

# **CDN Resource Laboratories Ltd.**

#2, 20148 – 102<sup>nd</sup> Ave, Langley, B.C., Canada, V1M 4B4, 604-882-8422, Fax: 604-882-8466 ([www.cdnlabs.com](http://www.cdnlabs.com))

## **REFERENCE MATERIAL: CDN-ME-1409**

Recommended values and the “Between Lab” Two Standard Deviations

<b>Gold</b>	<b>0.646 g/t</b>	<b>±</b>	<b>0.070 g/t</b>	<b>Certified value</b>
<b>Silver</b>	<b>11.6 g/t</b>	<b>±</b>	<b>1.6 g/t</b>	<i>Provisional value</i>
<b>Copper</b>	<b>0.242 %</b>	<b>±</b>	<b>0.010 %</b>	<b>Certified value</b>
<b>Lead</b>	<b>0.065 %</b>	<b>±</b>	<b>0.002 %</b>	<b>Certified value</b>
<b>Zinc</b>	<b>0.771 %</b>	<b>±</b>	<b>0.038 %</b>	<b>Certified value</b>

**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 Smeet, Ph.D., P. Geo.

**DATE OF CERTIFICATION:** November 17, 2014

### **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:**

The ore was supplied by Farallon Resources from their Campo Morado property in Mexico. The Campo Morado precious-metal-bearing, volcanogenic massive sulphide deposits occur in a lower Cretaceous bimodal, calc-alkaline volcanic sequence. Most deposits occur in the upper part of a sequence of felsic flows and heterolithic volcanoclastic rocks or at its contact with overlying chert and argillite. Gold, silver, zinc, and lead are associated with pyrite, quartz, ankerite, sphalerite, chalcopyrite and galena, with minor tennanite-freibergite, arsenopyrite, and pyrrhotite. Standard CDN-ME-1409 was made by combining 797 kg of Farallon material with 3 kg of a high grade gold ore.

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

	Percent			Percent
SiO <sub>2</sub>	61.7		MgO	4.5
Al <sub>2</sub> O <sub>3</sub>	6.0		K <sub>2</sub> O	0.5
Fe <sub>2</sub> O <sub>3</sub>	13.5		TiO <sub>2</sub>	0.2
CaO	2.7		LOI	9.3
Na <sub>2</sub> O	0.1		S	7.6
C	1.2			

### **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  $\pm 2$  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.

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

## **REFERENCE MATERIAL CDN-ME-1409**

**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														
ME-1409-1	0.692	0.661	0.704	0.570	0.676	0.702	0.668	0.706	0.720	0.656	0.641	0.543	0.710	0.584	0.600
ME-1409-2	0.674	0.626	0.705	0.585	0.645	0.761	0.651	0.618	0.630	0.650	0.628	0.581	0.704	0.612	0.600
ME-1409-3	0.662	0.677	0.729	0.610	0.642	0.683	0.682	0.598	0.600	0.615	0.635	0.593	0.674	0.636	0.590
ME-1409-4	0.655	0.675	0.696	0.595	0.681	0.766	0.677	0.622	0.550	0.678	0.685	0.637	0.647	0.661	0.640
ME-1409-5	0.629	0.677	0.692	0.606	0.633	0.760	0.675	0.583	0.640	0.626	0.665	0.600	0.617	0.645	0.620
ME-1409-6	0.655	0.628	0.657	0.573	0.690	0.739	0.657	0.599	0.620	0.652	0.704	0.643	0.626	0.625	0.640
ME-1409-7	0.668	0.665	0.697	0.628	0.615	0.701	0.678	0.650	0.660	0.650	0.701	0.564	0.612	0.647	0.650
ME-1409-8	0.676	0.693	0.710	0.588	0.689	0.753	0.672	0.606	0.670	0.681	0.627	0.585	0.616	0.629	0.630
ME-1409-9	0.729	0.660	0.693	0.613	0.635	0.713	0.661	0.655	0.660	0.678	0.683	0.586	0.641	0.629	0.620
ME-1409-10	0.668	0.701	0.712	0.598	0.636	0.678	0.653	0.613	0.650	0.639	0.645	0.645	0.676	0.619	0.660
Mean	0.671	0.666	0.700	0.597	0.654	0.726	0.667	0.625	0.640	0.653	0.661	0.598	0.652	0.629	0.625
Std. Devn.	0.0263	0.0245	0.0186	0.0183	0.0271	0.0340	0.0112	0.0362	0.0452	0.0222	0.0300	0.0343	0.0366	0.0213	0.0232
% RSD	3.92	3.67	2.66	3.06	4.14	4.68	1.67	5.80	7.06	3.40	4.54	5.73	5.61	3.39	3.71
	Ag g/t														
ME-1409-1	9.1	12	11	11	13.0	12.4	12.3	10	10	12	12	11	10.6	12.1	11.5
ME-1409-2	9.5	13	11	11	13.1	12.2	12.0	10	12	12	11	11	10.9	12.3	11.5
ME-1409-3	9.6	12	11	11	12.9	12.7	12.1	11	12	12	12	11	10.3	11.7	11.5
ME-1409-4	9.6	12	12	12	12.5	12.2	12.1	10	12	12	12	11	10.5	12.0	11.5
ME-1409-5	9.4	13	11	11	13.6	12.1	12.1	9	12	12	11	11	10.4	11.3	12.0
ME-1409-6	9.5	12	11	11	13.2	12.1	12.2	11	14	13	12	11	10.3	11.5	11.5
ME-1409-7	10.2	13	11	12	13.1	12.3	12.4	10	12	12	11	11	11.1	12.3	11.5
ME-1409-8	9.2	12	11	12	13.1	12.4	12.1	11	11	12	12	11	10.9	11.6	11.5
ME-1409-9	10.8	13	11	11	13.1	12.5	12.0	10	13	12	12	11	10.4	11.9	11.5
ME-1409-10	8.6	12	12	11	12.4	12.3	12.3	10	10	12	11	11	10.8	12.1	11.0
Mean	9.6	12.4	11.2	11.3	13.0	12.3	12.2	10.2	11.8	12.1	11.6	11.0	10.6	11.9	11.5
Std. Devn.	0.6005	0.5164	0.4216	0.4830	0.3432	0.1874	0.1350	0.6325	1.2293	0.3162	0.5164	0.0000	0.2860	0.3425	0.2357
% RSD	6.29	4.16	3.76	4.27	2.64	1.52	1.11	6.20	10.42	2.61	4.45	0.00	2.69	2.88	2.05

