

# CDN Resource Laboratories Ltd.

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## REFERENCE MATERIAL: CDN-SS-2201

Recommended value and the "Between Laboratory" two standard deviations

Gold	0.074 g/t ± 0.008 g/t	Certified value	30g FA / AA or ICP Finish
Silver	31.6 g/t ± 2.8 g/t	Certified value	4 Acid Digestion/ ICP or AA Finish
Silver	31.3 g/t ± 1.65 g/t	Certified value	4 Acid Digestion/ ICP-MS Finish

**PREPARED BY:** CDN Resource Laboratories Ltd.  
**CERTIFIED BY:** Ali Alizadeh, MSc, MBA, P Geo  
**INDEPENDENT GEOCHEMIST:** Dr. Barry Smee., Ph.D., P. Geo.  
**DATE OF CERTIFICATION:** March 6<sup>th</sup>, 2023

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

Standard CDN-SS-2201 was prepared was prepared using the ore that was supplied by Apollo Silver Corporation from their Waterloo silver deposit, on their Calico Silver Project in California, USA.

Waterloo is a silver-dominated, low-temperature hot-spring (epithermal) style precious metal deposit hosted in mid-Miocene (~19-17 Ma) aged siltstones and sandstones of the Barstow Formation. The silver mineralization occurs in the lower stratigraphic horizons of the Barstow where it is in conformable contact with the underlying felsic volcanics of the mid Miocene (~24-19 Ma) Pickhandle Formation. Silver mineralization is supergene enriched and oxidized, with silver mineralization comprising native silver, silver salts and acanthite. The deposit hosts both silver and gold, however these are spatially distinct, each hosted by separate stratigraphic horizons in the tilted sedimentary package and associated with different mineral and alteration assemblages. The silver dominant horizons are primarily siltstones and sandstones that are strongly silicified, variably baritized, moderately potassic (adularia) and weakly sericite altered. The gold dominant horizon comprises the lowermost Barstow package, represented by fine to medium grained pebbly sandstone conglomerate which is variably brecciated and shows strong steam heated alteration. The gold horizon is associated with elevated iron oxides, galena and sphalerite relative to the silver dominant horizons.

### **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 15 commercial laboratories for round robin assaying.

### **ASSAY PROCEDURES:**

**Au:** 30 gr Fire assay pre-concentration, AA or ICP finish.  
**Ag:** Four Acids digestion, ICP-MS finish.  
**Ag:** Four Acids digestion, ICP or AA finish.

Whole rock analysis was conducted by 5 labs, 10 samples each and 30 element ICP analysis (4-acid digestion) were also conducted on 3 labs, 10 samples each.

## 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  $\pm 2$  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.

Printed results from Round Robin Assaying is available in Appendix II and can be provided upon request.

## Quality Assurance and Quality Control Procedures:

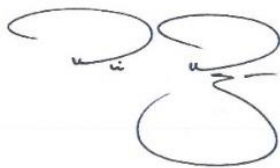
CDN completed a screening on CDN-SS-2201.

**Screening Test:** After completion of homogenization, three samples, 300g each of homogenized material was randomly collected and was re-screened by a testing sieve. Over size material of this standard and based on CDN's screening test was ~%1.0. (Appendix III).

## 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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Ali Alizadeh, MSc, MBA, P.Geo.

Geochemist



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Dr. Barry Smee, PhD, P. Geo.

**APPENDIX I:**

Whole rock analysis and 30 element ICP analysis (4-acid digestion) were also conducted on 3 samples.

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

Analyte	Percent	Analyte	Percent
SiO <sub>2</sub>	74.5	Na <sub>2</sub> O	<0.1
Al <sub>2</sub> O <sub>3</sub>	6.0	MgO	<0.2
Fe <sub>2</sub> O <sub>3</sub>	2.7	K <sub>2</sub> O	4.6
CaO	1.0	TiO <sub>2</sub>	0.3
MnO	<0.1	LOI	1.7
Total S	1.0	BaO	5.5

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

Activation Labs, Ancaster, Ontario, Canada	Bureau Veritas, Perth, Australia
Activation Labs, Thunder/ Bay, Ontario, Canada	Bureau Veritas, Vancouver, BC, Canada
AGAT Labs, Ontario, Canada	Certimin S.A., Lima, Peru
ALS Canada, North Vancouver, BC, Canada	MS Analytical, Langley, BC, Canada
ALS Lima, Peru	SGS Burnaby, BC, Canada
ALS, Brisbane, Australia	SGS Lakefield, ON, Canada
ALS, Loughrea, Ireland	Saskatchewan research council, SRC, Saskatoon, Canada
ALS, Perth Australia	

