

TORONTO, ONTARIO--(Marketwired - May 29, 2017) - [North American Palladium Ltd.](#) ("NAP" or the "Company") (TSX:PDL)(OTC PINK:PALDF) is pleased to announce an update to the Mineral Reserves and Mineral Resources estimates for its Lac des Iles Mine Property ("the Property") in northwestern Ontario. The new estimates reflect the outcomes of a comprehensive review of all mineralized zones on the Property and relate to a new Technical Report (Feasibility Study) that the Company plans to publish in June. The new plan features a return to full time mill operations, expansion of underground bulk mining on the Offset Zone and a resumption of open pit mining operations. These developments will reduce unit costs of production and, combined with strong current and forward looking metal prices, will allow the Company to extract a higher proportion of the known mineral inventory at lower mining cut-off grades.

Highlights:

- An increase of 18 million tonnes in the Company's Lac des Iles Mineral Reserves to 38.5 million tonnes at an average grade of 2.95 g/t Pd (2.95 g/t Pd equivalent grade, including contribution from byproduct metals) for a total of 2.78 million ounces of contained palladium;
- Underground Mineral Reserves increase by 13 million tonnes to 21.2 million tonnes, with an average grade of 3.09 g/t Pd (3.09 g/t Pd equivalent grade) including an increase of 10.6 million tonnes in the Offset Zone Mineral Reserves, a majority of which were added between the 905 mL and the 1300 mL (Lower Offset Zone) and will be mined by the recently implemented sub-level shrinkage method ("SLS") method;
- Surface Mineral Reserves for two separate pit mining operations (Roby pit pushback and Sheriff pit) increase by 11.1 million tonnes to 12.1 million tonnes at an average grade of 1.32 g/t Pd (1.82 g/t Pd equivalent grade);
- 5.1 million tonnes of surface stockpiles at a grade of 0.97 g/t, a decrease of 6.0 million tonnes due to mining depletion and re-estimates; and,
- 5.5 million tonnes included in the global Mineral Reserves estimate are from new initial Mineral Reserves estimates for the B2 Zone, Sheriff pit zones as well as the Roby and Offset footwall zones;

Note: The above increases are relative to the company's last published Mineral Reserves and Mineral Resources estimates in February 2015

"We are pleased to announce a significant increase to the Mineral Reserves at Lac de Iles that are the result of a diligent drilling and engineering effort underway since 2015. The updated Mineral Reserve provides the foundation for a planned, major expansion of the Lac des Iles Mine. We have completed a successful ramp-up of the new, lower-cost SLS mining method and will soon return to full-time operations. We have also added two recently discovered zones into the mine plan," said Jim Gallagher, President and CEO of North American Palladium.

"These developments are expected to translate into an increase in average annual palladium production over the next several years and also demonstrate our ability to translate exploration success at Lac des Iles into new production on a condensed timeline. Management has also conducted a review of our expanded portfolio of exploration targets both at the mine site and several greenfield opportunities and set priorities for a planned increase in exploration drilling."

The Company expects to issue a news release describing the new life of mine ("LOM") plan and an accompanying economic analysis in June. The updated Mineral Reserve and Mineral Resource estimates and the new LOM plan are based on a new National Instrument ("NI") 43-101 Technical Report entitled: "Feasibility Study Incorporating the Life of Mine Plan for Lac des Iles Mine." This report is expected to be filed on SEDAR (<http://www.sedar.com/>) in June.

