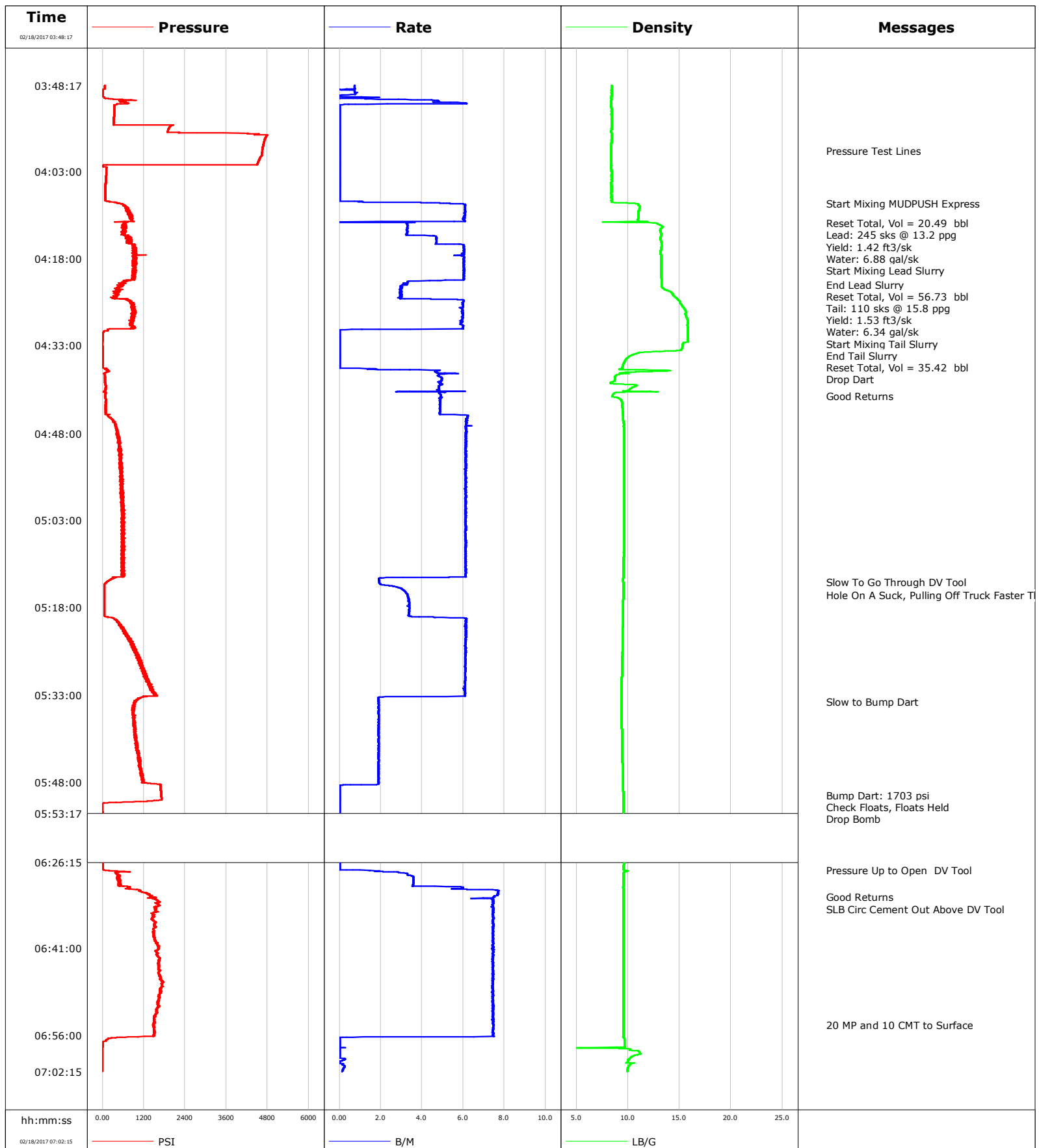


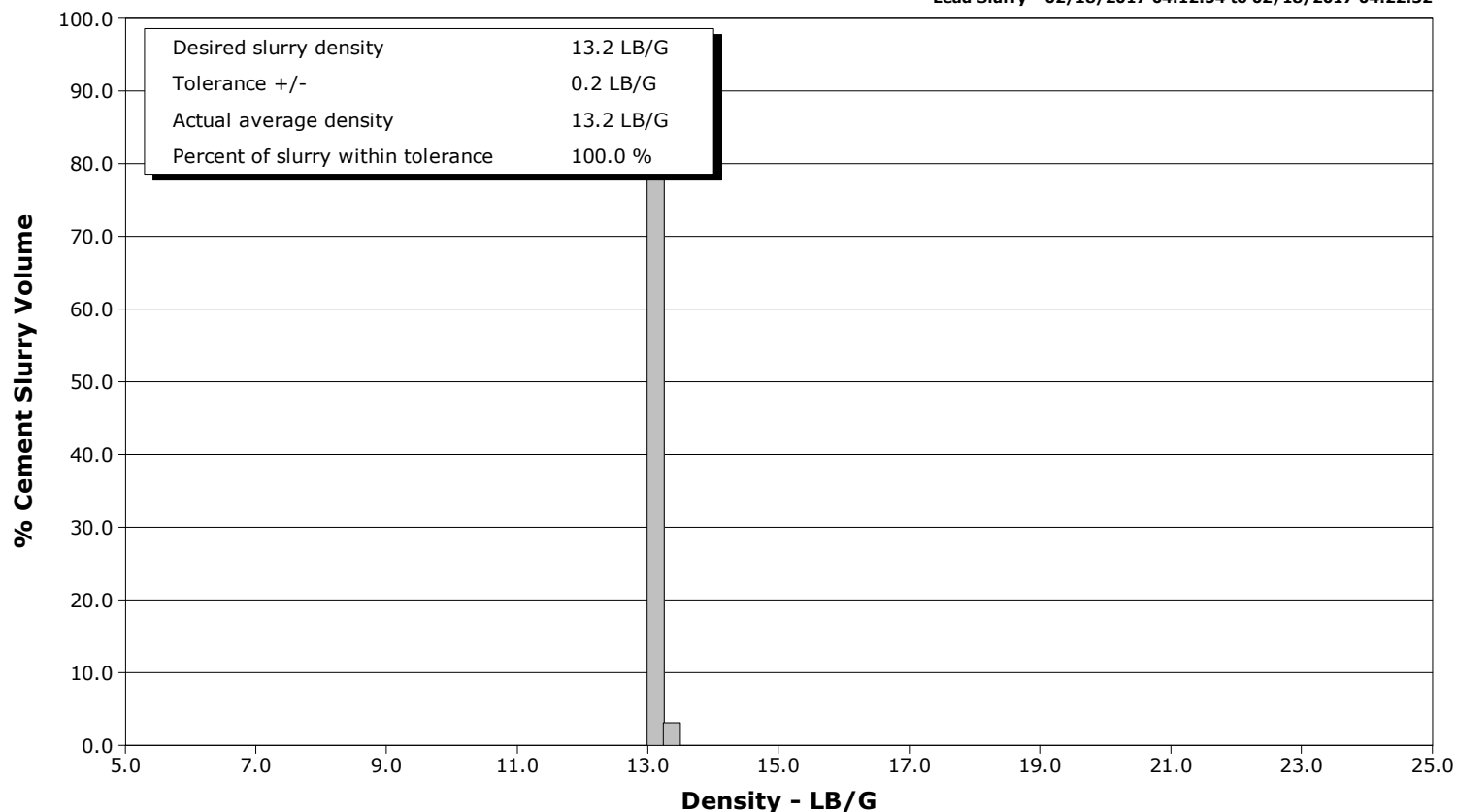
Well	EWS 4	Client	Expedition Water Solutions
Field	DJ Basin	SIR No.	CSS9-00179
Engineer	Weston Brew/Justin Storey	Job Type	1st of 2 Stages Cement Job
Country	United States	Job Date	02-18-2017



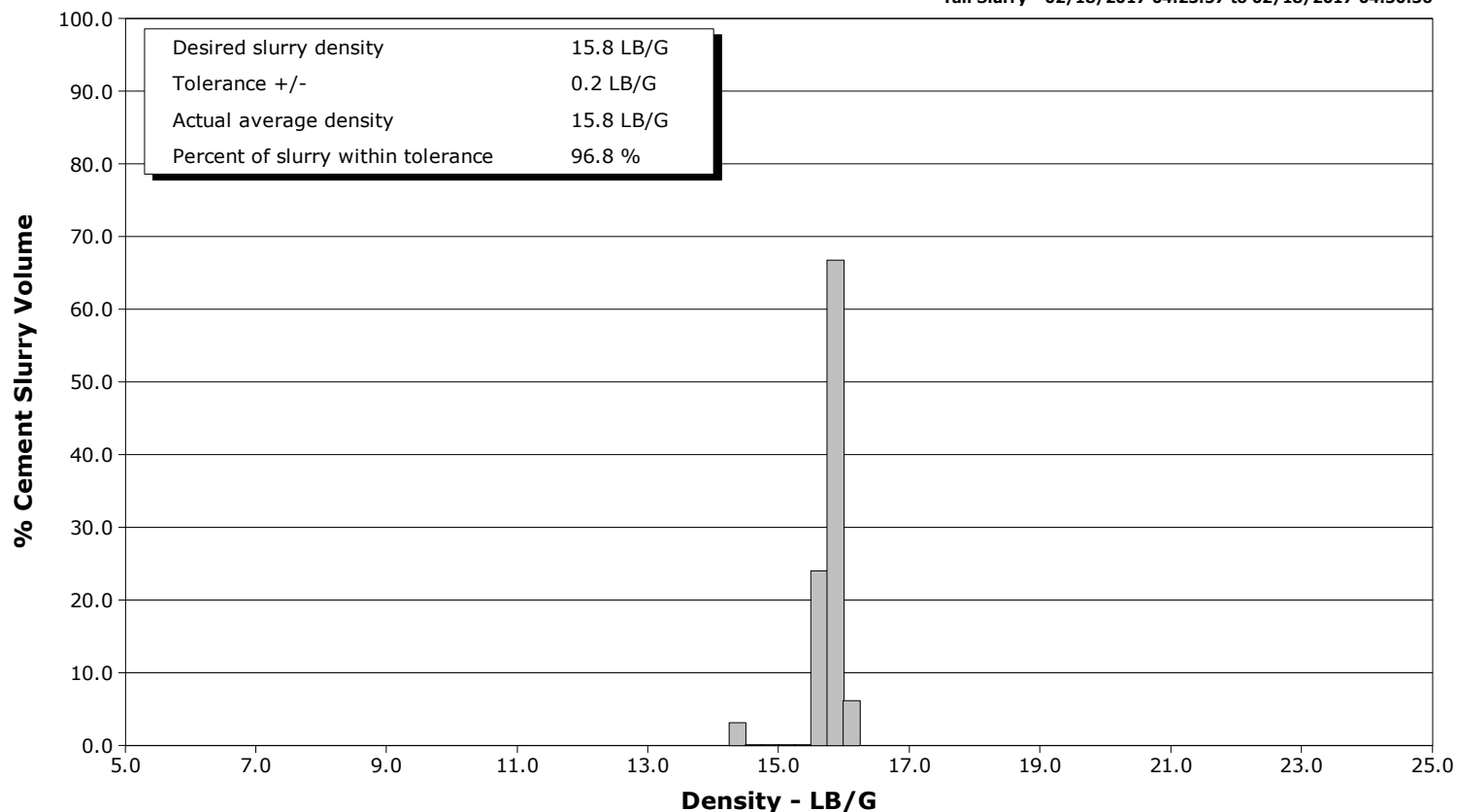
Well EWS 4
Field DJ Basin
Engineer Weston Brew/Justin Storey
Country United States

Client Expedition Water Solutions
SIR No. CSS9-00179
Job Type 1st of 2 Stages Cement Job
Job Date 02-18-2017

Lead Slurry - 02/18/2017 04:12:54 to 02/18/2017 04:22:32



Tail Slurry - 02/18/2017 04:23:57 to 02/18/2017 04:30:36



Cementing Service Report

				Customer Expedition Water Solutions			Job Number CSS9-00179							
Well EWS 4			Location (legal)			Schlumberger Location Williston			Job Start Feb/18/2017					
Field DJ Basin		Formation Name/Type		Deviation deg		Bit Size 8.8 in		Well MD 8546.0 ft		Well TVD ft				
County Weld		State/Province Colorado		BHP psi		BHST degF		BHCT degF		Pore Press. Gradient lb/gal				
Well Master 0631706658		API/UWI												
Rig Name Ensign 121		Drilled For Oil		Service Via Land		Casing/ Liner								
						Depth, ft		Size, in		Weight, lb/ft	Grade	Thread		
Offshore Zone		Well Class New		Well Type Development		8546.0		7.0		26.0		P110	8RD	
						0.0		0.0		0.0				
Drilling Fluid Type WBM		Max. Density lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe								
