

**CAMECO RESOURCES
CROW BUTTE OPERATION**



**86 Crow Butte Road
P.O. Box 169
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**(308) 665-2215
(308) 665-2341 – FAX**

July 30, 2010

Mr. Keith I McConnell, Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
Mailstop T8-F5
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Re: Source Materials License SUA-1534
Docket No. 40-8943
SM6-23 Monitor Well Excursion

Dear Mr. McConnell:

On June 16, 2010 during routine biweekly water sampling of Cameco Resources, Crow Butte Operation (CBO) shallow monitor well SM6-23, the upper control limits (UCL) were exceeded. The multiple parameter UCL's for alkalinity and conductivity were exceeded in SM6-23. As required by License Condition 11.2 of Source Materials License SUA-1534, a second sample was collected within 48 hours and analyzed for the three excursion indicator parameters. The results of the second sample also exceeded the UCL's as described above.

In accordance with License Condition 11.2, CBO increased the sampling frequency for SM6-23 to weekly. Weekly samples were obtained from June 17, 2010 to July 29, 2010. The samples collected on June 24, 2010, and July 1, 8, 15, 22, and 29, 2010 were below the excursion criteria as stated in License Condition 11.2. Based on these results, CBO is removing SM6-23 from excursion status and is returning it to routine biweekly sampling. Attached are copies of the analytical data for each of the last six weekly samples and graphs for each parameter covering the period of December 30, 2009 to July 29, 2010.

If you have any questions or require any further information, please do not hesitate to call me at (308) 665-2215 Ext. 114.

CROW BUTTE RESOURCES, INC.



Mr. Keith McConnell
July 30, 2010
Page 2

Sincerely,
CAMECO RESOURCES
CROW BUTTE OPERATION

Larry Teahon

Larry Teahon
SHEQ Manager

Enclosures: As Stated

cc: Mr. Ronald Burrows - NRC
Mr. Joe Brister – Cheyenne Office
CBO File

100

Crow Butte Project

Monitor Well Laboratory Report

Sample Date 6/24/2010
 Analysis Date 6/24/2010

Well ID	Alkalinity			Conductivity			Chloride		
	(mg/L)	Alk SCL	Alk MCL	(µmho/cm)	Cond SCL	Cond MCL	(mg/L)	Cl SCL	Cl MCL
BOW96-1	223	314	262	510	791	659	7.4	24	20
CM6-2	299	436	364	1970	2822	2352	195	279	233
CM6-28	312	449	374	1850	2894	2412	186	307	256
CM6-29	301	448	373	1910	3024	2520	195	321	268
CM6-3	292	441	367	1930	2808	2340	191	269	224
CM6-30	310	459	383	1870	2952	2460	188	328	274
CM6-31	312	464	386	1890	2851	2376	190	301	251
CM6-32	310	461	384	1900	2981	2484	191	292	244
CM8-24	318	458	382	1850	2971	2484	188	278	232
CM8-25	312	449	374	1850	3355	2796	190	357	298
CM9-1	300	482	402	1870	2837	2364	199	288	240
CM9-10	295	359	299	1810	2390	1992	191	292	244
CM9-2	297	439	366	1840	2779	2316	195	297	247
CM9-3	297	448	373	1870	2664	2220	199	266	222
CM9-4	321	464	386	1950	3067	2556	206	383	319
CM9-5	297	449	374	1820	2952	2460	191	328	274
CM9-6	296	449	374	1810	3082	2568	191	377	314
CM9-7	295	464	386	1810	2808	2340	191	285	238
CM9-8	293	418	348	1830	2952	2460	188	366	305
CM9-9	301	475	396	1830	2923	2436	195	334	278
SM10-30	239	359	299	530	778	648	7.1	25	21
SM10-31	228	340	283	520	734	612	6.4	25	21
SM10-32	230	340	283	520	734	612	6	23	20
SM6-23	257	314	262	570	691	576	6.7	23	19
SM6-28	288	351	293	760	778	648	18	24	20

