

# CDN Resource Laboratories Ltd.

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## REFERENCE MATERIAL: CDN-ME-1305

Recommended values and the “Between Lab” Two Standard Deviations

<i>Gold</i>	<i>1.92 g/t ± 0.18 g/t</i>	<i>Certified value</i>
<i>Silver</i>	<i>231 g/t ± 12 g/t</i>	<i>Certified value</i>
<i>Copper</i>	<i>0.617 % ± 0.024 %</i>	<i>Certified value</i>
<i>Lead</i>	<i>3.21 % ± 0.09 %</i>	<i>Certified value</i>
<i>Zinc</i>	<i>1.61 % ± 0.05 %</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 19, 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-1305 was made from a variety of ores and concentrates.

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

	Percent		Percent
SiO <sub>2</sub>	56.7	MgO	1.9
Al <sub>2</sub> O <sub>3</sub>	11.6	K <sub>2</sub> O	0.8
Fe <sub>2</sub> O <sub>3</sub>	10.3	TiO <sub>2</sub>	0.4
CaO	4.4	LOI	4.2
Na <sub>2</sub> O	2.4	S	2.5

### **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  $\pm 2$  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, Ag:** Fire assay pre-concentration, AA or ICP finish (30g sub-sample).  
**Cu, Pb, Zn:** 4-acid digestion, AA or ICP finish.

## REFERENCE MATERIAL CDN-ME-1305

### 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
ME-1305-1	2.03	1.88	1.93	2.06	1.88	1.90	1.79	1.85	1.97	1.83	1.86	1.65	2.00	1.78	1.89
ME-1305-2	2.00	1.90	1.89	2.08	2.03	1.80	1.77	1.94	1.98	1.72	1.77	1.65	1.82	1.83	1.98
ME-1305-3	1.85	1.96	1.84	2.06	1.83	1.88	1.83	1.84	1.92	1.85	2.00	1.73	2.09	1.83	1.85
ME-1305-4	1.85	1.85	1.88	2.10	1.81	1.91	1.84	1.90	2.07	1.81	1.85	1.80	2.14	1.85	2.00
ME-1305-5	1.85	1.82	1.85	1.99	1.85	1.89	1.77	1.89	2.10	1.75	2.00	1.70	2.00	1.90	1.87
ME-1305-6	2.01	1.91	1.92	2.03	1.93	1.89	1.79	1.82	1.93	1.90	1.97	1.62	1.96	1.88	1.90
ME-1305-7	2.03	1.99	1.93	2.10	1.97	1.94	1.80	1.91	2.05	1.76	1.90	1.74	1.82	2.10	1.97
ME-1305-8	1.86	1.84	1.84	2.04	1.81	1.90	1.77	1.86	1.98	1.89	1.89	1.75	1.99	1.92	2.02
ME-1305-9	1.99	1.86	1.93	2.08	2.01	1.96	1.84	1.92	1.95	1.86	2.15	1.77	1.97	1.80	1.94
ME-1305-10	1.95	1.92	1.92	2.06	1.99	1.98	1.76	1.89	2.01	1.95	2.05	1.61	2.17	1.86	2.01
Mean	1.94	1.89	1.89	2.06	1.91	1.90	1.80	1.88	1.99	1.83	1.94	1.70	1.99	1.88	1.94
Std. Devn.	0.0801	0.0548	0.0383	0.0337	0.0854	0.0510	0.0283	0.0380	0.0617	0.0730	0.1114	0.0661	0.1183	0.0900	0.0613
% RSD	4.12	2.90	2.02	1.63	4.47	2.68	1.58	2.02	3.09	3.98	5.73	3.89	5.94	4.80	3.16
	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
ME-1305-1	211	230	233	232	216	227	232	235	229	296	264	225		235	235
ME-1305-2	214	229	227	233	222	228	232	234	229	243	224	226		232	247
ME-1305-3	215	230	220	232	232	226	232	236	231	231	228	231		237	239
ME-1305-4	216	228	231	231	220	230	233	236	226	279	235	224		233	238
ME-1305-5	216	225	231	231	230	229	235	236	225	244	296	234		233	239
ME-1305-6	214	227	219	231	230	228	230	241	228	233	236	230		234	236
ME-1305-7	215	229	231	230	236	227	234	234	233	289	236	232		228	233
ME-1305-8	216	227	232	235	228	230	231	234	235	236	235	227		240	244
ME-1305-9	217	222	229	230	234	224	227	232	239	241	236	230		238	238
ME-1305-10	216	228	226	234	238	227	231	234	235	299	235	233		234	239
Mean	215.0	227.5	227.9	232.0	228.6	227.6	231.7	235.2	231.0	259.1	242.5	229.2	#DIV/0!	234.4	238.8
Std. Devn.	1.8080	2.4608	4.9318	1.6431	7.1833	1.8379	2.2136	2.3221	4.4472	28.0137	21.5316	3.4897	#DIV/0!	3.3731	4.1042
% RSD	0.84	1.08	2.16	0.71	3.14	0.81	0.96	0.99	1.93	10.81	8.88	1.52	#DIV/0!	1.44	1.72

