CAMECO RESOURCES
CROW BUTTE OPERATION

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

(308) 665-2215
(308) 665-2341 – FAX

November 8, 2013

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Attn: Document Control Desk, 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
Monitor Well Excursion – CM11-10

Dear Deputy Director:

On September 11, 20131 during routine biweekly water sampling of Cameco Resources, Crow Butte Operation (CBO) commercial monitor well CM11-10, the single control limit (SCL) for alkalinity was exceeded as well as the multiple control limit (MCL) for conductivity. 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 SCL for alkalinity and the MCL for conductivity.

In accordance with License Condition 11.2, CBO increased the sampling frequency for CM11-10 to weekly. Weekly samples were obtained from September 17, 2013 to November 5, 2013. The samples collected on October 1, 8, 15, 22, and 29, 2013, as well as the sample collected on November 5, 2013, were below excursion criteria described in License Condition 11.2. Based on these results, CBO is removing CM11-10 from excursion status and is returning it to routine

FSME20

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 April 24, 2013 to November 5, 2013.

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

Sincerely,
CAMECO RESOURCES
CROW BUTTE OPERATION

Larry Teahon

Larry Teahon
SHEQ Manager

Enclosures: As Stated

cc: Mr. Ronald Burrows – NRC
CBO – File
ec: CR – Cheyenne Office

W.D

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Crow Butte Project
Monitor Well Laboratory Report

Sample Date: 10/01/2013

Analysis Date: 10/01/2013

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
CM07-011	293	432	360	1908	2817	2347	192	281	234
CM07-012	292	422	352	1905	2794	2328	192	289	241
CM07-013	292	436	364	1923	2841	2368	190	287	239
CM07-014	294	422	352	1940	2772	2310	189	274	228
CM07-015	299	432	360	1941	2822	2352	191	284	236
CM07-016	303	441	367	1948	2831	2359	192	281	234
CM10-008	319	475	396	1848	2707	2256	183	265	221
CM10-009	317	468	390	1828	2693	2244	179	269	224
CM10-010	335	475	396	1917	2736	2280	192	275	229
CM10-011	315	481	401	1828	2808	2340	178	288	240
CM10-012	317	446	372	1830	2923	2436	179	327	272
CM10-013	331	481	401	1797	2779	2316	173	287	239
CM10-014	347	490	408	1742	2578	2148	171	251	209
CM10-015	347	504	420	1691	2491	2076	171	253	211
CM10-016	317	484	403	1815	2650	2208	165	253	211
CM10-017	327	475	396	1825	2664	2220	165	248	206
CM11-010	404	436	364	2186	2707	2256	211	284	236
IJ013P	187	415	346	759	2900	2417	53	278	232
PR008	172	484	403	535	2866	2388	28	282	235
PR015	185	444	370	596	2792	2327	31	268	223
SM03-001	207	374	312	666	1122	935	14	85	71
SM03-002	180	305	254	446	805	671	4.2	40	34
SM03-003	178	297	247	454	729	607	6	30	25
SM04-010A	302	354	295	704	1053	877	12	36	30
SM04-011A	294	554	462	696	1469	1224	11	139	115
SM07-015	147	200	167	332	495	413	3.4	24	20
SM07-016	141	199	166	328	451	376	3	24	20
SM07-017	176	209	174	390	539	449	3.2	30	25
SM07-018	142	217	181	337	513	427	3.3	23	19
SM07-019	145	212	176	353	599	499	3.8	38	31
SM07-020	148	228	190	341	583	486	2.2	28	23
SM07-021	145	216	180	339	534	445	2.7	27	23

WN

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Monitor Well Laboratory Report

