

CDN Resource Laboratories Ltd.

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REFERENCE MATERIAL: CDN-CM-25

Recommended values and the “Between Lab” Two Standard Deviations

<i>Gold</i>	<i>0.228 g/t ± 0.030 g/t</i>	<i>Certified value</i>	<i>30g FA / ICP or AA</i>
<i>Copper</i>	<i>0.191 % ± 0.006 %</i>	<i>Certified value</i>	<i>4-acid / ICP or AA</i>
<i>Copper</i>	<i>0.194 % ± 0.008 %</i>	<i>Certified value</i>	<i>Aqua regia / ICP or AA</i>
<i>Molybdenum</i>	<i>0.019 % ± 0.002 %</i>	<i>Certified value</i>	<i>4-acid / ICP or AA</i>
<i>Molybdenum</i>	<i>0.019 % ± 0.002 %</i>	<i>Certified value</i>	<i>Aqua regia / ICP or AA</i>
<i>Sulphur</i>	<i>0.367 % ± 0.028 %</i>	<i>Certified value</i>	<i>Leco</i>

Note: Standards with an RSD of near or less than 5% are certified; RSD's of between 5% and 15% are Provisional; 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: August 10, 2012

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 mixer. Splits were taken and sent to 15 laboratories for round robin assaying.

ORIGIN OF REFERENCE MATERIAL:

Standard CDN-CM-25 was prepared using 793 kg of a granitic rock blended with 7 kg of a Cu-Au-Mo concentrate.

Approximate chemical composition (from whole rock analysis) is as follows:

	Percent		Percent
SiO ₂	67.6	MgO	2.4
Al ₂ O ₃	12.6	K ₂ O	1.1
Fe ₂ O ₃	6.3	TiO ₂	0.6
CaO	3.8	LOI	2.1
Na ₂ O	3.0	S	0.3
C	0.1		

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.

REFERENCE MATERIAL CDN-CM-25

Results from round-robin assaying:

