

HALLIBURTON

iCem[®] Service

HALLIBURTON ENERGY SERVICES

For:

Date: Monday, January 19, 2015

TAPSTONE CHAINLAND 3509 11-4H

Sincerely,

**CHANCE CORDELL
SERVICE SUPERVISOR III**

Warning Disclaimer

Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

Limitations of Liability

Except as expressly set forth herein, there are no representations or warranties by Halliburton, express or implied, including implied warranties of merchantability and/or fitness for a particular purpose. In no event will Halliburton or its suppliers be liable for consequential, incidental, special, punitive or exemplary damages (including, without limitation, loss of data, profits, use of hardware, or software). Customer accepts full responsibility for any investment made based on results from the Software. Any interpretations, analyses or modeling of any data, including, but not limited to Customer data, and any recommendation or decisions based upon such interpretations, analyses or modeling are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional may differ. Accordingly, Halliburton cannot and does not warrant the accuracy, correctness or completeness of any such interpretation, recommendation, modeling or other products of the Software Product. As such, any interpretation, recommendation or modeling resulting from the Software for the purpose of any drilling, well treatment, production or financial decision will be at the sole risk of Customer. Under no circumstances will Halliburton or its suppliers be liable for any damages.

Table of Contents

1.0	Job Design	4
2.0	Temperature Modeling	4
3.0	Real-Time Job Summary	4
3.1	Stage Summary - Liquid Volume, Density, & Design Shutdown	4
3.2	Stage Summary - Pump Pressure & ECD	4
3.3	Stage Summary - Pump Rate & Nitrogen Rate	4
3.4	Shutdown Summary	4
3.1	Job Event Log	5
4.0	Attachments	7
4.1	TAPSTONE CHAINLAND.png	7
5.0	Custom Graphs	8
5.1	Custom Graph	8
6.0	Appendix	9
6.1	One-Minutes Real-Time Data Listing	10

1.0 Job Design

2.0 Temperature Modeling

3.0 Real-Time Job Summary

3.1 Stage Summary - Liquid Volume, Density, & Design Shutdown

Stage No.	Design Vol. (bbl)	Actual Vol. (bbl)	Design Density (ppg)	Average Density (ppg)	Minimum Density (ppg)	Maximum Density (ppg)
0	0	0		0.00	0.00	0.00

3.2 Stage Summary - Pump Pressure & ECD

Stage No.	Avg. Pump Pressure (psi)	Min. Pump Pressure (psi)	Max. Pump Pressure (psi)	Avg. ECD (psi/ft)	Min. ECD (psi/ft)	Max. ECD (psi/ft)
0	0.00	0.00	0.00	0.000	0.000	0.000

3.3 Stage Summary - Pump Rate & Nitrogen Rate

Stage No.	Design Average Pump Rate (bbl/min)	Average Pump Rate (bbl/min)	Min. Pump Rate (bbl/min)	Max. Pump Rate (bbl/min)	Design Average Nitrogen Rate (scfm)	Average Nitrogen Rate (scfm)	Min. Nitrogen Rate (scfm)	Max. Nitrogen Rate (scfm)
0	0	0.00	0.00	0.00	0	0	0	0

