

# PALLADIUM ONE MINING INC.

# ANNUAL INFORMATION FORM FOR THE YEAR ENDED DECEMBER 31, 2020

**April 27, 2021** 

# **TABLE OF CONTENTS**

GENERAL MATTERS	3
FORWARD-LOOKING INFORMATION	3
TECHNICAL INFORMATION	4
CORPORATE STRUCTURE	5
GENERAL DEVELOPMENT OF THE BUSINESS	5
DESCRIPTION OF THE BUSINESS	14
MATERIAL MINERAL PROJECTS	15
DESCRIPTION OF SHARE CAPITAL	37
DIVIDENDS AND DISTRIBUTIONS	37
TRADING PRICE AND VOLUME OF SECURITIES	38
PRIOR SALES OF UNLISTED SECURITIES	38
ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER	39
DIRECTORS AND OFFICERS	39
AUDIT COMMITTEE DISCLOSURE	42
RISK FACTORS	44
LEGAL PROCEEDINGS AND REGULATORY ACTIONS	48
INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	48
REGISTRAR AND TRANSFER AGENT	48
MATERIAL CONTRACTS	48
INTEREST OF EXPERTS	49
ADDITIONAL INFORMATION	49
GLOSSARY OF TERMS	50
SCHEDULE "A"	52

#### **GENERAL MATTERS**

In this annual information form (the "AIF"), unless otherwise indicated or the context otherwise indicates, the terms "Corporation", "Palladium One", "we", "us" and "our" refer to Palladium One Mining Inc. and its subsidiaries.

For reporting purposes, the Corporation prepares its financial statements in Canadian dollars and in conformity with International Financial Reporting Standards ("IFRS"). All dollar amounts in this AIF are expressed in Canadian dollars, except as otherwise indicated.

All capitalized terms used in this AIF but not otherwise defined herein shall have the meanings ascribed to them under the heading "Glossary of Terms" below.

#### FORWARD-LOOKING INFORMATION

This AIF contains "forward-looking information" and "forward-looking statements" within the meaning of applicable securities legislation. Forward-looking information is prospective and by its nature requires the Corporation to make certain assumptions and is subject to inherent risks and uncertainties. There can be no assurance that forward-looking information will prove to be accurate, and readers are cautioned not to place undue reliance on the forward-looking information contained in this AIF. All statements, other than statements of historical fact, constitute forward-looking information. Generally, but not always, forward-looking information is identifiable by use of the words "continue", "expect", "anticipate", "estimate", "forecast", "believe", "intend", "schedule", "budget", "plan" or "project" or the negative or other variations of these words or comparable terminology, or states that certain actions, events or results "may", "could", "should", "would", "might" or "will" be taken, occur or be achieved. Forward-looking information in this AIF includes, but is not limited to, statements with respect to: future financial and operating performance; strategic plans; size and timing of future exploration; cost and production estimates; need for additional financing; estimate of mineral resources and mineral reserves; realization of mineral resources; results of exploration; operational risks associated with mineral exploration; capital expenditures and objectives; evolution and economic performance of development projects; timing and location of future drilling; fluctuations in commodity prices; title matters; possibility of project cost overruns or unanticipated costs and expenses; government regulation of mining operations; environmental liability claims and insurance; reliance on key personnel; and volatility of common share price and volume and other reports and filings made in accordance with applicable securities legislation.

In order to give such forward-looking information, the Corporation has made certain assumptions about the Corporation's business, the economy and the mining industry in general and has also assumed that contracted parties provide goods and services on agreed timeframes, plant and equipment work as anticipated, required regulatory approvals are received, no unusual geological or technical problems occur, no material adverse change to the price of Platinum-Group Elements ("PGE"), nickel, copper and other metals occurs and no significant events transpire outside of the Corporation's normal course of business. Although the assumptions were considered reasonable by management of the Corporation at the time the forward-looking information was given, there can be no assurance that such assumptions will prove to be accurate. In addition, the following list are material factors that could cause actual results to differ materially from a conclusion, guidance, forecast or projection contained in the forwardlooking information in this AIF: risks normally incidental to the nature of mineral exploration, development and mining; the uncertainty of mineral resource or mineral reserve estimates; mineral resources not having demonstrated economic viability; risks associated with mining projects currently in production; financing risks, debt and liquidity risks; risks associated with inaccurate capital and operational costs estimates; risks related to accounting policies and internal controls; fluctuating commodity prices; tax matters; information technology; labour difficulties; dependence on key personnel; dependence on third parties; dependence on experts outside of Canada; joint ventures; there being no assurance of title to mineral projects; Aboriginal claims and consultation issues; the Corporation's activities being subject to extensive governmental regulation; maintenance or provision of infrastructure; risks associated with the construction and start-up of new mines; personal safety and asset security risks in regions linked to criminal activity; risks associated with obtaining or complying with all required permits and licences; environmental regulations and potential liabilities; insurance and uninsured risks; competition from other mining businesses; conflicts of interest; risks associated with conducting business in foreign countries; unexpected disruptions in services provided by smelters or refiners; corruption risks and compliance with anti-corruption laws; fluctuations in the value of the Canadian dollar or the euro; risks associated with recovery of value added taxes; the lack of a guarantee of a positive return on investment; the volatility of the trading price of the common shares of the Corporation (the "Common Shares"); dilution and future sales of Common Shares; the Corporation has no record of dividends; risks arising from public opposition to mining activities; litigation risks; and reputational risks. Although the Corporation has attempted to identify material factors that could cause actual results to differ materially from a conclusion, guidance, forecast or projection contained in the forward-looking information, there may be other factors that could cause results to differ from what is anticipated, estimated or intended. Such factors are discussed in more detail under the heading "Risk Factors" in this AIF and elsewhere herein. Additional risks and uncertainties not presently known to the Corporation or that the Corporation currently deems immaterial may also impair the Corporation's business operations. New factors emerge from time to time, and it is not possible for management to predict them all or to assess in advance the impact of each factor on the Corporation's business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

All forward-looking information contained in this AIF are expressly qualified by the foregoing cautionary statements and are made as of the date of this AIF. Except as may be required by applicable securities legislation, the Corporation does not undertake any obligation to publicly update or revise any forward-looking statement to reflect events or circumstances after the date of this AIF or reflect the occurrence of unanticipated events, whether as a result of new information, future events or results, or otherwise.

#### TECHNICAL INFORMATION

The scientific and technical information relating to the LK Project, located in Finland, as set forth in this Prospectus has been derived from or is based on the Technical Report. The Technical Report has been filed with applicable Canadian securities regulatory authorities and is available for review under the Company's profile on SEDAR at www.sedar.com. Each of Alexei Sokolov and Markku Iljina is a qualified person, as defined under National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101"), has reviewed and approved the scientific and technical disclosure contained in this Prospectus.

The Technical Report is subject to certain assumptions, qualifications and procedures described therein, and its conclusions are based upon information provided by Palladium One throughout the course of investigations, which in turn reflect various technical and economic conditions existing at the time of preparing the Technical Report. Given the nature of the mining exploration, these conditions can change significantly over relatively short periods of time. Reference should be made to the full text of the Technical Report, which has been filed with Canadian securities regulatory authorities pursuant to National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") and is available for review under the Corporation's profile on SEDAR at www.sedar.com. The Technical Report is deemed to be incorporated by reference in this AIF.

Where appropriate, certain information contained in this AIF updates information derived from such Technical Report. Any updates to the scientific or technical information derived from the Technical Report and any other scientific or technical information contained in this AIF was prepared by or under the supervision of Neil Pettigrew, M.Sc., P.Geo, Vice President of Exploration and a director of the Corporation. Neil Pettigrew is a "qualified person" for the purposes of NI 43-101.

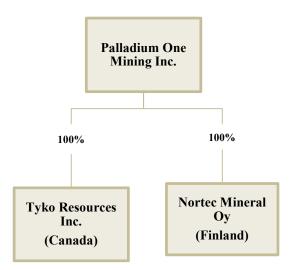
#### CORPORATE STRUCTURE

# Name, Address and Incorporation

The Corporation was incorporated under the *Business Corporations Act* (British Columbia) ("**BCBCA**") under the name Benzai Capital Corp. by articles of incorporation dated January 16, 2007. On January 24, 2013, the Corporation changed its name to Redline Resources Inc. and on February 11, 2016, the Corporation changed its name to Nickel One Resources Inc. and on May 3, 2019, the Corporation changed its name to Palladium One Mining Inc. The registered office and principal place of business of Palladium One is located at 800 West Pender Street, Suite 550, Vancouver, British Columbia, V6C 2V6. The Corporation's Common Shares are listed on the TSX Venture Exchange ("TSX-V") under the symbol "PDM".

#### **Inter-corporate Relationships**

The following diagram illustrates the corporate structure of the Corporation and the location of the Corporation's principal assets within its corporate structure.



