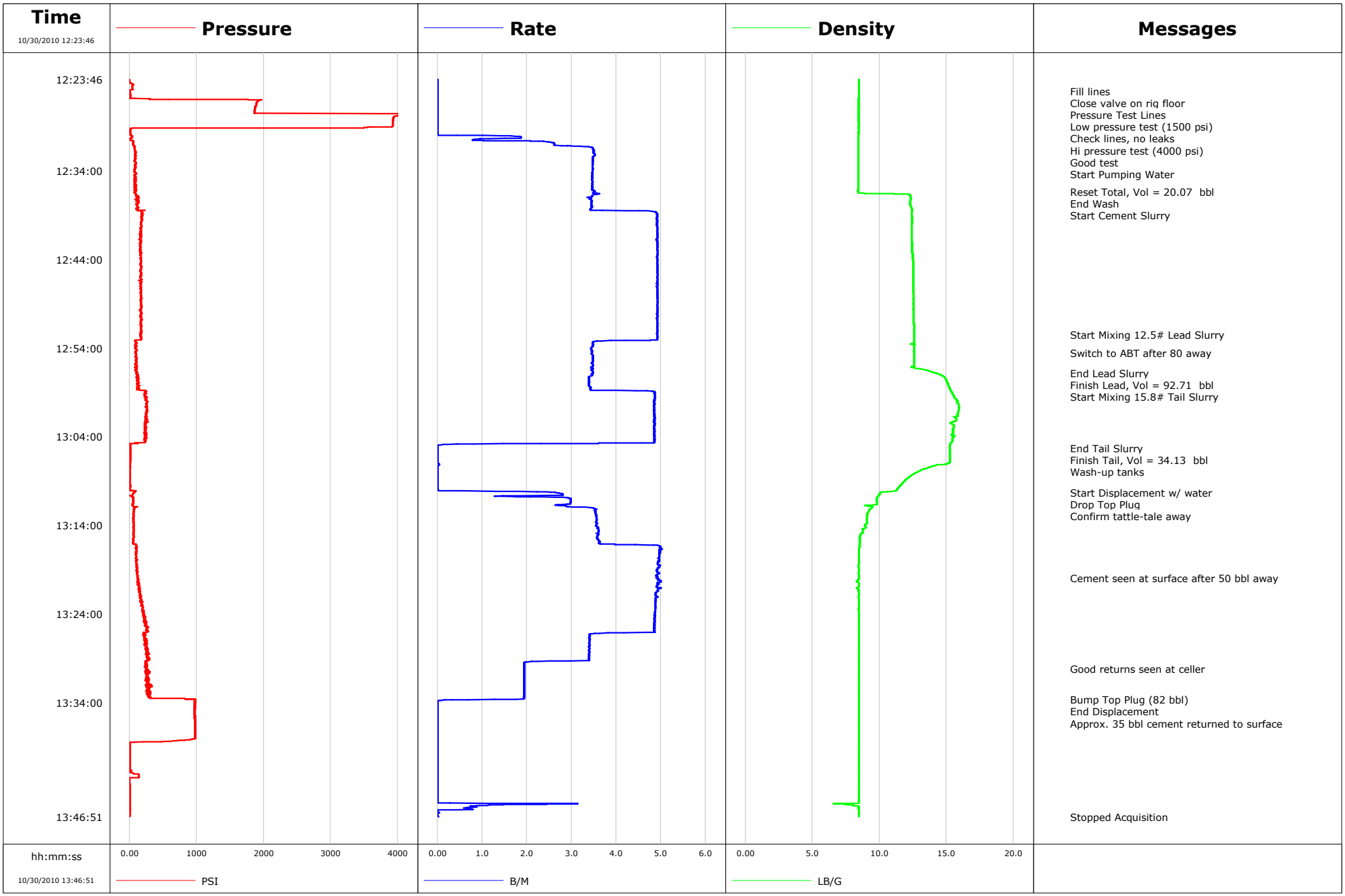
Schlumberger Cementing Job Report

Well	Federal 25-2BB	**Client**	Encana
Field		**SIR No.**	BAD4-00205
Engineer	Bill Bixby	**Job Type**	9 5/8" Surface Casing
Country	United States	**Job Date**	10-30-2010



Cementing Service Report

Customer	Job Number

Well	Location (legal)	Schlumberger Location	Job Start
			Oct/30/2010

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Well Master	**API/UWI**				

Rig Name	Drilled For	Service Via

Offshore Zone	Well Class	Well Type

Drilling Fluid Type	Max. Density	Plastic Viscosity

Service Line	Job Type
Cementing	

Max. Allowed Tubing Press	Max. Allowed Ann. Press	WellHead Connection

Service Instructions

Casing/Liner

Depth,	Size,	Weight,	Grade	Thread

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

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.