						T/D		Depth, ft		Size, in		Weight, lb/ft	Grade	Thread
Service Line Cementing		Job Type 1st of 2 Stages Cement Job												
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection		Perforations/Open Hole								
						Top, ft		Bottom, ft		shot/ft		No. of Shots	Total Interval ft	
Service Instructions						ft		ft						
						ft		ft				Diameter in		
						ft		ft						
		Treat Down Casing		Displacement 326.0 bbl		Packer Type		Packer Depth ft						
		Tubing Vol. 0.0 bbl		Casing Vol. 327.0 bbl		Annular Vol. 30.0 bbl		Openhole Vol. 202.0 bbl						
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>				Casing Tools			Squeeze Job					
Lift Pressure 1200 psi						Shoe Type Guide			Squeeze Type					
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 8546.0 ft			Tool Type					
No. Centralizers		Top Plugs		Bottom Plugs		Stage Tool Type			Tool Depth ft					
Cement Head Type Double						Stage Tool Depth 5566.0 ft			Tail Pipe Size in					
Job Scheduled For Feb/18/2017		Arrived on Location Feb/18/2017		Leave Location Feb/18/2017		Collar Type Float			Tail Pipe Depth ft					
						Collar Depth 8501.0 ft			Sqz. Total Vol. bbl					
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message								
02/18/2017	03:48:17	60	0.7	8.40	0.0									
02/18/2017	03:50:57	540	4.8	8.40	2.3									
