

**CAMECO RESOURCES
CROW BUTTE OPERATION**



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

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(308) 665-2341 – FAX**

April 17, 2015

Attn: Document Control Desk, Director
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Quarterly Excursion Monitoring Report
Source Materials License No. SUA-1534, Docket No. 40-8943

Dear Sir or Madam:

Enclosed please find one copy of the Excursion Monitoring Report for the Crow Butte Uranium Project. The report is provided in accordance with License Condition 11.1(A) of Source Materials License SUA-1534. This report covers the first quarter of 2015.

If you have any questions concerning the report, please feel free to call me at (308) 665-2215 ext. 114.

Sincerely,
CAMECO RESOURCES
CROW BUTTE OPERATION

Larry Teahon
Manager of Safety, Health, Environment & Quality

cc: Deputy Director, Division of Decommissioning
Uranium Recovery and Waste Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
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CROW BUTTE URANIUM PROJECT

**EXCURSION MONITORING
REPORT**

for

FIRST QUARTER, 2015

USNRC Source Materials License SUA 1534

**CAMECO RESOURCES
CROW BUTTE OPERATION**



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

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Excursion Monitoring

Biweekly excursion monitoring in the shallow aquifer and perimeter monitor wells was continued in Mine Units 2 through 11 during the first quarter of 2015.

On February 11, 2015 during routine biweekly water sampling of Cameco Resources, Crow Butte Operation (CBO) commercial monitor well CM11-3, the single parameter upper control limit (SCL) for alkalinity was exceeded as well as the multiple parameter upper control limit (MCL) for conductivity. As required by License Condition 11.5 of Source Materials License SUA-1534, a second sample was collected from CM11-3 within 48 hours and analyzed for the three excursion indicator parameters. The results of the second sample exceeded the SCL for alkalinity and MCL for conductivity

In accordance with License Condition 11.5, CBO increased the sampling frequency for CM11-3 to weekly until three consecutive weekly samples were below the exceeded UCLs. CBO continued weekly sampling for an additional three weeks after the goal had been achieved as required by CBO's NDEQ Class III UIC Permit requirements

Weekly samples were obtained from February 12, 2015, to March 31, 2015. The samples collected on February 24 and March 3, 10, 17, 24 and 31, 2015, were below the excursion criteria described in License Condition 11.5. Based on the results, CBO removed CM11-3 from excursion status and returned it to routine biweekly sampling on April 8, 2015.

Appendix A contains a summary of the weekly excursion indicator parameter values for all the monitor wells.

Corrective Actions

CBO significantly and progressively increased the bleed in the area of the wellfield adjacent to CM 11-3 and adjusted the wellfield balance in the area to correct the excursion.

Appendix A
Summary of
Weekly Excursion Indicator Parameter Values
First Quarter, 2015

Submitted by:
 Crow Butte Resources, Inc.
 P.O. Box 169
 Crawford, NE 69339

NRC
 Excursion Monitoring Report
 Quarter 1 of 2015

Submitted to:
 Document Control Desk, Director
 Office of Nuclear Material Safety & Safeguards
 U.S. Nuclear Regulatory Commission
 Washington, DC 20555-0001

