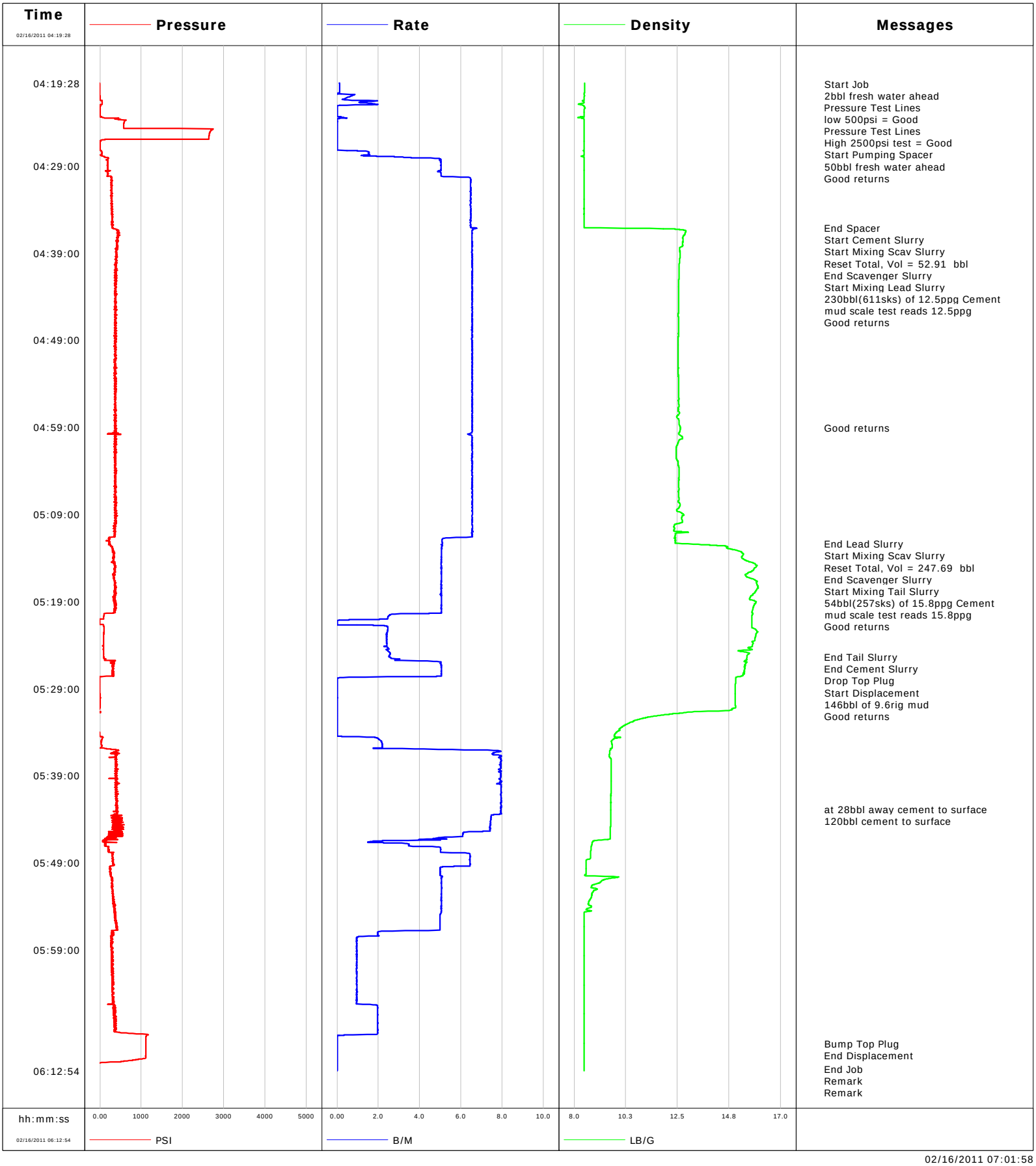
Schlumberger

Cementing Job Report

Well	KEINATH FEDERAL 9-14H C10O	**Client**	ENCANA OIL GAS
Field	MAMM CREEK	**SIR No.**	000494594
Engineer	Dustin C Krueger	**Job Type**	1532' 10.75" Surface
Country	United States	**Job Date**	02-15-2011