**APPENDIX II:  
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>															
<b>CDN-SS-2201</b>	0.071	0.077	0.074	0.073	0.074	0.074	0.070	0.074	0.073	0.087	0.075	0.070	0.074	0.082	0.08
	0.070	0.068	0.078	0.072	0.076	0.076	0.068	0.077	0.076	0.082	0.073	0.068	0.070	0.082	0.08
	0.072	0.068	0.078	0.087	0.077	0.074	0.069	0.077	0.072	0.082	0.070	0.075	0.076	0.082	0.08
	0.074	0.071	0.076	0.074	0.072	0.080	0.067	0.072	0.074	0.083	0.075	0.073	0.079	0.079	0.08
	0.070	0.071	0.082	0.079	0.070	0.073	0.073	0.075	0.073	0.079	0.074	0.071	0.072	0.076	0.08
	0.073	0.078	0.081	0.077	0.071	0.076	0.070	0.077	0.072	0.078	0.071	0.072	0.066	0.078	0.08
	0.074	0.070	0.077	0.074	0.074	0.073	0.073	0.076	0.074	0.084	0.070	0.071	0.078	0.080	0.08
	0.074	0.068	0.079	0.074	0.071	0.072	0.070	0.075	0.067	0.090	0.072	0.074	0.082	0.078	0.07
	0.073	0.074	0.078	0.075	0.078	0.070	0.068	0.075	0.072	0.090	0.073	0.069	0.040	0.085	0.08
0.065	0.067	0.076	0.073	0.075	0.078	0.071	0.074	0.073	0.085	0.076	0.072	0.076	0.081	0.07	
<b>Mean</b>	0.072	0.071	0.078	0.076	0.074	0.075	0.070	0.075	0.073	0.084	0.073	0.072	0.071	0.080	0.08
<b>Std. Devn.</b>	0.003	0.004	0.002	0.004	0.003	0.003	0.002	0.002	0.002	0.004	0.002	0.002	0.012	0.003	0.004
<b>% RSD</b>	3.91	5.49	3.05	5.86	3.71	3.96	2.90	2.15	3.19	4.89	2.92	3.04	16.73	3.27	5.41

<b>Ag (g/t) by 4Acid digestion ICP or AA finish</b>															
<b>CDN-SS-2201</b>	31	35.0		32	33	32	31	31	33.5	33	28.0		30.3	32	31
	32	34.2		30	29	31	32	31	35.5	32	29.0		30.2	30	30
	32	35.9		31	31	33	32	31	33.5	32	28.0		30.1	31	31
	31	33.9		31	31	32	32	31	34.5	32	28.2		30.2	32	31
	31	33.7		31	30	32	30	31	34.5	33	29.9		30.4	31	32
	32	34.2		31	34	33	32	31	33.0	32	29.0		30.2	31	31
	31	34.4		32	34	31	31	32	34.0	32	29.0		29.8	33	31
	31	35.1		31	32	31	31	31	32.5	31	28.4		30.1	31	32
	31	34.7		31	34	32	32	32	34.0	33	28.1		31.2	33	30
	30	35.1		31	33	32	33	31	34.0	33	28.9		31.0	31	29
<b>Mean</b>	31	35		31	32	32	32	31	33.9	32	28.7		30.4	32	31
<b>Std. Devn.</b>	0.63	0.67		0.57	1.79	0.74	0.84	0.422	0.84	0.67	0.62		0.43	0.97	0.92
<b>% RSD</b>	2.03	1.93		1.83	5.58	2.31	2.67	1.351	2.49	2.09	2.15		1.41	3.09	2.98

<b>Ag (g/t) by 4Acid digestion ICP-MS finish</b>															
<b>CDN-SS-2201</b>			28.7		30.5	30.4	30.4	31.3			30.3	31.25	31.0	31.5	32.1
			28.8		31.3	33.7	30.7	32.4			30.2	31.63	31.6	31.0	32.1
			28.9		30.3	34.0	31.0	31.3			28.6	30.97	31.2	30.5	32.3
			28.2		30.3	30.8	31.5	32.5			30.6	30.73	31.7	30.7	31.5
			28.0		28.9	31.2	29.5	32.1			31.4	31.74	32.0	30.9	32.3
			28.1		29.0	32.8	31.8	30.5			30.4	30.85	32.1	31.2	32.6
			28.5		28.5	32.7	31.6	31.6			31.8	30.75	31.9	30.2	32.6
			28.4		30.6	33.6	31.2	31.8			32.0	32.11	31.6	31.8	33.2
			28.1		29.8	33.0	31.6	31.9			30.5	30.51	31.6	31.4	31.8
			29.0		29.2	33.8	32.1	30.4			30.4	30.34	32.0	30.8	30.3
<b>Mean</b>			28.5		29.8	32.6	31.1	31.6			30.6	31.09	31.7	31.0	32.1
<b>Std. Devn.</b>			0.37		0.90	1.33	0.77	0.719			0.96	0.58	0.36	0.49	0.78
<b>% RSD</b>			1.28		3.03	4.07	2.48	2.278			3.15	1.86	1.12	1.57	2.43

**Notes:**

Ag results assayed by 4 Acid digestion and ICP-MS finish from Lab 3 were removed for failing the t test.

**APPENDIX III: QAQC**

Table below illustrates percentages of over size (+275 mesh) material in CDN-SS-2201.

Standard	Study Date	Total weight Screened (g)	Total weight Over size (g)	Percentage
SS-2201	12/14/2022	300	1	0.3%
SS-2201	12/14/2022	300	1	0.3%
SS-2201	12/14/2022	300	1	0.3%