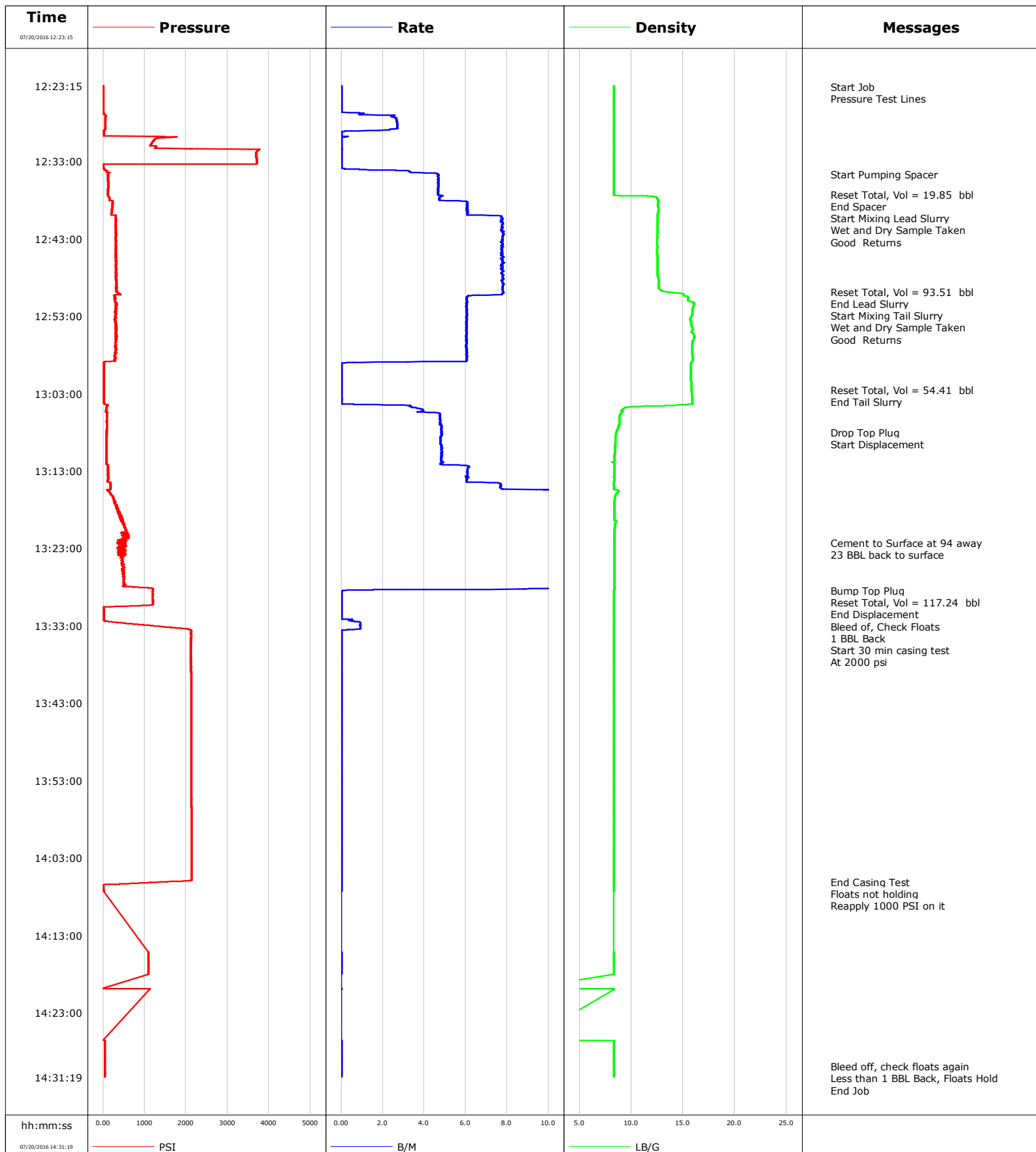


Well Land 15C-32HZ
Field Wattenberg
Engineer Glenn Mendez
Country United States