Source Materials License: SUA-1534

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
BOW96-001	220	224	223	497	506	501	6.6	8	7.0
CM02-005	322	350	336	1965	2117	2029	189	209	199.1
CM02-006	304	311	308	1533	1860	1705	128	176	155
CM02-007	305	308	307	1838	1871	1851	174	186	178.3
CM03-005	302	306	304	1941	1959	1949	178	186	182.7
CM03-006	298	302	300	1922	1931	1927	181	184	183.2
CM04-001	306	316	313	1830	1844	1838	175	180	177.6
CM04-002	308	311	310	1850	1867	1856	175	181	178.9
CM04-003	308	311	310	1854	1869	1862	175	180	177.7
CM04-004	313	350	340	1891	2033	1972	179	199	188
CM05-001	309	312	311	1869	1887	1876	175	179	177.3
CM05-002	306	307	307	1846	1866	1856	174	181	176.8
CM05-003	309	312	311	1844	1866	1851	175	179	176.8
CM05-004	313	315	314	1851	1869	1856	172	179	176.3
CM05-005	310	315	312	1850	1869	1857	175	182	177.3
CM05-006	306	309	308	1849	1869	1854	174	179	176.8
CM05-007	306	308	307	1849	1864	1853	175	179	176.3
CM05-008	307	310	309	1876	1900	1883	175	179	177
CM05-009	301	307	304	1862	1872	1867	174	176	174.8
CM05-010	293	298	295	1890	1902	1896	172	178	173.3
CM05-011	308	315	312	1933	1949	1938	178	183	180.5
CM05-012	300	302	301	1889	1910	1896	178	182	180.2
CM05-013	289	291	291	1870	1880	1875	175	180	177.5
CM05-018	307	331	321	1944	2050	1989	181	198	190.2
CM05-019	300	308	304	1906	1911	1908	178	182	180.3
CM05-020	300	307	305	1908	1916	1912	182	192	185.3
CM05-021	302	310	306	1906	1916	1910	180	182	181.2
CM05-022	302	304	303	1904	1917	1911	177	183	180.8

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
CM05-023	297	303	299	1899	1905	1902	176	189	180.8
CM05-024	297	305	302	1918	1927	1922	177	182	179.5
CM05-025	293	305	300	1924	1936	1929	173	182	176.7
CM05-026	300	306	304	1930	1942	1935	180	183	181.5
CM05-027	302	306	305	1937	1949	1941	180	186	183.3
CM06-001	284	292	288	1836	1857	1850	167	175	171.7
CM06-002	298	303	301	1923	1934	1927	180	182	181
CM06-003	299	303	302	1911	1930	1917	178	183	180.3
CM06-004	298	303	300	1934	1950	1943	182	188	184.7
CM06-005	294	299	296	1964	1986	1973	182	187	184
CM06-006	297	299	298	1920	1940	1927	177	182	179.3
CM06-007	286	291	288	1927	1947	1935	181	185	182.7
CM06-008	292	297	295	1915	1934	1920	175	180	176.8
CM06-009	282	288	285	1902	1918	1911	169	175	172
CM06-010	293	299	296	1918	1929	1924	173	180	177.3
CM06-012	300	308	303	1910	1924	1916	179	184	181.5
CM06-013	299	307	302	1904	1920	1914	179	183	181.3
CM06-014	295	300	297	1892	1904	1899	174	181	177.8
CM06-015	296	303	299	1910	1926	1918	176	182	178.8
CM06-016A	298	305	301	1905	1915	1910	176	182	178.7
CM06-017	299	305	301	1899	1914	1906	175	179	177.2
CM06-018	300	307	304	1898	1906	1902	175	181	177.7
CM06-019	305	312	309	1888	1906	1895	177	183	179.2
CM06-025	301	309	304	1869	1900	1880	176	180	177.7
CM06-026	303	309	306	1869	1886	1876	176	180	178
CM06-028	319	322	320	1804	1822	1813	169	173	171.7
CM06-029	300	309	305	1874	1893	1882	174	180	176.8
CM06-030	317	320	319	1827	1843	1837	173	176	174.8
CM06-031	317	321	320	1839	1861	1852	173	176	174.7
CM06-032	313	320	318	1861	1869	1864	175	178	175.7
CM07-010	294	298	297	1879	1893	1883	181	186	182.7
CM07-011	296	299	297	1893	1925	1905	180	185	182

