

# CDN Resource Laboratories Ltd.

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## REFERENCE MATERIAL: CDN-ME-1307

Recommended values and the “Between Lab” Two Standard Deviations

<i>Gold</i>	<i>1.02 g/t ± 0.09 g/t</i>	<i>Certified value</i>
<i>Silver</i>	<i>54.1 g/t ± 3.1 g/t</i>	<i>Certified value</i>
<i>Copper</i>	<i>0.537 % ± 0.020 %</i>	<i>Certified value</i>
<i>Lead</i>	<i>0.864 % ± 0.036 %</i>	<i>Certified value</i>
<i>Zinc</i>	<i>0.746% ± 0.026 %</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:** December 30, 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:**

This standard is made from a mixture of ores.

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

	Percent		Percent
SiO <sub>2</sub>	61.4	MgO	2.5
Al <sub>2</sub> O <sub>3</sub>	13.9	K <sub>2</sub> O	1.3
Fe <sub>2</sub> O <sub>3</sub>	7.5	TiO <sub>2</sub>	0.5
CaO	5.2	LOI	2.0
Na <sub>2</sub> O	2.9	S	1.3
C	0.1		

### **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:** 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-1307**

**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-1307-1	1.04	1.05	0.97	0.95	1.07	1.02	0.98	1.01	1.06	1.07	1.01	1.08	1.02	1.03	0.99
ME-1307-2	1.07	1.15	1.03	0.97	1.02	0.95	0.99	0.96	0.99	1.06	0.99	1.09	1.06	0.99	1.02
ME-1307-3	1.08	1.11	0.98	0.96	0.99	1.02	0.98	0.98	0.94	1.05	1.13	0.98	1.07	1.03	0.94
ME-1307-4	1.05	1.04	1.01	0.97	1.10	1.00	1.01	0.99	0.94	0.99	1.04	1.10	0.99	1.01	1.08
ME-1307-5	1.04	1.02	0.97	0.96	1.09	0.98	0.99	0.97	0.96	0.99	1.09	1.02	1.00	1.02	1.11
ME-1307-6	1.08	1.03	1.03	0.96	1.08	0.99	0.99	0.97	0.99	0.99	1.05	1.03	1.04	1.07	1.07
ME-1307-7	1.03	1.10	0.99	1.00	1.17	1.07	0.99	1.02	0.95	1.01	1.08	0.98	0.98	0.99	1.01
ME-1307-8	1.06	0.93	0.98	1.05	1.14	1.03	1.00	1.03	1.07	1.02	1.06	0.99	1.02	0.99	1.00
ME-1307-9	1.03	0.96	1.02	0.97	1.19	1.02	1.00	1.03	1.07	0.95	1.00	1.04	1.11	1.06	1.06
ME-1307-10	1.09	0.96	1.03	1.02	1.05	1.03	1.01	0.99	1.00	0.97	1.02	0.99	0.95	1.08	1.12
Mean	1.06	1.03	1.00	0.98	1.09	1.01	0.99	0.99	1.00	1.01	1.05	1.03	1.02	1.03	1.04
Std. Devn.	0.0231	0.0701	0.0256	0.0321	0.0629	0.0336	0.0097	0.0259	0.0507	0.0397	0.0438	0.0463	0.0466	0.0337	0.0565
% RSD	2.19	6.80	2.56	3.28	5.77	3.33	0.98	2.61	5.08	3.94	4.18	4.50	4.56	3.28	5.43
	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-1307-1	53.0	52.5	54.5	51.2	53.0	57.0	54.6	51.0	54.5	54.8	51.5	53	53.2	57.7	55
ME-1307-2	52.4	54.3	54.0	51.7	53.1	57.8	54.9	52.1	56.2	55.6	52.8	54	54.6	55.9	54
ME-1307-3	54.0	52.6	53.0	52.1	53.5	56.9	54.5	51.2	54.8	55.1	50.6	56	54.1	58.1	55
ME-1307-4	53.1	53.7	53.5	51.6	55.7	56.8	55.3	52.0	56.6	54.2	53.4	54	53.6	54.7	56
ME-1307-5	52.5	52.8	53.0	52.0	54.9	57.3	55.8	50.3	55.7	55.1	54.3	54	55.0	55.0	55
ME-1307-6	53.4	53.7	54.0	51.5	54.7	56.8	56.0	50.1	55.9	52.8	53.6	54	52.0	54.2	56
ME-1307-7	52.1	52.8	53.0	51.6	55.1	55.5	55.7	50.3	55.8	53.4	54.9	55	55.2	53.6	56
ME-1307-8	53.2	54.5	52.0	52.6	54.5	57.3	56.5	51.2	56.7	54.2	54.0	54	54.9	56.7	56
ME-1307-9	53.0	52.3	53.5	52.4	55.0	59.9	54.5	50.7	56.8	54.5	54.2	53	52.6	54.3	56
ME-1307-10	53.7	53.6	54.0	53.0	53.9	57.8	56.3	51.4	51.0	52.0	53.8	54	53.3	57.0	53
Mean	53.0	53.3	53.5	52.0	54.3	57.3	55.4	51.0	55.4	54.2	53.3	54.1	53.9	55.7	55.2
Std. Devn.	0.5873	0.7800	0.7246	0.5599	0.9168	1.1180	0.7564	0.6929	1.7243	1.1345	1.3329	0.8756	1.0876	1.5845	1.0328
% RSD	1.11	1.46	1.36	1.08	1.69	1.95	1.37	1.36	3.11	2.09	2.50	1.62	2.02	2.84	1.87

