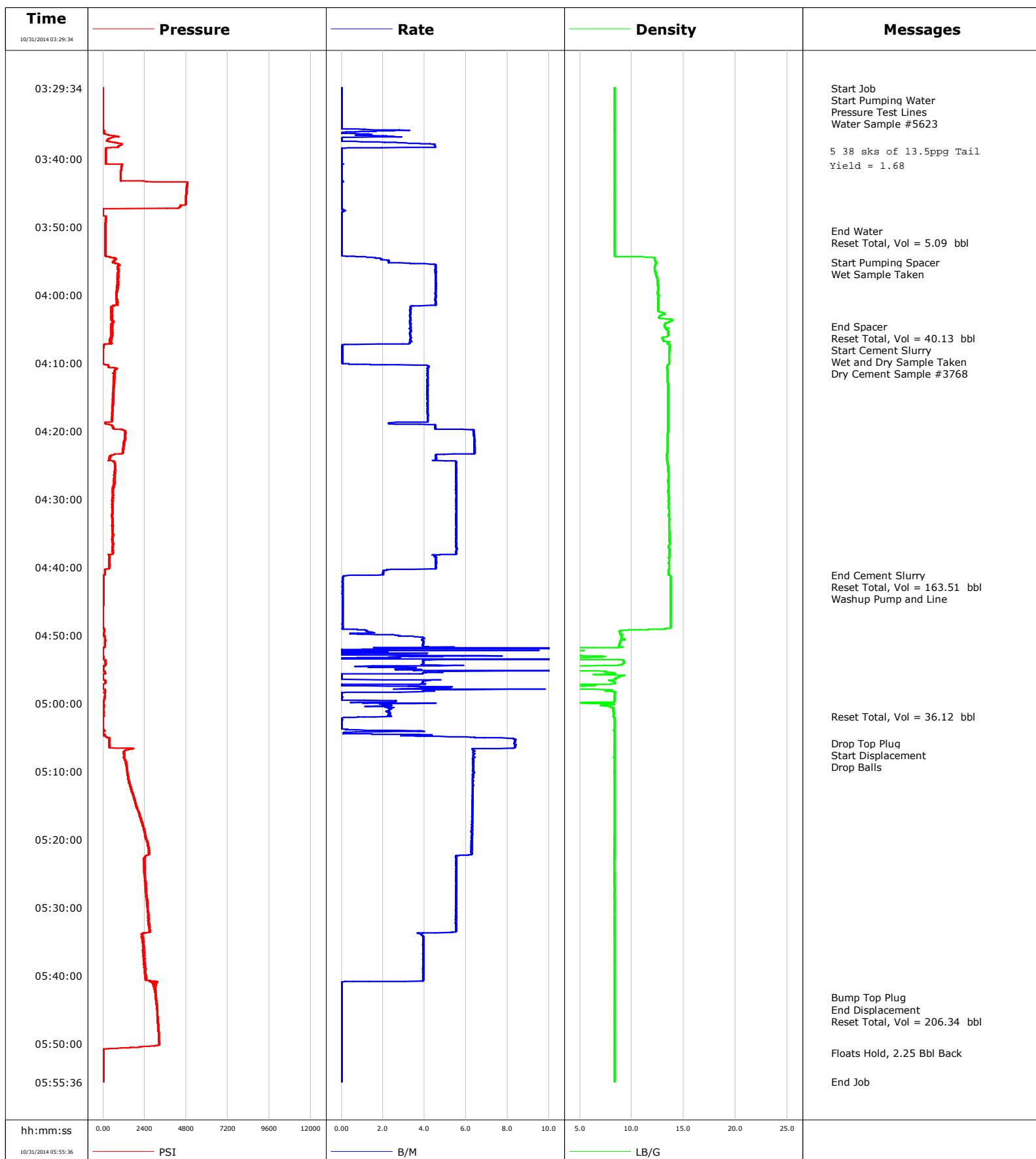


Well Grant Elmquist 2G-14H
Field Wattenberg
Engineer Ryan Drilling
Country United States