Notes: Au results from laboratory 12 were removed for failing the t test.

## REFERENCE MATERIAL CDN-ME-1305

### 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
ME-1305-1	0.592	0.622	0.622	0.604	0.560	0.622	0.62	0.608	0.664	0.669	0.598	0.614	0.636	0.622	0.637
ME-1305-2	0.593	0.627	0.631	0.607	0.578	0.619	0.61	0.616	0.661	0.772	0.626	0.623	0.626	0.606	0.619
ME-1305-3	0.599	0.632	0.622	0.602	0.555	0.622	0.61	0.622	0.655	0.686	0.598	0.621	0.623	0.623	0.621
ME-1305-4	0.600	0.629	0.625	0.605	0.597	0.623	0.61	0.622	0.650	0.667	0.617	0.617	0.631	0.615	0.632
ME-1305-5	0.612	0.613	0.631	0.610	0.561	0.632	0.61	0.620	0.658	0.738	0.622	0.605	0.634	0.612	0.629
ME-1305-6	0.609	0.633	0.629	0.604	0.587	0.624	0.61	0.627	0.628	0.765	0.598	0.605	0.617	0.624	0.640
ME-1305-7	0.600	0.613	0.630	0.611	0.603	0.619	0.62	0.629	0.656	0.766	0.606	0.618	0.617	0.611	0.635
ME-1305-8	0.606	0.609	0.622	0.611	0.572	0.617	0.61	0.620	0.617	0.760	0.594	0.622	0.631	0.619	0.627
ME-1305-9	0.612	0.642	0.628	0.601	0.586	0.623	0.61	0.615	0.667	0.683	0.604	0.606	0.628	0.616	0.617
ME-1305-10	0.605	0.602	0.627	0.606	0.619	0.627	0.62	0.615	0.664	0.699	0.610	0.595	0.630	0.612	0.627
Mean	0.603	0.622	0.627	0.606	0.582	0.623	0.613	0.619	0.652	0.721	0.607	0.613	0.627	0.616	0.628
Std. Devn.	0.0072	0.0126	0.0037	0.0035	0.0207	0.0043	0.0048	0.0062	0.0165	0.0436	0.0111	0.0093	0.0066	0.0059	0.0078
% RSD	1.19	2.02	0.59	0.58	3.55	0.69	0.79	1.01	2.54	6.06	1.83	1.53	1.05	0.96	1.24
	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb
ME-1305-1	3.27	3.22	3.26	3.25	3.07	3.16	3.20	3.13	3.17	3.42	3.24	3.22	3.16	3.21	3.26
ME-1305-2	3.27	3.27	3.19	3.21	3.15	3.21	3.16	3.15	3.23	3.29	3.25	3.22	3.16	3.19	3.21
ME-1305-3	3.31	3.23	3.22	3.22	3.25	3.21	3.19	3.19	3.28	3.43	3.23	3.24	3.14	3.26	3.18
ME-1305-4	3.29	3.21	3.23	3.24	3.14	3.16	3.19	3.16	3.31	3.31	3.25	3.21	3.17	3.21	3.26
ME-1305-5	3.32	3.16	3.20	3.26	3.27	3.20	3.14	3.17	3.29	3.05	3.23	3.17	3.16	3.19	3.22
ME-1305-6	3.26	3.26	3.21	3.23	3.39	3.20	3.16	3.18	3.29	3.26	3.32	3.17	3.14	3.25	3.27
ME-1305-7	3.30	3.17	3.20	3.24	3.28	3.19	3.17	3.19	3.24	3.20	3.43	3.20	3.11	3.17	3.23
ME-1305-8	3.28	3.17	3.21	3.24	3.26	3.12	3.17	3.12	3.24	3.45	3.31	3.21	3.20	3.23	3.21
