
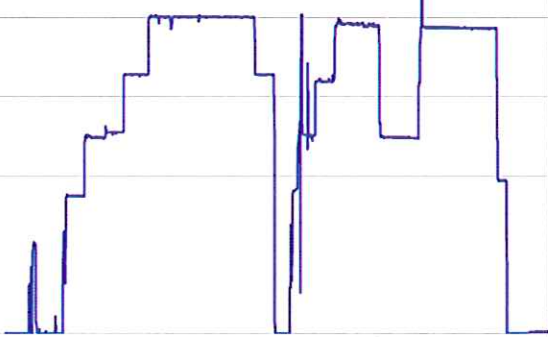
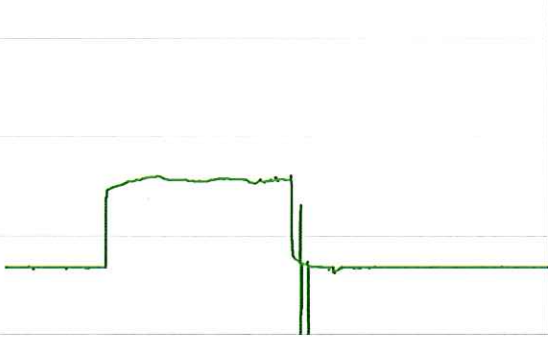


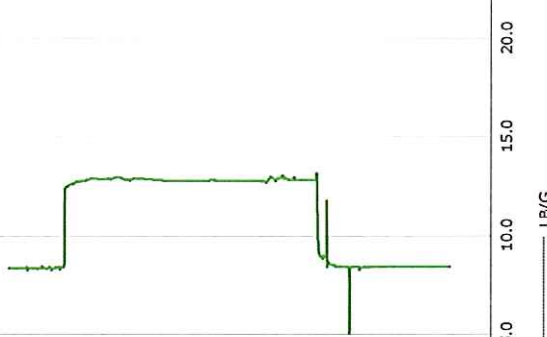
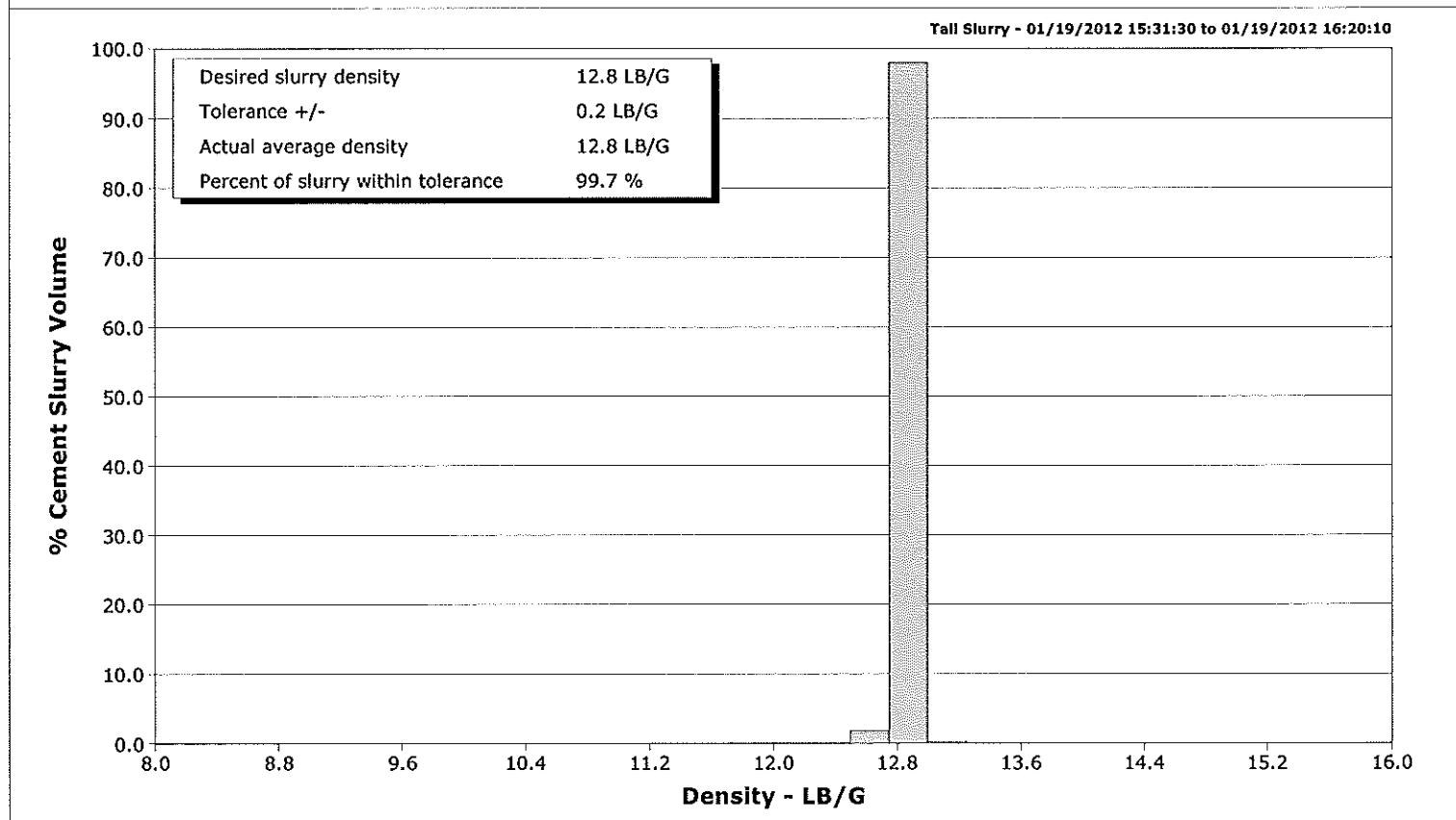
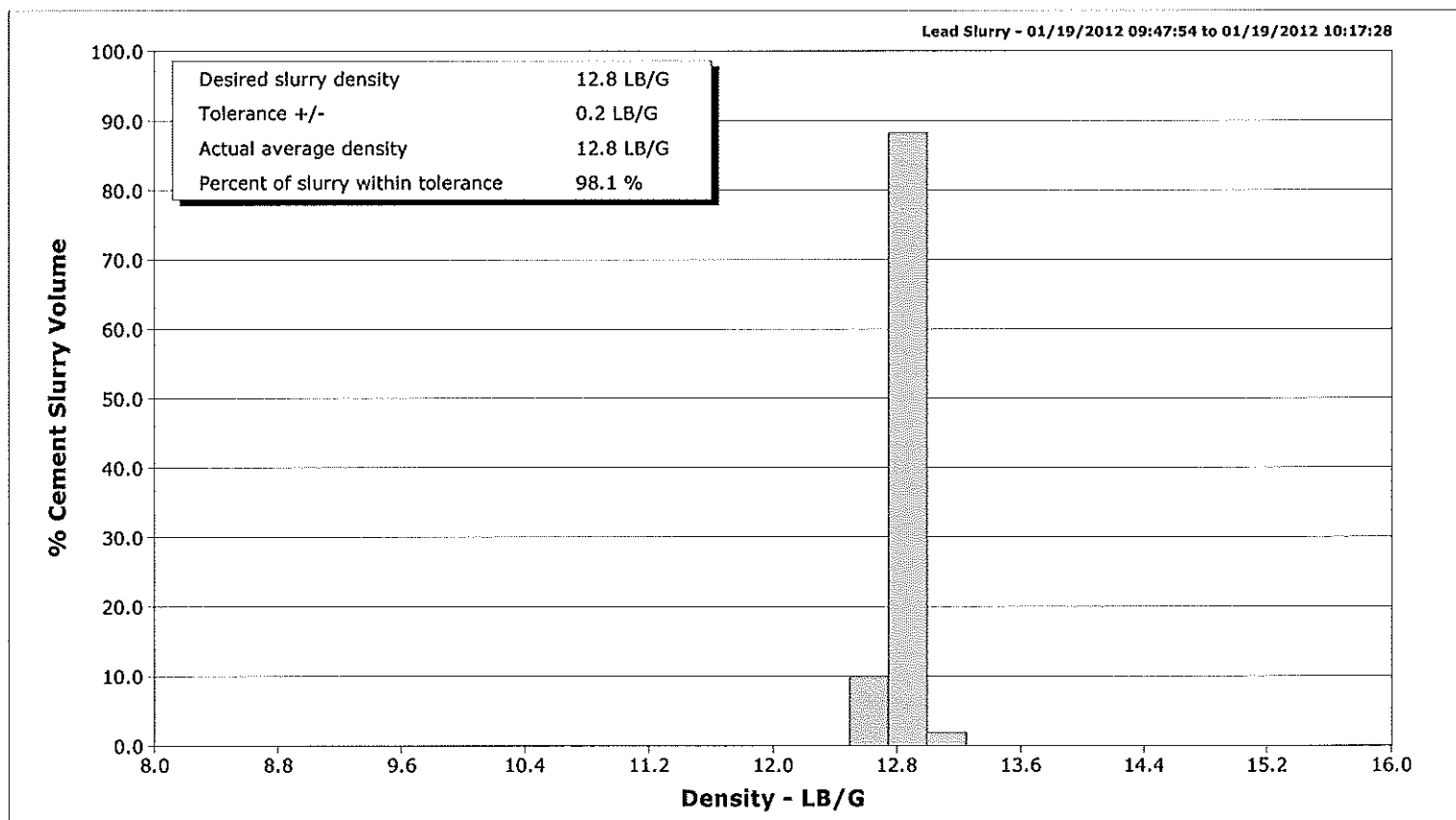


Well Field Engineer Country		RGU 23-25-198 Ryan Gulch Unit Ryan Bowditch United States		Client SIR No. Job Type Job Date		Williams COBA-00103 9 5/8" 2-Stage Surface 01-19-2012			
Time		Pressure		Rate		Density		Messages	
01/19/2012 09:17:46									
09:17:46								Start Job Held Safety Meeting Rig Up Per Standard 2 bbls Water Ahead Verified Flow Rates Pressure Test Lines 500 psi Pressure Test Pressure Test = Good Pressure Test Lines 3000 psi Pressure Test Pressure Test = Good Start Pumping Spacer 40 bbl Water Spacer End Spacer Reset Total, Vol = 46.80 bbl Start Mixing Lead Slurry 268 bbls Tail Cement Cement @ 12.8 ppg Took Dry Sample (008006) Full Returns Took Wet Samples (008046, 007797) Took Wet Sample Mud Scale = 13.0 ppg End Lead Slurry Reset Total, Vol = 276.80 bbl Drop Top Plug Start Displacement 307 bbl Displacement Displace with Water Partial Returns Bump Top Plug End Displacement Final Circulating Pressure = 700 psi Bump Plug to 1200 psi Floats Held 1.5 bbls Bleed Back Drop Opening Bomb Wait 12 Minutes for Bomb Held Safety Meeting Start Pumping Spacer 40 bbls Water Spacer Reset Total, Vol = 363.62 bbl End Spacer Reset Total, Vol = 20.93 bbl Good Returns Start Mixing Tail Slurry 376 bbls Cement Cement @ 12.8 ppg Took Dry Sample (008011) Took Wet Sample Mud Scale = 13.0 ppg Took Dry Sample (008031) Good Returns End Tail Slurry Reset Total, Vol = 384.65 bbl Drop Top Plug Start Displacement Displace with Water 143 bbl Displacement Good Cement to Surface 130 bbls Cement to Surface Bump Top Plug End Displacement Final Circulating Pressure = 500 psi	
09:38:00									
09:58:00									
10:18:00									
10:38:00									
10:58:00									
11:21:37									