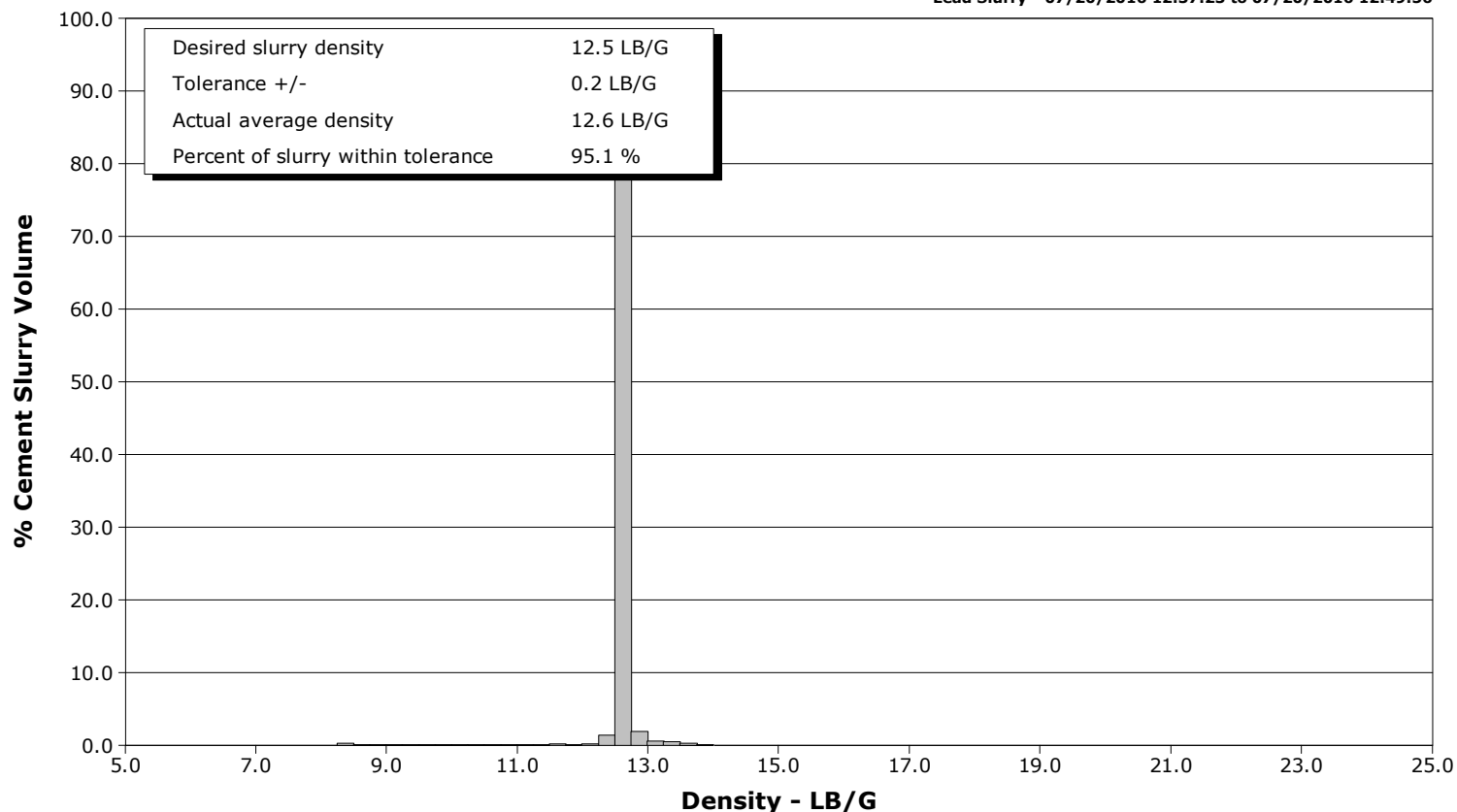
Client Anadarko
SIR No. D5VO-01398
Job Type Surface
Job Date 07-20-2016



