CAMECO RESOURCES
CROW BUTTE OPERATION

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P.O. Box 169
Crawford, Nebraska 69339-0169

(308) 665-2215
(308) 665-2341 – FAX

40-8943

October 12, 2015

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Marty Link, Acting Water Quality Division Administrator
Nebraska Department of Environmental Quality
PO Box 98922
Lincoln, Nebraska 68509-8922

Subject: UIC Permit NE0122611
SM6-24 Monitor Well Excursion

Dear Ms. Link:

On August 13, 2015 during routine biweekly water sampling of Cameco Resources, Crow Butte Operation (CBO) shallow monitor well SM6-24, exceeded the multiple parameter upper control limit (MCL) for conductivity and alkalinity. As required by Section B.1 of Part II of UIC Permit NE0122611, a second sample was collected within 24 hours and analyzed for the three excursion indicator parameters. The results of the second sample also exceeded the excursion control parameters as described above.

In accordance with Section B.1 Part II of the UIC permit, CBO increased the sampling frequency for SM6-24 to weekly. Weekly samples were obtained from August 14, 2015, to September 3, 2015. The samples collected on August 20, 27, and September 3, 2015, were below the excursion criteria from Section B.1 of the permit. Based on these results, CBO removed SM6-24 from excursion status. In accordance with the requirements of Section B.1, weekly sampling continued for an additional three weeks. During the stability monitoring period, the excursion parameters were not exceeded and SM6-24 was returned to biweekly sampling status. Attached are copies of the analytical data for each of the three weekly stability monitoring samples and graphs for each parameter covering the period of March 12, 2015 through October 8, 2015.

If you have any questions regarding this submittal, please feel free to contact me at (308) 665-2215, ext. 114.

NMS501

CROW BUTTE RESOURCES, INC.

Sincerely,
Cameco Resources
Crow Butte Operation

Larry Teahon

Larry Teahon
SHEQ Manager

Enclosures: As Stated

cc: CBO – File
NRC - Document Control Desk Director,
NRC – Deputy Director

ec: CR – Casper
Nancy Harris – NDEQ Program Coordinator
Shar Sapp – Chadron Field Office

Cameco

Crow Butte Project
Monitor Well Laboratory Report

Sample Date: 09/10/2015

Analysis Date: 09/10/2015

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
CM08-010	317	441	367	1842	3038	2532	172	315	263
CM08-011	321	446	372	1839	3053	2544	171	325	271
CM08-012	324	461	384	1844	3038	2532	169	305	254
CM10-001	324	469	391	1839	2822	2352	169	305	254
CM10-002	327	474	395	1849	2707	2256	170	262	218
CM10-003	334	474	395	1896	2736	2280	182	266	222
CM10-004	328	468	390	1882	2794	2328	176	288	240
CM10-005	347	464	386	1982	3082	2568	192	389	324
CM10-006	321	482	402	1837	2750	2292	166	281	234
CM10-007	323	482	402	1840	2765	2304	168	278	232
CM11-001	305	438	365	1840	2808	2340	177	297	247
CM11-002A	306	442	368	1846	2794	2328	174	285	238
CM11-003	323	439	366	1887	2693	2244	179	272	227
CM11-004	303	464	386	1837	2678	2232	172	268	223
CM11-005	310	451	376	1825	2664	2220	173	274	228
CM11-006	340	436	364	1929	2707	2256	183	269	224
CM11-007	302	432	360	1812	2707	2256	171	272	227
CM11-008	312	462	385	1850	2678	2232	176	274	228
CM11-009	301	439	366	1827	2765	2304	173	276	230
CM11-010	304	436	364	1854	2707	2256	176	284	236
CM11-011	330	433	361	1949	2736	2280	182	278	232
SM04-003	189	361	301	626	1251	1043	12	38	32
SM04-004	211	266	222	625	1099	916	13	62	52
SM06-024	246	310	258	567	672	560	10	24	20
SM10-001	289	469	391	690	994	828	13	37	31
SM10-002	229	338	282	525	763	636	7.9	24	20
SM10-003	249	386	322	556	821	684	8.3	24	20
SM10-004	241	346	288	528	778	648	6.6	24	20
SM10-005	242	350	292	531	763	636	6.6	23	19
SM10-006	309	501	418	733	1123	936	14	33	28
SM10-007	297	403	336	709	965	804	14	33	27
SM10-008	282	403	336	663	907	756	15	31	26

