

CDN Resource Laboratories Ltd.

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

REFERENCE MATERIAL: CDN-ME-1708

Recommended values and the “Between Lab” Two Standard Deviations

Gold	6.96 g/t	±	0.50 g/t	30 g FA, instrumental	Certified value
Gold	6.85 g/t	±	0.64 g/t	30 g FA, Gravimetric	Certified value
Silver	53.9 ppm	±	4.0 ppm	4-Acid / ICP	Certified value
Copper	2.00 %	±	0.07 %	4 Acid / ICP	Certified value
Lead	0.171 %	±	0.012 %	4 Acid / ICP	Certified value
Zinc	0.484 %	±	0.026 %	4 Acid / ICP	Certified value

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:

March 13, 2018

ORIGIN OF REFERENCE MATERIAL:

Standard CDN-ME-1708 was prepared by combining 700 kg of miscellaneous ores blended with 120 kg of ore from Aurcana's Shafter project.

The Shafter silver project is 375 km southeast of El Paso, in Presidio County, southwest Texas. The mineral deposits in the Shafter district occur mainly as silica-replacement bodies along bedding planes in the upper units of Permian limestone. Silver is present predominately as oxidized acanthite in fine-grained aggregates of quartz, calcite, and goethite, with lesser dolomite, hemimorphite, willemite, anglesite, galena, smithsonite, and sphalerite.

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 commercial laboratories for round robin assaying.

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

	Percent		Percent
SiO ₂	56.1	Na ₂ O	1.6
Al ₂ O ₃	9.4	MgO	2.8
Fe ₂ O ₃	10.4	K ₂ O	0.9
CaO	6.5	TiO ₂	0.3
MnO	0.1	LOI	8.3
S	5.4	C	1.4

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:** 30 g fire assay pre-concentration, AA or ICP finish.
Au: 30 g fire assay pre-concentration, gravimetric finish.
Ag, Cu, Pb, Zn: 4-acid digestion, AA or ICP finish.

Results from round-robin assaying:

