

**CAMECO RESOURCES  
CROW BUTTE OPERATION**



**86 Crow Butte Road  
P.O. Box 169  
Crawford, Nebraska 69339-0169**

**(308) 665-2215  
(308) 665-2341 – FAX**

May 19, 2008

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  
CM9-5 Monitor Well Excursion

Dear Mr. McConnell:

On May 15, 2008 during routine biweekly water sampling of Crow Butte Operation (CBO) perimeter monitor well CM9-5, the multiple parameter upper control limit (UCL) was exceeded for conductivity and the single parameter upper control limit was exceeded for alkalinity. 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 exceeded the multiple UCL for conductivity and the single UCL for alkalinity.

CBO notified Mr. Stephen J. Cohen by phone on May 16, 2008 of the confirmation of the exceedance as required in License Condition 9.2. Laboratory results for the sample analysis for CM9-5 are attached. In addition, graphs are attached for the three excursion indicator parameters and water level that cover the period from September 7, 2007 to May 16, 2008.

This well began to trend upward four weeks ago. CBO shut off injection in the well nearest CM9-5 on May 1, 2008. On May 15, 2008 six more injection wells were shut off in the area. A production bleed continues to be maintained in the area to recover injection fluids.

In accordance with License Condition 11.2, CBO has increased the sampling frequency for CM9-5 to weekly until three consecutive weekly samples are below the exceeded UCLs. CBO will continue weekly sampling for an additional three weeks after this goal has been achieved as required by

CROW BUTTE RESOURCES, INC.



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CBO's Nebraska Department of Environmental Quality (NDEQ) Class III UIC Permit requirements. If the well has not exceeded the UCLs after these samples, it will be returned to normal status.

If you have any questions or require any further information, please do not hesitate to call me at (308) 665-2215 Ext. 117.

Sincerely,  
CAMECO RESOURCES, CROW BUTTE OPERATION.

A handwritten signature in cursive script that reads "Walt Nelson".

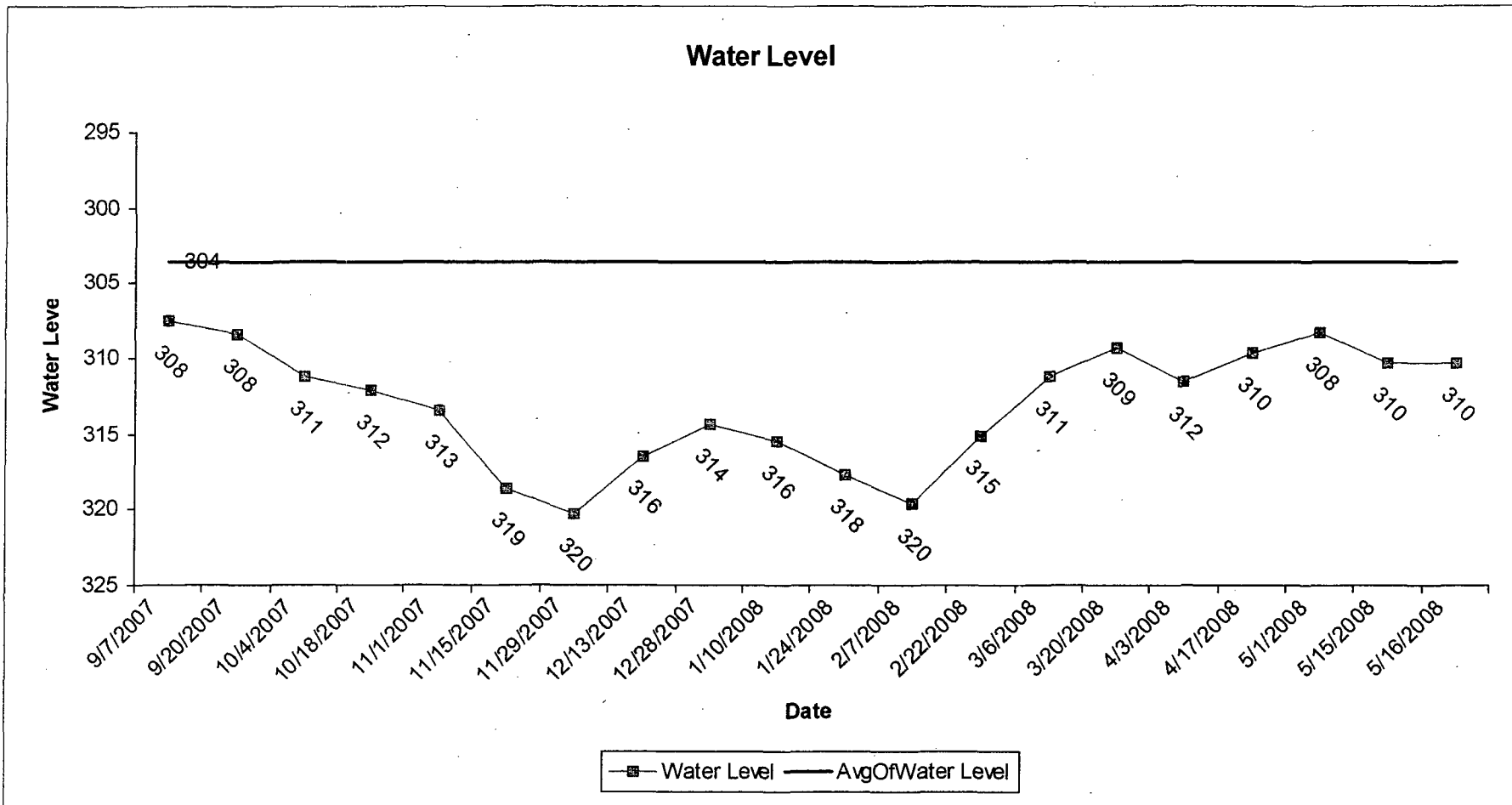
Walt Nelson  
Environmental Leadership Coordinator