Notes: Au data from laboratory 6 was removed for failing the t test.  
 Ag data from laboratory 1 was removed for failing the t test.

## **REFERENCE MATERIAL CDN-ME-1409**

### **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														
ME-1409-1	0.237	0.249	0.232	0.240	0.234	0.243	0.24	0.245	0.253	0.244	0.237	0.234	0.250	0.238	0.245
ME-1409-2	0.237	0.244	0.236	0.235	0.231	0.238	0.24	0.238	0.245	0.237	0.240	0.238	0.250	0.241	0.256
ME-1409-3	0.251	0.248	0.234	0.239	0.235	0.241	0.24	0.244	0.248	0.239	0.241	0.227	0.260	0.238	0.249
ME-1409-4	0.247	0.250	0.242	0.240	0.235	0.240	0.24	0.238	0.246	0.239	0.236	0.243	0.250	0.240	0.248
ME-1409-5	0.243	0.251	0.236	0.237	0.237	0.242	0.24	0.241	0.248	0.239	0.234	0.237	0.250	0.241	0.251
ME-1409-6	0.247	0.258	0.241	0.238	0.230	0.240	0.24	0.243	0.249	0.236	0.240	0.247	0.250	0.241	0.252
ME-1409-7	0.246	0.253	0.241	0.241	0.237	0.242	0.24	0.240	0.246	0.240	0.235	0.237	0.250	0.243	0.244
ME-1409-8	0.243	0.256	0.233	0.241	0.238	0.242	0.24	0.241	0.252	0.238	0.240	0.241	0.250	0.246	0.255
ME-1409-9	0.251	0.256	0.243	0.246	0.236	0.249	0.24	0.239	0.253	0.243	0.241	0.232	0.250	0.246	0.242
ME-1409-10	0.248	0.251	0.236	0.237	0.233	0.250	0.24	0.244	0.247	0.240	0.239	0.243	0.250	0.248	0.245
Mean	0.245	0.252	0.237	0.239	0.235	0.243	0.242	0.241	0.249	0.240	0.238	0.238	0.251	0.242	0.249
Std. Devn.	0.0050	0.0042	0.0040	0.0030	0.0026	0.0040	0.0018	0.0026	0.0030	0.0025	0.0026	0.0059	0.0032	0.0035	0.0048
% RSD	2.05	1.69	1.69	1.26	1.12	1.64	0.76	1.07	1.23	1.03	1.08	2.49	1.26	1.44	1.91
	% Pb														
ME-1409-1	0.070	0.06	0.064	0.063	0.066	0.064	0.066	0.065	0.065	0.065	0.064	0.064	0.07	0.065	0.066
ME-1409-2	0.072	0.06	0.065	0.064	0.066	0.064	0.067	0.063	0.063	0.064	0.063	0.062	0.07	0.067	0.066
ME-1409-3	0.072	0.06	0.064	0.063	0.066	0.065	0.066	0.065	0.065	0.065	0.064	0.062	0.07	0.065	0.066
ME-1409-4	0.071	0.06	0.066	0.064	0.067	0.066	0.067	0.064	0.060	0.066	0.063	0.064	0.07	0.066	0.066
ME-1409-5	0.071	0.07	0.066	0.064	0.067	0.064	0.066	0.063	0.065	0.064	0.063	0.065	0.07	0.065	0.065
ME-1409-6	0.069	0.06	0.067	0.063	0.066	0.065	0.065	0.063	0.063	0.065	0.064	0.063	0.07	0.066	0.066
ME-1409-7	0.068	0.06	0.065	0.064	0.066	0.066	0.066	0.063	0.065	0.065	0.063	0.064	0.07	0.065	0.065
ME-1409-8	0.064	0.06	0.065	0.064	0.066	0.065	0.067	0.064	0.064	0.064	0.064	0.062	0.06	0.065	0.067
ME-1409-9	0.066	0.06	0.064	0.065	0.066	0.067	0.067	0.064	0.064	0.066	0.064	0.063	0.07	0.067	0.066
ME-1409-10	0.067	0.06	0.063	0.064	0.066	0.066	0.065	0.065	0.067	0.065	0.063	0.064	0.07	0.067	0.067
