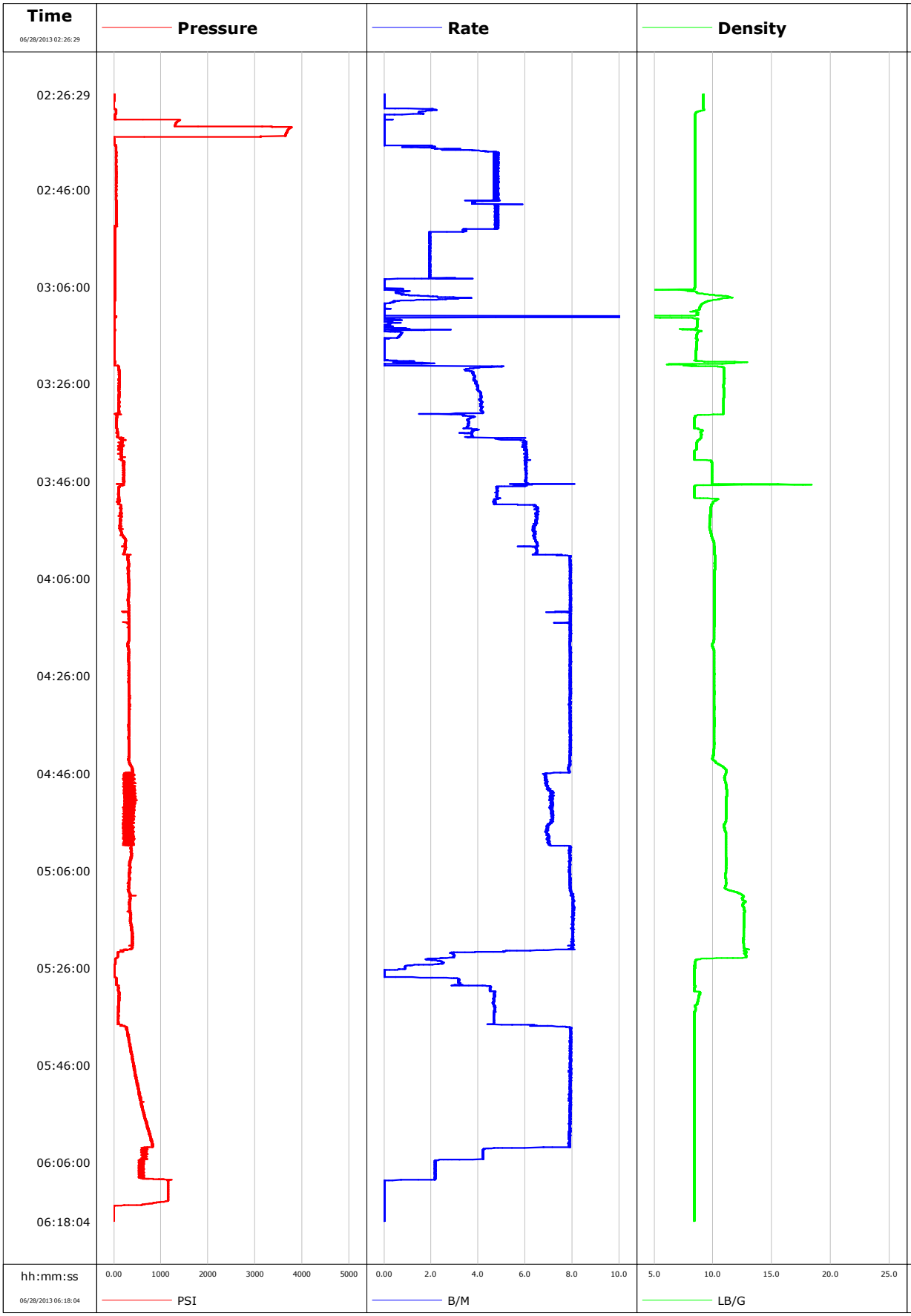
Schlumberger Cementing Job Report

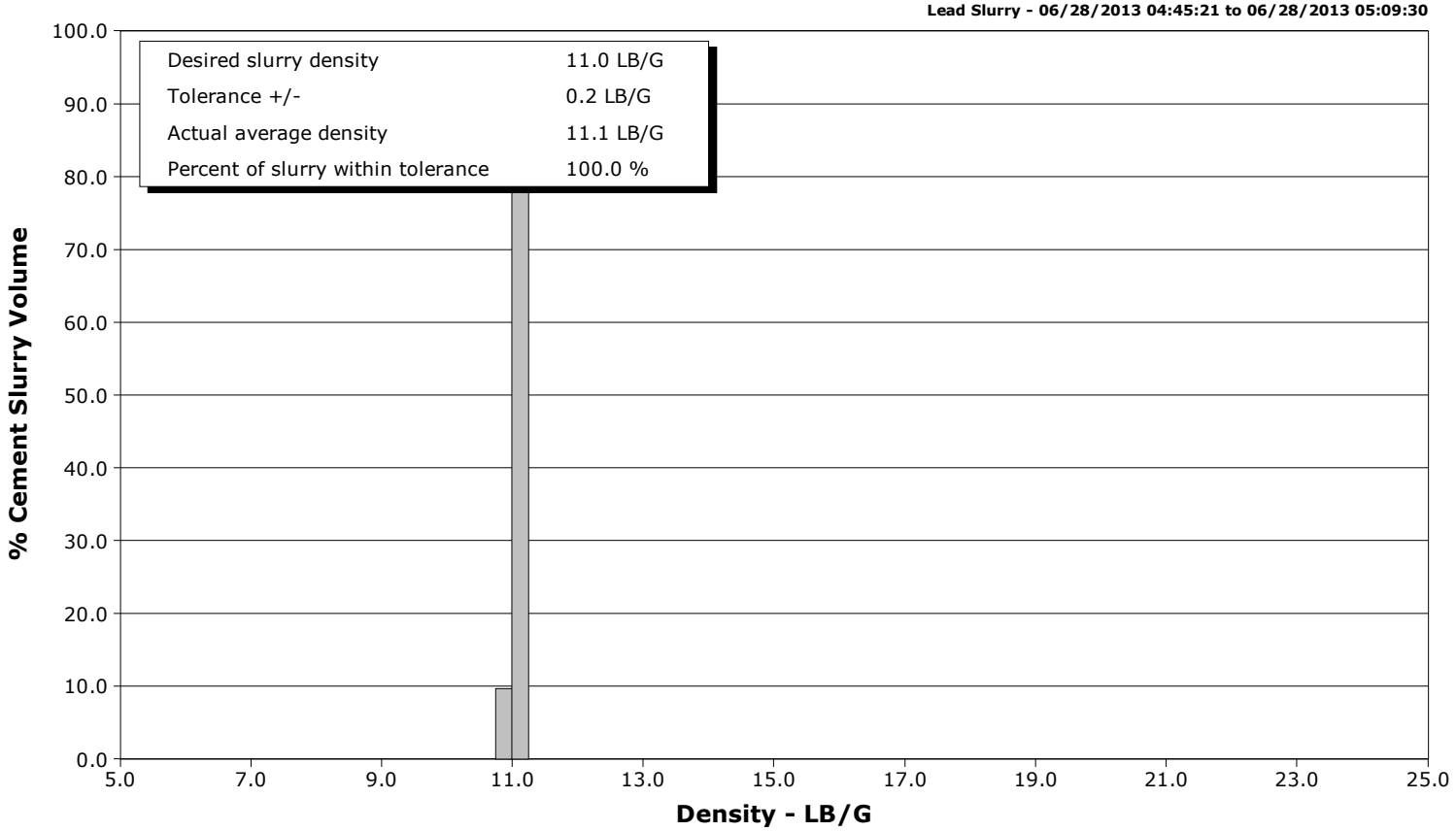
Well	SGU 8504D-24	**Client**	Encana
Field	Wild Cat	**SIR No.**	CAIO-00150
Engineer	Michael Simon	**Job Type**	Surface
Country	United States	**Job Date**	06-27-2013



