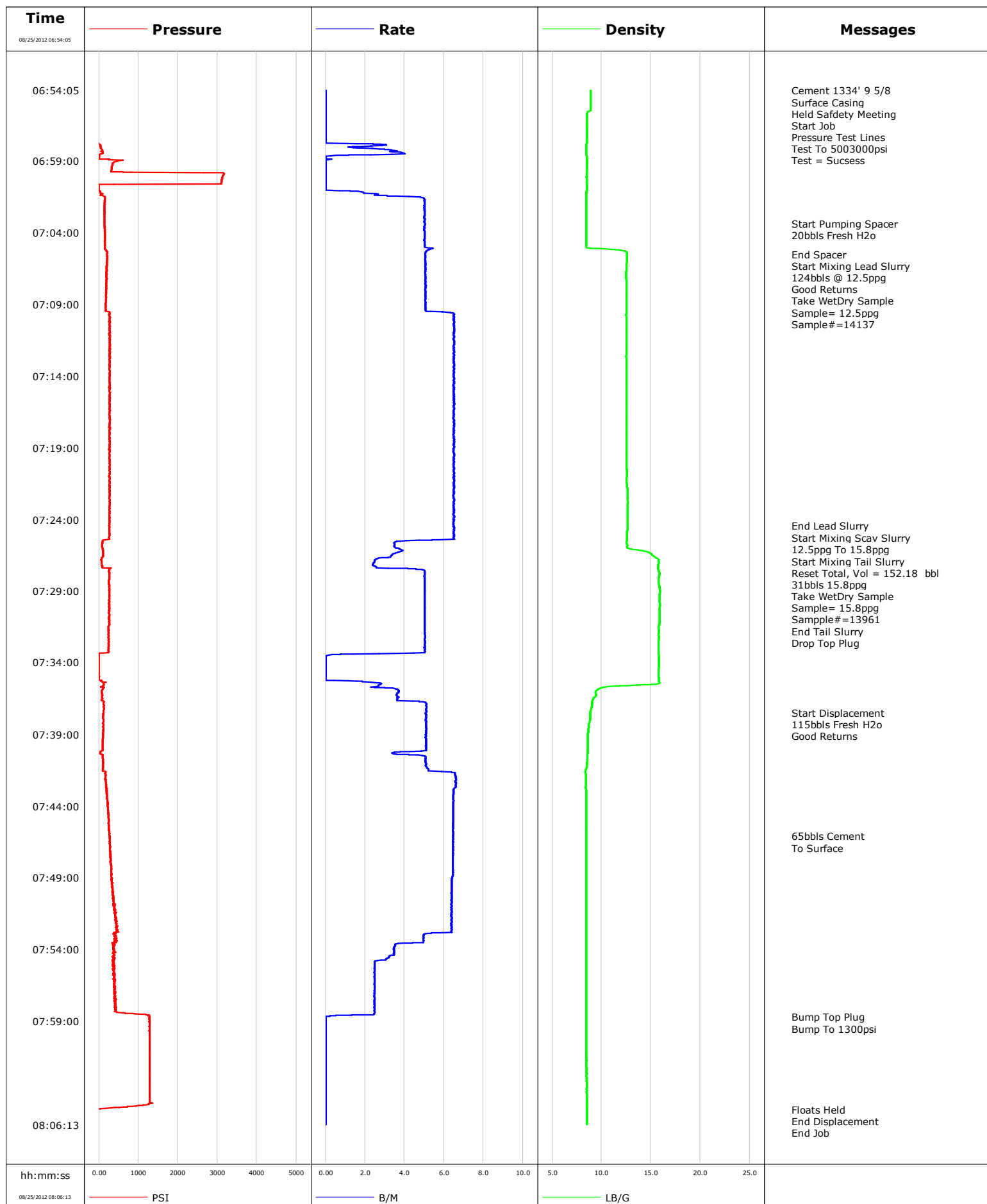


<b>Well</b>	SHIDELER FEE 31-8C	<b>Client</b>	ENCANA
<b>Field</b>	MAMM CREEK	<b>SIR No.</b>	
<b>Engineer</b>		<b>Job Type</b>	SURFACE
<b>Country</b>	United States	<b>Job Date</b>	08-25-2012

