

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-CM-41

Recommended value and the "Between Laboratory" two standard deviations

Gold	1.60 g/t ± 0.15 g/t	Certified value	30g FA / ICP or AA
Silver	8 g/t ± 1 g/t	Certified value	4 Acid / ICP or AA
Silver	8 g/t ± 1 g/t	Certified value	Aqua Regia / ICP or AA
Copper	1.71 % ± 0.05 %	Certified value	4 Acid / ICP or AA
Copper	1.71 % ± 0.05 %	Certified value	Aqua Regia / ICP or AA

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: July 28, 2016

ORIGIN OF REFERENCE MATERIAL:

Standard CDN-CM-41 was prepared using ore from the Minto Mine (Minto Explorations) in Yukon, Canada, supplied as coarse reject from diamond drilling. Mineralization is primary chalcopyrite and bornite pervasively disseminated and as stringers within foliated granodiorite units rich in secondary biotite. Sulphide mineralization is typically accompanied by magnetite. Gold is intimately associated with the bornite mineralization and rarely observed as free gold.

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: 4-acid digestion, AA or ICP finish and Aqua regia digestion and ICP or AA finish
Cu: 4-acid digestion, AA or ICP finish and Aqua regia digestion and ICP or AA 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):

Analyte	Percent	Analyte	Percent
SiO ₂	60.8	Na ₂ O	3.3
Al ₂ O ₃	14.5	MgO	1.4
Fe ₂ O ₃	8.4	K ₂ O	3.1
CaO	3.1	TiO ₂	0.4
MnO	<0.1	LOI	2.3
Total S	1.1	Total C	0.3

