

North American Palladium Provides Update on Exploration Results From the Second Half of 2013 Drilling at Lac des Iles

12/23/2013

TORONTO, ONTARIO--(Marketwired - Dec. 23, 2013) - North American Palladium Ltd. ("NAP" or the "Company") (TSX:PDL)(NYSE MKT:PAL) today provided an update on its drill results from the second half of its 2013 underground and surface exploration program at its Lac des Iles ("LDI") palladium mine property in Northern Ontario.

Highlights:

- Surface drilling on the upper Roby Zone northeast extension target extended a near-surface part of the zone. Several typical Roby Zone open pit grade intersections of palladium mineralization were encountered, including 2.44 grams per tonne of palladium ("g/t Pd") over 16 metres, 2.13 g/t Pd over 17 metres and 1.79 g/t Pd over 24 metres. The program also encountered some high-grade palladium mineralization, including 16.4 g/t Pd over 3 metres.
- Several surface drill holes testing the upper Offset Zone southeast extension target intersected significant palladium grades with hole 13-717 returning 5.23 g/t Pd over 37.6 metres, including 8.24 g/t Pd over 10 metres. Hole 13-717's intersection occurs 240 metres from the new shaft and above the Offset Zone mine

infrastructure in an otherwise undrilled area. Follow up drilling has been planned for 2014 to define the geometry and extent of this new discovery.

- Three short drill holes that were following up positive 2013 channel sampling results at the north end of the Sherriff Zone intersected high grade palladium mineralization. One hole hit 10.15 g/t Pd over a 16 metres within which a 4.7 metre interval graded 23.6 g/t Pd. This intersection occurs close to surface (45 to 58 metres vertical depth). This demonstrates additional high-grade mineralization can still be found on the property, away from the well-defined Roby and Offset high-grade zones.

LDI Exploration Overview

The exploration program's focus during the second half of 2013 was to identify lateral zone extensions near existing infrastructure, northeast of the Roby Zone and southeast of the upper Offset Zone.

In the second half of 2013, the Company completed 23,250 metres of diamond drilling at LDI of which:

- 7,216 metres (38 surface drill holes) were completed on the upper Roby Zone northeast extension target;

- 15,836 metres (27 surface drill holes) were completed on the upper Offset Zone southeast extension target; and

- 198 metres (3 surface drill holes) were completed on the north Sheriff Zone target.

In 2013 the Company completed a total of 54,532 metres of diamond drilling at LDI in 212 drill holes. For reference, the results from drilling during the first half of 2013 were disclosed in a news release dated September 5, 2013, available on NAP's website.

The results from the 2013 program, including the results from the potential lateral extension targets, will be considered in the studies and life of mine update planned for 2014 to establish the potential to extend mine life.

Figure 1 in the Appendix shows the locations of the program's exploration targets during the second half of the year. A tabulation of significant palladium ("Pd"), platinum ("Pt"), gold ("Au"), nickel ("Ni"), and copper ("Cu") assays received from drilling completed in the second half of 2013 are included in Table 1 in the Appendix, with select highlights listed in the tables referred to throughout this news release. All mineralized intersections are given as down hole intervals and core lengths in metres.

Roby Zone Northeast Extension Target

The objective of the upper Roby Zone northeast extension drilling program was to attempt to connect the undeveloped North VT Rim west resource to the northeast end of the Roby Zone open pit, thereby providing a potential future surface mining opportunity for the Company.

Highlights from this program are provided in Table 1 below, which include notable intersections of:

- 2.44 g/t Pd over 16.3 metres (hole 13-218);

- 2.13 g/t Pd over 17 metres (hole 13-226);
- 9.20 g/t Pd over 4 metres (hole 13-228);
- 16.35 g/t Pd over 3 metres (hole 13-236); and
- 1.79 g/t Pd over 24 metres (hole 13-240).

The results to date suggest that the Roby Zone does appear to connect to the North VT Rim along southwest trending shears and in association with a southwest striking noritic layer with grades reporting both to structures and to the noritic layer.

Table 1: Selected surface drilling highlights for the second half of the Roby Zone northeast extension target drilling program, conducted from July to September of 2013.