Casing/Tubing Secured ☐	1 Hole Volume Circulated prior to Cement ☐	Casing Tools	Squeeze Job
Lift Pressure		Shoe Type	Squeeze Type
Pipe Rotated ☐	Pipe Reciprocated ☐	Shoe Depth	Tool Type
No. Centralizers	Top Plugs / Bottom Plugs	Stage Tool Type	Tool Depth
Cement Head Type		Stage Tool Depth	Tail Pipe Size
Job Scheduled For: Oct/30/2010	Arrived on Location: Oct/30/2010	Collar Type	Tail Pipe Depth
Leave Location: Oct/30/2010		Collar Depth	Sqz. Total Vol.

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/01/1970	00:00:00					Remark
10/30/2010	11:42:41					Started Acquisition
10/30/2010	12:23:46	-3	0.0	8.44	0.0	
10/30/2010	12:24:00	-3	0.0	8.44	0.0	
10/30/2010	12:24:30	39	0.0	8.44	0.0	
10/30/2010	12:25:00	-4	0.0	8.44	0.0	
10/30/2010	12:25:06					Fill lines
10/30/2010	12:25:06	2	0.0	8.44	0.0	
10/30/2010	12:25:26					Close valve on rig floor
10/30/2010	12:25:26	9	0.0	8.44	0.0	
10/30/2010	12:25:30	9	0.0	8.44	0.0	
10/30/2010	12:25:41					Pressure Test Lines
10/30/2010	12:25:41	9	0.0	8.44	0.0	
10/30/2010	12:26:00	297	0.0	8.44	0.0	
10/30/2010	12:26:30	1890	0.0	8.43	0.0	
10/30/2010	12:27:00	1871	0.0	8.44	0.0	
10/30/2010	12:27:10					Low pressure test (1500 psi)
10/30/2010	12:27:10	1867	0.0	8.44	0.0	
10/30/2010	12:27:30	1859	0.0	8.43	0.0	
10/30/2010	12:27:42					Check lines, no leaks
10/30/2010	12:27:42	4119	0.0	8.44	0.0	
10/30/2010	12:27:59					Hi pressure test (4000 psi)