02/18/2017	03:53:37	331	0.0	8.40	5.2									
02/18/2017	03:56:17	1887	0.0	8.40	5.2									
02/18/2017	03:58:57	4660	0.0	8.40	5.2									
02/18/2017	03:59:29	4645	0.0	8.40	5.2	Pressure Test Lines								
02/18/2017	04:01:37	4512	0.0	8.40	5.2									
02/18/2017	04:04:17	98	0.0	8.40	5.2									
02/18/2017	04:06:57	79	0.0	8.40	5.2									
02/18/2017	04:08:32	504	5.2	10.52	0.9	Start Mixing MUDPUSH Express								
02/18/2017	04:09:37	712	6.1	11.11	7.5									
02/18/2017	04:11:56	642	3.3	12.67	0.1	Reset Total, Vol = 20.49 bbl								
02/18/2017	04:12:08	673	3.3	12.95	0.7	Lead: 245 sks @ 13.2 ppg								
02/18/2017	04:12:17	670	3.3	13.13	1.2									
02/18/2017	04:12:20	661	3.3	13.18	1.4	Yield: 1.42 ft3/sk								
02/18/2017	04:12:35	581	3.3	13.35	2.2	Water: 6.88 gal/sk								
02/18/2017	04:12:54	600	3.3	13.18	3.2	Start Mixing Lead Slurry								
02/18/2017	04:14:57	700	4.7	13.19	11.2									
02/18/2017	04:17:37	988	6.0	13.20	26.4									
02/18/2017	04:20:17	904	6.1	13.19	42.5									
02/18/2017	04:22:32	550	3.2	13.26	54.1	End Lead Slurry								

Well			Field	Job Start		Customer	Job Number
EWS 4			DJ Basin	Feb/18/2017		Expedition Water Solutions	CSS9-00179
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
02/18/2017	04:23:26	418	2.9	13.69	56.8	Reset Total, Vol = 56.73 bbl	
02/18/2017	04:23:27	395	2.9	13.72	56.8	Tail: 110 sks @ 15.8 ppg	