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
	Au by Fire Assay, 30g sample size and Instrumental finish														
CM-41-1	1.62	1.53	1.61	1.70	1.53	1.50	1.58	1.56	1.66	1.58	1.70	1.64	1.62	1.69	1.56
CM-41-2	1.50	1.73	1.45	1.58	1.59	1.59	1.55	1.44	1.54	1.40	1.64	1.54	1.67	1.68	1.63
CM-41-3	1.66	1.55	1.37	1.61	1.53	1.52	1.59	1.63	1.62	1.74	1.72	1.64	1.68	1.53	1.54
CM-41-4	1.69	1.58	1.59	1.53	1.59	1.48	1.55	1.53	1.74	1.56	1.72	1.72	1.74	1.61	1.64
CM-41-5	1.54	1.62	1.34	1.62	1.52	1.61	1.56	1.55	1.50	1.75	1.70	1.52	1.57	1.62	1.69
CM-41-6	1.81	1.63	1.48	1.54	1.53	1.69	1.58	1.45	1.57	1.44	1.71	1.57	1.69	1.51	1.63
CM-41-7	1.53	1.57	1.48	1.59	1.59	1.60	1.62	1.41	1.61	1.52	1.68	1.61	1.69	1.73	1.68
CM-41-8	1.56	1.65	1.63	1.51	1.55	1.55	1.56	1.40	1.76	1.73	1.66	1.74	1.63	1.53	1.66
CM-41-9	1.51	1.73	1.60	1.50	1.57	1.48	1.56	1.58	1.53	1.61	1.64	1.54	1.60	1.52	1.53
CM-41-10	1.68	1.64	1.48	1.57	1.52	1.64	1.60	1.57	1.56	1.85	1.65	1.57	1.71	1.62	1.60
Mean	1.61	1.62	1.50	1.57	1.55	1.57	1.58	1.51	1.61	1.62	1.68	1.61	1.66	1.60	1.62
Std. Devn.	0.100	0.066	0.103	0.059	0.029	0.070	0.023	0.080	0.089	0.146	0.033	0.077	0.053	0.080	0.057
% RSD	6.23	4.10	6.87	3.74	1.89	4.48	1.47	5.31	5.52	9.04	1.97	4.78	3.20	4.98	3.55
Ag by 4 Acid digestion /Instrumental finish															
CM-41-1	9	9	7	9	8	8	9	9	8	8	8	8	9	8	9
CM-41-2	8	9	7	9	8	7	9	8	6	8	9	7	8	8	9
CM-41-3	8	9	8	9	8	8	9	8	8	9	9	8	8	8	9
CM-41-4	9	9	8	9	8	8	9	8	8	9	8	8	8	8	8
CM-41-5	9	9	8	9	8	8	8	7	8	8	8	8	8	8	9
CM-41-6	8	9	8	9	8	8	8	8	8	8	8	8	8	8	8
CM-41-7	8	9	7	8	8	8	8	8	7	7	8	7	8	8	9
CM-41-8	8	10	7	8	9	8	8	8	8	8	8	8	8	8	9
CM-41-9	8	9	8	8	8	8	8	8	9	9	8	9	8	8	9
CM-41-10	8	9	7	9	8	8	9	8	8	8	9	8	8	8	9
Mean	8	9	8	9	8	8	9	8	8	8	8	8	8	8	9
Std. Devn.	0.48	0.29	0.53	0.48	0.07	0.23	0.53	0.47	0.79	0.44	0.11	0.42	0.33	0.00	0.42
% RSD	5.82	3.22	7.03	5.55	0.81	2.96	6.20	5.89	10.11	5.44	1.31	5.29	3.96	0.00	4.79
Ag by Aqua Regia digestion /Instrumental finish															
CM-41-1	7	8	9	8	8	8	8	8	8	8	9	8	9	7	9
CM-41-2	8	8	8	9	8	9	8	9	8	8	9	8	9	7	8
CM-41-3	8	8	8	8	8	8	8	8	8	8	9	8	9	8	9
CM-41-4	9	8	9	8	8	9	8	8	8	8	9	8	9	7	9
CM-41-5	9	8	8	9	8	8	9	8	8	8	9	8	8	7	9
CM-41-6	10	8	8	9	8	8	8	9	8	8	9	8	9	8	9
CM-41-7	8	8	8	8	8	9	8	7	9	8	9	9	9	7	9
CM-41-8	7	8	8	8	8	8	8	8	8	8	9	8	9	8	8
CM-41-9	8	8	8	9	8	8	9	7	9	8	9	9	8	8	9
CM-41-10	8	8	8	8	8	8	9	9	8	8	9	8	9	7	8
Mean	8	8	8	8	8	8	8	8	8	8	9	8	9	7	9
Std. Devn.	0.92	0.13	0.42	0.52	0.09	0.24	0.48	0.74	0.42	0.22	0.07	0.23	0.18	0.16	0.48
% RSD	11.21	1.67	5.14	6.15	1.14	2.87	5.82	9.11	5.14	2.73	0.78	2.86	2.05	2.20	5.55

Cu by 4 Acid digestion /Instrumental finish															
CM-41-1	1.74	1.70	1.73	1.70	1.72	1.71	1.68	1.66	1.72	1.72	1.74	1.68	1.62	1.76	1.69
CM-41-2	1.69	1.74	1.71	1.70	1.72	1.79	1.68	1.72	1.71	1.70	1.73	1.71	1.68	1.72	1.70
CM-41-3	1.71	1.69	1.71	1.73	1.72	1.77	1.68	1.67	1.72	1.73	1.73	1.72	1.68	1.73	1.69
CM-41-4	1.73	1.71	1.72	1.73	1.73	1.73	1.68	1.65	1.71	1.68	1.75	1.71	1.66	1.71	1.68
CM-41-5	1.71	1.70	1.72	1.73	1.73	1.72	1.68	1.63	1.69	1.69	1.74	1.70	1.67	1.66	1.68
CM-41-6	1.71	1.70	1.73	1.72	1.72	1.73	1.68	1.66	1.73	1.73	1.76	1.72	1.72	1.70	1.67
CM-41-7	1.70	1.71	1.73	1.72	1.72	1.75	1.68	1.66	1.73	1.68	1.75	1.73	1.70	1.67	1.68
CM-41-8	1.72	1.73	1.70	1.71	1.73	1.73	1.68	1.66	1.69	1.75	1.72	1.70	1.70	1.66	1.69
CM-41-9	1.73	1.73	1.71	1.72	1.71	1.75	1.68	1.68	1.72	1.74	1.72	1.71	1.71	1.75	1.69
CM-41-10	1.70	1.74	1.71	1.72	1.72	1.73	1.68	1.65	1.71	1.74	1.73	1.72	1.67	1.70	1.71
Mean	1.71	1.71	1.72	1.72	1.72	1.74	1.68	1.66	1.71	1.72	1.74	1.71	1.68	1.71	1.69
Std. Devn.	0.015	0.019	0.011	0.012	0.006	0.026	0.003	0.024	0.014	0.026	0.013	0.014	0.029	0.035	0.011
% RSD	0.90	1.09	0.64	0.68	0.37	1.48	0.15	1.42	0.80	1.53	0.74	0.81	1.72	2.07	0.68