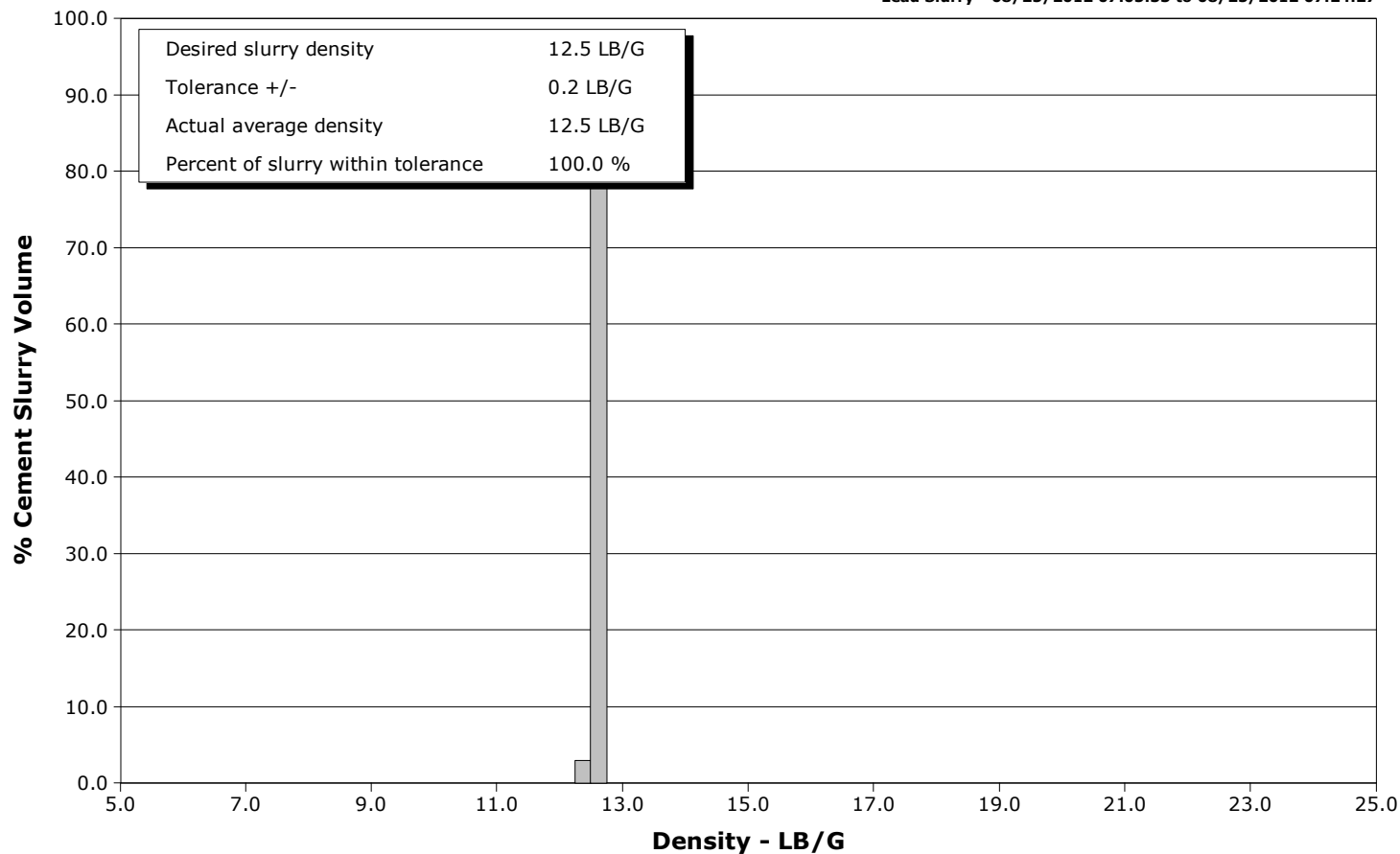


# Schlumberger Cementing Qa/Qc Density Report

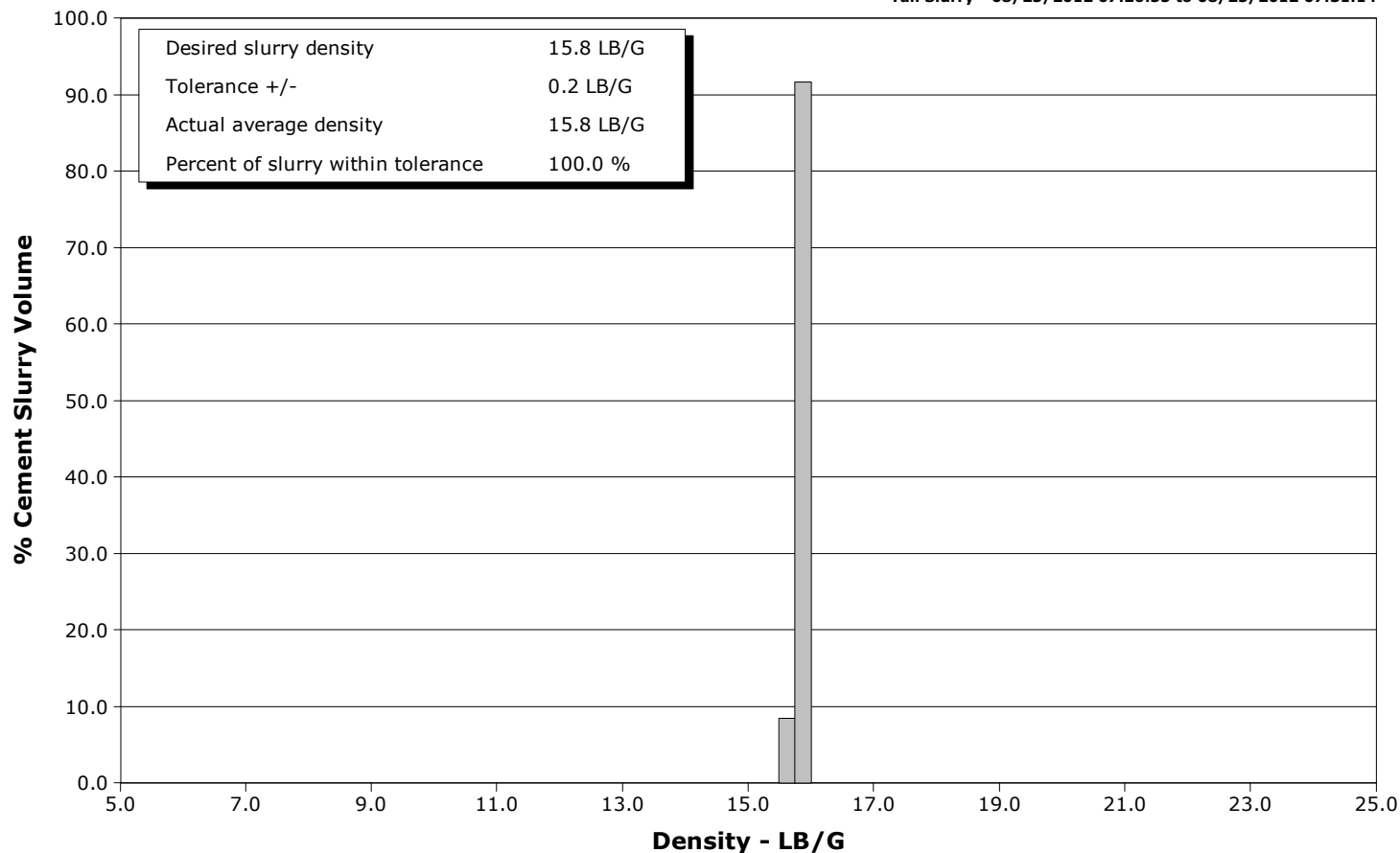
**Well** SHIDELER FEE 31-8C  
**Field** MAMM CREEK  
**Engineer**  
**Country** United States

