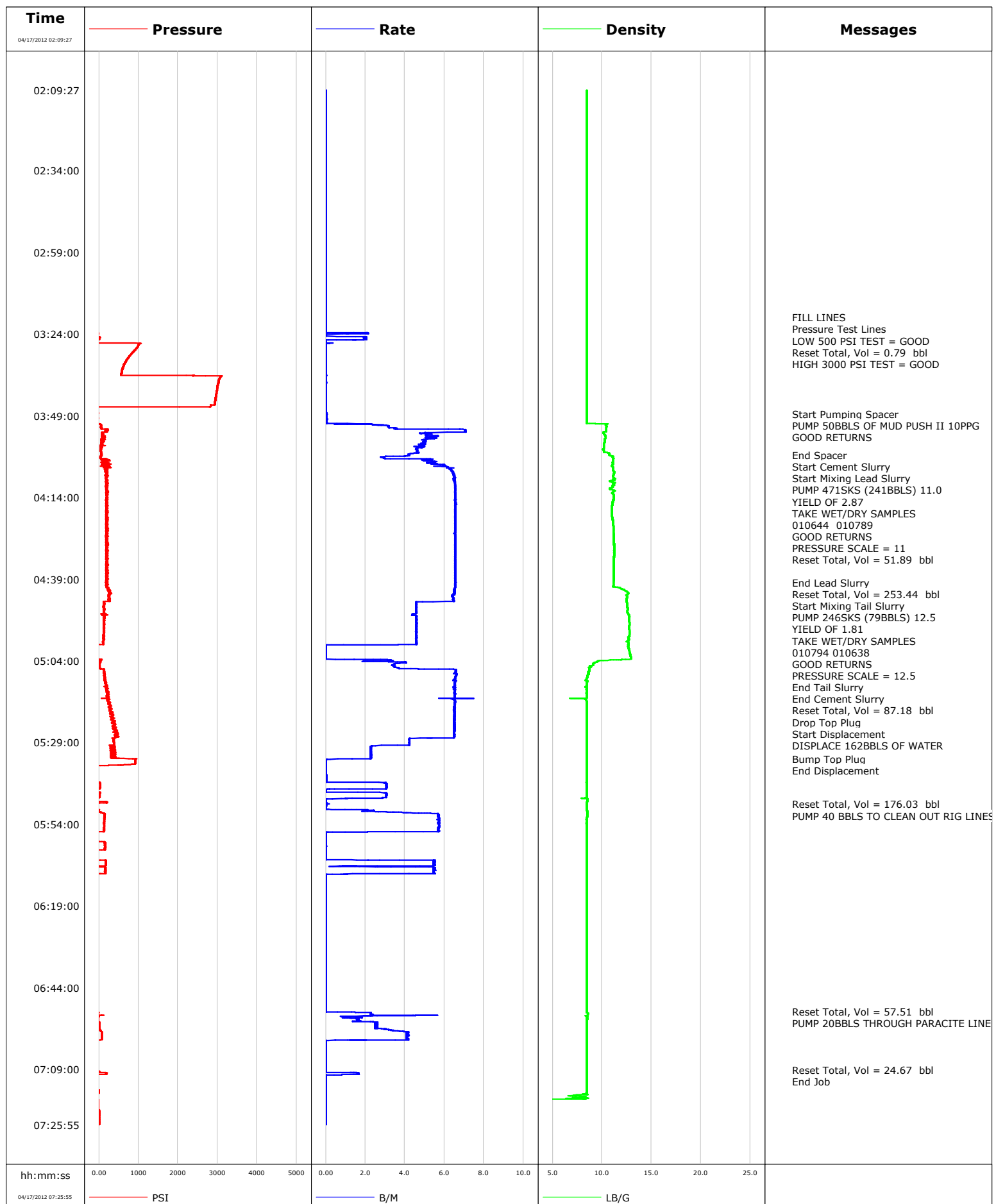


Well	8509F-21	Client	ENCANA
Field	STORY GULCH	SIR No.	
Engineer	DANT RYAN	Job Type	9 5/8 SURFACE CASSING
Country	United States	Job Date	04-16-2012