**Note:** Ag data from Lab 8 was removed for failing the t test.

**REFERENCE MATERIAL CDN-ME-1307**

**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-1307-1	0.549	0.528	0.571	0.519	0.521	0.521	0.49	0.543	0.529	0.553	0.527	0.533	0.535	0.525	0.537
ME-1307-2	0.544	0.538	0.550	0.521	0.529	0.522	0.50	0.549	0.551	0.551	0.532	0.539	0.544	0.519	0.545
ME-1307-3	0.548	0.547	0.567	0.521	0.542	0.519	0.51	0.543	0.537	0.546	0.533	0.552	0.543	0.519	0.552
ME-1307-4	0.552	0.525	0.564	0.522	0.539	0.532	0.50	0.548	0.544	0.553	0.534	0.544	0.539	0.527	0.557
ME-1307-5	0.544	0.525	0.568	0.521	0.535	0.530	0.50	0.539	0.547	0.550	0.530	0.548	0.547	0.528	0.539
ME-1307-6	0.534	0.528	0.569	0.520	0.539	0.533	0.51	0.533	0.538	0.542	0.540	0.537	0.540	0.510	0.547
ME-1307-7	0.535	0.533	0.577	0.523	0.533	0.519	0.50	0.533	0.546	0.544	0.564	0.537	0.547	0.524	0.547
ME-1307-8	0.544	0.512	0.555	0.529	0.536	0.522	0.50	0.553	0.551	0.547	0.550	0.544	0.548	0.526	0.560
ME-1307-9	0.542	0.517	0.577	0.523	0.529	0.529	0.50	0.543	0.553	0.546	0.541	0.539	0.537	0.519	0.530
ME-1307-10	0.548	0.539	0.557	0.522	0.535	0.526	0.50	0.542	0.500	0.541	0.538	0.544	0.543	0.530	0.533
Mean	0.544	0.529	0.566	0.522	0.534	0.525	0.501	0.543	0.540	0.547	0.539	0.542	0.542	0.523	0.545
Std. Devn.	0.0057	0.0105	0.0091	0.0026	0.0061	0.0054	0.0057	0.0064	0.0158	0.0044	0.0110	0.0057	0.0044	0.0060	0.0100
% RSD	1.05	1.98	1.60	0.50	1.15	1.02	1.13	1.18	2.93	0.80	2.04	1.06	0.82	1.16	1.83
	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb
ME-1307-1	0.884	0.842	0.817	0.863	0.859	0.88	0.73	0.793	0.859	0.847	0.899	0.866	0.844	0.854	0.874
ME-1307-2	0.876	0.861	0.857	0.865	0.868	0.86	0.73	0.812	0.884	0.853	0.908	0.875	0.855	0.843	0.877
ME-1307-3	0.880	0.855	0.863	0.880	0.877	0.88	0.73	0.799	0.867	0.839	0.902	0.879	0.846	0.856	0.869
ME-1307-4	0.882	0.840	0.827	0.870	0.857	0.85	0.73	0.817	0.890	0.850	0.890	0.878	0.855	0.837	0.880
ME-1307-5	0.875	0.833	0.848	0.871	0.860	0.86	0.73	0.801	0.877	0.847	0.904	0.875	0.870	0.850	0.872
ME-1307-6	0.875	0.849	0.826	0.863	0.870	0.87	0.73	0.790	0.871	0.840	0.892	0.875	0.851	0.835	0.869
ME-1307-7	0.866	0.852	0.846	0.875	0.873	0.88	0.72	0.799	0.891	0.836	0.885	0.869	0.861	0.843	0.877
ME-1307-8	0.872	0.850	0.825	0.879	0.884	0.88	0.72	0.815	0.890	0.846	0.894	0.875	0.854	0.852	0.878
ME-1307-9	0.873	0.828	0.828	0.880	0.882	0.88	0.73	0.806	0.898	0.837	0.888	0.875	0.842	0.832	0.860
ME-1307-10	0.882	0.855	0.846	0.874	0.880	0.88	0.73	0.810	0.816	0.833	0.872	0.877	0.851	0.875	0.856
Mean	0.876	0.847	0.838	0.872	0.871	0.872	0.728	0.804	0.874	0.843	0.893	0.874	0.853	0.848	0.871