Schlumberger Cementing Qa/Qc Density Report

Well	KEINATH FEDERAL 9-14H C10O	**Client**	ENCANA OIL GAS
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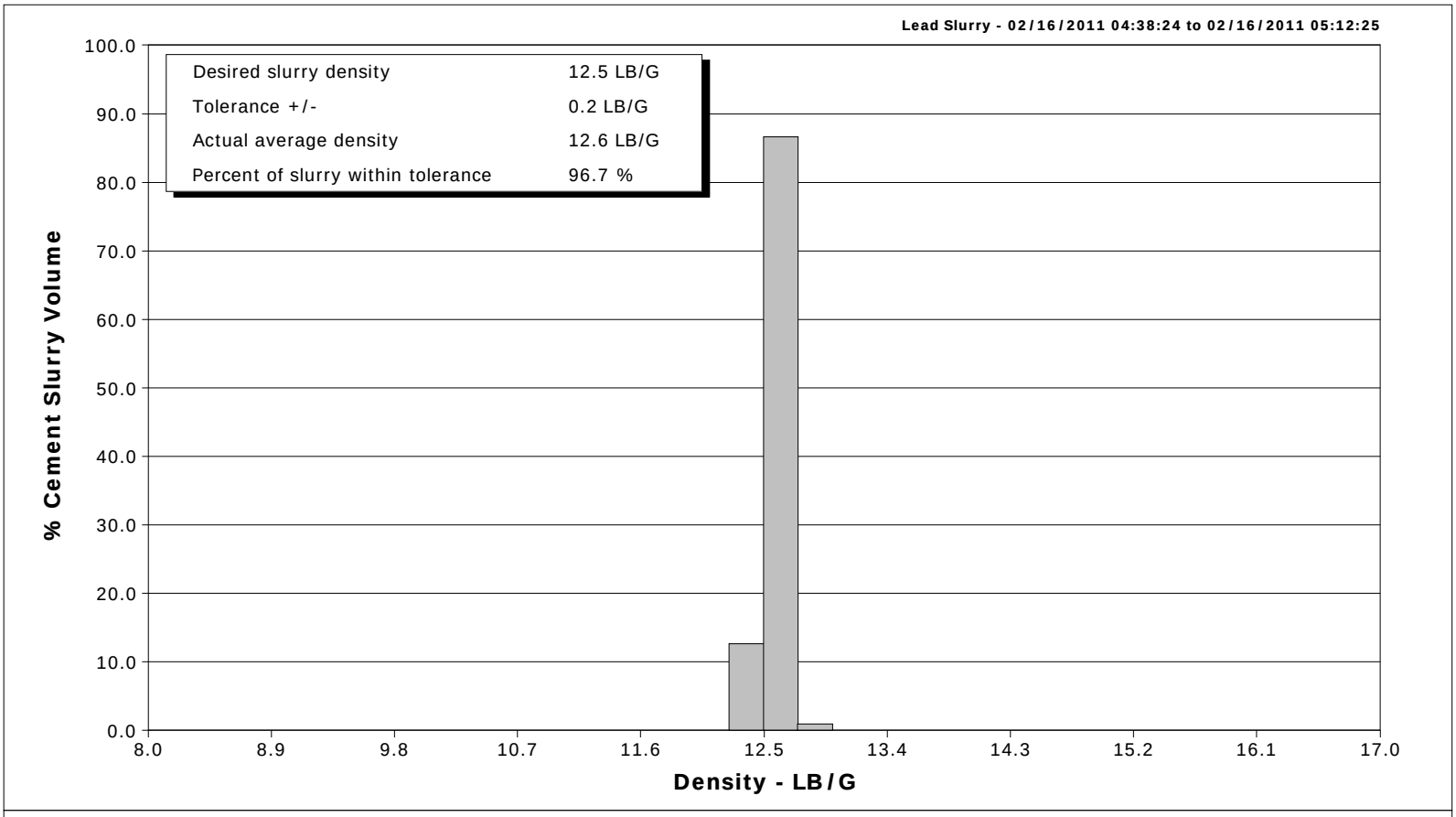