Hole #	From	To	Length	Pd (g/t)	Pt (g/t)	Au (g/t)
13-217	269.0	280.0	11.0	1.86	0.17	0.02
inc.	269.0	270.0	1.0	9.50	0.54	0.05
13-218	306.7	323.0	16.3	2.44	0.16	0.03
inc.	316.0	319.0	3.0	5.48	0.27	0.03
13-226	22.0	39.0	17.0	2.13	0.15	0.07
inc.	27.0	35.0	8.0	3.97	0.25	0.04
inc.	27.0	30.0	3.0	6.22	0.40	0.03
13-227	23.0	31.0	8.0	2.12	0.12	0.02
inc.	25.0	26.0	1.0	6.89	0.24	0.12
13-228	35.0	39.0	4.0	9.20	0.45	0.35
inc.	37.0	38.0	1.0	18.00	0.86	1.09
13-236	38.0	41.0	3.0	16.35	1.90	0.25
inc.	38.0	39.0	1.0	42.50	5.40	0.64
13-240	177.0	201.0	24.0	1.79	0.17	0.05
inc.	186.0	190.0	4.0	3.61	0.20	0.04
13-241	24.0	26.0	2.0	5.76	0.33	0.07
and	40.0	41.0	1.0	6.01	0.27	0.04
and	50.0	54.0	4.0	3.00	0.32	0.20

Upper Offset Zone Southeast Extension Target

The objective of the upper Offset Zone southeast extension drilling program was to test if the Offset Zone continues upward and toward the southeast along the currently interpreted arcuate strike of the Equigranular Gabbro unit in the same manner that the Roby Zone follows the arcuate Equigranular Gabbro contact towards the North VT Rim.

Highlights from this program are provided in Table 2 below, which include notable intersections of:

- 3.62 g/t Pd over 6 metres (hole 13-704);

- 4.58 g/t Pd over 8 metres (hole 13-707); and

- 4.34 g/t Pd over 50 metres (hole 13-717).

Results from the drilling program indicate that although palladium mineralization is intermittently present along the arcuate-trending target adjacent to the Equigranular Gabbro contact, it generally does not appear to have sufficient continuity to warrant additional infill drilling at this stage. However, the high-grade mineralization encountered in hole 13-717 does warrant follow-up drilling as it could potentially connect to an isolated new zone of good grade palladium mineralization located to the south of and above the main Offset Zone resource shell. The controls on the distribution of palladium in this new target area are currently unresolved but may relate to a northwest-trending fault or shear zone located to the south of the Offset Zone fault.

Table 2: Selected surface drilling highlights for the second half of the upper Offset Zone southeast extension drilling program, conducted from July to September of 2013.

Hole #	From	To	Length	Pd (g/t)	Pt (g/t)	Au (g/t)
13-704	380.0	386.0	6.0	3.62	0.38	0.04
13-707	140.0	143.0	3.0	2.16	0.25	0.17
and	179.0	206.0	27.0	1.92	0.20	0.15
inc	198.0	206.0	8.0	4.58	0.49	0.34
13-717	428.0	478.0	50.0	4.34	0.36	0.28
inc.	434.9	472.5	37.6	5.23	0.43	0.34
and	447.0	457.0	10.0	8.24	0.64	0.41
13-720	177.0	187.0	10.0	2.72	0.26	0.22
inc.	183.0	184.0	1.0	13.10	1.20	1.13
and	336.0	342.0	6.0	3.60	0.46	0.38
13-721	702.3	706.7	4.4	4.29	0.60	0.29

North Sheriff Zone Surface Exploration

In late September, three short drill holes were completed at the north end of the Sheriff Zone in order to determine the continuity along strike and to depth of previously identified surface mineralization (historical and recent

channel sampling results).

Highlights from this program are provided in Table 3 below, which include notable intersections of:

- 10.15 g/t Pd over 16 metres (hole 13-11); and

- 2.06 g/t Pd over 12 metres (hole 13-119).

Table 3: Selected surface drilling highlights for the North Sheriff Zone drilling program, conducted in September 2013. True widths have not been determined yet; there is no relationship between the reported interval lengths, average grades and the true width. Additional drilling and surface mapping will be required to establish the strike and dip of the mineralization encountered in the North Sheriff Zone area.

