CAMECO RESOURCES
CROW BUTTE OPERATION

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

(308) 665-2215
(308) 665-2341 – FAX

October 17, 2019

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 third quarter of 2019.

If you have any questions concerning the report, please feel free to call me at (308) 665-2215 ext. 117.

Sincerely,
CAMECO RESOURCES
CROW BUTTE OPERATION

Walter D. Nelson
SHEQ Coordinator

cc: Deputy Director, Division of Decommissioning
Uranium Recovery and Waste Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Mail Stop T5A10
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CBO – File

ec: CR – Electronic File

IE25
NMSS20
NMSS

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CROW BUTTE URANIUM PROJECT

EXCURSION MONITORING REPORT

for

THIRD QUARTER, 2019

USNRC Source Materials License SUA 1534

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Excursion Monitoring and Corrective Actions

The region around the CBO facility was subject to a major winter storm on March 14 and 15, 2019, in which the site received an estimated 18" of snowfall accompanied by up to 90 mph wind gusts. As a result, a significant amount of snowmelt impacted the wellfield. This caused the excursion indicator parameters to rise in a number of shallow monitor wells, particularly those located in the northern portion of the wellfield. A second significant winter storm impacted the area on April 10 and 11, 2019. The region continued to receive above normal springtime precipitation combined with unusually cool temperatures for most of the quarter. In total, seven shallow monitor wells were placed on excursion status due to these conditions (two wells at the end of March, 2019, five during the second quarter). No additional corrective actions were assigned for any of the wells other than placing the affected wells on a weekly sampling frequency.

SM10-28, SM10-17, and SM8-21 were placed on excursion status due to the wet conditions. These wells were all removed from excursion status during the second quarter.

SM8-25 was placed on excursion status on March 28, 2019, when the confirming sample results exceeded the SCL for conductivity, as a result of the March 14 and 15 winter storm. The well was removed from excursion status on August 14, 2019 after three consecutive weekly samples tested below the excursion parameters.

SM8-28 was placed on excursion status on April 18, 2019, as a result of the wet, cool, springtime conditions. This well has been placed on excursion status five times in the past during similar environmental conditions. The well was removed from excursion status on July 31, 2019 after three consecutive weekly samples tested below the excursion parameters.

SM6-23 was placed on excursion status on May 3, 2019, as a result of the wet, cool, springtime conditions. This well has been placed on excursion status three times in the past during similar environmental conditions. The well was removed from excursion status on July 30, 2019 after three consecutive weekly samples tested below the excursion parameters.

SM6-28 was placed on excursion status on May 3, 2019, as a result of the wet, cool, springtime conditions. This well has been placed on excursion status six times in the past during similar environmental conditions. The well remained on excursion status at the end of the quarter. The parameters in the well are trending down slowly and are very near the multiple control limits. In fact, several weekly samples have been below the excursion parameters, however, the sample results slightly exceeded the excursion parameters the following week. The well has been on excursion status for a period of greater than sixty days. Injection has been suspended in the area around the well.

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A summary of the weekly excursion indicator parameters and laboratory reports are included in Appendix A and Appendix B respectively.

Appendix A

Summary of

Weekly Excursion Indicator Parameter Values

Third Quarter, 2019

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

Permit No. SUA-153

NRC
Excursion Monitoring Report
Quarter 3 of 2019

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

Well ID	Alkalinity			Conductivity			Chloride		
	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
BOW96-001	224	230	226	509	530	521	7.3	8.4	7.9
CM02-005	329	360	344	1989	2174	2076	186	213	200.7
CM02-006	269	282	273	982	1080	1017	61	69	64.3
CM02-007	257	268	261	1079	1141	1095	75	80	76.7
CM03-005	297	302	300	1939	1961	1950	180	188	185.3
CM03-006	297	301	299	1943	1957	1949	182	189	185.9
CM04-001	306	313	310	1844	1868	1856	175	181	178.6
CM04-002	306	312	309	1867	1873	1870	173	181	178.3
CM04-003	304	306	306	1860	1877	1869	172	179	177.4
CM04-004	306	326	316	1882	1949	1910	173	187	180.1
CM05-001	302	307	305	1730	1779	1746	150	163	156.1
CM05-002	302	311	304	1838	1860	1852	173	180	177
CM05-003	304	310	306	1852	1866	1859	174	181	177.6
CM05-004	308	315	310	1856	1875	1866	174	181	178.7
CM05-005	301	309	304	1854	1866	1859	173	180	177.3
CM05-006	303	308	305	1854	1866	1862	174	181	178.3
CM05-007	302	307	304	1851	1870	1861	173	180	178.1
CM05-008	307	311	308	1880	1900	1892	175	182	179
CM05-009	299	304	301	1864	1880	1874	171	180	176.1
CM05-010	292	297	294	1887	1910	1899	171	176	174.3
CM05-011	306	315	309	1916	1934	1925	174	182	179.1
CM05-012	295	300	298	1871	1908	1897	174	185	180.1
CM05-013	292	298	295	1888	1915	1896	174	184	178.6
CM05-018	298	304	302	1906	1929	1919	177	186	181.9
CM05-019	304	314	310	1801	1821	1809	158	164	160.7
CM05-020	312	321	317	1829	1908	1859	163	178	169.7
CM05-021	298	303	301	1914	1930	1924	178	185	181.4

CM05-022	297	303	300	1904	1935	1925	177	186	180.9
CM05-023	294	298	296	1907	1928	1921	177	182	179.6
CM05-024	298	301	300	1931	1948	1944	176	183	179.7
CM05-025	294	297	295	1927	1952	1947	167	176	171.7
CM05-026	296	301	299	1939	1960	1952	176	186	181.1
CM05-027	298	301	300	1922	1961	1950	177	187	181.7
CM06-001	283	298	290	1833	1874	1855	169	177	173
CM06-002	290	298	293	1900	1926	1914	172	181	177.3
CM06-003	291	297	294	1912	1929	1921	173	180	177.6
CM06-004	293	301	297	1910	1935	1924	174	182	178.3
CM06-005	285	293	289	1938	1954	1947	174	182	178
CM06-006	291	303	296	1903	1941	1931	173	180	176.4
CM06-007	277	282	279	1957	1980	1970	173	180	176.3
CM06-008	288	296	291	1917	1940	1928	170	179	175.9
CM06-009	290	298	295	1911	1939	1921	174	180	177.5
CM06-010	289	296	293	1924	1948	1937	173	179	176.2
CM06-012	296	304	300	1909	1938	1928	178	184	181
CM06-013	298	301	300	1910	1939	1930	179	184	181.1
CM06-014	291	296	295	1907	1932	1920	177	180	178.3
CM06-015	293	298	296	1922	1942	1932	173	181	177.7
CM06-016A	291	295	294	1917	1940	1928	172	185	176.1
CM06-017	304	308	305	1900	1932	1919	176	180	178.1
CM06-018	303	308	306	1884	1922	1910	175	182	178.3
CM06-019	306	310	308	1890	1916	1905	174	180	178
CM06-025	301	304	303	1889	1907	1897	176	183	180
CM06-026	301	315	308	1886	1904	1894	172	182	177.5
CM06-028	318	324	321	1829	1843	1834	169	175	172
CM06-029	306	311	309	1866	1890	1875	171	181	174.2
CM06-030	312	317	315	1839	1860	1853	170	177	173.2
CM06-031	313	319	317	1855	1872	1868	171	177	174.2
CM06-032	313	319	316	1876	1889	1885	172	179	175.7
CM07-010	294	302	297	1889	1915	1901	179	186	183.4