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7/2

Crow Butte Project Monitor Well Laboratory Report

Sample Date 7/1/2010

Analysis Date 7/1/2010

Well ID	Alkalinity			Conductivity			Chloride		
	(mg/L)	Alk SCL	Alk MCL	(µmho/cm)	Cond SCL	Cond MCL	(mg/L)	Cl SCL	Cl MCL
CM3-5	315	433	361	2030	2814	2345	206	318	265
CM3-6	295	441	367	1960	2799	2333	191	300	250
CM5-1	309	462	385	1910	2884	2404	191	304	253
CM5-2	300	448	373	1890	2860	2383	191	297	247
CM5-3	302	449	374	1880	2949	2458	188	324	270
CM5-4	305	454	378	1890	2896	2413	191	305	254
CM5-5	305	455	379	1880	2880	2400	195	297	247
CM6-1	285	432	360	1880	3168	2640	188	334	278
CM6-10	299	429	358	1960	2952	2460	199	327	272
CM6-4	297	441	367	1940	2837	2364	199	289	241
CM6-5	295	416	347	2060	2923	2436	206	294	245
CM6-6	297	444	370	1950	2894	2412	195	301	251
CM6-7	286	403	336	1950	2822	2352	191	281	234
CM6-8	290	445	371	1940	2923	2436	191	305	254
CM6-9	284	428	356	1940	2866	2388	188	285	238
SM2-1	190	305	254	540	865	721	15	56	47
SM2-2	167	314	262	480	1210	1008	12	63	53
SM2-3	196	344	287	570	969	808	20	37	31
SM6-1	211	325	271	550	903	752	9.2	47	39
SM6-10	201	317	264	490	838	698	8.9	35	29
SM6-17	233	353	294	490	798	665	4.3	42	35
SM6-2	207	291	242	560	1008	840	12	85	71
SM6-23	256	314	262	560	691	576	7.4	23	19
SM6-28	270	351	293	700	778	648	16	24	20
SM6-3	200	295	246	550	844	703	12	43	36

Crow Butte Project
Monitor Well Laboratory Report

Sample Date 7/8/2010
Analysis Date 7/8/2010

Well ID	Alkalinity			Conductivity			Chloride		
	(mg/L)	Alk SCL	Alk MCL	(µmho/cm)	Cond SCL	Cond MCL	(mg/L)	Cl SCL	Cl MCL
SM10-3	246	386	322	560	821	684	8.5	24	20
SM10-4	233	346	288	530	778	648	7.1	24	20
SM10-5	243	350	292	540	763	636	6.2	23	19
SM10-6	290	501	418	740	1123	936	13	33	28
SM10-7	265	403	336	680	965	804	12	33	27
SM10-8	252	403	336	610	907	756	11	31	26
SM10-9	245	389	324	560	835	696	9.2	28	23
SM4-1	157	248	206	360	772	643	2.8	52	43
SM4-5A	196	367	306	550	1236	1030	12	106	88
SM5-10	205	324	270	560	901	751	11	36	30
SM5-11	217	341	284	590	942	785	11	41	34
SM5-12	208	327	272	570	920	767	11	43	36
SM5-13	201	314	262	560	880	733	13	39	32
SM5-14	184	304	253	500	854	712	9.6	31	26
SM5-15	204	311	259	560	973	811	13	60	50
SM5-16	182	285	238	460	732	610	5.7	30	25
SM5-9	205	314	262	560	870	726	11	36	30
SM6-23	256	314	262	570	691	576	7.1	23	19
SM6-28	258	351	293	670	778	648	13	24	20
SM8-28	233	328	274	720	801	667	14	24	20