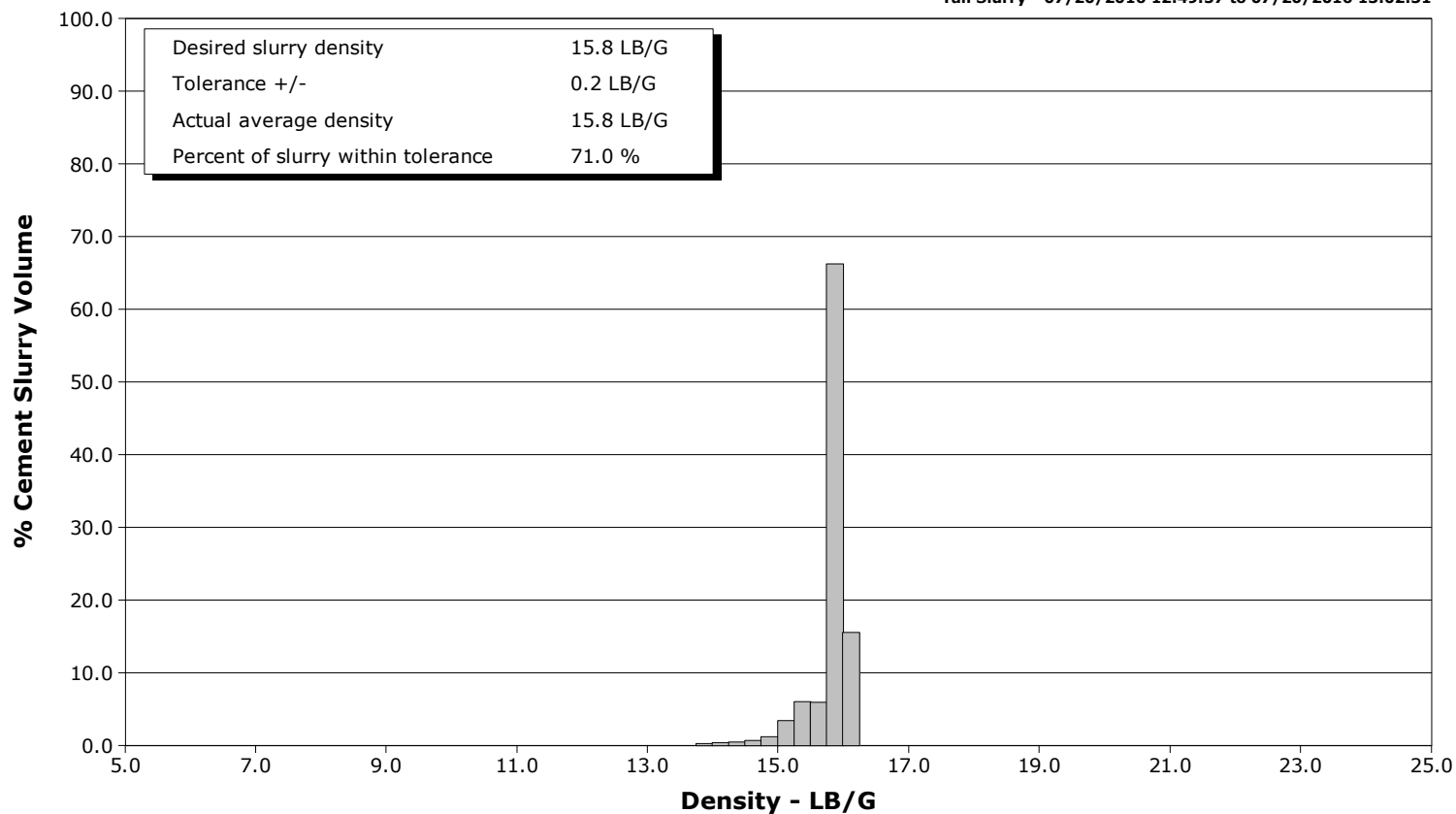
Well Land 15C-32HZ
Field Wattenberg
Engineer Glenn Mendez
Country United States