Well	Field	Job Start	Customer	Job Number
		Oct/30/2010		

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
10/30/2010	12:27:59	3941	0.0	8.43	0.0	
10/30/2010	12:28:00	3941	0.0	8.43	0.0	
10/30/2010	12:28:30	3925	0.0	8.44	0.0	
10/30/2010	12:29:00	3921	0.0	8.44	0.0	
10/30/2010	12:29:21					Good test
10/30/2010	12:29:21	16	0.0	8.44	0.0	
10/30/2010	12:29:30	11	0.0	8.43	0.0	
10/30/2010	12:30:00	14	0.0	8.43	0.0	
10/30/2010	12:30:10					Start Pumping Water
10/30/2010	12:30:10	31	1.8	8.42	0.1	
10/30/2010	12:30:30	13	0.9	8.42	0.7	
10/30/2010	12:31:00	51	2.6	8.42	1.6	
10/30/2010	12:31:30	72	3.5	8.43	3.1	
10/30/2010	12:32:00	90	3.5	8.43	4.9	
10/30/2010	12:32:30	87	3.5	8.43	6.6	
10/30/2010	12:33:00	77	3.5	8.43	8.4	
10/30/2010	12:33:30	86	3.5	8.43	10.1	
10/30/2010	12:34:00	76	3.5	8.43	11.8	
10/30/2010	12:34:30	93	3.5	8.43	13.5	
10/30/2010	12:35:00	72	3.5	8.43	15.3	
10/30/2010	12:35:30	74	3.5	8.43	17.0	
10/30/2010	12:36:00	79	3.5	8.43	18.7	
10/30/2010	12:36:23					Reset Total, Vol = 20.07 bbl
10/30/2010	12:36:23	77	3.5	8.39	20.1	
10/30/2010	12:36:30	76	3.5	8.43	20.5	
10/30/2010	12:36:31					End Wash
10/30/2010	12:36:31	74	3.5	8.43	20.5	
10/30/2010	12:36:45					Start Cement Slurry
10/30/2010	12:36:45	96	3.5	12.27	21.4	
10/30/2010	12:37:00	121	3.5	12.31	22.2	
10/30/2010	12:37:30	134	3.4	12.29	23.9	
10/30/2010	12:38:00	115	3.4	12.30	25.7	
10/30/2010	12:38:30	112	3.4	12.41	27.4	
10/30/2010	12:39:00	184	4.9	12.41	29.7	
10/30/2010	12:39:30	181	4.9	12.42	32.2	
10/30/2010	12:40:00	182	4.9	12.41	34.7	
10/30/2010	12:40:30	161	4.9	12.40	37.1	
10/30/2010	12:41:00	169	4.9	12.41	39.6	
10/30/2010	12:41:30	171	4.9	12.41	42.0	
10/30/2010	12:42:00	169	4.9	12.41	44.5	
10/30/2010	12:42:30	158	4.9	12.42	46.9	
10/30/2010	12:43:00	166	4.9	12.44	49.4	
10/30/2010	12:43:30	169	4.9	12.46	51.8	
10/30/2010	12:44:00	169	4.9	12.48	54.3	
10/30/2010	12:44:30	169	4.9	12.51	56.8	
10/30/2010	12:45:00	172	4.9	12.50	59.2	
10/30/2010	12:45:30	166	4.9	12.50	61.7	
10/30/2010	12:46:00	159	4.9	12.51	64.1	
10/30/2010	12:46:30	167	4.9	12.51	66.6	
10/30/2010	12:47:00	173	4.9	12.50	69.0	
10/30/2010	12:47:30	177	4.9	12.50	71.5	
10/30/2010	12:48:00	165	4.9	12.53	74.0	
10/30/2010	12:48:30	179	4.9	12.52	76.4	
10/30/2010	12:49:00	169	4.9	12.52	78.9	
10/30/2010	12:49:30	170	4.9	12.53	81.3	

Well	Field	Job Start	Customer	Job Number
		Oct/30/2010		

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
10/30/2010	12:50:00	163	4.9	12.54	83.8	
10/30/2010	12:50:30	163	4.9	12.54	86.2	
10/30/2010	12:51:00	167	4.9	12.55	88.7	
10/30/2010	12:51:30	175	4.9	12.57	91.2	
10/30/2010	12:52:00	175	4.9	12.57	93.6	
10/30/2010	12:52:30	165	4.9	12.57	96.1	
10/30/2010	12:52:31					Start Mixing 12.5# Lead Slurry
10/30/2010	12:52:31	161	4.9	12.57	96.1	
10/30/2010	12:53:00	169	4.9	12.57	98.5	
10/30/2010	12:53:30	106	3.5	12.57	100.5	
10/30/2010	12:54:00	96	3.5	12.56	102.3	
10/30/2010	12:54:30	95	3.5	12.56	104.0	
10/30/2010	12:54:35					Switch to ABT after 80 away
10/30/2010	12:54:35	92	3.5	12.56	104.3	
10/30/2010	12:55:00	90	3.5	12.56	105.7	
10/30/2010	12:55:30	100	3.5	12.56	107.5	
10/30/2010	12:56:00	107	3.5	12.57	109.2	
10/30/2010	12:56:30	98	3.4	13.40	110.9	
10/30/2010	12:56:52					End Lead Slurry
10/30/2010	12:56:52	107	3.5	14.22	112.2	
10/30/2010	12:57:00	120	3.5	14.46	112.7	
10/30/2010	12:57:02					Finish Lead, Vol = 92.71 bbl
10/30/2010	12:57:02	125	3.5	14.48	112.8	
10/30/2010	12:57:25					Start Mixing 15.8# Tail Slurry
10/30/2010	12:57:25	118	3.4	14.89	114.1	
10/30/2010	12:57:30	131	3.4	14.92	114.4	
10/30/2010	12:58:00	140	3.4	15.07	116.1	
10/30/2010	12:58:30	126	3.4	15.21	117.8	
10/30/2010	12:59:00	237	4.9	15.36	119.7	
10/30/2010	12:59:30	235	4.9	15.55	122.1	
10/30/2010	13:00:00	263	4.9	15.82	124.6	
10/30/2010	13:00:30	260	4.8	15.89	127.0	
10/30/2010	13:01:00	255	4.9	15.90	129.4	
10/30/2010	13:01:30	253	4.8	15.81	131.8	
10/30/2010	13:02:00	257	4.9	15.70	134.3	
10/30/2010	13:02:30	229	4.8	15.28	136.7	
10/30/2010	13:03:00	256	4.8	15.51	139.1	
10/30/2010	13:03:30	235	4.8	15.48	141.5	
10/30/2010	13:04:00	224	4.8	15.61	144.0	
10/30/2010	13:04:30	238	4.8	15.41	146.4	
10/30/2010	13:05:00	9	0.0	15.26	147.9	
10/30/2010	13:05:17					End Tail Slurry
10/30/2010	13:05:17	8	0.0	15.23	147.9	
10/30/2010	13:05:29					Finish Tail, Vol = 34.13 bbl
10/30/2010	13:05:29	9	0.0	15.22	147.9	
10/30/2010	13:05:30	9	0.0	15.22	147.9	
10/30/2010	13:06:00	9	0.0	15.22	147.9	
10/30/2010	13:06:30	9	0.0	15.23	147.9	
10/30/2010	13:07:00					Wash-up tanks
10/30/2010	13:07:00	7	0.0	15.24	147.9	
10/30/2010	13:07:30	7	0.0	13.65	147.9	
10/30/2010	13:08:00	7	0.0	12.87	147.9	
10/30/2010	13:08:30	7	0.0	12.30	147.9	
10/30/2010	13:09:00	7	0.0	11.91	147.9	
10/30/2010	13:09:30	8	0.0	11.59	147.9	