CM07-011	292	297	294	1904	1918	1909	179	187	183.4
CM07-012	291	295	293	1897	1917	1912	179	186	182.1
CM07-013	290	295	292	1927	1941	1933	177	185	181.4
CM07-014	291	297	293	1938	1956	1947	177	187	181.4
CM07-015	296	301	298	1929	1952	1944	178	187	183.3
CM07-016	303	309	306	1970	1985	1979	180	191	186.4
CM08-001	289	293	291	1922	1949	1937	171	179	174.8
CM08-002	293	300	298	1921	1937	1930	174	181	178.3
CM08-003	310	317	313	1979	2006	1991	182	192	187
CM08-004	293	296	295	1916	1936	1925	174	180	177.8
CM08-005	286	289	287	1896	1917	1905	175	181	178.3
CM08-006	294	301	300	1909	1924	1920	173	181	178.3
CM08-007	306	315	312	1906	1930	1923	177	183	179.5
CM08-008	314	320	318	1933	1957	1946	180	187	183.7
CM08-009	311	316	314	1857	1884	1874	171	174	172.8
CM08-010	311	315	313	1841	1852	1847	169	178	174.5
CM08-011	314	323	318	1842	1866	1852	165	174	170.5
CM08-012	316	328	322	1857	1886	1875	165	176	172.3
CM08-019	311	320	316	1789	1837	1823	165	174	171.3
CM08-020	313	321	318	1820	1824	1821	164	172	168.9
CM08-021	315	324	318	1816	1840	1830	164	173	169.3
CM08-022	317	322	319	1828	1843	1836	164	172	169.3
CM08-026	311	317	314	1820	1835	1830	165	173	169.4
CM08-027	315	319	317	1826	1845	1839	166	173	170.2
CM08-028	315	320	318	1829	1842	1836	167	173	170.8
CM09-008	297	300	299	1793	1811	1804	172	179	175.8
CM09-009	304	307	305	1780	1800	1793	174	179	176.5
CM09-010	302	304	302	1779	1790	1784	173	179	175.5
CM09-011	300	304	302	1788	1809	1802	174	179	176.5
CM09-012	296	304	300	1817	1832	1823	173	181	177.7
CM09-013	295	300	298	1807	1827	1816	172	182	177.1
CM09-014	300	308	302	1814	1844	1833	175	185	179.9
CM09-015	299	307	303	1823	1843	1832	173	183	178.9

CM09-016	301	308	302	1823	1841	1834	173	183	178.7
CM09-017	299	304	301	1827	1848	1839	175	183	178.9
CM09-018	296	303	299	1822	1845	1836	173	182	178.6
CM09-019	296	304	300	1833	1854	1847	175	186	179.9
CM09-020	292	299	295	1854	1873	1864	176	186	180.9
CM10-001	312	319	315	1845	1867	1857	166	179	171.3
CM10-002	311	317	315	1846	1865	1857	167	175	171.5
CM10-003	309	312	311	1843	1867	1853	167	179	173.2
CM10-004	329	332	330	1935	1959	1950	187	192	189.8
CM10-005	336	340	339	2000	2016	2008	193	202	198.8
CM10-006	311	318	316	1824	1855	1847	165	170	168
CM10-007	316	319	318	1836	1857	1850	164	174	169.3
CM10-008	323	331	325	1852	1876	1865	167	177	172.6
CM10-009	315	323	319	1834	1855	1842	163	174	169.3
CM10-010	338	345	341	1930	1972	1947	173	185	181
CM10-011	324	332	327	1820	1832	1824	161	168	164.7
CM10-012	342	348	344	1861	1873	1867	167	175	172.1
CM10-013	345	354	347	1759	1770	1765	162	168	164.6
CM10-014	353	361	356	1786	1804	1795	166	169	167.1
CM10-015	329	334	331	1812	1822	1817	158	163	160.9
CM10-016	311	318	313	1850	1861	1854	156	163	159.7
CM10-017	323	328	325	1853	1863	1858	158	164	161.1
CM10-020	336	341	338	1875	1899	1887	172	179	175.4
CM10-021	317	322	319	1826	1834	1830	160	166	164
CM10-022	317	331	324	1829	1840	1836	158	169	163.4
CM10-023	321	325	323	1838	1846	1843	160	166	163.6
CM10-024	318	325	322	1844	1856	1850	162	169	165.9
CM10-025	318	325	322	1833	1849	1840	163	170	166.9
CM10-026	314	321	318	1820	1842	1832	162	168	165
CM10-027	311	316	314	1831	1852	1841	164	172	168.6
CM10-028	311	316	314	1831	1848	1840	167	172	170.3
CM10-029	313	321	317	1825	1850	1839	164	173	168.6

CM10-030	315	321	318	1842	1849	1844	164	171	168.7
CM10-031	312	317	315	1830	1845	1837	164	171	168.3
CM10-032	313	317	315	1857	1875	1865	157	167	160
CM10-033	342	348	345	1775	1804	1787	160	170	164.4
CM10-034	346	353	350	1842	1866	1852	172	178	175.3
CM11-001	299	302	301	1846	1861	1854	172	178	175.3
CM11-002A	297	303	300	1837	1854	1846	172	179	175.8
CM11-003	314	319	317	1904	1920	1915	175	185	180.2
CM11-004	297	301	299	1810	1844	1832	169	178	173.7
CM11-005	294	302	299	1712	1836	1803	158	177	170.8
CM11-006	296	306	301	1814	1847	1829	170	178	174
CM11-007	294	299	297	1820	1831	1827	168	176	172.5
CM11-008	290	308	303	1642	1881	1832	145	180	170.2
CM11-009	294	297	295	1813	1830	1824	165	172	168.8
CM11-010	297	306	301	1816	1849	1839	170	178	173.5
CM11-011	302	308	305	1822	1847	1838	170	179	175
CM11-012	294	300	298	1792	1807	1802	168	175	170.5
CM11-013	300	302	301	1782	1801	1794	172	178	174.5
CM11-014	297	304	302	1777	1794	1789	172	187	175.5
CM11-015	296	298	297	1772	1784	1780	168	176	171.5
CM11-016	290	302	299	1773	1793	1785	170	187	176.3
CM11-017	302	304	303	1772	1785	1782	167	174	171.5
CM11-018	305	307	306	1777	1797	1790	170	179	174.7
CM11-019	300	303	301	1780	1800	1794	173	177	174.5
IJ013P	308	317	311	1265	1293	1281	96	103	99.6
PR008	328	341	337	1319	1374	1358	95	99	97
PR015	282	285	283	1090	1106	1096	75	79	77.6
SM02-001	188	191	189	525	533	528	14	15	14.4
SM02-002	166	169	167	459	466	462	11	11	11
SM02-003	197	198	197	546	552	549	15	15	15
SM03-001	204	207	206	663	669	666	12	13	12.4
SM03-002	177	179	178	443	448	445	3.1	4.2	3.6
SM03-003	175	178	177	453	458	455	5.5	5.9	5.7

SM04-001	154	158	156	358	370	364	2.7	3.4	2.9
SM04-002	189	192	191	629	640	634	13	14	13.8
SM04-003	180	186	182	591	616	607	12	13	12.3
SM04-004	206	209	208	603	626	616	13	14	13.7
SM04-005A	193	197	196	531	540	535	11	12	11.7
SM04-006	264	267	266	643	656	651	13	15	14
SM04-007	173	180	176	506	516	511	17	18	17.6
SM04-008	281	295	288	679	699	690	11	12	11.4
SM04-009	272	275	273	660	667	664	12	13	12.1
SM04-010A	291	295	294	702	712	706	12	13	12.3
SM04-011A	284	291	288	690	701	696	11	12	11.1
SM05-001	231	233	232	585	605	598	12	12	12
SM05-002	191	194	192	446	454	449	5.2	5.7	5.4
SM05-003	222	227	225	581	591	585	12	13	12.3
SM05-004	207	210	209	555	562	558	15	16	15.7
SM05-005	232	237	235	593	600	596	10	12	11.4
SM05-006	207	211	209	568	580	574	13	14	13.1
SM05-007	209	214	212	563	575	570	9.6	10	9.8
SM05-008	206	208	207	553	558	555	12	13	12.6
SM05-009	203	210	206	544	550	547	11	12	11.3
SM05-010	208	209	208	547	555	551	10	11	10.3
SM05-011	215	217	216	568	573	571	9.8	11	10.4
SM05-012	207	210	208	551	555	553	10	11	10.6
SM05-013	198	201	199	543	547	545	12	12	12
SM05-014	180	183	181	480	484	481	7.5	8.3	8.1
SM05-015	201	204	202	540	545	543	12	12	12
SM05-016	180	183	182	440	446	444	4.7	5.5	5.0
SM05-017	165	169	167	411	413	412	1.4	2.4	1.9
SM05-018	172	175	173	430	434	432	1.3	3.2	2.8
SM05-019	183	185	184	479	485	482	4.6	5	4.9
SM05-020	176	180	178	476	486	480	4.9	5.5	5.3
SM05-021	176	178	177	450	456	454	4.6	5.3	4.9