02/18/2017	04:23:28	454	3.0	13.72	56.9	Yield: 1.53 ft3/sk	
02/18/2017	04:23:57	440	2.9	14.26	58.3	Start Mixing Tail Slurry	
02/18/2017	04:25:37	894	6.0	15.06	5.6		
02/18/2017	04:28:17	917	6.0	15.72	21.6		
02/18/2017	04:30:36	32	0.0	15.80	32.7	End Tail Slurry	
02/18/2017	04:30:40	25	0.0	15.80	32.7	Reset Total, Vol = 35.42 bbl	
02/18/2017	04:30:42	20	0.0	15.80	32.7	Drop Dart	
02/18/2017	04:30:57	7	0.0	15.80	32.7		
02/18/2017	04:33:37	-0	0.0	15.19	32.7		
02/18/2017	04:36:17	2	0.0	9.52	0.0		
02/18/2017	04:38:57	66	5.0	8.72	9.2		
02/18/2017	04:41:34	78	4.9	8.51	21.8	Good Returns	
02/18/2017	04:41:37	79	4.9	8.49	22.0		
02/18/2017	04:44:17	89	4.9	9.50	35.0		
02/18/2017	04:46:57	395	6.1	9.60	50.8		
02/18/2017	04:49:37	509	6.1	9.62	67.1		
02/18/2017	04:52:17	522	6.1	9.62	83.4		
02/18/2017	04:54:57	559	6.1	9.62	99.8		
02/18/2017	04:57:37	579	6.1	9.62	116.1		
02/18/2017	05:00:17	615	6.1	9.61	132.4		
02/18/2017	05:02:57	557	6.1	9.61	148.7		
02/18/2017	05:05:37	593	6.1	9.61	165.0		
02/18/2017	05:08:17	539	6.1	9.59	181.3		
02/18/2017	05:10:57	604	6.1	9.59	197.6		
02/18/2017	05:13:33	126	1.9	9.55	210.4	Slow To Go Through DV Tool	
02/18/2017	05:13:37	129	1.9	9.55	210.5		
02/18/2017	05:15:50	53	3.3	9.55	216.7	Hole On A Suck, Pulling Off Truck Faster Than Pumping	
02/18/2017	05:16:17	53	3.3	9.55	218.2		
02/18/2017	05:18:57	50	3.4	9.52	227.1		
02/18/2017	05:21:37	539	6.1	9.49	241.5		