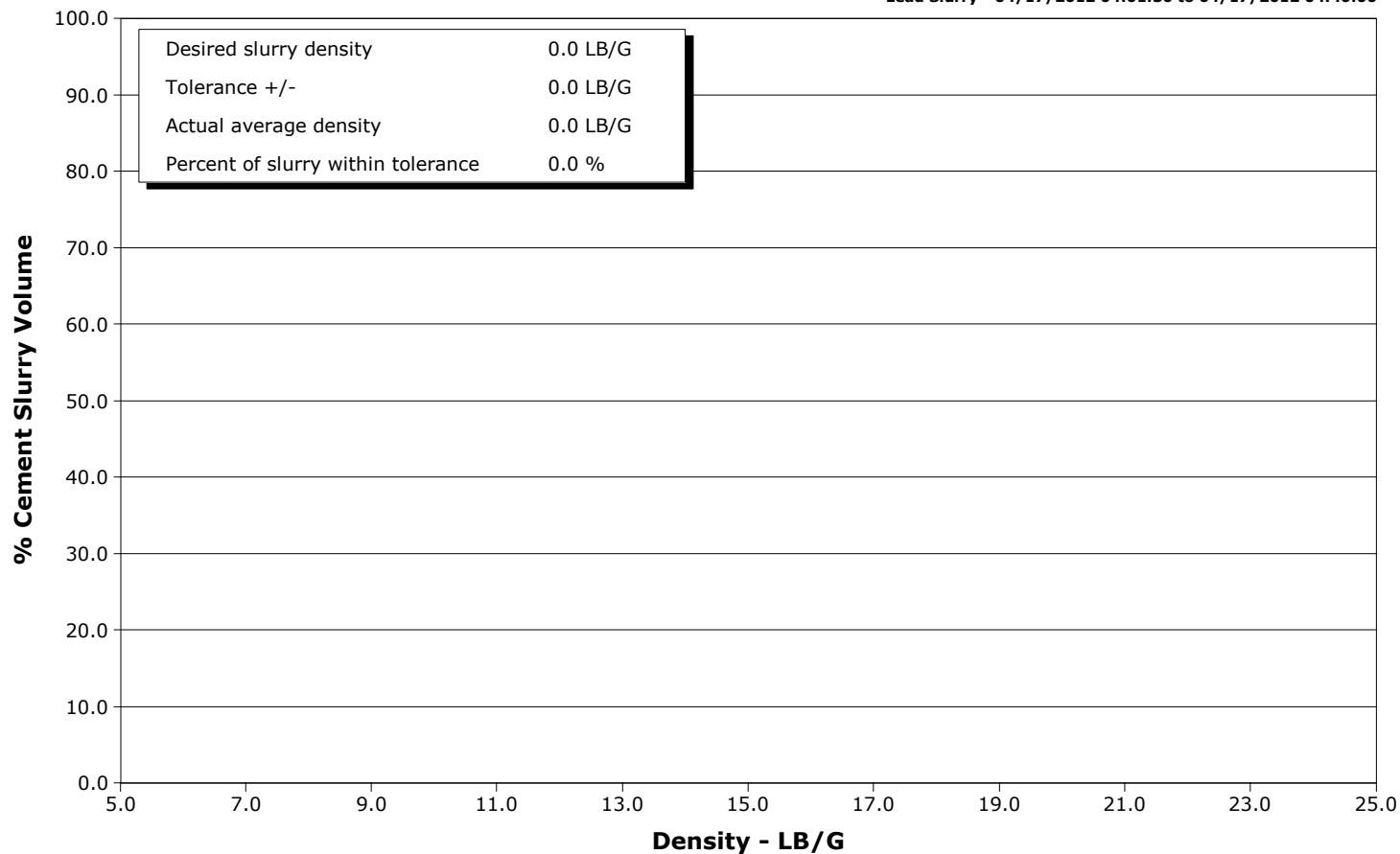


SchlumbergerCementing Qa/Qc Density Report

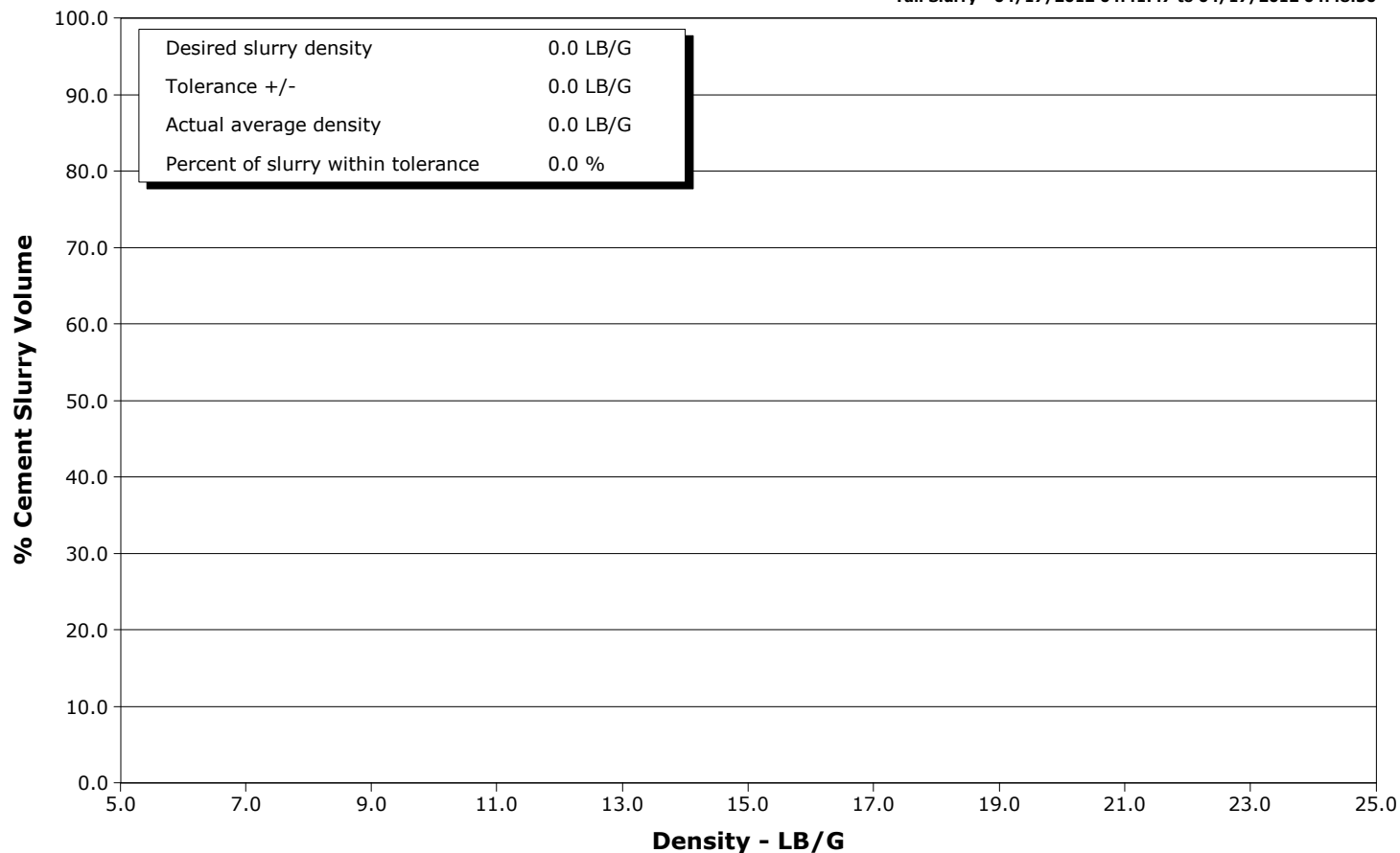
Well 8509F-21
Field STORY GULCH
Engineer DANT RYAN
Country United States

