# CDN Resource Laboratories Ltd.

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

# **REFERENCE MATERIAL: CDN-GS-7H**

Recommended value and the "Between Laboratory" two standard deviations

Gold	6.56 g/t ±	0.50 g/t	Certified value	30g FA / Instrumental
Gold	6.54 g/t ±	0.53 g/t	Certified value	30g FA / Gravimetric

**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:** March 29<sup>th</sup>, 2019

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

Standard CDN-GS-7H was prepared using material provided by Agnico Eagle's Meliadine advanced-stage gold project in Nunavut Territory, northern Canada. Archean volcanic and sedimentary rocks of the Meliadine greenstone belt underlie Meliadine's property. The sedimentary sequence contains a series of oxide iron formation consisting of a magnetite-rich oxide iron formation and two weakly magnetic iron formations. These two oxide iron formations host five of the Meliadine deposits. The sixth deposit (Wesmeg/Normeg) is hosted by the Wesmeg mafic volcanic rocks. The deposits are a combination of mesothermal quartz veins associated with the fault system as well as quartz lodes or sulphide replacement in the iron formation

#### **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, Instrumental and gravimetric 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
SiO2	64.3	Na2O	1.4
Al2O3	8.7	MgO	1.5
Fe2O3	14.4	K2O	1.3
CaO	2.8	TiO2	0.3
MnO	<0.1	LOI	4.9
Total S	1.4	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:**

Fire Assay	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
Instrumental	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t									
GS-7H-1	6.75	6.75	6.34	6.24	6.79	6.610	5.998	6.813	6.45	6.687	6.216	6.430	5.98		6.46
GS-7H-2	6.64	6.45	7.02	6.03	6.42	6.192	6.651	6.809	6.43	6.868	6.315	6.311	6.64		6.83
GS-7H-3	6.47	6.79	7.03	5.79	6.41	7.168	6.803	6.790	6.46	6.986	6.590	6.625	6.27		NSS
GS-7H-4	6.85	7.21	6.34	6.27	6.47	6.300	6.353	6.810	6.69	6.462	6.603	6.382	6.75		6.88
GS-7H-5	6.76	7.22	6.98	6.69	6.69	6.304	6.582	6.806	6.56	6.867	6.351	7.012	6.26		6.41
GS-7H-6	7.01	6.64	6.68	6.36	6.42	6.777	6.442	6.814	6.60	6.808	6.272	6.283	6.24		6.60
GS-7H-7	6.64	6.55	6.31	6.27	6.18	6.732	6.495	6.797	6.24	6.515	6.461	6.434	6.49		7.03
GS-7H-8	6.71	6.23	7.06	7.20	6.93	6.690	6.590	6.795	6.53	6.691	6.558	6.396	6.44		7.07
GS-7H-9	6.02	6.42	6.39	7.13	6.44	6.497	6.500	6.808	6.47	6.991	6.513	6.361	6.32		6.71
GS-7H-10	6.58	6.06	6.66	6.81	6.34	6.416	6.328	6.837	6.58	6.285	6.216	6.074	6.56		6.62
Mean	6.64	6.63	6.68	6.48	6.51	6.569	6.474	6.808	6.50	6.716	6.410	6.431	6.40		6.73
Std. Devn.	0.264	0.379	0.321	0.463	0.226	0.290	0.218	0.013	0.122	0.235	0.153	0.247	0.226		0.235
% RSD	3.98	5.71	4.80	7.15	3.46	4.42	3.37	0.19	1.88	3.49	2.39	3.84	3.54		3.49
Fire Assay Gravimetric	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t									
GS-7H-1	6.49	5.98	6.24	6.60	6.79	6.2	6.87	6.77	6.59	6.691	6.46	6.50	6.62	6.68	6.73
GS-7H-2	6.24	6.27	7.00	6.63	6.42	6.3	6.44	6.79	6.96	6.408	6.80	6.89	6.61	6.55	7.24
GS-7H-3	6.69	6.90	6.64	6.46	6.41	6.2	6.15	6.80	6.59	6.956	6.29	6.10	6.08	5.93	6.43
GS-7H-4	6.00	7.25	6.49	6.36	6.47	6.4	6.79	6.77	6.67	6.675	6.70	6.29	6.21	6.45	6.39
GS-7H-5	5.97	7.39	6.46	6.62	6.69	6.6	6.37	6.83	6.94	6.920	6.26	6.15	6.46	6.31	6.90
GS-7H-6	6.14	6.77	6.82	5.95	6.42	6.5	6.40	6.84	6.94	6.767	6.44	5.89	6.56	6.48	6.78
GS-7H-7	6.28	6.76	6.71	6.22	6.18	6.3	6.63	6.74	6.11	6.504	6.27	6.36	6.54	6.65	6.63
GS-7H-8	6.15	6.60	6.57	7.06	6.93	6.4	6.58	6.83	6.35	6.635	6.44	6.71	6.06	6.69	6.78
GS-7H-9	6.64	6.78	6.83	6.73	6.44	6.4	6.72	6.82	6.59	6.924	6.43	6.44	6.30	6.38	6.72
GS-7H-10	5.97	7.07	6.73	6.83	6.34	6.6	6.66	6.77	6.41	6.789	6.41	6.16	6.05	6.24	7.04
Mean	6.26	6.78	6.65	6.55	6.51	6.4	6.56	6.80	6.62	6.727	6.45	6.35	6.35	6.44	6.76
Std. Devn.	0.268	0.425	0.219	0.316	0.226	0.145	0.220	0.033	0.279	0.182	0.177	0.299	0.236	0.235	0.257
% RSD	4.28	6.27	3.29	4.82	3.46	2.27	3.35	0.49	4.22	2.70	2.74	4.71	3.72	3.66	3.80

<sup>\*\*</sup>Note: Lab.14 Only performed fire assay Au with gravimetric finish.

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

ALS Reno, Nevada, USA	Certimin S.A., Lima, Peru					
ALS Canada, North Vancouver, BC, Canada	SGS, Lima, Peru					
ALS, Loughrea, Ireland	SGS, Lakefield, Ontario, Canada					
ALS, Lima, Peru	SGS, Vancouver, BC, Canada					
ALS, Perth, Australia	Skyline Assayers & Laboratories, AZ, USA					
Bureau Veritas, Reno, USA	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

Duncan Sanderson, Certified Assayer of B.C.

Geochemist

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