## GENERAL DEVELOPMENT OF THE BUSINESS

Palladium One is an exploration stage company and engages principally in the exploration of mineral properties in proven, accessible and safe mining jurisdictions in Canada and Finland. The principal projects in which Palladium One currently holds a 100% interest include the Lantinen Koillismaa ("LK") Platinum-Group Elements ("PGE")-Copper-Nickel and Kostonjarvi ("KS") Cu-Ni-PGE projects, located in North-Central Finland and the Tyko Ni-Cu-PGE and Disraeli PGE-Ni-Cu projects, near Thunder Bay, Ontario, Canada. Further information regarding Palladium One's mineral projects can be found under the heading "Material Mineral Projects" below.

## **Three Year History**

Events During the Year 2020, 2019 and 2018 and Subsequent to Year Ended December 31, 2020

## **Change of Board and Management**

On March 28, 2019, the Company announced that Mr. Derrick Weyrauch was appointed as Interim President and Chief Executive Officer and Director of the Company. Mr. Weyrauch is an experienced mining executive and corporate director with a CPA CA designation. His background includes finance, risk management, corporate restructuring and turnarounds, coupled with M&A strategy development, execution and post transaction integration.

On March 28, 2019, the Company appointed Mr. Lawrence Roulston as an independent director to the board of directors. Mr. Roulston is a mining professional with over 35 years of diverse hands-on experience. He is an advisor who is providing business advisory and capital markets expertise to the junior and mid-tier sectors of the mining industry.

On September 5, 2019, the Company appointed Mr. Neil Pettigrew as its Vice President - Exploration. Neil Pettigrew M.Sc., P.Geo. is a geologist with 20 years of experience in the mineral exploration industry. He has worked for several junior and major companies in gold and Cu-Ni-PGE exploration, and has held officer and director positions at several TSX and TSX-V listed junior companies.

On September 10, 2019, the Company announced the appointment of Dr. Peter C. Lightfoot as an independent director to the board of directors. Dr. Peter C. Lightfoot, P.Geo. is an independent consultant to the global minerals industry, providing services to companies exploring for magmatic nickel-cobalt-copper and precious metal ore deposits. During a 20-year career as a geologist with Inco and Vale he was responsible for nickel exploration at Voisey's Bay, Sudbury and Carajas, and was involved in international project generation, evaluation and technical support.

On April 2, 2021, Ms. Giovanna Bee Moscoso was appointed as an independent director to the board of directors of the Company. Ms. Bee Moscoso is an experienced mining executive with over 28 years of experience, including progressive responsibilities over 25 years at Barrick Gold Corporation, where previously she was a partner, Vice President and Assistant General Counsel.

# Name Change and Share Consolidation

On May 3, 2019, the Company consolidated its share capital on a ratio of one (1) new post-consolidated common share for every two (2) old pre-consolidated common shares. All shares and per share references in this MD&A have been retroactively restated accordingly unless noted otherwise.

#### **Financing**

On January 2, 2018, 100,000 warrants were exercised at a price of \$0.08 per share for gross proceeds of \$8,000. Accordingly, the related warrants reserve of \$3,000 was reallocated to capital stock.

On March 12, 2018, the Company issued 5,000,000 common shares with a fair value of \$275,000 and 2,500,000 common share purchase warrants at a price of \$0.12 for the acquisition of Nortec Mineral Oy. In connection with the acquisition, the Company issued 250,000 common shares with a fair value of \$11,250 as a finder's fee.

During the year ended December 31, 2018, the Company completed a non-brokered private placement of 6,820,000 units at a price of \$0.05 per unit for gross proceeds \$341,000. Each unit consists of one common share and one-half common share purchase warrant. Each whole common share purchase warrant is exercisable into one common share for a period of two years from closing at a price of \$0.10 per share. A total of \$35,000 was received during the year ended December 31, 2017 and was included in subscription received in advance. The company incurred a total of \$3,105 in share issuance costs related to the private placement.

On May 9, 2019, the Company completed a non-brokered private placement and issued 16,912,000 units at a price of \$0.08 per unit for gross proceeds \$1,352,960. Each unit consists of one common share and one common share purchase warrant. Each whole common share purchase warrant is exercisable into one common share for a period of two years from closing at a price of \$0.12 per share. The Company incurred a total of \$19,404 in share issuance costs related to the private placement. The warrants were allocated a value of \$nil using the residual value allocation method.

On October 18, 2019, the Company completed a non-brokered flow-through private placement and issued 500,000 units at a price of \$0.10 for gross proceeds of \$50,000. Each unit consists of one flow-through common share and one common share purchase warrant. Each purchase warrant is exercisable for two years at a price of \$0.12. The

Warrants are subject to an acceleration provision: if the shares close at \$0.20 or more for ten consecutive trading days on the TSX-Venture Exchange, the Company has the right to accelerate the expiry. A flow-through premium liability of \$22,500 was recognized in respect of these flow-through shares.

On December 2, 2019, the Company completed a non-brokered private placement offering, issuing 63,102,999 units for total gross proceeds of \$3,786,180 at a price of \$0.06 per unit. Each Unit is comprised of one common share in the capital of the Company, one-half of one non-transferable Common Share purchase warrant, exercisable at \$0.10 for the first year then \$0.20 for a further year, and one-quarter of one non-transferable Common Share purchase warrant, exercisable for \$0.15 for one year. The warrants were allocated a value of \$nil using the residual value allocation method. In addition, the Company incurred a total of \$93,837 in share issuance costs (of which \$12,408 remains in accounts payable), issued 2,487,000 common shares valued at \$nil and issued 1,956,250 finders warrants with a fair value of \$55,465 in connection with the private placement. 1,334,500 of the finders' warrants are exercisable at \$0.10 for the first year then \$0.20 for a further year and the remaining 621,750 are exercisable at \$0.15 for a period of one year from the grant date.

On May 20, 2020, the Company completed the first tranche of its non-brokered private placement of flow through units for gross proceeds of \$1,057,950. The Company issued 2,700,000 charity flow-through units at a price of \$0.13 per unit and 7,855,000 flow-through units at a price of \$0.09 per unit. Each unit is comprised of one common share, one-half of one Common Share purchase warrant exercisable at \$0.13 for 12 months, then \$0.22 for the following 12 months. The Company incurred finders' fees totaling \$28,975 and issued 67,500 finders' warrants, with a fair value of \$3,894.

On May 26, 2020, the Company completed the second tranche of its non-brokered private placement of charity flow through units, for gross proceeds of \$76,440. Each unit is comprised of one common share, one-half of one Common Share purchase warrant exercisable at \$0.13 for 12 months, then \$0.22 for the following 12 months.

On October 29, 2020, the Company applied for trading in the United States on OTCQB Venture Market, in conjunction with DTC eligibility.

During the year ended December 31, 2020, 58,007,503 common shares were issued upon exercise of warrants for proceeds of \$6,782,275, and 75,000 common shares were issued upon exercise of stock options for proceeds of \$6,000.

On February 24, 2021, the Company completed a 'bought deal' financing of \$15,009,000, which consist of a short-form prospectus offering of 43,100,000 units at a price of \$0.29 per unit for gross proceeds \$12,499,000, brokered private placement of 5,000,000 charity flow through units at a price of \$0.40 per unit for gross proceeds of \$2,000,000, and 1,500,000 flow-through units at a price of \$0.34 per unit for gross proceeds of \$510,000. Each unit consists of one common share and one-half common share purchase warrant. Each warrant is exercisable into one common share for a period of two years from closing at a price of \$0.45 per share. The Company incurred a total of \$1,216,528 in share issuance costs related to the private placement.

On March 3, 2021, the Company reported its planned exploration activities in 2021 have been expanded at both the palladium dominant Läntinen Koillismaa ("LK") PGE-Ni-Cu project in Finland and the Tyko Nickel-Copper project in Ontario, Canada, with the acceleration of exploration activities and expansion of the initial 2021 exploration budget to \$11.5 million. The expanded program in Finland allows the company to complete the resource definition drilling at the Kaukua South and Haukiaho zones, while also initiating drilling at potential eastern and western extensions of Kaukua South. At the Tyko project, the expanded program will be centered on new target development infill drilling, and expansion of known high-grade nickel mineralization at the Smoke Lake zone.

Subsequent to December 31, 2020, 6,824,000 warrants were exercised for gross proceeds of \$903,095 and 750,000 options were exercised for gross proceeds of \$100,250.

#### **Settlement of Debts**

On March 18, 2019, the Company settled debt with various officers and directors, resulting in a gain on settlement of debt of \$124,020 (2018 - \$10,000). This amount has been netted against other vendors' gains or losses on the settlement of debt.

On May 13, 2019, the Company issued 925,072 common shares at a value of \$0.12 per share to settle \$95,557 in accounts payable which resulted in loss on settlement of debt of \$15,452. The arm's length parties are consultants and service providers that provided various services to the Company in 2016 and 2017.

#### **Options and Restricted Share Units ("RSU's)**

On June 10, 2019, the Company granted 2,400,000 stock options with a fair value of \$111,178 to certain directors, officers, consultants and advisors, exercisable at a price of \$0.08 per common share for a period of 5 years and vesting immediately.

On September 30, 2019, the Company granted 1,125,000 stock options with a fair value of \$30,608 to certain directors, officers, consultants, and advisors, exercisable at a price of \$0.08 per common share for a period of 5 years and vesting immediately.