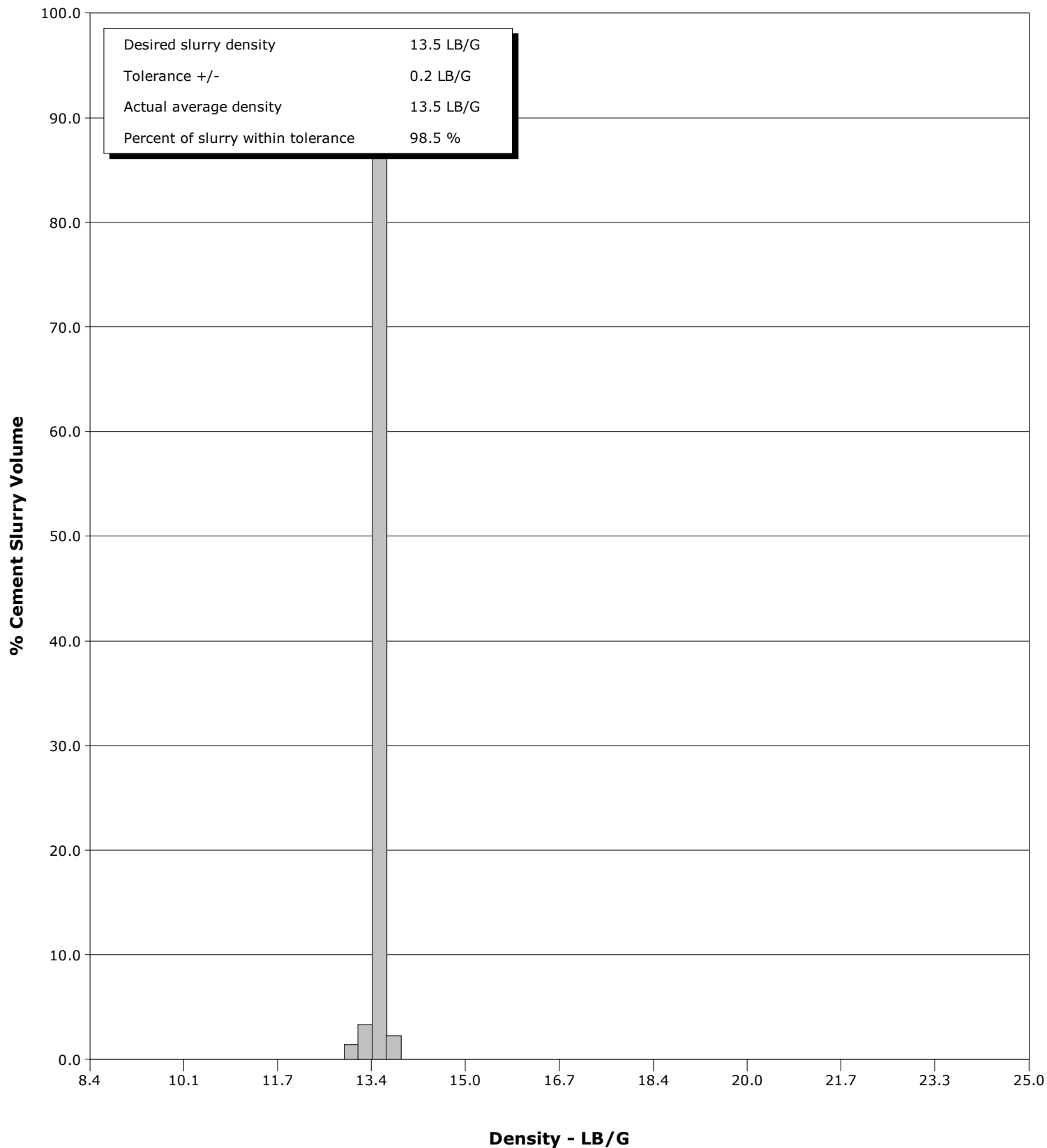
Client Encana
SIR No. D4RN-00087
Job Type Production
Job Date 10-31-2014



Well Grant Elmquist 2G-14H
Field Wattenberg
Engineer Ryan Drilling
Country United States