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
CM07-012	295	298	297	1897	1921	1908	182	186	183.6
CM07-013	293	297	296	1917	1937	1922	180	184	182.1
CM07-014	295	300	297	1919	1939	1926	180	185	182.6
CM07-015	298	307	302	1929	1950	1936	182	186	184.1
CM07-016	297	303	301	1927	1947	1933	180	187	182.4
CM08-001	287	293	291	1929	1942	1935	172	178	175.7
CM08-002	288	300	297	1908	1913	1909	174	181	178.2
CM08-003	286	302	296	1909	1933	1924	178	183	180.7
CM08-004	296	302	298	1903	1910	1906	175	182	177.7
CM08-005	287	297	292	1895	1907	1899	177	183	179.3
CM08-006	293	304	298	1879	1908	1900	176	182	179
CM08-007	305	312	308	1879	1888	1882	176	179	177.7
CM08-008	313	323	317	1899	1939	1914	180	187	182.7
CM08-009	316	323	320	1860	1879	1867	172	176	174.3
CM08-010	313	316	315	1834	1849	1841	172	181	176
CM08-011	316	319	318	1839	1858	1849	172	176	174
CM08-012	315	323	321	1859	1869	1864	171	179	173.8
CM08-019	318	322	320	1801	1828	1814	168	173	170.7
CM08-020	320	323	322	1796	1823	1811	169	175	171.3
CM08-021	314	321	318	1806	1838	1821	167	171	169.5
CM08-022	321	326	323	1817	1838	1827	168	173	170.2
CM08-026	316	321	319	1817	1836	1825	169	175	171.7
CM08-027	318	321	320	1809	1839	1824	170	172	171.3
CM08-028	321	323	322	1817	1828	1822	170	173	172.2
CM09-008	298	301	300	1796	1802	1800	171	176	173.7
CM09-009	302	306	303	1789	1796	1791	171	175	173.8
CM09-010	302	306	304	1775	1779	1778	173	175	174.7
CM09-011	305	307	306	1795	1799	1798	174	179	176.2
CM09-012	300	307	303	1803	1825	1810	176	180	177.7
CM09-013	299	303	301	1802	1822	1809	176	181	177.7
CM09-014	300	305	302	1817	1845	1830	183	187	183.8
CM09-015	301	305	303	1810	1823	1814	175	181	177.3

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
CM09-016	299	311	306	1826	1852	1838	178	181	179.5
CM09-017	304	306	305	1825	1843	1830	179	181	179.7
CM09-018	300	304	302	1820	1836	1825	177	183	179.3
CM09-019	299	305	302	1836	1855	1841	179	184	180.3
CM09-020	292	300	297	1847	1870	1856	180	183	181.7
CM10-001	319	322	320	1836	1849	1841	170	174	172.3
CM10-002	322	339	329	1861	1924	1883	174	183	177.2
CM10-003	317	324	322	1879	1921	1889	180	189	182
CM10-004	310	318	316	1845	1855	1850	173	177	175
CM10-005	328	334	332	1917	1938	1929	187	193	189.8
CM10-006	314	320	318	1838	1849	1844	168	175	171.3
CM10-007	319	322	321	1838	1849	1843	169	175	172
CM10-008	320	327	323	1821	1860	1836	172	177	173.9
CM10-009	321	323	322	1819	1849	1830	166	174	169.9
CM10-010	351	363	355	1957	1998	1980	183	192	187.6
CM10-011	317	322	319	1822	1852	1835	169	172	170.6
CM10-012	323	327	325	1809	1840	1821	166	169	167.7
CM10-013	341	351	345	1771	1839	1801	164	172	167.6
CM10-014	347	354	351	1716	1736	1725	160	166	163.6
CM10-015	348	354	350	1696	1724	1709	159	166	162.6
CM10-016	315	322	320	1808	1842	1822	159	166	162.1
CM10-017	335	342	339	1766	1818	1790	161	168	163.7
CM10-020	320	330	322	1775	1821	1801	160	167	163.1
CM10-021	320	325	324	1811	1839	1821	162	171	165.9
CM10-022	322	327	325	1827	1846	1836	165	170	167.6
CM10-023	323	328	326	1824	1851	1834	162	171	165.9
CM10-024	320	330	325	1813	1844	1829	162	170	165.4
CM10-025	323	326	325	1811	1839	1824	163	170	166.3
CM10-026	318	322	320	1811	1841	1824	165	171	167
CM10-027	314	322	319	1829	1865	1841	169	174	171.6
CM10-028	317	321	319	1814	1849	1832	169	174	171.5
CM10-029	319	323	321	1824	1844	1835	167	173	171.3

