

# CDN Resource Laboratories Ltd.

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## REFERENCE MATERIAL: CDN-CM-6

Recommended values and the

“Between Lab” Two Standard Deviations

<b>Gold:</b>	<b>1.43 ± 0.09 g/t</b>	<b>(RSD of 3.28%)</b>
<b>Copper:</b>	<b>0.737 ± 0.039 %</b>	<b>(RSD of 2.65%)</b>
<b>Molybdenum:</b>	<b>0.083 ± 0.008 %</b>	<b>(RSD of 4.80%)</b>

Provisional values:

<b>Silver:</b>	<b>3.3 ± 0.7 g/t</b>	<b>(RSD of 10%)</b>
<b>Rhenium:</b>	<b>0.85 ± 0.16 ppm</b>	<b>(RSD of 9.65%)</b>

*Standards with an RSD of near or less than 5 % are certified, RSD's of between 5 % and 15 % are Provisional, and RSD's over 15 % are Indicated. Provisional and Indicated values cannot be used to monitor accuracy with a high degree of certainty*

**PREPARED BY:** CDN Resource Laboratories Ltd.

**CERTIFIED BY:** Duncan Sanderson, B.Sc., Licensed Assayer of British Columbia

**INDEPENDENT GEOCHEMIST:** Dr. Barry Smee., Ph.D., P. Geo.

**DATE OF CERTIFICATION:** October 19, 2009

### **METHOD OF PREPARATION:**

Reject ore material was dried, crushed, pulverized and then passed through a 270 mesh screen. The +270 material was discarded. The -270 material was mixed for 5 days in a double-cone blender. Splits were taken and sent to 14 laboratories for round robin assaying.

### **ORIGIN OF REFERENCE MATERIAL:**

Standard CDN-CM-6 was prepared using ore supplied by Pacific Sentinel from their Casino property in Yukon, Canada. It is a copper-gold porphyry deposit. The standard was prepared using 750 kg of this ore, 30kg of a blank granitic material and 20 kg of a Au-Cu-Mo concentrate.

### **Approximate chemical composition is as follows:**

	Percent			Percent
SiO <sub>2</sub>	56.1		MgO	2.2
Al <sub>2</sub> O <sub>3</sub>	14.8		K <sub>2</sub> O	3.7
Fe <sub>2</sub> O <sub>3</sub>	8.2		TiO <sub>2</sub>	0.6
CaO	4.3		LOI	5.5
Na <sub>2</sub> O	1.9		S	1.0

### **Statistical Procedures:**

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ±2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual “between-laboratory” standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from individual analyses, unlike the Confidence Limits published on other standards.

**Results from round-robin assaying are displayed on the following page.**

## REFERENCE MATERIAL CDN-CM-6

**Assay Procedures:**    **Au:** Fire assay pre-concentration, AA or ICP finish (30g sub-sample).  
**Cu, Mo, Ag, Re:** 4-acid digestion, AA or ICP finish.