Client Encana
SIR No. D4RN-00087
Job Type Production
Job Date 10-31-2014

Cement Slurry - 10/31/2014 04:04:55 to 10/31/2014 04:41:08



Cementing Service Report

					Customer Encana			Job Number D4RN-00087	
Well Grant Elmquist 2G-14H 2G-14H			Location (legal) Cheyenne		Schlumberger Location Rock Springs			Job Start Oct/31/2014	
Field Wattenberg		Formation Name/Type Shale		Deviation 90 deg	Bit Size 6.1 in		Well MD 13732.0 ft		Well TVD 7284.6 ft
County Weld		State/Province Colorado		BHP psi	BHST 215 degF	BHCT 215 degF	Pore Press. Gradient lb/gal		
Well Master 0631587404		API/UWI							
Rig Name Ensign 135	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	7699.0	7.0	26.0	P110	8RD	
				13732.0	4.5	13.5	P110	8RD	
Drilling Fluid Type Bentonite		Max. Density 11.00 lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe					
				T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
Service Line Cementing	Job Type Production								
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi		WH Connection Single Cement head	Perforations/Open Hole					
				Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval ft	
Service Instructions Previous Casing: 7699' Top of Cement(previous casing - 2000'): 5699' OH Excess: 20% TD: 13,786' (7285')				ft	ft			Diameter in	
				ft	ft				
				ft	ft				
				Treat Down Casing		Displacement 205.0 bbl		Packer Type	
Tubing Vol. bbl		Casing Vol. 205.0 bbl		Annular Vol. 143.0 bbl		Openhole Vol. 101.0 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 psi				Shoe Type Float			Squeeze Type		
Pipe Rotated <input checked="" type="checkbox"/>		Pipe Reciprocated <input checked="" type="checkbox"/>		Shoe Depth 13732.0 ft			Tool Type		
No. Centralizers 31		Top Plugs 1	Bottom Plugs	Stage Tool Type			Tool Depth ft		
Cement Head Type Single				Stage Tool Depth ft			Tail Pipe Size in		
Job Scheduled For Oct/31/2014 01:00		Arrived on Location Oct/31/2014 01:00		Leave Location Oct/31/2014 07:00		Collar Type Float		Tail Pipe Depth ft	
						Collar Depth 13730.2 ft		Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message		
10/31/2014	03:29:34	-15	0.0	8.34	0.0	0	Started Acquisition		
10/31/2014	03:29:35	-15	0.0	8.34	0.0	0	Start Job		
10/31/2014	03:29:44	-15	0.0	8.34	0.0	0	Start Pumping Water		
10/31/2014	03:29:46	-15	0.0	8.34	0.0	0	Pressure Test Lines		
10/31/2014	03:30:24	-15	0.0	8.34	0.0	0	Water Sample #5623		
10/31/2014	03:30:34	-14	0.0	8.34	0.0	0			
10/31/2014	03:31:34	-15	0.0	8.34	0.0	0			
10/31/2014	03:32:34	-15	0.0	8.34	0.0	0			
10/31/2014	03:33:34	-15	0.0	8.34	0.1	0			
10/31/2014	03:34:34	-16	0.0	8.34	0.1	0			
10/31/2014	03:35:34	-17	0.0	8.34	0.1	0			
10/31/2014	03:36:34	329	0.7	8.34	1.1	0			
10/31/2014	03:37:34	516	1.8	8.34	1.7	0			
10/31/2014	03:38:34	147	0.0	8.34	5.1	0			
10/31/2014	03:39:34	150	0.0	8.34	5.1	0			
10/31/2014	03:40:34	149	0.0	8.34	5.1	0			
10/31/2014	03:41:34	1036	0.0	8.34	5.1	0			
10/31/2014	03:42:34	1019	0.0	8.34	5.1	0			
10/31/2014	03:43:34	4870	0.0	8.34	5.1	0			
10/31/2014	03:44:34	4818	0.0	8.34	5.1	0			
10/31/2014	03:45:34	4793	0.0	8.34	5.1	0			