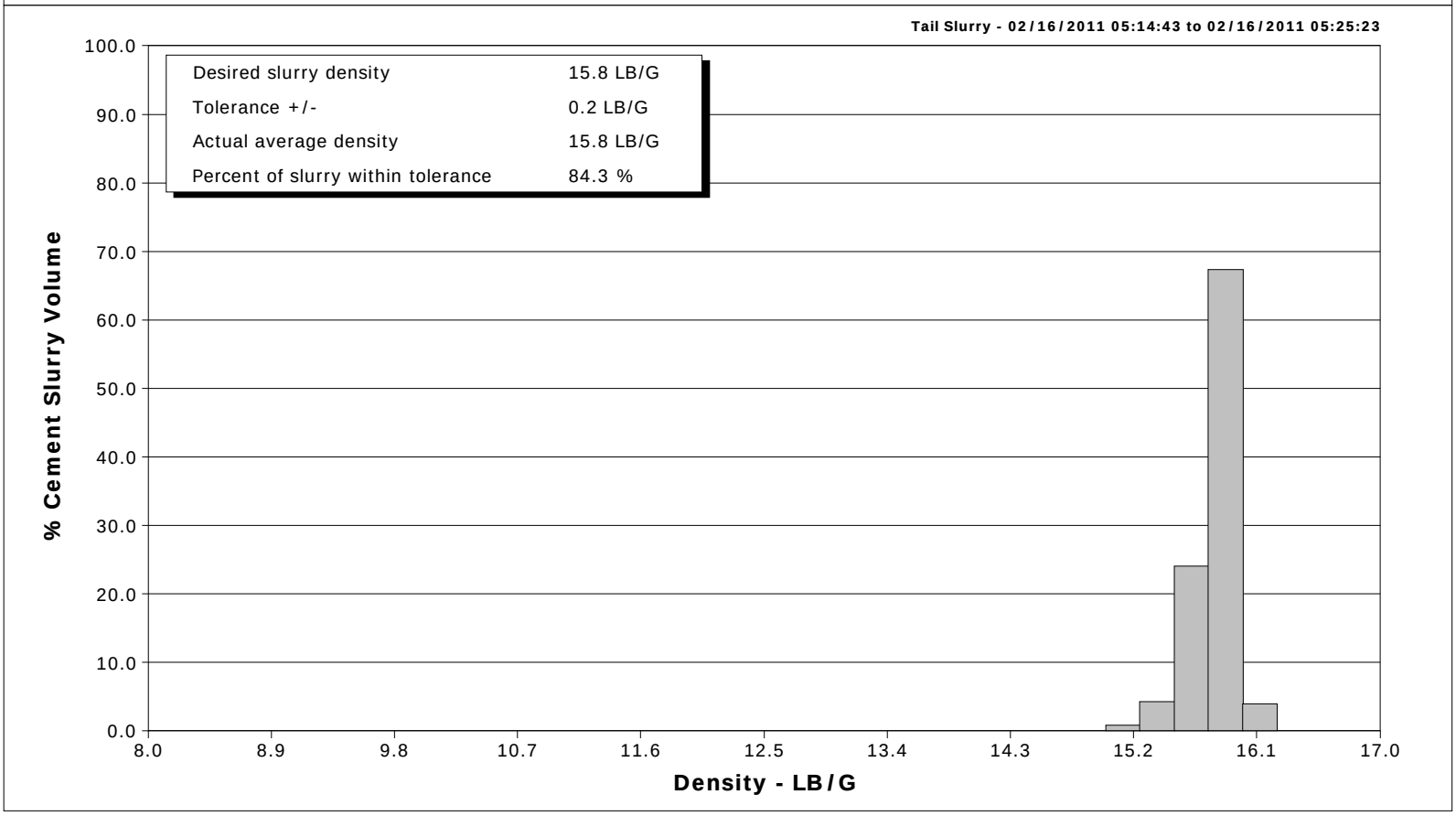

Cementing Service Report

Customer	Job Number
ENCANA OIL & GAS	000494594

Well	Location (legal)	Schlumberger Location	Job Start
KEINATH FEDERAL 9-14H C10O KEINATH FEDERAL 9-14H C10O	GRASS MESA	GRAND-JUNCTION	Feb/15/2011

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
MAMM CREEK	Clean-Sandstone		14.8 in	1532.0 ft	1532.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
GARFIELD	Colorado		100 degF	85 degF	

Well Master	API/UWI
0631231666	

Rig Name	Drilled For	Service Via
NABORS M-11	Gas	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
Bentonite	9.60 lb/gal	12.000 cP

Service Line	Job Type
Cementing	1532' 10.75" Surface

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
3000 psi	1500 psi	Single Cement head

Service Instructions

Cement 10 3/4" surface casing @ 1545ft in 14 3/4" OH with
50 bbl water
230bbl(611sks) 12.5 ppg Lead
54bbl(257sks) 15.8 ppg Tail
Displace 146bbl with 9.6 RIG MUD
120bbl Cement to surface

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
40.0	20.000	0.0	N/A	N/A
1532.0	10.750	40.5	J55	8RD

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
	146.1 bbl		

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
	150.3 bbl	158.0 bbl	314.0 bbl

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

Lift Pressure	Shoe Type	Squeeze Type