SM05-022	181	185	183	460	465	463	3.3	4	3.7
SM05-023	180	184	182	458	463	461	3.6	4	3.8
SM05-024	169	171	170	429	435	432	4.7	5.3	5.0
SM05-025	167	173	170	442	458	449	5.5	6.5	6.0
SM06-001	209	213	210	534	543	538	6.5	7.7	7.3
SM06-002	206	207	206	544	552	549	10	10	10
SM06-003	201	206	203	538	544	541	9.4	10	9.7
SM06-004	205	210	207	520	532	525	8.1	8.5	8.3
SM06-005	211	214	213	514	521	518	7.1	8	7.4
SM06-006	222	226	224	472	479	475	3.2	3.7	3.5
SM06-007	222	226	224	495	499	497	6.7	7	6.9
SM06-008	204	208	206	501	503	502	9	9.7	9.2
SM06-009	221	224	222	488	500	495	6.7	7.7	7.2
SM06-010	202	205	204	491	505	496	8.2	8.8	8.6
SM06-011	215	217	216	543	551	545	14	15	14.3
SM06-012	234	238	236	537	585	552	10	19	12.6
SM06-013	243	248	245	525	555	536	6.9	7.7	7.4
SM06-014	203	205	204	543	549	546	12	13	12.1
SM06-015	204	207	206	528	536	532	10	11	10.7
SM06-016	207	210	209	443	450	445	3.8	4.4	4.2
SM06-017	231	236	234	481	488	486	3.8	4.2	4
SM06-018	198	201	199	547	552	549	15	16	15.9
SM06-019	208	210	209	504	521	510	11	13	11.4
SM06-020	212	219	215	550	591	565	13	16	14.3
SM06-021	220	225	222	557	581	568	13	15	14
SM06-022	206	209	208	474	477	476	7.6	8.4	7.8
SM06-023	260	273	264	557	577	564	6.9	8.4	7.8
SM06-024	238	246	244	550	561	555	7.8	9.3	8.5
SM06-025	216	221	219	552	569	559	13	14	13.3
SM06-026	201	205	204	473	481	477	8.1	8.5	8.3
SM06-027	227	238	231	511	523	516	7.8	8.3	8.1
SM06-028	294	320	301	698	757	725	12	13	12.9
SM07-001	176	189	183	436	477	461	4.7	5.8	5.2

SM07-002	165	168	167	402	407	405	3.3	4	3.6
SM07-003	169	173	171	428	434	431	3.7	4.2	3.9
SM07-004	164	167	166	394	399	396	2	3.7	3.2
SM07-005	167	170	169	426	434	428	4.2	4.7	4.3
SM07-006	154	156	156	361	367	364	2.9	3.4	3.0
SM07-007	168	172	170	429	434	432	4.3	4.9	4.5
SM07-008	168	171	169	465	473	470	8	8.6	8.2
SM07-009	169	170	169	418	428	422	4.1	4.8	4.4
SM07-010	167	169	168	430	435	432	3.8	4.1	3.9
SM07-011	142	144	144	340	345	343	2.8	3.4	3.2
SM07-012	165	168	167	437	458	445	3.4	4.1	3.8
SM07-013	151	153	152	360	380	370	3.9	4.9	4.4
SM07-014	135	138	137	334	338	335	3.9	4.5	4.1
SM07-015	140	142	141	324	328	326	3.5	3.7	3.6
SM07-016	139	140	140	327	330	328	3.1	3.5	3.3
SM07-017	171	183	180	390	420	408	3.7	4.4	4.0
SM07-018	139	141	140	332	336	334	2.6	3.2	2.9
SM07-019	142	144	143	345	350	348	3.6	4.1	3.8
SM07-020	146	149	147	337	342	340	1.2	2.2	1.8
SM07-021	142	144	144	338	341	339	2.5	2.9	2.6
SM07-022	145	149	147	340	343	341	2.5	3	2.7
SM07-023	176	179	178	460	468	463	4	4.4	4.2
SM07-024	185	189	187	576	585	580	7.6	8.2	7.9
SM07-025	155	158	156	360	364	361	3.3	4	3.7
SM08-001	233	238	235	511	524	519	7.8	8.7	8.2
SM08-002	238	242	241	523	531	527	5.8	6.8	6.4
SM08-003	231	234	233	515	528	522	6.7	8.3	7.7
SM08-004	223	227	225	531	540	535	11	11	11
SM08-005	252	266	259	571	617	595	9.1	11	9.8
SM08-006	247	254	250	564	605	584	8.9	12	10.1
SM08-007	251	255	253	590	604	597	10	11	10.5
SM08-008	238	242	241	512	521	517	6.1	6.6	6.4

SM08-009	236	241	239	509	520	516	6.2	7.1	6.6
SM08-010	246	249	248	566	587	580	9.5	10	9.9
SM08-011	231	236	234	543	551	547	8.6	8.9	8.7
SM08-012	242	246	244	570	579	575	9.2	9.8	9.6
SM08-013	227	232	230	541	553	547	11	12	11.5
SM08-014	233	237	236	559	567	563	9.5	10	9.8
SM08-015	224	228	227	544	553	549	8.3	9	8.6
SM08-016	232	236	234	597	608	602	9.2	9.8	9.6
SM08-017	242	246	244	572	581	577	8.6	9.6	9.2
SM08-018	237	239	238	560	568	564	9.9	10	10.0
SM08-019	238	240	239	545	552	549	8	8.7	8.4
SM08-020	225	231	228	548	572	563	8.8	9.3	9.0
SM08-021	230	237	233	572	612	589	8.9	9.9	9.5
SM08-022	253	257	256	668	724	697	11	13	11.9
SM08-023	227	230	229	561	569	565	8.4	8.9	8.8
SM08-024	227	236	231	552	609	574	8.9	10	9.6
SM08-025	259	264	262	688	742	712	12	14	13.5
SM08-026	225	234	228	537	578	555	9	9.8	9.4
SM08-027	229	241	233	508	526	516	6.8	7.8	7.2
SM08-028	248	301	272	562	701	621	7.5	11	9.0
SM08-029	264	271	269	713	754	735	15	17	16
SM08-030	205	211	208	475	486	480	8.7	9	8.9
SM08-031	230	236	234	509	517	514	6.1	6.4	6.3
SM09-001	168	172	170	412	424	418	3.5	4.2	3.8
SM09-002	159	163	162	377	383	381	1.4	3.5	3.0
SM09-003	160	164	162	374	378	376	1.8	3.2	2.9
SM09-004	146	150	148	362	367	365	3.7	4.1	4.0
SM09-005	140	144	142	310	318	314	2.9	3.4	3.2
SM09-006	139	145	142	301	305	303	1.5	2.4	2.1
SM09-007	161	164	163	394	400	397	3.2	3.8	3.6
SM09-008	162	163	162	390	394	392	2.6	2.9	2.8
SM09-009	152	153	153	366	370	368	2.9	3.6	3.3
SM09-010	145	147	146	343	348	345	2.6	3	2.8