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14
<b>SAMPLE</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>	<b>Au g/t</b>
CM6-1	1.42	1.38	1.41	1.37	1.48	1.52	1.07	1.49	1.53	1.37	1.40	1.41	1.44	1.44
CM6-2	1.46	1.40	1.53	1.43	1.43	1.50	0.97	1.37	1.44	1.39	1.45	1.48	1.42	1.40
CM6-3	1.45	1.38	1.43	1.42	1.40	1.61	1.14	1.38	1.55	1.35	1.41	1.37	1.47	1.37
CM6-4	1.46	1.39	1.44	1.35	1.45	1.41	0.99	1.41	1.39	1.48	1.44	1.40	1.48	1.44
CM6-5	1.45	1.40	1.52	1.42	1.44	1.49	1.03	1.36	1.48	1.44	1.46	1.42	1.39	1.41
CM6-6	1.44	1.33	1.44	1.33	1.34	1.45	1.25	1.45	1.45	1.42	1.37	1.34	1.46	1.46
CM6-7	1.53	1.47	1.47	1.37	1.49	1.37	1.15	1.48	1.52	1.43	1.40	1.39	1.49	1.47
CM6-8	1.46	1.31	1.46	1.44	1.42	1.45	1.25	1.43	1.47	1.34	1.37	1.36	1.45	1.43
CM6-9	1.43	1.38	1.53	1.40	1.44	1.43	1.23	1.54	1.56	1.41	1.46	1.42	1.41	1.47
CM6-10	1.43	1.46	1.49	1.39	1.42	1.39	1.26	1.36	1.49	1.42	1.49	1.39	1.45	1.38
Mean	1.45	1.39	1.47	1.39	1.43	1.46	1.13	1.43	1.49	1.41	1.43	1.40	1.45	1.42
Std. Dev'n	0.0317	0.0492	0.0437	0.0366	0.0420	0.0708	0.1113	0.0622	0.0533	0.0430	0.0409	0.0388	0.0317	0.0351
%RSD	2.19	3.54	2.97	2.63	2.94	4.85	9.83	4.36	3.58	3.06	2.87	2.78	2.19	2.46
	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>	<b>Cu %</b>
CM6-1	0.773	0.720	0.736	0.760	0.732	0.675	0.75	0.764	0.734	0.695	0.748	0.709	0.727	0.760
CM6-2	0.745	0.721	0.729	0.762	0.715	0.666	0.75	0.763	0.739	0.700	0.742	0.722	0.750	0.789
CM6-3	0.765	0.709	0.725	0.767	0.724	0.719	0.74	0.758	0.735	0.692	0.740	0.737	0.731	0.772
CM6-4	0.747	0.701	0.735	0.767	0.732	0.726	0.75	0.772	0.729	0.695	0.743	0.729	0.738	0.788
CM6-5	0.765	0.710	0.734	0.775	0.744	0.725	0.74	0.764	0.746	0.688	0.754	0.720	0.706	0.791
CM6-6	0.746	0.712	0.733	0.765	0.736	0.721	0.76	0.764	0.738	0.688	0.752	0.739	0.722	0.738
CM6-7	0.736	0.708	0.737	0.752	0.728	0.720	0.75	0.762	0.732	0.700	0.744	0.726	0.743	0.727
CM6-8	0.744	0.719	0.739	0.748	0.738	0.718	0.75	0.773	0.727	0.689	0.751	0.743	0.726	0.739
CM6-9	0.748	0.714	0.733	0.753	0.747	0.724	0.76	0.765	0.740	0.696	0.756	0.700	0.711	0.727
CM6-10	0.736	0.713	0.742	0.759	0.743	0.726	0.75	0.762	0.742	0.698	0.758	0.784	0.725	0.750
Mean	0.751	0.713	0.734	0.761	0.734	0.712	0.750	0.765	0.736	0.694	0.749	0.731	0.728	0.758
Std. Dev'n	0.0127	0.0062	0.0048	0.0082	0.0099	0.0222	0.0067	0.0045	0.0059	0.0047	0.006	0.0229	0.0135	0.0256
%RSD	1.70	0.87	0.66	1.08	1.34	3.11	0.89	0.59	0.80	0.67	0.84	3.14	1.86	3.38
	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>	<b>Mo %</b>
CM6-1	0.079	0.079	0.080	0.084	0.081	0.088	0.085	0.089	0.081	0.079	0.082	0.089	0.085	0.082
CM6-2	0.079	0.081	0.079	0.088	0.079	0.081	0.082	0.090	0.084	0.077	0.083	0.089	0.084	0.076
CM6-3	0.081	0.076	0.081	0.087	0.081	0.087	0.084	0.090	0.082	0.078	0.081	0.088	0.084	0.080
CM6-4	0.078	0.076	0.080	0.086	0.081	0.087	0.084	0.090	0.083	0.081	0.078	0.090	0.086	0.080
CM6-5	0.084	0.077	0.081	0.087	0.080	0.088	0.083	0.088	0.083	0.080	0.082	0.092	0.086	0.075
CM6-6	0.080	0.077	0.081	0.091	0.079	0.085	0.083	0.089	0.083	0.078	0.080	0.090	0.085	0.083
CM6-7	0.080	0.079	0.081	0.084	0.081	0.087	0.084	0.087	0.083	0.080	0.080	0.088	0.085	0.083
CM6-8	0.079	0.075	0.081	0.083	0.082	0.085	0.083	0.089	0.085	0.082	0.078	0.089	0.084	0.080
CM6-9	0.081	0.076	0.082	0.083	0.080	0.087	0.084	0.088	0.083	0.079	0.081	0.090	0.084	0.078
CM6-10	0.081	0.077	0.081	0.079	0.080	0.086	0.082	0.088	0.083	0.081	0.081	0.091	0.085	0.068
Mean	0.080	0.077	0.081	0.085	0.080	0.086	0.083	0.089	0.083	0.079	0.081	0.090	0.085	0.079
Std. Dev'n	0.0016	0.0018	0.0008	0.0033	0.0010	0.0021	0.0010	0.0009	0.0011	0.0015	0.002	0.001	0.001	0.005
%RSD	1.98	2.37	1.01	3.90	1.20	2.41	1.16	1.01	1.27	1.86	2.04	1.41	0.93	5.83