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
CM10-030	318	324	321	1821	1849	1833	169	174	171.7
CM10-031	318	322	320	1817	1844	1826	166	177	170.5
CM10-032	315	321	319	1842	1867	1849	156	162	159
CM10-033	321	327	325	1807	1836	1818	157	163	160.7
CM10-034	327	331	329	1792	1815	1804	162	167	164.4
CM11-001	298	304	302	1836	1850	1844	172	178	175.5
CM11-002A	313	321	317	1877	1899	1892	180	183	181.3
CM11-003	353	470	400	2022	2417	2175	193	219	202.3
CM11-004	302	307	304	1827	1839	1835	172	176	174
CM11-005	302	305	304	1821	1832	1826	172	177	174.7
CM11-006	340	360	348	1942	2008	1969	184	190	186.7
CM11-007	300	303	302	1811	1820	1815	172	175	173.3
CM11-008	328	361	344	1916	2045	1975	181	189	185.5
CM11-009	298	301	300	1828	1839	1834	173	177	174.5
CM11-010	295	299	298	1824	1834	1827	171	177	174
CM11-011	336	409	356	1949	2223	2025	187	216	194.5
CM11-012	301	303	302	1804	1820	1809	168	174	170.8
CM11-013	300	303	301	1813	1817	1816	176	180	178.7
CM11-014	313	319	316	1867	1891	1872	184	190	187.7
CM11-015	303	306	304	1783	1792	1787	169	172	170.8
CM11-016	303	305	304	1774	1781	1776	170	175	172.8
CM11-017	300	308	305	1775	1779	1778	169	174	171.7
CM11-018	303	308	306	1789	1799	1793	170	174	172.8
CM11-019	307	310	308	1793	1804	1798	173	176	174.8
IJ013P	222	259	243	851	1012	951	59	72	66.9
PR008	213	230	222	737	850	806	53	64	59.3
PR015	182	187	186	570	598	582	27	29	27.9
SM02-001	191	193	192	528	532	530	13	15	14.5
SM02-002	169	170	170	461	465	463	11	12	11.2
SM02-003	199	200	200	547	554	551	15	16	15.8
SM03-001	206	209	208	660	673	668	13	13	13
SM03-002	178	189	182	441	453	448	3.5	3.6	3.5

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
SM03-003	177	179	178	448	460	455	5.5	5.7	5.6
SM04-001	158	160	159	366	375	370	2.2	2.8	2.6
SM04-002	193	194	193	630	637	633	14	15	14.5
SM04-003	184	190	187	619	624	621	12	13	12.2
SM04-004	209	211	210	621	627	624	12	13	12.2
SM04-005A	198	199	199	535	542	538	11	11	11
SM04-006	270	273	271	649	661	656	12	14	13.2
SM04-007	181	185	183	519	529	523	17	18	17.3
SM04-008	297	300	298	693	703	698	10	12	11.2
SM04-009	283	290	286	672	686	678	12	13	12.1
SM04-010A	297	302	299	697	716	707	11	12	11.6
SM04-011A	293	299	295	687	708	699	11	11	11
SM05-001	222	237	234	487	604	580	7.8	12	11.3
SM05-002	193	195	194	449	453	451	5.2	6.2	5.6
SM05-003	228	230	229	579	589	584	12	12	12
SM05-004	211	214	212	545	565	558	15	17	16
SM05-005	236	238	237	590	601	595	11	11	11
SM05-006	210	213	212	570	575	573	13	13	13
SM05-007	213	216	214	562	573	567	9.2	9.7	9.4
SM05-008	209	210	209	552	559	555	12	12	12
SM05-009	207	210	208	544	552	548	11	11	11
SM05-010	209	212	211	545	558	552	9.7	10	10.0
SM05-011	219	220	220	565	574	571	10	10	10
SM05-012	211	213	212	551	559	554	9.9	10	10.0
SM05-013	201	202	202	545	554	550	13	13	13
SM05-014	181	185	183	479	493	486	8.9	9.9	9.6
SM05-015	205	206	206	541	551	547	12	12	12
SM05-016	184	186	185	449	454	451	5.2	5.4	5.3
SM05-017	168	171	170	411	417	413	1.5	2.4	2.1
SM05-018	175	177	176	429	435	433	3.1	3.3	3.2
SM05-019	184	187	185	471	486	478	4.5	4.8	4.7
SM05-020	178	181	179	472	488	480	5	5.3	5.1