SM09-011	147	149	148	351	355	353	1.8	3.1	2.6
SM09-012	161	163	162	388	393	390	2.6	3	2.8
SM09-013	144	147	145	334	339	337	3	3.5	3.2
SM09-014	139	142	141	316	321	319	1.5	2.2	2
SM09-015	139	142	141	317	322	320	1.4	2.1	1.8
SM09-016	139	143	141	299	303	301	1.4	1.9	1.6
SM09-017	140	143	142	316	324	321	2.6	3	2.8
SM09-018	137	143	142	309	321	316	1.3	3.1	1.9
SM09-019	135	138	137	308	311	310	2	3.1	2.8
SM09-020	139	141	140	309	315	312	1.9	2.6	2.2
SM10-001	289	299	295	683	705	694	13	14	13.3
SM10-002	229	233	231	527	539	533	8.2	8.8	8.5
SM10-003	247	254	252	550	565	558	7.6	8.5	7.8
SM10-004	242	248	246	536	544	540	6.7	7.4	7
SM10-005	239	246	244	531	542	537	6.9	7.8	7.2
SM10-006	283	310	297	659	717	687	11	14	12.8
SM10-007	289	300	294	679	695	688	13	15	13.7
SM10-008	253	287	263	597	675	620	11	15	12
SM10-009	252	258	256	577	587	582	9.5	10	9.9
SM10-010	238	243	241	540	546	543	8	9	8.4
SM10-011	243	263	249	571	609	586	9.2	11	10.2
SM10-012	260	267	262	613	628	620	11	12	11.3
SM10-013	233	239	237	539	548	543	8.6	9.1	9.0
SM10-014A	240	249	245	562	577	571	9.7	10	9.9
SM10-015	237	244	241	550	562	554	8.8	9.8	9.3
SM10-016	250	255	253	600	606	604	13	14	13.9
SM10-017	242	246	245	574	588	581	12	14	13.4
SM10-018	240	242	241	549	563	557	10	12	11.6
SM10-019	247	257	252	579	595	587	11	12	11.9
SM10-020	233	236	234	573	583	577	18	20	18.9
SM10-021	238	242	240	602	609	605	19	20	19.7
SM10-022	238	242	240	564	570	566	12	14	13

SM10-023	234	237	236	562	571	566	15	16	15.3
SM10-024	227	231	229	534	545	540	10	12	10.7
SM10-025	227	230	228	536	545	542	11	13	11.6
SM10-026	243	247	245	591	602	596	15	17	15.9
SM10-027	245	250	248	559	573	564	9	10	9.5
SM10-028A	212	228	220	593	610	601	27	32	29.7
SM10-029A	257	269	263	597	615	607	13	14	13.1
SM10-030	242	247	245	539	547	542	6.9	7.6	7.2
SM10-031	240	244	242	539	545	542	6.6	7.3	7.1
SM10-032	243	245	244	530	538	534	5.7	6.3	6.0
SM11-001	161	165	163	403	410	408	5	5.5	5.3
SM11-002	140	142	141	315	322	319	3.2	3.8	3.5
SM11-003	142	145	144	315	326	323	1.8	2.1	2
SM11-004	139	142	141	302	309	307	1.9	2.3	2.1
SM11-005	137	140	139	318	322	321	3.9	4.2	4.1
SM11-006	141	143	142	313	318	316	3	3.2	3.1
SM11-007	142	144	143	296	309	306	2.6	3.3	3.1
SM11-009	150	153	152	297	308	304	1	1.6	1.3
SM11-010	153	158	156	310	321	318	2	2.4	2.2
SM11-011	143	146	145	334	347	343	3.2	3.9	3.6
SM11-012	142	146	144	318	333	328	3.1	3.5	3.3
SM11-013	141	143	142	288	295	293	1.4	1.9	1.7
SM11-014	135	139	137	287	292	290	1.1	2	1.6
SM11-015	135	139	137	302	307	304	2.1	2.4	2.2
SM11-016	143	148	145	299	304	302	2.3	2.8	2.6
SM11-017	140	144	143	292	300	295	2.1	3	2.6
SM11-018	138	141	140	303	307	305	4.1	4.6	4.4
SM11-019	139	143	141	309	314	311	1.1	2	1.6
SM11-020	160	163	162	401	410	407	5.5	6.4	5.9
SM11-022	164	167	166	454	461	458	7.1	7.6	7.4
SM11-023	164	168	167	394	401	397	4	4.5	4.2
SM11-024	153	157	156	399	405	402	4.4	5	4.7
SM11-025	158	161	160	403	412	408	3.2	3.7	3.5

SM11-026	147	149	148	336	348	343	2.1	3	2.6

Appendix B

Monitor Well Laboratory Reports

Third Quarter, 2019

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/02/2019

Analysis Date: 07/02/2019

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
SM05-007	211	323	269	568	932	776	9.9	41	34
SM05-008	207	312	260	554	840	700	13	32	27
SM06-023	269	314	262	568	691	576	8.4	23	19
SM06-028	320	351	293	757	778	648	13	24	20
SM08-017	244	331	276	572	848	707	9.6	24	20
SM08-018	238	317	264	560	816	680	10	25	21
SM08-019	240	340	283	549	827	689	8	25	21
SM08-020	226	314	262	548	806	672	8.8	25	21
SM08-022	257	324	270	724	829	691	13	25	20
SM08-023	228	317	264	568	808	673	8.7	27	23
SM08-024	236	317	264	609	720	600	10	24	20
SM10-030	247	359	299	547	778	648	6.9	25	21
SM10-031	243	340	283	541	734	612	7.2	25	21
SM10-032	245	340	283	530	734	612	5.8	23	20

Wednesday, July 03, 2019

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/03/2019

Analysis Date: 07/03/2019

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
SM08-025	262	324	270	742	720	600	14	24	20
SM08-028	300	328	274	701	801	667	11	24	20
SM09-006	145	216	180	304	461	384	1.7	22	19
SM09-007	164	239	199	400	590	492	3.7	25	21
SM09-008	163	230	192	394	701	584	2.9	106	88
SM09-009	153	235	196	369	634	528	3.4	50	42
SM09-010	147	216	180	347	533	444	2.9	24	20
SM09-011	148	230	192	354	518	432	3.1	21	17
SM09-012	162	238	198	392	605	504	2.6	29	24
SM09-013	146	222	185	339	518	432	3.2	24	20
SM09-014	142	233	194	321	518	432	2.1	21	18
SM09-015	141	225	187	321	490	408	1.7	22	18
SM09-016	143	216	180	303	461	384	1.4	20	17
SM09-017	142	209	174	324	533	444	3	31	26
SM09-018	142	210	175	314	490	408	1.3	22	18
SM09-019	138	209	174	311	461	384	2.5	23	19
SM09-020	140	210	175	312	475	396	2.2	22	19

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/09/2019

Analysis Date: 07/09/2019

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	290	428	356	1916	2866	2388	177	285	238
CM06-010	289	429	358	1924	2952	2460	176	327	272
CM08-001	289	455	379	1934	3110	2592	174	372	310
CM08-002	293	395	329	1937	3125	2604	179	334	278
CM08-003	310	432	360	1999	3211	2676	188	367	306
CM08-004	293	428	356	1936	3125	2604	178	328	274
CM08-005	286	425	354	1917	3067	2556	181	328	274
CM08-006	294	432	360	1909	3067	2556	179	317	264
CM08-007	306	425	354	1906	3154	2628	178	396	330
CM08-008	316	418	348	1950	3211	2676	186	415	346
CM08-009	311	452	377	1876	3053	2544	174	325	271
CM09-008	299	418	348	1804	2952	2460	178	366	305
CM09-009	304	475	396	1799	2923	2436	178	334	278
CM09-010	302	359	299	1785	2390	1992	177	292	244
CM09-011	302	445	371	1806	2707	2256	179	284	236
CM11-012	299	433	361	1807	2794	2328	172	268	223
CM11-013	301	418	348	1800	2722	2268	178	291	242
CM11-014	301	468	390	1794	3024	2520	174	357	298
CM11-015	297	431	359	1784	2765	2304	172	289	241
CM11-016	299	451	376	1786	2794	2328	176	276	230
CM11-017	302	438	365	1785	2837	2364	173	301	251
CM11-018	305	445	371	1796	2722	2268	177	297	247
CM11-019	300	448	373	1800	2779	2316	177	300	250
SM04-001	157	248	206	365	772	643	2.9	52	43
SM04-002	192	513	393	640	1256	1039	14	127	88
SM04-005A	196	367	306	539	1236	1030	12	106	88
SM06-023	273	314	262	577	691	576	8.4	23	19
SM06-028	313	351	293	752	778	648	13	24	20
SM08-001	237	374	312	524	763	636	8.1	25	21
SM08-002	241	353	294	531	778	648	6.4	24	20
SM08-003	234	331	276	528	720	600	7.6	24	20
SM08-004	227	323	269	540	819	683	11	25	21