	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	Lab 15
	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t
CM-25-1	0.239	0.208	0.198	0.251	0.22	0.212	0.23	0.225	0.242	0.223	0.211	0.240	0.215	0.206	0.260
CM-25-2	0.228	0.243	0.211	0.223	0.23	0.233	0.23	0.245	0.229	0.219	0.232	0.215	0.245	0.200	0.254
CM-25-3	0.222	0.202	0.198	0.204	0.22	0.227	0.23	0.227	0.242	0.223	0.261	0.220	0.240	0.203	0.263
CM-25-4	0.245	0.203	0.201	0.215	0.23	0.275	0.23	0.221	0.238	0.233	0.249	0.240	0.228	0.197	0.247
CM-25-5	0.247	0.182	0.220	0.228	0.24	0.239	0.23	0.245	0.231	0.206	0.225	0.220	0.220	0.214	0.253
CM-25-6	0.219	0.192	0.216	0.212	0.23	0.240	0.24	0.216	0.237	0.206	0.216	0.240	0.224	0.216	0.263
CM-25-7	0.236	0.201	0.217	0.211	0.23	0.235	0.23	0.243	0.230	0.220	0.216	0.220	0.277	0.210	0.243
CM-25-8	0.250	0.197	0.203	0.214	0.24	0.247	0.24	0.248	0.228	0.248	0.221	0.218	0.232	0.215	0.249
CM-25-9	0.252	0.229	0.223	0.197	0.22	0.223	0.22	0.239	0.262	0.214	0.225	0.221	0.259	0.211	0.252
CM-25-10	0.224	0.219	0.225	0.232	0.23	0.230	0.23	0.250	0.248	0.227	0.247	0.230	0.228	0.209	0.242
Mean	0.236	0.208	0.211	0.219	0.229	0.236	0.231	0.236	0.239	0.222	0.230	0.226	0.237	0.208	0.253
Std. Devn.	0.0123	0.0181	0.0105	0.0155	0.0074	0.0168	0.0057	0.0124	0.0105	0.0125	0.0167	0.0101	0.0191	0.0065	0.0076
% RSD	5.20	8.72	4.95	7.07	3.22	7.11	2.46	5.26	4.41	5.65	7.23	4.47	8.07	3.11	3.02
4-acid	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu
CM-25-1	0.194	0.191	0.189	0.214	0.194	0.193	0.192	0.189	0.202	0.190	0.188	0.193	0.188	0.191	0.20
CM-25-2	0.197	0.184	0.190	0.213	0.193	0.191	0.187	0.190	0.209	0.188	0.187	0.196	0.193	0.191	0.19
CM-25-3	0.192	0.188	0.194	0.211	0.190	0.196	0.195	0.189	0.196	0.191	0.192	0.195	0.190	0.194	0.19
CM-25-4	0.174	0.187	0.193	0.211	0.192	0.192	0.189	0.197	0.202	0.189	0.191	0.194	0.187	0.195	0.20
CM-25-5	0.188	0.190	0.193	0.209	0.194	0.197	0.190	0.194	0.208	0.188	0.190	0.195	0.191	0.191	0.19
CM-25-6	0.185	0.194	0.193	0.211	0.193	0.197	0.189	0.193	0.207	0.190	0.189	0.195	0.191	0.194	0.19
CM-25-7	0.185	0.193	0.190	0.214	0.191	0.193	0.190	0.191	0.200	0.187	0.188	0.193	0.198	0.194	0.20
CM-25-8	0.172	0.192	0.193	0.211	0.195	0.193	0.198	0.197	0.200	0.189	0.191	0.200	0.196	0.193	0.19
CM-25-9	0.189	0.188	0.189	0.209	0.186	0.194	0.191	0.192	0.204	0.188	0.185	0.193	0.189	0.191	0.19
CM-25-10	0.183	0.194	0.192	0.208	0.188	0.192	0.191	0.191	0.194	0.185	0.192	0.193	0.191	0.193	0.19
Mean	0.186	0.190	0.192	0.211	0.192	0.194	0.191	0.192	0.202	0.189	0.189	0.195	0.191	0.193	0.193
Std. Devn.	0.0081	0.0033	0.0019	0.0021	0.0029	0.0021	0.0032	0.0029	0.0050	0.0017	0.0024	0.0022	0.0034	0.0016	0.0048
% RSD	4.34	1.74	0.99	0.98	1.49	1.11	1.67	1.53	2.45	0.91	1.27	1.11	1.80	0.84	2.50
Aqua regia	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu
CM-25-1	0.200	0.187	0.198	0.212	0.189	0.196	0.196	0.203	0.189	0.190	0.183	0.195	0.192	0.193	0.19
CM-25-2	0.201	0.191	0.197	0.222	0.187	0.199	0.199	0.200	0.192	0.192	0.183	0.199	0.195	0.191	0.19
CM-25-3	0.201	0.192	0.196	0.221	0.176	0.200	0.205	0.194	0.193	0.199	0.184	0.196	0.189	0.191	0.19
CM-25-4	0.201	0.191	0.196	0.216	0.179	0.195	0.197	0.207	0.191	0.193	0.187	0.198	0.195	0.190	0.19
CM-25-5	0.199	0.191	0.199	0.219	0.179	0.193	0.199	0.198	0.187	0.192	0.187	0.200	0.192	0.192	0.19
CM-25-6	0.200	0.19	0.200	0.219	0.178	0.193	0.201	0.204	0.192	0.188	0.191	0.192	0.190	0.193	0.19
CM-25-7	0.196	0.193	0.192	0.212	0.181	0.193	0.202	0.198	0.191	0.192	0.188	0.200	0.195	0.193	0.19
CM-25-8	0.200	0.189	0.195	0.222	0.185	0.191	0.200	0.190	0.197	0.188	0.191	0.193	0.185	0.191	0.19
CM-25-9	0.197	0.192	0.196	0.220	0.184	0.196	0.198	0.201	0.192	0.187	0.182	0.196	0.200	0.191	0.19
CM-25-10	0.202	0.189	0.195	0.211	0.175	0.195	0.200	0.198	0.185	0.190	0.180	0.199	0.189	0.193	0.19
Mean	0.200	0.191	0.196	0.217	0.181	0.195	0.200	0.199	0.191	0.191	0.186	0.197	0.192	0.192	0.190
Std. Devn.	0.0019	0.0018	0.0023	0.0043	0.0048	0.0027	0.0026	0.0049	0.0033	0.0034	0.0039	0.0029	0.0042	0.0012	0.0000
% RSD	0.95	0.93	1.16	1.99	2.64	1.38	1.29	2.47	1.74	1.80	2.08	1.45	2.20	0.61	0.00