Sample Date: 10/08/2013

Analysis Date: 10/08/2013

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
CM06-009	277	428	356	1906	2866	2388	177	285	238
CM06-010	302	429	358	1944	2952	2460	184	327	272
CM08-001	286	455	379	1939	3110	2592	184	372	310
CM08-002	299	395	329	1964	3125	2604	188	334	278
CM08-003	284	432	360	1915	3211	2676	188	367	306
CM08-004	292	428	356	1909	3125	2604	184	328	274
CM08-005	284	425	354	1896	3067	2556	186	328	274
CM08-006	294	432	360	1898	3067	2556	188	317	264
CM08-007	312	425	354	1924	3154	2628	188	396	330
CM08-008	315	418	348	1908	3211	2676	188	415	346
CM08-009	312	452	377	1870	3053	2544	186	325	271
CM09-008	299	418	348	1803	2952	2460	184	366	305
CM09-009	296	475	396	1795	2923	2436	183	334	278
CM09-010	301	359	299	1786	2390	1992	184	292	244
CM09-011	304	445	371	1803	2707	2256	184	284	236
CM11-010	394	436	364	2154	2707	2256	209	284	236
CM11-012	298	433	361	1800	2794	2328	181	268	223
CM11-013	302	418	348	1807	2722	2268	181	291	242
CM11-014	298	468	390	1791	3024	2520	181	357	298
CM11-015	300	431	359	1792	2765	2304	181	289	241
CM11-016	300	451	376	1789	2794	2328	184	276	230
CM11-017	304	438	365	1787	2837	2364	181	301	251
CM11-018	306	445	371	1797	2722	2268	181	297	247
CM11-019	306	448	373	1804	2779	2316	184	300	250
SM04-001	156	248	206	373	772	643	3.2	52	43
SM04-002	197	513	393	613	1256	1039	13	127	88
SM04-005A	197	367	306	532	1236	1030	14	106	88
SM08-001	237	374	312	505	763	636	5	25	21
SM08-002	235	353	294	505	778	648	5.5	24	20
SM08-003	234	331	276	501	720	600	5.4	24	20
SM08-004	222	323	269	491	819	683	7.3	25	21
SM08-005	231	346	288	510	749	624	6.8	23	19

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Monitor Well Laboratory Report

Sample Date: 10/15/2013

Analysis Date: 10/15/2013

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
CM07-011	294	432	360	1910	2817	2347	188	281	234
CM07-012	294	422	352	1912	2794	2328	189	289	241
CM07-013	292	436	364	1921	2841	2368	189	287	239
CM07-014	293	422	352	1931	2772	2310	194	274	228
CM07-015	300	432	360	1944	2822	2352	191	284	236
CM07-016	303	441	367	1956	2831	2359	192	281	234
CM10-008	319	475	396	1846	2707	2256	180	265	221
CM10-009	319	468	390	1831	2693	2244	175	269	224
CM10-010	325	475	396	1912	2736	2280	187	275	229
CM10-011	315	481	401	1832	2808	2340	173	288	240
CM10-012	321	446	372	1838	2923	2436	174	327	272
CM10-013	328	481	401	1799	2779	2316	169	287	239
CM10-014	345	490	408	1739	2578	2148	169	251	209
CM10-015	345	504	420	1694	2491	2076	168	253	211
CM10-016	317	484	403	1820	2650	2208	167	253	211
CM10-017	328	475	396	1828	2664	2220	166	248	206
CM11-010	382	436	364	2102	2707	2256	206	284	236
IJ013P	194	415	346	769	2900	2417	55	278	232
PR008	174	484	403	526	2866	2388	27	282	235
PR015	188	444	370	587	2792	2327	30	268	223
SM03-001	207	374	312	659	1122	935	14	85	71
SM03-002	178	305	254	442	805	671	3.8	40	34
SM03-003	177	297	247	449	729	607	6	30	25
SM04-010A	299	354	295	698	1053	877	14	36	30
SM04-011A	289	554	462	686	1469	1224	13	139	115
SM07-015	144	200	167	325	495	413	2.7	24	20
SM07-016	140	199	166	324	451	376	2.9	24	20
SM07-017	166	209	174	365	539	449	2.8	30	25
SM07-018	140	217	181	332	513	427	2.8	23	19
SM07-019	145	212	176	349	599	499	3.5	38	31
SM07-020	147	228	190	335	583	486	1.2	28	23
SM07-021	144	216	180	336	534	445	2.8	27	23

