAGED @ 17:00. RIG RUNNING CASING WHEN HES SUPERVISOR ARRIVED ON LOCATION CALLED FOR HES EQUIPMENT TO SPOT ON LOCATION
Event	5	Assessment Of Location Safety Meeting	1/26/2017	17:15:00	USER					MET WITH COMP REP, AND WENT OVER NUMBERS AND JOB PROCEDURE. WALKED AROUND LOCATION AND COLLECTED WATER SAMPLE (PH- 7.0, CHLORIDES- 0, TEMP- 80F). COMP REP WAS OFFERED SDS FOR ALL CHEMICLES USED BY HES.
Event	6	Spot Equipment	1/26/2017	17:30:00	USER					1 HT 400 PUMP TRUCK E1, 1 SUPER FLUSH TRANSPORT, 2 550 SERVICE PICKUP'S WITH A COMPRESSOR AND A HEATER TRAILER
Event	7	Pre-Rig Up Safety	1/26/2017	18:00:00	USER					ALL HES PRESENT

Meeting										
Event	8	Rig-Up Equipment	1/26/2017	18:15:00	USER	HES RIGGED UP EQUIPMENT UNTIL 20:00 WITHOUT ENTERING RED ZONE.				
Event	9	Finish Rig-Up Equipment	1/26/2017	21:00:00	USER	FINISHED RIGGING UP				
Event	10	Pre-Job Safety Meeting	1/26/2017	21:45:00	USER	ALL HES EMPLOYEES AND RIG CREW PRESENT, RIG CIRCULATED @ 8 BB PRIOR TO JOB WITH RETURNS, PRESSURE 200 PSI.				
Event	11	Start Job	1/26/2017	22:28:29	USER	TD 2753' OF 14 3/4" OH, 18" CONDUCTOR SET @84', 1750.37' OF 9 5/8" J-55 36#/FT ON BOTTOM AND 1006.37' OF 9 5/8" J-55 40#/FT ON TOP FOR A TOTAL PIPE OF 2756.91', SJ 28.90', PARASITE STRING 1.90" TOTAL LENGTH 2639.20', MUD 9.0 PPG				
Event	12	Prime Lines	1/26/2017	22:30:28	USER	8.33	2.0	18	2	FRESH WATER
Event	13	Test Lines	1/26/2017	22:33:28	COM5			3580		
Event	14	Pump H2O Spacer	1/26/2017	22:37:41	COM5	8.33	2.4	22	5	5 BBBL FRESH WATER
Event	15	Pump Super Flush 100	1/26/2017	22:40:15	COM5	11.7	2.4	80	10	10 BBL SUPER FLUSH 100
Event	16	Pump H2O Spacer	1/26/2017	22:45:12	COM5	8.33	2.4	24	5	5 BBL WATER
Event	17	Pump Calcium Chloride Spacer	1/26/2017	22:47:13	COM5	8.4	2.4	25	10	10 BBL CALCIUM CHLORIDE WATER (10 SKS CALCIUM CHLORIDE
Event	18	Shutdown	1/26/2017	22:50:15	USER	GETTING RETRUNS COMMING UP AND GOING OVER RISER BURPING MUD ALL OVER RIG				
Event	19	Pump H2O Spacer	1/26/2017	22:56:11	COM5	8.33	2.0	20	5	5 BBBL FRESH WATER
Event	20	Pump Super Flush 100	1/26/2017	22:58:45	COM5	11.7	2.4	69	10	10 BBL SUPER FLUSH 100

