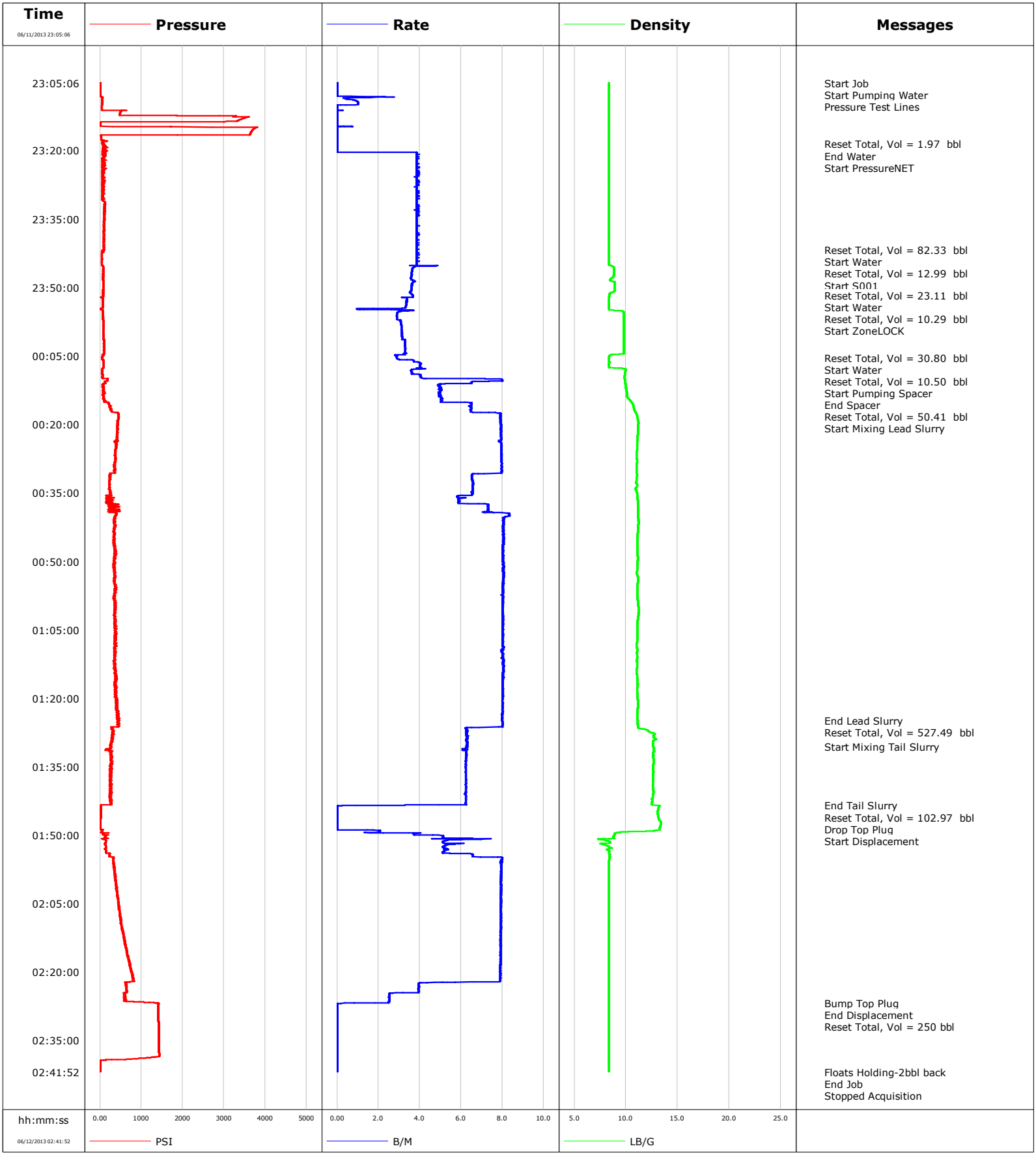
Schlumberger Cementing Job Report

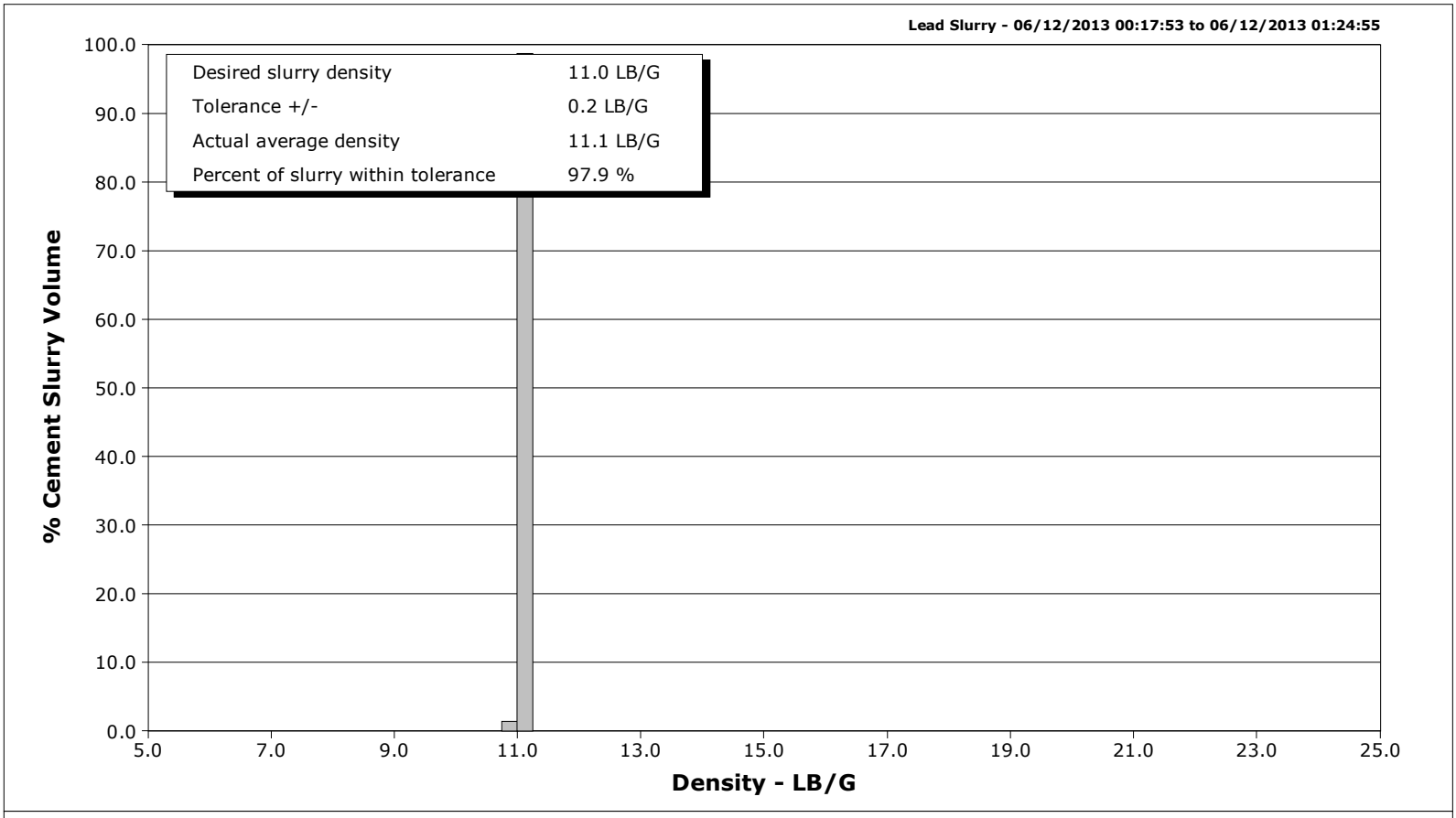