Client ENCANA
SIR No.
Job Type 9 5/8 SURFACE CASSING
Job Date 04-16-2012

Lead Slurry - 04/17/2012 04:01:30 to 04/17/2012 04:40:00



Tail Slurry - 04/17/2012 04:41:47 to 04/17/2012 04:48:30





Cementing Service Report

				Customer ENCANA		Job Number 733389					
Well 8509F-21 8509F-21			Location (legal) N22		Schlumberger Location		Job Start Apr/18/2012				
Field STORY GULCH		Formation Name/Type Shale		Deviation	Bit Size 14.8 in	Well MD 2139.0 ft		Well TVD 2139.0 ft			
County GARFIELD		State/Province Colorado		BHP	BHST 110 degF	BHCT 91 degF	Pore Press. Gradient				
Well Master 0631310460		API/UWI									
Rig Name Patterson 306		Drilled For Gas	Service Via Land	Casing/Liner							
				Depth, ft	Size, in	Weight, lb/ft	Grade	Thread			
Offshore Zone		Well Class New	Well Type Development	120.0	16.000	65.0	N/A	N/A			
				2138.0	9.630	36.0	K55	8RD			
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe							
				Depth,	Size,	Weight,	Grade	Thread			
Service Line Cementing		Job Type 9 5/8 SURFACE CASSING									
Max. Allowed Tub. Press		Max. Allowed Ann. Press	WH Connection Single Cement head	Perforations/Open Hole							
				Top,	Bottom,		No. of Shots	Total Interval			
Service Instructions Cement 9 5/8 Surface Casing Pump 50bbbs of MudPUSH II @ 10ppg Pump 471sks (241bbbs) 11.0 Lite FILL Pump 246sks (79bbbs) 12.5 Lite FILL Displace 162bbbs of Water								Diameter			
				Treat Down Casing		Displacement 162.0 bbl		Packer Type		Packer Depth	
				Tubing Vol.		Casing Vol. 165.0 bbl		Annular Vol. 261.0 bbl		Openhole Vol. 456.0 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 1058 psi				Shoe Type Float			Squeeze Type				
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 2139.0 ft			Tool Type				
No. Centralizers		Top Plugs 1	Bottom Plugs	Stage Tool Type			Tool Depth				
Cement Head Type Single				Stage Tool Depth			Tail Pipe Size				
Job Scheduled For Apr/17/2012 00:01		Arrived on Location Apr/17/2012 00:00	Leave Location Apr/17/2012 09:00	Collar Type Float			Tail Pipe Depth				
				Collar Depth 2095.0 ft			Sqz. Total Vol.				
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
04/16/2012	22:07:06					Started Acquisition					
04/17/2012	02:09:26					Start Job					
04/17/2012	02:09:26					RIG UP PER STD 5					
04/17/2012	02:09:26					VARRIFY RATES					
04/17/2012	02:09:26					TAKE WATER SAMPLES					
04/17/2012	02:09:26					011269 011498					
04/17/2012	02:09:26					HOLD SAFETY MEETING					
04/17/2012	02:09:27	-51	0.0	8.47	0.0						
04/17/2012	02:10:26	-52	0.0	8.47	0.0						
04/17/2012	02:12:06	-51	0.0	8.47	0.0						
04/17/2012	02:13:46	-51	0.0	8.47	0.0						
04/17/2012	02:15:26	-51	0.0	8.47	0.0						
04/17/2012	02:17:06	-51	0.0	8.47	0.0						
04/17/2012	02:18:46	-51	0.0	8.47	0.0						
04/17/2012	02:20:26	-51	0.0	8.47	0.0						
04/17/2012	02:22:06	-50	0.0	8.47	0.0						
04/17/2012	02:23:46	-50	0.0	8.47	0.0						
04/17/2012	02:25:26	-50	0.0	8.47	0.0						
04/17/2012	02:27:06	-50	0.0	8.47	0.0						
04/17/2012	02:28:46	-50	0.0	8.47	0.0						
04/17/2012	02:30:26	-50	0.0	8.47	0.0						

