

# CDN Resource Laboratories Ltd.

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## REFERENCE MATERIAL: CDN-ME-1406

Recommended values and the “Between Lab” Two Standard Deviations

<i>Gold</i>	<i>0.678 g/t ± 0.054 g/t</i>	<i>Certified value</i>
<i>Silver</i>	<i>57.1 g/t ± 3.7 g/t</i>	<i>Certified value</i>
<i>Copper</i>	<i>0.320 % ± 0.012 %</i>	<i>Certified value</i>
<i>Lead</i>	<i>0.485 % ± 0.026 %</i>	<i>Certified value</i>
<i>Zinc</i>	<i>2.27 % ± 0.08 %</i>	<i>Certified value</i>

**Note 1:** 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.

**Note 2:** Standard CDN-ME-1406 is a high sulphide sample and has been pre-packaged in kraft bags which have been individually vacuum-sealed in nylon bags in either 60g or 100g quantities. It is available for purchase in lots of either 10 x 60g or 10 x 100g. High sulphide samples will stay valid indefinitely while vacuum sealed and should stay that way until the lab is ready to analyse the standard. After opening we cannot guarantee their accuracy for any length of time but resealing and storing in a cold dark place should reduce the oxidation rate.

**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 26, 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 tennantite-freibergite, arsenopyrite, and pyrrhotite.

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

	Percent		Percent
SiO <sub>2</sub>	45.9	MgO	3.1
Al <sub>2</sub> O <sub>3</sub>	6.4	K <sub>2</sub> O	1.1
Fe <sub>2</sub> O <sub>3</sub>	22.7	TiO <sub>2</sub>	0.2
CaO	2.3	LOI	14.4
Na <sub>2</sub> O	0.1	S	15.8
C	1.3		

### **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-1406

### 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.

### 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-1406-1	0.679	0.690	0.680	0.743	0.675	0.679	0.695	0.656	0.680	0.733	0.660	0.637	0.682	0.657	0.660
ME-1406-2	0.683	0.743	0.709	0.833	0.711	0.695	0.691	0.660	0.690	0.655	0.637	0.687	0.689	0.677	0.640
ME-1406-3	0.700	0.713	0.701	0.790	0.689	0.687	0.700	0.666	0.670	0.695	0.643	0.630	0.638	0.675	0.680
ME-1406-4	0.639	0.720	0.675	0.747	0.675	0.706	0.679	0.643	0.680	0.728	0.642	0.650	0.691	0.670	0.670
ME-1406-5	0.689	0.653	0.704	0.737	0.685	0.675	0.678	0.652	0.660	0.681	0.623	0.634	0.768	0.676	0.650
ME-1406-6	0.642	0.663	0.658	0.737	0.690	0.692	0.714	0.659	0.660	0.697	0.662	0.702	0.783	0.638	0.630
ME-1406-7	0.678	0.716	0.664	0.738	0.689	0.696	0.680	0.687	0.720	0.680	0.665	0.609	0.674	0.646	0.650
ME-1406-8	0.678	0.718	0.707	0.705	0.739	0.680	0.711	0.668	0.680	0.725	0.634	0.619	0.717	0.689	0.620
ME-1406-9	0.695	0.716	0.651	0.703	0.724	0.703	0.694	0.666	0.660	0.678	0.614	0.649	0.675	0.670	0.650
ME-1406-10	0.689	0.715	0.655	0.661	0.690	0.691	0.691	0.657	0.660	0.672	0.631	0.660	0.678	0.666	0.660
Mean	0.677	0.705	0.680	0.739	0.697	0.690	0.693	0.661	0.676	0.694	0.641	0.648	0.700	0.666	0.651
Std. Devn.	0.0207	0.0278	0.0231	0.0472	0.0212	0.0102	0.0125	0.0117	0.0190	0.0264	0.0170	0.0290	0.0447	0.0154	0.0179
% RSD	3.05	3.94	3.40	6.39	3.04	1.48	1.81	1.76	2.81	3.80	2.65	4.48	6.39	2.31	2.75
	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-1406-1	56	60	59	60	59	56	56	57	62	55	55	57	56	58	55
ME-1406-2	57	60	59	57	59	57	58	59	60	55	54	59	55	57	55
ME-1406-3	54	60	65	58	63	57	57	57	58	54	55	58	56	58	53
ME-1406-4	58	61	62	55	59	59	59	59	59	54	55	57	54	57	54
ME-1406-5	57	60	61	57	61	58	58	58	59	54	55	57	55	57	56
ME-1406-6	56	60	58	56	60	57	56	57	62	56	55	57	55	56	54
ME-1406-7	56	60	60	56	59	58	59	57	60	56	55	54	56	58	55
ME-1406-8	57	59	59	56	61	59	59	57	59	56	55	57	56	57	54
ME-1406-9	57	59	59	56	57	57	59	58	56	56	54	58	56	57	55
ME-1406-10	58	59	58	55	61	57	58	57	58	54	56	57	58	57	56
Mean	56.5	59.8	60.0	56.6	59.8	57.5	57.9	57.6	59.5	55.0	54.9	57.1	55.5	57.3	54.5
Std. Devn.	0.9163	0.6325	2.1602	1.5055	1.6687	0.9718	1.1972	0.8433	1.8233	0.9428	0.5777	1.2867	0.9058	0.5051	0.8498
% RSD	1.62	1.06	3.60	2.66	2.79	1.69	2.07	1.46	3.06	1.71	1.05	2.25	1.63	0.88	1.56

