

# CDN Resource Laboratories Ltd.

#2, 20148 - 102nd Avenue, Langley, B.C., Canada, V1M 4B4, Ph: 604-882-8422 Fax: 604-882-8466  
(www.cdnlabs.com)

## REFERENCE MATERIAL: CDN-CGS-28

Recommended values and the "Between Lab" Two Standard Deviations

*Copper concentration: 2.089 ± 0.096 % (4-acid)*

*Copper concentration: 2.033 ± 0.108 % (aqua regia)*

*Gold concentration: 0.727 ± 0.076 g/t (30g FA, instrumental finish)*

**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 17, 2011

### **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:**

The ore was supplied by Capstone Mining Corp. from the Minto Mine in Yukon, Canada. Mineralization is primary chalcopyrite and bornite pervasively disseminated and as stringers within foliated granodiorite units rich in secondary biotite. Sulphide mineralization is typically accompanied by magnetite. Gold is associated with the sulphide mineralization, typically intimately associated with bornite and rarely observed as free gold.

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

	Percent			Percent
SiO <sub>2</sub>	64.1		MgO	0.9
Al <sub>2</sub> O <sub>3</sub>	11.2		K <sub>2</sub> O	2.9
Fe <sub>2</sub> O <sub>3</sub>	9.6		TiO <sub>2</sub>	0.3
CaO	2.1		LOI	3.1
Na <sub>2</sub> O	2.3		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.

## REFERENCE MATERIAL CDN-CGS-28

### Results from round-robin assaying:

**Assay Procedures:** Au: Fire assay pre-concentration, AA or ICP finish (30g sub-sample).

Cu: 4-acid digestion, AA or ICP finish as well as aqua regia digestion, AA or ICP.