CemCAT v1.3

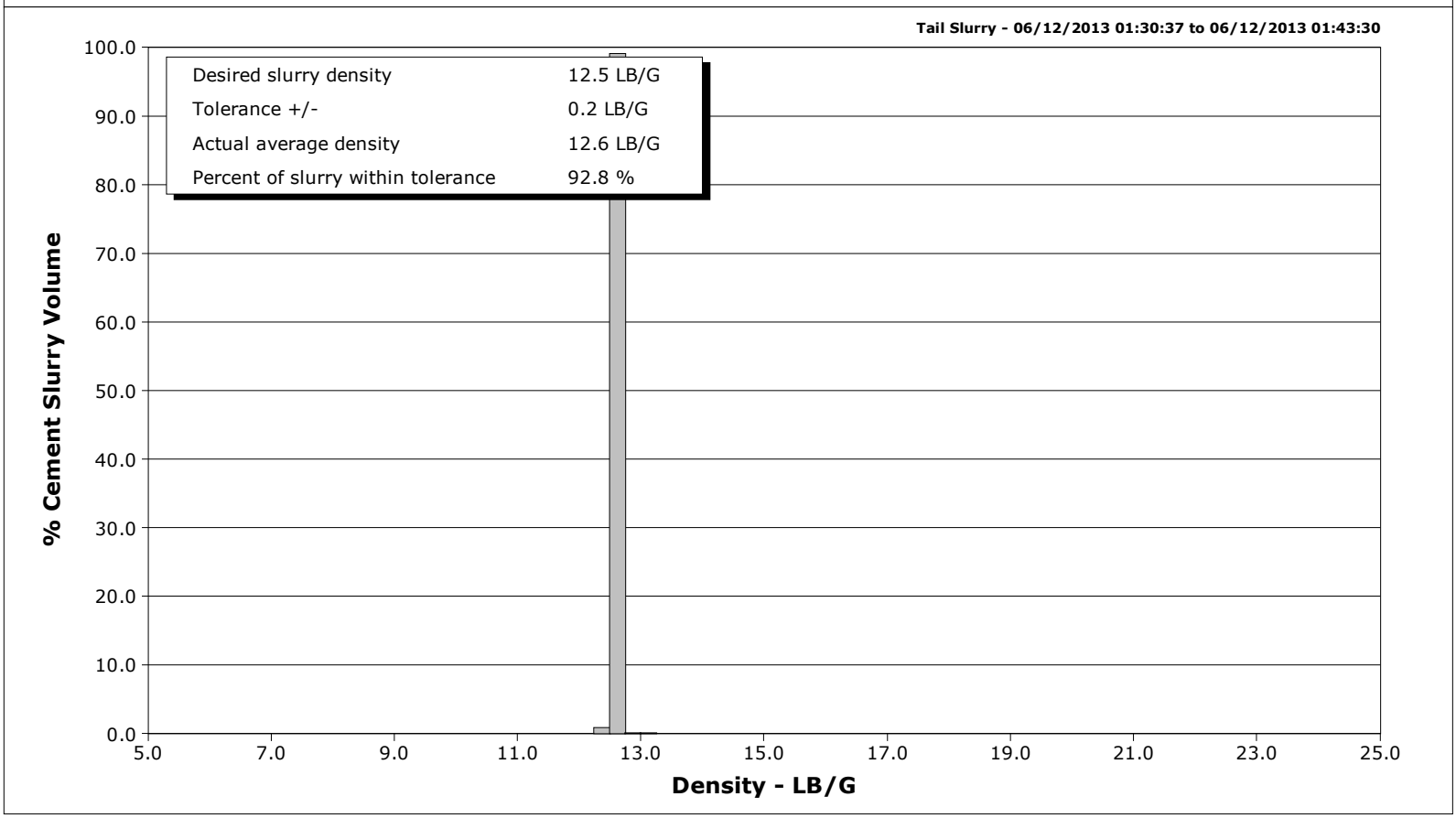
Well	SGU 8507A-23	**Client**	Encana
Field	Wildcat	**SIR No.**	CAIO-00145
Engineer	Michael Simon	**Job Type**	Surface
Country	United States	**Job Date**	06-11-2013