Notes:

1. Au data from Lab. 2 was removed for failing the t test.
2. 4-acid Cu data from Labs 4 and 9 was removed for failing the t test.
3. Aqua regia Cu data from Labs 4 and 5 was removed for failing the t test.

REFERENCE MATERIAL CDN-CM-25

Results from round-robin assaying:

	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	Lab 15
4 acid	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo
CM-25-1	0.019	0.019	0.020	0.018	0.020	0.020	0.018	0.019	0.019	0.019	0.019	0.020	0.018	0.019	0.02
CM-25-2	0.019	0.018	0.019	0.019	0.020	0.019	0.018	0.020	0.019	0.020	0.019	0.020	0.018	0.018	0.02
CM-25-3	0.019	0.018	0.024	0.019	0.019	0.020	0.020	0.019	0.018	0.020	0.019	0.019	0.018	0.018	0.02
CM-25-4	0.017	0.019	0.017	0.019	0.019	0.019	0.019	0.020	0.019	0.020	0.019	0.020	0.015	0.018	0.02
CM-25-5	0.019	0.019	0.019	0.018	0.019	0.020	0.020	0.021	0.020	0.019	0.019	0.020	0.014	0.018	0.02
CM-25-6	0.019	0.019	0.022	0.018	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.020	0.016	0.018	0.02
CM-25-7	0.019	0.019	0.020	0.019	0.019	0.020	0.020	0.019	0.019	0.019	0.019	0.020	0.020	0.018	0.02
CM-25-8	0.018	0.017	0.023	0.019	0.019	0.019	0.020	0.020	0.018	0.020	0.020	0.020	0.019	0.018	0.02
CM-25-9	0.019	0.018	0.024	0.019	0.019	0.019	0.019	0.020	0.019	0.020	0.019	0.020	0.019	0.018	0.02
CM-25-10	0.019	0.017	0.022	0.020	0.019	0.020	0.019	0.020	0.018	0.019	0.020	0.019	0.016	0.018	0.02
Mean	0.019	0.018	0.021	0.019	0.019	0.020	0.019	0.020	0.019	0.020	0.019	0.020	0.017	0.018	0.020
Std. Devn.	0.0007	0.0008	0.0024	0.0004	0.0003	0.0003	0.0006	0.0005	0.0006	0.0005	0.0004	0.0004	0.0019	0.0004	0.0000
% RSD	3.61	4.50	11.22	2.33	1.74	1.32	3.12	2.33	3.36	2.70	1.98	2.13	11.25	1.94	0.00
Aqua regia	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo
CM-25-1	0.018	0.019	0.019	0.018	0.013	0.017	0.018	0.020	0.018	0.019	0.019	0.020	0.019	0.018	0.02
CM-25-2	0.019	0.020	0.019	0.019	0.012	0.017	0.017	0.020	0.018	0.020	0.019	0.020	0.020	0.018	0.02
CM-25-3	0.020	0.020	0.019	0.019	0.012	0.017	0.019	0.019	0.018	0.020	0.019	0.019	0.020	0.018	0.02
CM-25-4	0.019	0.019	0.020	0.019	0.012	0.017	0.018	0.020	0.018	0.020	0.020	0.020	0.020	0.018	0.02
CM-25-5	0.019	0.021	0.019	0.020	0.011	0.017	0.019	0.019	0.018	0.020	0.019	0.020	0.017	0.018	0.02
CM-25-6	0.019	0.020	0.018	0.020	0.012	0.017	0.018	0.020	0.019	0.020	0.020	0.020	0.021	0.017	0.02
CM-25-7	0.019	0.020	0.019	0.018	0.012	0.016	0.019	0.019	0.019	0.020	0.020	0.020	0.020	0.018	0.02