Hole #	From	To	Length	Pd (g/t)	Pt (g/t)	Au (g/t)
13-118	53.1	69.0	15.9	10.15	0.50	0.28
inc.	53.1	63.0	9.9	15.43	0.74	0.43
inc.	58.3	63.0	4.7	23.59	0.87	0.34
13-119	40.0	52.4	12.5	2.06	0.22	0.19
inc.	45.0	48.0	3.0	3.68	0.34	0.28
13-120	40.0	47.0	7.0	1.44	0.14	0.12

Mineral Reserve and Resource Update

A comprehensive update to LDI's mineral reserve and resource estimates is expected to be provided in January 2014. The Company is currently working with an external engineering firm to revisit its Phase I mine plan for the upper Offset Zone based on recent refinements to the underground mining method, operating costs and capital expenditure forecasts. The results of this work will be provided in a National Instrument 43-101 ("NI 43-101") technical report that will be published in the first quarter of 2014.

Technical Information and Qualified Persons

The assay analyses performed during NAP's exploration drilling programs are subject to a formal quality assurance and quality control (QA/QC) program. Diamond drill core from exploration drilling is logged and sampled on site and at the Company's exploration office in Thunder Bay with samples transported by the Company and a commercial courier to Activation Laboratories Ltd. (Thunder Bay and Ancaster), an independent accredited laboratory, for assay analysis. Check assay analyses are carried out by SGS Minerals Services (Toronto), a laboratory that is also independent of the Company.

The Company's exploration team designed and executed the drilling program under the direction of Robert D. Stewart, P. Geo., Exploration Division Chief Geologist, an employee of NAP and a Qualified Person as defined by National Instrument 43-101, who has reviewed and approved the content of this news release.

About North American Palladium

NAP is an established precious metals producer that has been operating its Lac des Iles mine ("LDI") located in Ontario, Canada since 1993. LDI is one of only two primary producers of palladium in the world, offering investors leverage to the rising price of palladium. The Company's shares trade on the NYSE MKT under the symbol PAL and on the TSX under the symbol PDL.

Cautionary Statement on Forward Looking Information

Certain information included in this news release constitutes 'forward-looking statements' within the meaning of the 'safe harbor' provisions of the United States Private Securities Litigation Reform Act of 1995 and Canadian securities laws. The words 'expect', 'believe', 'will', 'intend', 'estimate', 'forecast', and similar expressions identify forward-looking statements. Such statements include, without limitation, any information as to our future exploration results, financial or operating performance, including: statements with respect to the exploration potential of the LDI or greenfields properties, projected grades and other statements that express management's expectations or estimates of future performance. Forward-looking statements are necessarily based upon a number of factors and assumptions that, while considered reasonable by management, are inherently subject to significant business, economic and competitive uncertainties and contingencies. The factors and assumptions contained in this news release, which may prove to be incorrect, include, but are not limited to: that the Company's interpretations of the ore body are accurate, that prices for key exploration and development supplies, including labour, will remain consistent with the Company's expectations, that the Company's current estimates of mineral reserves and resources are accurate, and that there are no material delays in the timing of ongoing projects. The forward-looking statements are not guarantees of future performance. The Company cautions the reader that such forward-looking statements involve known and unknown risks that may cause the actual results to be materially

different from those expressed or implied by the forward-looking statements. Such risks include, but are not limited to: the possibility that new exploration targets may not meet management's expectations, uncertainty of mineral reserves and resources, inherent risks associated with exploration and development, the risk that the Offset Zone and other zones may not be successfully developed, and uncertainty of the ability of the Company to obtain financing. For more details on the factors, assumptions and risks see the Company's most recent Form 40-F/Annual Information Form on file with the U.S. Securities and Exchange Commission and Canadian provincial securities regulatory authorities. The Company disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, events or otherwise, except as expressly required by law. Readers are cautioned not to put undue reliance on these forward-looking statements.

APPENDIX:

FIGURE 1: Geological map of the Lac des Iles mine block intrusion showing the surface projection of the Roby Zone northeast extension target, the upper Offset Zone southeast extension target and the Sheriff Zone north area target.

To view FIGURE 1, please visit the following link: <http://media3.marketwire.com/docs/LacdesIlesFig.pdf>.

TABLE 1: Selected drilling intersections from exploration drilling completed at the LDI property in the second half of 2013. Interval lengths reported are not true widths.

	To	Ni
--	----	----

Hole #	From (m)	(m)	Length (m)	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu (%)	(%)
--------	----------	-----	------------	----------	----------	----------	--------	-----

13-217

269.0

280.0

11.0

1.86

0.17

0.02

0.01

0.04

inc.