Update to Mineral Reserves and Mineral Resources for the Lac des Iles Mine Property

The Company has completed a material update to its Lac des Iles Mines Ltd. ("LDI") Mineral Reserves and Mineral Resources estimates (see Table 1 for summary and Appendices 1 and 2 for details). The effective date for the new estimates is March 20th, 2017. The new estimates exclude material mined up until the end of 2016. The principal mineralized zones referenced in the new Mineral Reserves and Mineral Resources estimates are shown in Figures 1 and 2. The Mineral Reserves estimates were prepared by Mr. Kris Hutton, P. Eng. and Mr. Johnny Canosa, P. Eng., both of whom are employees of Nordmin Engineering Ltd. and Qualified Persons in accordance with NI 43-101 guidelines and companion guidelines. The Mineral Resources estimates were prepared by Mr. Denis Decharte, P. Eng., an employee of NAP, and Mr. Chris Roney, P. Geo., an independent consultant, both of whom are Qualified Persons, also in accordance with NI 43-101 guidelines. Both estimates were reviewed and approved by David C. Peck, P.Geo., the Company's V.P., Exploration and Development, a Qualified Person under NI 43-101.

TABLE 1. Summary of the Updated Mineral Reserves Estimates for the Lac des Iles Mine Property.

Location	Zone/Area	Classification	Tonnes Pd (’000s)	Pd (g/t)	Pd Eq* (g/t)	Contained Pd (K oz)
Underground	Offset Zone	Proven	2,800	3.17	3.87	285
"	"	Probable	15,036	3.19	4.23	1,542
"	Roby Zone	Proven	1,224	2.37	2.96	93
"	"	Probable	924	3.00	3.70	89
"	B2 Zone	Probable	1,268	2.51	3.27	102

Surface	Roby Pushback	Proven	1,534	1.47	1.97	72
"	"	Probable	10,135	1.26	1.76	410
"	Sheriff Pit	Proven	373	1.86	2.32	22
"	"	Probable	102	2.64	3.05	8
"	RGO	Probable	5,128	0.97	1.28	159
Total Underground	All	Proven	4,024	2.93	3.63	379
"	"	Probable	15,960	3.18	4.20	1,631
Total Surface	All	Proven	1,907	1.55	2.05	95
"	"	Probable	15,365	1.17	1.59	577
Sub-Total	All	Proven	5,931	2.48	3.13	472
"	"	Probable	32,593	2.21	2.97	2,315
TOTAL	All	Proven & Probable	38,524	2.25	2.95	2,787

*Palladium equivalent grade

Notes to Table 1.

1) Palladium equivalent grade estimated using the Company's long-term US dollar metal price and Fx assumptions for estimation of Mineral Reserves as follows: Pd - \$793/oz; Pt - \$1,175/oz; Au - \$1,298/oz; Cu - \$2.66/lb. Fx (\$CAD:\$US) = 1.305

2) The effective date for the Mineral Reserves estimates is March 20, 2017. The estimates reflect depletion from mining activities to including December 31, 2016

3) Details of the Mineral Reserves and Mineral Resources estimation methods and qualified persons are provided in the Appendices accompanying this news release

The previous estimates of Mineral Reserves and Mineral Resources for the Property were published in February 2015.

Mineral Reserves

The updated Mineral Reserves estimates presented in Appendix 1 are divided into underground and surface Mineral Reserves. Underground Mineral Reserves are principally sourced from the Offset Zone. Near-surface Mineral Reserves reflect a planned, major expansion of the Roby open pit, a smaller pit in the Sheriff Zone and material remaining in the Company's low-grade (RGO) surface stockpile (Figure 2).

The new Mineral Reserves estimates represent a material change in the Company's LDI mineral inventory. Total Proven and Probable Reserves are estimated at 38.5 million tonnes at an average grade of 2.25 g/t Pd (2.78 million ounces contained palladium). Underground Proven and Probable Reserves total 21.2 million tonnes at an average grade of 3.09 g/t Pd (2.11 million ounces of contained palladium). Surface Proven and Probable Reserves total 17.3 million tonnes at an average grade of 1.22 g/t Pd (0.67 million ounces of contained palladium).

Changes in the current Mineral Reserves estimates compared to the February 2015 estimates are summarized in Appendix 3. Mineral depletion for 2015 and 2016 included approximately 2.9 million tonnes of underground Mineral Reserves and Mineral Resources (principally from the Upper Offset Zone) and 1.5 million tonnes of surface Mineral Reserves (principally from the RGO stockpile). The decrease in the RGO stockpile Mineral Reserves, from 11.2 million tonnes to 5.1 million tonnes (Appendix 3), reflects depletion from mining and a re-estimation of the remaining extractable tonnes in the stockpile based on a new drone-based volumetric survey completed in October 2016.