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
SM05-021	179	181	180	454	461	457	4.6	4.8	4.7
SM05-022	185	187	186	461	471	466	3.4	3.8	3.6
SM05-023	183	185	184	458	464	461	3.2	3.5	3.3
SM05-024	173	175	175	436	446	441	5	5.1	5.0
SM05-025	172	176	174	453	467	462	6	6.3	6.2
SM06-001	208	213	210	528	536	533	6.7	7.2	6.9
SM06-002	209	211	210	537	549	543	10	10	10
SM06-003	204	205	204	535	544	540	10	10	10
SM06-004	208	210	209	520	525	523	8	8.3	8.2
SM06-005	217	219	218	514	522	517	6.5	7	6.8
SM06-006	226	228	227	473	485	478	3.3	3.7	3.4
SM06-007	229	231	230	491	499	494	6	6.3	6.2
SM06-008	208	209	209	485	497	492	7.3	7.5	7.4
SM06-009	224	226	225	477	484	481	4.8	5.2	5.1
SM06-010	204	206	205	478	490	485	7.8	8.3	8.1
SM06-011	212	214	213	491	497	493	8.7	9	8.9
SM06-012	237	239	238	498	506	502	5.1	5.4	5.2
SM06-013	240	242	241	518	535	523	5.6	7.3	6.0
SM06-014	206	207	207	542	553	547	12	12	12
SM06-015	207	208	208	530	540	535	11	11	11
SM06-016	211	212	212	438	447	443	3.4	3.7	3.5
SM06-017	236	238	237	478	484	481	3.6	3.9	3.8
SM06-018	202	203	202	541	552	547	14	14	14
SM06-019	208	210	209	480	487	484	7.5	8	7.8
SM06-020	215	217	216	518	539	527	9.7	12	10.8
SM06-021	215	220	218	522	533	528	10	11	10.8
SM06-022	210	212	211	463	471	467	5.9	6.1	6.0
SM06-023	250	256	254	535	544	541	6.3	7	6.7
SM06-024	232	239	236	508	531	522	7.1	8	7.7
SM06-025	215	217	216	511	523	516	9.6	11	10.1
SM06-026	206	212	209	461	476	468	6.7	6.9	6.8
SM06-027	221	223	222	488	497	491	6.8	7.1	7.0

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
SM06-028	250	254	253	575	587	580	9.1	9.6	9.3
SM07-001	171	181	176	426	443	433	3	3.9	3.4
SM07-002	166	168	167	399	410	407	3.3	3.7	3.5
SM07-003	171	174	172	432	440	436	4.7	4.9	4.8
SM07-004	165	167	166	396	405	400	3	3.8	3.4
SM07-005	169	171	170	417	427	422	3.1	3.5	3.3
SM07-006	156	158	157	360	373	367	3.4	4.6	4.0
SM07-007	170	173	172	424	436	430	4	4.6	4.3
SM07-008	169	171	170	471	485	479	7.7	8.1	8.0
SM07-009	169	171	170	416	424	420	3.9	4.2	4.0
SM07-010	168	170	169	440	450	443	3.7	3.8	3.8
SM07-011	144	145	145	341	349	344	3.3	3.5	3.4
SM07-012	168	169	169	436	445	440	3.7	4.5	4.0
SM07-013	151	153	152	362	371	367	5.1	5.4	5.2
SM07-014	138	141	139	324	335	330	2.2	2.7	2.5
SM07-015	145	147	146	328	340	335	2.8	3.1	3.0
SM07-016	140	142	141	326	337	331	3	3.5	3.2
SM07-017	174	184	180	389	409	400	3	3.5	3.2
SM07-018	140	141	141	329	341	336	2.7	3	2.8
SM07-019	144	145	145	348	354	350	3.1	3.6	3.3
SM07-020	147	149	148	335	346	340	1.7	2.2	2.0
SM07-021	144	146	145	339	346	342	2.2	2.8	2.6
SM07-022	146	148	147	332	343	338	2	2.4	2.2
SM07-023	176	179	178	445	453	448	3.7	4	3.8
SM07-024	187	190	189	553	570	561	7.9	8.5	8.3
SM07-025	156	158	157	352	364	358	2.6	2.9	2.8
SM08-001	233	237	235	497	512	505	5.2	5.8	5.5
SM08-002	237	239	238	509	520	514	5.1	5.4	5.3
SM08-003	231	233	232	501	513	505	5.8	6	5.9
SM08-004	226	229	228	505	515	509	7.1	7.4	7.3
SM08-005	249	253	251	556	564	560	7.2	7.8	7.5
SM08-006	243	245	244	630	686	652	9.1	12	11.0