Well			Field		Job Start	Customer	Job Number
8509F-21 8509F-21			STORY GULCH		Apr/18/2012	ENCANA	733389
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
04/17/2012	02:33:46	-51	0.0	8.47	0.0		
04/17/2012	02:35:26	-51	0.0	8.47	0.0		
04/17/2012	02:37:06	-51	0.0	8.47	0.0		
04/17/2012	02:38:46	-51	0.0	8.47	0.0		
04/17/2012	02:40:26	-51	0.0	8.47	0.0		
04/17/2012	02:42:06	-51	0.0	8.47	0.0		
04/17/2012	02:43:46	-51	0.0	8.47	0.0		
04/17/2012	02:45:26	-51	0.0	8.47	0.0		
04/17/2012	02:47:06	-50	0.0	8.47	0.0		
04/17/2012	02:48:46	-51	0.0	8.47	0.0		
04/17/2012	02:50:26	-51	0.0	8.47	0.0		
04/17/2012	02:52:06	-50	0.0	8.47	0.0		
04/17/2012	02:53:46	-50	0.0	8.47	0.0		
04/17/2012	02:55:26	-50	0.0	8.47	0.0		
04/17/2012	02:57:06	-50	0.0	8.47	0.0		
04/17/2012	02:58:46	-50	0.0	8.47	0.0		
04/17/2012	03:00:26	-49	0.0	8.47	0.0		
04/17/2012	03:02:06	-49	0.0	8.47	0.0		
04/17/2012	03:03:46	-49	0.0	8.47	0.0		
04/17/2012	03:05:26	-49	0.0	8.47	0.0		
04/17/2012	03:07:06	-50	0.0	8.47	0.0		
04/17/2012	03:08:46	-50	0.0	8.47	0.0		
04/17/2012	03:10:26	-51	0.0	8.47	0.0		
04/17/2012	03:12:06	-51	0.0	8.47	0.0		
04/17/2012	03:13:46	-49	0.0	8.47	0.0		
04/17/2012	03:15:26	-49	0.0	8.47	0.0		
04/17/2012	03:17:06	-50	0.0	8.47	0.0		
04/17/2012	03:18:46	-50	0.0	8.47	0.0		
04/17/2012	03:19:00					FILL LINES	
04/17/2012	03:19:00	-50	0.0	8.47	0.0		
04/17/2012	03:20:00					Pressure Test Lines	
04/17/2012	03:20:00	-50	0.0	8.47	0.0		
04/17/2012	03:20:02					LOW 500 PSI TEST = GOOD	
04/17/2012	03:20:02	-49	0.0	8.47	0.0		
04/17/2012	03:20:26	-51	0.0	8.47	0.0		
04/17/2012	03:22:06	-53	0.0	8.47	0.0		
04/17/2012	03:23:46	-27	2.0	8.47	0.2		
04/17/2012	03:24:42					Reset Total, Vol = 0.79 bbl	
04/17/2012	03:24:42	-44	0.0	8.47	0.8		
04/17/2012	03:25:26	-3	2.0	8.47	2.0		
04/17/2012	03:27:06	1015	0.0	8.47	3.0		
04/17/2012	03:28:46	925	0.0	8.47	3.0		
04/17/2012	03:29:00					HIGH 3000 PSI TEST = GOOD	
04/17/2012	03:29:00	906	0.0	8.47	3.0		
04/17/2012	03:30:26	799	0.0	8.47	3.0		
04/17/2012	03:32:06	695	0.0	8.47	3.0		
04/17/2012	03:33:46	621	0.0	8.47	3.0		
04/17/2012	03:35:26	577	0.0	8.47	3.0		
04/17/2012	03:37:06	3078	0.0	8.47	3.0		
04/17/2012	03:38:46	3022	0.0	8.47	3.0		
04/17/2012	03:40:26	2993	0.0	8.47	3.0		
04/17/2012	03:42:06	2969	0.0	8.47	3.1		
04/17/2012	03:43:46	2949	0.0	8.47	3.1		
04/17/2012	03:45:26	2934	0.0	8.47	3.1		

