

## Certificate of Analysis

### STANDARD REFERENCE MATERIAL: CDN-GS-4P

Gold	3.79 g/t ± 0.25 g/t	Certified value	30g FA / AA or ICP Finish
Gold	3.832 g/t ± 0.168 g/t	Certified value	Gamma ray- photon assay instrument
Arsenic	678 ppm ± 32 ppm	Certified value	Aqua Regia/ ICP or ICP-MS
Mercury	22.2 ppm ± 1.6 ppm	Certified value	Aqua Regia/ ICP or ICP-MS

Recommended values and the “Between Lab” Two Standard Deviations

**Note 1:** Standards with an RSD of near or less than 5% are certified; RSD’s of between 5% and 15% are Provisional; RSDs 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.  
**PREPARATION CERTIFIED BY:** Ali Alizadeh, MSc, MBA, P Geo  
**CERTIFIED BY INDEPENDENT GEOCHEMIST:** Dr. Barry Smee., Ph.D., FGC  
**DATE OF CERTIFICATION:** April 21<sup>st</sup>, 2024

#### ORIGIN OF MATERIAL:

CDN-GS-4P was prepared from material that became available to CDN Resource Laboratories from Barrick’s Goldrush deposit, Nevada.

Goldrush is a Carlin-type sedimentary rock-hosted disseminated gold deposit located within the Cortez mining district on the Battle Mountain-Eureka trend, Nevada, USA.

Gold mineralization occurs within extensive zones of decarbonatization and silicification spatially associated with a stratigraphic horizon containing fossiliferous debris flows in thrust-faulted and folded Devonian carbonate rocks.

The system is marked by a large stratiform silicified and sulfidized breccia horizon from 15 to 70 m thick. Gold occurs as submicroscopic inclusions within fine-grained pyrite, similar to other Carlin-type gold deposits in Nevada.

#### 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 commercial laboratories for round robin assaying.

#### Assay Procedures:

**Au:** 30 gr Fire assay pre-concentration, ICP or AA finish  
**Au:** Gamma ray analysis by photon assay instrument  
**As, Hg:** Aqua Regia digestion with / ICP or ICP-MS

#### 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 database. 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

# CDN Resource Laboratories Ltd.

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.

**Quality Assurance and Quality Control Procedures:**

**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.

**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

Ali Alizadeh, MSc, MBA, P.Geo.

Geochemist

Dr. Barry Smee, PhD, FGC

**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>	87.7	K <sub>2</sub> O	0.4
Al <sub>2</sub> O <sub>3</sub>	1.6	TiO <sub>2</sub>	<0.1
Fe <sub>2</sub> O <sub>3</sub>	3.9	MnO	0.04
CaO	1.6	LOI	3.8
MgO	0.6	Total S	1.8
Na <sub>2</sub> O	0.02	Total C	0.9

**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, Calgary, AB, Canada	Certimin S.A., Lima, Peru
ALS, Brisbane, Australia	Intertek Genalysis, Maddington, Australia
ALS, Perth, Australia	MS Analytical, Langley, BC, Canada
ALS Lima, Peru	MS Analytical, Prince George, BC, Canada
ALS, Loughrea, Ireland	MS Analytical, Val-d'Or, QB, Canada
ALS Johannesburg, South Africa	MS Analytical, Timmins, ON, Canada
ALS Kalgoorlie, Australia	SGS Lakefield, ON, Canada
ALS Canada, North Vancouver, BC, Canada	SGS, Vancouver, BC, Canada

**APPENDIX II: Results from round-robin assaying:**

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6
<b>GS-4P</b>	<b>Au (g/t) by Gamma ray analysis by photon assay instrument</b>					
	3.81	3.78	3.66	3.866	3.827	3.758
	3.95	3.89	3.76	3.729	4.055	3.818
	3.73	3.70	3.86	3.847	3.985	3.850
	3.79	3.89	3.83	3.875	3.907	3.869
	3.92	3.93	3.61	3.871	4.074	3.859
	3.79	3.84	3.69	3.814	4.027	3.856
	3.88	3.82	3.77	3.781	3.872	3.944
	3.80	3.71	3.85	3.839	3.940	3.860
	3.90	3.81	3.67	3.763	4.016	4.334
3.72	3.76	3.74	3.740	3.907	3.919	
<b>Mean</b>	3.83	3.81	3.74	3.813	3.961	3.907
<b>Std. Devn.</b>	0.08	0.08	0.09	0.056	0.08	0.16
<b>% RSD</b>	2.07	2.02	2.29	1.457	2.09	4.05