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/10/2019

Analysis Date: 07/10/2019

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	312	441	367	1844	3038	2532	176	315	263
CM08-011	319	446	372	1866	3053	2544	172	325	271
CM08-012	321	461	384	1884	3038	2532	174	305	254
CM10-001	317	469	391	1863	2822	2352	173	305	254
CM10-002	317	474	395	1865	2707	2256	172	262	218
CM10-003	312	474	395	1858	2736	2280	173	266	222
CM10-004	329	468	390	1946	2794	2328	189	288	240
CM10-005	339	464	386	2009	3082	2568	200	389	324
CM10-006	316	482	402	1853	2750	2292	168	281	234
CM10-007	318	482	402	1857	2765	2304	170	278	232
CM11-001	301	438	365	1853	2808	2340	176	297	247
CM11-002A	301	442	368	1854	2794	2328	177	285	238
CM11-003	318	439	366	1920	2693	2244	181	272	227
CM11-004	301	464	386	1839	2678	2232	174	268	223
CM11-005	301	451	376	1836	2664	2220	174	274	228
CM11-006	300	436	364	1837	2707	2256	174	269	224
CM11-007	299	432	360	1830	2707	2256	173	272	227
CM11-008	306	462	385	1878	2678	2232	177	274	228
CM11-009	296	439	366	1826	2765	2304	169	276	230
CM11-010	299	436	364	1839	2707	2256	173	284	236
CM11-011	304	433	361	1837	2736	2280	178	278	232
SM04-003	186	361	301	609	1251	1043	13	38	32
SM04-004	209	266	222	611	1099	916	14	62	52
SM08-021	237	317	264	596	706	588	9.9	25	21
SM08-025	263	324	270	722	720	600	14	24	20
SM08-028	301	328	274	690	801	667	11	24	20
SM10-001	299	469	391	690	994	828	14	37	31
SM10-002	233	338	282	532	763	636	8.8	24	20
SM10-003	251	386	322	552	821	684	8.5	24	20
SM10-004	248	346	288	536	778	648	7.4	24	20
SM10-005	246	350	292	534	763	636	7.1	23	19
SM10-006	310	501	418	704	1123	936	14	33	28

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/16/2019

Analysis Date: 07/16/2019

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	292	432	360	1910	2817	2347	187	281	234
CM07-012	292	422	352	1916	2794	2328	185	289	241
CM07-013	292	436	364	1927	2841	2368	182	287	239
CM07-014	292	422	352	1944	2772	2310	184	274	228
CM07-015	297	432	360	1943	2822	2352	186	284	236
CM07-016	306	441	367	1983	2831	2359	189	281	234
CM10-008	323	475	396	1858	2707	2256	170	265	221
CM10-009	315	468	390	1839	2693	2244	170	269	224
CM10-010	338	475	396	1949	2736	2280	183	275	229
CM10-011	324	481	401	1824	2808	2340	165	288	240
CM10-012	342	446	372	1862	2923	2436	174	327	272
CM10-013	345	481	401	1763	2779	2316	164	287	239
CM10-014	353	490	408	1786	2578	2148	166	251	209
CM10-015	329	504	420	1812	2491	2076	159	253	211
CM10-016	311	484	403	1850	2650	2208	160	253	211
CM10-017	323	475	396	1856	2664	2220	163	248	206
IJ013P	310	415	346	1277	2900	2417	100	278	232
PR008	329	484	403	1336	2866	2388	96	282	235
PR015	282	444	370	1099	2792	2327	78	268	223
SM03-001	206	374	312	667	1122	935	13	85	71
SM03-002	179	305	254	444	805	671	4.2	40	34
SM03-003	176	297	247	453	729	607	5.8	30	25
SM04-010A	294	354	295	708	1053	877	13	36	30
SM04-011A	286	554	462	694	1469	1224	12	139	115
SM06-023	266	314	262	564	691	576	8	23	19
SM06-028	307	351	293	734	778	648	13	24	20
SM07-015	141	200	167	326	495	413	3.5	24	20
SM07-016	139	199	166	327	451	376	3.5	24	20
SM07-017	181	209	174	411	539	449	3.9	30	25
SM07-018	139	217	181	335	513	427	3.1	23	19
SM07-019	142	212	176	345	599	499	4	38	31
SM07-020	147	228	190	339	583	486	2.1	28	23

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/17/2019

Analysis Date: 07/17/2019

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
SM05-007	209	323	269	563	932	776	9.9	41	34
SM05-008	206	312	260	556	840	700	13	32	27
SM08-017	242	331	276	575	848	707	8.6	24	20
SM08-018	238	317	264	563	816	680	10	25	21
SM08-019	239	340	283	545	827	689	8.1	25	21
SM08-020	225	314	262	556	806	672	8.9	25	21
SM08-021	233	317	264	595	706	588	9.9	25	21
SM08-022	256	324	270	716	829	691	12	25	20
SM08-023	227	317	264	564	808	673	8.9	27	23
SM08-024	233	317	264	591	720	600	9.8	24	20
SM08-025	262	324	270	725	720	600	14	24	20
SM08-028	289	328	274	660	801	667	10	24	20
SM10-030	246	359	299	539	778	648	7.1	25	21
SM10-031	241	340	283	540	734	612	7.1	25	21
SM10-032	244	340	283	530	734	612	6.2	23	20

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/23/2019

Analysis Date: 07/23/2019

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	295	428	356	1911	2866	2388	180	285	238
CM06-010	290	429	358	1942	2952	2460	177	327	272
CM08-001	291	455	379	1936	3110	2592	176	372	310
CM08-002	300	395	329	1937	3125	2604	179	334	278
CM08-003	313	432	360	1980	3211	2676	187	367	306
CM08-004	296	428	356	1924	3125	2604	180	328	274
CM08-005	289	425	354	1906	3067	2556	179	328	274
CM08-006	301	432	360	1923	3067	2556	179	317	264
CM08-007	314	425	354	1927	3154	2628	180	396	330
CM08-008	314	418	348	1933	3211	2676	183	415	346
CM08-009	314	452	377	1857	3053	2544	173	325	271
CM09-008	299	418	348	1793	2952	2460	179	366	305
CM09-009	304	475	396	1782	2923	2436	177	334	278
CM09-010	302	359	299	1779	2390	1992	175	292	244
CM09-011	301	445	371	1797	2707	2256	176	284	236
CM11-012	298	433	361	1798	2794	2328	170	268	223
CM11-013	301	418	348	1786	2722	2268	173	291	242
CM11-014	303	468	390	1794	3024	2520	174	357	298
CM11-015	298	431	359	1784	2765	2304	171	289	241
CM11-016	300	451	376	1791	2794	2328	175	276	230
CM11-017	303	438	365	1785	2837	2364	174	301	251
CM11-018	307	445	371	1797	2722	2268	176	297	247
CM11-019	303	448	373	1799	2779	2316	173	300	250
SM04-001	154	248	206	364	772	643	2.9	52	43
SM04-002	190	513	393	630	1256	1039	14	127	88
SM04-005A	196	367	306	534	1236	1030	12	106	88
SM06-023	265	314	262	567	691	576	7.7	23	19
SM06-028	302	351	293	733	778	648	13	24	20
SM08-001	233	374	312	519	763	636	8.1	25	21
SM08-002	239	353	294	527	778	648	6.5	24	20
SM08-003	233	331	276	525	720	600	6.7	24	20
SM08-004	225	323	269	533	819	683	11	25	21

