

# **CDN Resource Laboratories Ltd.**

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## **REFERENCE MATERIAL: CDN-ME-3**

Recommended values and the “Between Lab” Two Standard Deviations

<b>Gold</b>	<b>9.77 g/t Au</b>	<b>± 0.58 g/t Au</b>	<b>(FA / Grav.)</b>
<b>Silver</b>	<b>276 g/t Ag</b>	<b>± 17.1 g/t Ag</b>	<b>(FA / Grav.)</b>
<b>Silver</b>	<b>275 g/t Ag</b>	<b>± 16.2 g/t Ag</b>	<b>(Digestion / ICP)</b>
<b>Copper</b>	<b>0.180 % Cu</b>	<b>± 0.012 % Cu</b>	
<b>Lead</b>	<b>2.82 % Pb</b>	<b>± 0.12 % Pb</b>	
<b>Zinc</b>	<b>0.88 % Zn</b>	<b>± 0.06 % Zn</b>	

**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 20, 2009

### **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 thirteen laboratories for round robin assaying.

### **ORIGIN OF REFERENCE MATERIAL:**

This standard is made primarily from ore supplied by US Silver from the Coeur d' Alene mining district in northern Idaho. The mineralization occurs as veins hosted by weakly metamorphosed siliceous sediments. Ag-Cu ore occurs as tetrahedrite, and variable amounts of pyrite and chalcopyrite. Minor Pb is associated with Ag-Cu veins. Other portions of the mineralized areas include Pb-Ag veins primarily consisting of galena and quartz.

Approximately 230 kg of US Silver ore was blended with 230 kg of a high grade gold ore, 230 kg of blank granitic rock and 10 kg of a zinc concentrate.

### **Approximate chemical composition is as follows:**

	Percent			Percent
SiO <sub>2</sub>	65.1		MgO	1.1
Al <sub>2</sub> O <sub>3</sub>	8.2		K <sub>2</sub> O	2.1
Fe <sub>2</sub> O <sub>3</sub>	10.5		TiO <sub>2</sub>	0.4
CaO	1.4		LOI	6.4
Na <sub>2</sub> O	1.4		S	3.2

### **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 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, Ag:** Fire assay pre-concentration, gravimetric finish (30g sub-sample).

**Ag, Cu, Pb, Zn:** 4-acid digestion, AA or ICP finish.

## REFERENCE MATERIAL CDN-ME-3

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
	Au g/t												
ME-3-1	9.43	10.10	10.20	10.70	9.74	9.99	8.98	9.48	9.61	9.33	9.75	9.96	10.04
ME-3-2	9.84	9.51	10.00	10.35	9.64	9.98	8.95	9.69	9.65	9.67	9.59	9.90	10.10
ME-3-3	10.18	9.41	10.53	10.55	9.80	9.70	9.17	10.20	9.35	9.67	9.75	9.90	10.12
ME-3-4	9.41	10.05	9.70	10.45	9.60	9.56	9.41	9.60	9.74	9.67	9.80	10.00	10.19
ME-3-5	9.84	9.58	10.00	9.80	9.47	9.58	9.47	9.50	10.15	9.33	9.95	9.81	10.01
ME-3-6	9.76	9.87	10.50	10.55	9.60	9.59	9.86	9.10	10.01	9.67	9.96	10.30	10.19
ME-3-7	9.53	9.93	9.77	10.75	9.50	9.23	9.42	9.99	9.43	9.67	9.62	10.40	10.19
ME-3-8	9.96	9.63	9.73	11.15	9.74	9.37	8.94	9.87	9.82	9.33	9.86	10.10	10.04
ME-3-9	9.77	9.96	10.20	11.35	9.41	9.58	9.63	9.65	11.90	9.33	9.81	10.20	10.15
ME-3-10	9.53	9.61	10.27	10.85	9.40	9.67	9.95	9.53	10.24	9.67	9.70	10.10	10.19
Mean	9.73	9.77	10.09	10.65	9.59	9.63	9.38	9.66	9.99	9.53	9.78	10.07	10.12
Std. Devn.	0.2482	0.2443	0.3016	0.4301	0.1425	0.2351	0.3664	0.3051	0.7311	0.1756	0.1242	0.1894	0.0687
% RSD	2.55	2.50	2.99	4.04	1.49	2.44	3.91	3.16	7.32	1.84	1.27	1.88	0.68
(FA / Grav.)	Ag g/t												
ME-3-1	276	265	272.5	269	271		269.6	272	291	272			279.4
ME-3-2	273	253	271.5	271	272		269.7	275	292	274			281.2
ME-3-3	278	268	261.6	272	269		287.0	276	289	270			280.1
ME-3-4	279	263	278.6	273	281		290.6	276	290	272			281.0
ME-3-5	280	257	281.9	271	273		278.0	270	292	271			280.7
ME-3-6	281	258	274.8	269	283		310.5	259	292	272			279.7
ME-3-7	283	255	275.1	271	267		290.3	273	290	272			280.0
ME-3-8	289	260	266.3	272	282		274.3	273	287	272			281.1
ME-3-9	289	265	266.2	269	278		311.4	276	286	267			279.3
ME-3-10	290	259	282.5	272	272		307.9	278	289	269			281.5
Mean	281.8	260.3	273.1	270.9	274.8		288.9	272.8	289.8	271.1			280.4
Std. Devn.	5.865	4.832	6.928	1.449	5.731		16.382	5.391	2.098	1.969			0.799
% RSD	2.08	1.86	2.54	0.53	2.09		5.67	1.98	0.72	0.73			0.28
Digestion / ICP	Ag g/t												
ME-3-1	273		268.8	262	271	284	286.5		267		284	262	
ME-3-2	271		271.8	267	276	282	282.7		271		286	254	
ME-3-3	271		266.6	265	277	289	285.2		268		281	254	
ME-3-4	272		265.7	268	270	279	285.1		271		284	260	
ME-3-5	276		273.1	267	298	286	283.9		270		282	262	
ME-3-6	279		262.0	270	280	286	286.6		270		282	264	
ME-3-7	274		272.6	268	289	281	282.7		271		282	260	
ME-3-8	277		269.1	269	287	279	283		277		275	250	
ME-3-9	273		264.1	270	279	282	284.5		278		281	254	
ME-3-10	274		263.7	271	283	278	283.9		266		284	256	
Mean	274.0		267.8	267.7	281.0	282.6	284.4		270.9		282.1	257.6	
Std. Devn.	2.625		3.941	2.669	8.563	3.596	1.439		3.900		2.961	4.600	
% RSD	0.96		1.47	1.00	3.05	1.27	0.51		1.44		1.05	1.79	