15:07:29									
15:27:00									
15:47:00									
16:07:00									
16:27:00									
16:47:00									
16:56:46									
hh:mm:ss		PSI		B/M		LB/G			
01/19/2012 16:56:46									

Well	RGU 23-25-198	Client	Williams
Field	Ryan Gulch Unit	SIR No.	COBA-00103
Engineer	Ryan Bowditch	Job Type	9 5/8" 2-Stage Surface
Country	United States	Job Date	01-19-2012



					Customer Williams		Job Number COBA-00103	
Well RGU 23-25-198			Location (legal)		Schlumberger Location Grand Junction, CO			Job Start Jan/19/2012
Field Ryan Gulch Unit		Formation Name/Type Shale		Deviation 0 deg	Bit Size 14.8 in	Well HD 4012.0 ft	Well TVD ft	
County Rio Blanco		State/Province Colorado		BHP psi	BHST 124 degF	BHCT 100 degF	Pore Press. Gradient lb/gal	
Well Master		API/UWI						
Rig Name Cyclone 29	Drilled For Gas	Service Via Land		Casing/Liner				
				Depth, ft	Size, in	Weight, lb/ft	Grade	
				80.0	20.0	94.0		
				4012.0	9.6	36.0	K55	
Offshore Zone		Well Class New	Well Type Development					
Drilling Fluid Type		Max. Density lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe				
				T/D	Depth, ft	Size, in	Weight, lb/ft	
Service Line Cementing		Job Type 9 5/8" 2-Stage Surface						
Max. Allowed Tub. Press 3000 psi		Max. Allowed Ann. Press 1000 psi	WH Connection Single Cement head	Perforations/Open Hole				
				Top, ft	Bottom, ft	shot/ft	No. of Shots	
				ft	ft		Total Interval ft	
				ft	ft		Diameter in	
				ft	ft			
Service Instructions Cement 9 5/8" 2-Stage Surface with: 40 bbls Water 268 bbls 12.8 ppg Cement (874 sks @ 1.72 cft/sk) 307 bbls Water Displacement 40 bbls Water 376 bbls 12.8 ppg Cement (1226 sks @ 1.72 cft/sk) Displace 142 bbls Water				Treat Down Casing	Displacement 307.0 bbl	Packer Type	Packer Depth ft	
				Tubing Vol. bbl	Casing Vol. 310.0 bbl	Annular Vol. 189.0 bbl	Openhole Vol. 546.0 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 700 psi				Shoe Type Float		Squeeze Type		