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Crow Butte Project
Monitor Well Laboratory Report

Sample Date: 09/17/2015

Analysis Date: 09/17/2015

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
CM05-012	299	456	380	1885	2982	2485	176	323	269
CM05-013	290	373	311	1880	3149	2624	175	386	322
CM06-001	293	432	360	1894	3168	2640	176	334	278
CM06-002	303	436	364	1938	2822	2352	180	279	233
CM06-003	299	441	367	1920	2808	2340	178	269	224
CM06-004	296	441	367	1939	2837	2364	182	289	241
CM06-005	295	416	347	1970	2923	2436	181	294	245
CM06-006	301	444	370	1937	2894	2412	177	301	251
CM06-007	291	403	336	1939	2822	2352	180	281	234
CM06-008	299	445	371	1929	2923	2436	176	305	254
CM07-010	297	454	378	1884	2877	2398	182	297	247
CM09-012	301	444	370	1808	2866	2388	177	321	268
CM09-013	304	442	368	1808	2707	2256	175	279	233
CM09-014	306	461	384	1822	2923	2436	178	327	272
CM09-015	301	432	360	1819	2736	2280	175	279	233
CM09-016	302	444	370	1836	2678	2232	179	268	223
CM09-017	307	441	367	1833	2678	2232	178	268	223
CM09-018	300	445	371	1826	2794	2328	178	294	245
CM09-019	301	454	378	1842	2952	2460	178	315	263
CM09-020	298	431	359	1867	2779	2316	178	279	233
SM06-001	212	325	271	534	903	752	7.4	47	39
SM06-002	209	291	242	544	1008	840	10	85	71
SM06-003	205	295	246	539	844	703	11	43	36
SM06-004	211	310	258	523	804	670	8.5	32	27
SM06-005	217	314	262	516	770	642	6.6	26	22
SM06-006	227	334	278	479	711	593	3.4	24	20
SM06-007	231	343	286	493	779	649	6.3	39	32
SM06-008	208	311	259	490	770	642	7.5	36	30
SM06-009	226	336	280	491	815	679	6.6	51	42
SM06-010	206	317	264	483	838	698	8.2	35	29
SM06-017	238	353	294	482	798	665	3.6	42	35
SM06-024	245	310	258	560	672	560	9.9	24	20

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Crow Butte Project
Monitor Well Laboratory Report