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/24/2019

Analysis Date: 07/24/2019

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	313	441	367	1851	3038	2532	178	315	263
CM08-011	318	446	372	1851	3053	2544	174	325	271
CM08-012	321	461	384	1873	3038	2532	175	305	254
CM10-001	316	469	391	1850	2822	2352	172	305	254
CM10-002	316	474	395	1846	2707	2256	172	262	218
CM10-003	312	474	395	1847	2736	2280	178	266	222
CM10-004	329	468	390	1935	2794	2328	191	288	240
CM10-005	339	464	386	2000	3082	2568	202	389	324
CM10-006	318	482	402	1843	2750	2292	169	281	234
CM10-007	318	482	402	1841	2765	2304	171	278	232
CM11-001	301	438	365	1846	2808	2340	176	297	247
CM11-002A	299	442	368	1844	2794	2328	177	285	238
CM11-003	317	439	366	1908	2693	2244	180	272	227
CM11-004	299	464	386	1827	2678	2232	176	268	223
CM11-005	298	451	376	1819	2664	2220	174	274	228
CM11-006	301	436	364	1821	2707	2256	175	269	224
CM11-007	297	432	360	1821	2707	2256	173	272	227
CM11-008	304	462	385	1872	2678	2232	177	274	228
CM11-009	294	439	366	1813	2765	2304	167	276	230
CM11-010	291	436	364	1816	2707	2256	174	284	236
CM11-011	302	433	361	1822	2736	2280	175	278	232
SM04-003	180	361	301	611	1251	1043	13	38	32
SM04-004	206	266	222	619	1099	916	14	62	52
SM08-025	259	324	270	721	720	600	14	24	20
SM08-028	279	328	274	641	801	667	9.2	24	20
SM10-001	298	469	391	705	994	828	13	37	31
SM10-002	231	338	282	539	763	636	8.7	24	20
SM10-003	250	386	322	559	821	684	7.9	24	20
SM10-004	246	346	288	543	778	648	6.7	24	20
SM10-005	244	350	292	542	763	636	7.8	23	19
SM10-006	308	501	418	717	1123	936	13	33	28
SM10-007	296	403	336	695	965	804	14	33	27

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/30/2019

Analysis Date: 07/30/2019

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	1906	2817	2347	183	281	234
CM07-012	292	422	352	1908	2794	2328	181	289	241
CM07-013	290	436	364	1932	2841	2368	183	287	239
CM07-014	292	422	352	1944	2772	2310	182	274	228
CM07-015	296	432	360	1929	2822	2352	184	284	236
CM07-016	309	441	367	1978	2831	2359	188	281	234
CM10-008	323	475	396	1852	2707	2256	174	265	221
CM10-009	320	468	390	1834	2693	2244	171	269	224
CM10-010	345	475	396	1941	2736	2280	182	275	229
CM10-011	326	481	401	1820	2808	2340	165	288	240
CM10-012	345	446	372	1861	2923	2436	172	327	272
CM10-013	347	481	401	1766	2779	2316	165	287	239
CM10-014	354	490	408	1791	2578	2148	168	251	209
CM10-015	331	504	420	1820	2491	2076	163	253	211
CM10-016	313	484	403	1850	2650	2208	159	253	211
CM10-017	324	475	396	1863	2664	2220	164	248	206
IJ013P	311	415	346	1285	2900	2417	101	278	232
PR008	338	484	403	1373	2866	2388	98	282	235
PR015	285	444	370	1104	2792	2327	79	268	223
SM03-001	204	374	312	664	1122	935	12	85	71
SM03-002	177	305	254	443	805	671	3.1	40	34
SM03-003	175	297	247	454	729	607	5.5	30	25
SM04-010A	291	354	295	703	1053	877	13	36	30
SM04-011A	284	554	462	693	1469	1224	11	139	115
SM06-023	263	314	262	564	691	576	7.7	23	19
SM06-028	299	351	293	727	778	648	13	24	20
SM07-015	141	200	167	325	495	413	3.6	24	20
SM07-016	139	199	166	328	451	376	3.5	24	20
SM07-017	171	209	174	390	539	449	3.7	30	25
SM07-018	139	217	181	333	513	427	2.9	23	19
SM07-019	142	212	176	350	599	499	3.6	38	31
SM07-020	146	228	190	338	583	486	1.9	28	23

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 07/31/2019

Analysis Date: 07/31/2019

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
SM05-007	210	323	269	572	932	776	9.7	41	34
SM05-008	207	312	260	558	840	700	13	32	27
SM08-017	242	331	276	580	848	707	9.1	24	20
SM08-018	238	317	264	568	816	680	10	25	21
SM08-019	239	340	283	549	827	689	8.7	25	21
SM08-020	228	314	262	563	806	672	9.1	25	21
SM08-021	231	317	264	595	706	588	9.6	25	21
SM08-022	256	324	270	710	829	691	12	25	20
SM08-023	228	317	264	569	808	673	8.9	27	23
SM08-024	232	317	264	582	720	600	9.8	24	20
SM08-025	261	324	270	720	720	600	14	24	20
SM08-028	272	328	274	624	801	667	9.1	24	20
SM10-030	244	359	299	545	778	648	7.6	25	21
SM10-031	244	340	283	545	734	612	7.3	25	21
SM10-032	243	340	283	536	734	612	6	23	20

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 08/06/2019

Analysis Date: 08/06/2019

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	298	428	356	1939	2866	2388	179	285	238
CM06-010	293	429	358	1947	2952	2460	177	327	272
CM08-001	291	455	379	1949	3110	2592	177	372	310
CM08-002	299	395	329	1925	3125	2604	180	334	278
CM08-003	317	432	360	2006	3211	2676	188	367	306
CM08-004	296	428	356	1923	3125	2604	180	328	274
CM08-005	289	425	354	1908	3067	2556	180	328	274
CM08-006	301	432	360	1924	3067	2556	180	317	264
CM08-007	311	425	354	1923	3154	2628	181	396	330
CM08-008	318	418	348	1937	3211	2676	183	415	346
CM08-009	314	452	377	1882	3053	2544	174	325	271
CM09-008	300	418	348	1811	2952	2460	175	366	305
CM09-009	306	475	396	1800	2923	2436	179	334	278
CM09-010	302	359	299	1782	2390	1992	179	292	244
CM09-011	304	445	371	1805	2707	2256	179	284	236
CM11-012	300	433	361	1806	2794	2328	175	268	223
CM11-013	301	418	348	1798	2722	2268	178	291	242
CM11-014	303	468	390	1777	3024	2520	173	357	298
CM11-015	297	431	359	1780	2765	2304	176	289	241
CM11-016	290	451	376	1793	2794	2328	187	276	230
CM11-017	303	438	365	1783	2837	2364	174	301	251
CM11-018	305	445	371	1785	2722	2268	179	297	247
CM11-019	301	448	373	1786	2779	2316	176	300	250
SM04-001	158	248	206	370	772	643	3.4	52	43
SM04-002	189	513	393	632	1256	1039	14	127	88
SM04-005A	193	367	306	540	1236	1030	12	106	88
SM06-023	262	314	262	559	691	576	7.5	23	19
SM06-028	296	351	293	725	778	648	13	24	20
SM08-001	233	374	312	520	763	636	7.8	25	21
SM08-002	238	353	294	528	778	648	6.5	24	20
SM08-003	231	331	276	526	720	600	7.9	24	20
SM08-004	223	323	269	535	819	683	11	25	21

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 08/07/2019

Analysis Date: 08/07/2019

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	315	441	367	1852	3038	2532	175	315	263
CM08-011	323	446	372	1865	3053	2544	172	325	271
CM08-012	325	461	384	1886	3038	2532	175	305	254
CM10-001	319	469	391	1867	2822	2352	179	305	254
CM10-002	317	474	395	1864	2707	2256	174	262	218
CM10-003	312	474	395	1856	2736	2280	173	266	222
CM10-004	332	468	390	1959	2794	2328	192	288	240
CM10-005	340	464	386	2015	3082	2568	202	389	324
CM10-006	318	482	402	1852	2750	2292	170	281	234
CM10-007	319	482	402	1856	2765	2304	170	278	232
CM11-001	302	438	365	1861	2808	2340	178	297	247
CM11-002A	300	442	368	1850	2794	2328	179	285	238
CM11-003	319	439	366	1919	2693	2244	183	272	227
CM11-004	301	464	386	1843	2678	2232	176	268	223
CM11-005	302	451	376	1832	2664	2220	177	274	228
CM11-006	302	436	364	1835	2707	2256	178	269	224
CM11-007	299	432	360	1829	2707	2256	176	272	227
CM11-008	308	462	385	1881	2678	2232	175	274	228
CM11-009	297	439	366	1829	2765	2304	172	276	230
CM11-010	300	436	364	1842	2707	2256	176	284	236
CM11-011	308	433	361	1845	2736	2280	179	278	232
SM04-003	181	361	301	609	1251	1043	12	38	32
SM04-004	206	266	222	621	1099	916	13	62	52
SM08-025	260	324	270	710	720	600	14	24	20
SM08-028	264	328	274	606	801	667	8.6	24	20
SM10-001	295	469	391	696	994	828	13	37	31
SM10-002	229	338	282	533	763	636	8.4	24	20
SM10-003	247	386	322	550	821	684	7.6	24	20
SM10-004	242	346	288	537	778	648	7.2	24	20
SM10-005	239	350	292	531	763	636	7	23	19
SM10-006	305	501	418	705	1123	936	14	33	28
SM10-007	294	403	336	690	965	804	13	33	27