On December 29, 2019, the Company granted 5,100,000 stock options with a fair value of \$404,237 to certain directors, officers, consultants, and advisors, exercisable at a price of \$0.15 per common share for a period of 5 years and vesting immediately.

On March 15, 2021, the Company granted 1,275,862 restricted share units ("RSU") with a fair value of \$370,000 to certain directors, officers, consultants and advisors, exercisable at a price of \$0.29 per common share and vesting 3-years from the date of grant.

On March 15, 2021, the Company also granted 775,000 stock options to certain directors, officers, consultants and advisors, exercisable at a price of \$0.29 per common share for a term of 5 years and having 1/3 vesting immediately and 1/3 every year thereafter.

#### **COVID-19 Pandemic**

On March 24, 2020, the Company reported that due to the COVID-19 pandemic, it has suspended the exploration program at the LK project, in Finland. The Company repatriated all Canadian staff on March 16, 2020 and praised the professionalism of its Finnish team during the challenging period. The Company's exploration program concluded having completed the full 85-line kilometers of Induced Polarization (IP) and 385-line kilometers of drone Magnetic geophysical surveys, and approximately 2,000-meters of the planned 5,000-meter diamond drilling program.

## Lantinen Koillismaa PGE-Cu-Ni Project ("LK Project"), Finland

On June 10, 2019, the Company retained Mining Plus UK Ltd to prepare an independent National Instrument 43-101 compliant mineral resource estimate for the Kaukua deposit of the LK project. As part of the mineral resource estimation, a data verification program was undertaken wherein over 100, quarter-split core samples were collected from historical diamond drill core and have been sent to ALS Global in Finland for re-assaying and ultimately reconciliation with the existing drill hole assay database.

On August 12, 2019, the Company reported Reconnaissance Prospecting that returned up to 3.106 g/t PGE, 0.78% Cu, and 0.13% Ni at the LK Project.

On September 5, 2019, the Company announced it had made an application to expand the LK palladium-nickel-copper project by nearly 50%, by applying for 2 reservations covering an additional 13 km of Prospective Basal Contact at the LK PGE-Ni-Cu Project in Finland.

On September 9, 2019, the Company issued a resource statement for the Kaukua deposit, highlighting the following:

- An optimized pit-constrained Mineral Resource, at a 0.3 g/t Pd ("grams per tonne" "palladium") cut-off, for the Kaukua Deposit includes:
  - o 635,600 Pd\_Eq ounces of Indicated Resources grading 1.80 g/t Pd\_Eq ("palladium equivalent") contained in 11 million tonnes, and
  - 525,800 Pd\_Eq ounces of Inferred Resources grading 1.50 g/t Pd\_Eq contained in 11 million tonnes.

On December 17, 2019, the Company announced that the LK Project had seven of eight exploration permit renewal applications approved by the Finnish Mining Authority, with the approvals entering an appeals process. The Company also announced plans to conduct a 75 line-kilometer Induced Polarization (IP) geophysical program along with a diamond drilling program of up to 5,000 meters at the LK Project.

On January 14, 2020, the Company announced that it had retained SJ Geophysics Ltd. to conduct an induced polarization survey. Five separate grids will be surveyed totaling 75 line-kilometers; cumulatively representing ~12km of strike length of the highly prospective basal unit of the Koillismaa mafic-ultramafic complex, which hosts the Kaukua deposit.

On January 16, 2020, the Company bought back an existing 2% Net Smelter Return ("NSR") royalty in respect of the historic Haukiaho deposit. The terms of the royalty buyback include a cash payment of C\$50,000 and issuance of 375,000 common shares.

On February 13, 2020, the Company reported that the Finnish Mining Authority had approved all eight exploration permit renewals and one new exploration permit application, with two key exploration permits clearing the appeals process. Seven remained in the appeals process, however the Company applied for an Enforcement Decision, which will allow it to conduct exploration during the appeals process. Exploration permits covering the Kaukau deposit, and the historic Haukiaho deposit, where the bulk of the drill program is planned, were uncontested.

On February 18, 2020, the Company retained a local diamond drilling contractor to conduct a drill program, with crews scheduled to mobilize on February 24th.

On February 25, 2020, the Company reported initial results from the first Induced Polarization (IP) survey with the discovery of a large chargeability anomaly, representing the eastern extension of the palladium dominant Kaukua South Zone. The Kaukua South Zone anomaly was extended over a two (2) kilometre strike length.

On March 10, 2020, the Company reported that the second 2020 Induced Polarization (IP) survey grid, located at Murtolampi, two kilometres northeast of the Kaukua deposit, had successfully outlined a significant untested chargeability anomaly. The core of the Murtolampi chargeability anomaly extends over more than 750m of strike length, with a width ranging from 100 to 300m and extends down to the maximum depth of the 300m IP survey.

On March 24, 2020, the Company announced that due to the COVID-19 pandemic, the Company was suspending the current exploration program at the palladium dominant, Läntinen Koillismaa ("LK") PGE-nickel-copper project located in Finland.

On April 2, 2020, the Company reported that it has applied for two additional reservations Kaukuanjarvi (9,100 ha) and Haukiaho North (2,140 ha).

The Company also reported that the Salmivaara 2-11 exploration permit had gained legal force. The Company had three permits that have cleared the appeals process, and enforcement decisions have been granted on another five thereby enabling exploration to be conducted on eight permits.

On April 14, 2020, the Company report that the Kaukua South Zone anomaly extends over more than a four (4) km strike length and into a large, overburdened area that has never been drill tested. Final results from the first Induced Polarization (IP) survey grid, Kaukua East and the Infill grid have outlined this large chargeability anomaly, representing the eastern extension of the palladium dominant Kaukua South Zone. This suggests the greater Kaukua area could have a much larger resource endowment than previously understood.

On May 7, 2020, the Company reported that it had identified three new drill targets on the Haukiaho Trend resulting from the Haukiaho Induced Polarization (IP) survey.

On May 26, 2020, the Company reported that it had identified a new, large chargeability drill target at the Haukiaho East Induced Polarization (IP) survey grid.

On June 11, 2020, the Company reported that it had identified a new chargeability drill target on the Tilsa Induced Polarization (IP) survey grid.

On July 14, 2020, the Company reported that it was preparing to resume its drill program in August, after its suspension due to the COVID-19 pandemic. Initial drilling will focus on expanding known mineralization to the east of existing drill intercepts in the Kaukua South zone, which coincides with a greater than four (4) kilometer long Induced Polarization chargeability anomaly.

On July 22, 2020, the Company reported that it had intersected 32.6m @ 2.86 g/t palladium equivalent in drill hole LK20-001, including 16m @ 3.64 g/t palladium equivalent, which was the first hole of the Phase 1 program. Holes LK20-001 through LK20-005 targeted previously untested up dip portions of the Kaukua Deposit, with the goal of upgrading current inferred resources to indicated.

On July 28, 2020, the Company reported that it had intersected 41.6m @ 2.16 g/t palladium equivalent in drill hole LK20-007, including 7.8m @ 3.26 g/t palladium equivalent. Hole LK20-007 targeted the down plunge of a previously unrecognized, southwest trending, higher-grade shoot within the Kaukua deposit. The results of this hole indicate that this higher-grade shoot remains open to the southwest for expansion. Hole LK20-007 is on the lower edge of the 2019 block model and the expansion of this higher-grade shoot will add ounces to a future resource update.

On August 10, 2020, the Company reported that the final data from the 2020 winter Induced Polarization (IP) geophysical program, suggest that the newly discovered Kaukua South chargeability anomaly extends for over 5.5 km.

On August 10, 2020, the Company reported the post-COVID, resumption of the Phase 1 drilling program in the LK PGE-Cu-Ni Project, located in north-central Finland.

On August 11, 2020, the Company reported that it had intersected 166.7m @ 1.16 g/t palladium equivalent in drill hole LK20-005, including 63.4m @ 1.88 g/t palladium equivalent in Kaukua South. LK20-006 confirms the eastern extension of the greater than 4-kilometer long Kaukua South IP anomaly is the result of PGE-Cu-Ni sulphide mineralization. Additionally, LK20-006 is 180m east of and significantly higher grade than the nearest Kaukua South hole. It is also twice as wide as the best historic intercept in Kaukua South. This is the most significant result of the Phase 1 drill program and demonstrates continued strong correlation between IP results and sulphide mineralization.

On August 25, 2020, the Company reported that it had intersected 87.2m @ 1.43 g/t palladium equivalent at the Murtolampi zone. This is the first diamond drill hole results in the Murtolampi zone, located 2.5 kilometers north of the Kaukua Deposit, at the open pit LK PGE-Cu-Ni Project.

On September 15, 2020, the Company reported that it had identified the first diamond drill hole assays from the Haukiaho Trend, wherein it had intersected a wide interval of mineralization in a previously untested area thereby increasing the potential of the Haukiaho 2013 historic resource area. Haukiaho is located 12 kilometers southwest of the Kaukua Deposit, in the LK PGE-Cu-Ni Project. Hole LK20-010 intersected a core zone of 34.2m @ 2.09 g/t palladium equivalent (0.77g/t PGE, 0.22% nickel, 0.20% copper), within a larger zone grading 83.30 @ 1.27g/t palladium equivalent.