Well			Field		Job Start	Customer		Job Number
Grant Elmquist 2G-14H 2G-14H			Wattenberg		Oct/31/2014	Encana		D4RN-00087
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message	
10/31/2014	03:47:34	-15	0.1	8.34	5.1	0		
10/31/2014	03:48:34	147	0.0	8.34	0.0	0		
10/31/2014	03:49:34	135	0.0	8.34	0.0	0		
10/31/2014	03:50:34	136	0.0	8.34	0.0	0		
10/31/2014	03:50:35	136	0.0	8.34	0.0	0	End Water	
10/31/2014	03:50:36	136	0.0	8.34	0.0	0	Reset Total, Vol = 5.09 bbl	
10/31/2014	03:51:34	133	0.0	8.34	0.0	0		
10/31/2014	03:52:34	129	0.0	8.34	0.0	0		
10/31/2014	03:53:34	131	0.0	8.34	0.0	0		
10/31/2014	03:54:34	649	1.6	12.18	0.2	13		
10/31/2014	03:55:11	556	2.3	12.30	1.5	15	Start Pumping Spacer	
10/31/2014	03:55:34	891	4.5	12.30	2.7	17		
10/31/2014	03:56:15	855	4.5	12.23	5.8	17	Wet Sample Taken	
10/31/2014	03:56:34	879	4.5	12.22	7.2	19		
10/31/2014	03:57:34	884	4.5	12.46	11.8	18		
10/31/2014	03:58:34	864	4.5	12.51	16.3	24		
10/31/2014	03:59:34	819	4.5	12.51	20.8	25		
10/31/2014	04:00:34	774	4.5	12.54	25.4	21		
10/31/2014	04:01:34	592	4.3	12.55	29.9	17		
10/31/2014	04:02:34	490	3.3	12.84	33.3	28		
10/31/2014	04:03:34	448	3.3	13.53	36.6	27		
10/31/2014	04:04:34	556	3.3	13.18	39.9	34	End Spacer	
10/31/2014	04:04:37	438	3.3	13.17	40.1	34	Reset Total, Vol = 40.13 bbl	
10/31/2014	04:04:55	448	3.3	13.48	41.1	41	Start Cement Slurry	
10/31/2014	04:05:34	581	3.3	13.51	43.2	39		
10/31/2014	04:05:35	491	3.3	13.51	43.3	39	Wet and Dry Sample Taken	
10/31/2014	04:05:40	529	3.3	13.52	43.6	39	Dry Cement Sample #3768	
10/31/2014	04:06:34	484	3.3	13.00	46.6	34		
10/31/2014	04:07:34	23	0.0	13.66	48.9	0		
10/31/2014	04:08:34	-2	0.0	13.62	48.9	0		
10/31/2014	04:09:34	-3	0.0	13.62	49.0	0		
10/31/2014	04:10:34	292	4.2	13.43	50.2	36		
10/31/2014	04:11:34	656	4.1	13.45	54.3	37		
10/31/2014	04:12:34	641	4.2	13.47	58.5	37		
10/31/2014	04:13:34	614	4.1	13.49	62.6	37		
10/31/2014	04:14:34	578	4.1	13.49	66.8	36		
10/31/2014	04:15:34	577	4.2	13.50	70.9	36		
10/31/2014	04:16:34	537	4.2	13.50	75.1	35		
10/31/2014	04:17:34	507	4.2	13.50	79.2	35		
10/31/2014	04:18:34	498	4.2	13.51	83.4	35		
10/31/2014	04:19:34	612	4.5	13.48	87.2	35		
10/31/2014	04:20:34	1281	6.4	13.44	93.2	34		
10/31/2014	04:21:34	1226	6.4	13.46	99.6	35		
10/31/2014	04:22:34	1161	6.4	13.45	106.0	35		
10/31/2014	04:23:34	512	4.5	13.37	112.1	35		
10/31/2014	04:24:34	643	5.5	13.44	116.8	35		
10/31/2014	04:25:34	691	5.5	13.51	122.4	35		
10/31/2014	04:26:34	679	5.5	13.54	127.9	35		
10/31/2014	04:27:34	633	5.5	13.52	133.4	35		
10/31/2014	04:28:34	541	5.5	13.53	138.9	35		
10/31/2014	04:29:34	566	5.5	13.56	144.5	36		
10/31/2014	04:30:34	520	5.5	13.57	150.0	36		
10/31/2014	04:31:34	561	5.5	13.60	155.5	36		
10/31/2014	04:32:34	503	5.5	13.58	161.1	36		