689 psi	Guide	

Pipe Rotated	Pipe Reciprocated	Shoe Depth	Tool Type
☐	☐	1532.0 ft	

No. Centralizers	Top Plugs	Bottom Plugs	Stage Tool Type	Tool Depth
6	1			

Cement Head Type	Stage Tool Depth	Tail Pipe Size
Single		

Job Scheduled For	Arrived on Location	Leave Location	Collar Type	Tail Pipe Depth
Feb/15/2011 19:00	Feb/15/2011 18:45	Feb/16/2011 07:00	Float	

Collar Depth	Sqz. Total Vol.
1489.0 ft	

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/16/2011	03:33:52					Started Acquisition
02/16/2011	03:34:18					Pre Job Safety Meeting
02/16/2011	04:19:28	-4	0.1	8.46	0.0	
02/16/2011	04:19:34					Start Job
02/16/2011	04:19:34	-5	0.1	8.46	0.0	
02/16/2011	04:19:41					2bbl fresh water ahead
02/16/2011	04:19:41	-5	0.1	8.46	0.0	
02/16/2011	04:19:47					Pressure Test Lines
02/16/2011	04:19:47	-5	0.1	8.46	0.0	
02/16/2011	04:19:49					low 500psi = Good
02/16/2011	04:19:49	-5	0.1	8.46	0.0	
02/16/2011	04:19:52					Pressure Test Lines
02/16/2011	04:19:52	-5	0.1	8.46	0.1	
02/16/2011	04:19:55					High 2500psi test = Good
02/16/2011	04:19:55	-6	0.1	8.46	0.1	
02/16/2011	04:19:57					Start Pumping Spacer
02/16/2011	04:19:57	-5	0.1	8.46	0.1	
02/16/2011	04:20:01					50bbl fresh water ahead
02/16/2011	04:20:01	-5	0.1	8.46	0.1	
02/16/2011	04:20:02					Good returns
02/16/2011	04:20:02	-6	0.1	8.46	0.1	