On September 29, 2020, the Company reported that it had 11 successful discovery holes drilled on the Kaukua South extension, each containing a magmatic sulphide mineralization, and are currently waiting for the assay results. These major discovery increases Kaukua South mineralized strike length six-fold from 600m to 4km.

On October 6, 2020, the Company reported that it had identified the first assay results from the resumed Phase I drill program at the LK Project in Finland and has returned a wide zone, of shallow, high-grade palladium mineralization in the Kaukua South Extension. Hole LK20-014 returned a core zone of 72.0 m at 1.96 g/t palladium equivalent within a wider zone of 145.5m at 1.26 g/t palladium equivalent.

On October 20, 2020, the Company reported that it had discovered a further 600m mineralized strike length at Murtolampi, located less than 2km north of the Kaukua Deposit. Discoveries now total 4.6km of strike length in greater Kaukua area.

On October 22, 2020, the Company reported that of the 11 discovery holes drilled at Kaukua South, hole LK20-016 is the highest grade drilled to date.

On November 10, 2020, the Company reported that it had initiated a 17,500-meter Phase II drilling program in Finland. The Phase II program is primarily designed to support a future inferred resource estimate at Kaukua South, which possesses a drill defined, greater than 4-kilometer mineralized strike length.

On November 16, 2020, the Company reported that it had intersected high-grade open pit potential mineralization returning 13m at 3.4 g/t palladium equivalent within 79m at 2.0 g/t palladium equivalent. The shallow high-grade results suggest potential for a low-cost satellite open pit at Murtolampi, which is close to the existing Kaukua deposit, located 2km to the south.

On January 18, 2021, the Company announced the initial infill drilling results from the 17,500-meter Phase II drill program having delivered superior grades and demonstrate broad zones of continuity with multiple intercepts of high-grade, open-pit resource potential at the Kaukua South zone of the LK PGE-Ni-Cu project. As well as the filing of an updated 43-101 technical report on the LK project.

On February 10 2021, the Company applied to convert 2,862 hectares of the 9,151 hectare Kaukuanjarvi Reservation to an Exploration Permit.

On March 11, 2021, the Company reported that the infill drilling spaced at 100-meter grid spacing has increased continuous mineralization to over 1,300 meters and into the 'gap zone', thereby supporting the thesis of potentially more open-pit resources at the Kaukua South zone of the LK PGE-Ni-Cu project in Finland.

On March 18, 2021, the Company reported that it had expanded a high-grade zone at Kaukua South, drills 47 meters at 2.6 g/t palladium equivalent, including 12 meters at 4.2 g/t palladium equivalent.

# Kostonjarvi, Cu-Ni-PGE Project ("KS Project"), Finland

On April 2, 2020, the Company reported that it had received approval from the Finnish Mining Authority for a ~20,000-hectare Reservation, Kostonjarvi (KS), which is adjacent to the Company's Flagship Läntinen Koillismaa (LK) Project in Central Finland.

Licence Name	Licence ID	First Registration (Arrival)	Renewal Granted	Legally Valid (passed appeals process)	Expiry	Validity Period Years	Status	Area (hectares)
Reservations								
Kostonjarvi	VA2020:0079- 01	21.10.2019	04.12.2019	14.07.2020	20.10.2021	N/A	Active	19,924

# Tyko Ni-Cu-PGE Property ("Tyko Project"), Canada

On August 19, 2019, the Company announced it had acquired, through staking, 12 new claims totalling 254 hectares covering the historic Shabotik Zone, located 4.5km south of the Tyko project, near Marathon, Ontario.

On October 21, 2019, the Company announced that it had submitted a sample collected from it's Tyko Ni-Cu-PGE project to Activation Laboratories for metallurgical testing. This testing represents the first metallurgical work done on the project and assessed the floatation characteristics of mineralization. The metallurgical sample was collected from hole TK-16-002 from the RJ zone which was drilled by the Company in 2016. The sample consists of ~20kg of drill core and represents a 50/50 mixture of primary pyroxenite and remobilized granite hosted sulphide mineralization.

As at December 31, 2019, the Company has spent a total of \$1,309,379 on the property since it was acquired by Tyko in 2010.

On January 21, 2020, the Company reported prospecting samples with assay results of up to 0.74% Ni, 4.09% Cu and 2.51g/t PGE (1.21 g/t Pt, 1.19 g/t Pd, and 0.11 g/t Au) from the Tyko Showing.

On January 27, 2019, the Company reported that the Fall 2019 program had returned up to 238 ppm nickel and 108 ppm copper in soils (representing >20 times background) down ice of the untested Smoke Lake airborne electromagnetic (EM) anomaly. A ground-based VLF survey conducted by the Company in 2016 traced this EM anomaly over a 300m strike length. Smoke Lake anomaly has become a high priority drill target for the Company.

On January 27, 2020, the Company reported greater than 20 times background levels for both nickel and copper in soil sampling at the Smoke Lake electromagnetic geophysical anomaly.

On November 18, 2020, the Company announced the discovery of up to 0.41% Nickel in Boulders and initiation of a drill program at the Tyko project in Canada. Boulders closely resemble Ni-Cu mineralization at the RJ and Tyko zones which have returned up to 4.71% Ni over 0.87m in diamond drilling. Initial Phase I diamond drill program to begin on November 23, 2020.

On December 7, 2020, the Company announced the discovery of a 4-meter and a 2-meter wide drill intercept of massive magmatic sulphide at the Smoke Lake airborne electromagnetic ("EM") target.

As at December 31, 2020, the Company has spent a total of \$1,709,514 on the Tyko project since it was acquired by Tyko in 2010.

On January 5, 2021, the Company announced that it had intersected massive magmatic sulphides grading of 8.7% Ni\_Eq\*(193 pounds per tonne) over 3.8 meters (6.6% Ni, 3.7% Cu, 1.5g/t PGE) at less than 30 meters true-depth, at the Smoke Lake target of the Tyko Ni-Cu-PGE project.

On January 12, 2021, the Company reported the results of six additional drill holes containing several massive magmatic sulphides intercepts grading up to 7.5% Ni\_Eq\*(164 pounds per tonne) over 4.2 meters (5.8% Ni, 2.7% Cu, 1.3/t PGE), at the Smoke Lake target of the Tyko Ni-Cu-PGE project.

On January 19, 2021, the Company reported the final results of its 2020 Tyko drill program showing massive magmatic sulphides grading up to 9.9% Ni\_Eq\*(218 pounds per tonne) over 3.8 meters (8.1% Ni, 2.9% Cu, 1.3/t PGE), starting at less than 9 meters true-depth, located at the Smoke Lake target of the Tyko Ni-Cu-PGE project. The intercept is within a broader interval that returned 6.1% Ni\_Eq over 7.5 meters (135 pounds per tonne) (4.5% Ni, 2.9% Cu, 1.0g/t PGE) from 5.3 meters down hole.

On April 6, 2021, the Company reported that it had started its 2,000-meter Phase II drilling program at the high-grade Smoke Lake nickel discovery, which returned up to 9.9% Ni\_Eq over 3.8 meters from surface, on the Tyko Sulphide-Nickel-Copper project in Ontario, Canada. In advance of drilling, in February 2021, detailed ground based Electromagnetic ("EM") and Borehole Electromagnetic ("BHEM") surveys were conducted to better define the conductors hosting the high-grade nickel mineralization.

# Disraeli Lake, PGE-Ni-Cu Property ("Disraeli Project"), Canada

On February 6, 2020, the Company completed the purchase of the Disraeli Property, located near Thunder Bay, Ontario. The Company acquired a 100% interest in the property by making a cash payment of \$5,000 to Ursa Major Minerals Inc and incurring \$56,000 in exploration expenditures, which was fulfilled by the end March 2020. The 155 claim unit, ~2,500 hectare project covers a the Disraeli mafic-ultramafic intrusion located in the prolific Nipigon Plate of the Proterozoic mid-continent rift. The Disraeli intrusion lies along the West Nipigon lineament that also hosts the Thunder Bay North PGE-Ni-Cu deposit, held by Clean Air Metals Inc.

In late February and early March 2020, the Company conducted detailed drone airborne magnetic and lake sediment surveys on the project.

On December 9, 2020, the Company discovered a potential significant magnetic signature, a key indicator of mineralization in the Mid-Continental Rift ("MCR"), where the Disraeli PGE Project is located. The magnetic survey ("Mag") outlined a large, reversely polarized, magnetic body coincident with AeroTEM electromagnetic ("EM") anomalies.

On April 6, 2021, the Company reported 5 ice-based holes totaling 1,233 meters One conductor was found to be caused by cobalt bearing massive magnetite skarn mineralization (returning 2.63 meters grading 0.12% Cu, 0.05% Co, and 0.09% Ni), while several of the airborne EM conductors proved to be the result of lake sediments. The reversely polarized magnetic body requires additional follow up as it was not adequately explained. Of particular note was an off-hole EM conductor identified at the basement contact. Unseasonably warm conditions in early March resulted in deterioration of the ice road, cutting the drill program short and thus this target was not able to be tested. This target remains a priority target.