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 4012.0 ft		Tool Type		
No. Centralizers		Top Plugs 1	Bottom Plugs	Stage Tool Type DV		Tool Depth ft		
Cement Head Type Single				Stage Tool Depth 1840.0 ft		Tail Pipe Size in		
Job Scheduled For Jan/19/2012		Arrived on Location Jan/19/2012	Leave Location Jan/19/2012	Collar Type Float		Tail Pipe Depth ft		
				Collar Depth 3968.0 ft		Sqz. Total Vol. bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/H	Density LB/G	Volume BBL	Solid Fraction NULL	Message	
01/19/2012	09:17:46	-3	0.0	8.42	0.0	0	Started Acquisition	
01/19/2012	09:17:47	-2	0.0	8.42	0.0	0	Start Job	
01/19/2012	09:17:48	-2	0.0	8.42	0.0	0	Held Safety Meeting	
01/19/2012	09:17:49	-2	0.0	8.42	0.0	0	Rig Up Per Standard	
01/19/2012	09:19:26	-3	0.0	8.42	0.0	0		
01/19/2012	09:21:06	-3	0.0	8.42	0.0	0		
01/19/2012	09:22:46	-6	0.0	8.41	0.0	0		
01/19/2012	09:24:26	118	2.3	8.39	1.7	0		
01/19/2012	09:26:06	1371	0.0	8.41	2.5	0		
01/19/2012	09:26:30	1354	0.0	8.41	2.5	0	Pressure Test Lines	
01/19/2012	09:26:31	1353	0.0	8.41	2.5	0	500 psi Pressure Test	
01/19/2012	09:27:30	4010	0.0	8.41	2.5	0	Pressure Test Lines	
01/19/2012	09:27:46	3996	0.0	8.41	2.5	0		
01/19/2012	09:29:26	5	0.0	8.41	2.5	0		
01/19/2012	09:31:06	143	2.6	8.41	3.0	0		
01/19/2012	09:31:19	94	1.3	8.41	3.5	0	Start Pumping Spacer	
01/19/2012	09:31:20	80	1.3	8.41	3.5	0	40 bbl Water Spacer	
01/19/2012	09:32:46	174	3.5	8.41	7.9	0		
01/19/2012	09:34:26	137	3.5	8.40	13.7	0		
01/19/2012	09:36:06	210	5.0	8.39	20.0	0		
01/19/2012	09:37:46	221	5.0	8.40	28.3	0		

Well			Field		Job Start		Customer		Job Number
RGU 23-25-198			Ryan Gulch Unit		Jan/19/2012		Williams		COBA-00103
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message		
01/19/2012	09:41:06	300	5.1	12.33	44.9	39			
01/19/2012	09:41:26	288	5.1	12.38	46.5	39	End Spacer		
01/19/2012	09:41:28	288	5.1	12.39	46.7	39	Reset Total, Vol = 46.80 bbl		