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Monitor Well Laboratory Report

Sample Date: 10/22/2013

Analysis Date: 10/22/2013

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
CM06-009	282	428	356	1916	2866	2388	179	285	238
CM06-010	297	429	358	1944	2952	2460	187	327	272
CM08-001	293	455	379	1936	3110	2592	183	372	310
CM08-002	298	395	329	1942	3125	2604	187	334	278
CM08-003	287	432	360	1910	3211	2676	186	367	306
CM08-004	296	428	356	1904	3125	2604	184	328	274
CM08-005	286	425	354	1892	3067	2556	182	328	274
CM08-006	297	432	360	1900	3067	2556	185	317	264
CM08-007	316	425	354	1930	3154	2628	188	396	330
CM08-008	316	418	348	1906	3211	2676	188	415	346
CM08-009	312	452	377	1864	3053	2544	181	325	271
CM09-008	301	418	348	1806	2952	2460	183	366	305
CM09-009	303	475	396	1803	2923	2436	182	334	278
CM09-010	300	359	299	1788	2390	1992	184	292	244
CM09-011	304	445	371	1808	2707	2256	184	284	236
CM11-010	383	436	364	2106	2707	2256	209	284	236
CM11-012	299	433	361	1804	2794	2328	176	268	223
CM11-013	303	418	348	1811	2722	2268	179	291	242
CM11-014	302	468	390	1796	3024	2520	181	357	298
CM11-015	298	431	359	1798	2765	2304	182	289	241
CM11-016	304	451	376	1791	2794	2328	180	276	230
CM11-017	306	438	365	1790	2837	2364	182	301	251
CM11-018	306	445	371	1802	2722	2268	179	297	247
CM11-019	305	448	373	1801	2779	2316	180	300	250
SM04-001	155	248	206	357	772	643	2.8	52	43
SM04-002	198	513	393	611	1256	1039	15	127	88
SM04-005A	197	367	306	526	1236	1030	12	106	88
SM08-001	233	374	312	494	763	636	5.4	25	21
SM08-002	236	353	294	503	778	648	5.1	24	20
SM08-003	231	331	276	493	720	600	5.9	24	20
SM08-004	220	323	269	487	819	683	7.2	25	21
SM08-005	234	346	288	525	749	624	7	23	19

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Monitor Well Laboratory Report

Sample Date: 10/29/2013

Analysis Date: 10/29/2013

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
CM07-011	296	432	360	1908	2817	2347	192	281	234
CM07-012	293	422	352	1911	2794	2328	189	289	241
CM07-013	293	436	364	1930	2841	2368	187	287	239
CM07-014	293	422	352	1939	2772	2310	190	274	228
CM07-015	300	432	360	1945	2822	2352	192	284	236
CM07-016	303	441	367	1960	2831	2359	196	281	234
CM10-008	321	475	396	1844	2707	2256	181	265	221
CM10-009	321	468	390	1841	2693	2244	177	269	224
CM10-010	331	475	396	1911	2736	2280	187	275	229
CM10-011	316	481	401	1838	2808	2340	173	288	240
CM10-012	319	446	372	1839	2923	2436	174	327	272
CM10-013	330	481	401	1802	2779	2316	172	287	239
CM10-014	344	490	408	1742	2578	2148	169	251	209
CM10-015	347	504	420	1693	2491	2076	168	253	211
CM10-016	319	484	403	1818	2650	2208	167	253	211
CM10-017	329	475	396	1826	2664	2220	166	248	206
CM11-010	396	436	364	2162	2707	2256	211	284	236
IJ013P	219	415	346	904	2900	2417	68	278	232
PR008	174	484	403	519	2866	2388	26	282	235
PR015	192	444	370	606	2792	2327	31	268	223
SM03-001	208	374	312	660	1122	935	15	85	71
SM03-002	180	305	254	442	805	671	3.7	40	34
SM03-003	178	297	247	448	729	607	5.8	30	25
SM04-010A	301	354	295	695	1053	877	14	36	30
SM04-011A	296	554	462	691	1469	1224	11	139	115
SM07-015	147	200	167	328	495	413	2.7	24	20
SM07-016	141	199	166	324	451	376	2.9	24	20
SM07-017	170	209	174	371	539	449	2.8	30	25
SM07-018	141	217	181	331	513	427	3	23	19
SM07-019	146	212	176	349	599	499	3.6	38	31
SM07-020	147	228	190	336	583	486	2.1	28	23
SM07-021	146	216	180	336	534	445	2.6	27	23