**Client** ENCANA  
**SIR No.**  
**Job Type** SURFACE  
**Job Date** 08-25-2012

**Lead Slurry - 08/25/2012 07:05:33 to 08/25/2012 07:24:27**



**Tail Slurry - 08/25/2012 07:26:55 to 08/25/2012 07:31:14**





# Cementing Service Report

				Customer ENCANA			Job Number CAET-00011								
Well SHIDELER FEE 31-8C			Location (legal)			Schlumberger Location GCO			Job Start Aug/25/2012						
Field MAMM CREEK		Formation Name/Type			Deviation		Bit Size		Well MD		Well TVD				
County GARFILED		State/Province Colorado			BHP		BHST		BHCT		Pore Press. Gradient				
Well Master 0631395613		API/UWI													
Rig Name PATTERSON 303		Drilled For Gas		Service Via Land		Casing/Liner									
Offshore Zone		Well Class New		Well Type Development		Depth,		Size,		Weight,		Grade		Thread	
Drilling Fluid Type			Max. Density		Plastic Viscosity		Tubing/Drill Pipe								
Service Line Cementing		Job Type Cem Surface Casing				Depth,		Size,		Weight,		Grade		Thread	
Max. Allowed Tub. Press		Max. Allowed Ann. Press		WH Connection		Perforations/Open Hole									
Service Instructions 331skts 12.5ppg lead 2.11 ft3/sk 149skts 15.8ppg tail 1.17ft3/sk water test= good						Top,		Bottom,				No. of Shots		Total Interval	
						Treat Down Casing		Displacement 115.0 bbl		Packer Type		Packer Depth			
						Tubing Vol.		Casing Vol. 118.0 bbl		Annular Vol. 90.0 bbl		Openhole Vol. 214.0 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 759 psi				Shoe Type Guide		Squeeze Type									
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1534.0 ft				Tool Type							
No. Centralizers		Top Plugs		Bottom Plugs		Stage Tool Type				Tool Depth					
Cement Head Type Single				Stage Tool Depth				Tail Pipe Size							
Job Scheduled For Aug/25/2012		Arrived on Location Aug/25/2012		Leave Location Aug/25/2012		Collar Type Diff-Fill				Tail Pipe Depth					
						Collar Depth 1489.0 ft				Sqz. Total Vol.					
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message									
08/25/2012	05:55:11					Started Acquisition									
08/25/2012	06:54:05	-14	0.0	8.92	0.0										
08/25/2012	06:54:06					Cement 1334' 9 5/8									
08/25/2012	06:54:06					Surface Casing									
08/25/2012	06:54:06					Held Safdety Meeting									
08/25/2012	06:54:06	-14	0.0	8.92	0.0										
08/25/2012	06:54:08					Start Job									
08/25/2012	06:54:08	-14	0.0	8.92	0.0										
08/25/2012	06:54:12					Pressure Test Lines									
08/25/2012	06:54:12	-14	0.0	8.92	0.0										
08/25/2012	06:54:14					Test To 5003000psi									
08/25/2012	06:54:14					Test = Succsess									
08/25/2012	06:54:14	-14	0.0	8.92	0.0										
08/25/2012	06:55:11	-17	0.0	8.90	0.0										
08/25/2012	06:57:11	-18	0.0	8.51	0.0										
08/25/2012	06:59:11	355	0.0	8.48	2.3										
08/25/2012	07:01:11	35	1.9	8.46	2.5										
08/25/2012	07:03:11	150	5.0	8.47	11.7										
08/25/2012	07:03:23					Start Pumping Spacer									
08/25/2012	07:03:23					20bbIs Fresh H2o									
08/25/2012	07:03:23	145	5.0	8.47	12.7										