01/19/2012	09:42:46	287	5.1	12.49	53.3	39			
01/19/2012	09:44:26	236	5.1	12.61	61.8	37			
01/19/2012	09:46:06	302	6.5	12.75	72.2	37			
01/19/2012	09:47:46	292	6.5	12.84	83.1	37			
01/19/2012	09:47:54	298	6.6	12.84	84.0	37	Start Mixing Lead Slurry		
01/19/2012	09:47:55	298	6.6	12.84	84.1	37	268 bbis Tail Cement		
01/19/2012	09:49:26	312	6.6	12.90	94.1	37			
01/19/2012	09:51:06	440	8.0	12.97	106.0	38			
01/19/2012	09:51:17	461	8.0	12.97	107.5	38	Took Dry Sample (008006)		
01/19/2012	09:51:36	456	8.0	12.98	110.0	38	Took Wet Samples (008046, 007797)		
01/19/2012	09:52:46	457	7.9	12.99	119.3	38			
01/19/2012	09:53:40	460	8.0	12.92	126.5	38	Took Wet Sample		
01/19/2012	09:54:26	438	8.0	12.86	132.7	37			
01/19/2012	09:56:06	439	8.0	12.84	145.9	37			
01/19/2012	09:57:46	437	8.0	12.82	159.3	37			
01/19/2012	09:59:26	422	8.0	12.80	172.6	37			
01/19/2012	10:01:06	415	8.0	12.77	186.0	37			
01/19/2012	10:02:46	443	8.0	12.76	199.3	36			
01/19/2012	10:04:26	454	8.0	12.80	212.6	37			
01/19/2012	10:06:06	450	8.0	12.88	226.0	37			
01/19/2012	10:07:46	445	8.0	12.88	239.3	37			
01/19/2012	10:09:26	458	8.0	12.86	252.7	37			
01/19/2012	10:11:06	447	8.0	12.85	266.0	37			
01/19/2012	10:12:46	449	8.0	12.81	279.3	37			
01/19/2012	10:14:26	445	8.0	12.66	292.7	36			
01/19/2012	10:16:06	302	6.5	12.76	303.9	36			
01/19/2012	10:17:28	330	6.6	12.77	312.8	37	End Lead Slurry		
01/19/2012	10:17:46	337	6.5	12.79	314.8	28			
01/19/2012	10:19:26	-1	0.0	12.93	323.6	0			
01/19/2012	10:21:06	9	0.0	12.85	323.6	0			
01/19/2012	10:22:37	12	0.2	12.84	323.6	56	Reset Total, Vol = 276.80 bbl		
01/19/2012	10:22:41	77	1.8	12.89	323.7	56	Drop Top Plug		
01/19/2012	10:22:42	77	2.3	12.97	323.7	56	Start Displacement		
01/19/2012	10:22:46	66	2.7	13.04	323.8	56			
01/19/2012	10:24:26	107	4.3	8.77	329.3	56			
01/19/2012	10:25:37	102	5.0	8.60	335.7	13	307 bbl Displacement		