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Crow Butte Project
Monitor Well Laboratory Report

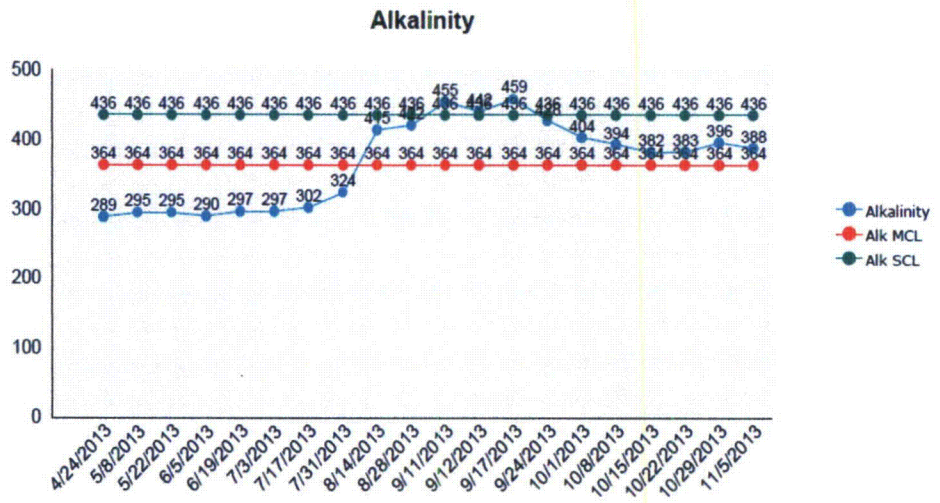
Sample Date: 11/05/2013

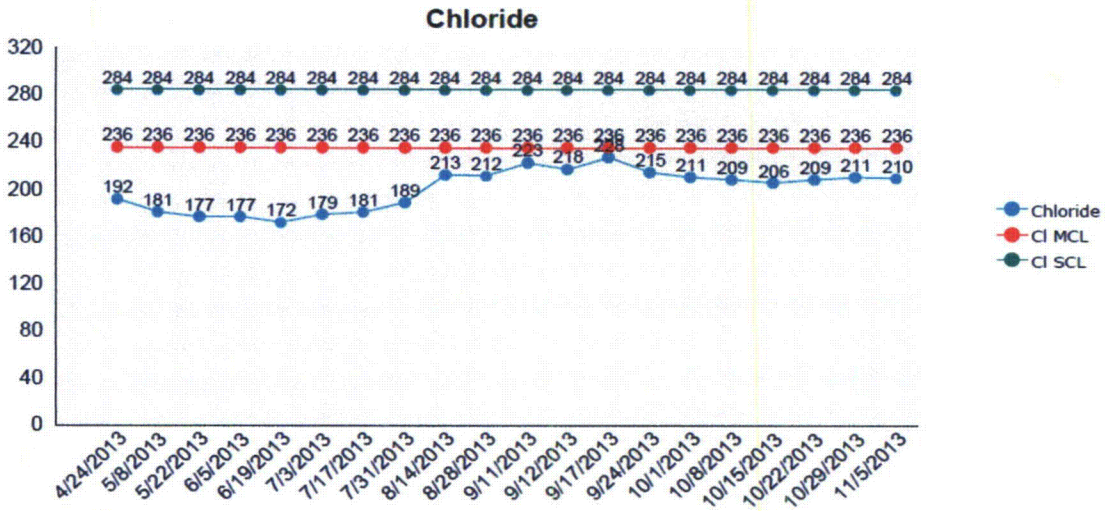
Analysis Date: 11/06/2013

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
CM06-009	280	428	356	1920	2866	2388	180	285	238
CM06-010	296	429	358	1942	2952	2460	187	327	272
CM08-001	293	455	379	1934	3110	2592	183	372	310
CM08-002	291	395	329	1931	3125	2604	185	334	278
CM08-003	284	432	360	1913	3211	2676	184	367	306
CM08-004	293	428	356	1905	3125	2604	186	328	274
CM08-005	285	425	354	1893	3067	2556	186	328	274
CM08-006	295	432	360	1905	3067	2556	187	317	264
CM08-007	313	425	354	1930	3154	2628	189	396	330
CM08-008	313	418	348	1905	3211	2676	188	415	346
CM08-009	314	452	377	1865	3053	2544	184	325	271
CM09-008	298	418	348	1811	2952	2460	182	366	305
CM09-009	301	475	396	1807	2923	2436	184	334	278
CM09-010	296	359	299	1791	2390	1992	186	292	244
CM09-011	301	445	371	1805	2707	2256	184	284	236
CM11-010	388	436	364	2143	2707	2256	210	284	236
CM11-012	299	433	361	1807	2794	2328	179	268	223
CM11-013	300	418	348	1809	2722	2268	182	291	242
CM11-014	300	468	390	1799	3024	2520	181	357	298
CM11-015	298	431	359	1794	2765	2304	183	289	241
CM11-016	300	451	376	1792	2794	2328	183	276	230
CM11-017	303	438	365	1794	2837	2364	183	301	251
CM11-018	303	445	371	1805	2722	2268	183	297	247
CM11-019	303	448	373	1804	2779	2316	182	300	250
SM04-001	155	248	206	355	772	643	2.5	52	43
SM04-002	198	513	393	602	1256	1039	14	127	88
SM04-005A	198	367	306	520	1236	1030	12	106	88
SM08-001	235	374	312	506	763	636	5.4	25	21
SM08-002	236	353	294	513	778	648	5.2	24	20
SM08-003	232	331	276	507	720	600	5.5	24	20
SM08-004	220	323	269	503	819	683	7.1	25	21
SM08-005	233	346	288	510	749	624	7	23	19