NOTE: Lab. 6, 11, 12 were unable to provide FA/ Grav. data for Ag.  
 Lab. 2, 8, 10, 13 were unable to provide Digestion / ICP. data for Ag.

Au data from Lab 4 was excluded for failing the “t” test

## **REFERENCE MATERIAL CDN-ME-3**

**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
	% Cu												
ME-3-1	0.181	0.190	0.209	0.173	0.178	0.181	0.171	0.19	0.184	0.182	0.191	0.182	0.171
ME-3-2	0.179	0.186	0.208	0.171	0.188	0.185	0.174	0.18	0.183	0.182	0.190	0.174	0.171
ME-3-3	0.178	0.189	0.202	0.172	0.182	0.180	0.174	0.18	0.180	0.181	0.186	0.175	0.171
ME-3-4	0.179	0.189	0.202	0.175	0.174	0.183	0.175	0.18	0.180	0.184	0.190	0.182	0.172
ME-3-5	0.183	0.190	0.206	0.174	0.181	0.179	0.176	0.18	0.183	0.186	0.189	0.175	0.171
ME-3-6	0.182	0.190	0.209	0.175	0.181	0.179	0.178	0.18	0.180	0.181	0.189	0.177	0.172
ME-3-7	0.183	0.189	0.206	0.176	0.189	0.181	0.173	0.18	0.180	0.181	0.189	0.177	0.172
ME-3-8	0.183	0.188	0.210	0.175	0.187	0.175	0.173	0.18	0.185	0.179	0.187	0.173	0.172
ME-3-9	0.178	0.190	0.210	0.175	0.190	0.181	0.177	0.18	0.186	0.181	0.188	0.173	0.171
ME-3-10	0.182	0.188	0.203	0.179	0.185	0.180	0.180	0.18	0.178	0.180	0.187	0.178	0.171
Mean	0.181	0.189	0.207	0.175	0.184	0.180	0.175	0.181	0.182	0.182	0.189	0.177	0.172
Std. Devn.	0.0021	0.0013	0.0032	0.0022	0.0052	0.0026	0.0027	0.0032	0.0026	0.0020	0.0016	0.0033	0.0005
% RSD	1.16	0.68	1.55	1.27	2.83	1.46	1.53	1.75	1.45	1.10	0.83	1.87	0.29
	% Pb												
ME-3-1	2.85	2.84	2.75	2.99	2.83	2.93	2.851	2.75	2.87	2.92	2.875	2.81	2.800
ME-3-2	2.84	2.74	2.70	2.88	2.86	2.86	2.866	2.74	2.76	2.89	2.876	2.79	2.793
ME-3-3	2.85	2.81	2.77	3.00	2.84	2.91	2.848	2.74	2.82	2.87	2.804	2.80	2.810
ME-3-4	2.89	2.80	2.70	3.00	2.75	2.80	2.848	2.75	2.75	2.84	2.853	2.83	2.789
ME-3-5	2.92	2.79	2.73	3.02	3.12	2.86	2.834	2.73	2.74	2.87	2.853	2.82	2.880
ME-3-6	2.93	2.77	2.65	3.09	2.94	2.90	2.819	2.74	2.80	2.87	2.853	2.87	2.794
ME-3-7	2.89	2.79	2.71	2.99	3.07	2.82	2.834	2.75	2.73	2.87	2.853	2.79	2.782
ME-3-8	2.90	2.80	2.72	3.00	3.04	2.85	2.867	2.76	2.86	2.86	2.815	2.79	2.789
ME-3-9	2.90	2.84	2.71	2.99	3.04	2.86	2.820	2.73	2.82	2.86	2.845	2.79	2.781