Well			Field		Job Start		Customer	Job Number
8509F-21 8509F-21			STORY GULCH		Apr/18/2012		ENCANA	733389
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
04/17/2012	03:48:30					Start Pumping Spacer		
04/17/2012	03:48:30	-25	0.0	8.47	3.2			
04/17/2012	03:48:46	-30	0.0	8.47	3.2			
04/17/2012	03:49:00					PUMP 50BBLS OF MUD PUSH II 10PPG		
04/17/2012	03:49:00					GOOD RETURNS		
04/17/2012	03:49:00	-31	0.0	8.47	3.2			
04/17/2012	03:50:26	-26	0.0	8.47	0.0			
04/17/2012	03:52:06	51	3.1	10.41	1.4			
04/17/2012	03:53:46	208	7.1	10.43	9.1			
04/17/2012	03:55:26	66	5.6	10.35	18.4			
04/17/2012	03:57:06	99	4.9	10.27	27.0			
04/17/2012	03:58:46	94	4.8	10.15	35.1			
04/17/2012	04:00:26	58	4.6	10.66	42.8			
04/17/2012	04:01:00					End Spacer		
04/17/2012	04:01:00	62	4.2	10.70	45.2			
04/17/2012	04:01:30					Start Cement Slurry		
04/17/2012	04:01:30					Start Mixing Lead Slurry		
04/17/2012	04:01:30					PUMP 471SKS (241BBLS) 11.0		
04/17/2012	04:01:30					YIELD OF 2.87		
04/17/2012	04:01:30					TAKE WET/DRY SAMPLES		
04/17/2012	04:01:30					010644 010789		
04/17/2012	04:01:30					GOOD RETURNS		
04/17/2012	04:01:30	43	3.4	11.07	47.3			
04/17/2012	04:02:00					PRESSURE SCALE = 11		
04/17/2012	04:02:00	39	2.9	11.13	48.8			
04/17/2012	04:02:06	37	3.0	11.13	49.1			
04/17/2012	04:02:41					Reset Total, Vol = 51.89 bbl		
04/17/2012	04:02:41	108	5.1	11.11	51.8			
04/17/2012	04:03:46	160	5.4	11.11	57.6			
04/17/2012	04:05:26	221	6.3	11.12	67.6			
04/17/2012	04:07:06	203	6.5	11.18	78.3			
04/17/2012	04:08:46	200	6.5	11.25	89.1			
04/17/2012	04:10:26	192	6.5	11.05	100.0			
04/17/2012	04:12:06	203	6.5	11.28	110.9			
04/17/2012	04:13:46	201	6.6	11.21	121.8			
04/17/2012	04:15:26	189	6.5	11.08	132.7			
04/17/2012	04:17:06	186	6.5	11.02	143.6			
04/17/2012	04:18:46	198	6.5	11.01	154.5			
04/17/2012	04:20:26	185	6.5	11.05	165.5			
04/17/2012	04:22:06	188	6.5	11.11	176.4			
04/17/2012	04:23:46	187	6.6	11.16	187.3			
04/17/2012	04:25:26	192	6.6	11.18	198.2			
04/17/2012	04:27:06	196	6.5	11.21	209.1			
04/17/2012	04:28:46	198	6.6	11.23	220.0			
04/17/2012	04:30:26	207	6.5	11.24	230.9			
04/17/2012	04:32:06	202	6.5	11.22	241.8			
04/17/2012	04:33:46	184	6.5	11.20	252.8			
04/17/2012	04:35:26	220	6.5	11.19	263.7			
04/17/2012	04:37:06	224	6.5	11.21	274.6			
04/17/2012	04:38:46	204	6.5	11.21	285.5			
04/17/2012	04:40:00					End Lead Slurry		
04/17/2012	04:40:00	183	6.6	11.14	293.6			
04/17/2012	04:40:26	194	6.6	11.14	296.4			
04/17/2012	04:41:47					Reset Total, Vol = 253.44 bbl		