CAMECO RESOURCES
CROW BUTTE OPERATION
86 Crow Butte Road
Crawford, NE 69339-0169

CM 11-010





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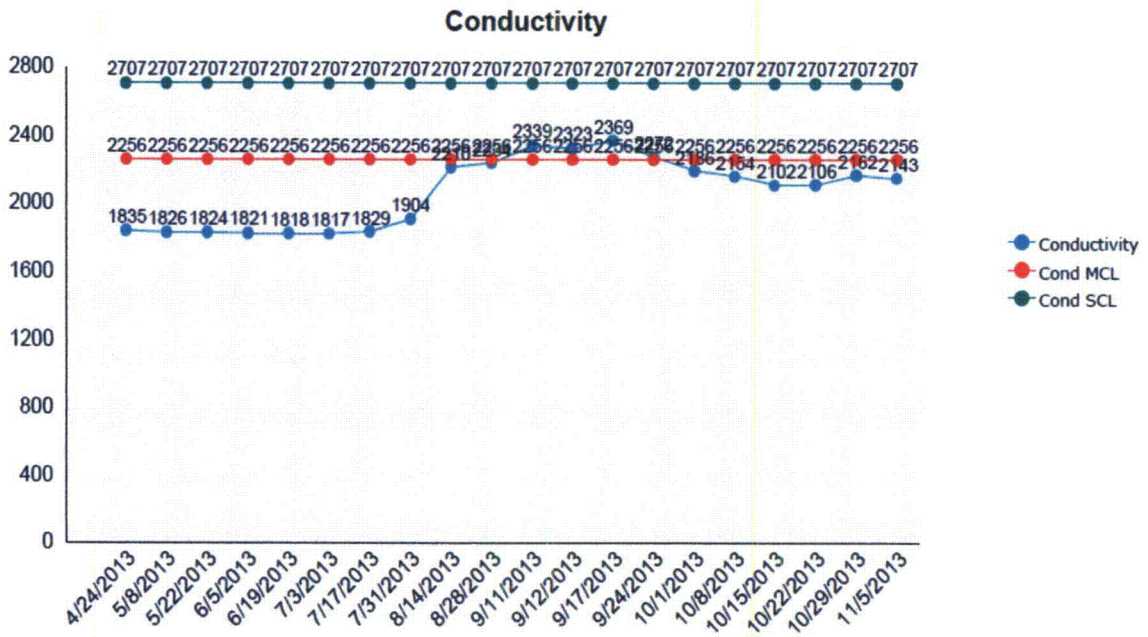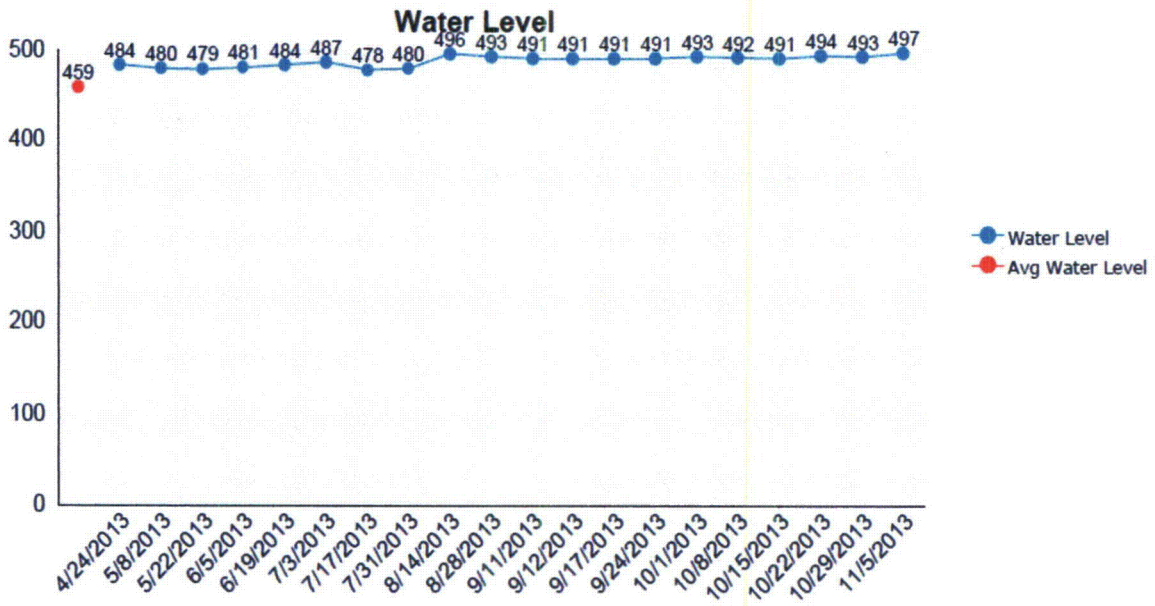
CM 11-010