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7/15

Crow Butte Project Monitor Well Laboratory Report

Sample Date 7/15/2010

Analysis Date 7/15/2010

Well ID	Alkalinity			Conductivity			Chloride		
	(mg/L)	Alk SCL	Alk MCL	(µmho/cm)	Cond SCL	Cond MCL	(mg/L)	Cl SCL	Cl MCL
CM3-5	312	433	361	2030	2814	2345	206	318	265
CM3-6	301	441	367	1960	2799	2333	195	300	250
CM5-1	310	462	385	1920	2884	2404	193	304	253
CM5-2	305	448	373	1890	2860	2383	195	297	247
CM5-3	308	449	374	1890	2949	2458	188	324	270
CM5-4	311	454	378	1900	2896	2413	191	305	254
CM5-5	307	455	379	1880	2880	2400	195	297	247
CM6-1	284	432	360	1890	3168	2640	191	334	278
CM6-10	302	429	358	1950	2952	2460	195	327	272
CM6-4	300	441	367	1950	2837	2364	199	289	241
CM6-5	299	416	347	2050	2923	2436	206	294	245
CM6-6	302	444	370	1950	2894	2412	191	301	251
CM6-7	285	403	336	1950	2822	2352	195	281	234
CM6-8	299	445	371	1950	2923	2436	195	305	254
CM6-9	294	428	356	1960	2866	2388	193	285	238
SM2-1	192	305	254	540	865	721	15	56	47
SM2-2	168	314	262	470	1210	1008	12	63	53
SM2-3	198	344	287	570	969	808	19	37	31
SM6-1	211	325	271	550	903	752	8.9	47	39
SM6-10	205	317	264	500	838	698	9.2	35	29
SM6-17	239	353	294	490	798	665	4.1	42	35
SM6-2	210	291	242	560	1008	840	11	85	71
SM6-23	257	314	262	560	691	576	7.1	23	19
SM6-28	263	351	293	660	778	648	13	24	20
SM6-3	204	295	246	550	844	703	12	43	36

Sample Date 7/22/2010
 Analysis Date 7/22/2010

Crow Butte Project Monitor Well Laboratory Report

Well ID	Alkalinity			Conductivity			Chloride		
	(mg/L)	Alk SCL	Alk MCL	(µmho/cm)	Cond SCL	Cond MCL	(mg/L)	Cl SCL	Cl MCL
BOW96-1	223	314	262	500	791	659	7.1	24	20
CM6-2	303	436	364	1970	2822	2352	195	279	233
CM6-28	317	449	374	1850	2894	2412	186	307	256
CM6-29	307	448	373	1900	3024	2520	191	321	268
CM6-3	293	441	367	1930	2808	2340	191	269	224
CM6-30	313	459	383	1870	2952	2460	188	328	274
CM6-31	316	464	386	1890	2851	2376	188	301	251
CM6-32	311	461	384	1900	2981	2484	191	292	244
CM8-12	349	461	384	2010	3038	2532	206	305	254
CM8-24	319	458	382	1850	2971	2484	188	278	232
CM8-25	310	449	374	1850	3355	2796	188	357	298
CM9-1	298	482	402	1870	2837	2364	199	288	240
CM9-10	293	359	299	1800	2390	1992	191	292	244
CM9-2	293	439	366	1840	2779	2316	195	297	247
CM9-3	300	448	373	1870	2664	2220	202	266	222
CM9-4	319	464	386	1960	3067	2556	213	383	319
CM9-5	294	449	374	1830	2952	2460	191	328	274
CM9-6	294	449	374	1810	3082	2568	188	377	314
CM9-7	294	464	386	1810	2808	2340	191	285	238
CM9-8	290	418	348	1830	2952	2460	190	366	305
CM9-9	298	475	396	1830	2923	2436	195	334	278
SM10-30	242	359	299	540	778	648	7.1	25	21
SM10-31	231	340	283	520	734	612	6.4	25	21
SM10-32	232	340	283	520	734	612	6	23	20
SM6-23	253	314	262	560	691	576	6.7	23	19