CM-25-8	0.019	0.019	0.019	0.019	0.012	0.016	0.018	0.019	0.018	0.020	0.020	0.020	0.020	0.018	0.02
CM-25-9	0.018	0.020	0.020	0.019	0.012	0.017	0.018	0.020	0.019	0.020	0.020	0.020	0.020	0.018	0.02
CM-25-10	0.019	0.021	0.019	0.018	0.011	0.017	0.017	0.019	0.018	0.020	0.018	0.020	0.020	0.018	0.02
Mean	0.019	0.020	0.019	0.019	0.012	0.017	0.018	0.019	0.018	0.020	0.019	0.020	0.020	0.018	0.020
Std. Devn.	0.0006	0.0007	0.0006	0.0007	0.0006	0.0004	0.0006	0.0005	0.0004	0.0003	0.0006	0.0003	0.0011	0.0003	0.0000
% RSD	3.00	3.71	2.97	3.79	4.71	2.47	3.17	2.32	2.01	1.59	3.01	1.59	5.38	1.52	0.00
Leco	% S	% S	% S	% S	% S	% S	% S	% S	% S	% S	% S	% S	% S	% S	% S
CM-25-1	0.38	0.38	0.35	0.399		0.35	0.37	0.35	0.37		0.40	0.34	0.38	0.32	0.32
CM-25-2	0.36	0.38	0.38	0.379		0.35	0.37	0.36	0.36		0.41	0.36	0.38	0.32	0.33
CM-25-3	0.30	0.38	0.36	0.379		0.35	0.38	0.35	0.36		0.41	0.37	0.39	0.33	0.31
CM-25-4	0.36	0.38	0.38	0.383		0.34	0.38	0.35	0.37		0.41	0.37	0.39	0.33	0.35
CM-25-5	0.37	0.38	0.38	0.366		0.35	0.38	0.36	0.37		0.41	0.38	0.39	0.34	0.34
CM-25-6	0.36	0.38	0.37	0.385		0.36	0.38	0.36	0.37		0.41	0.35	0.38	0.34	0.34
CM-25-7	0.35	0.38	0.37	0.372		0.35	0.37	0.36	0.36		0.41	0.36	0.38	0.34	0.35
CM-25-8	0.37	0.39	0.37	0.374		0.35	0.37	0.35	0.37		0.41	0.37	0.38	0.34	0.33
CM-25-9	0.37	0.38	0.37	0.377		0.35	0.37	0.36	0.36		0.41	0.37	0.39	0.35	0.34
CM-25-10	0.36	0.39	0.37	0.369		0.35	0.36	0.35	0.36		0.41	0.38	0.38	0.34	0.34
Mean	0.358	0.382	0.370	0.378		0.350	0.373	0.355	0.365		0.409	0.365	0.384	0.335	0.335
Std. Devn.	0.0220	0.0042	0.0094	0.0094		0.0047	0.0067	0.0053	0.0053		0.0032	0.0127	0.0052	0.0097	0.0127
% RSD	6.15	1.10	2.55	2.48		1.35	1.81	1.48	1.44		0.77	3.48	1.34	2.90	3.79

Notes:

1. 4-acid Mo data from Labs 3 and 13 was removed for failing the t test.
2. Aqua regia Mo data from Labs 5 and 6 was removed for failing the t test.
3. Leco sulphur data from Lab 11 was removed for failing the t test.
4. Labs 5 and 10 were unable to provide Leco sulphur data.

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Participating Laboratories:

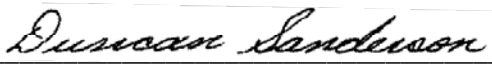
(not in same order as listed in table of results)

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SGS, Lima, Peru
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SGS, Vancouver, B.C., Canada
TSL Laboratories, Saskatoon, Canada
Ultra Trace (Bureau Veritas), Perth, Australia


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