02/18/2017	05:24:17	918	6.1	9.47	257.9		
02/18/2017	05:26:57	1040	6.1	9.43	274.1		
02/18/2017	05:29:37	1233	6.1	9.41	290.4		
02/18/2017	05:32:17	1394	6.1	9.39	306.6		
02/18/2017	05:34:09	958	1.9	9.39	314.3	Slow to Bump Dart	
02/18/2017	05:34:57	905	1.9	9.39	315.8		
02/18/2017	05:37:37	906	1.9	9.40	320.9		
02/18/2017	05:40:17	963	1.9	9.42	325.9		
02/18/2017	05:42:57	1047	1.9	9.42	330.9		
02/18/2017	05:45:37	1098	1.9	9.52	336.0		
02/18/2017	05:48:17	1576	1.9	9.52	341.0		
02/18/2017	05:50:12	1703	0.0	9.56	341.3	Bump Dart: 1703 psi	
02/18/2017	05:50:57	1713	0.0	9.56	341.3		
02/18/2017	05:51:36	1	0.0	9.57	341.3	Check Floats, Floats Held	
02/18/2017	05:51:45	-3	0.0	9.57	341.3	Drop Bomb	
02/18/2017	05:53:37	-1	0.0	9.58	341.3		
02/18/2017	05:56:17	-1	0.0	9.60	341.3		
02/18/2017	05:58:57	-0	0.0	9.61	341.3		
02/18/2017	06:01:37	0	0.0	9.61	341.3		
02/18/2017	06:04:17	1	0.0	9.62	341.3		
02/18/2017	06:06:57	2	0.0	9.63	341.3		
02/18/2017	06:09:37	2	0.0	9.63	341.3		

Well			Field		Job Start	Customer	Job Number
EWS 4			DJ Basin		Feb/18/2017	Expedition Water Solutions	CSS9-00179
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
02/18/2017	06:14:57	2	0.0	9.64	341.3		
02/18/2017	06:17:37	2	0.0	9.64	341.3		
02/18/2017	06:20:17	1	0.0	9.64	341.3		
02/18/2017	06:22:57	0	0.0	9.64	341.3		
02/18/2017	06:25:37	0	0.0	9.64	341.3		
02/18/2017	06:27:38	94	1.5	9.76	0.1	Pressure Up to Open DV Tool	