01/19/2012	10:25:38	102	5.0	8.60	335.8	13	Displace with Water		
01/19/2012	10:26:06	90	5.0	8.57	338.1	13			
01/19/2012	10:27:46	98	5.0	8.44	346.6	11			
01/19/2012	10:29:26	165	6.4	8.42	356.5	5			
01/19/2012	10:31:06	159	6.4	8.42	367.1	4			
01/19/2012	10:32:46	222	6.7	8.12	377.8	5			
01/19/2012	10:34:26	251	7.8	8.39	390.8	6			
01/19/2012	10:36:06	235	7.8	8.41	403.9	6			
01/19/2012	10:37:46	244	7.8	8.40	416.9	5			
01/19/2012	10:39:26	240	7.8	8.42	429.9	10			
01/19/2012	10:39:50	246	7.8	8.42	433.0	10	Partial Returns		
01/19/2012	10:41:06	249	7.8	8.42	442.9	0			
01/19/2012	10:42:46	250	7.8	8.42	455.9	0			
01/19/2012	10:44:26	102	5.0	8.42	464.7	0			
01/19/2012	10:46:06	118	5.0	8.42	473.0	0			

Well			Field		Job Start		Customer		Job Number
RGU 23-25-198			Ryan Gulch Unit		Jan/19/2012		Williams		COBA-00103
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message		
01/19/2012	10:49:26	132	5.0	8.42	489.5	0			
01/19/2012	10:51:06	156	4.9	8.42	497.8	0			
01/19/2012	10:52:46	356	7.8	8.42	508.3	0			
01/19/2012	10:54:26	394	7.7	8.42	521.3	0			
01/19/2012	10:56:06	463	7.8	8.42	534.2	0			
01/19/2012	10:57:46	515	7.7	8.42	547.1	0			
01/19/2012	11:01:06	626	7.7	8.42	572.8	0			
01/19/2012	11:02:46	691	7.7	8.41	585.7	0			
01/19/2012	11:04:26	750	7.7	8.41	598.6	0			
01/19/2012	11:06:06	816	7.7	8.41	611.4	0			
01/19/2012	11:07:46	867	7.7	8.41	624.3	0			
01/19/2012	11:09:26	915	7.7	8.41	637.2	0			
01/19/2012	11:11:06	750	3.9	8.41	644.7	0			
01/19/2012	11:12:46	1158	0.0	8.41	648.0	0			
01/19/2012	11:12:56	1116	0.0	8.41	648.0	0	Bump Top Plug		
01/19/2012	11:12:57	1100	0.0	8.41	648.0	0	End Displacement		
01/19/2012	11:13:46	-7	0.0	8.41	648.0	0	Final Circulating Pressure = 700 psi		
01/19/2012	11:13:48	-6	0.0	8.41	648.0	0	Floats Held		
01/19/2012	11:14:26	-5	0.0	8.41	648.0	0			
01/19/2012	11:16:06	-4	0.0	8.41	648.0	0			
01/19/2012	11:17:46	-2	0.0	8.42	648.0	0			
01/19/2012	11:19:26	-4	0.1	8.42	648.1	0			