3.4 Shutdown Summary

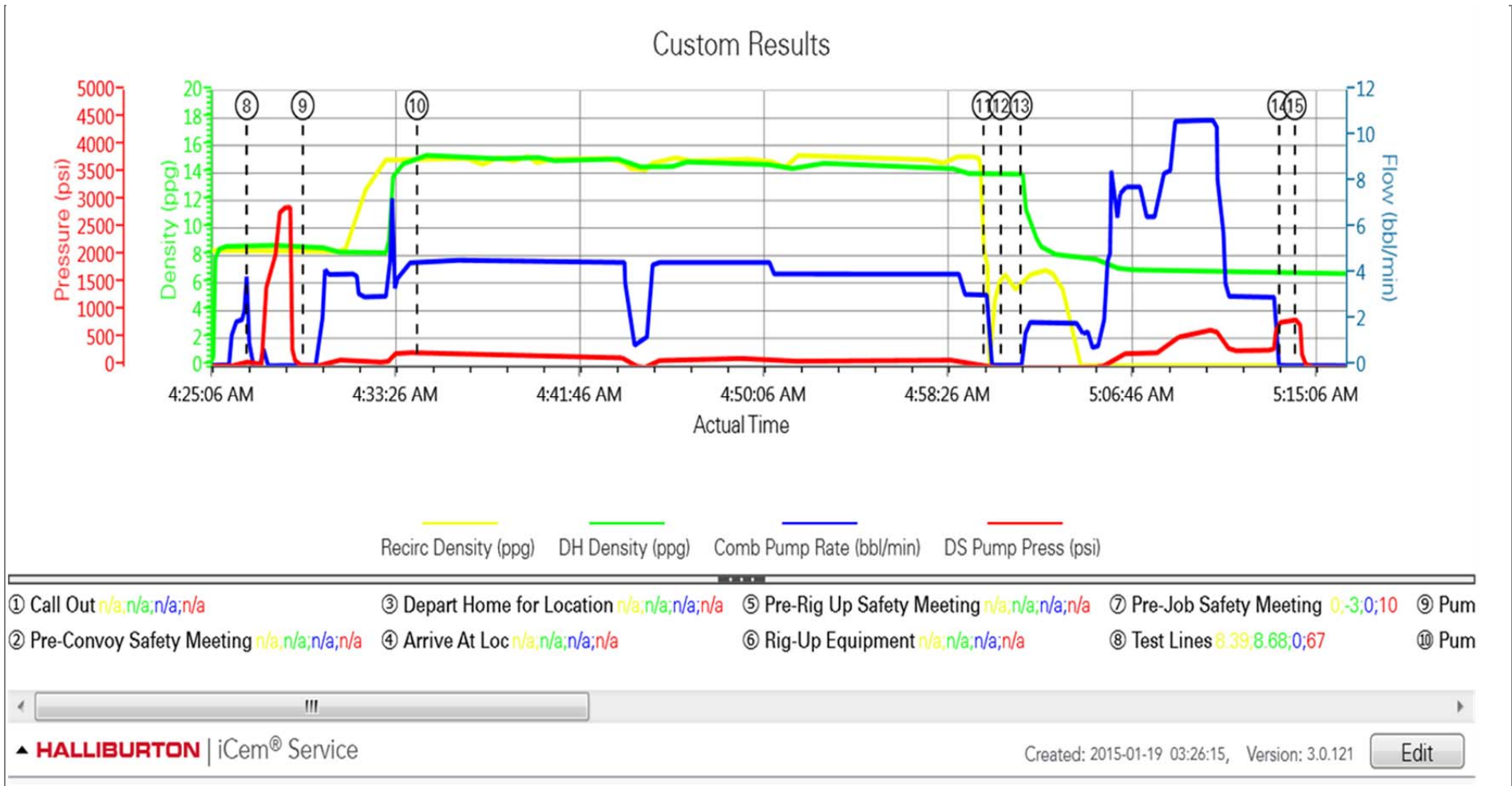
3.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Recirc Density (ppg)	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Comment
Event	1	Call Out	Call Out	1/18/2015	16:30:00	USER					CREW CALLED OUT. 1 PUMP CREW, 2 BULK TRUCKS
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	1/18/2015	18:00:00	USER					DISCUSS DRIVING DIRECTIONS AND USING SAFE DRIVING TECHNIQUES
Event	3	Depart Home for Location	Depart Home for Location	1/18/2015	18:30:00	USER					LEAVE YARD
Event	4	Arrive At Loc	Arrive At Loc	1/18/2015	21:00:00	USER					ARRIVE AT LOCATION. REQUESTED O/L AT 2230
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	1/19/2015	01:00:00	USER					DISCUSS RIGGING UP SAFELY
Event	6	Rig-Up Equipment	Rig-Up Equipment	1/19/2015	01:30:00	USER					RIG UP CEMENT EQUIPMENT.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	1/19/2015	03:30:00	USER	0.00	-2.96	0.00	10.00	DISCUSS HES SAFETY STANDARDS AND JOB PROCEDURES WITH HES, CUSTOMER REPS, AND RIG CREW
Event	8	Test Lines	Test Lines	1/19/2015	04:26:51	COM7	8.39	8.68	0.00	67.00	TEST LINES TO 3000. GOOD TEST NO LEAKS.
Event	9	Pump Spacer 1	Pump Spacer 1	1/19/2015	04:29:23	COM7	8.38	8.57	0.00	-5.00	PUMP 10 BBL H2O
Event	10	Pump Cement	Pump Cement	1/19/2015	04:34:33	COM7	15.09	15.13	4.40	237.00	PUMP 115 BBL CEMENT AT 15 PPG
Event	11	Shutdown	Shutdown	1/19/2015	05:00:13	USER	7.29	14.04	3.10	35.00	SHUTDOWN
Event	12	Drop Top Plug	Drop Top Plug	1/19/2015	05:00:59	USER	6.70	13.89	0.00	-51.00	HES PLUG
Event	13	Pump Displacement	Pump Displacement	1/19/2015	05:01:53	COM7	6.19	13.85	0.80	-49.00	PUMP 60 BBL H2O DISPLACEMENT.
Event	14	Bump Plug	Bump Plug	1/19/2015	05:13:35	COM7					BUMP PLUG, WENT 500 PSI OVER. 42 BBL CEMENT BACK TO SURFACE
Event	15	Check Floats	Check Floats	1/19/2015	05:14:18	USER	0.00	6.67	0.00	832.00	FLOATS HELD 1/2 BBL BACK
Event	16	Pre-Rig Down Safety	Pre-Rig Down Safety	1/19/2015	05:30:00	USER					DISCUSS MAKING SURE