Samples	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) by Fire Assay, 30g sample size and Instrumental finish															
ME-1708-1	6.29	6.61	7.33	6.90	7.01	6.56	6.99	7.40	6.56	6.888	7.35	6.991	7.05		6.85
ME-1708-2	6.53	6.21	6.96	7.39	6.77	6.61	7.11	7.40	6.66	7.025	6.77	6.944	7.17		7.10
ME-1708-3	6.96	6.65	7.79	6.71	7.08	6.62	7.14	7.58	6.81	6.907	6.96	7.029	6.76		6.96
ME-1708-4	7.06	6.80	7.16	7.08	6.65	6.81	6.99	7.24	6.86	7.036	6.57	6.967	7.49		6.77
ME-1708-5	7.05	6.20	7.52	7.24	7.00	6.59	7.02	7.31	7.02	7.102	7.02	6.961	6.94		6.80
ME-1708-6	6.63	6.25	7.10	6.65	6.63	7.10	7.02	7.47	6.52	7.102	7.09	6.764	7.69		7.27
ME-1708-7	6.13	6.99	7.14	7.04	6.99	6.89	6.86	7.44	6.63	7.182	6.91	6.541	7.75		6.70
ME-1708-8	6.97	6.50	7.21	7.08	7.02	6.53	7.03	7.23	6.74	7.004	7.09	6.873	6.82		6.67
ME-1708-9	6.70	6.80	7.30	7.13	6.69	6.86	6.82	7.54	6.87	7.198	7.05	6.839	7.30		7.14
ME-1708-10	7.03	6.38	6.58	7.00	6.64	7.06	6.89	7.22	6.93	7.077	6.55	7.195	7.03		7.23
Mean	6.73	6.54	7.21	7.02	6.85	6.76	6.99	7.38	6.76	7.05	6.94	6.91	7.20		6.95
Std. Dev.	0.336	0.277	0.322	0.224	0.187	0.211	0.103	0.129	0.167	0.103	0.249	0.174	0.349		0.222
% RSD	4.99	4.24	4.47	3.19	2.73	3.11	1.48	1.75	2.47	1.46	3.59	2.52	4.84		3.20
Au (g/t) by Fire Assay, 30g sample size and Gravimetric finish															
ME-1708-1	6.92	6.57	7.0	6.90	7.50	6.44	7.08	7.37	6.56	7.19	7.20	6.86	7.11	6.99	6.30
ME-1708-2	6.21	6.93	6.6	7.50	6.70	6.99	6.56	7.22	6.83	6.99	6.99	6.98	6.48	6.86	6.18
ME-1708-3	6.60	6.04	6.6	7.01	6.86	6.84	6.42	7.30	7.02	7.21	6.97	7.07	7.19	6.65	6.42
ME-1708-4	7.26	6.25	7.7	6.67	7.23	6.30	6.52	7.31	6.87	6.57	7.01	7.02	7.06	6.89	6.72
ME-1708-5	7.28	6.19	7.2	6.59	7.04	6.45	6.61	7.33	6.52	7.15	6.67	6.86	7.06	6.72	6.95
ME-1708-6	6.75	6.88	6.6	6.72	7.35	6.70	6.86	7.35	6.99	6.71	6.61	7.29	7.05	6.69	6.57
ME-1708-7	7.19	6.41	6.4	6.66	7.27	6.44	6.63	7.27	6.68	6.77	6.87	6.96	7.28	6.93	6.08
ME-1708-8	7.18	6.37	6.3	6.17	7.20	6.60	6.46	7.30	7.04	7.24	6.74	7.07	7.12	6.65	6.08
ME-1708-9	7.13	6.91	6.5	6.75	6.91	6.74	6.77	7.41	6.46	7.36	6.72	6.96	7.29	6.89	6.45
ME-1708-10	6.71	6.18	6.5	8.40	7.03	6.93	6.68	7.32	6.80	6.81	7.15	7.05	6.50	6.99	6.57
Mean	6.92	6.47	6.7	6.94	7.11	6.64	6.66	7.32	6.78	7.00	6.89	7.01	7.01	6.83	6.43
Std. Dev.	0.351	0.332	0.433	0.615	0.245	0.234	0.200	0.052	0.213	0.270	0.204	0.124	0.289	0.136	0.283
% RSD	5.07	5.13	6.42	8.86	3.44	3.52	3.00	0.71	3.14	3.86	2.95	1.77	4.12	1.99	4.39

Results from round-robin assaying-Continue:

Ag (g/t) 4-acid digestion, Instrumental finish															
ME-1708-1	56	54	50.9	54	53	54.5	55	55.0	55	52.3	52	50	56	48.6	54
ME-1708-2	53	54	50.5	57	54	53.0	57	55.7	56	52.0	55	53	55	46.7	57
ME-1708-3	55	55	50.4	52	51	53.5	55	54.4	55	53.0	55	53	57	48.0	52
ME-1708-4	55	58	51.4	55	52	53.5	57	53.2	56	53.1	54	52	59	47.5	57
ME-1708-5	52	58	51.4	50	50	56.0	53	54.0	59	54.7	53	53	54	47.5	55
ME-1708-6	52	62	50.3	52	53	54.0	56	54.0	57	52.6	55	56	58	47.2	55
ME-1708-7	51	54	49.7	52	51	55.0	54	52.8	58	54.5	55	51	61	45.3	57
ME-1708-8	52	55	51.6	53	52	53.0	57	53.0	58	53.2	55	52	53	46.8	55
ME-1708-9	54	59	51.4	52	54	55.5	59	53.0	57	52.9	52	53	52	48.4	55
ME-1708-10	53	57	51.9	52	52	56.0	56	55.0	57	53.3	55	51	55	49.2	55
Mean	53	57	50.9	53	52	54.4	56	54.0	57	53.2	54	52	56	47.5	55
Std. Dev.	1.636	2.675	0.701	1.969	1.317	1.174	1.729	1.007	1.317	0.862	1.287	1.647	2.789	1.116	1.549
% RSD	3.07	4.73	1.38	3.72	2.52	2.16	3.09	1.86	2.32	1.62	2.38	3.14	4.98	2.35	2.81

