

CDN Resource Laboratories Ltd.

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REFERENCE MATERIAL: CDN-MPC-1602

Recommended values and the “Between Lab” Two Standard Deviations

<i>Gold</i>	<i>31.60 g/t ± 1.25 g/t</i>	<i>Certified value</i>	<i>FA / instrumental finish</i>
<i>Silver</i>	<i>47.8 g/t ± 2.5 g/t</i>	<i>Certified value</i>	<i>4-acid / ICP or AA</i>
<i>Copper</i>	<i>23.78 % ± 0.18 %</i>	<i>Certified value</i>	<i>Titration</i>
<i>Iron</i>	<i>26.82 % ± 0.65 %</i>	<i>Certified value</i>	<i>Titration</i>
<i>Sulphur</i>	<i>29.25 % ± 1.40 %</i>	<i>Certified value</i>	<i>Leco</i>
<i>SiO₂</i>	<i>10.29 % ± 0.53 %</i>	<i>Certified value</i>	<i>peroxide fusion, ICP</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.

The certified value and between lab 2SD calculated for each element are done so for a specific analytical procedure. It is inappropriate to apply them to other techniques (eg. geochemical analyses).

PREPARED BY: CDN Resource Laboratories Ltd.

CERTIFIED BY: Duncan Sanderson, B.Sc., Licensed Assayer of British Columbia

INDEPENDENT GEOCHEMIST: Dr. Barry Smeed, Ph.D., P. Geo.

DATE OF CERTIFICATION: February 28, 2017

METHOD OF PREPARATION:

Concentrate 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 9 laboratories for round robin assaying.

ORIGIN OF REFERENCE MATERIAL:

Standard CDN-MPC-1602 was prepared using copper concentrates supplied by Mount Polley mine in British Columbia, Canada.

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.

REFERENCE MATERIAL CDN-MPC-1602

Results from round-robin assaying:

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9
Instrumental	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
MPC-1602-1	31.23	32.10	31.50	31.60	32.80	32.00	31.32	31.70	32.50
MPC-1602-2	31.22	NSS	31.10	30.60	31.22	31.60	31.16	32.50	31.59
MPC-1602-3	31.64	31.30	32.10	31.30	30.07	31.70	30.32	32.50	30.44
MPC-1602-4	31.76	32.30	31.30	31.60	31.35	32.30	30.70	31.60	31.10
MPC-1602-5	31.27	31.50	33.10	31.30	31.44	31.50	30.38	32.90	32.25
MPC-1602-6	31.18	NSS	32.00	31.50	31.22	31.90	30.56	33.20	31.17
MPC-1602-7	31.59	31.90	33.30	31.30	31.38	31.70	30.04	32.50	31.42
MPC-1602-8	31.01	31.60	29.50	31.80	33.56	31.90	30.76	32.40	33.00
MPC-1602-9	31.49	32.60	32.10	NSS	32.05	31.90	30.90	32.90	31.90
MPC-1602-10	31.15	31.50	30.40	31.70	31.14	31.60	30.79	31.60	31.20
Mean	31.354	31.850	31.640	31.411	31.623	31.810	30.693	32.380	31.657
Std. Devn.	0.2475	0.4536	1.1539	0.3551	0.9693	0.2378	0.3872	0.5712	0.7618
% RSD	0.79	1.42	3.65	1.13	3.07	0.75	1.26	1.76	2.41
Instrumental	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
MPC-1602-1	48	47	46	49	51	48	50	49	52
MPC-1602-2	48	46	48	49	47	48	50	48	50
MPC-1602-3	49	48	46	50	48	47	47	49	49
MPC-1602-4	47	46	46	49	49	47	47	47	49
MPC-1602-5	48	44	47	49	48	47	47	47	48
MPC-1602-6	48	44	47	48	46	47	46	48	47
MPC-1602-7	47	47	48	52	49	46	49	48	49
MPC-1602-8	49	47	48	51	51	47	48	49	52
MPC-1602-9	46	46	49	48	48	46	48	50	47
MPC-1602-10	48	47	50	48	47	46	50	49	47
Mean	48	46	47	49	48	47	48	48	49
Std. Devn.	0.919	1.317	1.142	1.361	1.647	0.693	1.486	0.966	1.832
% RSD	1.92	2.85	2.41	2.77	3.40	1.48	3.09	2.00	3.75
	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu
MPC-1602-1	24.20	23.80	23.83	23.93	23.79	23.80	23.68	23.70	23.65
MPC-1602-2	24.52	23.75	23.82	23.90	23.70	23.80	23.69	23.71	23.25
MPC-1602-3	24.44	23.72	23.77	23.90	23.67	23.80	23.73	23.78	23.78
MPC-1602-4	24.30	23.75	23.84	23.93	23.73	23.80	23.64	23.77	23.81
MPC-1602-5	24.26	23.72	23.83	24.00	23.65	23.80	23.67	23.76	23.55
MPC-1602-6	24.27	23.68	23.86	23.96	23.73	23.80	23.70	23.83	23.83
MPC-1602-7	24.30	23.83	23.83	24.01	23.76	23.80	23.68	23.80	23.81
MPC-1602-8	24.38	23.77	23.89	23.94	23.72	23.80	23.70	23.89	23.53
MPC-1602-9	24.45	23.61	23.87	23.96	23.63	23.80	23.70	23.72	23.60
MPC-1602-10	24.21	23.63	23.96	23.91	23.53	23.80	23.67	23.89	23.51
Mean	24.33	23.73	23.85	23.94	23.69	23.80	23.69	23.79	23.63
Std. Devn.	0.1088	0.0701	0.0503	0.0386	0.0748	0.0000	0.0241	0.0685	0.1837
% RSD	0.45	0.30	0.21	0.16	0.32	0.00	0.10	0.29	0.78

Note: Cu and Fe results from Lab 1 and Lab 7 were removed, both for failing the t test.
 Laboratories 6 and 7 did not provide Si results.
 Laboratory 6 did not provide Fe and S results.