Enclosures: As Stated

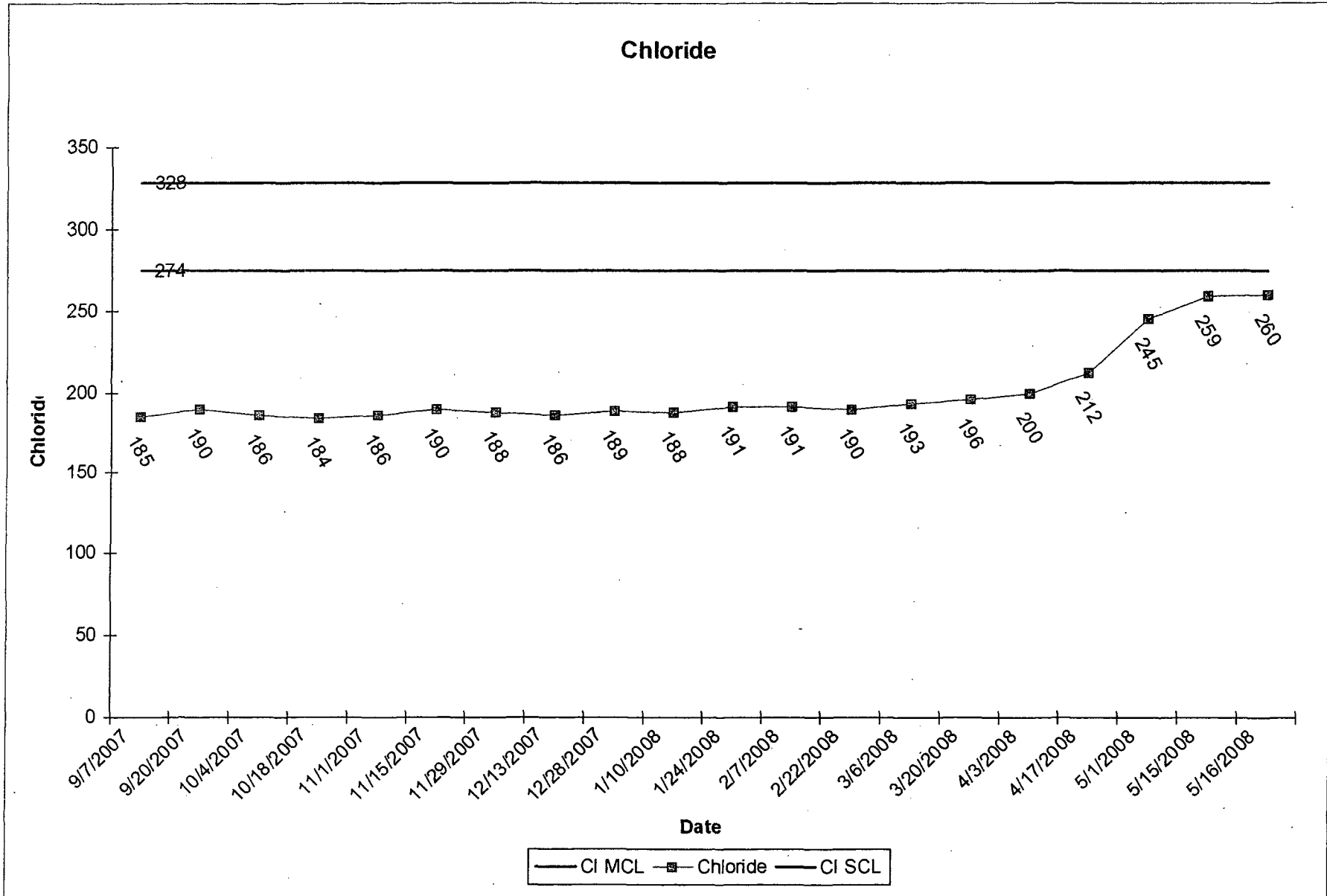
cc: U.S. Nuclear Regulatory Commission  
Mr. Stephen J. Cohen - ADDRESSEE ONLY  
Fuel Cycle Licensing Branch  
Mailstop T8-F5  
Washington, DC 20555