Std. Devn.	0.0056	0.0105	0.0156	0.0067	0.0099	0.0114	0.0042	0.0093	0.0239	0.0067	0.0106	0.0040	0.0083	0.0126	0.0079
% RSD	0.64	1.24	1.86	0.77	1.14	1.30	0.58	1.16	2.73	0.80	1.18	0.45	0.97	1.49	0.91
	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn
ME-1307-1	0.755	0.738	0.743	0.709	0.731	0.73	0.73	0.734	0.736	0.738	0.701	0.754	0.737	0.753	0.766
ME-1307-2	0.745	0.740	0.731	0.702	0.745	0.73	0.75	0.718	0.761	0.748	0.691	0.762	0.741	0.744	0.762
ME-1307-3	0.749	0.752	0.742	0.706	0.772	0.73	0.74	0.722	0.740	0.741	0.686	0.768	0.747	0.734	0.761
ME-1307-4	0.753	0.730	0.730	0.700	0.748	0.74	0.75	0.748	0.760	0.749	0.674	0.770	0.736	0.746	0.772
ME-1307-5	0.747	0.730	0.730	0.708	0.764	0.74	0.75	0.724	0.755	0.746	0.664	0.766	0.749	0.745	0.761
ME-1307-6	0.745	0.735	0.765	0.704	0.762	0.75	0.75	0.712	0.755	0.737	0.674	0.757	0.744	0.724	0.755
ME-1307-7	0.739	0.744	0.762	0.706	0.763	0.73	0.74	0.725	0.773	0.743	0.698	0.754	0.755	0.749	0.762
ME-1307-8	0.746	0.714	0.756	0.711	0.764	0.73	0.73	0.716	0.768	0.740	0.687	0.765	0.754	0.745	0.766
ME-1307-9	0.745	0.719	0.759	0.711	0.758	0.74	0.74	0.724	0.771	0.733	0.667	0.770	0.740	0.734	0.743
ME-1307-10	0.749	0.731	0.731	0.705	0.754	0.74	0.73	0.733	0.705	0.730	0.684	0.763	0.752	0.760	0.741
Mean	0.747	0.733	0.745	0.706	0.756	0.736	0.741	0.726	0.752	0.740	0.683	0.763	0.746	0.743	0.759
Std. Devn.	0.0045	0.0112	0.0144	0.0035	0.0120	0.0070	0.0088	0.0103	0.0206	0.0063	0.0125	0.0061	0.0069	0.0105	0.0099
% RSD	0.61	1.53	1.93	0.49	1.58	0.95	1.18	1.42	2.74	0.85	1.84	0.80	0.93	1.41	1.31

**Notes:** Cu data from laboratories 3 and 7 was removed for failing the t test.  
Pb data from laboratories 7 and 8 was removed for failing the t test.  
Zn data from laboratories 4 and 11 was removed for failing the t test.

**REFERENCE MATERIAL CDN-ME-1307**

**Participating Laboratories:**

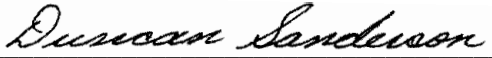
(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver, BC, Canada  
Actlabs, Ancaster, Ontario, Canada  
Actlabs, Kamloops, BC, Canada  
Actlabs, Thunder Bay, Ontario, Canada  
ALS Canada Inc., North Vancouver, BC, Canada  
ALS, Loughrea, Ireland (Omac)  
ALS, Reno, Nevada, USA  
American Assay Laboratories Inc., Sparks, Nevada, USA  
Alex Stewart Assayers, Argentina  
Certimin, Lima, Peru  
Genalysis, Perth, Australia  
Met-Solve Analytical Services, Langley, BC, Canada  
SGS, Lima, Peru  
TSL Laboratories Ltd., Saskatoon, Saskatchewan, Canada  
Ultra Trace, Perth, Australia


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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.