Client Anadarko
SIR No. D5VO-01398
Job Type Surface
Job Date 07-20-2016

Lead Slurry - 07/20/2016 12:37:23 to 07/20/2016 12:49:56



Tail Slurry - 07/20/2016 12:49:57 to 07/20/2016 13:02:31



Cementing Service Report

				Customer Anadarko				Job Number D5VO-01398			
Well Land 15C-32HZ			Location (legal) 2173			Schlumberger Location Jeff Eulberg			Job Start Jul/20/2016		
Field Wattenberg		Formation Name/Type Shale		Deviation 0 deg		Bit Size 13.5 in		Well MD 1558.0 ft		Well TVD 1558.0 ft	
County Weld		State/Province Colorado		BHP psi		BHST 89 degF		BHCT 79 degF		Pore Press. Gradient lb/gal	
Well Master 0631662990		API/UWI									
Rig Name Precision 461		Drilled For Oil & Gas		Service Via Land		Casing/ Liner					
						Depth, ft		Size, in		Weight, lb/ft	
Offshore Zone		Well Class New		Well Type Development		1558.0		9.6		36.0	
						0.0		0.0		0.0	
Drilling Fluid Type LT OBM		Max. Density lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe					
						T/D		Depth, ft		Size, in	
Service Line Cementing		Job Type Surface									
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection		Perforations/Open Hole					
						Top, ft		Bottom, ft		shot/ft	
						ft		ft			
						ft		ft			
						Treat Down Casing		Displacement 117.0 bbl		Packer Type	
										Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 120.0 bbl		Annular Vol. bbl	
										Openhole Vol. 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 psi				Shoe Type Float				Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1558.0 ft				Tool Type			
No. Centralizers		Top Plugs 1		Bottom Plugs 0		Stage Tool Type				Tool Depth ft	
Cement Head Type Single				Stage Tool Depth ft				Tail Pipe Size in			
Job Scheduled For Jul/20/2016		Arrived on Location Jul/20/2016		Leave Location Jul/20/2016		Collar Type Float				Tail Pipe Depth ft	
						Collar Depth 1513.0 ft				Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
07/20/2016	12:23:15	6	0.0	8.33	20.7	Started Acquisition					
07/20/2016	12:23:22	6	0.0	8.33	20.7	Start Job					
07/20/2016	12:23:25	6	0.0	8.33	20.7	Pressure Test Lines					
07/20/2016	12:24:15	7	0.0	8.33	20.7						
07/20/2016	12:25:15	3	0.0	8.33	20.7						
07/20/2016	12:26:15	3	0.0	8.33	20.7						
07/20/2016	12:27:15	59	2.5	8.33	0.8						
07/20/2016	12:28:15	57	2.7	8.33	3.2						
07/20/2016	12:29:15	17	0.0	8.33	5.0						
07/20/2016	12:30:15	1233	0.0	8.33	5.1						
07/20/2016	12:31:15	1260	0.0	8.33	5.1						
07/20/2016	12:32:15	3693	0.0	8.33	5.1						
07/20/2016	12:33:15	3707	0.0	8.33	5.1						
07/20/2016	12:34:15	102	3.3	8.33	5.6						
07/20/2016	12:34:41	122	4.7	8.33	7.4	Start Pumping Spacer					
07/20/2016	12:35:15	119	4.7	8.34	10.1						
07/20/2016	12:36:15	121	4.7	8.34	14.8						
07/20/2016	12:37:15	115	4.7	8.34	19.6						
07/20/2016	12:37:17	116	4.7	8.34	19.8	Reset Total, Vol = 19.85 bbl					
07/20/2016	12:37:20	114	4.7	8.34	20.0	End Spacer					
07/20/2016	12:37:23	120	4.7	8.34	20.2	Start Mixing Lead Slurry					

