

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-ME-1304

Recommended values and the “Between Lab” Two Standard Deviations

<i>Gold</i>	<i>1.80 g/t ± 0.12 g/t</i>	<i>Certified value</i>
<i>Silver</i>	<i>34.0 g/t ± 3.2 g/t</i>	<i>Certified value</i>
<i>Copper</i>	<i>0.268 % ± 0.010 %</i>	<i>Certified value</i>
<i>Lead</i>	<i>0.258 % ± 0.014 %</i>	<i>Certified value</i>
<i>Zinc</i>	<i>0.220 % ± 0.012 %</i>	<i>Certified value</i>

Note: Standards with an RSD of near or less than 5% are certified; RSD's of between 5% and 15% are Provisional; RSD's 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.
CERTIFIED BY: Duncan Sanderson, B.Sc., Licensed Assayer of British Columbia
INDEPENDENT GEOCHEMIST: Dr. Barry Smee., Ph.D., P. Geo.
DATE OF CERTIFICATION: August 9, 2013

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 laboratories for round robin assaying.

ORIGIN OF REFERENCE MATERIAL:

Standard CDN-ME-1304 was made from a variety of ores and concentrates.

Approximate chemical composition (from whole rock analysis) is as follows:

	Percent			Percent
SiO ₂	63.4		MgO	2.2
Al ₂ O ₃	13.0		K ₂ O	0.9
Fe ₂ O ₃	8.2		TiO ₂	0.5
CaO	4.7		LOI	2.5
Na ₂ O	2.8		S	0.8

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 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.

Assay Procedures:

Au: Fire assay pre-concentration, AA or ICP finish (30g sub-sample).
Ag, Cu, Pb, Zn: 4-acid digestion, AA or ICP finish.

REFERENCE MATERIAL CDN-ME-1304

Results from round-robin assaying:

	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	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t
CDN-ME-1304-1	1.76	1.82	1.84	1.83	1.80	1.74	1.75	1.96	1.86	1.70	1.84	1.83	1.78	1.92	1.85
CDN-ME-1304-2	1.65	1.73	1.87	1.77	1.95	1.65	1.77	1.83	1.81	1.77	1.81	1.77	1.78	1.79	1.76
CDN-ME-1304-3	1.59	1.76	1.83	1.85	1.78	1.65	1.75	1.86	1.90	1.84	1.77	1.68	1.83	1.78	1.83
CDN-ME-1304-4	1.67	1.83	1.87	1.83	1.93	1.64	1.76	1.88	1.76	1.80	1.78	1.78	1.83	1.88	1.84
CDN-ME-1304-5	1.66	1.85	1.83	1.80	1.84	1.85	1.78	1.88	1.86	1.84	1.86	1.73	1.70	1.96	1.74
CDN-ME-1304-6	1.71	1.81	1.81	1.89	1.87	1.75	1.76	1.84	1.77	1.82	1.80	1.79	1.80	1.81	1.81
CDN-ME-1304-7	1.80	1.73	1.77	1.73	1.92	1.88	1.72	1.93	1.79	1.69	1.74	1.72	1.73	1.79	1.84
CDN-ME-1304-8	1.74	1.82	1.80	1.76	1.94	1.64	1.74	1.91	1.93	1.85	1.79	1.83	1.83	1.88	1.80
CDN-ME-1304-9	1.73	1.85	1.81	1.84	1.78	1.80	1.76	1.94	1.64	1.83	1.80	1.82	1.71	1.81	1.84
CDN-ME-1304-10	1.67	1.79	1.86	1.81	1.82	1.78	1.77	1.92	1.99	1.68	1.77	1.75	1.82	1.82	1.87
Mean	1.70	1.80	1.83	1.81	1.86	1.74	1.76	1.90	1.83	1.78	1.80	1.77	1.78	1.84	1.82
Std. Devn.	0.0608	0.0456	0.0325	0.0475	0.0678	0.0895	0.0179	0.0445	0.1014	0.0676	0.0350	0.0503	0.0509	0.0620	0.0416
% RSD	3.58	2.54	1.78	2.62	3.64	5.15	1.02	2.35	5.55	3.79	1.95	2.84	2.86	3.36	2.29
	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t
CDN-ME-1304-1	36.3	33.4	32.5	32.9	34.7	35	31	32.9	32.8	36.8	32	32	31.8	36.9	34.4
CDN-ME-1304-2	35.5	31.9	33.5	33.4	33.8	36	31	32.7	34.6	38.4	32	33	32.8	36.2	35.7
CDN-ME-1304-3	35.2	34.1	34.5	32.1	34.0	35	33	33.8	33.5	38.0	32	33	31.6	34.7	34.6
CDN-ME-1304-4	36.0	33.9	34.5	31.9	34.9	36	33	33.2	35.4	35.6	32	33	33.1	35.7	34.5
CDN-ME-1304-5	36.4	34.0	33.5	31.9	33.6	36	32	33.0	32.4	36.5	31	32	33.1	35.8	34.9
CDN-ME-1304-6	36.1	33.4	33.5	32.2	33.8	36	31	33.2	33.8	37.3	31	33	33.3	34.3	37.2
CDN-ME-1304-7	35.8	36.2	33.5	30.5	34.0	36	32	33.2	35.5	36.3	33	34	32.8	34.4	35.3
CDN-ME-1304-8	36.3	34.5	33.5	33.4	35.4	35	31	33.6	34.9	36.1	31	35	33.2	35.5	38.2
CDN-ME-1304-9	35.8	33.7	33.5	32.9	35.6	35	32	33.1	33.3	35.5	33	35	32.5	35.0	36.4
CDN-ME-1304-10	35.5	33.1	35.0	32.4	35.4	36	31	32.9	34.6	36.9	33	35	32.6	33.8	35.8
Mean	35.9	33.8	33.8	32.4	34.5	35.6	31.7	33.2	34.1	36.7	32.0	33.5	32.7	35.2	35.7
Std. Devn.	0.4012	1.0963	0.7169	0.8644	0.7685	0.5164	0.8233	0.3307	1.0779	0.9536	0.8165	1.1785	0.5789	0.9592	1.2534
% RSD	1.12	3.24	2.12	2.67	2.23	1.45	2.60	1.00	3.16	2.60	2.55	3.52	1.77	2.72	3.51