01/19/2012	11:20:55	-3	0.1	8.42	648.2	0	Drop Opening Bomb		
01/19/2012	11:20:56	-3	0.1	8.42	648.2	0	Wait 12 Minutes for Bomb		
01/19/2012	11:21:06	-3	0.1	8.42	648.2	0			
01/19/2012	11:22:46	-3	0.1	8.42	648.3	0			
01/19/2012	11:24:26	-3	0.1	8.42	648.4	0			
01/19/2012	11:26:06	-2	0.1	8.42	648.5	0			
01/19/2012	11:27:46	68	1.6	8.42	648.6	0			
01/19/2012	11:29:26	278	6.3	8.40	655.6	0			
01/19/2012	11:31:06	295	6.4	8.39	666.2	0			
01/19/2012	11:32:46	151	0.0	8.05	670.1	0			
01/19/2012	11:32:54	151	0.0	8.12	670.1	0	Remark		
01/19/2012	15:17:46	1	0.0	8.39	17.2	0			
01/19/2012	15:19:26	-2	0.0	8.39	17.2	0			
01/19/2012	15:21:06	42	1.9	8.38	1.7	0			
01/19/2012	15:21:44	81	2.9	8.37	2.6	0	Held Safety Meeting		
01/19/2012	15:22:05	82	3.5	8.37	3.8	0	Start Pumping Spacer		
01/19/2012	15:22:06	81	3.5	8.37	3.9	0	40 bbls Water Spacer		
01/19/2012	15:22:46	138	5.0	8.34	6.8	0			
01/19/2012	15:24:26	133	5.0	8.38	15.1	0			
01/19/2012	15:24:50	132	5.0	8.34	17.1	0	Reset Total, Vol = 363.62 bbl		
01/19/2012	15:26:06	142	5.0	8.30	23.4	0			
01/19/2012	15:27:46	150	4.9	8.42	31.6	0			
01/19/2012	15:29:03	241	4.5	12.20	37.8	42	End Spacer		
01/19/2012	15:29:05	141	4.4	12.32	38.0	42	Reset Total, Vol = 20.93 bbl		
01/19/2012	15:29:26	107	4.4	12.48	39.5	42			
01/19/2012	15:31:06	513	8.1	12.65	49.3	42			
01/19/2012	15:31:10	446	8.2	12.67	49.8	42	Good Returns		
01/19/2012	15:31:30	237	4.7	12.72	51.9	41	Start Mixing Tail Slurry		
01/19/2012	15:31:32	303	5.0	12.73	52.0	41	376 bbls Cement		
01/19/2012	15:32:46	407	9.1	12.77	60.2	39			
01/19/2012	15:34:26	302	6.5	12.84	71.8	38			
01/19/2012	15:34:57	348	6.5	12.90	75.2	37	Took Dry Sample (008011)		

Well			Field		Job Start		Customer	Job Number
RGU 23-25-198			Ryan Gulch Unit		Jan/19/2012		Williams	C08A-00103
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/H	Density LB/G	Volume BBL	Solid Fraction NULL	Message	
01/19/2012	15:37:46	332	6.5	12.87	93.6	37		