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
SM08-007	246	248	247	580	599	589	7.7	8.7	8.2
SM08-008	239	240	239	501	513	506	5	5.3	5.1
SM08-009	238	238	238	499	509	502	4.9	5.2	5.0
SM08-010	240	241	240	567	582	574	8.1	9	8.5
SM08-011	229	231	230	527	539	532	7	7.7	7.3
SM08-012	240	254	245	556	590	572	7.8	8.2	8.0
SM08-013	226	227	227	530	561	542	9.8	15	11.8
SM08-014	230	233	231	544	552	548	9.1	9.7	9.4
SM08-015	221	223	222	519	525	522	7.3	7.6	7.4
SM08-016	223	225	224	524	535	529	7.2	7.7	7.4
SM08-017	234	237	236	531	537	534	7.3	7.6	7.4
SM08-018	227	230	228	518	526	523	8.4	8.8	8.6
SM08-019	229	230	229	523	526	526	7.3	7.5	7.4
SM08-020	218	220	219	508	511	510	7.3	7.6	7.4
SM08-021	225	227	226	532	539	535	7.6	8	7.9
SM08-022	227	229	228	536	549	542	7.3	7.8	7.5
SM08-023	223	224	224	524	528	526	7.3	7.7	7.6
SM08-024	227	229	228	547	560	554	7.8	8.3	8.1
SM08-025	228	241	236	579	590	585	8.4	8.7	8.6
SM08-026	229	230	230	522	554	543	7.9	8.7	8.2
SM08-027	232	234	233	505	514	509	6.1	6.6	6.4
SM08-028	231	235	233	588	646	626	6.8	7.4	7.2
SM08-029	242	244	243	556	582	571	9.4	10	9.9
SM08-030	196	198	197	439	447	442	7.7	8.8	8.2
SM08-031	230	233	232	499	509	504	6.3	6.9	6.6
SM09-001	171	177	174	416	441	431	3.4	4.6	4.0
SM09-002	163	166	165	385	394	389	3.2	3.5	3.4
SM09-003	161	162	161	376	383	380	2.9	3	3.0
SM09-004	147	149	148	372	379	375	6	6.3	6.1
SM09-005	143	146	144	309	319	314	2.5	2.8	2.7
SM09-006	140	145	143	305	309	307	2.1	2.6	2.4
SM09-007	165	165	165	396	398	397	3	3.3	3.2