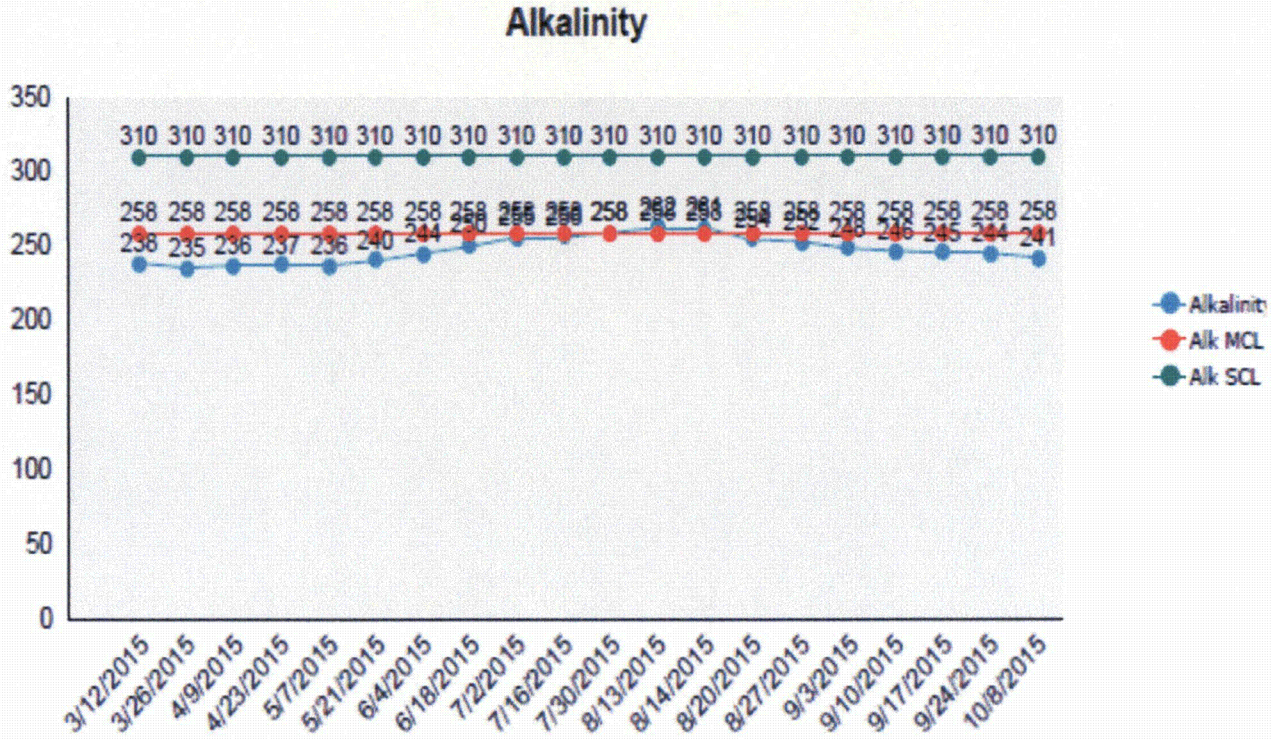
Sample Date: 09/24/2015

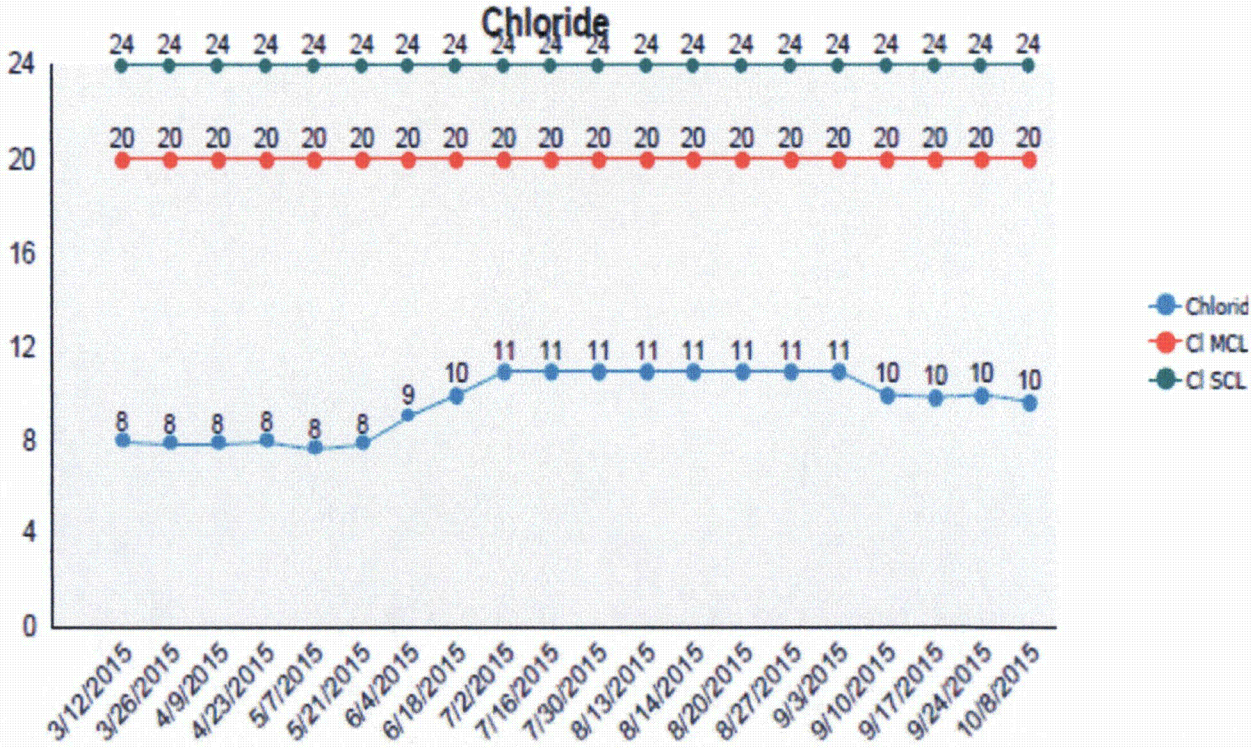
