

CDN Resource Laboratories Ltd.

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PLATINUM GROUP ORE REFERENCE STANDARD: CDN-PGMS-2

Recommended values and 95% Confidence Intervals ($\pm 2SD$)

Platinum concentration: 0.21 ± 0.04 g/tonne

Palladium concentration: 3.90 ± 0.47 g/tonne

Copper concentration: 1.35 ± 0.09 percent

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.

METHOD OF PREPARATION:

Reject ore material was dried, crushed, pulverized and then passed through a 200 mesh screen. The +200 material was discarded. The -200 material was mixed for 10 days in a rotary mixer. After internal assaying to test for homogeneity, splits were taken and sent to 13 laboratories for round robin assaying .

ORIGIN OF REFERENCE MATERIAL:

The ore was supplied by Gold City Industries from their Sappho property in southern British Columbia. The material is described as being pyroxenite, with chalcopyrite, bornite and magnetite. The platinum is associated with the magnetite while the Pd is associated with the chalcopyrite

Approximate chemical composition is as follows:

	Percent			Percent
SiO ₂	37.9		MgO	3.1
Al ₂ O ₃	14.2		K ₂ O	2.9
Fe ₂ O ₃	14.8		TiO ₂	1.1
CaO	11.4		LOI	7.7
Na ₂ O	2.8		P ₂ O ₅	1.3

Statistical Procedures:

The mean and standard deviation for all data was calculated. Outliers were defined as samples beyond the mean ± 2 Standard Deviations from all data. These outliers were removed from the data and a new mean and standard deviation was determined. 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 Certified Limits published on other standards.

Results from round-robin assaying are presented on the following page:

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	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	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu
	%	%	%	%	%	%	%	%	%	%	%	%	%
	1.41	1.41	1.29	1.33	1.33	1.32	1.37	1.32	1.36	1.30	1.29	1.26	1.39
	1.41	1.41	1.30	1.34	1.31	1.36	1.37	1.33	1.37	1.30	1.29	1.27	1.42
	1.40	1.40	1.32	1.34	1.35	1.34	1.36	1.33	1.37	1.31	1.29	1.27	1.40
	1.41	1.42	1.34	1.34	1.34	1.34	1.36	1.36	1.36	1.31	1.29	1.28	1.40
	1.40	1.45	1.31	1.36	1.33	1.34	1.35	1.34	1.37	1.30	1.31	1.36	1.41
	1.40	1.44	1.32	1.34	1.28	1.39	1.37	1.33	1.37	1.29	1.30	1.27	1.41
Mean	1.405	1.422	1.313	1.342	1.323	1.348	1.363	1.335	1.367	1.302	1.295	1.285	1.405
Std. Dev.	0.005	0.019	0.018	0.010	0.025	0.024	0.008	0.014	0.005	0.008	0.008	0.037	0.010
%RSD	0.39	1.37	1.33	0.73	1.89	1.78	0.60	1.03	0.38	0.58	0.65	2.90	0.75
	Pt	Pt	Pt	Pt	Pt	Pt	Pt	Pt	Pt	Pt	Pt	Pt	Pt
	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne
	0.20	0.18	0.20	0.21	0.20	0.24	0.24	0.18	0.21	0.22	0.25	0.24	0.22
	0.24	0.23	0.22	0.20	0.20	0.20	0.25	0.20	0.23	0.22	0.23	0.22	0.23
	0.21	0.20	0.19	0.20	0.20	0.19	0.25	0.22	0.24	0.22	0.23	0.22	0.23
	0.21	0.18	0.20	0.20	0.20	0.19	0.25	0.28	0.18	0.23	0.21	0.21	0.24
	0.21	0.19	0.20	0.25	0.20	0.19	0.25	0.20	0.16	0.27	0.22	0.22	0.23
	0.22	0.21	0.21	0.27	0.20	0.19	0.25	0.19	0.18	0.22	0.22	0.21	0.24
Mean	0.215	0.198	0.203	0.222	0.200	0.200	0.248	0.212	0.200	0.230	0.227	0.220	0.232
Std. Dev.	0.014	0.019	0.010	0.031	0.000	0.020	0.004	0.036	0.032	0.020	0.014	0.011	0.008
%RSD	6.41	9.79	5.08	13.81	0.00	10.00	1.64	17.01	15.81	8.70	6.03	4.98	3.25
	Pd	Pd	Pd	Pd	Pd	Pd	Pd	Pd	Pd	Pd	Pd	Pd	Pd
	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne
	3.81	3.94	3.92	3.99	3.45	3.58	4.30	3.52	3.75	4.13	4.37	4.05	3.59
	3.75	4.01	3.80	3.80	3.60	3.27	4.30	3.73	3.89	3.96	4.11	4.05	3.85
	3.82	4.07	3.75	3.74	3.60	3.25	4.26	3.64	4.08	3.93	4.15	3.96	3.73
	3.84	4.33	3.79	3.68	3.70	3.47	4.37	3.75	3.85	4.01	4.12	4.03	3.71
	3.70	4.21	3.71	4.09	3.55	3.22	4.33	3.63	3.80	3.94	4.14	3.96	3.63
	3.72	4.16	3.96	3.95	3.70	3.26	4.34	3.57	3.96	3.95	4.13	4.00	3.75
Mean	3.77	4.12	3.82	3.88	3.60	3.34	4.32	3.64	3.89	3.99	4.17	4.01	3.71
Std. Dev.	0.058	0.142	0.098	0.159	0.095	0.147	0.038	0.089	0.119	0.076	0.099	0.042	0.092
%RSD	1.53	3.45	2.56	4.11	2.64	4.40	0.89	2.44	3.05	1.89	2.37	1.04	2.48

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Participating Laboratories:

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

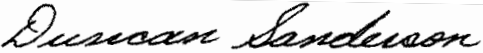
Accurassay Laboratories,
Acme Analytical Laboratories Ltd.
Activation Laboratories
Assayers Canada Ltd., Vancouver
ALS Chemex Laboratories, North Vancouver
Bondar Clegg, Vancouver
Eco-Tech Laboratories, Kamloops
International Plasma Laboratories Ltd., Vancouver
Lakefield Research Ltd., Ontario
Loring Laboratories, Calgary
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Swastika Laboratories, Swastika
X-Ray Laboratories,

Availability: Lots of 100g, 500g, 1 kg, 2 kg, or as per request.
Minimum order: 1 kg.


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Certified by


Duncan Sanderson, Certified Assayer of B.C.

Geochemist


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