Sample	Lab 1	Lab 2	Lab 3	Lab 8	Lab 4	Lab 5	Lab 6	Lab 7	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14	Lab 15
<b>GS-4P</b>	<b>Au (g/t) 30 gr Fire assay pre-concentration, ICP or AA finish</b>														
	3.45	3.66	3.69	3.85	3.85	3.72	3.79	3.65	3.78	3.69	3.956	4.006	3.429	4.00	3.80
	3.59	3.74	3.93	3.81	3.77	3.78	3.81	3.65	3.75	3.91	3.889	3.909	3.418	3.82	3.76
	3.37	3.74	3.60	3.82	3.71	3.77	3.87	-	3.67	3.66	4.003	4.041	3.469	3.83	3.85
	3.71	3.77	3.71	3.87	3.94	3.75	3.85	3.67	3.16	3.70	3.872	4.041	3.575	4.01	3.84
	3.42	3.71	3.72	3.85	3.68	3.79	3.79	3.72	3.64	3.74	3.886	4.049	3.420	3.92	3.79
	3.62	3.48	3.83	3.86	3.82	3.53	3.91	3.74	3.84	3.81	3.921	3.953	3.571	3.99	3.77
	3.61	3.82	3.67	3.59	3.83	3.78	3.89	3.66	3.88	3.69	3.895	3.990	3.505	3.83	3.75
	3.60	3.79	3.68	3.86	3.96	3.79	3.83	3.69	3.77	3.69	3.959	4.049	3.625	3.92	3.83
	3.52	3.86	3.68	3.85	3.81	3.74	3.89	3.67	3.80	3.85	3.778	3.989	3.495	3.97	3.79
3.49	3.74	3.73	3.84	3.79	3.86	3.87	3.73	3.69	3.77	3.790	3.969	3.452	3.85	3.81	
<b>Mean</b>	3.54	3.73	3.72	3.82	3.82	3.75	3.85	3.69	3.70	3.75	3.895	4.000	3.496	3.91	3.80
<b>Std. Dev</b>	0.11	0.10	0.09	0.08	0.09	0.09	0.04	0.04	0.20	0.08	0.07	0.05	0.07	0.08	0.03
<b>% RSD</b>	2.99	2.80	2.49	2.17	2.31	2.30	1.12	0.95	5.50	2.20	1.83	1.17	2.08	1.95	0.89

Hg (ppm) by Aqua Regia digestion ICP or MS finish															
GS-4P	23.8	22.2	22.2	21.7	21.9	25.0	21.4	22.9	20.9	20.8	-	21	22.77	22.32	-
	23.9	22.1	22.2	22.3	21.8	24.6	21.8	22.7	21.2	22.1	-	21	22.68	22.56	-
	22.8	22.2	22.8	21.3	21.9	24.7	22.1	-	21.9	20.6	-	21	22.59	22.84	-
	23.4	22.2	22.8	21.0	21.3	25.3	21.5	21.5	20.7	21.7	-	23	22.57	22.78	-
	24.1	22.0	22.5	22.0	21.7	24.7	21.6	24.6	21.7	22.4	-	23	22.41	20.94	-
	23.4	21.7	22.6	21.7	21.4	25.6	21.9	23.5	21.4	22.7	-	21	22.37	22.74	-
	24.3	22.7	23.0	21.9	21.6	25.8	22.0	23.3	21.9	21.2	-	23	22.63	21.69	-
	24.3	22.8	23.0	22.0	22.1	24.7	20.7	24.5	21.0	22.3	-	22	22.45	22.68	-
	23.3	23.0	22.3	21.8	21.6	24.1	21.8	22.8	21.3	22.7	-	21	22.34	21.54	-
	23.3	22.6	21.7	21.3	22.0	24.1	21.9	24.4	22.5	22.9	-	24	22.95	21.35	-
<b>Mean</b>	23.7	22.4	22.5	21.7	21.7	24.9	21.7	23.4	21.5	21.9	-	22	22.58	22.14	-
<b>Std. Dev</b>	0.50	0.41	0.41	0.39	0.26	0.57	0.406	1.02	0.55	0.83	-	1.15	0.19	0.70	-
<b>% RSD</b>	2.10	1.82	1.84	1.82	1.19	2.30	1.872	4.38	2.57	3.77	-	5.25	0.85	3.15	-
As (ppm) by Aqua Regia digestion ICP or MS finish															
GS-4P	791	745	634	668	689	690	652	740	685	706	-	685	676.4	700	662
	791	673	631	666	688	700	656	744	688	688	-	688	675.5	722	670
	767	684	666	652	690	700	667	-	685	681	-	685	687.0	691	656
	806	763	643	666	685	700	656	740	685	679	-	685	679.2	717	657
	827	751	645	666	686	700	657	748	678	664	-	678	688.7	708	676
	776	773	652	669	687	700	655	745	670	669	-	670	684.2	704	675
	759	759	636	670	690	700	654	758	679	688	-	679	684.7	677	655
	796	764	647	669	686	680	653	744	686	677	-	686	688.3	714	658
	789	758	626	674	683	680	653	741	676	660	-	676	673.2	681	668
	802	774	621	671	683	710	653	740	695	673	-	695	708.2	679	667
<b>Mean</b>	790	744	640	667	687	696	656	744	683	679	-	683	684.5	699	664
<b>Std. Dev</b>	19.70	35.92	13.30	5.88	2.58	9.66	4.33	5.79	7.06	13.41	-	7.06	10.01	16.52	7.88
<b>% RSD</b>	2.49	4.83	2.08	0.88	0.38	1.39	0.660	0.78	1.03	1.98	-	1.03	1.46	2.36	1.19

Notes: Hg results from Lab 6 and were removed for failing the t test.  
As results from Labs 1,2 and 8 were removed for failing the t test.