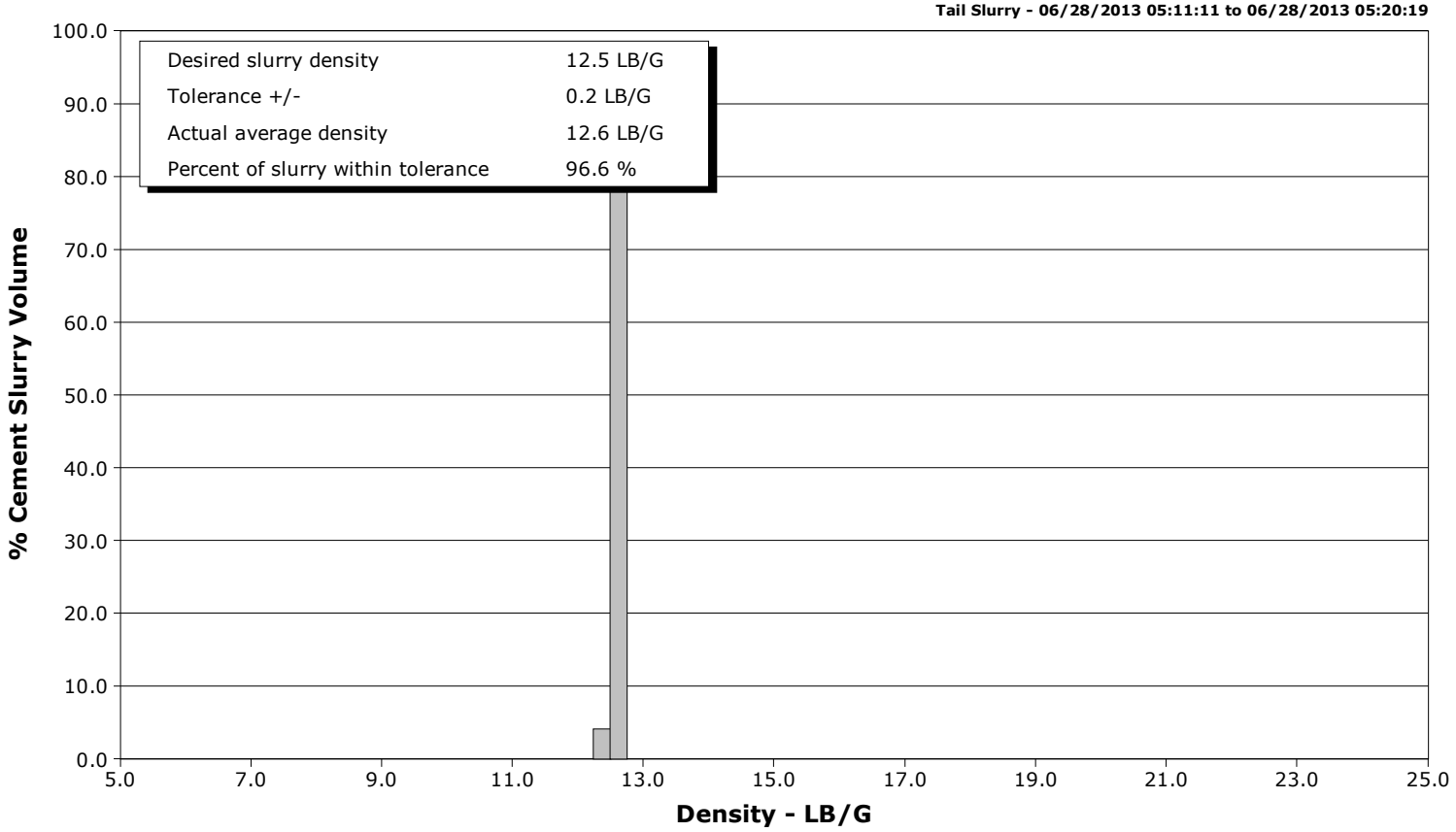
Schlumberger Cementing Qa/Qc Density Report

Well	SGU 8504D-24	**Client**	Encana
Field	Wild Cat	**SIR No.**	CAIO-00150
Engineer	Michael Simon	**Job Type**	Surface
Country	United States	**Job Date**	06-27-2013

Lead Slurry - 06/28/2013 04:45:21 to 06/28/2013 05:09:30



Tail Slurry - 06/28/2013 05:11:11 to 06/28/2013 05:20:19



Cementing Service Report

Customer	Job Number
Encana	CAIO-00150

Well	Location (legal)	Schlumberger Location	Job Start
SGU 8504D-24 8504D	Grand Junction	Rock Spriings	Jun/27/2013

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Wild Cat	Shale		14.8 in	3335.5 ft	3335.5 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Garfield	Colorado		125 degF	97 degF	

Well Master	API/UWI
0631465742	

Rig Name	Drilled For	Service Via
Patterson 330	Gas	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
	9.00 lb/gal	

Service Line	Job Type
Cementing	Surface

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
3000 psi		Single Cement head

Service Instructions

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
3335.5	9.630	36.0	K55	8RD
0.0	0.000	0.0		