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## 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-1406-1	0.330	0.319	0.321	0.319	0.312	0.317	0.32	0.313	0.326	0.329	0.308	0.320	0.330	0.323	0.317
ME-1406-2	0.320	0.327	0.325	0.309	0.311	0.319	0.32	0.317	0.330	0.330	0.306	0.300	0.340	0.320	0.323
ME-1406-3	0.311	0.324	0.335	0.310	0.320	0.319	0.32	0.313	0.318	0.324	0.309	0.320	0.330	0.324	0.327
ME-1406-4	0.328	0.323	0.335	0.324	0.310	0.313	0.32	0.313	0.321	0.314	0.305	0.300	0.330	0.323	0.323
ME-1406-5	0.321	0.319	0.328	0.326	0.326	0.321	0.32	0.314	0.318	0.327	0.310	0.320	0.330	0.320	0.325
ME-1406-6	0.315	0.322	0.322	0.322	0.315	0.319	0.32	0.311	0.325	0.329	0.309	0.330	0.340	0.322	0.322
ME-1406-7	0.322	0.323	0.328	0.318	0.308	0.319	0.32	0.314	0.322	0.328	0.310	0.320	0.340	0.326	0.330
ME-1406-8	0.317	0.322	0.321	0.324	0.323	0.323	0.33	0.310	0.321	0.330	0.306	0.320	0.300	0.320	0.323
ME-1406-9	0.317	0.320	0.321	0.322	0.315	0.319	0.32	0.318	0.300	0.323	0.305	0.310	0.330	0.322	0.320
ME-1406-10	0.326	0.320	0.319	0.314	0.311	0.323	0.32	0.311	0.321	0.321	0.309	0.320	0.340	0.319	0.329
Mean	0.321	0.322	0.326	0.319	0.315	0.319	0.321	0.313	0.320	0.326	0.308	0.316	0.331	0.322	0.324
Std. Devn.	0.0060	0.0025	0.0059	0.0060	0.0060	0.0029	0.0032	0.0025	0.0078	0.0051	0.0018	0.0097	0.0120	0.0021	0.0040
% RSD	1.87	0.78	1.80	1.88	1.91	0.91	0.99	0.81	2.44	1.57	0.58	3.06	3.62	0.66	1.23
	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb	% Pb
ME-1406-1	0.488	0.500	0.551	0.494	0.479	0.490	0.470	0.484	0.475	0.493	0.460	0.490	0.520	0.486	0.528
ME-1406-2	0.474	0.500	0.542	0.485	0.478	0.490	0.470	0.493	0.488	0.491	0.459	0.490	0.530	0.481	0.522
ME-1406-3	0.487	0.510	0.565	0.487	0.487	0.491	0.470	0.488	0.483	0.484	0.458	0.480	0.520	0.489	0.523
ME-1406-4	0.486	0.510	0.563	0.498	0.479	0.491	0.480	0.484	0.481	0.488	0.459	0.480	0.510	0.481	0.519
ME-1406-5	0.479	0.510	0.556	0.496	0.492	0.496	0.470	0.483	0.481	0.482	0.464	0.490	0.520	0.479	0.524
ME-1406-6	0.478	0.510	0.544	0.490	0.485	0.490	0.480	0.482	0.485	0.505	0.464	0.490	0.530	0.479	0.513
ME-1406-7	0.479	0.500	0.555	0.497	0.473	0.492	0.480	0.484	0.488	0.502	0.461	0.460	0.530	0.486	0.517
ME-1406-8	0.477	0.500	0.550	0.503	0.490	0.494	0.480	0.481	0.488	0.503	0.458	0.480	0.480	0.484	0.515