**Note:** "Au" data from laboratory 7 was excluded from the calculations for failing the t test.

**REFERENCE MATERIAL CDN-CM-6**

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14
	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t
CM6-1	3.4	2.9	1.92	3.7	4	3.3	3.1	3.2	1.5	3	3.0	3	3.1	3.4
CM6-2	3.3	2.0	1.85	3.8	4	3.1	3.4	3.0	1.3	3	3.0	< 3	3.1	3.4
CM6-3	3.6	2.4	1.17	3.7	4	3.2	3.1	3.1	1.5	3	3.0	< 3	3.4	3.7
CM6-4	3.4	2.6	3.29	3.8	3	3.2	3.4	3.1	1.7	3	3.0	< 3	3.3	3.6
CM6-5	3.6	2.3	2.92	3.8	4	3.2	2.9	3.4	1.4	3	3.5	3	3.0	3.4
CM6-6	3.5	2.1	2.37	3.7	3	3.3	3.1	3.4	1.4	3	3.0	< 3	3.0	3.7
CM6-7	3.4	2.6	2.63	3.7	4	3.2	3.1	3.2	1.4	3	3.0	< 3	3.1	3.6
CM6-8	3.8	2.9	2.17	3.8	3	3.2	3.0	3.3	1.4	3	3.0	< 3	3.0	3.7
CM6-9	3.5	2.2	1.97	3.8	4	3.1	3.2	3.1	1.5	3	3.0	< 3	3.2	3.5
CM6-10	3.3	2.2	2.46	3.8	3	3.0	3.3	3.1	1.5	3	3.5	< 3	3.1	3.0
Mean	3.5	2.4	2.3	3.8	3.6	3.2	3.2	3.2	1.5	3.0	3.1		3.1	3.5
Std. Dev'n	0.1549	0.3190	0.6007	0.0516	0.5164	0.0919	0.1647	0.1448	0.1075	0.0000	0.211		0.134	0.216
%RSD	4.45	13.18	26.40	1.37	14.34	2.89	5.21	4.53	7.36	0.00	6.80		4.27	6.17
	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t	Re g/t
CM6-1	0.937	0.741			0.869	0.96	0.725	0.780	0.869	0.90	0.9	1.02		0.85
CM6-2	0.951	0.751			0.906	0.92	0.739	0.732	0.876	0.86	0.9	1.03		0.87
CM6-3	0.958	0.711			0.841	0.93	0.752	0.705	0.883	0.89	0.9	1.03		0.76
CM6-4	0.963	0.742			0.892	0.94	0.762	0.729	0.874	0.89	0.8	1.07		0.82
CM6-5	0.933	0.716			0.867	0.94	0.734	0.765	0.908	0.86	0.9	1.09		0.81
CM6-6	0.958	0.719			0.886	0.91	0.755	0.790	0.885	0.85	0.9	1.08		0.83
CM6-7	0.944	0.741			0.939	0.91	0.709	0.688	0.877	0.85	0.9	1.07		0.82
CM6-8	0.964	0.728			0.917	0.96	0.710	0.821	0.871	0.95	0.9	1.00		0.81
CM6-9	0.916	0.751			0.937	0.90	0.691	0.764	0.876	0.85	0.9	1.04		0.80
CM6-10	1.045	0.713			1.004	0.89	0.676	0.871	0.892	0.90	0.9	1.00		0.80
Mean	0.957	0.731			0.906	0.926	0.725	0.764	0.881	0.880	0.890	1.043		0.817
Std. Dev'n	0.0345	0.0157			0.0465	0.0241	0.0285	0.0549	0.0117	0.0323	0.032	0.033		0.030
%RSD	3.60	2.15			5.14	2.61	3.93	7.18	1.33	3.67	3.55	3.16		3.65

**Note:** "Ag" data from laboratories 3 & 9 were excluded from the calculations for failing the t test.  
 "Ag" data from laboratory 12 was not used.  
 "Re" data from laboratory 12 was excluded from the calculations for failing the t test.

**Some laboratories were unable to provide rhenium analysis.**

**REFERENCE MATERIAL CDN-CM-6**

**Participating Laboratories:**

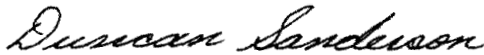
(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver, B.C.  
Activation Laboratories Ltd., Ancaster, Ontario  
Activation Laboratories Ltd., Thunder Bay, Ontario  
Assayers Canada Ltd., Vancouver, B.C.  
ALS Chemex Laboratories, North Vancouver, B.C.  
EcoTech, Kamloops, B.C.  
SGS-Toronto, Ontario  
Genalysis Laboratory Services Pty. Ltd., Australia  
Inspectorate America Assay Labs, USA  
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OMAC Laboratories Ltd., Ireland  
Skyline Assayers & Laboratories, Tucson, USA  
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Certified by



Duncan Sanderson, Certified Assayer of B.C.

Geochemist



Dr. Barry Smee, Ph.D., P. Geo.