Well			Field		Job Start	Customer	Job Number
8509F-21 8509F-21			STORY GULCH		Apr/18/2012	ENCANA	733389
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
04/17/2012	04:41:47					PUMP 246SKS (79BBLS) 12.5	
04/17/2012	04:41:47					YIELD OF 1.81	
04/17/2012	04:41:47					TAKE WET/DRY SAMPLES	
04/17/2012	04:41:47					010794 010638	
04/17/2012	04:41:47					GOOD RETURNS	
04/17/2012	04:41:47	215	6.5	11.83	305.2		
04/17/2012	04:42:06	226	6.5	12.09	307.3		
04/17/2012	04:43:46	279	6.5	12.57	318.1		
04/17/2012	04:45:00					PRESSURE SCALE = 12.5	
04/17/2012	04:45:00	248	6.5	12.50	326.0		
04/17/2012	04:45:26	235	6.5	12.49	328.8		
04/17/2012	04:47:06	115	4.6	12.55	337.4		
04/17/2012	04:48:30					End Tail Slurry	
04/17/2012	04:48:30	137	4.6	12.59	343.8		
04/17/2012	04:48:46	124	4.6	12.56	345.0		
04/17/2012	04:50:26	133	4.6	12.74	352.5		
04/17/2012	04:52:06	126	4.6	12.74	360.2		
04/17/2012	04:53:46	118	4.6	12.73	367.8		
04/17/2012	04:55:26	124	4.6	12.76	375.5		
04/17/2012	04:57:06	108	4.6	12.67	383.1		
04/17/2012	04:58:00					End Cement Slurry	
04/17/2012	04:58:00	110	4.6	12.65	387.2		
04/17/2012	04:58:46	109	4.6	12.66	390.7		
04/17/2012	05:00:26	-45	0.0	12.71	392.4		
04/17/2012	05:02:06	-38	0.0	12.85	392.4		
04/17/2012	05:03:37					Reset Total, Vol = 87.18 bbl	
04/17/2012	05:03:37					Drop Top Plug	
04/17/2012	05:03:37					Start Displacement	
04/17/2012	05:03:37	62	1.4	12.09	392.5		
04/17/2012	05:03:46	62	3.3	11.71	392.9		
04/17/2012	05:05:26	18	3.4	9.08	398.6		
04/17/2012	05:07:06	136	6.6	8.70	406.2		
04/17/2012	05:08:46	143	6.6	8.51	417.2		
04/17/2012	05:10:00					DISPLACE 162BBLS OF WATER	
04/17/2012	05:10:00	151	6.4	8.31	425.2		
04/17/2012	05:10:26	186	6.5	8.49	428.1		
04/17/2012	05:12:06	201	6.5	8.38	438.9		
04/17/2012	05:13:46	199	6.5	8.46	449.8		
04/17/2012	05:15:26	229	6.5	8.46	460.6		
04/17/2012	05:17:06	270	6.5	8.46	471.5		
04/17/2012	05:18:46	302	6.5	8.46	482.4		
04/17/2012	05:20:26	351	6.5	8.46	493.2		
04/17/2012	05:22:06	304	6.5	8.46	504.0		
04/17/2012	05:23:46	359	6.5	8.46	514.8		
04/17/2012	05:25:26	411	6.5	8.46	525.7		
04/17/2012	05:27:06	446	6.5	8.46	536.5		
04/17/2012	05:28:46	379	4.2	8.46	544.8		
04/17/2012	05:30:26	296	2.3	8.46	550.9		
04/17/2012	05:32:06	335	2.3	8.46	554.7		
04/17/2012	05:33:46	338	2.3	8.46	558.5		
04/17/2012	05:34:00					Bump Top Plug	
04/17/2012	05:34:00					End Displacement	
04/17/2012	05:34:00	853	2.3	8.46	559.0		
04/17/2012	05:35:26	911	0.0	8.47	559.2		

Well			Field		Job Start	Customer		Job Number