Mineral Resources

The updated Mineral Resources estimates presented in Appendix 2 represent a material change to the previous, published Mineral Resources estimates for the Property (February 2015). Drilling and engineering studies completed since the beginning of 2015 support the upgrading and conversion of a large proportion of the former Measured, Indicated and Inferred Resources to Proven and Probable Reserves. Specifically, approximately half of the previously stated Offset Zone and Roby pit Mineral Resources have been converted to Mineral Reserves. In addition, a significant portion of the previously estimated Roby and Offset footwall zone Mineral Resources that did not convert to Mineral Reserves were deemed by the Company's Qualified Persons to have a low probability of being mined in the future (based on tonnage, grade, geological factors and distance to infrastructure) and were therefore excluded from the current estimates. Although no longer appearing in the Company's Mineral Resource estimates, these excluded materials provide a clear focus for future exploration drilling on the Property.

Comparisons between the currently reported Mineral Resources estimates and the previously published estimates are highlighted in Appendix 4.

Exploration Update

Over the last two years NAP has consolidated a number of promising PGE claims within a 50km radius of the mine site. These greenfield

properties, combined with several well-defined exploration targets within the existing LDI mine site footprint (including near surface targets and opportunities to extend existing underground deposits), provide the Company with a well-balanced portfolio of near, medium and long-term exploration opportunities.

A more detailed exploration update will be released in the near future.

All figures are in Canadian dollars except where noted.

Technical Information and Qualified Persons

Dr. David C. Peck, P.Geo., the Company's Vice President, Exploration and a Qualified Person under National Instrument 43-101, has reviewed and approved all technical items disclosed in 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 the world's only mining operation that is a primary producer of palladium, offering investors unique exposure to palladium. The Company's shares trade on the TSX under the symbol PDL and on the OTC Pink under the symbol PALDF.

Cautionary Statement on Forward-Looking Information

Certain information contained in this news release constitutes 'forward-looking statements' within the meaning of the 'safe harbor' provisions of Canadian securities laws and the United States Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact are forward-looking statements. The words 'target', 'plan', 'should', 'could', 'estimate', 'guidance', and similar expressions identify forward-looking statements. Forward-looking statements in this news release include, without limitation: information pertaining to the Company's strategy, plans or future financial or operating performance, such as statements with respect to, long term fundamentals for the business, operating performance expectations, project timelines, tailings management plan, mining method changes, production forecasts, operating and capital cost estimates, expected mining and milling rates, cash balances, projected grades, mill recoveries, metal price and foreign exchange rates and other statements that express management's expectations or estimates of future performance. Forward-looking statements involve known and unknown risk factors 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 metal prices and foreign exchange rates may fluctuate, the risk that the LDI mine may not perform as planned, that the Company may not be able to meet production forecasts, the possibility that the Company may not be able to generate sufficient cash to service its indebtedness and may be forced to take other actions, inherent risks associated with development, exploration, mining and processing, including environmental risks and risks to tailings capacity, employment disruptions, including in connection with collective agreements between the Company and unions, the risks associated with obtaining necessary licenses and permits and uncertainty regarding the ability to consummate the Recapitalization. For more details on these and other risk factors see the Company's most recent Annual Information Form / Form 40-F on file with Canadian provincial securities regulatory authorities and the SEC.

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 will be able to continue normal business operations at its Lac des Iles mine, that metal prices and exchange rates between the Canadian and U.S. dollar will be consistent with the Company's expectations, that there will be no significant disruptions affecting operations, and that prices for key mining and construction supplies, including labour, will remain consistent with the Company's expectations. The forward-looking statements are not guarantees of future performance. 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.