#### **DESCRIPTION OF THE BUSINESS**

## **Summary**

Palladium One is a Vancouver-based mineral exploration and development company and is engaged in the pursuit of PGEs, copper and nickel. Its assets consist of the LK and KS Projects, located in North-Central Finland, and the Tyko and Disraeli Properties situated near Thunder Bay in Ontario, Canada. Additional information regarding Palladium One's mineral projects can be found under the heading "Material Mineral Projects" below.

#### Specialized Skills and Knowledge

Palladium One require specialized skills and knowledge, including but not limited to geology. The Corporation has adequate contractors and consultants with extensive experience in these areas to meet its current needs.

## **Competitive Conditions**

The mineral exploration and mining business is competitive in all phases of exploration, development and production. Palladium One competes with a number of other mining companies in the search for and acquisition of mineral properties and to retain qualified personnel. See "Risk Factors" below. The ability of the Corporation to acquire precious metal mineral properties in the future will depend not only on its ability to develop its present properties, but also on its ability to select and acquire suitable producing properties or prospects for precious metal development or mineral exploration.

# **Changes to Contracts**

The Corporation does not anticipate that its business will be materially affected in the current financial year by the renegotiation or termination of any contracts or sub-contracts.

#### Health, Safety, Social and Environmental Policies and Environmental Protection

Palladium One's exploration, development and production activities are subject to, and any future development and production operations will be subject to, environmental laws and regulations in the jurisdictions in which operations are carried out. See "*Risk Factors*".

Palladium One's operating mineral projects seek to adopt the best environmental practices programs to manage environmental matters and compliance with local and international legislation. In common with other natural resources and mineral processing companies, the Corporation's operations generate hazardous and non-hazardous waste, effluent and emissions into the atmosphere, water and soil in compliance with local and international regulations and standards. There are numerous environmental laws in Finland and Canada that apply to the Corporation's operations, exploration, development projects and land holdings. These laws address matters such as protection of the natural environment, air and water quality, emissions standards and disposal of waste.

Cognizant of its responsibility to the environment, Palladium One strives to conform with all applicable environmental laws and regulations and to promote the respect of the environment in its activities. Employees are expected to maintain compliance with the letter and spirit of all laws governing the jurisdictions in which they perform their duties. Specifically, employees are expected to support Palladium One's efforts to develop, implement and maintain procedures and programs designed to protect and preserve the environment.

## **Employees**

As of December 31, 2020, the Corporation had one employee.

## **Domestic and Foreign Operations**

The Corporation's mineral projects are in Canada and Finland. See "Material Mineral Projects" for a summary of the Corporation's projects. Any changes in regulations or shifts in political attitudes in any of these jurisdictions, or other jurisdictions in which Palladium One has projects from time to time, are beyond the control of the Corporation and may adversely affect its business. Future development and operations may be affected in varying degrees by such factors as government regulations (or changes thereto) with respect to the restrictions on production, export controls, income taxes, expropriation of property, repatriation of profits, environmental legislation, land use, water use, land claims of local people and receipt of necessary permits. The effect of these factors cannot be accurately predicted. See "Risk Factors".

#### MATERIAL MINERAL PROJECTS

Where appropriate, certain information contained in this AIF updates information derived from the Technical Report. Any updates to the scientific or technical information derived from such Technical Report and any other scientific or technical information contained in this AIF have been prepared by or under the supervision of Neil Pettigrew, M.Sc., P.Geo, Vice President of Exploration and a director of the Corporation. Neil Pettigrew is a "qualified person" for the purposes of NI 43-101.

# A. Lantinen Koillismaa PGE-Cu-Ni Project in Finland

The following summary of the LK Project is extracted from the Technical Report, and is modified to conform to this AIF. This summary is qualified in its entirety by reference to the full text of the Technical Report entitled 'Technical Report for the Kaukua Deposit, Läntinen Koillismaa Project, Finland' dated September 2019, which has been filed with Canadian securities regulatory authorities pursuant to NI 43-101 and is available for review under the Corporation's profile on SEDAR at <a href="www.sedar.com">www.sedar.com</a>. The Technical Report is incorporated into this AIF by reference.

# Project Description, Location and Access

The Lantinen Koillismaa PGE-Cu-Ni Project (the "LK Project") is located in north central Finland, approximately 40 km north of the Company's exploration office in the village of Taivalkoski. The property is 130 km ESE of the town of Rovaniemi and 160 km NE of the port town of Oulu. The central point of the LK Project is centred at longitude 28°07'42.00" E; latitude 65°54'20.61" N. The project is accessed by major paved roads and local access on gravel or dirt roads to the individual drill site areas. Weather conditions are characteristic of the northern Fennoscandian climate with temperate summers and cold winters. During the summer months (June-August), temperatures range from 10°C to 25°C, and during the winter months (November-April) between -5°C to -30°C.

## **Exploration Permits and Reservations**

The LK Project area is covered by Exploration Permits, and Reservation Notifications. Exploration Permits are divided into two groups; the Kaukua Group consisting of the Kaukua and Murtolampi targets (Kaukua North 1-2) and the Haukiaho Group covering the Lipeävaara and Haukiaho targets.

The Exploration Permits cover 5,3464 hectares, while the Exploration Reservation cover 12,652 hectares (Table 1 and 2). An Exploration Permit is granted for a fixed term of up to 4 years. The Exploration Permit can be renewed for up to 3 years at time for a total maximum duration of 15 years, excluding renewal review periods, and includes preceding comparable permits, which are referred to as Claims in the old Mining Act (pre-2011). The validity period (the time since the permit was first granted) of each Exploration Permit is shown in the Table 1 below. Reservations are granted for up to 2 years and are not renewable but must either be converted into Exploration Permits or dropped.

Licence Name	Licence ID	First Registration (Arrival)	Registration Granted	Legally Valid (passed appeals process)	Expiry	Validity Period Years	Status	Area (hectares)
Exploration P	ermits							
Kaukua 1-3	ML2012:0198- 02	11.7.2008	07.11.2019	10-12- 2019	07.11.2022	9	2 <sup>nd</sup> Renewal	229
Kaukua East 1- 2	ML2017:0024- 01	14.5.2012	11.12.2019	14.07.20 20	11.12.2022	6	1 <sup>st</sup> Renewal	158
Kaukua North 1-2	ML2017:0025- 01	14.5.2012	07.11.2019	18.02.20 20	07.11.2022	6	1 <sup>st</sup> Renewal	123
Kaukua 4 ja 6- 15	ML2017- 0039-01	14.5.2012	07.11.2019	18.02.20 20	07.11.2022	6	1 <sup>st</sup> Renewal	385
Kaukua West 1-2	ML2017:0026- 01	14.5.2012	19.02.2020	14.07.20 20	19.02.2023	6	1 <sup>st</sup> Renewal	135
Haukiaho 1-2	ML2012:0199- 02	21.10.2008	11.12.2019	11.01.20 20	11.12.2022	9	2 <sup>nd</sup> Renewal	185
Haukiaho 3-4	ML2014:0012- 01	7.4.2009	11.12.2019	14.07.20 20	11.12.2022	6	1 <sup>st</sup> Renewal	187
Haukiaho 11	ML2014:0016- 01	13.4.2012	11.12.2019	14.07.20 20	11.12.2022	6	1 <sup>st</sup> Renewal	93
Salmivaara 2-11	ML2016:0021- 1	24.03.2016	10.02.2020	12.02.20 20	24.04.2023	1	New	989
Kaukuanjarvi*	ML2021:0015- 01	10.02.2021	N/A	N/A	N/A	N/A	Applicati on	2,862

Licence Name	Licence ID	First Registratio n (Arrival)	Registration Date	Legally Valid (passed appeals process)	Expiry	Validity Period Years	Status	Area (hectares )
Reservations								
Haukiaho East	VA2019:0053 -01	29.06.2019	10.10.2019	18.02.2020	28.06.2021	N/A	Active	480
Lipeävaara	VA2019:0052 -01	29.06.2019	10.10.2019	18.02.2020	28.06.2021	N/A	Active	871
Kaukuanjarvi *	VA2020:0012 -01	24.02.2020	16.04.2020	10.07.2020	23.02.2021	N/A	Converted to Permit Applicatio n	9,151
Haukiaho North	VA2020:0008 -01	24.02.2020	16.04.2020	10.07.2020	23.02.2022	N/A	Active	2,150

<sup>\*</sup> Kaukuanjarvi is in the process of being converted from a Reservation to an Exploration Permit, thus it appears in the both Reservation and Exploration Permit tables.

None of the LK Project permit areas are located on nature conservation areas, however, the Exploration Permit for Salmivaara 2-11 has approximately 2.3 km of common border with a Natura 2000 area. Natura 2000 is a nature conservation program established according to Finnish national legislation and in accordance to a directive given by the European Union. Approximately 10% of the KS project Exploration Reservation overlaps with a Natura 2000 area.

There is no legal requirement to survey the boundaries of exploration permits in Finland; instead they are assigned Finnish map coordinates by the mining authority.