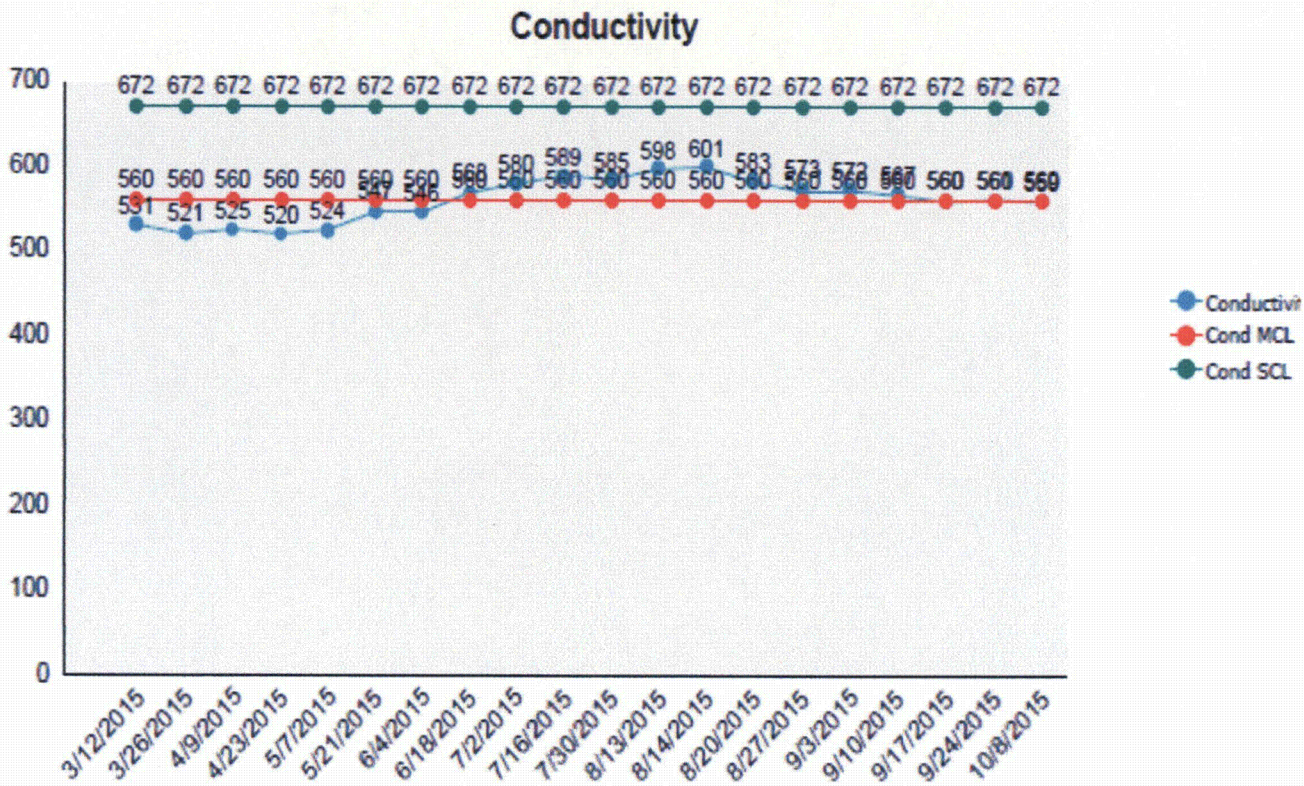
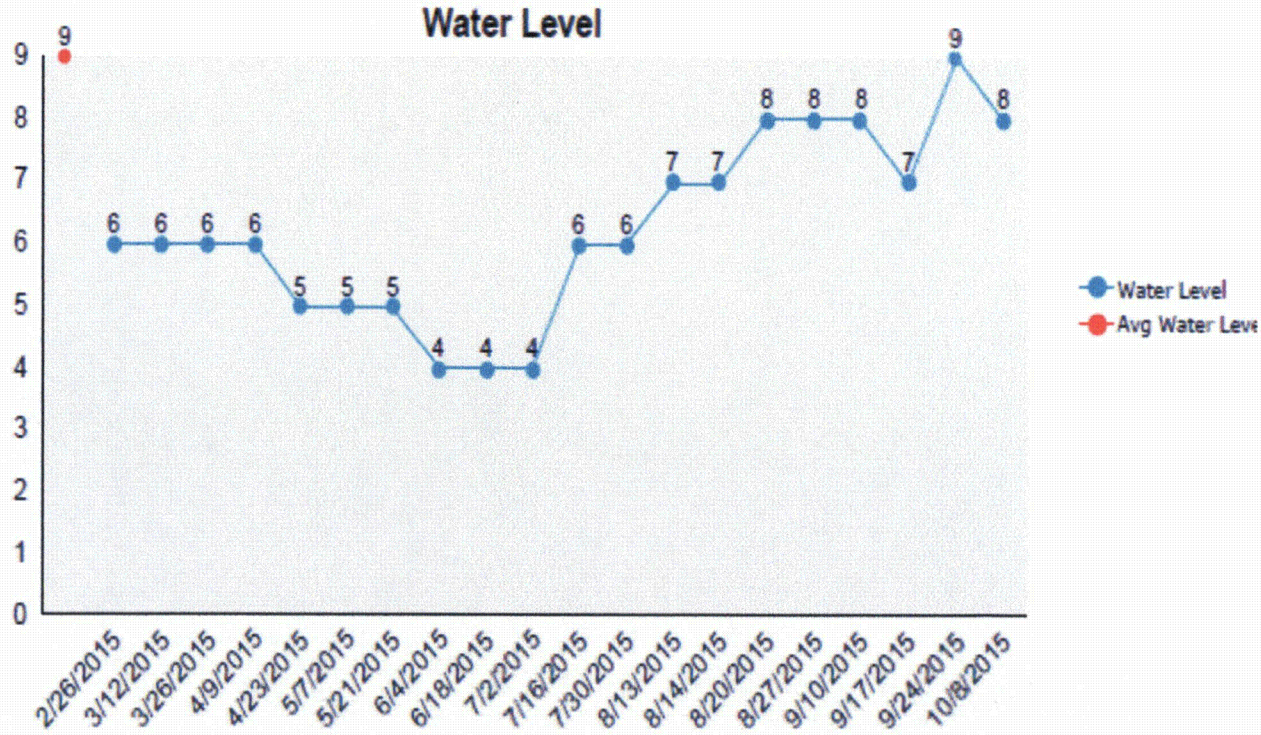
Analysis Date: 09/24/2015