To view Figure 1 accompanying this press release, please visit the following link: http://media3.marketwire.com/docs/1095963_Fig1.pdf

To view Figure 2 accompanying this press release, please visit the following link: http://media3.marketwire.com/docs/1095963_Fig2.pdf

APPENDIX 1: Mineral Reserve estimates for the Lac des Iles Mine Property effective March 20th, 2017.

Location	Zone/Area	Classification	Tonnes (’000s)	Reserves Grade					Contained Metal in Mineral Reserve			
				Pd (g/t)	Pt (g/t)	Au (g/t)	Cu (%)	Ni (%)	Pd (K oz)	Pt (K oz)	Au (K oz)	Cu (M lbs)
Underground	Offset Zone	Proven	2,800	3.17	0.25	0.21	0.06	0.09	285	22	18	3.7
"	"	Probable	15,036	3.19	0.27	0.29	0.09	0.11	1,542	130	140	29.8
"	Roby Zone	Proven	1,224	2.37	0.19	0.17	0.05	0.05	93	7	6	1.3
"	"	Probable	924	3.00	0.21	0.22	0.05	0.06	89	6	6	1.0

"	B2 Zone	Probable	1,268	2.51	0.24	0.19	0.07	0.08	102	9	7	1.9
Surface	Roby Pushback	Proven	1,534	1.47	0.18	0.12	0.05	0.06	72	8	5	1.6
"	"	Probable	10,135	1.26	0.20	0.10	0.05	0.06	410	65	32	11.1
"	Sheriff Pit	Proven	373	1.86	0.17	0.10	0.05	0.06	22	2	1	0.4
"	"	Probable	102	2.64	0.19	0.06	0.04	0.05	8	0	0	0
"	RGO	Probable	5,128	0.97	0.12	0.08	0.03	0.06	159	19	13	3.3
Total Underground	All	Proven	4,024	2.93	0.23	0.20	0.05	0.07	379	29	25	4.4
"	All	Probable	15,960	3.18	0.27	0.28	0.09	0.11	1,631	138	143	31.6
Total Surface	All	Proven	1,907	1.55	0.18	0.12	0.05	0.06	95	11	7	2.1
"	All	Probable	15,365	1.17	0.17	0.09	0.04	0.06	577	83	44	13.5
Total Reserves	All	Proven	5,931	2.48	0.21	0.17	0.06	0.07	472	40	32	7.8
"	All	Probable	32,593	2.21	0.22	0.19	0.08	0.07	2,315	230	199	57.4
"	All	Proven & Probable	38,524	2.25	0.22	0.19	0.06	0.07	2,787	272	235	50

*RGO refers to the Company's low-grade surface stockpile.

APPENDIX 2: Mineral Resource estimates for the Lac des Iles Mine Property effective March 20th, 2017

Mineral Resource estimates are stated exclusive of Mineral Reserves.

A. Measured and Indicated Resources

Location	Zone/Area	Category	COG (g/t Pd)	Tonnes (^{000 t)}	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu (%)	Ni (%)	Contained Pd (K oz)
Underground	Offset	Measured	2.0	2,064	3.02	0.29	0.23	0.08	0.10	200
Underground	Offset	Indicated	2.0	3,586	3.02	0.30	0.23	0.08	0.10	348
Underground	B2	Indicated	2.2	500	2.91	0.29	0.22	0.10	0.10	46
Underground	Roby	Measured	2.0	1,633	2.90	0.22	0.18	0.05	0.06	152
Underground	Roby	Indicated	2.0	960	2.80	0.22	0.17	0.05	0.05	86
Surface	Roby Pit Expansion	Measured	0.7	7,961	1.46	0.15	0.11	0.05	0.04	374
Surface	Roby Pit Expansion	Indicated	0.7	9,476	1.28	0.17	0.10	0.05	0.05	390
Surface	Sheriff South	Measured	1.0	1,724	1.40	0.15	0.09	0.05	0.06	77
Surface	Sheriff South	Indicated	1.0	454	1.31	0.15	0.08	0.04	0.05	19
Surface	North Vt Rim	Measured	1.0	437	2.03	0.12	0.03	0.01	0.03	28
Surface	North Vt Rim	Indicated	1.0	14	1.75	0.12	0.03	0.01	0.03	0.8
All	Totals	Measured	-	13,819	1.87	0.18	0.13	0.05	0.05	832
All	Totals	Indicated	-	14,990	1.85	0.21	0.14	0.06	0.06	891