#### Title and Royalties

On February 28, 2018, the Company completed the acquisition of 100% interest in the LK Project from Finore Mining Inc. ("Finore") through the purchase by the Company of Nortec Minerals Oy, the owner of the LK Project from Finore.

Finore acquired its rights to the LK Project from Nortec Minerals Corp. ("Nortec") via an Option and Joint Venture Agreement, dated August 24th, 2011 and as subsequently amended. Nortec was granted a 2% Net Smelter Royalty ("NSR") on any future production from the Haukiaho and Haukiaho East claims. The Company retained the option to purchase 1% of the NSR from Nortec for €1 million. On January 9, 2020, Palladium announced the purchase of the 2% NSR from Nortec for the sum of \$50,000 cash and 375,000 common shares of the Company.

Nortec acquired its rights to the LK Project from Akkerman Exploration B.V. ("**AEbv**") pursuant to a Memorandum of Understanding dated July 26, 2007 and as subsequently amended.

AEbv was granted a 2% NSR on any future production from the Kaukua, Murtolampi and Lipeävaara Targets. The Company retains the option to purchase 1% of the NSR from AEbv for €1 million. On February 25, 2020, EMX Royalty Corporation announced the purchase of the 2% NSR from AEbv for \$125,000 in cash and 52,000 shares of the Company.

The 100% interest in the Kaukua property was transferred to the Finland registered company, Nortec Minerals Oy, a 100%-owned subsidiary of Nortec at the time.

Nortec acquired its 100% right to the Haukiaho property via a sale and purchase agreement with Vulcan Resources Ltd dated on October 7, 2009.

On January 16, 2020, the Company bought back an existing 2% Net Smelter Return ("NSR") royalty in respect of the historic Haukiaho deposit, with a cash payment of \$50,000 and issuance of 375,000 common shares, with a fair value of \$73,125.

# History

Copper and nickel mineralization, hosted by the Marginal Series of the Koillismaa Intrusion (see Geological Setting and Mineralization, Section 7) was first documented by the Geological Survey and Outokumpu Oy in the early 1960s. The latter also completed 75 drillholes for approximately 12 km of diamond drill core. Approximately half of these drillholes were drilled on the Haukiaho Group of properties, where a small-scale test mining operation was also undertaken. The original exploration carried out by Outokumpu located sulphide minerals in the Haukiaho and Lipeävaara areas.

PGE-focused exploration started in the early 1980s, when highly anomalous PGE-enriched boulder samples (PGE+Au >10 ppm) were reported in the Haukiaho area. This was followed by detailed mapping, surface sampling, resampling of old drill core for PGE and geophysical surveys. In 1990, Outokumpu discovered mineralized portions in the Kaukua and Murtolampi (Kaukua North 1-2) intrusion blocks and executed a trenching and sampling project by handheld mini-drill. No further drilling was conducted at this time.

In 1996, GTK (Finland Geological Survey) started an extensive research and exploration program of the entire Koillismaa Complex including the current Palladium One LK Project areas.

In 2000, the Swedish junior exploration company North Atlantic Natural Resources AB ("NAN") signed a contract with GTK and the Ministry of Trade and Industry (predecessor of TEM) of Finland ("KTM") optioning the claims. NAN conducted geophysical ground surveys on Palladium One's present Haukiaho, Murtolampi (licence area Kaukua North 1-2), and Kaukua areas, but only drilled the Haukiaho area. Fugro Ltd flew a low-altitude aerial geophysical survey covering the area of Haukiaho and Kaukua. NAN also sent surface boulder samples of Haukiaho mineralization for metallurgical tests to Lakefield Research Ltd (Lakefield Research Ltd 2001) in Canada before withdrawing from the Koillismaa project in late 2002.

Detailed magnetic surveys (by GTK and NAN) outlined principal segments or blocks of the basal Koillismaa Intrusion and helped determine probable continuity and offsets. Induced Polarization (IP) surveys did outline a consistent chargeable unit, which correlates with the mineralization intersected by the drilling. This is also consistent with the descriptions of typical disseminated Cu-Ni-Fe sulphide mineralization seen in drill core. There is some variability displayed along strike, which may indicate thinner mineralized zones, or minor disruptions related to post emplacement cross faults.

The research and exploration program, by GTK and NAN (1996-2002), resulted in the delineation of highly mineralized areas in the Marginal Series host. Two of the areas, Haukiaho and Kaukua, were subjected to further exploration activity in 2004 and 2005 by GTK including diamond drilling.

Historical mineralogical and metallurgical studies show a strong correlation between the sulphide content and the Ni, Cu and PGE tenor.

Nortec conducted four phases of exploration drilling over the Kaukua property from October 2007 to May 2009 for a total of 10,292.8 meters of drilling. The drilling programs explored for east-west trending, southerly dipping PGE+Au-Cu-Ni mineralization, plunging to the WSW. Limited mineral processing and metallurgical tests were

completed by Nortec Minerals Corp in 2009 and 2010 on drill core from the Kaukua deposit (SGS Canada Inc. 2010), the results of which are discussed in Section 13 Mineral Processing and Metallurgical Testing.

Nortec completed drill core re-logging and sampling of historic drill core from 2008 to 2010 in 68 drillholes. This work included using the Nortec logging data format, confirmation of the high quality work done in previous studies and the creation of a modern electronic database in Access format. This work as summarized meets or exceeds present industry standards.

In June 2008, Nortec contracted SJ Geophysics, a geophysical contracting and consultancy firm from Vancouver, BC, Canada, to conduct a three-dimensional ground based Induced Polarization (3DIP) test survey over the Kaukua property. The purpose of this ground geophysical test survey was to determine if IP could locate and trace potential sulphide mineralization and differentiate between possible similar responses from fine grained magnetite known to be present in the area. Data collection was carried out on a grid with lines spaces at 100 m, amounting to 20-line kilometers of survey.

The inverted chargeability sections calculated from this 3DIP survey outline several anomalous sources which were generally observed to correlate with known and projected Cu- Ni mineralization.

# Geology, Mineralization and Deposit Types

## Geology

Finland lies within the predominantly Neoarchaean and Palaeoproterozoic Fennoscandian Shield, which is exposed over an area of more than 1 million km². The Fennoscandian Shield bedrocks in Finland can be subdivided into three broad domains, a Neoarchaean cratonic nucleus flanked by Palaeoproterozoic mobile belts forming the Karelian Province, and Palaeoproterozoic Svecofennian Province in SW Finland. The Archaean nucleus is characterized by extensive granitoids and gneiss domains surrounding narrow northerly trending greenstone belts. The major magmatic and metamorphic events took place around 2.84 Ga, although rocks up to 3.5 Ga are present in the craton. Greenstone sequences of lower metamorphic grade were formed after this event. These greenstone sequences were subsequently deformed and intruded by tonalitic to granitic magmas between 2.75-2.69 Ga. The Kuhmo and Suomussalmi greenstone belts are the most extensive and well preserved supracrustal units in these Archaean belts outcropping over a strike length of nearly 200 km, though seldom exceeding 10 km in width. Both greenstone belts contain abundant tholeitic and komatitic volcanic rocks, together with related intrusive and subvolcanic cumulates, and lesser felsic volcanic and volcanoclastic units.

Geological survey of Finland has defined broad metallogenic areas, which characterise various structural units. A special reference is given to 2.5 Ga breakup of Archaeancraton, which globally gave rise to igneous activity that introduced layered intrusions and mafic dyke swarms worldwide. In Fennoscandia, this breakup is represented by the Tornio-Näränkävaara intrusion belt, TNB, which forms the western part of the giant intrusion belt extending into Russia and bifurcating to Lake Onega in the south, and Arctic Ocean and White Sea in the north and east.

All mineralization types characteristic of layered mafic intrusions can be found in the TNB. These include "contact style" accumulations of chromite and PGE-enriched base metal sulphides in the lowest parts of the intrusions, stratiform "reef style" PGE, chromite and magnetite enrichments higher in the cumulate sequences, and offset "footwall style" PGE-base metal deposits below the intrusions.

The TNB hosts several deposit types such as the world-class chrome deposit located at the base of the Kemi Intrusion, the potentially world-class Suhanko PGE-Ni-Cu deposits hosted by the Portimo Complex, the Monchegorsk Ni-Cu-PGE deposit hosted by the Monchetundra Massif (Russia), and a vanadium deposit hosted by a magnetite gabbro layer within the Koillismaa complex. Mining is currently underway at the Kemi chrome mine (1968-Present) and formerly at the Monchegorsk Ni-Cu-PGE mine, and Mustavaara vanadium mine (1976-1985).

The Koillismaa Layered Igneous Complex makes up the easternmost portion of the TNB and consists of two main sectors, the Näränkävaara Intrusion in the east and the Koillismaa Intrusion formerly called the Western Intrusion.

These two intrusions are likely connected by an unexposed connecting dyke, which is indicated by a strong magnetic and gravity anomaly.