02/18/2017	06:28:17	474	3.3	9.56	1.8		
02/18/2017	06:30:57	1032	6.8	9.55	12.5		
02/18/2017	06:32:15	1481	7.5	9.55	22.4	Good Returns	
02/18/2017	06:32:55	1619	7.4	9.55	27.3	SLB Circ Cement Out Above DV Tool	
02/18/2017	06:33:37	1647	7.4	9.55	32.5		
02/18/2017	06:36:17	1474	7.4	9.55	52.4		
02/18/2017	06:38:57	1503	7.4	9.55	72.2		
02/18/2017	06:41:37	1554	7.5	9.55	92.1		
02/18/2017	06:44:17	1647	7.4	9.55	111.9		
02/18/2017	06:46:57	1748	7.4	9.55	131.8		
02/18/2017	06:49:37	1643	7.4	9.55	151.6		
02/18/2017	06:52:17	1565	7.4	9.55	171.4		
02/18/2017	06:54:16	1474	7.5	9.55	186.2	20 MP and 10 CMT to Surface	
02/18/2017	06:54:57	1500	7.5	9.55	191.3		
02/18/2017	06:57:37	2	0.0	9.68	201.3		

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 5.2	N2	Mud	Maximum Rate 7.7		Total Slurry 91.0	Mud 0.0	Spacer 20.0	N2				
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 4801	Final -2	Average 779	Bump Plug to 1703	Breakdown	Type	Volume bbl	Density lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 92.0 bbl	Displacement 326.0 bbl	Mix Water Temp degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume 10.0 bbl						
				Washed Thru Perfs <input type="checkbox"/>		To ft						
Customer or Authorized Representative Bill Stone			Schlumberger Supervisor Weston Brew/Justin Storey			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					