B. Inferred Resources

Location	Zone/Area	Category	COG (g/t Pd)	Tonnes (^{000 t)}	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu (%)	Ni (%)
Underground	Offset	Inferred	2.0	2,722	3.11	0.27	0.20	0.08	0.09
Underground	B2	Inferred	2.2	91	3.03	0.28	0.25	0.09	0.09
Underground	Roby	Inferred	2.0	141	2.98	0.20	0.08	0.02	0.03
Underground	Mystery	Inferred	2.0	222	3.23	0.27	0.23	0.06	0.07
Surface	Roby Pit Expansion	Inferred	0.7	497	1.26	0.16	0.07	0.03	0.04
Surface	Sheriff South	Inferred	1.0	769	1.46	0.16	0.10	0.05	0.05
All	Totals	Inferred	-	4,442	2.62	0.24	0.17	0.07	0.07

Notes for Appendices 1 and 2

1. All Mineral Reserves and Mineral Resources estimates were prepared in accordance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects (NI 43-101) and the Canadian Institute of Mining, Metallurgy and Petroleum classification system. Investors should refer to the Annual Information Form for an overview on how Canadian Standards differ significantly from US requirements.
2. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimates of Mineral Resources and Mineral Reserves may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues. The effective date of the Mineral Reserve and Mineral Resource estimates provided in Tables 1 and 2 is March 20th, 2017.
3. The current estimates of Mineral Resources and Mineral Reserves on the Property reflect depletion from mining activities to December 31st, 2016.

4. The Mineral Reserves listed in Appendix 1 were estimated by Kris Hutton, P. Eng., and Johnny Canosa, P.Eng., both of whom are employees of Nordmin Engineering Ltd. and qualified persons (QPs) under NI 43-101. All Mineral Reserves estimates provided in Appendix 1 are based on geological block models provided by Denis Decharte, P.Eng, an employee of [North American Palladium](#) and a qualified person (QP) under NI 43-101 and Chris Roney, P. Geo., a consultant to LDI and a qualified person (QP) under NI 43-101. All Mineral Reserves and Mineral Resources estimates were reviewed and approved by Dave Peck, P. Geo., the Company's Vice-President, Exploration and a qualified person under NI 43-101.
5. Details of the Mineral Resources estimation procedures used for all zones and mining areas listed in Appendix 2 are documented in the new NI 43-101 Technical Report that the Company expects to file on SEDAR before June 15, 2017. Mineral Resources listed in Appendix 2 are exclusive of Mineral Reserves.
6. All of the underground Mineral Resources, excluding the Mystery Zone, were estimated by Denis Decharte (QP).
7. The Mystery Zone and Sheriff South Zone Mineral Resources were estimated by Chris Roney (QP).
8. The Near-Surface Mineral Resources were estimated by Denis Decharte (QP) using a single, constraining pit shell and a consolidated block model. The consolidated block model was derived from six different block models for discrete near-surface deposits prepared by Chris Roney (QP).
9. Mineral Resources estimates for the North VT Rim zone are unchanged from the estimates provided in the Company's 2014 Technical Report for the Property that were originally prepared by Chris Roney (QP).
10. The Mineral Reserve estimate for the low-grade surface stockpile (RGO) was prepared by Kris Hutton (QP). This Mineral Reserve estimate is based on a revised Mineral Resource estimate described in the new Technical Report for the Property and prepared by Dave Peck (QP).
11. The following metal price assumptions were used for Mineral Reserves estimation: US\$793/oz palladium, US\$1,175/oz platinum, US\$1,298/oz gold, US\$2.66/lb copper and US\$5.65/lb nickel. A CDN\$/US\$ exchange rate of 1.305 was also applied. These prices reflect the Company's long-term price and foreign exchange assumptions, which are based on median analyst forecasts from February, 2017.
12. Tonnages are rounded down to nearest '000 tonnes. Pd, Pt and Au grades are rounded to nearest .01 g/t. Ni and Cu grades are rounded to nearest .01%. Rounded numbers are used to calculate contained metal values and average Mineral Reserve and Mineral Resource tonnage and grades. Contained metal values are rounded down to nearest '000 oz (Pd, Pt and Au) or 100,000 lbs (Cu). Row and column summation totals may not directly match due to rounding.
13. Palladium ounces (oz) are stated as contained ounces. Disclosure of contained ounces is permitted under Canadian regulations; however, the SEC generally permits Mineral Resources to be reported only as in place tonnage and grade.