Well			Field	Job Start		Customer	Job Number
Land 15C-32HZ			Wattenberg	Jul/20/2016		Anadarko	D5VO-01398
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
07/20/2016	12:39:15	218	6.1	12.62	30.7		
07/20/2016	12:40:15	297	7.7	12.53	37.3		
07/20/2016	12:41:09	307	7.8	12.53	44.4	Wet and Dry Sample Taken	
07/20/2016	12:41:15	298	7.8	12.53	45.2		
07/20/2016	12:42:15	309	7.8	12.52	53.1		
07/20/2016	12:43:15	322	7.8	12.50	61.0		
07/20/2016	12:44:15	318	7.8	12.51	68.8		
07/20/2016	12:45:15	298	7.8	12.52	76.7		
07/20/2016	12:46:15	303	7.8	12.52	84.6		
07/20/2016	12:47:15	319	7.8	12.54	92.5		
07/20/2016	12:48:15	315	7.8	12.64	100.4		
07/20/2016	12:49:15	323	7.8	12.62	108.2		
07/20/2016	12:49:53	334	7.8	13.43	113.2	Reset Total, Vol = 93.51 bbl	
07/20/2016	12:49:56	359	7.8	13.77	113.6	End Lead Slurry	
07/20/2016	12:49:57	334	7.8	13.98	113.8	Start Mixing Tail Slurry	
07/20/2016	12:50:15	436	7.7	15.07	116.1		
07/20/2016	12:51:15	295	6.1	16.03	122.3		
07/20/2016	12:52:15	295	6.1	15.88	128.4		
07/20/2016	12:53:15	317	6.1	15.73	134.6		
07/20/2016	12:53:36	298	6.1	15.75	136.7	Wet and Dry Sample Taken	
07/20/2016	12:53:37	276	6.1	15.77	136.8	Good Returns	
07/20/2016	12:54:15	307	6.0	15.80	140.7		
07/20/2016	12:55:15	299	6.1	15.97	146.8		
07/20/2016	12:56:15	304	6.0	15.91	153.0		
07/20/2016	12:57:15	307	6.1	15.89	159.2		
07/20/2016	12:58:15	279	6.1	15.93	165.3		
07/20/2016	12:59:15	16	0.0	15.76	169.4		
07/20/2016	13:00:15	17	0.0	15.74	169.4		
07/20/2016	13:01:15	17	0.0	15.76	169.4		
07/20/2016	13:02:15	17	0.0	15.79	169.4		
07/20/2016	13:02:30	17	0.0	15.81	169.4	Reset Total, Vol = 54.41 bbl	
07/20/2016	13:02:31	17	0.0	15.81	169.4	End Tail Slurry	
07/20/2016	13:03:15	16	0.0	15.85	169.4		
07/20/2016	13:04:15	24	0.0	15.91	169.4		
07/20/2016	13:05:15	72	3.9	9.04	172.1		
07/20/2016	13:06:15	96	4.8	8.84	176.6		
07/20/2016	13:07:15	88	4.8	8.78	181.4		
07/20/2016	13:08:02	83	4.8	8.56	185.2	Drop Top Plug	
07/20/2016	13:08:03	83	4.8	8.56	185.3	Start Displacement	
07/20/2016	13:08:15	86	4.8	8.52	186.2		
07/20/2016	13:09:15	74	4.8	8.46	191.0		
07/20/2016	13:10:15	78	4.8	8.42	195.8		
07/20/2016	13:11:15	80	4.8	8.40	200.6		
07/20/2016	13:12:15	116	5.6	8.36	205.5		
07/20/2016	13:13:15	118	6.1	8.35	211.7		
07/20/2016	13:14:15	113	6.0	8.35	217.9		
07/20/2016	13:15:15	181	7.7	8.35	225.4		
07/20/2016	13:16:15	228	20.3	8.45	233.3		
07/20/2016	13:17:15	275	20.1	8.39	241.2		
07/20/2016	13:18:15	344	20.3	8.39	249.0		
07/20/2016	13:19:15	467	20.1	8.39	256.9		
07/20/2016	13:20:15	520	20.1	8.40	264.8		
07/20/2016	13:21:15	527	20.2	8.39	272.7		
07/20/2016	13:22:15	492	20.2	8.39	279.2		