	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
SAMPLE	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
CGS-28-1	0.744	0.723	0.741	0.669	0.752	0.669	0.792	0.665	0.84	0.855	0.67	0.701	0.677	0.720	0.780
CGS-28-2	0.715	0.724	0.773	0.737	0.758	0.665	0.802	0.691	0.72	0.783	0.75	0.660	0.685	0.729	0.777
CGS-28-3	0.693	0.728	0.767	0.736	0.784	0.711	0.785	0.711	0.75	0.711	0.69	0.703	0.678	0.726	0.747
CGS-28-4	0.663	0.701	0.715	0.685	0.738	0.751	0.878	0.678	0.84	0.684	0.78	0.730	0.798	0.756	0.777
CGS-28-5	0.774	0.719	0.723	0.696	0.893	0.718	0.820	0.719	0.74	0.730	0.74	0.688	0.720	0.655	0.760
CGS-28-6	0.754	0.727	0.748	0.712	0.746	0.725	0.786	0.698	0.77	0.672	0.69	0.749	0.716	0.749	0.770
CGS-28-7	0.735	0.709	0.772	0.695	0.846	0.633	0.840	0.616	0.76	0.736	0.76	0.679	0.688	0.705	0.743
CGS-28-8	0.808	0.738	0.716	0.687	0.751	0.709	0.891	0.659	0.79	0.670	0.77	0.692	0.722	0.789	0.743
CGS-28-9	0.748	0.724	0.750	0.687	0.815	0.705	0.859	0.698	0.79	0.706	0.74	0.669	0.713	0.790	0.750
CGS-28-10	0.810	0.739	0.720	0.700	0.791	0.738	0.793	0.645	0.81	0.771	0.74	0.717	0.706	0.695	0.770
Mean	0.744	0.723	0.743	0.700	0.787	0.702	0.825	0.678	0.781	0.732	0.733	0.699	0.710	0.731	0.762
Std. Dev'n	0.0466	0.0116	0.0232	0.0220	0.0505	0.0363	0.0399	0.0320	0.0407	0.0579	0.0371	0.0275	0.0354	0.0418	0.0148
%RSD	6.26	1.61	3.12	3.15	6.42	5.16	4.84	4.72	5.21	7.91	5.07	3.93	4.98	5.71	1.94
4 acid	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %
CGS-28-1	2.08	2.15	2.01	2.14	1.98	2.10	2.18	2.14	2.15	2.08	2.04	2.00	2.00	2.06	2.12
CGS-28-2	2.09	2.11	2.03	2.12	2.00	2.03	2.18	2.16	2.15	2.07	1.98	2.04	2.07	2.05	2.16
CGS-28-3	2.10	2.10	2.03	2.16	1.95	2.06	2.09	2.17	2.10	2.07	2.11	2.02	2.00	2.06	2.19
CGS-28-4	2.07	2.07	2.03	2.14	1.94	2.09	2.10	2.13	2.12	2.07	2.03	2.15	2.06	2.02	2.17
CGS-28-5	2.10	2.13	2.03	2.11	1.97	2.09	2.13	2.13	2.15	2.11	2.03	2.08	2.05	2.07	2.13
CGS-28-6	2.09	2.09	2.03	2.11	1.98	2.06	2.20	2.13	2.18	2.07	2.07	2.06	2.08	2.05	2.17
CGS-28-7	2.08	2.13	2.05	2.16	1.94	2.06	2.12	2.14	2.14	2.06	2.01	2.03	2.00	2.08	2.16
CGS-28-8	2.05	2.09	2.08	2.13	2.02	2.09	2.11	2.14	2.17	2.07	2.01	2.05	2.07	2.05	2.16
CGS-28-9	2.02	2.08	2.04	2.12	1.95	2.08	2.23	2.13	2.13	2.05	1.99	2.12	2.01	2.07	2.17
CGS-28-10	2.01	2.10	2.06	2.13	2.03	2.07	2.13	2.10	2.14	2.08	2.08	2.08	2.05	2.09	2.11
Mean	2.07	2.11	2.04	2.13	1.97	2.07	2.15	2.14	2.14	2.07	2.04	2.06	2.04	2.06	2.15
Std. Dev'n	0.0321	0.0251	0.0210	0.0184	0.0302	0.0223	0.0472	0.0189	0.0231	0.0158	0.0412	0.0460	0.0328	0.0194	0.0263
%RSD	1.55	1.19	1.03	0.86	1.53	1.08	2.20	0.88	1.08	0.76	2.02	2.23	1.61	0.94	1.22
Aqua Regia	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %
CGS-28-1	2.06	2.07	1.98	1.99	2.06	2.01	1.99	1.98	2.08	2.03	1.89	2.08	2.09		2.06
CGS-28-2	2.04	2.09	2.00	1.98	1.98	2.05	1.99	1.99	2.13	2.02	1.96	1.97	2.03		2.06
CGS-28-3	2.03	2.08	2.00	1.96	2.01	2.13	2.19	1.97	2.08	2.03	1.95	2.08	2.12		2.06
CGS-28-4	2.02	2.09	2.02	1.97	2.04	2.06	2.05	1.98	2.12	2.03	1.90	2.02	2.02		2.06
CGS-28-5	2.05	2.08	2.00	2.01	2.03	2.03	2.05	1.94	2.13	2.02	1.92	2.03	2.00		2.09
CGS-28-6	2.03	2.07	1.99	1.99	2.03	2.13	2.14	1.98	2.15	2.02	1.93	1.96	2.05		2.10
CGS-28-7	2.05	2.08	2.01	1.93	1.96	2.10	2.06	1.93	2.15	2.02	1.93	2.06	1.99		2.05
CGS-28-8	2.00	2.09	2.00	1.94	2.01	2.10	2.10	1.98	2.14	2.04	2.08	2.04	2.03		2.06
CGS-28-9	2.05	2.05	2.01	2.00	2.00	2.15	2.10	1.98	2.16	2.02	1.93	2.05	2.04		2.08
CGS-28-10	2.04	2.04	1.95	1.97	2.04	2.07	2.13	2.00	2.13	2.01	2.00	2.07	1.99		2.05
Mean	2.04	2.07	2.00	1.97	2.01	2.08	2.08	1.97	2.13	2.03	1.95	2.04	2.04		2.07
Std. Dev'n	0.0177	0.0171	0.0189	0.0242	0.0288	0.0460	0.0645	0.0216	0.0275	0.0105	0.0555	0.0425	0.0422		0.0178
%RSD	0.87	0.83	0.95	1.23	1.43	2.21	3.10	1.10	1.29	0.52	2.85	2.09	2.07		0.86

**Note:** Au data from Laboratory 7 was excluded for failing the t test.  
Cu data (4 acid) from Laboratory 5 was excluded for failing the t test.

**STANDARD REFERENCE MATERIAL CDN-CGS-28**

**Participating Laboratories:**

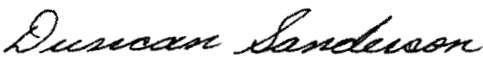
(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver, B.C., Canada  
Actlabs, Ancaster, Ontario, Canada  
Actlabs, Thunder Bay, Ontario, Canada  
ALS Chemex Laboratories, North Vancouver, B.C., Canada  
American Assay Laboratories, Nevada, USA  
Alex Stewart Argentina SA  
Alex Stewart, Kamloops, B.C., Canada  
CIMM, Lima, Peru  
Genalysis Laboratory Services Pty. Ltd., Australia  
Inspectorate, Richmond, B.C., Canada  
OMAC Laboratories Ltd., Ireland  
SGS, Lima, Peru  
Skyline Assayers & Laboratories, Arizona, USA  
TSL Laboratories, Saskatoon, Canada  
Ultra Trace Analytical Laboratories, Australia


Legal Notice:

This certificate and the reference material described in it have been prepared with due care and attention. However CDN Resource Laboratories Ltd. or Barry Smee accept no liability for any decisions or actions taken following the use of the reference material. Our liability is limited solely to the cost of the reference material.

Certified by

  
Duncan Sanderson, Certified Assayer of B.C.

Geochemist

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