Schlumberger Cementing Qa/Qc Density Report

Well	SGU 8507A-23	**Client**	Encana
Field	Wildcat	**SIR No.**	CAIO-00145
Engineer	Michael Simon	**Job Type**	Surface
Country	United States	**Job Date**	06-11-2013





Cementing Service Report

Customer	Job Number
Encana	CAIO-00145

Well	Location (legal)	Schlumberger Location	Job Start
SGU 8507A-23 8507A-23	Grand Junctio	Rock Spriings	Jun/11/2013

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Wildcat			14.8 in	3298.6 ft	3297.1 ft

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

Well Master	API/UWI
0631465737	

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
4500 psi		Single Cement head

Service Instructions

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
3297.1	9.630	36.0	J55	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
	250.0 bbl		

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
	254.9 bbl	418.0 bbl	690.0 bbl

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

Lift Pressure	1631 psi	Shoe Type	Float	Squeeze Type	
Pipe Rotated	☐	Pipe Reciprocated	☐	Shoe Depth	3297.1 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	Arrived on Location	Leave Location		Collar Type	Float	Tail Pipe Depth	
Jun/11/2013	Jun/11/2013	Jun/11/2013		Collar Depth	3252.5 ft	Sqz. Total Vol.	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
06/11/2013	22:18:21						Started Acquisition
06/11/2013	23:05:06	7	0.0	8.37	0.0	0.0	
06/11/2013	23:05:07						Start Job
06/11/2013	23:05:07	7	0.0	8.37	0.0	0.0	
06/11/2013	23:05:09						Start Pumping Water
06/11/2013	23:05:09	6	0.0	8.37	0.0	0.0	
06/11/2013	23:05:14						Pressure Test Lines
06/11/2013	23:05:14	6	0.0	8.37	0.0	0.0	
06/11/2013	23:06:21	5	0.0	8.37	0.0	0.0	
06/11/2013	23:09:21	56	1.0	8.36	1.2	1.2	
06/11/2013	23:12:21	1896	0.0	8.37	1.9	1.9	
06/11/2013	23:15:21	3707	0.0	8.37	2.0	2.0	
06/11/2013	23:18:21	59	0.0	8.37	2.0	2.0	
06/11/2013	23:18:35						Reset Total, Vol = 1.97 bbl
06/11/2013	23:18:35	60	0.0	8.37	2.0	2.0	
06/11/2013	23:18:36						End Water
06/11/2013	23:18:36	66	0.0	8.37	0.0	0.0	
06/11/2013	23:18:53						Start PressureNET
06/11/2013	23:18:53	105	0.0	8.37	0.0	0.0	
06/11/2013	23:21:21	118	3.9	8.37	3.7	3.7	
06/11/2013	23:24:21	54	3.9	8.37	15.3	15.3	

Well	Field	Job Start	Customer	Job Number
SGU 8507A-23 8507A-23	Wildcat	Jun/11/2013	Encana	CAIO-00145