Well			Field	Job Start		Customer	Job Number
Land 15C-32HZ			Wattenberg	Jul/20/2016		Anadarko	D5VO-01398
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
07/20/2016	13:23:15	503	20.4	8.38	283.4		
07/20/2016	13:24:15	409	20.4	8.38	286.5		
07/20/2016	13:25:15	445	20.5	8.39	288.4		
07/20/2016	13:26:15	474	20.4	8.39	290.3		
07/20/2016	13:27:15	495	20.4	8.39	292.2		
07/20/2016	13:28:15	1201	8.9	8.38	294.0		
07/20/2016	13:28:28	1197	0.1	8.35	294.0	Bump Top Plug	
07/20/2016	13:28:29	1196	0.1	8.35	294.0	Reset Total, Vol = 117.24 bbl	
07/20/2016	13:28:30	1196	0.1	8.35	294.0	End Displacement	
07/20/2016	13:28:43	1194	0.0	8.35	294.0	Bleed of, Check Floats	
07/20/2016	13:29:15	1196	0.0	8.35	294.0		
07/20/2016	13:30:15	1197	0.0	8.34	294.0		
07/20/2016	13:31:15	13	0.0	8.34	294.0		
07/20/2016	13:32:12	16	0.5	8.34	294.0	Start 30 min casing test	
07/20/2016	13:32:13	17	0.6	8.34	294.0	At 2000 psi	
07/20/2016	13:32:15	18	0.5	8.35	294.0		
07/20/2016	13:33:15	1655	0.9	8.34	294.9		
07/20/2016	13:34:15	2119	0.0	8.34	295.4		
07/20/2016	13:35:15	2117	0.0	8.34	295.4		
07/20/2016	13:36:15	2117	0.0	8.34	295.4		
07/20/2016	13:37:15	2117	0.0	8.34	295.4		
07/20/2016	13:38:15	2117	0.0	8.34	295.4		
07/20/2016	13:39:15	2118	0.0	8.34	295.4		
07/20/2016	13:40:15	2118	0.0	8.34	295.4		
07/20/2016	13:41:15	2119	0.0	8.34	295.4		
07/20/2016	13:42:15	2120	0.0	8.34	295.4		
07/20/2016	13:43:15	2121	0.0	8.34	295.4		
07/20/2016	13:44:15	2121	0.0	8.34	295.4		
07/20/2016	13:45:15	2122	0.0	8.34	295.4		
07/20/2016	13:46:15	2122	0.0	8.34	295.4		
07/20/2016	13:47:15	2124	0.0	8.34	295.4		
07/20/2016	13:48:15	2125	0.0	8.34	295.4		
07/20/2016	13:49:15	2125	0.0	8.34	295.4		
07/20/2016	13:50:15	2125	0.0	8.34	295.4		
07/20/2016	13:51:15	2126	0.0	8.34	295.4		
07/20/2016	13:52:15	2127	0.0	8.34	295.4		
07/20/2016	13:53:15	2127	0.0	8.34	295.4		
07/20/2016	13:54:15	2128	0.0	8.34	295.4		
07/20/2016	13:55:15	2128	0.0	8.34	295.4		
07/20/2016	13:56:15	2129	0.0	8.34	295.4		
07/20/2016	13:57:15	2129	0.0	8.34	295.4		
07/20/2016	13:58:15	2130	0.0	8.34	295.4		
07/20/2016	13:59:15	2131	0.0	8.34	295.4		
07/20/2016	14:00:15	2132	0.0	8.34	295.4		
07/20/2016	14:01:15	2132	0.0	8.34	295.4		
07/20/2016	14:02:15	2133	0.0	8.34	295.4		
07/20/2016	14:03:15	2134	0.0	8.34	295.4		
07/20/2016	14:04:15	2134	0.0	8.34	295.4		
07/20/2016	14:05:15	2135	0.0	8.34	295.4		
07/20/2016	14:06:07	1466	0.0	8.34	295.4	End Casing Test	
07/20/2016	14:06:12	1137	0.0	8.34	295.4	Floats not holding	
07/20/2016	14:06:15	907	0.0	8.34	295.4		
07/20/2016	14:07:08	12	0.0	8.34	295.4	Reapply 1000 PSI on it	
07/20/2016	14:07:15	12	0.0	8.34	295.4		

Well			Field		Job Start	Customer		Job Number
Land 15C-32HZ			Wattenberg		Jul/20/2016	Anadarko		D5VO-01398
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
07/20/2016	14:16:15	1091	0.0	8.34	296.1			
07/20/2016	14:17:15	1090	0.0	8.34	296.1			
07/20/2016	14:27:15	45	0.0	8.34	0.0			
07/20/2016	14:28:15	45	0.0	8.34	0.0			
07/20/2016	14:29:15	47	0.0	8.34	0.0			
07/20/2016	14:29:58	46	0.0	8.34	0.0	Bleed off, check floats again		
07/20/2016	14:29:59	46	0.0	8.34	0.0	Less than 1 BBL Back, Floats Hold		
07/20/2016	14:30:00	45	0.0	8.34	0.0	End Job		
07/20/2016	14:30:15	45	0.0	8.34	0.0			

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 5.5	N2	Mud	Maximum Rate 0.0	Total Slurry 295.4	Mud 0.0	Spacer 20.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 1124	Final 46	Average 894	Bump Plug to	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %	Designed Slurry Volume 0.0 bbl	Displacement 108.8 bbl	Mix Water Temp 74 degF	Cement Circulated to Surface? <input type="checkbox"/>	Volume bbl			
				Washed Thru Perfs <input type="checkbox"/>	To ft			
Customer or Authorized Representative Joe Wallem			Schlumberger Supervisor Glenn Mendez		Circulation Lost <input type="checkbox"/>	Job Completed <input type="checkbox"/>		
					-	-		