Tubing/Drill Pipe

Depth,	Size,	Weight,	Grade	Thread

Perforations/Open Hole

Top,	Bottom,		No. of Shots	Total Interval
				Diameter

Treat Down	Displacement	Packer Type	Packer Depth
Casing	253.0 bbl		

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
	257.8 bbl	422.0 bbl	698.0 bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement
X	X

Lift Pressure	1650 psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs
23	1	

Cement Head Type	Single

Job Scheduled For	Arrived on Location	Leave Location
Jun/27/2013	Jun/27/2013	Jun/27/2013

Casing Tools		Squeeze Job	
Shoe Type	Float	Squeeze Type	
Shoe Depth	3335.5 ft	Tool Type	
Stage Tool Type		Tool Depth	
Stage Tool Depth		Tail Pipe Size	
Collar Type	Float	Tail Pipe Depth	
Collar Depth	3290.1 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
06/28/2013	01:56:53						Started Acquisition
06/28/2013	02:26:26						Start Job
06/28/2013	02:26:29	1	0.0	9.17	0.0	0.0	
06/28/2013	02:26:37						Start Pumping Water
06/28/2013	02:26:37	1	0.0	9.17	0.0	0.0	
06/28/2013	02:26:38						Pressure Test Lines
06/28/2013	02:26:38	1	0.0	9.17	0.0	0.0	
06/28/2013	02:26:53	0	0.0	9.17	0.0	0.0	
06/28/2013	02:29:53	43	1.9	9.07	0.9	0.9	
06/28/2013	02:32:53	1298	0.0	8.46	2.1	2.1	
06/28/2013	02:35:53	8	0.0	8.45	2.1	2.1	
06/28/2013	02:37:26						End Water
06/28/2013	02:37:26	37	1.4	8.45	2.8	2.8	
06/28/2013	02:37:28						Reset Total, Vol = 2.81 bbl
06/28/2013	02:37:28	39	1.6	8.45	2.8	2.8	
06/28/2013	02:37:41						Start PressureNET
06/28/2013	02:37:41	41	2.3	8.45	0.4	0.4	
06/28/2013	02:38:53	48	4.9	8.45	5.3	5.3	
06/28/2013	02:41:53	49	4.6	8.45	19.6	19.6	
06/28/2013	02:44:53	48	4.6	8.45	33.9	33.9	
06/28/2013	02:47:53	45	4.9	8.45	48.2	48.2	

Well	Field	Job Start	Customer	Job Number
SGU 8504D-24 8504D	Wild Cat	Jun/27/2013	Encana	CAIO-00150