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
06/11/2013	23:30:21	55	3.9	8.37	38.5	38.5	
06/11/2013	23:33:21	104	3.9	8.37	50.0	50.0	
06/11/2013	23:36:21	89	3.9	8.37	61.6	61.6	
06/11/2013	23:39:21	87	3.9	8.38	73.2	73.2	
06/11/2013	23:41:43						Reset Total, Vol = 82.33 bbl
06/11/2013	23:41:43	99	3.9	8.37	82.3	82.3	
06/11/2013	23:42:01						Start Water
06/11/2013	23:42:01	50	3.9	8.37	1.2	1.2	
06/11/2013	23:42:21	75	3.9	8.37	2.4	2.4	
06/11/2013	23:45:05						Reset Total, Vol = 12.99 bbl
06/11/2013	23:45:05	44	3.9	8.37	13.0	13.0	
06/11/2013	23:45:21	66	3.9	8.67	1.1	1.1	
06/11/2013	23:45:36						Start S001
06/11/2013	23:45:36	76	3.7	8.81	2.1	2.1	
06/11/2013	23:48:21	73	3.6	8.45	12.0	12.0	
06/11/2013	23:51:21	72	3.6	8.43	22.8	22.8	
06/11/2013	23:51:42						Reset Total, Vol = 23.11 bbl
06/11/2013	23:51:42	72	3.6	8.39	24.1	24.1	
06/11/2013	23:53:25						Start Water
06/11/2013	23:53:25	63	3.4	8.37	5.9	5.9	
06/11/2013	23:54:21	64	3.3	8.37	9.0	9.0	
06/11/2013	23:54:26						Reset Total, Vol = 10.29 bbl
06/11/2013	23:54:26	64	3.3	8.37	9.3	9.3	
06/11/2013	23:54:57						Start ZoneLOCK
06/11/2013	23:54:57	62	3.6	8.59	1.1	1.1	
06/11/2013	23:57:21	86	3.1	9.79	8.3	8.3	
06/12/2013	00:00:21	80	3.1	9.80	17.6	17.6	
06/12/2013	00:03:21	101	3.3	9.79	27.3	27.3	
06/12/2013	00:05:24						Reset Total, Vol = 30.80 bbl
06/12/2013	00:05:24	57	2.9	8.37	33.8	33.8	
06/12/2013	00:05:51						Start Water
06/12/2013	00:05:51	73	3.4	8.37	1.3	1.3	
06/12/2013	00:06:21	87	3.9	8.40	3.2	3.2	
06/12/2013	00:07:48						Reset Total, Vol = 10.50 bbl
06/12/2013	00:07:48	59	4.3	9.86	9.0	9.0	
06/12/2013	00:07:54						Start Pumping Spacer
06/12/2013	00:07:54	54	3.8	9.96	0.4	0.4	
06/12/2013	00:09:21	61	4.0	9.87	5.8	5.8	
06/12/2013	00:12:21	79	5.0	10.01	22.6	22.6	
06/12/2013	00:15:21	205	6.5	10.61	0.5	0.5	
06/12/2013	00:15:43						End Spacer
06/12/2013	00:15:43	224	6.5	10.69	2.9	2.9	
06/12/2013	00:15:44						Reset Total, Vol = 50.41 bbl
06/12/2013	00:15:44	219	6.5	10.69	3.0	3.0	
06/12/2013	00:17:53						Start Mixing Lead Slurry
06/12/2013	00:17:53	447	7.9	11.03	17.6	17.6	
06/12/2013	00:18:21	430	7.9	11.09	21.3	21.3	
06/12/2013	00:21:21	419	7.9	11.16	45.1	45.1	
06/12/2013	00:24:21	403	7.9	11.08	68.8	68.8	
06/12/2013	00:27:21	373	8.0	11.04	92.7	92.7	
06/12/2013	00:30:21	367	8.0	11.03	116.6	116.6	
06/12/2013	00:33:21	242	6.5	11.08	136.8	136.8	
06/12/2013	00:36:21	162	5.9	11.13	155.9	155.9	
06/12/2013	00:39:21	383	7.6	11.16	176.4	176.4	

Well	Field	Job Start	Customer	Job Number
SGU 8507A-23 8507A-23	Wildcat	Jun/11/2013	Encana	CAIO-00145