Well	Field	Job Start	Customer	Job Number
		Oct/30/2010		

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
10/30/2010	13:10:00	7	0.0	11.30	147.9	
10/30/2010	13:10:19					Start Displacement w/ water
10/30/2010	13:10:19	71	2.6	10.11	148.2	
10/30/2010	13:10:30	47	2.8	10.01	148.7	
10/30/2010	13:10:44					Drop Top Plug
10/30/2010	13:10:44	28	1.3	9.92	149.3	
10/30/2010	13:10:58					Confirm tattle-tale away
10/30/2010	13:10:58	54	3.0	9.80	149.9	
10/30/2010	13:11:00	55	3.0	9.79	149.9	
10/30/2010	13:11:30	54	3.0	9.81	151.4	
10/30/2010	13:12:00	72	3.3	9.46	152.9	
10/30/2010	13:12:30	63	3.5	9.17	154.6	
10/30/2010	13:13:00	64	3.5	9.06	156.4	
10/30/2010	13:13:30	57	3.6	9.06	158.2	
10/30/2010	13:14:00	60	3.5	8.89	160.0	
10/30/2010	13:14:30	63	3.6	8.72	161.8	
10/30/2010	13:15:00	59	3.6	8.62	163.6	
10/30/2010	13:15:30	57	3.6	8.52	165.3	
10/30/2010	13:16:00	56	3.6	8.52	167.1	
10/30/2010	13:16:30	110	5.0	8.51	169.4	
10/30/2010	13:17:00	97	5.0	8.46	171.9	
10/30/2010	13:17:30	100	5.0	8.47	174.3	
10/30/2010	13:18:00	107	5.0	8.46	176.8	
10/30/2010	13:18:30	114	5.0	8.44	179.3	
10/30/2010	13:19:00	111	4.9	8.44	181.8	
10/30/2010	13:19:30	111	4.9	8.43	184.2	
10/30/2010	13:20:00					Cement seen at surface after 50 bbl away
10/30/2010	13:20:00	121	4.9	8.44	186.7	
10/30/2010	13:20:30	126	4.9	8.44	189.1	
10/30/2010	13:21:00	146	4.9	8.45	191.6	
10/30/2010	13:21:30	158	4.9	8.44	194.1	
10/30/2010	13:22:00	156	4.9	8.44	196.5	
10/30/2010	13:22:30	180	4.9	8.44	199.0	
10/30/2010	13:23:00	194	4.9	8.44	201.4	
10/30/2010	13:23:30	195	4.9	8.43	203.8	
10/30/2010	13:24:00	209	4.9	8.44	206.3	
10/30/2010	13:24:30	213	4.9	8.44	208.7	
10/30/2010	13:25:00	219	4.9	8.44	211.1	
10/30/2010	13:25:30	279	4.9	8.44	213.6	
10/30/2010	13:26:00	270	4.9	8.44	216.0	
10/30/2010	13:26:30	225	3.4	8.44	217.9	
10/30/2010	13:27:00	264	3.4	8.44	219.6	
10/30/2010	13:27:30	224	3.4	8.44	221.3	
10/30/2010	13:28:00	242	3.4	8.44	223.0	
10/30/2010	13:28:30	281	3.4	8.44	224.7	
10/30/2010	13:29:00	278	3.4	8.44	226.4	
10/30/2010	13:29:30	238	1.9	8.44	227.8	
10/30/2010	13:30:00	227	1.9	8.44	228.8	
10/30/2010	13:30:11					Good returns seen at celler
10/30/2010	13:30:11	243	1.9	8.44	229.2	
10/30/2010	13:30:30	233	1.9	8.44	229.8	
10/30/2010	13:31:00	270	1.9	8.44	230.7	
10/30/2010	13:31:30	294	1.9	8.44	231.7	
10/30/2010	13:32:00	325	1.9	8.44	232.7	
10/30/2010	13:32:30	287	1.9	8.44	233.7	