		Meeting	Meeting				
Event	17	Rig-Down Equipment	Rig-Down Equipment	1/19/2015	06:00:00	USER	PRESSURE IS OFF AND ALL WATER SOURCES SHUT OFF
							RIG DOWN CEMENT EQUIPMENT.
Event	18	Safety Meeting - Departing Location	Safety Meeting - Departing Location	1/19/2015	07:30:00	USER	DISCUSS LEAVING IN CONVOY, AND CALLING DISPATCH TO INFORM OF JOB COMPLETION
Event	19	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	1/19/2015	08:00:00	USER	LEAVE LOCATION.

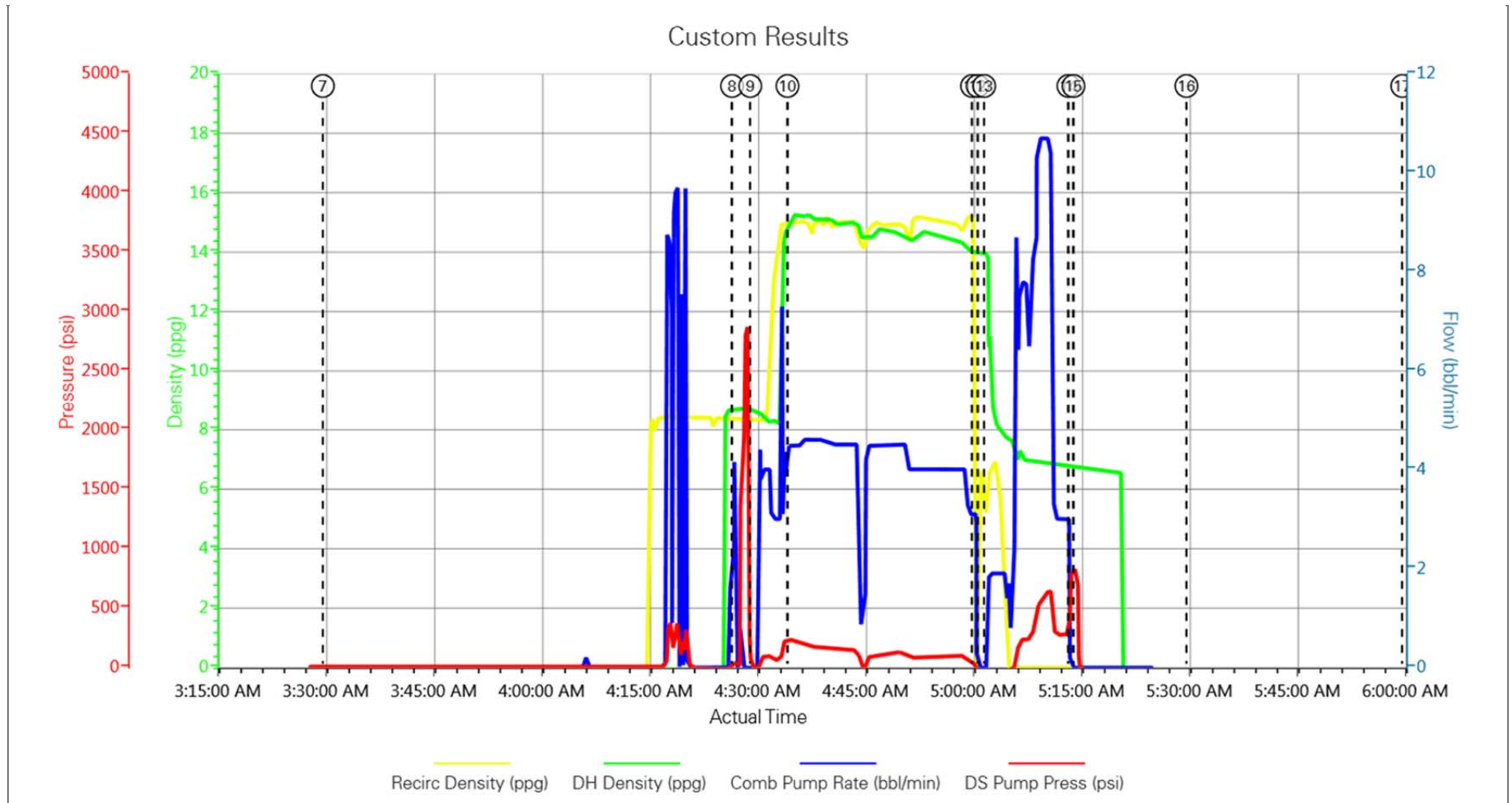
4.0 Attachments

4.1 TAPSTONE CHAINLAND.png



5.0 Custom Graphs

5.1 Custom Graph



6.0 Appendix

6.1 One-Minutes Real-Time Data Listing

Time	Truck 1 Slurry Rate (bbl/min)	Stage Slurry Volume (bbl)	Truck 1 Density (ppg)	Truck 1 Pressure (psi)	Backside Pressure (psi)	Truck 1 Water Rate (bbl/min)
03:27:48	0.00	0.0	0.00	0.00	0.00	0.00
03:29:28	0.00	0.0	-2.83	-3.00	10.00	0.00
03:31:07	0.00	0.0	-3.22	-3.00	11.00	0.00
03:32:48	0.00	0.0	-3.77	-2.00	11.00	0.00
03:34:28	0.00	0.0	-4.04	-2.00	12.00	0.00
03:36:07	0.00	0.0	-4.40	-2.00	12.00	0.00
03:37:48	0.00	0.0	-4.60	-2.00	12.00	0.00