Cu (%) 4-acid digestion, Instrumental finish															
ME-1708-1	2.00	1.99	2.06	1.93	1.98	2.00	2.00	1.97	2.02	2.00	1.97	2.05	2.01	2.03	2.04
ME-1708-2	2.05	2.05	2.05	1.95	2.04	1.95	2.14	2.02	1.97	1.99	2.01	2.04	2.00	2.04	2.03
ME-1708-3	2.00	2.05	2.02	1.90	1.96	1.98	2.04	2.03	1.96	2.00	2.00	2.06	2.00	2.03	2.02
ME-1708-4	1.98	2.02	2.05	1.94	2.00	1.99	1.98	1.99	1.99	2.00	1.95	2.02	2.00	2.05	1.99
ME-1708-5	1.93	2.00	1.96	1.92	1.96	1.99	1.98	1.96	1.91	1.99	1.96	2.07	1.99	2.00	2.06
ME-1708-6	2.00	2.08	2.00	1.93	2.01	1.96	1.99	1.96	1.99	2.00	2.03	1.98	2.05	2.04	2.01
ME-1708-7	1.99	1.95	2.04	1.94	1.98	1.97	2.03	2.01	2.03	2.01	1.99	2.03	2.02	2.06	1.97
ME-1708-8	1.98	1.81	2.04	1.95	2.00	1.95	2.04	2.00	2.03	1.97	2.00	2.10	2.01	1.97	2.05
ME-1708-9	1.98	1.90	2.04	1.94	2.01	2.00	2.20	2.00	2.01	2.00	2.02	2.07	2.00	2.05	2.06
ME-1708-10	1.99	2.06	2.03	1.96	1.99	1.97	2.09	1.99	1.96	1.97	2.01	2.04	2.04	2.05	2.04
Mean	1.99	1.99	2.03	1.93	1.99	1.98	2.05	1.99	1.99	1.99	1.99	2.05	2.01	2.03	2.03
Std. Dev.	0.029	0.084	0.030	0.016	0.025	0.019	0.073	0.024	0.037	0.012	0.027	0.033	0.019	0.027	0.030
% RSD	1.48	4.21	1.47	0.84	1.25	0.96	3.55	1.21	1.87	0.58	1.36	1.60	0.96	1.35	1.47

Pb (%) 4-acid digestion, Instrumental finish															
ME-1708-1	0.166	0.180	0.164	0.169	0.169	0.169	0.18	0.170	0.18	0.167	0.18	0.160	0.18	0.17	0.174
ME-1708-2	0.168	0.181	0.160	0.172	0.174	0.168	0.19	0.181	0.18	0.168	0.18	0.162	0.18	0.17	0.171
ME-1708-3	0.169	0.180	0.160	0.166	0.167	0.170	0.18	0.175	0.18	0.170	0.18	0.155	0.18	0.17	0.167
ME-1708-4	0.165	0.183	0.162	0.171	0.174	0.167	0.17	0.176	0.17	0.170	0.18	0.160	0.18	0.17	0.167
ME-1708-5	0.165	0.177	0.158	0.168	0.166	0.170	0.18	0.180	0.17	0.169	0.18	0.159	0.17	0.16	0.173
ME-1708-6	0.166	0.180	0.161	0.167	0.173	0.171	0.17	0.180	0.17	0.170	0.18	0.162	0.18	0.17	0.170
ME-1708-7	0.167	0.175	0.161	0.169	0.168	0.171	0.18	0.177	0.17	0.173	0.18	0.162	0.18	0.17	0.169
ME-1708-8	0.170	0.175	0.162	0.172	0.169	0.169	0.17	0.180	0.18	0.169	0.18	0.163	0.17	0.16	0.172
ME-1708-9	0.169	0.182	0.159	0.166	0.171	0.167	0.19	0.180	0.17	0.171	0.18	0.167	0.18	0.17	0.175
ME-1708-10	0.169	0.182	0.161	0.169	0.169	0.167	0.18	0.180	0.17	0.171	0.18	0.159	0.17	0.17	0.172
Mean	0.167	0.180	0.475	0.169	0.170	0.169	0.18	0.178	0.17	0.170	0.18	0.161	0.18	0.17	0.171
Std. Dev.	0.002	0.003	0.005	0.002	0.003	0.002	0.007	0.003	0.005	0.002	0.000	0.003	0.005	0.004	0.003
% RSD	1.10	1.60	1.04	1.32	1.69	0.94	4.12	1.94	2.97	0.97	0.00	1.95	2.73	2.51	1.61