Notes: Au results from laboratory 6 were removed for failing the t test.

REFERENCE MATERIAL CDN-ME-1304

Results from round-robin assaying:

	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
	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu
CDN-ME-1304-1	0.259	0.255	0.270	0.251	0.264	0.269	0.27	0.267	0.272	0.253	0.268	0.254	0.264	0.269	0.252
CDN-ME-1304-2	0.258	0.256	0.269	0.252	0.265	0.270	0.26	0.267	0.277	0.263	0.264	0.261	0.267	0.270	0.271
CDN-ME-1304-3	0.262	0.267	0.271	0.253	0.269	0.272	0.27	0.273	0.276	0.263	0.264	0.258	0.264	0.266	0.263
CDN-ME-1304-4	0.273	0.268	0.269	0.251	0.268	0.271	0.27	0.270	0.283	0.257	0.265	0.268	0.266	0.268	0.265
CDN-ME-1304-5	0.270	0.268	0.270	0.254	0.258	0.269	0.27	0.268	0.273	0.262	0.258	0.260	0.268	0.269	0.280
CDN-ME-1304-6	0.267	0.256	0.274	0.254	0.271	0.272	0.27	0.271	0.277	0.265	0.249	0.275	0.268	0.264	0.274
CDN-ME-1304-7	0.264	0.273	0.276	0.255	0.264	0.269	0.27	0.268	0.269	0.265	0.261	0.257	0.275	0.269	0.260
CDN-ME-1304-8	0.272	0.266	0.274	0.254	0.279	0.270	0.27	0.270	0.277	0.266	0.273	0.276	0.281	0.268	0.272
CDN-ME-1304-9	0.267	0.268	0.271	0.250	0.275	0.270	0.27	0.271	0.271	0.262	0.268	0.270	0.273	0.268	0.268
CDN-ME-1304-10	0.268	0.282	0.275	0.253	0.284	0.273	0.27	0.267	0.273	0.277	0.269	0.265	0.271	0.266	0.274
Mean	0.266	0.266	0.272	0.253	0.270	0.271	0.269	0.269	0.275	0.263	0.264	0.264	0.270	0.267	0.268
Std. Devn.	0.0051	0.0084	0.0026	0.0016	0.0078	0.0014	0.0032	0.0021	0.0040	0.0062	0.0067	0.0076	0.0054	0.0019	0.0080
% RSD	1.93	3.17	0.96	0.64	2.89	0.53	1.18	0.78	1.46	2.37	2.55	2.89	1.99	0.70	2.99
	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb
CDN-ME-1304-1	0.274	0.246	0.241	0.264	0.260	0.25	0.26	0.254	0.258	0.271	0.260	0.242	0.257	0.254	0.257
CDN-ME-1304-2	0.268	0.242	0.235	0.269	0.255	0.25	0.25	0.252	0.261	0.269	0.262	0.254	0.261	0.262	0.246
CDN-ME-1304-3	0.268	0.249	0.232	0.264	0.257	0.25	0.26	0.262	0.263	0.269	0.268	0.248	0.254	0.249	0.251
CDN-ME-1304-4	0.276	0.252	0.229	0.266	0.259	0.25	0.26	0.259	0.266	0.270	0.264	0.255	0.257	0.262	0.246
CDN-ME-1304-5	0.272	0.253	0.231	0.262	0.254	0.25	0.25	0.256	0.259	0.267	0.257	0.252	0.258	0.254	0.253
CDN-ME-1304-6	0.266	0.245	0.234	0.263	0.254	0.25	0.25	0.260	0.261	0.271	0.258	0.259	0.260	0.252	0.256
CDN-ME-1304-7	0.265	0.256	0.222	0.264	0.255	0.25	0.25	0.257	0.268	0.275	0.261	0.249	0.266	0.253	0.246
CDN-ME-1304-8	0.270	0.252	0.228	0.261	0.262	0.25	0.25	0.255	0.262	0.268	0.260	0.266	0.267	0.260	0.254
CDN-ME-1304-9	0.264	0.252	0.228	0.258	0.264	0.25	0.25	0.257	0.260	0.264	0.261	0.262	0.260	0.256	0.257
CDN-ME-1304-10	0.265	0.254	0.220	0.264	0.273	0.25	0.25	0.256	0.257	0.280	0.259	0.255	0.262	0.256	0.259