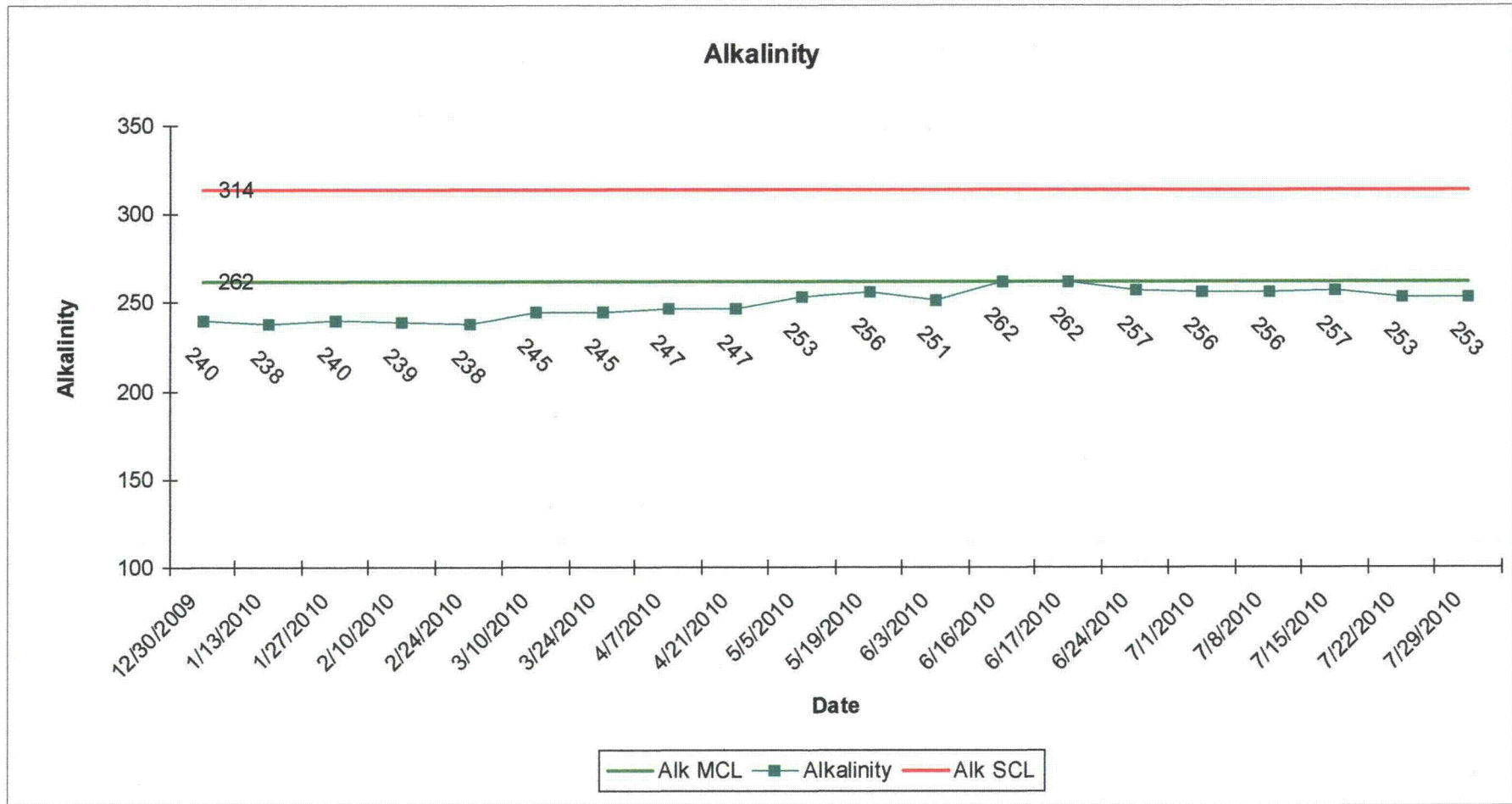
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Crow Butte Project Monitor Well Laboratory Report