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
06/28/2013	02:53:53	23	4.7	8.45	76.3	76.3	
06/28/2013	02:56:53	17	1.9	8.45	84.0	84.0	
06/28/2013	02:59:53	18	1.9	8.45	89.8	89.8	
06/28/2013	03:02:53	18	1.9	8.45	95.7	95.7	
06/28/2013	03:05:53	17	0.0	8.45	98.8	98.8	
06/28/2013	03:08:53	13	1.1	9.84	102.1	102.1	
06/28/2013	03:11:53	10	0.0	8.67	102.4	102.4	
06/28/2013	03:14:53	28	0.0	8.13	110.6	110.6	
06/28/2013	03:17:53	4	0.0	8.58	111.8	111.8	
06/28/2013	03:20:53	4	0.0	8.57	111.8	111.8	
06/28/2013	03:23:53	111	3.8	10.94	118.6	118.6	
06/28/2013	03:26:01						Down from 2:47am to 3:20am (33min)
06/28/2013	03:26:01	109	3.9	10.91	126.8	126.8	
06/28/2013	03:26:53	107	4.0	10.91	130.2	130.2	
06/28/2013	03:29:53	108	4.1	10.90	142.5	142.5	
06/28/2013	03:32:25						Reset Total, Vol = 81.2 bbl
06/28/2013	03:32:25	64	3.3	9.02	152.5	152.5	
06/28/2013	03:32:53	64	3.8	8.43	1.7	1.7	
06/28/2013	03:33:22						Start water
06/28/2013	03:33:22	56	3.6	8.41	3.4	3.4	
06/28/2013	03:35:39						Reset Total, Vol = 11.71 bbl
06/28/2013	03:35:39	68	3.8	9.09	11.7	11.7	
06/28/2013	03:35:51						Start S001
06/28/2013	03:35:51	73	3.7	8.99	0.7	0.7	
06/28/2013	03:35:53	71	3.7	8.97	0.9	0.9	
06/28/2013	03:38:53	170	6.0	8.59	15.6	15.6	
06/28/2013	03:40:11						Reset Total, Vol = 20.5 bbl
06/28/2013	03:40:11	159	6.1	8.41	23.4	23.4	
06/28/2013	03:40:38						Start Water
06/28/2013	03:40:38	153	6.0	8.40	26.2	26.2	
06/28/2013	03:41:53	199	6.0	9.85	33.7	33.7	
06/28/2013	03:42:43						Reset Total, Vol = 10.11 bbl
06/28/2013	03:42:43	218	6.0	9.86	3.2	3.2	
06/28/2013	03:43:38						Start ZoneLOCK
06/28/2013	03:43:38	214	6.0	9.86	5.5	5.5	
06/28/2013	03:46:45						Reset Total, Vol = 30.34 bbl
06/28/2013	03:46:45	181	5.5	17.63	24.3	24.3	
06/28/2013	03:47:09						Start Water
06/28/2013	03:47:09	116	4.8	8.42	2.3	2.3	
06/28/2013	03:47:53	102	4.8	8.41	2.2	2.2	
06/28/2013	03:49:25						Reset Total, Vol = 10.55 bbl
06/28/2013	03:49:25	105	4.8	8.41	9.6	9.6	
06/28/2013	03:49:44						Start Pumping Spacer
06/28/2013	03:49:44	92	4.8	10.40	11.1	11.1	
06/28/2013	03:50:53	138	6.3	9.82	16.6	16.6	
06/28/2013	03:53:53	147	6.5	9.76	36.1	36.1	
06/28/2013	03:56:53	158	6.4	9.83	55.3	55.3	
06/28/2013	03:57:51						Reset Total, Vol = 51.46 bbl
06/28/2013	03:57:51	239	6.4	9.94	61.5	61.5	
06/28/2013	03:58:09						End Spacer
06/28/2013	03:58:09	251	6.4	10.00	1.9	1.9	
06/28/2013	03:58:24						Start Mixing Scav Slurry
06/28/2013	03:58:24	251	6.4	10.04	3.5	3.5	
06/28/2013	03:59:53	241	6.5	10.10	13.1	13.1	

Well	Field	Job Start	Customer	Job Number
SGU 8504D-24 8504D	Wild Cat	Jun/27/2013	Encana	CAIO-00150