Cu by Aqua Regia digestion /Instrumental finish															
CM-41-1	1.71	1.65	1.72	1.72	1.71	1.68	1.75	1.73	1.66	1.58	1.73	1.65	1.69	1.63	1.73
CM-41-2	1.71	1.68	1.71	1.69	1.71	1.76	1.74	1.68	1.66	1.61	1.74	1.67	1.71	1.69	1.70
CM-41-3	1.72	1.67	1.73	1.70	1.71	1.71	1.74	1.73	1.69	1.63	1.74	1.70	1.70	1.65	1.70
CM-41-4	1.71	1.67	1.72	1.71	1.70	1.70	1.74	1.71	1.69	1.67	1.77	1.69	1.69	1.73	1.72
CM-41-5	1.71	1.67	1.74	1.71	1.70	1.72	1.75	1.71	1.69	1.58	1.73	1.69	1.71	1.69	1.68
CM-41-6	1.68	1.67	1.72	1.74	1.69	1.66	1.74	1.64	1.68	1.62	1.74	1.69	1.64	1.74	1.71
CM-41-7	1.70	1.67	1.80	1.74	1.69	1.77	1.74	1.69	1.70	1.70	1.74	1.70	1.71	1.71	1.66
CM-41-8	1.72	1.68	1.72	1.68	1.69	1.68	1.75	1.70	1.70	1.59	1.73	1.70	1.70	1.70	1.70
CM-41-9	1.68	1.71	1.73	1.70	1.70	1.73	1.75	1.66	1.72	1.63	1.74	1.71	1.71	1.72	1.72
CM-41-10	1.68	1.69	1.73	1.70	1.69	1.64	1.74	1.67	1.71	1.66	1.73	1.71	1.71	1.72	1.68
Mean	1.70	1.68	1.73	1.71	1.70	1.71	1.74	1.69	1.69	1.63	1.74	1.69	1.70	1.70	1.70
Std. Devn.	0.017	0.015	0.027	0.020	0.009	0.042	0.004	0.030	0.019	0.040	0.012	0.019	0.022	0.035	0.021
% RSD	1.00	0.90	1.54	1.17	0.52	2.45	0.26	1.76	1.11	2.46	0.70	1.15	1.27	2.06	1.25

Notes:

Four acid Ag results from laboratory 3 were removed for failing the t test.

Aqua regia Ag results from laboratory 14 were removed for failing the t test.

Aqua regia Cu results from laboratory 10 were removed for failing the t test.

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

Activation Laboratories, Ancaster, Ontario, Canada	Certimin S.A., Lima, Peru
ALS, Loughrea, Ireland	MS Analytical, Langley, BC, Canada
ALS, Lima, Peru	SGS, Vancouver, BC, Canada
ALS Canada, North Vancouver, BC, Canada	SGS, Lima, Peru
Andes Analytical, Santiago Chile	SGS, Lakefield, Ontario, Canada
Argetest, Ankara, Turkey	Skyline Assayers & Laboratories, AZ, USA
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

Duncan Sanderson, Certified Assayer of B.C.

Geochemist

BW Smee

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