

CDN Resource Laboratories Ltd.

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PLATINUM GROUP ORE REFERENCE STANDARD: CDN-PGMS-8

Recommended values and the "Between Lab" Two Standard Deviations

Gold concentration: 0.82 ± 0.14 g/t
Platinum concentration: 0.44 ± 0.07 g/t
Palladium concentration: 1.50 ± 0.12 g/t

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:

The ore was supplied by Stillwater Mining Corporation from the Stillwater Complex in Montana.

The mineralogy of the Stillwater Pt/Pd ore consists of up to 1 % sulphides comprising chalcopyrite, pentlandite, pyrrhotite, ± pyrite hosted by a chromite-rich ultramafic layer. The main platinum-bearing minerals are Braggite ($Pt,Pd,Ni)S$, Cooperite ($Pt, Pd, Ni)S$ as well as Isoferroplatinum ($PtFe_3$) and Moncheite ($Pt,Pd)(Te,Bi)_2$. The majority of the palladium is hosted as solid solution within the pendlandite ($(Fe,Ni)9S8$); less than 15 % as Vysotskite ($Pd,Ni,Pt)S$, Bragite, Cooperite and Moncheite.

This standard was prepared by combining a quantity of the Stillwater ore (screened to -325) with a quantity of gold-bearing ore from the Misty Mountain Specogna deposit (screened to -200) and diluting with a blank granitic material that had been screened to -200 mesh. The material was mixed for 6 days in a rotary mixer. Splits were sent to 12 laboratories for round robin assaying .

Approximate chemical composition is as follows:

	Percent			Percent
SiO ₂	60.7		MgO	3.0
Al ₂ O ₃	16.1		K ₂ O	1.4
Fe ₂ O ₃	7.6		TiO ₂	0.6
CaO	5.4		LOI	0.5
Na ₂ O	3.3			

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:

Assay Procedure: 30g fire assay, AA or ICP finish.