269.0

270.0

1.0

9.50

0.54

0.05

0.00

0.03

13-218

306.7

323.0

16.3

2.44

0.16

0.03

0.01

0.03

15 210
inc.

306.7

309.0

2.3

3.82

0.25

0.05

0.01

0.04

and 316.0 319.0 3.0 5.48 0.27 0.03 0.01 0.04

and

387.0	390.8	3.8	2.89	0.37	0.39	0.04	0.07
-------	-------	-----	------	------	------	------	------

13-220

382.0

392.0

10.0

1.04

0.11

0.03

0.01

0.03

13-221

78.0

88.0

10.0

1.20

0.11

0.01

0.00

0.03

13-222	73.0	79.3	6.3	1.55	0.14	0.06	0.01	0.03	
13-223	112.0	122.0	10.0	1.39	0.12	0.03	0.01	0.03	
13-225	67.0	69.0	2.0	3.63	0.22	0.09	0.01	0.04	
13-226	22.0	39.0	17.0	2.13	0.15	0.07	0.01	0.04	
inc.	27.0	35.0	8.0	3.97	0.25	0.04	0.01	0.03	
inc.	27.0	30.0	3.0	6.22	0.40	0.03	0.00	0.04	
13-227	23.0	31.0	8.0	2.12	0.12	0.02	0.00	0.02	
inc.	25.0	26.0	1.0	6.89	0.24	0.12	0.01	0.03	
13-228	35.0	39.0	4.0	9.20	0.45	0.35	0.01	0.03	
inc.	37.0	38.0	1.0	18.00	0.86	1.09	0.02	0.04	
and	57.0	63.0	6.0	2.07	0.12	0.02	0.00	0.03	
13-229	63.4	67.0	3.6	1.23	0.14	0.02	0.01	0.03	
13-230	93.0	99.0	6.0	1.98	0.18	0.09	0.01	0.04	
inc.	93.0	97.0	4.0	2.54	0.22	0.09	0.00	0.03	
13-231	59.0	70.0	11.0	1.17	0.12	0.05	0.01	0.03	
inc.	68.0	70.0	2.0	3.47	0.32	0.04	0.01	0.03	
13-233	32.0	39.0	7.0	1.68	0.10	0.02	0.01	0.03	
inc.	36.0	39.0	3.0	2.88	0.13	0.04	0.00	0.03	
13-234	35.0	44.0	9.0	1.23	0.07	0.02	0.00	0.03	
inc.	35.0	39.0	4.0	2.23	0.10	0.03	0.00	0.03	
13-236	38.0	41.0	3.0	16.35	1.90	0.25	0.01	0.03	
inc.	38.0	39.0	1.0	42.50	5.40	0.64	0.01	0.03	
13-237	73.0	87.0	14.0	1.04	0.11	0.08	0.01	0.04	
13-240	174.0	210.0	36.0	1.46	0.14	0.08	0.01	0.04	
inc.	177.0	201.0	24.0	1.79	0.17	0.05	0.01	0.03	
and	186.0	190.0	4.0	3.61	0.20	0.04	0.01	0.03	
and	199.0	201.0	2.0	5.24	0.72	0.09	0.00	0.03	
13-241	24.0	26.0	2.0	5.76	0.33	0.07	0.00	0.03	
and	40.0	41.0	1.0	6.01	0.27	0.04	0.00	0.03	
and	50.0	54.0	4.0	3.00	0.32	0.20	0.06	0.10	
13-242	43.0	50.0	7.0	1.17	0.10	0.05	0.01	0.04	
13-243	26.0	29.0	3.0	1.93	0.15	0.03	0.00	0.02	
and	48.0	59.0	11.0	1.33	0.13	0.10	0.01	0.04	
<u>Upper Offset Southeast Extension Target</u>									
13-704	386.0	386.0	6.0	3.62	0.38	0.04	0.04	0.08	
13-705	280.0	284.0	4.0	1.19	0.15	0.14	0.04	0.06	
and	301.4	303.3	1.9	4.13	0.41	0.09	0.01	0.05	
and	319.0	332.0	13.0	1.14	0.14	0.23	0.05	0.08	
13-706	613.0	616.0	3.0	1.28	0.14	0.12	0.06	0.06	
13-707	140.0	143.0	3.0	2.16	0.25	0.17	0.09	0.09	