Several mineralization types typical of layered mafic intrusions can be found in the Koillismaa Intrusion. These include layered accumulations of PGE-enriched base metal sulphides in the lowest parts of the intrusions (contact-type PGE deposits), stratiform PGE, and vanadium enriched magnetite layer (Reefs) higher in the cumulate sequences. The magnetite gabbro layer has been exploited for vanadium.

## Mineralization

The mineralized Marginal Series has been more intensively studied in the Kaukua and Haukiaho blocks. Four principal types of base metal - PGE mineralization have been identified within the Kaukua block:

- 1. Hangingwall-type Mineralization (contact-type, in the northern block).
- 2. Marginal Series-type Mineralization (contact-type).
- 3. Mixed Zone-type Mineralization (contact-type).
- 4. Reef-type Mineralization (in the southern block).

The Hangingwall-type mineralization is hosted in a strongly foliated gabbronorite of the Layered Series just above the Marginal Series. The Hangingwall-type is may be related to the PGE reef identified in the southern Kaukua block abutting the Marginal Series of the northern block due to angular discordance between the Layered and Marginal Series. A PGE reef has also been intersected in the Haukiaho Layered Series, but its possible merging with the Marginal Series mineralization to form Kaukua Hangingwall type mineralization is unknown.

Marginal Series-type mineralization makes up over 70% of the metal deposition at Kaukua. The Marginal Series is dominated by pyroxenite that hosts sulphide assemblages comprised of pyrrhotite-chalcopyrite-pentlandite. The sulphide assemblage also occurs as medium-grained, disseminated aggregations. Sulphide content increases towards the base of the Marginal Series, which often indicates an increase in grade for both PGE and base metals.

There are occasional thin (<3 m wide) transition zones between the mineralized pyroxenite (Marginal Series) and the sulphide-bearing Mixed Zone that have lower grade PGE mineralization or are barren.

Sulphide mineralization in the Mixed Zone at Kaukua varies in thickness between 30 and 40 meters. The Mixed Zone is dominated by xenoliths of granodiorite and quartzo-feldspathic gneisses partially assimilated into Marginal Series. Sulphides usually occur as fine-medium grained chalcopyrite and pyrrhotite disseminations in the basement unit and in cross-cutting gabbroic-pyroxenitic intrusions. Pyrite is also present. PGE are associated with the sulphides, with the highest values associated with the chalcopyrite-rich domains. Upon moving deeper into the basement, pyrite becomes a dominant sulphide and PGE values decrease below detection limits.

The Kaukua PGE - base metals sulphide reef shares similar features with the Rometölväs Reef described in the Syöte and Porttivaara blocks of the Koillismaa Intrusion. This Rometölväs Reef appears as low-grade, erratic enrichment within a 20 m thick gabbronorite adcumulate zone containing fine-grained xenoliths (known as microgabbronorites), gabbropegmatites and anorthositic segregates. The characteristic feature of the reef in Kaukua is frequent basement xenoliths while other features of Rometölväs Reef are missing. In the northern part of Kaukua, this reef appears to abut the Marginal Series due to angular discordance between it and the Layered Series. When occurring right above the Marginal Series the reef is actually determined as hangingwall-type mineralization as described above.

The typical sulphide assemblage is pyrrhotite-chalcopyrite-pentlandite and accessory sulphides include pyrite, sphalerite, galena and molybdenite. The main oxides are magnetite and ilmenite, with chromite present in trace

amounts. The grades of PGE mineralization roughly correlate with the abundance of sulphides, particularly chalcopyrite.

While the LK and KS projects are contiguous, the targets are very different. The LK project is an open pit style, with disseminated sulphide mineralization along the prospective basal unit of the Koillismaa complex, with similarities to Platreef type deposits. Whereas the KS project target is underground, high-grade massive sulphide, in the feeder system (Feeder Dyke) of the Koillismaa Complex, similar to a Norilsk, or Voisey's Bay type deposit.

## Deposit Types

Platinum-Group Elements ("PGE") are a general reference to six metals: platinum (Pt), palladium (Pd), rhodium (Rh), iridium (Ir), ruthenium (Ru), and osmium (Os). Economic PGE deposits are primarily hosted by mafic and ultramafic igneous rocks. The deposit type is a basal accumulation of PGE-rich base metal sulphides hosted in the Koillismaa layered mafic-ultramafic complex, which forms part of the Paleoproterozoic (2.5-2.4 Ga) Tornio-Näränkävaara Layered Intrusion Belt (TNB) that extends east west across Finland and into Russia.

Finland lies within the predominantly Neoarchaean and Palaeoproterozoic Fennoscandian Shield, which is exposed over an area of more than 1 million km2. The Fennoscandian Shield bedrocks in Finland can be subdivided into three broad domains, a Neoarchaean cratonic nucleus flanked by Palaeoproterozoic mobile belts forming the Karelian Province, and Palaeoproterozoic Svecofennian Province in SW Finland. The Archaean nucleus is characterized by extensive granitoids and gneiss domains surrounding narrow northerly trending greenstone belts. The major magmatic and metamorphic events took place around 2.84 Ga, although rocks up to 3.5 Ga are present in the craton. Greenstone sequences of lower metamorphic grade were formed after this event. These greenstone sequences were subsequently deformed and intruded by tonalitic to granitic magmas between 2.75-2.69 Ga. The Kuhmo and Suomussalmi greenstone belts are the most extensive and well preserved supracrustal units in these Archaean belts outcropping over a strike length of nearly 200 km, though seldom exceeding 10 km in width. Both greenstone belts contain abundant tholeitic and komatitic volcanic rocks, together with related intrusive and subvolcanic cumulates, and lesser felsic volcanic and volcanoclastic units.

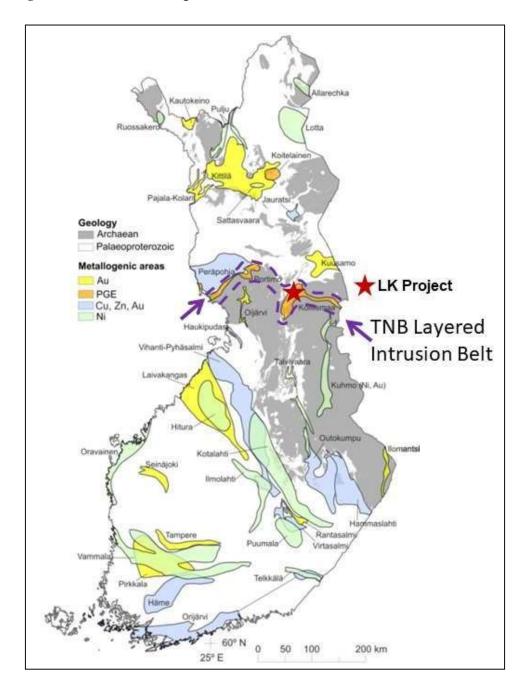
The Karelian Province records a prolonged and episodic history of sedimentation, rifting and magmatism throughout the Early Palaeoproterozoic. The Central Lapland greenstone belt is the largest mafic-dominated province preserved in the entire shield. A sequence of bimodal mafic and felsic volcanics dated at around 2.5 Ga unconformably overlie the Archean basement and represent the onset of rifting.

Continued rifting of the Archean crust resulted in the widespread emplacement of mafic and ultramafic layered intrusions between 2.5-2.4 Ga including the Koillismaa Complex. These igneous formations have been found to be potential for Cr, Cu-Ni-PGE sulphide, PGE only and Fe-Ti-V oxide mineralization. Clastic sediments discordantly overlie these layered intrusions, with further episodes of mafic magmatism recorded as sporadic lavas and sills dated at around 2.2 Ga, 2.10 Ga, and 2.05 Ga. The latest stage includes the Sakatti and Kevitsa Ni-Cu-PGE deposit.

Geological survey of Finland has defined broad metallogenic areas, which characterise various structural units, Figure 7-1 and Figure 7-2. A special reference is given to 2.5 Ga breakup of Archaean craton, which globally gave rise to igneous activity that introduced layered intrusions and mafic dyke swarms worldwide. In Fennoscandia, this breakup is represented by the Tornio-Näränkävaara intrusion belt, TNB, Figure 7-1, which forms the western part

of the giant intrusion belt extending into Russia and bifurcating to Lake Onega in the south, and Arctic Ocean and White Sea in the north and east (Alapieti et al. 1990).

Figure 7-1 - Finland metallogenic areas and Tornio-Näränkävaara intrusion belt, TNB



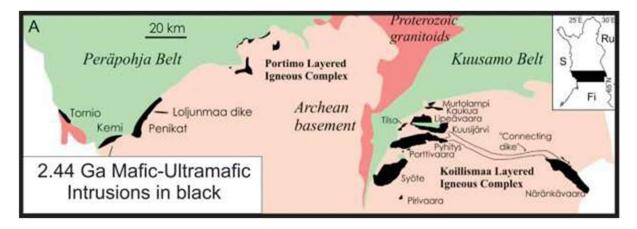


Figure 7-2 – Simplified geology of the Tornio Näränkävaara intrusion belt (TNB), showing the Kemi Intrusion, host to the world class Kemi chrome mine, the Portimo Complex host to the Suhanko PGE-Ni-Cu deposit, and the Koillismaa Complex which hosts the LK Project

All mineralization types characteristic of layered mafic intrusions can be found in the TNB. These include "contact style" accumulations of chromite and PGE-enriched base metal sulphides in the lowest parts of the intrusions, stratiform "reef style" PGE, chromite and magnetite enrichments higher in the cumulate sequences, and offset "footwall style" PGE- base metal deposits below the intrusions (Iljina and Hanski 2005).