Mr. Steve Magnuson - CBO, Denver

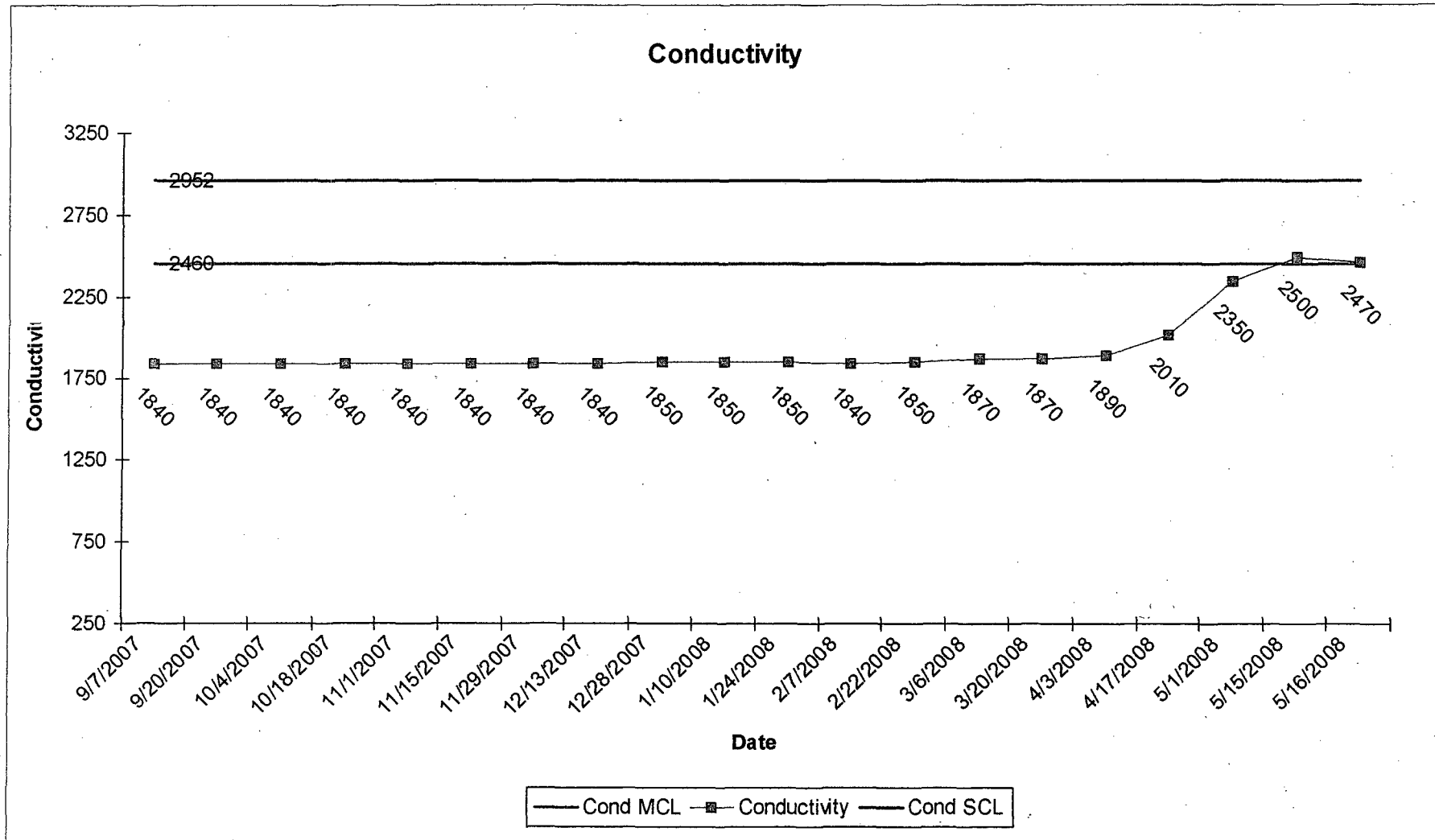
# CM9-5



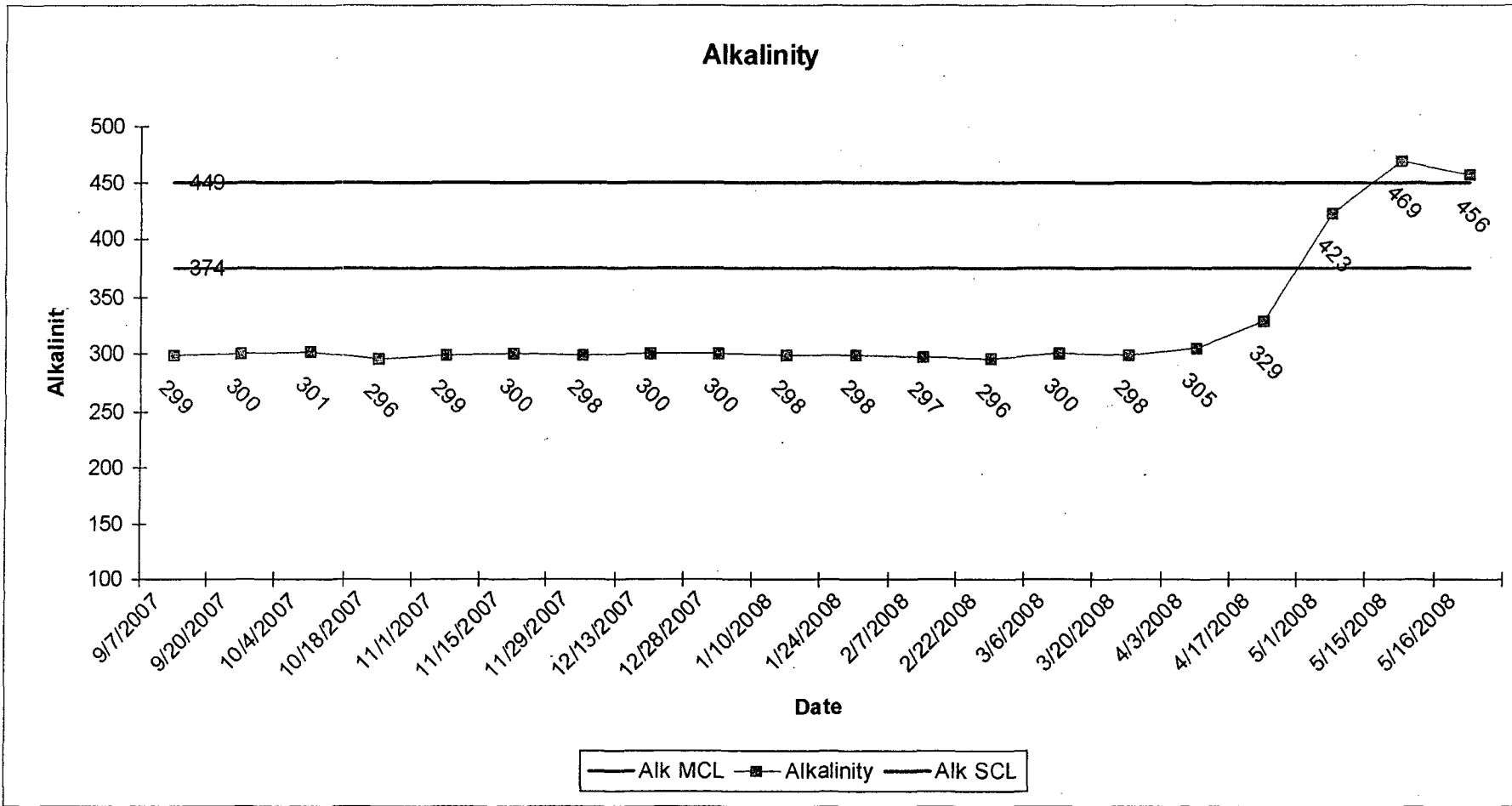
# CM9-5



# CM9-5



# CM9-5



Sample Date  
Analysis Date

5/15/08  
5/15/08

## 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	222	314	262	500	791	659	6.8	24	20
CM6-2	295	436	364	1920	2822	2352	190	279	233
CM6-28	316	449	374	1850	2894	2412	182	307	256
CM6-29	300	448	373	1910	3024	2520	185	321	268
CM6-3	294	441	367	1930	2808	2340	186	269	224
CM6-30	314	459	383	1860	2952	2460	182	328	274
CM6-31	315	464	386	1880	2851	2376	184	301	251
CM6-32	310	461	384	1900	2981	2484	184	292	244
CM8-24	322	458	382	1860	2971	2484	182	278	232
CM8-25	312	449	374	1860	3355	2796	181	357	298
CM9-1	303	482	402	1890	2837	2364	201	288	240
CM9-10	300	359	299	1800	2390	1992	186	292	244
CM9-2	302	439	366	1840	2779	2316	186	297	247
CM9-3	333	448	373	2010	2664	2220	215	266	222
CM9-4	389	464	386	2270	3067	2556	241	383	319
CM9-5	469	449	374	2500	2952	2460	259	328	274
CM9-6	311	449	374	1860	3082	2568	192	377	314
CM9-7	299	464	386	1810	2808	2340	183	285	238
CM9-8	300	418	348	1820	2952	2460	187	366	305
CM9-9	304	475	396	1810	2923	2436	187	334	278
SM10-30	227	359	299	510	778	648	6.4	25	21
SM10-31	226	340	283	510	734	612	5.9	25	21
SM10-32	228	340	283	510	734	612	5.8	23	20
SM8-17	224	331	276	510	848	707	7.1	24	20
SM8-18	223	317	264	520	816	680	9.9	25	21

Sample Date 5/16/08  
Analysis Date 5/16/08

### 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
GM9-5	456	449	374	2470	2952	2460	260	328	274