Zn (%) 4-acid digestion, Instrumental finish															
ME-1708-1	0.482	0.468	0.445	0.475	0.477	0.478	0.49	0.480	0.52	0.472	0.48	0.473	0.50	0.49	0.494
ME-1708-2	0.493	0.473	0.439	0.477	0.497	0.471	0.52	0.497	0.51	0.472	0.48	0.461	0.50	0.50	0.486
ME-1708-3	0.489	0.467	0.439	0.466	0.475	0.476	0.49	0.493	0.52	0.477	0.48	0.463	0.51	0.50	0.487
ME-1708-4	0.487	0.481	0.436	0.481	0.484	0.480	0.48	0.500	0.51	0.476	0.48	0.463	0.52	0.50	0.481
ME-1708-5	0.476	0.461	0.442	0.469	0.477	0.469	0.48	0.490	0.50	0.478	0.47	0.465	0.49	0.49	0.500
ME-1708-6	0.488	0.469	0.438	0.475	0.491	0.472	0.49	0.490	0.51	0.478	0.48	0.468	0.50	0.50	0.487
ME-1708-7	0.488	0.459	0.447	0.478	0.478	0.474	0.49	0.496	0.51	0.482	0.49	0.463	0.50	0.50	0.478
ME-1708-8	0.487	0.465	0.450	0.479	0.487	0.468	0.49	0.500	0.53	0.475	0.48	0.470	0.49	0.48	0.497
ME-1708-9	0.488	0.471	0.441	0.473	0.490	0.469	0.52	0.490	0.51	0.479	0.49	0.468	0.52	0.49	0.497
ME-1708-10	0.491	0.480	0.442	0.481	0.484	0.471	0.49	0.510	0.51	0.478	0.49	0.468	0.50	0.50	0.492
Mean	0.487	0.469	0.442	0.475	0.484	0.473	0.49	0.495	0.51	0.477	0.48	0.466	0.50	0.49	0.490
Std. Dev.	0.005	0.007	0.004	0.005	0.007	0.004	0.014	0.008	0.008	0.003	0.006	0.004	0.011	0.007	0.007
% RSD	0.98	1.54	0.97	1.04	1.51	0.86	2.89	1.63	1.60	0.67	1.31	0.81	2.11	1.43	1.49

Notes: Ag results from Lab 14 were removed for failing the t test.

Zn results from Lab 3 were removed for failing the t test.

Lab 14 only reported Au with gravimetric finish

Participating Laboratories: (not in same order as table of assays)

Activation Laboratories, Ancaster, Ontario, Canada	Certimin S.A., Lima, Peru
Activation Laboratories, Thunder Bay, Ontario, Canada	MS Analytical, Langley, BC, Canada
AGAT Labs, Mississauga, Ontario, Canada	SGS, Vancouver, BC, Canada
ALS Canada, North Vancouver, BC, Canada	SGS, Lima, Peru
ALS, Loughrea, Ireland	SGS, Lakefield, Ontario, Canada
ALS, Lima, Peru	Skyline Assayers & Laboratories, AZ, USA
Bureau Veritas, Perth, Australia	TSL Laboratories Ltd., Saskatoon, SK, Canada
Bureau Veritas, Vancouver, BC, Canada	

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
Duncan Sanderson, Certified Assayer of B.C.

Geochemist


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