Well			Field		Job Start	Customer		Job Number
Grant Elmquist 2G-14H 2G-14H			Wattenberg		Oct/31/2014	Encana		D4RN-00087
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message	
10/31/2014	04:34:34	541	5.5	13.61	172.1	36		
10/31/2014	04:35:34	550	5.5	13.63	177.6	36		
10/31/2014	04:36:34	573	5.5	13.69	183.2	37		
10/31/2014	04:37:34	552	5.5	13.64	188.7	37		
10/31/2014	04:38:34	372	4.6	13.57	193.8	35		
10/31/2014	04:39:34	343	4.6	13.57	198.4	42		
10/31/2014	04:40:34	102	2.0	13.57	202.3	58		
10/31/2014	04:41:08	95	2.0	13.56	203.5	71	End Cement Slurry	
10/31/2014	04:41:14	18	0.4	13.71	203.6	0	Reset Total, Vol = 163.51 bbl	
10/31/2014	04:41:26	19	0.1	13.72	203.7	0	Washup Pump and Line	
10/31/2014	04:41:34	19	0.1	13.72	203.7	0		
10/31/2014	04:42:34	20	0.1	13.72	203.7	0		
10/31/2014	04:43:34	12	0.1	13.72	203.8	0		
10/31/2014	04:44:34	12	0.1	13.72	203.8	0		
10/31/2014	04:45:34	11	0.1	13.73	203.9	0		
10/31/2014	04:46:34	-4	0.1	13.74	204.0	0		
10/31/2014	04:47:34	-5	0.1	13.74	204.0	0		
10/31/2014	04:48:34	-6	0.1	13.74	204.1	0		
10/31/2014	04:49:34	60	1.4	8.83	204.6	73		
10/31/2014	04:50:34	106	3.9	9.32	207.1	38		
10/31/2014	04:51:34	105	3.9	8.76	211.1	73		
10/31/2014	04:52:34	-16	0.1	2.94	215.1	73		
10/31/2014	04:53:34	70	13.5	6.84	218.1	4		
10/31/2014	04:54:34	30	0.6	3.16	222.5	17		
10/31/2014	04:55:34	123	3.9	8.37	227.2	17		
10/31/2014	04:56:34	108	4.6	7.86	227.9	17		
10/31/2014	04:57:34	-29	5.3	4.52	230.8	0		
10/31/2014	04:58:34	100	0.0	8.35	234.4	0		
10/31/2014	04:59:34	23	1.1	8.33	234.4	32		
10/31/2014	05:00:34	29	2.1	8.15	236.5	0		
10/31/2014	05:01:34	28	2.3	8.30	238.8	0		
10/31/2014	05:01:58	-0	2.2	8.21	239.7	0	Reset Total, Vol = 36.12 bbl	
10/31/2014	05:02:34	-3	0.0	8.33	239.9	0		
10/31/2014	05:03:34	-1	0.0	8.33	0.0	0		
10/31/2014	05:04:34	81	3.0	8.34	0.9	0		
10/31/2014	05:05:34	365	8.4	8.35	7.2	0		
10/31/2014	05:05:52	366	8.3	8.35	9.7	0	Drop Top Plug	
10/31/2014	05:05:55	364	8.3	8.35	10.1	0	Start Displacement	
10/31/2014	05:05:57	367	8.3	8.35	10.4	0	Drop Balls	
10/31/2014	05:06:34	744	8.3	8.34	15.6	0		
10/31/2014	05:07:34	1216	6.3	8.34	22.1	0		
10/31/2014	05:08:34	1318	6.4	8.33	28.5	0		
10/31/2014	05:09:34	1384	6.3	8.34	34.8	0		
10/31/2014	05:10:34	1415	6.3	8.34	41.2	0		
10/31/2014	05:11:34	1481	6.3	8.34	47.5	0		
10/31/2014	05:12:34	1615	6.3	8.34	53.8	0		
10/31/2014	05:13:34	1752	6.3	8.34	60.1	0		
10/31/2014	05:14:34	1840	6.3	8.34	66.5	0		
10/31/2014	05:15:34	1983	6.3	8.34	72.8	0		
10/31/2014	05:16:34	2118	6.3	8.34	79.1	0		
10/31/2014	05:17:34	2244	6.3	8.34	85.3	0		
10/31/2014	05:18:34	2383	6.3	8.33	91.6	0		
10/31/2014	05:19:34	2438	6.3	8.33	97.9	0		
10/31/2014	05:20:34	2601	6.3	8.33	104.2	0		