ME-3-10	2.90	2.80	2.67	2.99	3.01	2.87	2.833	2.74	2.71	2.93	2.837	2.81	2.793
Mean	2.89	2.80	2.71	3.00	2.95	2.87	2.84	2.74	2.79	2.88	2.85	2.81	2.80
Std. Devn.	0.0306	0.0297	0.0351	0.0506	0.1237	0.0395	0.0169	0.0095	0.0558	0.0278	0.023	0.0254	0.029
% RSD	1.06	1.06	1.29	1.69	4.19	1.38	0.60	0.35	2.00	0.97	0.81	0.90	1.03
	% Zn												
ME-3-1	0.90	0.913	0.86	0.843	0.877	0.919	0.855	0.84	0.889	0.882	0.915	0.872	0.913
ME-3-2	0.90	0.896	0.84	0.847	0.891	0.899	0.857	0.85	0.882	0.865	0.908	0.877	0.923
ME-3-3	0.90	0.913	0.85	0.847	0.877	0.912	0.833	0.85	0.864	0.864	0.894	0.876	0.919
ME-3-4	0.90	0.920	0.85	0.856	0.869	0.891	0.855	0.85	0.878	0.864	0.911	0.888	0.912
ME-3-5	0.92	0.919	0.85	0.847	0.959	0.900	0.853	0.84	0.890	0.883	0.909	0.880	0.920
ME-3-6	0.93	0.913	0.84	0.854	0.914	0.908	0.839	0.85	0.869	0.875	0.909	0.882	0.923
ME-3-7	0.93	0.913	0.84	0.853	0.947	0.903	0.853	0.85	0.876	0.869	0.909	0.883	0.919
ME-3-8	0.92	0.909	0.86	0.856	0.937	0.894	0.830	0.85	0.896	0.873	0.901	0.881	0.913
ME-3-9	0.90	0.919	0.84	0.850	0.923	0.898	0.837	0.85	0.894	0.876	0.906	0.878	0.923
ME-3-10	0.92	0.910	0.85	0.852	0.927	0.896	0.858	0.85	0.868	0.880	0.912	0.872	0.920
Mean	0.912	0.913	0.848	0.851	0.912	0.902	0.847	0.848	0.881	0.873	0.907	0.879	0.918
Std. Devn.	0.0132	0.0069	0.0079	0.0044	0.0319	0.0087	0.0109	0.0042	0.0114	0.0073	0.0061	0.005	0.0045
% RSD	1.44	0.76	0.93	0.52	3.50	0.96	1.29	0.50	1.30	0.84	0.67	0.57	0.49

**NOTE: Cu data from Lab 3 was excluded for failing the “t” test  
Pb data from Labs 4 and 5 was excluded for failing the “t” test**

## **REFERENCE MATERIAL CDN-ME-3**

### **Participating Laboratories:**

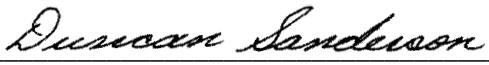
(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver  
Actlabs-Ancaster, Ontario, Canada  
Actlabs-Thunder Bay, Ontario, Canada  
ALS Chemex Laboratories, North Vancouver  
Alaska Assay Laboratories, Alaska, USA  
Assayers Canada Ltd., Vancouver  
Eco Tech, B.C., Canada  
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Certified by

  
Duncan Sanderson, Certified Assayer of B.C.

Geochemist

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