ME-1305-9	3.30	3.36	3.22	3.22	3.25	3.27	3.18	3.16	3.20	3.26	3.23	3.16	3.21	3.21	3.21
ME-1305-10	3.25	3.15	3.20	3.23	3.35	3.15	3.22	3.13	3.19	3.40	3.24	3.12	3.19	3.18	3.24
Mean	3.29	3.22	3.21	3.23	3.24	3.19	3.18	3.16	3.24	3.31	3.27	3.19	3.16	3.21	3.23
Std. Devn.	0.0235	0.0645	0.0201	0.0153	0.0976	0.0416	0.0230	0.0254	0.0477	0.1244	0.0641	0.0361	0.0303	0.0304	0.0285
% RSD	0.71	2.00	0.63	0.47	3.02	1.31	0.72	0.81	1.47	3.76	1.96	1.13	0.96	0.95	0.88
	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn
ME-1305-1	1.60	1.60	1.63	1.60	1.65	1.62	1.52	1.58	1.57	1.80	1.49	1.64	1.63	1.60	1.66
ME-1305-2	1.59	1.62	1.60	1.60	1.60	1.60	1.53	1.59	1.59	1.73	1.50	1.62	1.62	1.58	1.62
ME-1305-3	1.61	1.63	1.64	1.60	1.66	1.61	1.52	1.61	1.62	1.80	1.47	1.63	1.59	1.62	1.62
ME-1305-4	1.60	1.62	1.61	1.60	1.60	1.61	1.52	1.63	1.64	1.75	1.52	1.62	1.61	1.59	1.66
ME-1305-5	1.61	1.59	1.61	1.62	1.65	1.65	1.51	1.60	1.62	1.58	1.54	1.61	1.63	1.59	1.65
ME-1305-6	1.58	1.63	1.62	1.60	1.76	1.63	1.50	1.63	1.63	1.70	1.49	1.60	1.59	1.61	1.67
ME-1305-7	1.60	1.58	1.62	1.60	1.70	1.61	1.52	1.62	1.59	1.66	1.51	1.61	1.59	1.59	1.65
ME-1305-8	1.59	1.60	1.63	1.59	1.65	1.61	1.51	1.63	1.60	1.79	1.48	1.62	1.62	1.58	1.65
ME-1305-9	1.60	1.68	1.63	1.59	1.69	1.61	1.53	1.60	1.60	1.72	1.49	1.60	1.62	1.60	1.63
ME-1305-10	1.58	1.58	1.61	1.60	1.73	1.62	1.52	1.62	1.58	1.78	1.51	1.59	1.62	1.59	1.63
Mean	1.60	1.61	1.62	1.60	1.67	1.62	1.52	1.61	1.60	1.73	1.50	1.61	1.61	1.59	1.64
Std. Devn.	0.0115	0.0312	0.0125	0.0094	0.0521	0.0142	0.0092	0.0170	0.0240	0.0705	0.0205	0.0151	0.0151	0.0108	0.0178
% RSD	0.72	1.94	0.77	0.59	3.12	0.88	0.61	1.05	1.50	4.07	1.37	0.93	0.94	0.67	1.08

**Notes:** *Cu results from laboratory 10 were removed for failing the t test.*  
*Pb results from laboratory 10 were removed for failing the t test.*  
*Zn results from laboratories 10 and 11 were removed for failing the t test.*

**REFERENCE MATERIAL CDN-ME-1305**

**Participating Laboratories:**

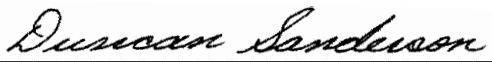
(not in same order as listed in table of results)

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Certified by

  
Duncan Sanderson, Certified Assayer of B.C.

Geochemist

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