Mean	0.069	0.061	0.065	0.064	0.066	0.065	0.066	0.064	0.064	0.065	0.064	0.063	0.069	0.066	0.066
Std. Devn.	0.0027	0.0032	0.0012	0.0006	0.0004	0.0009	0.0008	0.0009	0.0018	0.0007	0.0005	0.0011	0.0032	0.0009	0.0007
% RSD	3.92	5.18	1.84	0.99	0.61	1.37	1.19	1.37	2.82	1.14	0.83	1.77	4.58	1.39	0.99
	% Zn														
ME-1409-1	0.790	0.780	0.750	0.763	0.740	0.752	0.756	0.783	0.773	0.797	0.779	0.74	0.80	0.772	0.760
ME-1409-2	0.779	0.780	0.765	0.763	0.738	0.751	0.759	0.774	0.755	0.764	0.780	0.73	0.80	0.766	0.769
ME-1409-3	0.822	0.790	0.751	0.769	0.760	0.760	0.754	0.772	0.754	0.762	0.792	0.74	0.82	0.765	0.769
ME-1409-4	0.812	0.800	0.776	0.767	0.753	0.756	0.760	0.762	0.759	0.777	0.777	0.71	0.80	0.770	0.758
ME-1409-5	0.804	0.810	0.766	0.762	0.747	0.753	0.758	0.771	0.754	0.764	0.780	0.71	0.81	0.769	0.762
ME-1409-6	0.801	0.830	0.777	0.769	0.736	0.747	0.750	0.783	0.763	0.766	0.790	0.71	0.81	0.770	0.754
ME-1409-7	0.816	0.810	0.779	0.774	0.767	0.758	0.755	0.766	0.775	0.775	0.782	0.73	0.82	0.770	0.742
ME-1409-8	0.804	0.810	0.750	0.769	0.753	0.754	0.751	0.767	0.761	0.780	0.777	0.72	0.74	0.768	0.773
ME-1409-9	0.818	0.810	0.773	0.780	0.746	0.773	0.753	0.767	0.775	0.791	0.796	0.71	0.83	0.779	0.765
ME-1409-10	0.827	0.810	0.751	0.762	0.743	0.765	0.751	0.785	0.776	0.755	0.780	0.73	0.81	0.788	0.758
Mean	0.807	0.803	0.764	0.768	0.748	0.757	0.755	0.773	0.764	0.773	0.783	0.723	0.804	0.772	0.761
Std. Devn.	0.0148	0.0157	0.0123	0.0058	0.0100	0.0075	0.0035	0.0081	0.0093	0.0134	0.0068	0.0125	0.0246	0.0068	0.0089
% RSD	1.84	1.95	1.61	0.76	1.33	0.99	0.47	1.05	1.22	1.74	0.87	1.73	3.06	0.88	1.17

Notes: Pb data from laboratories 1, 2 and 13 was removed for failing the t test.  
Zn data from laboratory 12 was removed for failing the t test.

## **REFERENCE MATERIAL CDN-ME-1409**

### **Participating Laboratories:**

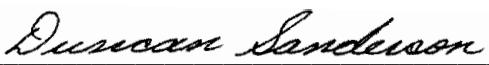
(not in same order as listed in table of results)

Bureau Veritas, Vancouver, BC, Canada  
Actlabs, Ancaster, Ontario, Canada  
Actlabs, Thunder Bay, Ontario, Canada  
AGAT, Mississauga, Ontario, Canada  
ALS Canada Inc., North Vancouver, BC, Canada  
ALS, Loughrea, Ireland (Omac)  
American Assay Laboratories, Nevada, USA  
Certimin, Lima, Peru  
Intertek - Genalysis, Perth, Australia  
Met-Solve, Langley, B.C., Canada  
SGS, Lima, Peru  
SGS Canada Inc., Burnaby, BC, Canada  
Skyline Assayers and Laboratories, Arizona, USA  
TSL Laboratories Ltd., Saskatoon, Saskatchewan, Canada  
Bureau Veritas, 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.