Well			Field		Job Start	Customer	Job Number
SHIDELER FEE 31-8C			MAMM CREEK		Aug/25/2012	ENCANA	CAET-00011
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
08/25/2012	07:05:32					End Spacer	
08/25/2012	07:05:32	205	5.1	12.58	23.5		
08/25/2012	07:05:33					Start Mixing Lead Slurry	
08/25/2012	07:05:33	214	5.1	12.57	23.6		
08/25/2012	07:05:35					124bbls @ 12.5ppg	
08/25/2012	07:05:35					Good Returns	
08/25/2012	07:05:35					Take WetDry Sample	
08/25/2012	07:05:35	205	5.0	12.57	23.8		
08/25/2012	07:05:36					Sample= 12.5ppg	
08/25/2012	07:05:36					Sample#=14137	
08/25/2012	07:05:36	214	5.1	12.57	23.9		
08/25/2012	07:07:11	185	5.1	12.50	31.9		
08/25/2012	07:09:11	169	5.1	12.51	42.0		
08/25/2012	07:11:11	264	6.5	12.51	54.5		
08/25/2012	07:13:11	268	6.5	12.51	67.4		
08/25/2012	07:15:11	274	6.5	12.51	80.4		
08/25/2012	07:17:11	273	6.5	12.51	93.4		
08/25/2012	07:19:11	270	6.5	12.52	106.4		
08/25/2012	07:21:11	283	6.5	12.55	119.4		
08/25/2012	07:23:11	258	6.5	12.64	132.3		
08/25/2012	07:24:27					End Lead Slurry	
08/25/2012	07:24:27	256	6.5	12.61	140.6		
08/25/2012	07:24:32					Start Mixing Scav Slurry	
08/25/2012	07:24:32	265	6.5	12.61	141.1		
08/25/2012	07:24:34					12.5ppg To 15.8ppg	
08/25/2012	07:24:34	264	6.5	12.61	141.3		
08/25/2012	07:25:11	277	6.5	12.59	145.3		
08/25/2012	07:26:55					Start Mixing Tail Slurry	
08/25/2012	07:26:55	67	2.5	15.78	152.1		
08/25/2012	07:26:57					Reset Total, Vol = 152.18 bbl	
08/25/2012	07:26:57	70	2.5	15.79	152.2		
08/25/2012	07:26:58					31bbls 15.8ppg	
08/25/2012	07:26:58	72	2.5	15.79	152.2		
08/25/2012	07:26:59					Take WetDry Sample	
08/25/2012	07:26:59					Sample= 15.8ppg	
08/25/2012	07:26:59					Sample#=13961	
08/25/2012	07:26:59	70	2.5	15.79	152.3		
08/25/2012	07:27:11	71	2.4	15.72	152.7		
08/25/2012	07:29:11	263	5.0	15.88	162.1		
08/25/2012	07:31:11	251	5.0	15.87	172.2		
08/25/2012	07:31:14					End Tail Slurry	
08/25/2012	07:31:14	268	5.0	15.87	172.4		
08/25/2012	07:31:15					Drop Top Plug	
08/25/2012	07:31:15	262	5.0	15.87	172.5		
08/25/2012	07:33:11	253	5.0	15.76	182.2		
08/25/2012	07:35:11	-3	0.0	15.79	183.2		
08/25/2012	07:37:11	124	5.1	8.95	190.3		
08/25/2012	07:37:28					Start Displacement	
08/25/2012	07:37:28	115	5.1	8.85	191.8		
08/25/2012	07:37:29					115bbls Fresh H2o	
08/25/2012	07:37:29					Good Returns	
08/25/2012	07:37:29	119	5.1	8.85	191.9		
08/25/2012	07:39:11	102	5.1	8.63	200.5		
08/25/2012	07:41:11	100	5.1	8.53	210.3		

Well			Field		Job Start	Customer		Job Number
SHIDELER FEE 31-8C			MAMM CREEK		Aug/25/2012	ENCANA		CAET-00011
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
08/25/2012	07:45:11	243	6.5	8.46	235.7			
08/25/2012	07:46:06					65bbls Cement		
08/25/2012	07:46:06	270	6.5	8.46	241.7			
08/25/2012	07:46:17					To Surface		
08/25/2012	07:46:17	290	6.5	8.46	242.8			
08/25/2012	07:47:11	302	6.4	8.46	248.6			
08/25/2012	07:49:11	326	6.4	8.47	261.5			
08/25/2012	07:51:11	398	6.4	8.47	274.3			
08/25/2012	07:53:11	451	5.0	8.47	286.6			
08/25/2012	07:55:11	393	2.5	8.47	293.5			
08/25/2012	07:58:42					Bump Top Plug		
08/25/2012	07:58:42	1279	0.0	8.48	302.0			
08/25/2012	07:58:44					Bump To 1300psi		
08/25/2012	07:58:44	1278	0.0	8.48	302.0			
08/25/2012	07:59:11	1277	0.0	8.48	302.0			
08/25/2012	08:01:11	1276	0.0	8.48	302.0			
08/25/2012	08:03:11	1276	0.0	8.48	302.0			
08/25/2012	08:05:09					Floats Held		
08/25/2012	08:05:09	-16	0.0	8.48	302.0			
08/25/2012	08:05:11	-19	0.0	8.48	302.0			
08/25/2012	08:05:20					End Displacement		
08/25/2012	08:05:20	-19	0.0	8.48	302.0			
08/25/2012	08:05:22					End Job		

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate		Total Slurry	Mud	Spacer	N2
5.3		0.0	11.6		302.0	0.0	23.5	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density	
3173	223	382	1300					
Avg. N2 Percent		Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?		Volume	
		155.0 bbl	129.5 bbl	62 degF	<input checked="" type="checkbox"/>		65.0 bbl	
					Washed Thru Perfs		To	
					<input type="checkbox"/>			
Customer or Authorized Representative			Schlumberger Supervisor			Circulation Lost	Job Completed	
MIKE OLSEN			JASON CRICK			<input type="checkbox"/>		<input checked="" type="checkbox"/>
						-	-	