Well			Field		Job Start		Customer		Job Number
Grant Elmquist 2G-14H 2G-14H			Wattenberg		Oct/31/2014		Encana		D4RN-00087
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message		
10/31/2014	05:22:34	2424	5.5	8.33	116.5	0			
10/31/2014	05:23:34	2359	5.5	8.33	122.1	0			
10/31/2014	05:24:34	2382	5.5	8.33	127.6	0			
10/31/2014	05:25:34	2398	5.5	8.33	133.1	0			
10/31/2014	05:26:34	2450	5.5	8.33	138.7	0			
10/31/2014	05:27:34	2463	5.5	8.33	144.2	0			
10/31/2014	05:28:34	2513	5.5	8.33	149.7	0			
10/31/2014	05:29:34	2557	5.5	8.33	155.2	0			
10/31/2014	05:30:34	2557	5.5	8.33	160.8	0			
10/31/2014	05:31:34	2624	5.5	8.33	166.3	0			
10/31/2014	05:32:34	2644	5.5	8.33	171.8	0			
10/31/2014	05:33:34	2705	5.5	8.33	177.3	0			
10/31/2014	05:34:34	2283	3.9	8.33	181.4	0			
10/31/2014	05:35:34	2349	3.9	8.34	185.4	0			
10/31/2014	05:36:34	2291	3.9	8.33	189.3	0			
10/31/2014	05:37:34	2386	3.9	8.34	193.2	0			
10/31/2014	05:38:34	2389	3.9	8.34	197.2	0			
10/31/2014	05:39:34	2385	3.9	8.33	201.1	0			
10/31/2014	05:40:34	2488	3.9	8.34	205.0	0			
10/31/2014	05:41:34	3055	0.0	8.34	206.2	0			
10/31/2014	05:42:34	3002	0.0	8.34	206.2	0			
10/31/2014	05:43:12	3037	0.0	8.34	206.2	0	Bump Top Plug		
10/31/2014	05:43:14	3042	0.0	8.34	206.2	0	End Displacement		
10/31/2014	05:43:34	3067	0.0	8.34	206.2	0			
10/31/2014	05:44:34	3099	0.0	8.34	206.2	0			
10/31/2014	05:44:55	3107	0.0	8.34	206.2	0	Reset Total, Vol = 206.34 bbl		
10/31/2014	05:45:34	3129	0.0	8.34	206.2	0			
10/31/2014	05:46:34	3159	0.0	8.34	206.2	0			
10/31/2014	05:47:34	3185	0.0	8.34	206.2	0			
10/31/2014	05:48:34	3207	0.0	8.34	206.2	0			
10/31/2014	05:49:34	3228	0.0	8.34	206.2	0			
10/31/2014	05:50:34	1595	0.0	8.34	206.2	0			
10/31/2014	05:51:16	11	0.0	8.34	206.2	0	Floats Hold, 2.25 Bbl Back		
10/31/2014	05:51:34	11	0.0	8.34	206.2	0			
10/31/2014	05:52:34	12	0.0	8.35	206.2	0			
10/31/2014	05:53:34	12	0.0	8.34	206.2	0			
10/31/2014	05:54:34	11	0.0	8.34	206.2	0			
10/31/2014	05:55:32	11	0.0	8.34	206.2	0	End Job		

Well Grant Elmquist 2G-14H 2G-14H	Field Wattenberg	Job Start Oct/31/2014	Customer Encana	Job Number D4RN-00087
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl				
Slurry 4.2	N2	Mud	Maximum Rate 25.0	Total Slurry 163.0	Mud 0.0	Spacer 40.0	N2		
Treating Pressure Summary, psi					Breakdown Fluid				
Maximum 4885	Final 11	Average 1241	Bump Plug to 3000	Breakdown	Type	Volume bbl	Density lb/gal		
Avg. N2 Percent %	Designed Slurry Volume 160.9 bbl	Displacement 205.0 bbl	Mix Water Temp 65 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl			
				Washed Thru Perfs <input type="checkbox"/>		To ft			
Customer or Authorized Representative Mark Schulz			Schlumberger Supervisor Ryan Drilling			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>		
						-	-		