Appendix 3. Comparison Between 2017 and 2015 Mineral Reserves Estimates for the Lac des Iles Mine Property.

Mineral Reserves estimates listed for each zone and area include both Proven and Probable Reserves where applicable.

Location	Zone/Area	March 2017			March 2015			Difference	
		Tonnes ('000)	Pd Grade (g/t)	Pd Contained (K oz)	Tonnes ('000)	Pd Grade (g/t)	Pd Contained (K oz)	Pd Contained (K oz)	Pd Contained (% difference)
Surface	RGO	5,128	0.97	159	11,199	0.97	349	-190	-54%
Surface	Roby Pit	11,669	1.29	483	1,009	1.33	43	440	1023%
Surface	Sheriff Pit	475	2.03	31	0	-	-	31	-
Underground	Offset Zone	17,836	3.19	1,829	7,224	3.89	903	926	103%
Underground	Roby Zone	2,148	2.64	182	935	3.32	100	82	82%
Underground	B2 Zone	1,268	2.51	102	0	-	-	102	-
Surface	All Zones	17,272	1.22	673	12,208	1.00	392	281	72%
Underground	All Zones	21,252	3.09	2,113	8,159	3.82	1,003	1,110	111%
TOTAL RESERVES All Zones		38,524	2.25	2,786	20,367	2.13	1,395	1,391	100%

*RGO refers to the Company's low-grade surface stockpile. "-" means not applicable

APPENDIX 4: Comparison Between 2017 and 2015 Mineral Resources Estimates for the Lac des Iles Mine Property.

Includes combined Measured and Indicated Resources where applicable. Mineral Resources are exclusive of Mineral Reserves.

Measured and Indicated Resources		March 2017			March 2015			Difference	
Location	Zone/Area	Tonnes ('000)	Pd Grade (g/t)	Pd Contained (K oz)	Tonnes ('000)	Pd Grade (g/t)	Pd Contained (K oz)	Pd Contained (K oz)	Pd Contained (% diff)
Surface	Roby and Sheriff	19,615	1.36	857	35,136	1.27	1,434	-577	-62%
Surface	North VT Rim	451	2.03	29	451	2.02	29	0	0%
Underground	Offset	5,650	3.02	548	29,382	2.73	2,578	-2,030	-79%
Underground	Roby	2,593	2.86	238	6,500	2.40	501	-263	-52%
Underground	B2	500	2.91	46	0	-	-	46	-
TOTAL All Zones		28,809	1.86	1,718	71,469	1.98	4,542	-2,824	-62%
Inferred Resources		March 2017			March 2015			Difference	
Location	Zone/Area	Tonnes ('000)	Pd Grade (g/t)	Tonnes ('000)	Pd Grade (g/t)	Tonnes ('000)	Tonnes (% diff)		

Surface	Roby and Sheriff	1,266	1.38	530	1.66	736	139%
Underground	Offset	2,722	3.11	13,434	2.68	-10,712	-80%
Underground	Roby	141	2.98	248	2.43	-107	-43%
Underground	B2	91	3.03	827	3.20	-736	-89%
Underground	Mystery	222	3.23	0	-	222	-
TOTAL	All Zones	4,442	2.62	15,039	2.67	-10,597	-70%

"-" means not applicable

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