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
06/28/2013	04:05:53	303	7.9	10.12	58.7	58.7	
06/28/2013	04:08:53	314	7.9	10.11	82.4	82.4	
06/28/2013	04:11:53	318	7.9	10.11	106.1	106.1	
06/28/2013	04:14:53	320	7.9	10.11	129.8	129.8	
06/28/2013	04:17:53	317	7.9	10.08	153.5	153.5	
06/28/2013	04:20:53	322	7.9	10.08	177.2	177.2	
06/28/2013	04:23:53	315	7.9	10.07	200.9	200.9	
06/28/2013	04:26:53	310	7.9	10.09	224.6	224.6	
06/28/2013	04:29:53	328	7.9	10.10	248.3	248.3	
06/28/2013	04:32:53	340	7.9	10.10	272.0	272.0	
06/28/2013	04:35:53	318	7.9	10.10	295.7	295.7	
06/28/2013	04:38:53	316	7.9	10.08	319.4	319.4	
06/28/2013	04:41:53	324	7.9	10.04	343.2	343.2	
06/28/2013	04:44:53	389	7.8	10.92	366.8	366.8	
06/28/2013	04:45:19						Reset Total, Vol = 341.21 bbl
06/28/2013	04:45:19	401	7.8	11.08	370.2	370.2	
06/28/2013	04:45:21						End Scavenger Slurry
06/28/2013	04:45:21						Start Mixing Lead Slurry
06/28/2013	04:45:21	381	7.8	11.09	0.3	0.3	
06/28/2013	04:47:53	340	6.9	11.04	18.3	18.3	
06/28/2013	04:50:53	241	7.1	11.14	39.3	39.3	
06/28/2013	04:53:53	366	7.1	11.10	60.6	60.6	
06/28/2013	04:56:53	208	6.9	10.91	82.0	82.0	
06/28/2013	04:59:53	292	7.0	11.08	102.8	102.8	
06/28/2013	05:02:53	379	7.9	11.09	125.6	125.6	
06/28/2013	05:05:53	335	7.9	11.08	149.3	149.3	
06/28/2013	05:08:53	325	7.9	11.07	172.9	172.9	
06/28/2013	05:09:30						End Lead Slurry
06/28/2013	05:09:30	302	7.9	11.01	177.8	177.8	
06/28/2013	05:09:52						Reset Total, Vol = 184.70 bbl
06/28/2013	05:09:52	314	7.9	11.11	180.7	180.7	
06/28/2013	05:11:11						Start Mixing Tail Slurry
06/28/2013	05:11:11	470	8.0	12.53	10.5	10.5	
06/28/2013	05:11:53	340	8.0	12.48	16.1	16.1	
06/28/2013	05:14:53	356	8.0	12.64	40.2	40.2	
06/28/2013	05:17:53	384	8.0	12.60	64.2	64.2	
06/28/2013	05:20:19						End Tail Slurry
06/28/2013	05:20:19	400	8.1	12.57	83.7	83.7	
06/28/2013	05:20:53	387	8.0	12.57	88.2	88.2	
06/28/2013	05:23:53	69	3.0	12.78	105.6	105.6	
06/28/2013	05:25:20						Reset Total, Vol = 91.16 bbl
06/28/2013	05:25:20	20	2.2	8.43	108.9	108.9	
06/28/2013	05:26:53	2	0.0	8.42	110.0	110.0	
06/28/2013	05:29:53	89	4.5	8.44	116.2	116.2	
06/28/2013	05:32:53	107	4.6	8.69	130.1	130.1	
06/28/2013	05:34:04						Drop Top Plug
06/28/2013	05:34:04	95	4.7	8.47	3.4	3.4	
06/28/2013	05:34:05						Start Displacement
06/28/2013	05:34:05	95	4.7	8.47	3.5	3.5	
06/28/2013	05:35:53	90	4.7	8.41	11.9	11.9	
06/28/2013	05:38:53	289	7.9	8.41	29.2	29.2	
06/28/2013	05:41:53	345	7.9	8.41	53.0	53.0	
06/28/2013	05:44:53	393	7.9	8.41	76.8	76.8	
06/28/2013	05:47:53	454	7.9	8.41	100.5	100.5	

Well	Field	Job Start	Customer	Job Number
SGU 8504D-24 8504D	Wild Cat	Jun/27/2013	Encana	CAIO-00150

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
06/28/2013	05:53:53	601	7.9	8.41	148.0	148.0	
06/28/2013	05:56:53	651	7.9	8.41	171.7	171.7	
06/28/2013	05:59:53	747	7.9	8.41	195.3	195.3	
06/28/2013	06:02:53	826	7.9	8.41	219.0	219.0	
06/28/2013	06:05:53	537	2.2	8.41	231.0	231.0	
06/28/2013	06:08:53	639	2.2	8.41	237.5	237.5	
06/28/2013	06:09:38						Bump Top Plug
06/28/2013	06:09:38	1179	0.7	8.41	0.1	0.1	
06/28/2013	06:09:39						End Displacement
06/28/2013	06:09:39	1132	0.4	8.41	0.1	0.1	
06/28/2013	06:09:40						Reset Total, Vol = 253 bbl
06/28/2013	06:09:40	1164	0.2	8.41	0.1	0.1	
06/28/2013	06:10:47						Floats hold-1.5bbl back
06/28/2013	06:10:47	1148	0.0	8.41	0.1	0.1	
06/28/2013	06:11:53	1148	0.0	8.41	0.1	0.1	
06/28/2013	06:14:53	47	0.0	8.41	0.1	0.1	
06/28/2013	06:17:53	-1	0.0	8.41	0.1	0.1	
06/28/2013	06:17:59						End Job
06/28/2013	06:17:59	-1	0.0	8.41	0.1	0.1	
06/28/2013	06:18:04	-1	0.0	8.41	0.1	0.1	

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
6.0		0.0	25.0	616.0	0.0	51.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3770	-0	296	990				

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume	Circulation Lost	Job Completed
	616.0 bbl	253.0 bbl	80 degF	[x]	304.0 bbl	[ ]	[x]
				Washed Thru Perfs [ ]	To		

Customer or Authorized Representative	Schlumberger Supervisor
Randy Burke	Michael Simon