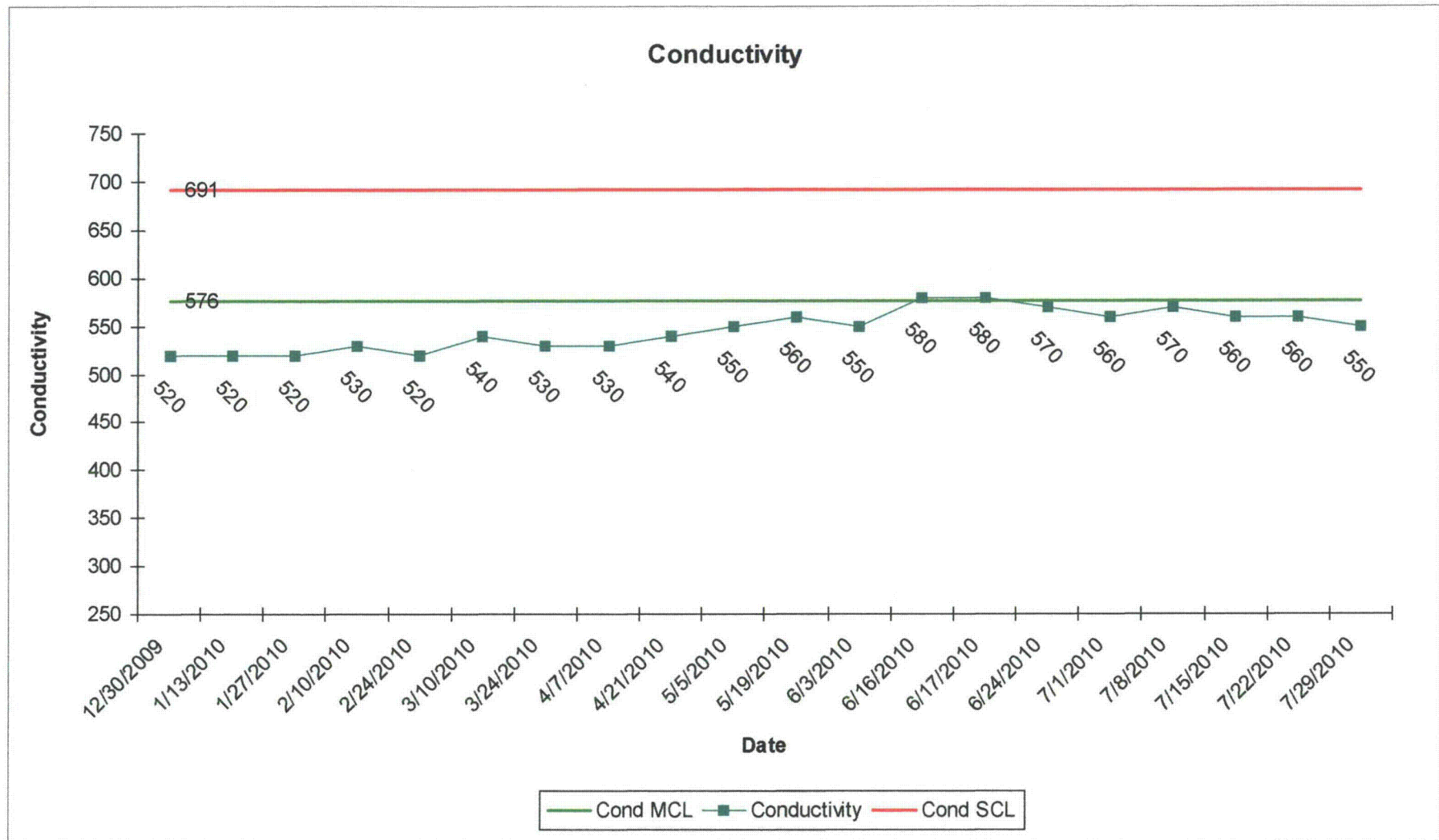
Sample Date 7/29/2010
Analysis Date 7/29/2010

Well ID	Alkalinity			Conductivity			Chloride		
	(mg/L)	Alk SCL	Alk MCL	(µmho/cm)	Cond SCL	Cond MCL	(mg/L)	Cl SCL	Cl MCL
CM3-5	314	433	361	2050	2814	2345	202	318	265
CM3-6	296	441	367	1960	2799	2333	197	300	250
CM5-1	305	462	385	1910	2884	2404	193	304	253
CM5-2	298	448	373	1880	2860	2383	191	297	247
CM5-3	303	449	374	1890	2949	2458	191	324	270
CM5-4	306	454	378	1890	2896	2413	195	305	254
CM5-5	306	455	379	1880	2880	2400	191	297	247
CM6-1	288	432	360	1870	3168	2640	188	334	278
CM6-10	304	429	358	1950	2952	2460	195	327	272
CM6-4	300	441	367	1930	2837	2364	199	289	241
CM6-5	300	416	347	2040	2923	2436	202	294	245
CM6-6	304	444	370	1940	2894	2412	191	301	251
CM6-7	290	403	336	1930	2822	2352	191	281	234
CM6-8	299	445	371	1940	2923	2436	191	305	254
CM6-9	292	428	356	1940	2866	2388	191	285	238
CM8-12	330	461	384	1940	3038	2532	199	305	254
SM2-1	190	305	254	540	865	721	15	56	47
SM2-2	167	314	262	480	1210	1008	12	63	53
SM2-3	194	344	287	570	969	808	19	37	31
SM6-1	213	325	271	550	903	752	8.9	47	39
SM6-10	202	317	264	490	838	698	8.9	35	29
SM6-17	237	353	294	490	798	665	3.9	42	35
SM6-2	209	291	242	560	1008	840	12	85	71
SM6-23	253	314	262	550	691	576	6.6	23	19
SM6-28	256	351	293	640	778	648	13	24	20