8509F-21 8509F-21			STORY GULCH		Apr/18/2012	ENCANA		733389
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
04/17/2012	05:38:46	-42	0.0	8.46	559.3			
04/17/2012	05:40:26	-26	0.0	8.46	559.3			
04/17/2012	05:42:06	25	3.1	8.46	562.1			
04/17/2012	05:43:46	-36	0.0	8.46	565.6			
04/17/2012	05:45:26	16	3.1	8.46	569.0			
04/17/2012	05:47:06	112	0.0	8.49	571.1			
04/17/2012	05:47:48					Reset Total, Vol = 176.03 bbl		
04/17/2012	05:47:48	-35	0.0	8.46	571.1			
04/17/2012	05:48:46	-49	0.0	8.46	571.1			
04/17/2012	05:50:00					PUMP 40 BBLs TO CLEAN OUT RIG LINES		
04/17/2012	05:50:00	-12	1.9	8.51	572.0			
04/17/2012	05:50:26	54	3.9	8.53	573.3			
04/17/2012	05:52:06	133	5.7	8.46	582.5			
04/17/2012	05:53:46	132	5.7	8.47	592.0			
04/17/2012	05:55:26	131	5.7	8.46	601.5			
04/17/2012	05:57:06	-46	0.0	8.47	606.7			
04/17/2012	05:58:46	-51	0.0	8.47	606.7			
04/17/2012	06:00:26	150	0.0	8.47	606.7			
04/17/2012	06:02:06	-43	0.0	8.46	606.7			
04/17/2012	06:03:46	-47	0.0	8.47	606.7			
04/17/2012	06:05:26	174	5.4	8.46	609.2			
04/17/2012	06:07:06	89	4.0	8.46	617.0			
04/17/2012	06:08:46	165	5.4	8.46	626.1			
04/17/2012	06:10:26	-48	0.0	8.47	628.6			
04/17/2012	06:12:06	-49	0.0	8.47	628.6			
04/17/2012	06:13:46	-49	0.0	8.47	628.6			
04/17/2012	06:15:26	-49	0.0	8.47	628.6			
04/17/2012	06:17:06	-48	0.0	8.47	628.6			
04/17/2012	06:18:46	-48	0.0	8.47	628.6			
04/17/2012	06:20:26	-47	0.0	8.47	628.6			
04/17/2012	06:22:06	-48	0.0	8.47	628.6			
04/17/2012	06:23:46	-48	0.0	8.47	628.6			
04/17/2012	06:25:26	-48	0.0	8.47	628.6			
04/17/2012	06:27:06	-49	0.0	8.47	628.6			
04/17/2012	06:28:46	-49	0.0	8.47	628.6			
04/17/2012	06:30:26	-49	0.0	8.47	628.6			
04/17/2012	06:32:06	-49	0.0	8.47	628.6			
04/17/2012	06:33:46	-49	0.0	8.47	628.6			
04/17/2012	06:35:26	-49	0.0	8.47	628.6			
04/17/2012	06:37:06	-49	0.0	8.47	628.6			
04/17/2012	06:38:46	-50	0.0	8.47	628.6			
04/17/2012	06:40:26	-50	0.0	8.47	628.6			
04/17/2012	06:42:06	-49	0.0	8.47	628.6			
04/17/2012	06:43:46	-49	0.0	8.47	628.6			
04/17/2012	06:45:26	-49	0.0	8.47	628.6			
04/17/2012	06:47:06	-50	0.0	8.47	628.6			
04/17/2012	06:48:46	-50	0.0	8.47	628.6			
04/17/2012	06:50:26	-50	0.0	8.47	628.6			
04/17/2012	06:51:20					Reset Total, Vol = 57.51 bbl		
04/17/2012	06:51:20	-50	0.0	8.47	628.6			
04/17/2012	06:52:00					PUMP 20BBLs THROUGH PARACITE LINE		
04/17/2012	06:52:00	-18	2.3	8.58	629.7			
04/17/2012	06:52:06	-14	2.3	8.56	630.0			
04/17/2012	06:53:46	-22	1.6	8.48	633.1			