Event	21	Pump H2O Spacer	1/26/2017	23:05:04	COM5	8.33	2.0	20	5	5 BBBL FRESH WATER
Event	22	Pump Calcium Chloride Spacer	1/26/2017	23:07:36	COM5	8.4	2.0	30	10	10 BBL CALCIUM CHLORIDE WATER (10 SKS CALCIUM CHLORIDE
Event	23	Pump H2O Spacer	1/26/2017	23:12:30	COM5	8.4	3.0	24	10	10 BBBL FRESH WATER
Event	24	Pump Water	1/26/2017	23:21:59	USER					PUMPED ANOTHER 20 BBL OF WATER TO SEE WHAT RATES WE COULD GET WITHOUT MAKING TOO BIG OF A MESS BEFORE MIXING CMT. DECIDED TO TAKE RISER OFF AND PUT SUB PUMP INTO CELLUR TO REDUCE MESS ALL OVER RIG
Event	25	Shutdown	1/26/2017	23:27:15	USER					TOOK OFF RISER AND MOVED OVER SUB PUMP
Event	26	Other	1/26/2017	23:40:46	USER					HAD TO ADJUST RATES DUE TO FLOW GETTING BACK AND PUMP ISSUES
Event	27	Check weight	1/26/2017	23:45:23	COM5					WEIGHT VERIFIED VIA PRESSUREIZED MUD SCALES
Event	28	Pump Lead Cement	1/26/2017	23:50:02	COM5	12.3	0.00	-2.00	0.0	905 SKS VARICEM CMT 12.3 PPG, 2.38 FT3/SK, 13.76 GAL/SK. WITH 60LBS TUF-FIBER THROUGHOUT CMT AFTER THE FIRST 20 BBL AWAY.
Event	29	Slow Rate	1/27/2017	00:45:29	USER	12.43	6.90	305.00	338.7	SLOWED TO END CMT
Event	30	Pump Tail Cement	1/27/2017	00:56:10	COM5					345 SKS VARICEM CMT 12.8 PPG, 2.11 FT3/SK, 511.78 GAL/SK
Event	31	Shutdown	1/27/2017	01:11:51	USER	12.70	6.00	230.00	109.7	END OF CMT
Event	32	Drop Top Plug	1/27/2017	01:16:08	USER	13.94	0.00	-7.00	111.5	VERIFIED BY FLAG INDICATOR
Event	33	Pump Displacement	1/27/2017	01:18:39	COM5					FRESH WATER
Event	34	Slow Rate	1/27/2017	01:49:52	USER	8.34	5.90	818.00	193.0	SLOWED TO BUMP PLUG
Event	35	Bump Plug	1/27/2017	01:56:47	COM5					PLUG BUMPED
Event	36	Check Floats	1/27/2017	02:00:29	USER	8.31	0.00	3.00	206.7	FLOATS HELD .5 BBL FLOW BACK
Event	37	Clear Parasite	1/27/2017	02:19:50	USER	8.27	0.90	4.00	0.1	FILLED PARASITE WITH 6 BBLS AND FLUSHED WITH

10 BBL SUGAR WATER USED 10 LBS SUGAR									
Event	38	Shutdown	1/27/2017	02:28:26	USER	8.43	0.00	51.00	15.0
Event	39	End Job	1/27/2017	02:30:06	USER	8.42	0.00	12.00	15.0
RETURNS THROUGHOUT JOB. 20 SKS CALCIUM CLORIDE USED, 50 LBS SUGAR USED, 230 BBL CMT TO SURFACE									
Event	40	Post-Job Safety Meeting (Pre Rig-Down)	1/27/2017	04:30:00	USER				
ALL HES PRESENT									
Event	41	Pre-Convoy Safety Meeting	1/27/2017	05:45:00	USER				
Event	42	Crew Leave Location	1/27/2017	06:00:00	USER				
THANK YOU FOR CHOOSING HALLIBURTON CEMENT, DUSTIN HYDE AND CREW									

Terra, Chevron TR 413-21-597, 9 5/8" Surface



① Call Out	⑥ Spot Equipment	⑪ Start Job	⑯ Pump H2O Spacer	21 Pump H2O Spacer	26 Other	31
② Pre-Convoy Safety Meeting	⑦ Pre-Rig Up Safety Meeting	⑫ Prime Lines	⑰ Pump Calcium Chloride Spacer	22 Pump Calcium Chloride Spacer	27 Check weight	32
③ Crew Leave Yard	⑧ Rig-Up Equipment	⑬ Test Lines	⑱ Shutdown	23 Pump H2O Spacer	28 Pump Lead Cement	33
④ Arrive At Loc	⑨ Finish Rig-Up Equipment	⑭ Pump H2OSpacer	⑲ Pump H2O Spacer	24 Pump Water	29 Slow Rate	34
⑤ Assessment Of Location Safety Meeting	⑩ Pre-Job Safety Meeting	⑮ Pump Super Flush 100	20 Pump Super Flush 100	25 Shutdown	30 Pump Tail Cement	35

Terra, Chevron TR 413-21-597, 9 5/8" Surface