### APPENDIX III: QAQC

#### QA/QC PROCEDURES.

All standards prepared by CDN Resource Laboratories will undergo QC Screening and Homogeneity testing. All material will be tested for nuggety gold and silver.

- **CDN Resource Laboratories QAQC procedures include:**
  - **Screen QC** - After completion of homogenization, 300g of material will be collected from the mixer and will be re-screened through testing sieve. Over size should not exceed 3% of the total screened material. If over size exceeds 3% of the total screened material, material needs to be re-screened and re-homogenized.

# CDN Resource Laboratories Ltd.

- **Homogeneity QC** – CDN recommends conducting homogeneity study on all CRMs, based on ISO 13528 Annex B (Homogeneity and Stability of proficiency test items).

For homogeneity test, 15 randomly selected samples from each prepared grade will be sent to commercial assaying Laboratory. Each sample will be assayed twice and reported separately.

Assay results will go through a statistical work-up by checking the mean, standard deviation, and %RSD. Based on performed statistical works outlined by ISO 13528.

**Table below illustrates percentages of over size (+275 mesh) material in CDN-GS-4P**

Standard	Study Date	Total weight Screened (g)	Total weight Over size (g)	Percentage
GS-4P	9/5/2023	300	2	0.7%
	9/5/2023	300	3	1.0%
	9/5/2023	300	3	1.0%

**Table below shows homogeneity test results of CDN-GS-4P**

GS-4P	Au Original	Au Repeat	Between Sample Variance Wt	Sample Avg. Xt	Within-Sample Std.
	3.474	3.570	0.096	3.522	0.001
	3.763	3.679	0.084	3.721	0.026
	3.656	3.409	0.247	3.533	0.001
	3.638	3.485	0.153	3.562	0.000
	3.518	3.546	0.028	3.532	0.001
	3.744	3.562	0.182	3.653	0.009
	3.486	3.405	0.081	3.446	0.013
	3.472	3.593	0.121	3.533	0.001
	3.525	3.494	0.031	3.510	0.002
	3.501	3.707	0.206	3.604	0.002
	3.599	3.705	0.106	3.652	0.009
	3.445	3.481	0.036	3.463	0.009
	3.547	3.472	0.075	3.510	0.002
	3.593	3.546	0.047	3.570	0.000
3.513	3.639	0.126	3.576	0.000	
Statistics			Statistics	Gavg	SS
Mean	3.565	3.553	3.559	0.074	0.039
SD	0.0983	0.0981	C	C SQRT	
RSD	2.758	2.760	0.0148	0.12	
Based on Statistical procedures outlined in Annex B, ISO 13528:2015 guidelines, if "SS is < square root of C" Standard is considered homogeneous. <b>CDN-GS-4P is statistically homogenous.</b>					

## APPENDIX IV: General Notes

### Intended Use

This Certified Reference Material, fit for use as a control sample in routine assay laboratory quality control when inserted within runs of test samples and measured in parallel to test samples. This material can also be used for method development, use as independent calibration verification check standard or for validation of accuracy in a method validation exercise.

This CRM can also be used to assess inter-laboratory or instrument bias and establish within-laboratory precision and within-laboratory reproducibility. The certified concentrations and expanded uncertainty for this material are property values based on an inter-laboratory measurement campaign and reflect consensus results from the laboratories that took part in the exercise.

### Handling

Do not use if the seal is broken or there are any signs of contamination.

The material is packaged in either Tin Tie envelopes, foil envelopes, or jars that must be shaken before use.

### Storage information

The material should be stored in a dry place, in such a way that it does not compromise the integrity of the CRM. The material should be stored in conditions which will ensure it does not absorb moisture.

Certificate is not valid if re-packaged by a third party.

### Metrological Traceability

The values quoted herein are based on the consensus values derived from statistical analysis of the data from an inter-laboratory measurement program. Traceability to SI units is via the standards used by the individual laboratories all of which are accredited to the ISO17025 general requirements for the competence of testing and calibration laboratories and who have maintained measurement traceability during the analytical process.

### Period of Validity

The certified values are valid for this product, while still sealed in its original packaging, until notification to the contrary. The material's stability will undergo regular testing every five years throughout its inventory duration. Should product stability become an issue, all customers will be notified and notification to that effect will be placed on the <http://www.cdnlabs.com/> website.

### Minimum Sample Size

Most of the laboratory's reporting used a 0.5g sample size for the ICP and a 30g sample size for the fire assay.

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

### Statistical Procedures

Round robin samples were sent to participating laboratories.

The mean and standard deviation for all data were calculated. Outliers were defined as samples beyond the mean  $\pm$  2 Standard Deviations from all data. These outliers were removed from the data and a new mean and standard deviation were determined. This method makes use of actual "between-laboratory" standard deviation in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses.

Statistical analysis was carried out by Dr. Barry Smee, an independent statistician. A statistical report is provided along with a certificate of analysis.