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 08/13/2019

Analysis Date: 08/13/2019

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	1906	2817	2347	185	281	234
CM07-012	292	422	352	1917	2794	2328	183	289	241
CM07-013	291	436	364	1934	2841	2368	181	287	239
CM07-014	291	422	352	1954	2772	2310	181	274	228
CM07-015	299	432	360	1950	2822	2352	184	284	236
CM07-016	306	441	367	1985	2831	2359	187	281	234
CM10-008	323	475	396	1872	2707	2256	177	265	221
CM10-009	323	468	390	1839	2693	2244	174	269	224
CM10-010	342	475	396	1963	2736	2280	185	275	229
CM10-011	325	481	401	1822	2808	2340	167	288	240
CM10-012	345	446	372	1873	2923	2436	175	327	272
CM10-013	345	481	401	1759	2779	2316	166	287	239
CM10-014	356	490	408	1797	2578	2148	169	251	209
CM10-015	330	504	420	1814	2491	2076	163	253	211
CM10-016	311	484	403	1853	2650	2208	161	253	211
CM10-017	326	475	396	1860	2664	2220	163	248	206
IJ013P	308	415	346	1275	2900	2417	99	278	232
PR008	339	484	403	1367	2866	2388	98	282	235
PR015	282	444	370	1090	2792	2327	78	268	223
SM03-001	207	374	312	669	1122	935	13	85	71
SM03-002	179	305	254	446	805	671	3.8	40	34
SM03-003	177	297	247	455	729	607	5.6	30	25
SM04-010A	295	354	295	711	1053	877	12	36	30
SM04-011A	288	554	462	698	1469	1224	11	139	115
SM06-023	264	314	262	560	691	576	8.3	23	19
SM06-028	301	351	293	723	778	648	13	24	20
SM07-015	142	200	167	325	495	413	3.5	24	20
SM07-016	140	199	166	328	451	376	3.2	24	20
SM07-017	183	209	174	414	539	449	4.2	30	25
SM07-018	140	217	181	334	513	427	2.6	23	19
SM07-019	143	212	176	349	599	499	4.1	38	31
SM07-020	148	228	190	342	583	486	2.2	28	23

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 08/14/2019

Analysis Date: 08/14/2019

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
SM05-007	214	323	269	569	932	776	10	41	34
SM05-008	208	312	260	553	840	700	13	32	27
SM08-017	246	331	276	574	848	707	9.5	24	20
SM08-018	239	317	264	560	816	680	10	25	21
SM08-019	240	340	283	546	827	689	8.7	25	21
SM08-020	231	314	262	563	806	672	9.3	25	21
SM08-021	234	317	264	583	706	588	9.5	25	21
SM08-022	257	324	270	694	829	691	12	25	20
SM08-023	230	317	264	563	808	673	8.9	27	23
SM08-024	232	317	264	566	720	600	9.5	24	20
SM08-025	263	324	270	713	720	600	14	24	20
SM08-028	267	328	274	597	801	667	8.8	24	20
SM10-030	246	359	299	540	778	648	7.2	25	21
SM10-031	242	340	283	539	734	612	7.2	25	21
SM10-032	245	340	283	533	734	612	6	23	20

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 08/20/2019

Analysis Date: 08/20/2019

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	294	428	356	1919	2866	2388	179	285	238
CM06-010	294	429	358	1948	2952	2460	179	327	272
CM08-001	291	455	379	1949	3110	2592	179	372	310
CM08-002	299	395	329	1924	3125	2604	181	334	278
CM08-003	315	432	360	1991	3211	2676	192	367	306
CM08-004	296	428	356	1924	3125	2604	180	328	274
CM08-005	286	425	354	1906	3067	2556	179	328	274
CM08-006	300	432	360	1922	3067	2556	181	317	264
CM08-007	313	425	354	1929	3154	2628	183	396	330
CM08-008	320	418	348	1956	3211	2676	187	415	346
CM08-009	315	452	377	1884	3053	2544	174	325	271
CM09-008	297	418	348	1810	2952	2460	178	366	305
CM09-009	304	475	396	1797	2923	2436	177	334	278
CM09-010	304	359	299	1784	2390	1992	176	292	244
CM09-011	300	445	371	1804	2707	2256	176	284	236
CM11-012	294	433	361	1801	2794	2328	170	268	223
CM11-013	300	418	348	1794	2722	2268	174	291	242
CM11-014	302	468	390	1787	3024	2520	173	357	298
CM11-015	296	431	359	1784	2765	2304	171	289	241
CM11-016	300	451	376	1786	2794	2328	178	276	230
CM11-017	303	438	365	1784	2837	2364	172	301	251
CM11-018	306	445	371	1794	2722	2268	175	297	247
CM11-019	300	448	373	1799	2779	2316	175	300	250
SM04-001	157	248	206	366	772	643	2.7	52	43
SM04-002	192	513	393	638	1256	1039	14	127	88
SM04-005A	196	367	306	536	1236	1030	12	106	88
SM06-023	262	314	262	562	691	576	7.6	23	19
SM06-028	299	351	293	726	778	648	13	24	20
SM08-001	238	374	312	524	763	636	8.7	25	21
SM08-002	242	353	294	530	778	648	6.8	24	20
SM08-003	232	331	276	522	720	600	7.7	24	20
SM08-004	226	323	269	538	819	683	11	25	21

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 08/27/2019

Analysis Date: 08/27/2019

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	1904	2817	2347	185	281	234
CM07-012	291	422	352	1897	2794	2328	182	289	241
CM07-013	293	436	364	1941	2841	2368	184	287	239
CM07-014	291	422	352	1938	2772	2310	182	274	228
CM07-015	297	432	360	1935	2822	2352	185	284	236
CM07-016	308	441	367	1980	2831	2359	188	281	234
CM10-008	324	475	396	1872	2707	2256	175	265	221
CM10-009	323	468	390	1844	2693	2244	171	269	224
CM10-010	340	475	396	1943	2736	2280	184	275	229
CM10-011	325	481	401	1820	2808	2340	168	288	240
CM10-012	343	446	372	1864	2923	2436	175	327	272
CM10-013	347	481	401	1766	2779	2316	168	287	239
CM10-014	356	490	408	1795	2578	2148	166	251	209
CM10-015	331	504	420	1815	2491	2076	161	253	211
CM10-016	314	484	403	1854	2650	2208	163	253	211
CM10-017	325	475	396	1853	2664	2220	162	248	206
IJ013P	308	415	346	1265	2900	2417	101	278	232
PR008	341	484	403	1374	2866	2388	99	282	235
PR015	282	444	370	1090	2792	2327	77	268	223
SM03-001	206	374	312	668	1122	935	12	85	71
SM03-002	178	305	254	448	805	671	3.2	40	34
SM03-003	176	297	247	458	729	607	5.7	30	25
SM04-010A	294	354	295	712	1053	877	12	36	30
SM04-011A	287	554	462	701	1469	1224	11	139	115
SM06-028	294	351	293	720	778	648	13	24	20
SM07-015	140	200	167	328	495	413	3.5	24	20
SM07-016	140	199	166	330	451	376	3.4	24	20
SM07-017	183	209	174	420	539	449	4.4	30	25
SM07-018	139	217	181	336	513	427	2.7	23	19
SM07-019	142	212	176	348	599	499	3.8	38	31
SM07-020	147	228	190	342	583	486	2.2	28	23
SM07-021	144	216	180	341	534	445	2.5	27	23