ME-1406-9	0.481	0.500	0.547	0.497	0.464	0.490	0.480	0.494	0.461	0.496	0.458	0.490	0.530	0.488	0.522
ME-1406-10	0.496	0.500	0.540	0.486	0.481	0.493	0.470	0.482	0.487	0.480	0.460	0.480	0.540	0.486	0.523
Mean	0.483	0.504	0.551	0.493	0.481	0.492	0.475	0.486	0.482	0.492	0.460	0.483	0.521	0.484	0.521
Std. Devn.	0.0066	0.0052	0.0085	0.0060	0.0083	0.0021	0.0053	0.0046	0.0083	0.0090	0.0022	0.0095	0.0166	0.0036	0.0046
% RSD	1.37	1.02	1.54	1.22	1.73	0.42	1.11	0.95	1.72	1.83	0.47	1.96	3.19	0.75	0.87
	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn	% Zn
ME-1406-1	2.32	2.25	2.28	2.25	2.15	2.25	2.28	2.27	2.31	2.31	2.05	2.30	2.36	2.27	2.21
ME-1406-2	2.20	2.27	2.29	2.22	2.15	2.25	2.29	2.31	2.36	2.31	2.04	2.20	2.39	2.25	2.28
ME-1406-3	2.29	2.26	2.36	2.22	2.18	2.22	2.27	2.28	2.30	2.26	2.06	2.29	2.35	2.28	2.29
ME-1406-4	2.24	2.26	2.33	2.27	2.13	2.22	2.29	2.28	2.29	2.20	2.05	2.11	2.33	2.25	2.25
ME-1406-5	2.30	2.24	2.34	2.28	2.23	2.26	2.25	2.27	2.38	2.30	2.03	2.26	2.34	2.24	2.28
ME-1406-6	2.20	2.26	2.27	2.23	2.18	2.27	2.28	2.26	2.33	2.30	2.05	2.29	2.38	2.23	2.26
ME-1406-7	2.18	2.24	2.31	2.25	2.16	2.26	2.29	2.27	2.33	2.30	2.05	2.28	2.39	2.28	2.27
ME-1406-8	2.27	2.25	2.27	2.29	2.22	2.28	2.29	2.25	2.32	2.31	2.05	2.25	2.19	2.24	2.25
ME-1406-9	2.21	2.24	2.27	2.28	2.15	2.21	2.32	2.31	2.15	2.27	2.05	2.23	2.37	2.29	2.28
ME-1406-10	2.23	2.24	2.25	2.21	2.13	2.22	2.31	2.23	2.37	2.26	2.04	2.25	2.41	2.26	2.29
Mean	2.24	2.25	2.30	2.25	2.17	2.24	2.29	2.27	2.32	2.28	2.05	2.25	2.35	2.26	2.27
Std. Devn.	0.0483	0.0110	0.0362	0.0291	0.0346	0.0246	0.0195	0.0245	0.0654	0.0352	0.0077	0.0568	0.0617	0.0198	0.0246
% RSD	2.15	0.49	1.58	1.29	1.59	1.09	0.85	1.08	2.82	1.54	0.38	2.53	2.63	0.88	1.08

Notes: Cu data from laboratory 13 was removed for failing the t test.  
Pb data from laboratories 3 and 13 was removed for failing the t test.  
Zn data from laboratory 11 was removed for failing the t test.

**REFERENCE MATERIAL CDN-ME-1406**

**Participating Laboratories:**

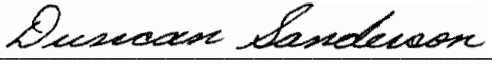
(not in same order as listed in table of results)

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

  
Duncan Sanderson, Certified Assayer of B.C.

Geochemist

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