and	179.0	206.0	27.0	1.92	0.20	0.15	0.06	0.07	
inc.	198.0	206.0	8.0	4.58	0.49	0.34	0.13	0.12	
and	362.0	365.0	3.0	2.37	0.23	0.19	0.07	0.08	
13-710	450.0	454.0	4.0	1.78	0.21	0.19	0.06	0.08	
13-711	470.0	489.0	19.0	1.17	0.16	0.08	0.03	0.06	
inc.	480.0	489.0	9.0	1.66	0.24	0.13	0.04	0.06	
13-714	77.0	82.0	5.0	1.02	0.13	0.04	0.06	0.07	
and	453.0	460.0	7.0	1.55	0.19	0.14	0.06	0.07	
and	478.0	484.0	6.0	1.26	0.14	0.09	0.06	0.07	
and	521.0	548.0	27.0	1.07	0.11	0.10	0.03	0.06	
inc.	521.0	532.0	11.0	1.68	0.17	0.15	0.05	0.08	
and	566.0	569.0	3.0	1.48	0.23	0.19	0.11	0.11	
13-717	91.0	96.0	5.0	2.48	0.27	0.10	0.09	0.09	
and	382.0	386.0	4.0	1.58	0.20	0.14	0.07	0.07	
and	428.0	478.0	50.0	4.34	0.36	0.28	0.07	0.09	
inc.	434.9	472.5	37.6	5.23	0.43	0.34	0.08	0.10	
inc.	447.0	457.0	10.0	8.24	0.64	0.41	0.09	0.13	
13-718	591.0	597.0	6.0	1.10	0.12	0.11	0.05	0.07	
and	608.0	610.0	2.0	2.66	0.29	0.13	0.06	0.10	
13-719	548.0	574.1	26.1	1.33	0.14	0.12	0.04	0.06	
inc.	559.4	562.0	2.7	4.08	0.42	0.29	0.11	0.09	
and	565.0	568.0	3.0	2.59	0.26	0.22	0.07	0.07	
13-720	156.0	168.0	12.0	1.20	0.12	0.10	0.06	0.06	
and	177.0	187.0	10.0	2.72	0.26	0.22	0.07	0.07	
inc.	183.0	184.0	1.0	13.10	1.20	1.13	0.29	0.28	
and	219.0	243.0	24.0	1.40	0.14	0.11	0.06	0.05	
and	335.0	369.0	34.0	1.64	0.20	0.15	0.05	0.06	
inc.	336.0	342.0	6.0	3.60	0.46	0.38	0.10	0.09	
and	384.0	387.0	3.0	1.98	0.24	0.12	0.07	0.09	
and	459.0	462.0	3.0	1.40	0.18	0.12	0.04	0.08	
13-721	634.0	638.0	4.0	1.25	0.09	0.04	0.02	0.06	
and	702.3	706.7	4.4	4.29	0.60	0.29	0.11	0.13	
13-722	626.0	630.0	4.0	1.23	0.13	0.10	0.05	0.06	
and	687.8	698.0	10.2	1.00	0.11	0.10	0.04	0.07	
and	704.0	707.0	3.0	1.62	0.17	0.09	0.03	0.08	
and	783.0	789.0	6.0	1.05	0.16	0.14	0.08	0.08	
and	794.0	800.0	6.0	1.17	0.13	0.11	0.05	0.06	
13-726	741.0	745.2	4.2	1.83	0.21	0.09	0.05	0.08	
<u>Sheriff Zone North Extension Target</u>									
13-118	53.1	69.0	16.0	10.15	0.50	0.28	0.05	0.07	
inc.	53.1	63.0	10.0	15.43	0.74	0.43	0.06	0.10	
inc.	58.3	63.0	4.7	23.59	0.87	0.34	0.03	0.08	
13-119	40.0	52.4	12.5	2.06	0.22	0.19	0.09	0.09	
inc.	45.0	48.0	3.0	3.68	0.34	0.28	0.12	0.09	
13-120	12.6	22.0	9.4	1.08	0.17	0.04	0.04	0.05	
13-120	40.0	47.0	7.0	1.44	0.14	0.12	0.03	0.05	

Contact Information:

North American Palladium Ltd.

Camilla Bartosiewicz
Director, Investor Relations

and Corporate Communications

416-360-7374

camilla@nap.com

www.nap.com