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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
SAMPLE	Au g/t	Au g/t	Au g/t									
CDN-PG8-1	0.82	0.80	0.82	0.84	0.74	0.90	0.89	0.85	0.55	0.84	0.89	0.72
CDN-PG8-2	0.75	0.88	0.72	0.79	0.74	0.85	0.81	0.76	0.73	0.84	0.86	0.69
CDN-PG8-3	0.74	0.87	0.79	0.95	0.81	0.80	0.81	0.83	0.69	0.90	0.90	0.71
CDN-PG8-4	0.75	0.93	0.84	0.82	0.86	0.82	0.93	0.77	0.71	0.82	0.92	0.69
CDN-PG8-5	0.77	0.90	0.88	0.83	0.73	0.91	0.92	0.69	0.72	0.79	0.88	0.71
CDN-PG8-6	0.89	0.79	0.86	0.93	0.73	0.80	0.89	0.90	0.81	0.81	0.90	0.72
CDN-PG8-7	0.72	0.91	0.71	0.88	0.76	0.80	0.91	0.83	0.87	0.86	0.92	0.73
CDN-PG8-8	0.72	0.82	0.73	0.80	0.70	0.84	0.94	0.79	0.73	0.79	0.90	0.71
CDN-PG8-9	0.77	0.83	0.80	0.93	0.81	0.85	0.80	0.90	0.77	0.83	0.88	0.76
CDN-PG8-10	0.80	0.96	0.65	0.86	0.75	0.87	0.85	0.88	0.87	0.83	0.92	0.73
Mean	0.77	0.87	0.78	0.86	0.76	0.84	0.88	0.82	0.75	0.83	0.90	0.72
Std. Dev'n	0.0527	0.0574	0.0745	0.0574	0.0469	0.0403	0.0534	0.0691	0.0940	0.0328	0.0200	0.0216
%RSD	6.81	6.61	9.56	6.65	6.14	4.78	6.10	8.44	12.61	3.95	2.23	3.02
	Pt g/t	Pt g/t	Pt g/t									
CDN-PG8-1	0.47	0.42	0.61	0.42	0.48	0.44	0.44	0.45	0.31	0.50	0.51	0.40
CDN-PG8-2	0.41	0.43	0.41	0.45	0.44	0.48	0.40	0.50	0.35	0.45	0.49	0.37
CDN-PG8-3	0.42	0.41	0.41	0.42	0.44	0.43	0.45	0.54	0.38	0.46	0.48	0.41
CDN-PG8-4	0.44	0.43	0.47	0.42	0.44	0.46	0.46	0.46	0.36	0.49	0.47	0.40
CDN-PG8-5	0.40	0.44	0.43	0.45	0.43	0.42	0.44	0.44	0.38	0.46	0.52	0.39
CDN-PG8-6	0.43	0.41	0.44	0.42	0.42	0.51	0.45	0.43	0.48	0.47	0.49	0.41
CDN-PG8-7	0.43	0.42	0.42	0.47	0.45	0.42	0.45	0.50	0.44	0.47	0.53	0.41
CDN-PG8-8	0.43	0.44	0.43	0.42	0.44	0.44	0.47	0.47	0.40	0.49	0.51	0.39
CDN-PG8-9	0.44	0.45	0.40	0.44	0.45	0.51	0.44	0.54	0.46	0.46	0.50	0.41
CDN-PG8-10	0.42	0.42	0.38	0.42	0.42	0.43	0.45	0.45	0.42	0.47	0.48	0.39
Mean	0.43	0.43	0.44	0.43	0.44	0.45	0.45	0.48	0.40	0.47	0.50	0.40
Std. Dev'n	0.0193	0.0134	0.0645	0.0183	0.0170	0.0347	0.0184	0.0406	0.0527	0.0162	0.0193	0.0137
%RSD	4.52	3.13	14.65	4.22	3.88	7.64	4.14	8.50	13.23	3.43	3.88	3.45
	Pd g/t	Pd g/t	Pd g/t									
CDN-PG8-1	1.52	1.54	1.48	1.54	1.46	1.55	1.51	1.53	1.07	1.62	1.54	1.38
CDN-PG8-2	1.42	1.52	1.54	1.52	1.44	1.53	1.47	1.52	1.24	1.60	1.56	1.37
CDN-PG8-3	1.45	1.55	1.54	1.51	1.44	1.54	1.53	1.52	1.32	1.65	1.56	1.42
CDN-PG8-4	1.53	1.57	1.48	1.57	1.47	1.48	1.48	1.50	1.22	1.60	1.53	1.46
CDN-PG8-5	1.42	1.56	1.54	1.55	1.45	1.50	1.50	1.47	1.35	1.60	1.54	1.47
CDN-PG8-6	1.51	1.56	1.47	1.46	1.42	1.51	1.48	1.55	1.39	1.58	1.52	1.46
CDN-PG8-7	1.42	1.55	1.48	1.48	1.48	1.49	1.46	1.54	1.50	1.60	1.53	1.37
CDN-PG8-8	1.45	1.54	1.48	1.51	1.50	1.49	1.48	1.53	1.41	1.62	1.50	1.34
CDN-PG8-9	1.47	1.56	1.40	1.53	1.44	1.53	1.51	1.51	1.45	1.55	1.54	1.41
CDN-PG8-10	1.53	1.55	1.45	1.52	1.39	1.52	1.50	1.54	1.48	1.57	1.53	1.34
Mean	1.47	1.55	1.49	1.52	1.45	1.51	1.49	1.52	1.34	1.60	1.54	1.40
Std. Dev'n	0.0452	0.0141	0.0445	0.0321	0.0313	0.0237	0.0215	0.0235	0.1343	0.0281	0.0178	0.0484
%RSD	3.08	0.91	3.00	2.12	2.16	1.56	1.44	1.55	10.00	1.76	1.16	3.45

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Participating Laboratories:

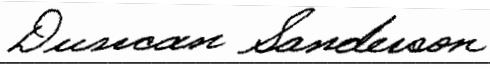
(not in same order as listed in table of results)

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Assayers Canada Ltd., Vancouver
ALS Chemex Laboratories, North Vancouver
Genalysis Laboratory Services Pty Ltd., Perth
GTK Laboratory, Geological Survey of Finland
International Plasma Laboratories Ltd., Vancouver
OMAC Laboratories Ltd., Ireland
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Certified by


Duncan Sanderson, Certified Assayer of B.C.

Geochemist


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