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 09/03/2019

Analysis Date: 09/03/2019

Well ID	Alkalinity (mg/L)	Alk SCL	Alk MCL	Conductivity (µMho/cm)	Cond SCL	Cond MCL	Chloride (mg/L)	Cl SCL	Cl MCL
SM05-021	177	284	236	454	755	629	4.7	29	24
SM05-022	183	278	232	462	773	644	3.6	33	28
SM05-023	184	287	239	461	753	628	3.7	28	24
SM05-024	171	264	220	433	700	583	5	28	24
SM05-025	170	264	220	444	724	604	6	31	26
SM06-011	216	318	265	545	691	576	14	24	20
SM06-012	238	348	290	552	736	613	12	23	19
SM06-013	244	360	300	531	768	640	7.4	26	21
SM06-014	205	301	251	545	936	780	12	58	48
SM06-015	207	321	268	531	842	702	11	34	28
SM06-016	210	317	264	443	840	700	4.3	31	26
SM06-018	201	305	254	548	837	697	16	33	27
SM06-019	209	297	247	508	698	582	11	27	22
SM06-020	214	323	269	558	717	598	14	26	22
SM06-021	222	312	260	563	713	594	14	25	21
SM06-022	208	310	258	476	674	562	7.7	22	18
SM06-028	298	351	293	717	778	648	13	24	20

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 09/10/2019

Analysis Date: 09/10/2019

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	1918	2817	2347	179	281	234
CM07-012	295	422	352	1916	2794	2328	179	289	241
CM07-013	292	436	364	1933	2841	2368	177	287	239
CM07-014	295	422	352	1951	2772	2310	177	274	228
CM07-015	299	432	360	1952	2822	2352	178	284	236
CM07-016	304	441	367	1970	2831	2359	180	281	234
CM10-008	324	475	396	1859	2707	2256	171	265	221
CM10-009	317	468	390	1844	2693	2244	167	269	224
CM10-010	340	475	396	1934	2736	2280	178	275	229
CM10-011	327	481	401	1825	2808	2340	163	288	240
CM10-012	346	446	372	1873	2923	2436	171	327	272
CM10-013	349	481	401	1770	2779	2316	163	287	239
CM10-014	357	490	408	1801	2578	2148	167	251	209
CM10-015	330	504	420	1822	2491	2076	159	253	211
CM10-016	313	484	403	1856	2650	2208	156	253	211
CM10-017	324	475	396	1859	2664	2220	158	248	206
IJ013P	309	415	346	1284	2900	2417	96	278	232
PR008	341	484	403	1369	2866	2388	95	282	235
PR015	282	444	370	1090	2792	2327	75	268	223
SM03-001	207	374	312	664	1122	935	12	85	71
SM03-002	178	305	254	443	805	671	3.6	40	34
SM03-003	178	297	247	455	729	607	5.9	30	25
SM04-010A	294	354	295	705	1053	877	12	36	30
SM04-011A	291	554	462	699	1469	1224	11	139	115
SM06-028	295	351	293	705	778	648	13	24	20
SM07-015	141	200	167	326	495	413	3.6	24	20
SM07-016	140	199	166	327	451	376	3.5	24	20
SM07-017	183	209	174	416	539	449	4.1	30	25
SM07-018	140	217	181	332	513	427	2.9	23	19
SM07-019	143	212	176	348	599	499	3.7	38	31
SM07-020	148	228	190	340	583	486	1.5	28	23
SM07-021	144	216	180	338	534	445	2.5	27	23

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 09/17/2019

Analysis Date: 09/17/2019

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	295	428	356	1917	2866	2388	174	285	238
CM06-010	293	429	358	1927	2952	2460	173	327	272
CM08-001	293	455	379	1922	3110	2592	171	372	310
CM08-002	298	395	329	1921	3125	2604	174	334	278
CM08-003	313	432	360	1979	3211	2676	182	367	306
CM08-004	296	428	356	1927	3125	2604	174	328	274
CM08-005	287	425	354	1896	3067	2556	175	328	274
CM08-006	301	432	360	1919	3067	2556	173	317	264
CM08-007	312	425	354	1923	3154	2628	177	396	330
CM08-008	319	418	348	1943	3211	2676	180	415	346
CM08-009	316	452	377	1865	3053	2544	171	325	271
CM09-008	299	418	348	1807	2952	2460	172	366	305
CM09-009	307	475	396	1798	2923	2436	174	334	278
CM09-010	302	359	299	1790	2390	1992	173	292	244
CM09-011	301	445	371	1809	2707	2256	175	284	236
CM11-012	299	433	361	1805	2794	2328	168	268	223
CM11-013	302	418	348	1801	2722	2268	172	291	242
CM11-014	304	468	390	1793	3024	2520	172	357	298
CM11-015	297	431	359	1774	2765	2304	168	289	241
CM11-016	302	451	376	1783	2794	2328	172	276	230
CM11-017	304	438	365	1784	2837	2364	169	301	251
CM11-018	306	445	371	1793	2722	2268	171	297	247
CM11-019	303	448	373	1797	2779	2316	173	300	250
SM04-001	156	248	206	361	772	643	2.9	52	43
SM04-002	192	513	393	635	1256	1039	13	127	88
SM04-005A	197	367	306	532	1236	1030	11	106	88
SM06-028	297	351	293	702	778	648	13	24	20
SM08-001	236	374	312	511	763	636	8.3	25	21
SM08-002	242	353	294	525	778	648	5.8	24	20
SM08-003	234	331	276	515	720	600	8.3	24	20
SM08-004	226	323	269	531	819	683	11	25	21
SM08-005	252	346	288	571	749	624	9.1	23	19

WD

Cameco

Crow Butte Project

Monitor Well Laboratory Report

Sample Date: 09/24/2019

Analysis Date: 09/24/2019

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	297	432	360	1912	2817	2347	179	281	234
CM07-012	294	422	352	1913	2794	2328	179	289	241
CM07-013	295	436	364	1929	2841	2368	178	287	239
CM07-014	297	422	352	1956	2772	2310	177	274	228
CM07-015	301	432	360	1949	2822	2352	179	284	236
CM07-016	307	441	367	1980	2831	2359	182	281	234
CM10-008	331	475	396	1864	2707	2256	167	265	221
CM10-009	320	468	390	1840	2693	2244	163	269	224
CM10-010	339	475	396	1930	2736	2280	173	275	229
CM10-011	332	481	401	1827	2808	2340	161	288	240
CM10-012	348	446	372	1870	2923	2436	167	327	272
CM10-013	354	481	401	1767	2779	2316	162	287	239
CM10-014	361	490	408	1804	2578	2148	166	251	209
CM10-015	334	504	420	1821	2491	2076	158	253	211
CM10-016	318	484	403	1856	2650	2208	157	253	211
CM10-017	328	475	396	1854	2664	2220	158	248	206
IJ013P	313	415	346	1287	2900	2417	97	278	232
PR008	341	484	403	1369	2866	2388	97	282	235
PR015	285	444	370	1090	2792	2327	77	268	223
SM03-001	206	374	312	663	1122	935	12	85	71
SM03-002	179	305	254	443	805	671	3.6	40	34
SM03-003	177	297	247	455	729	607	5.6	30	25
SM04-010A	295	354	295	702	1053	877	12	36	30
SM04-011A	289	554	462	697	1469	1224	11	139	115
SM06-028	294	351	293	698	778	648	12	24	20
SM07-015	142	200	167	325	495	413	3.6	24	20
SM07-016	140	199	166	328	451	376	3.1	24	20
SM07-017	183	209	174	414	539	449	4.1	30	25
SM07-018	139	217	181	332	513	427	2.7	23	19
SM07-019	143	212	176	347	599	499	3.6	38	31
SM07-020	147	228	190	337	583	486	1.4	28	23
SM07-021	144	216	180	338	534	445	2.8	27	23