01/19/2012	15:39:26	361	6.5	12.86	104.5	37		
01/19/2012	15:40:22	487	7.0	12.94	110.5	37	Took Wet Sample	
01/19/2012	15:41:06	480	8.0	12.95	116.3	37		
01/19/2012	15:42:46	487	8.0	12.84	129.6	36		
01/19/2012	15:44:26	479	8.0	12.87	142.9	36		
01/19/2012	15:46:06	467	8.0	12.91	156.2	37		
01/19/2012	15:47:46	463	8.0	12.85	169.6	37		
01/19/2012	15:49:26	455	8.0	12.83	182.9	36		
01/19/2012	15:50:02	475	8.0	12.82	187.7	36	Took Dry Sample (008031)	
01/19/2012	15:51:06	470	8.0	12.81	196.2	36		
01/19/2012	15:52:46	472	8.0	12.80	209.5	36		
01/19/2012	15:54:09	469	8.0	12.81	220.6	36	Good Returns	
01/19/2012	15:54:26	464	8.0	12.81	222.8	36		
01/19/2012	15:56:06	471	8.0	12.79	236.2	36		
01/19/2012	15:57:46	469	8.0	12.79	249.5	36		
01/19/2012	15:59:26	463	8.0	12.80	262.8	36		
01/19/2012	16:01:06	453	8.0	12.80	276.1	36		
01/19/2012	16:02:46	469	8.0	12.81	289.5	36		
01/19/2012	16:04:26	476	8.0	12.80	302.8	36		
01/19/2012	16:06:06	468	8.0	12.80	316.1	36		
01/19/2012	16:07:46	459	8.0	12.79	329.4	36		
01/19/2012	16:09:26	441	8.0	12.80	342.7	36		
01/19/2012	16:11:06	422	8.0	12.81	356.1	36		
01/19/2012	16:12:46	441	8.0	12.80	369.4	36		
01/19/2012	16:14:26	314	6.5	12.77	381.4	36		
01/19/2012	16:16:06	549	7.4	12.95	393.5	36		
01/19/2012	16:17:46	306	6.5	12.89	405.3	37		
01/19/2012	16:19:26	212	5.1	12.93	414.4	31		
01/19/2012	16:20:10	153	4.9	12.87	418.0	38	End Tail Slurry	
01/19/2012	16:21:06	28	2.9	12.88	422.5	49		
01/19/2012	16:22:46	18	0.0	12.82	422.7	0		
01/19/2012	16:24:26	19	0.0	12.82	422.7	0		
01/19/2012	16:25:58	15	0.0	12.84	422.7	0	Reset Total, Vol = 384.65 bbl	
01/19/2012	16:25:59	15	0.0	12.84	422.7	52	Drop Top Plug	
01/19/2012	16:26:00	15	0.0	12.84	422.7	52	Start Displacement	
01/19/2012	16:26:02	15	0.0	12.84	422.7	52	Displace with Water	
01/19/2012	16:26:06	15	0.0	12.84	422.7	52		
01/19/2012	16:27:46	162	5.0	8.89	427.3	47		
01/19/2012	16:29:26	262	6.4	8.57	437.2	5		