Mean	0.269	0.250	0.230	0.264	0.259	0.250	0.253	0.257	0.262	0.270	0.261	0.254	0.260	0.256	0.252
Std. Devn.	0.0040	0.0045	0.0061	0.0029	0.0059	0.0000	0.0048	0.0029	0.0034	0.0044	0.0032	0.0070	0.0040	0.0045	0.0050
% RSD	1.49	1.78	2.67	1.12	2.29	0.00	1.91	1.14	1.32	1.64	1.21	2.76	1.56	1.75	1.98
	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn
CDN-ME-1304-1	0.237	0.213	0.217	0.221	0.219	0.22	0.22	0.215	0.230	0.210	0.222	0.213	0.214	0.214	0.215
CDN-ME-1304-2	0.233	0.216	0.217	0.219	0.213	0.23	0.22	0.214	0.232	0.217	0.221	0.217	0.216	0.222	0.217
CDN-ME-1304-3	0.232	0.222	0.219	0.219	0.217	0.23	0.21	0.219	0.230	0.218	0.222	0.215	0.209	0.212	0.218
CDN-ME-1304-4	0.238	0.222	0.218	0.220	0.217	0.22	0.22	0.218	0.240	0.217	0.224	0.219	0.214	0.220	0.217
CDN-ME-1304-5	0.234	0.222	0.216	0.217	0.213	0.22	0.22	0.217	0.231	0.213	0.215	0.218	0.216	0.215	0.220
CDN-ME-1304-6	0.230	0.215	0.217	0.216	0.215	0.23	0.22	0.218	0.232	0.218	0.214	0.226	0.219	0.216	0.227
CDN-ME-1304-7	0.226	0.232	0.216	0.218	0.216	0.23	0.22	0.215	0.227	0.220	0.221	0.216	0.220	0.217	0.217
CDN-ME-1304-8	0.231	0.222	0.218	0.217	0.226	0.22	0.22	0.217	0.230	0.227	0.221	0.231	0.223	0.218	0.223
CDN-ME-1304-9	0.225	0.223	0.216	0.211	0.222	0.22	0.22	0.215	0.226	0.218	0.222	0.225	0.217	0.218	0.229
CDN-ME-1304-10	0.226	0.234	0.218	0.214	0.230	0.23	0.22	0.214	0.232	0.226	0.219	0.220	0.217	0.215	0.228
Mean	0.231	0.222	0.217	0.217	0.219	0.225	0.219	0.216	0.231	0.218	0.220	0.220	0.217	0.217	0.221
Std. Devn.	0.0046	0.0068	0.0010	0.0030	0.0056	0.0053	0.0032	0.0018	0.0038	0.0051	0.0032	0.0056	0.0038	0.0031	0.0051
% RSD	2.00	3.04	0.48	1.38	2.57	2.34	1.44	0.84	1.63	2.36	1.46	2.56	1.76	1.42	2.30

Notes: *Cu results from laboratory 4 were removed for failing the t test.
Pb results from laboratory 3 were removed for failing the t test.*

REFERENCE MATERIAL CDN-ME-1304

Participating Laboratories:

(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver, BC, Canada
Acme Analytical Laboratories Ltd., Chile
Actlabs-Ancaster, Ontario, Canada
Actlabs-Thunder Bay, Ontario, Canada
AGAT, Mississauga, Ontario, Canada
Alex Stewart Argentina SA
ALS Canada, North Vancouver, BC, Canada
ALS, Loughrea, Ireland
ALS Reno, Nevada, USA
American Assay Laboratory, Nevada, USA
Certimin, Lima, Peru
Intertek Genalysis, Perth, Australia
SGS – Lima, Peru
TSL Laboratories Ltd., Saskatoon, Saskatchewan, Canada
Ultra Trace, Perth, Australia


Legal Notice:

This certificate and the reference material described in it have been prepared with due care and attention. However CDN Resource Laboratories Ltd. or Barry Smee accept no 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.