03:39:27	0.00	0.0	-4.79	-1.00	12.00	0.00
03:41:07	0.00	0.0	-5.03	-2.00	13.00	0.00
03:42:47	0.00	0.0	-5.20	-2.00	13.00	0.00
03:44:28	0.00	0.0	-5.20	-2.00	13.00	0.00
03:46:08	0.00	0.0	-5.40	-2.00	13.00	0.00
03:47:47	0.00	0.0	-5.57	-2.00	14.00	0.00
03:49:27	0.00	0.0	-5.65	-2.00	0.00	0.00
03:51:08	0.00	0.0	-5.73	-2.00	0.00	0.00
03:52:48	0.00	0.0	-5.79	-2.00	0.00	0.12
03:54:28	0.00	0.0	-5.84	-2.00	0.00	0.00
03:56:07	0.00	0.0	-5.98	-2.00	1.00	0.00
03:57:48	0.00	0.0	-6.09	-2.00	1.00	0.00
03:59:28	0.00	0.0	-6.12	-2.00	1.00	0.00
04:01:07	0.00	0.0	-6.19	-2.00	1.00	0.00
04:02:47	0.00	0.0	-6.25	-2.00	1.00	0.00
04:04:28	0.00	0.0	-6.21	-2.00	2.00	0.00
04:06:08	0.00	0.0	-6.35	-2.00	2.00	0.00
04:07:47	0.00	0.0	-6.35	-2.00	2.00	0.00
04:09:27	0.00	0.0	-6.36	-2.00	2.00	0.00
04:11:08	0.00	0.0	-6.46	-2.00	2.00	0.00
04:12:48	0.00	0.0	-6.43	-2.00	2.00	0.00
04:14:27	0.00	0.0	-6.53	-2.00	2.00	0.00
04:16:08	0.00	0.0	-0.03	-2.00	2.00	0.00
04:17:48	8.60	5.4	-0.02	323.00	383.00	0.00
04:19:27	4.10	16.8	-0.12	201.00	227.00	0.00
04:21:08	0.00	20.7	-0.13	10.00	-4.00	0.93