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
SM09-008	165	166	165	390	393	392	1.9	2.5	2.2
SM09-009	154	160	155	369	372	370	3.3	3.7	3.5
SM09-010	145	149	148	345	347	346	2.2	2.5	2.4
SM09-011	145	150	149	352	357	354	2.7	3.2	3.0
SM09-012	160	164	163	389	394	391	2.5	3	2.7
SM09-013	145	146	146	335	339	337	2.8	3.1	2.9
SM09-014	140	142	142	316	320	318	1.9	2	1.9
SM09-015	140	143	142	313	318	315	1.1	2.1	1.7
SM09-016	143	145	144	300	305	303	1.2	1.8	1.5
SM09-017	140	141	141	320	324	321	2.8	3.3	3.1
SM09-018	143	146	145	318	327	323	1.1	2.1	1.9
SM09-019	139	140	139	306	310	308	2.3	2.6	2.4
SM09-020	140	142	142	316	320	318	2.9	3.4	3.1
SM10-001	281	292	288	691	715	707	15	17	15.8
SM10-002	229	238	235	520	546	538	7.4	8.3	7.9
SM10-003	246	250	247	552	557	554	8.6	9.4	9.1
SM10-004	237	238	238	520	525	523	6.4	6.9	6.7
SM10-005	238	240	239	522	529	525	6.3	7.5	6.6
SM10-006	326	343	332	771	814	786	13	13	13
SM10-007	296	315	302	706	752	723	12	13	12.5
SM10-008	287	298	294	660	683	673	11	12	11.8
SM10-009	243	247	246	542	548	545	8.1	8.5	8.3
SM10-010	237	242	240	531	535	533	7.5	7.9	7.7
SM10-011	275	285	280	648	670	661	11	11	11
SM10-012	272	282	279	644	667	661	11	11	11
SM10-013	235	238	237	531	543	539	8.2	9	8.7
SM10-014A	242	247	245	555	573	567	9.2	9.8	9.4
SM10-015	242	256	250	540	576	562	8.8	11	9.7
SM10-016	253	256	255	562	579	572	9.2	9.9	9.5
SM10-017	247	250	249	542	555	549	8.7	9.3	9.0
SM10-018	237	240	239	522	538	529	7.9	8.9	8.3
SM10-019	242	245	244	530	545	538	7.6	7.8	7.7

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
SM10-020	237	242	239	545	565	558	14	18	15.7
SM10-021	230	235	233	582	598	592	23	25	23.9
SM10-022	240	243	242	533	547	542	9.6	10	9.8
SM10-023	235	238	237	553	560	556	14	15	14.7
SM10-024	230	232	231	528	545	537	11	11	11
SM10-025	226	229	228	527	536	533	10	11	10.9
SM10-026	244	247	246	571	579	575	14	15	14.1
SM10-027	244	270	258	547	590	571	8.7	9.5	8.9
SM10-028A	240	244	242	622	640	635	27	28	27.9
SM10-029A	267	269	268	597	609	603	11	12	11.6
SM10-030	234	239	236	518	526	521	6.6	7	6.7
SM10-031	231	233	232	522	525	524	6.7	7.1	6.9
SM10-032	234	236	235	518	523	520	6.2	6.5	6.4
SM11-001	163	164	164	411	416	413	6.4	6.8	6.6
SM11-002	140	142	141	324	330	326	4	4.3	4.2
SM11-003	145	146	145	320	326	323	1.7	1.9	1.8
SM11-004	142	143	142	308	314	311	1.2	2.3	1.9
SM11-005	141	142	142	317	324	321	2.6	3	2.8
SM11-006	142	144	143	326	333	329	5.4	6	5.6
SM11-007	144	145	145	309	324	314	2.8	3.7	3.3
SM11-009	152	154	153	309	314	311	1.1	1.4	1.2
SM11-010	158	159	159	321	326	323	1.1	1.3	1.2
SM11-011	152	158	154	348	354	351	2	3	2.7
SM11-012	145	146	146	329	336	332	2.9	3.1	3.0
SM11-013	143	144	143	296	302	299	1.8	2	1.9
SM11-014	140	142	141	297	303	299	2.1	2.6	2.4
SM11-015	140	140	140	308	314	310	2.2	2.7	2.5
SM11-016	146	148	147	301	307	304	1.2	2.3	2.1
SM11-017	144	145	145	295	301	298	2.8	3	2.9
SM11-018	142	143	143	296	300	297	1.6	2.2	2.0
SM11-019	144	146	145	317	325	320	1.7	2.1	1.9
SM11-020	162	163	162	395	404	400	4.7	5.1	4.9

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
SM11-022	170	172	171	458	463	460	7.1	7.3	7.2
SM11-023	168	170	169	407	411	409	6.3	6.6	6.5
SM11-024	158	158	158	395	403	399	2.8	4	3.4
SM11-025	160	162	161	399	407	403	2.5	2.8	2.7
SM11-026	147	152	149	336	354	342	2	2.7	2.3