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
06/12/2013	00:45:21	354	8.0	11.13	224.9	224.9	
06/12/2013	00:48:21	340	8.0	11.12	248.9	248.9	
06/12/2013	00:51:21	318	8.0	11.12	273.1	273.1	
06/12/2013	00:54:21	347	8.1	11.16	297.2	297.2	
06/12/2013	00:57:21	366	7.9	11.13	321.3	321.3	
06/12/2013	01:00:21	369	8.0	11.22	345.3	345.3	
06/12/2013	01:03:21	354	8.0	11.13	369.4	369.4	
06/12/2013	01:06:21	393	8.0	11.12	393.4	393.4	
06/12/2013	01:09:21	377	8.0	11.10	417.5	417.5	
06/12/2013	01:12:21	358	8.0	11.06	441.5	441.5	
06/12/2013	01:15:21	369	8.0	11.08	465.6	465.6	
06/12/2013	01:18:21	386	8.0	11.07	489.7	489.7	
06/12/2013	01:21:21	411	8.0	11.18	513.7	513.7	
06/12/2013	01:24:21	439	8.0	11.12	537.7	537.7	
06/12/2013	01:24:55						End Lead Slurry
06/12/2013	01:24:55	440	8.0	11.14	542.2	542.2	
06/12/2013	01:26:57						Reset Total, Vol = 527.49 bbl
06/12/2013	01:26:57	314	6.3	12.01	557.5	557.5	
06/12/2013	01:27:21	322	6.2	12.20	2.5	2.5	
06/12/2013	01:30:21	266	6.3	12.61	21.3	21.3	
06/12/2013	01:30:37						Start Mixing Tail Slurry
06/12/2013	01:30:37	264	6.2	12.63	23.0	23.0	
06/12/2013	01:33:21	275	6.2	12.67	40.1	40.1	
06/12/2013	01:36:21	243	6.2	12.66	58.8	58.8	
06/12/2013	01:39:21	259	6.3	12.60	77.5	77.5	
06/12/2013	01:42:21	237	6.2	12.54	96.1	96.1	
06/12/2013	01:43:30						End Tail Slurry
06/12/2013	01:43:30						Reset Total, Vol = 102.97 bbl
06/12/2013	01:43:30	14	0.9	13.15	102.9	102.9	
06/12/2013	01:43:32						Drop Top Plug
06/12/2013	01:43:32						Start Displacement
06/12/2013	01:43:32	14	0.2	13.22	103.0	103.0	
06/12/2013	01:45:21	14	0.0	13.09	0.0	0.0	
06/12/2013	01:48:21	11	0.0	13.29	0.0	0.0	
06/12/2013	01:51:21	141	5.1	8.37	10.4	10.4	
06/12/2013	01:54:21	241	6.6	8.43	26.5	26.5	
06/12/2013	01:57:21	350	7.9	8.36	49.7	49.7	
06/12/2013	02:00:21	379	7.9	8.37	73.5	73.5	
06/12/2013	02:03:21	412	7.9	8.36	97.3	97.3	
06/12/2013	02:06:21	464	7.9	8.36	121.0	121.0	
06/12/2013	02:09:21	502	7.9	8.36	144.8	144.8	
06/12/2013	02:12:21	568	7.9	8.36	168.6	168.6	
06/12/2013	02:15:21	649	7.9	8.36	192.3	192.3	
06/12/2013	02:18:21	706	7.9	8.36	216.0	216.0	
06/12/2013	02:21:21	793	7.9	8.36	239.7	239.7	
06/12/2013	02:24:21	645	3.9	8.36	255.0	255.0	
06/12/2013	02:26:51						Bump Top Plug
06/12/2013	02:26:51						End Displacement
06/12/2013	02:26:51	1388	0.4	8.36	261.5	261.5	
06/12/2013	02:27:01						Reset Total, Vol = 250 bbl
06/12/2013	02:27:01	1416	0.0	8.36	261.5	261.5	
06/12/2013	02:27:21	1414	0.0	8.37	0.0	0.0	
06/12/2013	02:30:21	1415	0.0	8.36	0.0	0.0	
06/12/2013	02:33:21	1422	0.0	8.37	0.0	0.0	

Well	Field	Job Start	Customer	Job Number
SGU 8507A-23 8507A-23	Wildcat	Jun/11/2013	Encana	CAIO-00145

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
06/12/2013	02:39:21	42	0.0	8.37	0.0	0.0	
06/12/2013	02:41:52	11	0.0	8.37	0.0	0.0	
06/12/2013	02:41:52						Floats Holding-2bbl back
06/12/2013	02:41:53						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
6.2		0.0	8.4	629.0	0.0	50.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3804	11	382	1000				

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp				
	615.0 bbl	250.0 bbl	80 degF	Cement Circulated to Surface?	[x]	Volume	180.0 bbl
				Washed Thru Perfs	[ ]	To	

Customer or Authorized Representative	Schlumberger Supervisor				
Buddy Burke	Michael Simon	Circulation Lost	[ ]	Job Completed	[x]
		-		-	