Time	Truck 1 Slurry Rate (bbl/min)	Stage Slurry Volume (bbl)	Truck 1 Density (ppg)	Truck 1 Pressure (psi)	Backside Pressure (psi)	Truck 1 Water Rate (bbl/min)
04:22:48	0.00	20.7	-0.14	3.00	-8.00	1.43
04:24:28	0.00	20.7	-0.18	2.00	-10.00	0.00
04:26:07	1.90	21.0	8.72	23.00	10.00	0.00
04:27:48	0.00	22.7	8.71	1,831.00	1,787.00	0.00
04:29:28	0.00	22.7	8.59	14.00	-6.00	0.52
04:31:08	4.00	27.0	8.27	115.00	104.00	0.00
04:32:48	3.00	32.5	8.15	86.00	65.00	3.33
04:34:27	4.50	39.6	15.02	219.00	235.00	2.86
04:36:08	4.60	47.1	15.28	201.00	199.00	2.64
04:37:47	4.60	54.8	15.05	195.00	174.00	2.48
04:39:27	4.60	62.4	15.10	196.00	174.00	4.48
04:41:07	4.50	70.0	15.11	191.00	162.00	3.43
04:42:48	4.50	77.5	14.90	196.00	151.00	2.57
04:44:27	1.20	83.1	14.52	39.00	-26.00	2.79
04:46:07	4.50	89.2	14.52	188.00	107.00	3.05
04:47:48	4.50	96.7	14.67	198.00	128.00	2.43
04:49:28	4.50	104.2	14.57	198.00	128.00	2.79
04:51:07	4.00	111.3	14.44	163.00	86.00	2.57
04:52:47	4.00	118.0	14.69	173.00	91.00	2.74
04:54:28	4.00	124.6	14.51	171.00	89.00	2.86
04:56:08	4.00	131.3	14.44	172.00	90.00	2.21
04:57:47	4.00	138.0	14.42	182.00	99.00	2.07
04:59:28	3.10	144.2	14.03	130.00	40.00	0.00
05:01:07	0.00	146.7	13.91	37.00	-51.00	0.00
05:02:47	1.90	148.4	8.49	66.00	-19.00	0.00
05:04:27	1.40	151.5	7.74	71.00	-12.00	0.00
05:06:07	6.60	156.5	6.94	289.00	158.00	0.00
05:07:48	6.50	168.7	6.90	327.00	224.00	0.00
05:09:28	10.70	184.3	6.94	680.00	594.00	0.00
05:11:08	3.00	199.4	6.86	381.00	307.00	0.00
05:12:48	3.00	204.4	6.80	362.00	280.00	0.00
05:14:27	0.00	205.8	6.90	247.00	169.00	0.00
05:16:07	0.00	205.8	6.70	29.00	-47.00	0.00
05:17:47	0.00	205.8	6.66	29.00	-47.00	0.00

Time	Truck 1 Slurry Rate <i>(bbl/min)</i>	Stage Slurry Volume <i>(bbl)</i>	Truck 1 Density <i>(ppg)</i>	Truck 1 Pressure <i>(psi)</i>	Backside Pressure <i>(psi)</i>	Truck 1 Water Rate <i>(bbl/min)</i>
05:19:27	0.00	205.8	6.57	29.00	-47.00	0.00
05:21:07	0.00	205.8	-1.98	30.00	-47.00	0.00
05:22:48	0.00	205.8	-2.01	30.00	-46.00	0.00
05:24:27	0.00	205.8	-2.00	30.00	-46.00	0.00
05:24:54	0.00	205.8	-2.08	30.00	-46.00	0.00