Well	Field	Job Start	Customer	Job Number
ATH FEDERAL 9-14H C10O KEINATH FEDERAL 9-14H C	MAMM CREEK	Feb/15/2011	ENCANA OIL & GAS	000494594

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/16/2011	04:23:52	598	0.0	8.44	1.4	
02/16/2011	04:26:22	11	0.0	8.44	1.4	
02/16/2011	04:28:52	191	5.0	8.44	6.9	
02/16/2011	04:31:22	287	6.5	8.43	21.1	
02/16/2011	04:33:52	280	6.5	8.43	37.2	
02/16/2011	04:36:05					End Spacer
02/16/2011	04:36:05	291	6.5	8.43	51.6	
02/16/2011	04:36:06					Start Cement Slurry
02/16/2011	04:36:06	291	6.6	8.50	51.7	
02/16/2011	04:36:08					Start Mixing Scav Slurry
02/16/2011	04:36:08	300	6.7	9.13	51.9	
02/16/2011	04:36:17					Reset Total, Vol = 52.91 bbl
02/16/2011	04:36:17	384	6.6	12.52	52.9	
02/16/2011	04:36:22	407	6.6	12.77	53.5	
02/16/2011	04:38:23					End Scavenger Slurry
02/16/2011	04:38:23	423	6.5	12.60	66.6	
02/16/2011	04:38:24					Start Mixing Lead Slurry
02/16/2011	04:38:24	423	6.5	12.59	66.8	
02/16/2011	04:38:26					230bbl(611sks) of 12.5ppg Cement
02/16/2011	04:38:26	392	6.5	12.59	67.0	
02/16/2011	04:38:27					mud scale test reads 12.5ppg
02/16/2011	04:38:27	392	6.5	12.59	67.1	
02/16/2011	04:38:28					Good returns
02/16/2011	04:38:28	412	6.5	12.59	67.2	
02/16/2011	04:38:52	379	6.5	12.61	69.8	
02/16/2011	04:41:22	376	6.5	12.57	86.2	
02/16/2011	04:43:52	373	6.5	12.55	102.5	
02/16/2011	04:46:22	380	6.5	12.54	118.9	
02/16/2011	04:48:52	395	6.5	12.53	135.2	
02/16/2011	04:51:22	375	6.5	12.53	151.6	
02/16/2011	04:53:52	375	6.5	12.55	167.9	
02/16/2011	04:56:22	354	6.5	12.56	184.3	
02/16/2011	04:58:52	351	6.5	12.60	200.7	
02/16/2011	04:59:04					Good returns
02/16/2011	04:59:04	362	6.5	12.63	202.0	
02/16/2011	05:01:22	377	6.5	12.45	217.0	
02/16/2011	05:03:52	375	6.5	12.58	233.3	
02/16/2011	05:06:22	368	6.5	12.54	249.7	
02/16/2011	05:08:52	363	6.5	12.69	266.0	
02/16/2011	05:11:22	350	6.5	12.42	282.4	
02/16/2011	05:12:25					End Lead Slurry
02/16/2011	05:12:25	241	5.1	12.95	288.2	
02/16/2011	05:12:27					Start Mixing Scav Slurry
02/16/2011	05:12:27	249	5.1	13.20	288.4	
02/16/2011	05:13:52	328	5.1	15.30	295.6	
02/16/2011	05:14:41					Reset Total, Vol = 247.69 bbl
02/16/2011	05:14:41	367	5.0	15.87	299.7	
02/16/2011	05:14:42					End Scavenger Slurry
02/16/2011	05:14:42	334	5.0	15.89	299.8	
02/16/2011	05:14:43					Start Mixing Tail Slurry
02/16/2011	05:14:43	334	5.0	15.89	299.8	
02/16/2011	05:14:46					54bbl(257sks) of 15.8ppg Cement
02/16/2011	05:14:46	355	5.0	15.90	300.1	
02/16/2011	05:14:47					mud scale test reads 15.8ppg

