

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-1X

Recommended value and the "Between Laboratory" two standard deviations

Gold	1.299 g/t ± 0.132 g/t	Certified value	30g, FA / Instrumental
Silver	68.5 g/t ± 8.5 g/t	Provisional Mean	4 Acid /Instrumental

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: May 23rd, 2019

ORIGIN OF REFERENCE MATERIAL:

Standard CDN-GS-1X was prepared by combining 812 kg of granite blended with 8 kg of high-grade gold ore supplied by Teuton Resources from their Clone gold property in B.C., Canada and 30 kg of ore provided by Hecla Green Creek property. Mineralization of Clone gold property is localized within highly silicified semi-massive to massive specular hematite. Gold occurs as fine disseminations and is associated with the oxide mineralization. The major lithology is light grey to green andesitic pyroclastic intercalated with fine grained to aphanitic andesite.

The Greens Creek deposit is a polymetallic, stratiform, massive sulfide deposit. The host rock consists of predominantly marine sedimentary, and mafic to ultramafic volcanic and plutonic rocks, which have been subjected to multiple periods of deformation. Mineralization occurs discontinuously along the contact between a structural hanging wall of quartz mica carbonate phyllites, and a structural footwall of graphitic and calcareous argillite.

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 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
SiO₂	69.5	Na₂O	4.3
Al₂O₃	13.7	MgO	1.0
Fe₂O₃	3.7	K₂O	1.8
CaO	2.6	TiO₂	0.3
MnO	<0.1	LOI	1.9
Total S	0.5	Total C	0.2

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:

30g, FA- Instrumental	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
	Au g/t														
GS-1X-1	1.33	1.295	1.255	1.405	1.230	1.37	1.293	1.358	1.266	1.294	1.333	1.199	1.480	1.253	1.325
GS-1X-2	1.24	1.245	1.210	1.335	1.200	1.26	1.379	1.323	1.291	1.359	1.329	1.334	1.389	1.178	1.275
GS-1X-3	1.25	1.300	1.265	1.165	1.370	1.27	1.297	1.364	1.253	1.297	1.289	1.190	1.397	1.188	1.190
GS-1X-4	1.28	1.330	1.240	1.130	1.380	1.28	1.246	1.325	1.308	1.269	1.228	1.368	1.310	1.399	1.245
GS-1X-5	1.24	1.280	1.240	1.300	1.485	1.25	1.258	1.360	1.293	1.378	1.345	1.333	1.262	1.198	1.305
GS-1X-6	1.25	1.270	1.200	1.115	1.425	1.32	1.234	1.322	1.266	1.401	1.228	1.231	1.420	1.216	1.215
GS-1X-7	1.36	1.300	1.345	1.125	1.330	1.42	1.372	1.364	1.245	1.285	1.382	1.300	1.249	1.178	1.305
GS-1X-8	1.33	1.375	1.290	1.250	1.575	1.38	1.266	1.322	1.211	1.356	1.388	1.402	1.321	1.049	1.375
GS-1X-9	1.25	1.355	1.355	1.205	1.225	1.44	1.165	1.358	1.263	1.364	1.439	1.350	1.315	1.240	1.330
GS-1X-10	1.32	1.250	1.350	1.205	1.490	1.24	1.278	1.322	1.305	1.328	1.221	1.414	1.448	1.288	1.310
Mean	1.285	1.300	1.275	1.224	1.371	1.32	1.279	1.342	1.270	1.333	1.318	1.312	1.36	1.219	1.288
Std. Devn.	0.046	0.043	0.058	0.098	0.126	0.074	0.063	0.020	0.030	0.045	0.075	0.081	0.079	0.090	0.056
% RSD	3.54	3.28	4.52	8.00	9.22	5.60	4.94	1.50	2.36	3.36	5.72	6.14	5.80	7.36	4.39
4Acid Digestion	Ag g/t														
GS-1X-1	73.3	65	70	71	67	64.5	62	65.2	64	65.7	72.1	70	74	68.1	79
GS-1X-2	72.8	66	73	74	73	66.5	70	65.5	67	67.2	72.3	70	71	71.8	79
GS-1X-3	74.3	67	65	76	82	66.0	64	63.7	69	64.3	73.0	64	69	67.6	66
GS-1X-4	72.0	66	63	69	68	63.5	74	63.7	72	62.0	73.3	76	73	77.1	64
GS-1X-5	76.0	64	66	63	76	64.5	77	65.6	77	62.7	71.9	76	70	64.6	72
GS-1X-6	74.4	66	72	63	67	65.5	67	63.4	67	67.8	70.8	73	67	68.4	79
GS-1X-7	75.9	66	63	70	65	69.5	69	65.5	65	64.6	70.7	69	69	58.4	65
GS-1X-8	73.6	68	68	64	64	63.0	61	65.5	65	65.3	69.9	65	75	65.3	79
GS-1X-9	77.2	67	63	64	69	52.5	71	65.0	68	62.3	70.5	69	73	72.9	74
GS-1X-10	76.8	73	72	63	80	56.5	61	63.4	74	66.1	71.2	69	72	70.4	80
Mean	74.6	67	68	67.7	71	63.2	68	64.7	69	64.8	71.6	70	71	68.5	74
Std. Devn.	1.766	2.440	4.035	4.945	6.332	5.018	5.582	0.968	4.264	2.008	1.125	4.012	2.541	5.123	6.533
% RSD	2.37	3.65	5.98	7.30	8.91	7.94	8.26	1.50	6.20	3.10	1.57	5.72	3.56	7.48	8.86

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

AGAT Labs, Mississauga, ON, 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



Duncan Sanderson, Certified Assayer of B.C.

Geochemist



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