

# CDN Resource Laboratories Ltd.

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## REFERENCE MATERIAL: CDN-GS-4L

Recommended value and the "Between Laboratory" two standard deviations

<b>Gold</b>	<b>4.01 g/t ± 0.30 g/t</b>	<b>Certified value</b>	<b>30g, FA / Instrumental</b>
<b>Silver</b>	<b>125.9 g/t ± 7.3 g/t</b>	<b>Certified value</b>	<b>4 Acid / Instrumental</b>

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

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

**INDEPENDENT GEOCHEMIST:** Dr. Barry Smee, PhD, P Geo

**DATE OF CERTIFICATION:** November 20<sup>th</sup>, 2019

### ORIGIN OF REFERENCE MATERIAL:

Standard CDN-GS-4L was prepared by combining several different siliceous ores with low sulphide content.

### 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 blender. Splits were taken and sent to 15 commercial laboratories for round robin assaying.

### ASSAY PROCEDURES:

**Au:** 30 gr Fire assay pre-concentration, Instrumental finish.

**Ag:** 4 Acid Digestion with Instrumental finish.

Whole rock analysis and 30 element ICP analysis (4-acid digestion) were also conducted on 5 samples.

### APPROXIMATE CHEMICAL COMPOSITION (by whole rock analysis):

	Percent		Percent
SiO <sub>2</sub>	49.5	Na <sub>2</sub> O	1.7
Al <sub>2</sub> O <sub>3</sub>	11.4	MgO	2.8
Fe <sub>2</sub> O <sub>3</sub>	11.5	K <sub>2</sub> O	2.4
CaO	6.0	TiO <sub>2</sub>	0.5
MnO	<0.2	LOI	11
		Total C	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 mean and standard deviation 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.

Our certified gold values are based on 30 g Fire Assay determinations. For optimal results, we strongly recommend you assay our standards with similar methods using "at least" 30 g of material. Using a smaller sample weight may result in erratic values.

## RESULTS FROM ROUND ROBIN ASSAYING:

Sample	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
	<b>Au (g/t) by Fire Assay, 30g sample size and Instrumental finish</b>														
GS-4L-1	4.03	4.16	4.38	4.19	4.04	3.88	4.059	4.114	4.101	4.142	3.775	3.945	3.74	3.91	3.90
GS-4L-2	4.17	4.38	4.29	4.10	4.05	3.75	3.918	4.159	3.884	4.215	3.932	3.868	3.78	3.74	4.02
GS-4L-3	4.27	3.9	3.72	3.96	4.10	3.93	4.144	4.128	4.024	4.150	3.849	3.977	4.26	4.01	3.87
GS-4L-4	4.09	4.3	3.89	4.03	3.91	3.72	4.078	4.152	4.054	4.126	3.831	3.924	3.9	4.15	3.97
GS-4L-5	4.22	4.12	3.89	3.94	4.11	3.87	4.176	4.150	4.026	4.115	3.84	3.986	3.98	3.87	3.99
GS-4L-6	4.09	3.94	4.19	4.08	4.53	3.86	4.095	4.110	3.985	4.175	3.754	3.831	3.91	3.70	4.03
GS-4L-7	4.20	4.02	4.11	4.15	4.04	3.7	4.184	4.148	3.918	4.207	3.927	4.153	4.03	4.18	4.25
GS-4L-8	4.10	4.15	4.7	4.25	4.39	3.66	4.004	4.137	3.984	4.172	3.765	4.01	3.87	3.70	4.10
GS-4L-9	4.00	4.2	4.1	4.06	4.48	3.7	3.826	4.156	3.995	4.231	3.765	3.942	4.28	3.81	3.97
GS-4L-10	4.00	4.02	3.87	3.85	4.10	3.86	3.963	4.126	4.001	4.132	3.786	4.379	3.8	3.74	4.11
Mean	4.12	4.12	4.11	4.06	4.18	3.79	4.045	4.138	3.997	4.167	3.822	4.002	3.96	3.88	4.02
Std. Devn.	0.09	0.15	0.29	0.12	0.21	0.10	0.12	0.02	0.06	0.04	0.07	0.16	0.19	0.18	0.11
% RSD	2.30	3.71	7.09	2.99	5.07	2.54	2.89	0.43	1.56	0.97	1.72	3.96	4.75	4.62	2.75
<b>Ag (g/t) by 4 Acid digestion /Instrumental finish</b>															
GS-4L-1	135	122	127	128	121	131	126	126	125	122.8	124.3	129	130	126.9	126
GS-4L-2	133	125	130	123	119	152	131	124	119	123.4	127.0	133	128	126.5	125
GS-4L-3	136	127	128	127	119	142	133	128	125	123.3	122.3	132	123	132.6	125
GS-4L-4	140	131	127	129	121	139	131	127	123	123.5	127.4	133	124	130.1	127
GS-4L-5	133	124	127	124	124	147	131	129	127	124.4	126.0	127	123	122.0	129
GS-4L-6	133	128	123	122	129	134	124	129	121	123.7	127.7	135	127	123.7	126
GS-4L-7	133	129	121	125	121	138	125	124	124	124.7	124.6	135	123	120.0	127
GS-4L-8	136	122	124	122	124	144	127	125	128	120.4	126.3	136	127	124.0	124
GS-4L-9	138	131	123	120	121	139	127	128	122	121.0	123.7	121	128	125.9	124
GS-4L-10	133	124	129	125	123	127	131	127	124	124.2	126.4	136	122	121.1	124
Mean	135	126	126	125	122	139	129	127	124	123.1	125.6	132	126	125.3	126
Std. Devn.	2.49	3.40	2.96	2.88	2.97	7.45	3.13	1.89	2.70	1.41	1.77	4.79	2.80	3.97	1.64
% RSD	1.85	2.69	2.35	2.31	2.43	5.35	2.44	1.49	2.18	1.14	1.41	3.63	2.23	3.17	1.30

\*\*Note: Ag results from Lab. 6 were removed for failing the t test.

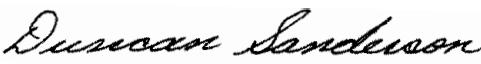
**PARTICIPATING LABORATORIES:** (not in same order as table of assays)

AGAT Labs, Ontario, Canada	Certimin S.A., Lima, Peru
ALS Reno, Nevada, USA	SGS, Lima, Peru
ALS Canada, North Vancouver, BC, Canada	SGS, Lakefield, Ontario, Canada
ALS, Loughrea, Ireland	SGS, Vancouver, BC, Canada
ALS, Lima, Peru	Skyline Assayers & Laboratories, AZ, USA
ALS, Perth, Australia	MS Analytical, Langley, BC, Canada
Bureau Veritas, Perth, Australia	TSL Laboratories Ltd., Saskatoon, SK, Canada
Bureau Veritas, Vancouver, BC, Canada	

**LEGAL NOTICE:**

This certificate and the reference material described in it have been prepared with due care and attention. However, CDN Resource Laboratories Ltd. nor Barry Smee accept any 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

  
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Duncan Sanderson, Certified Assayer of B.C.

Geochemist

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