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
CM06-025	304	433	361	1886	2952	2460	179	317	264
CM06-026	305	448	373	1880	2952	2460	177	338	282
CM06-028	318	449	374	1820	2894	2412	171	307	256
CM06-029	310	448	373	1872	3024	2520	173	321	268
CM06-030	316	459	383	1840	2952	2460	174	328	274
CM06-031	319	464	386	1852	2851	2376	174	301	251
CM06-032	319	461	384	1864	2981	2484	175	292	244
CM08-027	319	475	396	1829	2794	2328	170	314	262
CM08-028	320	480	400	1819	2650	2208	171	264	220
SM06-023	244	314	262	529	691	576	7.9	23	19
SM06-024	244	310	258	561	672	560	10	24	20
SM06-025	217	324	270	549	696	580	13	24	20
SM06-026	206	308	257	470	726	605	7	24	20
SM06-027	224	317	264	509	677	564	7.9	23	20
SM06-028	271	351	293	696	778	648	17	24	20
SM08-026	226	317	264	542	720	600	9.1	24	20
SM08-027	227	353	294	503	706	588	6.3	22	19
SM08-028	238	328	274	563	801	667	7.2	24	20
SM08-029	249	338	282	633	763	636	14	26	22
SM08-030	196	284	236	450	672	560	9.6	38	32
SM08-031	230	350	292	508	750	625	6.3	28	23
SM11-016	145	213	178	306	461	384	2.3	23	19
SM11-017	144	210	175	301	432	360	2.9	21	17
SM11-018	142	207	173	301	475	396	2.4	28	23
SM11-019	142	204	170	320	533	444	1.7	35	29
SM11-020	163	235	196	409	590	492	5.7	23	19
SM11-022	170	288	240	466	773	644	7.1	32	27
SM11-023	168	246	205	414	662	552	6.9	32	27
SM11-024	158	233	194	410	619	516	4.6	26	21
SM11-025	160	235	196	409	590	492	2.8	21	18
SM11-026	149	228	190	350	547	456	2.5	22	18

SM6-024
10/9/15

SM06-024





SM6-024
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