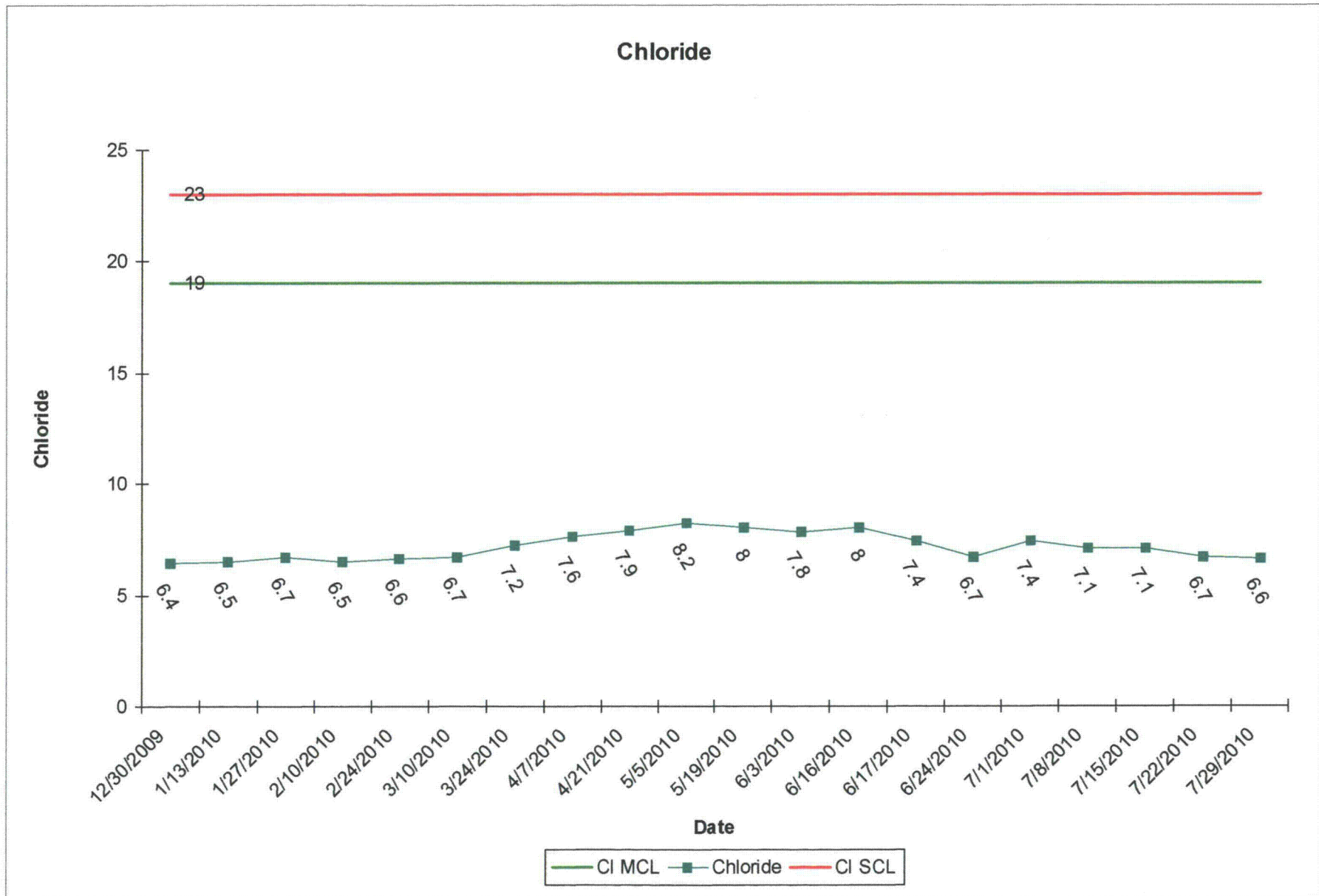
SM6-23



SM6-23



SM6-23



SM6-23