Well			Field		Job Start	Customer	Job Number
8509F-21 8509F-21			STORY GULCH		Apr/18/2012	ENCANA	733389
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
04/17/2012	06:57:06	37	3.3	8.47	641.4		
04/17/2012	06:58:46	63	4.1	8.47	648.1		
04/17/2012	07:00:26	-48	0.0	8.47	653.3		
04/17/2012	07:02:06	-48	0.0	8.47	653.3		
04/17/2012	07:03:46	-49	0.0	8.47	653.3		
04/17/2012	07:05:26	-47	0.0	8.47	653.3		
04/17/2012	07:07:06	-47	0.0	8.47	653.3		
04/17/2012	07:08:46	-47	0.0	8.47	653.3		
04/17/2012	07:09:09					Reset Total, Vol = 24.67 bbl	
04/17/2012	07:09:09	-47	0.0	8.47	653.3		
04/17/2012	07:10:00					End Job	
04/17/2012	07:10:00	15	1.4	8.47	653.3		
04/17/2012	07:10:26	193	1.6	8.47	654.0		
04/17/2012	07:12:06	-56	0.0	8.47	654.4		
04/17/2012	07:13:46	-42	0.0	8.47	654.4		
04/17/2012	07:15:26	-8	0.0	8.47	654.4		
04/17/2012	07:17:06	-50	0.0	6.74	654.4		
04/17/2012	07:18:46	-23	0.0	-0.00	654.4		
04/17/2012	07:20:26	-23	0.0	-0.00	654.4		
04/17/2012	07:22:06	-1	0.0	-0.00	654.4		
04/17/2012	07:23:46	3	0.0	0.00	654.4		

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl				
Slurry 4.0	N2	Mud 0.0	Maximum Rate 6.5		Total Slurry 320.0	Mud 0.0	Spacer 50.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid				
Maximum 911	Final 911	Average 300	Bump Plug to 900	Breakdown	Type		Volume		Density
Avg. N2 Percent		Designed Slurry Volume 320.0 bbl		Displacement 162.0 bbl	Mix Water Temp 60 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume 100.0 bbl	
						Washed Thru Perfs <input type="checkbox"/>		To	
Customer or Authorized Representative				Schlumberger Supervisor			Circulation Lost <input type="checkbox"/>		Job Completed <input checked="" type="checkbox"/>
RICK DURAN				DANT RYAN			-		-