01/19/2012	16:31:06	290	6.4	8.46	447.9	4		
01/19/2012	16:32:46	314	6.3	8.44	458.5	6		
01/19/2012	16:34:26	352	6.3	8.44	469.3	11		
01/19/2012	16:36:06	343	6.4	8.29	479.8	5		
01/19/2012	16:37:46	408	6.4	8.43	490.5	8		
01/19/2012	16:39:26	440	6.3	8.44	501.0	1		
01/19/2012	16:39:28	429	6.3	8.44	501.3	0	Good Cement to Surface	
01/19/2012	16:41:06	483	6.3	8.44	511.6	15		
01/19/2012	16:42:46	476	6.3	8.44	522.1	0		
01/19/2012	16:44:26	518	6.3	8.44	532.6	0		
01/19/2012	16:46:06	551	6.3	8.44	543.2	0		
01/19/2012	16:47:46	566	6.3	8.44	553.7	0		
01/19/2012	16:49:26	496	3.9	8.44	560.7	0		
01/19/2012	16:51:06	458	2.5	8.44	566.2	0		

Well			Field		Job Start	Customer		Job Number
RGU 23-25-198			Ryan Gulch Unit		Jan/19/2012	Williams		COBA-00103
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message	
01/19/2012	16:54:17	1681	0.0	8.44	573.3	0	Bump Top Plug	
01/19/2012	16:54:18	1680	0.0	8.44	573.3	0	End Displacement	
01/19/2012	16:54:19	1692	0.0	8.44	573.3	0	Final Circulating Pressure = 500 psi	
01/19/2012	16:54:26	1690	0.0	8.44	573.3	0		
01/19/2012	16:56:05	2	0.0	8.44	573.3	0	Floats Held	
01/19/2012	16:56:06	2	0.0	8.44	573.3	0		
01/19/2012	16:56:08	3	0.0	8.44	573.3	0	Good Returns During Displacement	

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl					
Slurry 6.1	N2	Hud	Maximum Rate 8.0		Total Slurry 644.0	Hud 0.0	Spacer 80.6	N2		
Treating Pressure Summary, psi					Breakdown Fluid					
Maximum 4072	Final 3	Average 376	Bump Plug to 1200	Breakdown	Type	Volume bbl	Density lb/gal			
Avg. N2 Percent %	Designed Slurry Volume 644.0 bbl		Displacement 450.0 bbl	Mix Water Temp 65 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 130.0 bbl				
						Washed Thru Perfs <input type="checkbox"/>	To ft			
Customer or Authorized Representative Andrew Bunk			Schlumberger Supervisor Ryan Bowditch			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>			
						-	-			