REFERENCE MATERIAL CDN-MPC-1602

Results from round-robin assaying-Continue:

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9
	% Fe	% Fe	% Fe	% Fe	% Fe	% Fe	% Fe	% Fe	% Fe
MPC-1602-1	27.31	27.04	27.27	26.8	26.04		24.50	27.09	26.02
MPC-1602-2	27.24	26.57	27.07	26.9	26.25		24.31	27.13	26.43
MPC-1602-3	27.34	26.85	26.98	26.8	26.53		24.80	27.01	26.32
MPC-1602-4	27.22	26.98	27.04	26.9	26.63		24.91	27.06	26.35
MPC-1602-5	27.22	26.81	26.98	26.8	26.39		24.95	26.91	26.50
MPC-1602-6	27.00	26.88	26.83	26.9	25.93		24.73	27.03	26.46
MPC-1602-7	27.16	26.62	26.83	27.2	26.33		24.57	27.07	26.54
MPC-1602-8	27.09	26.90	26.84	26.9	26.14		24.78	26.99	26.26
MPC-1602-9	27.24	26.90	26.91	26.9	26.13		24.27	27.06	26.18
MPC-1602-10	27.33	26.79	26.83	27.0	26.22		24.75	26.91	26.25
Mean	27.22	26.83	26.96	26.90	26.26		24.66	27.03	26.33
Std. Devn.	0.1075	0.1464	0.1426	0.1141	0.2165		0.2361	0.0728	0.1600
% RSD	0.40	0.55	0.53	0.42	0.82		0.96	0.27	0.61
	% SiO2	% SiO2	% SiO2	% SiO2	% SiO2	% SiO2	% SiO2	% SiO2	% SiO2
MPC-1602-1	10.6	10.4	9.8	10.3	10.4			9.8	10.4
MPC-1602-2	10.8	10.6	9.6	10.3	10.3			9.9	10.3
MPC-1602-3	10.7	10.4	10.3	10.3	10.4			9.8	10.4
MPC-1602-4	10.6	10.4	9.8	10.3	10.4			9.9	10.4
MPC-1602-5	10.7	10.4	10.1	10.5	10.4			9.9	10.4
MPC-1602-6	10.4	10.4	9.8	10.3	10.4			10.0	10.3
MPC-1602-7	10.4	10.4	10.1	10.3	10.4			9.8	10.4
MPC-1602-8	10.6	10.4	10.7	10.5	10.3			9.7	10.4
MPC-1602-9	10.6	10.1	9.6	10.3	10.2			9.7	10.3
MPC-1602-10	10.6	10.3	9.6	10.3	10.4			9.8	10.4
Mean	10.60	10.37	9.95	10.34	10.36			9.83	10.36
Std. Devn.	0.1247	0.1121	0.3382	0.0843	0.0699			0.0869	0.0495
% RSD	1.18	1.08	3.40	0.82	0.67			0.88	0.48
	% S	% S	% S	% S	% S	% S	% S	% S	% S
MPC-1602-1	28.88	29.90	29.30	29.90	28.03	30.60	30.30	28.60	28.36
MPC-1602-2	29.26	29.60	29.30	29.50	28.94	30.30	30.20	28.40	28.61
MPC-1602-3	29.64	30.00	29.20	29.20	28.67	29.50	30.00	29.00	28.77
MPC-1602-4	29.07	29.40	29.50	28.80	28.79	30.80	30.00	28.20	28.53
MPC-1602-5	28.88	29.30	29.70	28.50	29.08	30.60	29.80	28.40	28.95
MPC-1602-6	29.74	29.80	29.30	29.00	28.22	30.00	30.30	28.00	28.49
MPC-1602-7	30.12	30.00	29.20	28.30	28.43	30.50	30.30	28.70	28.31
MPC-1602-8	29.45	29.20	29.70	28.90	28.68	30.10	30.00	28.50	28.47
MPC-1602-9	28.88	29.40	29.30	28.30	28.12	30.00	30.00	28.70	28.33
MPC-1602-10	29.83	29.90	29.20	29.60	28.53	30.40	30.10	29.00	28.30
Mean	29.38	29.65	29.37	29.00	28.55	30.28	30.10	28.55	28.512
Std. Devn.	0.4488	0.3064	0.1947	0.5518	0.3497	0.3853	0.1700	0.3206	0.2141
% RSD	1.53	1.03	0.66	1.90	1.23	1.27	0.56	1.12	0.75

Note: Cu and Fe results from Lab 1 were removed, both for failing the t test.
 Laboratories 6 and 7 did not provide Si results.
 Laboratory 6 did not provide Fe and S results.

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Participating Laboratories:

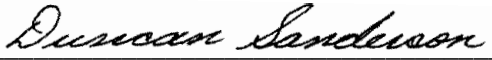
(not in same order as listed in table of results)

ALS Lima, Peru
ALS Perth, Australia
ALS Vancouver, B.C., Canada
Argetest, Ankara, Turkey
Bureau Veritas, Vancouver, B.C., Canada
MS Analytical, Langley, B.C., Canada
Mt. Polley Mine Lab, B.C., Canada
SGS, Lakefield, Ontario, Canada
Freeport-McMoran, AZ, USA


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Certified by


Duncan Sanderson, Certified Assayer of B.C.

Geochemist


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