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ATH FEDERAL 9-14H C10O KEINATH FEDERAL 9-14H C	MAMM CREEK	Feb/15/2011	ENCANA OIL & GAS	000494594

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
02/16/2011	05:14:47	367	5.0	15.89	300.2	
02/16/2011	05:16:22	333	5.1	15.70	308.2	
02/16/2011	05:18:52	362	5.1	15.74	320.8	
02/16/2011	05:21:22	-10	0.0	15.75	330.3	
02/16/2011	05:23:52	86	2.4	15.79	335.5	
02/16/2011	05:25:23					End Tail Slurry
02/16/2011	05:25:23	88	2.5	15.53	339.2	
02/16/2011	05:25:26					End Cement Slurry
02/16/2011	05:25:26	106	2.6	15.54	339.4	
02/16/2011	05:25:31					Drop Top Plug
02/16/2011	05:25:31	97	2.6	15.53	339.6	
02/16/2011	05:25:35					Start Displacement
02/16/2011	05:25:35	95	2.6	15.51	339.7	
02/16/2011	05:25:39					146bbl of 9.6rig mud
02/16/2011	05:25:39					Good returns
02/16/2011	05:25:39	118	2.9	15.51	339.9	
02/16/2011	05:26:22	339	5.0	15.44	343.1	
02/16/2011	05:28:52	-10	0.0	15.02	349.8	
02/16/2011	05:31:22	-12	0.0	14.87	349.8	
02/16/2011	05:33:52	-12	0.0	9.92	349.8	
02/16/2011	05:36:22	323	7.6	9.55	355.6	
02/16/2011	05:38:52	391	7.9	9.63	375.3	
02/16/2011	05:41:22	403	8.0	9.61	395.1	
02/16/2011	05:42:53					at 28bbl away cement to surface
02/16/2011	05:42:53					120bbl cement to surface
02/16/2011	05:42:53	415	7.9	9.60	407.2	
02/16/2011	05:43:52	542	7.5	9.59	414.8	
02/16/2011	05:46:22	436	4.0	9.47	431.8	
02/16/2011	05:48:52	312	6.5	8.52	444.1	
02/16/2011	05:51:22	304	5.0	9.09	457.5	
02/16/2011	05:53:52	326	5.1	8.63	470.1	
02/16/2011	05:56:22	421	5.0	8.44	482.6	
02/16/2011	05:58:52	316	0.9	8.44	487.6	
02/16/2011	06:01:22	304	1.0	8.44	490.0	
02/16/2011	06:03:52	319	1.0	8.44	492.4	
02/16/2011	06:06:22	376	2.0	8.44	495.8	
02/16/2011	06:08:52	1122	0.0	8.44	500.6	
02/16/2011	06:09:48					Bump Top Plug
02/16/2011	06:09:48	1112	0.0	8.44	500.6	
02/16/2011	06:09:49					End Displacement
02/16/2011	06:09:49	1112	0.0	8.44	500.6	
02/16/2011	06:11:22	1109	0.0	8.44	500.6	
02/16/2011	06:12:43					End Job
02/16/2011	06:12:43	-17	0.0	8.45	500.6	
02/16/2011	06:12:49					Remark
02/16/2011	06:12:49	-17	0.0	8.45	500.6	
02/16/2011	06:12:50					Remark
02/16/2011	06:12:50	-17	0.0	8.45	500.6	
02/16/2011	06:14:24					Started Acquisition

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ATH FEDERAL 9-14H C10O KEINATH FEDERAL 9-14H C	MAMM CREEK	Feb/15/2011	ENCANA OIL & GAS	000494594

Post Job Summary

Average Pump Rates,				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
				283.0	86.1	50.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
3000	700	250	1000	251	FreshWater	341.0 bbl	8.34 lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
	283.0 bbl	146.1 bbl	75 degF	[x]	120.0 bbl
				Washed Thru Perfs [ ]	To

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Richard Mitchell	Dustin C Krueger	[ ] -	[x] -