Well	Field	Job Start	Customer	Job Number
		Oct/30/2010		

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
10/30/2010	13:33:00	323	1.9	8.44	234.6	
10/30/2010	13:33:30	309	1.9	8.44	235.6	
10/30/2010	13:33:40					Bump Top Plug (82 bbl)
10/30/2010	13:33:40	962	1.3	8.44	235.9	
10/30/2010	13:34:00	976	0.0	8.44	235.9	
10/30/2010	13:34:04					End Displacement
10/30/2010	13:34:04	971	0.0	8.44	235.9	
10/30/2010	13:34:06					Approx. 35 bbl cement returned to surface
10/30/2010	13:34:06	974	0.0	8.44	235.9	
10/30/2010	13:34:30	972	0.0	8.44	235.9	
10/30/2010	13:35:00	972	0.0	8.44	235.9	
10/30/2010	13:35:30	972	0.0	8.44	235.9	
10/30/2010	13:36:00	973	0.0	8.44	235.9	
10/30/2010	13:36:30	973	0.0	8.44	235.9	
10/30/2010	13:37:00	974	0.0	8.44	235.9	
10/30/2010	13:37:30	974	0.0	8.44	235.9	
10/30/2010	13:38:00	974	0.0	8.44	235.9	
10/30/2010	13:38:30	14	0.0	8.44	235.9	
10/30/2010	13:39:00	2	0.0	8.44	235.9	
10/30/2010	13:39:30	2	0.0	8.44	235.9	
10/30/2010	13:40:00	2	0.0	8.44	235.9	
10/30/2010	13:40:30	2	0.0	8.44	235.9	
10/30/2010	13:41:00	2	0.0	8.44	235.9	
10/30/2010	13:41:30	2	0.0	8.44	235.9	
10/30/2010	13:42:00	49	0.0	8.44	235.9	
10/30/2010	13:42:30	3	0.0	8.44	235.9	
10/30/2010	13:43:00	-0	0.0	8.44	235.9	
10/30/2010	13:43:30	1	0.0	8.44	235.9	
10/30/2010	13:44:00	1	0.0	8.44	235.9	
10/30/2010	13:44:30	2	0.0	8.44	235.9	
10/30/2010	13:45:00	2	0.0	8.44	235.9	
10/30/2010	13:45:30	3	1.5	7.62	236.3	
10/30/2010	13:46:00	2	0.7	8.45	236.7	
10/30/2010	13:46:30	2	0.0	8.44	236.8	
10/30/2010	13:46:51	2	0.0	8.44	236.8	
10/30/2010	13:46:51					Stopped Acquisition

Post Job Summary

Average Pump Rates,				Volume of Fluid Injected,			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2

Treating Pressure Summary,					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface? ☐	Volume
				Washed Thru Perfs ☐	To

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost ☐	Job Completed ☐
		-	-