The TNB hosts several deposit types such as the world-class chrome deposit located at the base of the Kemi Intrusion, the potentially world-class Suhanko PGE-Ni-Cu deposits hosted by the Portimo Complex, the Monchegorsk Ni-Cu-PGE deposit hosted by the Monchetundra Massif (Russia), and a vanadium deposit hosted by a magnetite gabbro layer within the Koillismaa complex. Mining is currently underway at the Kemi chrome mine (1968-Present) and formerly at the Monchegorsk Ni-Cu-PGE mine, and Mustavaara vanadium mine (1976- 1985). Platinum-Group Elements ("PGE") are a general reference to six metals: platinum (Pt), palladium (Pd), rhodium (Rh), iridium (Ir), ruthenium (Ru), and osmium (Os). Economic PGE deposits are primarily hosted by mafic and ultramafic igneous rocks.

On the basis of relative abundance (in economic value) of PGE and other metals, PGE deposits can be classified as 'PGE only' type of deposits, or deposits in which PGEs are enriched along with the base metal sulphides or chromite.

PGE deposits of rift-related intracontinental layered intrusions (like Koillismaa) are classified on their structural position in the intrusion as shown in Figure 8-1.

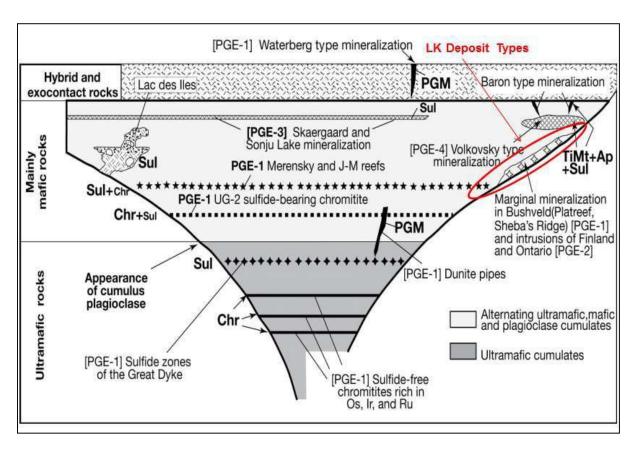


Figure 8-1 - Schematic Section of Magmatic Cu, Ni, PGE Deposits Types (MP modified from Finore 2013 supplied image)

'Contact-type' deposits are generally zones near or at the base of an intrusion. "Marginal Series", may be tens to over a hundred meters wide and are developed at the base or sides of layered mafic intrusions. The PGE concentration is generally lower than in 'reef-type' (stratiform layers in the layered intrusion) deposits and the economic exploitability is based on large tonnage bulk mining methods. Contact-type mineralization is erratic in nature and in individual drillholes the highest PGE values can be found tens of meters above or below the contact of the intrusion. This style of mineralization also varies along strike. High-grade PGE enrichments, contact-type and others seem to be related to larger igneous events, but the size of the hosting intrusion is not necessarily a controlling factor (Iljina and Lee, 2005).

There are examples within the Marginal Series where mineralization is enhanced at particular structural positions. Specifically, where the Layered Series PGE reef abuts the Marginal Series due to an angular discordance. Known examples of this grade enhancing host rock relationship come from the Platreef (Contact-Type Merensky Reef) in the Northern Bushveld, Bushveld Complex. A similar structural relationship is tentatively identified in Haukiaho and Kaukua.

## **Exploration**

In July 2019, the Company conducted a site visit of the property and reconnaissance prospecting in the Murtolampi and Haukiaho areas which returned up to 3.1 g/t and 0.96 g/t Pt+Pd+Au respectively. The Company was also very active in compiling all historic geological information on the LK project into a central database, and with this data produced a revised geological model of Kaukua deposit which forms the basis of the 2019 updated resource.

Since the technical report dated September 25, 2019 entitled "Technical Report for the Kaukua Deposit, Läntinen Kollismaa Project, Finland" by Alexei Sokolov and Marrku Iljina and the effective date of November 10, 2020 for the Technical Report, the Company has conducted 4,800 meters of diamond drilling in 26 drillholes and 88.3-line km of 3D Induced Polarization (IP) (SJ Geophysics 2020), and 385-line km of drone-based mag surveys (Nuutinen 2020) on the LK project. On November 10, 2020, the Company announced a 17,500 meter Phase II drill program on the LK Project beginning on November 13, 2020.

The Company began the 2020 exploration program in mid January by conducting high resolution 3D IP using SJ Geophysics of Vancouver B.C., Canada on 5 grids, Kaukua South/East, Murtolampi, Haukiaho, Tilsa, and Feeder/Haukiaho East. Concurrently, a high resolution (50 meter spacing) drone-based magnetometer survey was carried out over the 5 grids by GRM Geophysical and Rock Mechanical Services of Helsinki, Finland. The Phase I drilling began in late February 2020 but was shut down mid-March 2020 due to COVID-19 completing only 1,918.3 meters in 12 drillholes. Drilling resumed in August 2020 with another 14 drillholes completed bring phase I to a total of 4,482.25 meters in 26 drillholes by the end of September 2020.

The 2020 3D Induced Polarization survey was successful. Induced Polarization had been instrumental in the discovery of the Kaukua deposit in 2008 and has proven effective again in 2020 with the discovery of the Kaukua South mineralization. The disseminated and blebby Cu-Ni-PGE mineralization in the marginal phase of the Koillismaa complex form low to moderate chargeability anomalies. Significantly, the Koillismaa complex rocks and the surrounding country rocks are very low in sulphide, hence there is very little background interference with the Induced Polarization response.

The 2020 drill program was also successful. The pre-COVID shut down stage included drilling on the Kaukua deposit, Kaukua South, Haukiaho, and Murtolampi. This resulted in the discovery of the Kaukua South extension with drillhole LK-20-006. The second stage of the drill program was successful in extending the Kaukua South mineralization over 3 km and also tested the Murtolampi zone.

# Drilling

A partial history of drilling on the project has been summarized in the section "History" of this Prospectus and in Section 6 of the Technical Report. Historic drilling on the property summarized in Table 4 below:

**Table 4 – Drilling History Summary** 

Company/Year	Number of Drillholes	Permit Group	Number of Meters Drilled
Outokumpu/1963-1966	36	Haukiaho	6,327.85
University of Oulu/1973	2	Lipeävaara	83.10
GTK/1997-1999 and 2004-2005	46	Haukiaho	6,206.01
GTK/1999 and 2004	16	Kaukua	1,951.75
GTK/1999	7	Lipeävaara	999.29
NAN/2001	7	Haukiaho	893.60
Nortec/2007-2009	50	Kaukua	10,292.80
Finore/2011-2012	25	Haukiaho	4,668.80
Finore/2012	23	Kaukua	6,116.20
Palladium One/2020	26	Kaukua, Haukiaho	4,482.25
Total	238		42,021.65

# 2020 Palladium Drill Program

The Company commenced its Phase I drilling in late February 2020 completing only 1,909.6 m in 12 drillholes before being shut down mid-March due to COVID-19. Drilling resumed in August 2020 with another 14 drillholes completed bringing Phase I to a total of 4,482.25 meters in 26 drillholes by the end of September 2020. Drillhole collar coordinates have been provided in Table 5 (below). On November 10th 2020, the Company announced a Phase II 17,500 meters drill program.

Table 5 – 2020 Drilling Summary (Phase I)

Zone	Hole	Easting (UTM WGS84 z35)	Northing (UTM WGS84 z35)	Numbers of Meters Drilled	Azimuth	Dip
	LK20_001	553402.7	7314491	91.2	356.9	-54.7
	LK20_002	553510.5	7314504	94.2	355.5	-55.3
Kaukua Deposit	LK20_003	553609.1	7314494	91.8	357.3	-55.5
	LK20_004	553556.8	7314500	86.65	396.9	-54.6
	LK20_005	553458.2	7314502	88.1	357.5	-54.5
Kaukua South	LK20_006	553978	7313707	271.82	357.6	-79.9
Kaukua Deposit	LK20_007	553112.4	7314239	305.75	1.5	-59.2
	LK20_008	547040.7	7304055	117.4	193	-44.1
Haukiaho	LK20_009	546960	7304142	229.8	198.2	-80.1
	LK20_010	546935	7304215	222.65	196.8	-55.5
Mantolompi	LK20_011	555103	7316463	43	292	-45
Murtolampi	LK20_012	555103	7316463	275.9	303.8	-44.8
	LK20_013	553978	7313720	193.9	1.3	-50.39
	LK20_014	554076.469	7313728.696	221.5	1.8	-79.56
	LK20_015	554354	7313663	302.2	357.8	-81.14
	LK20_016	554647	7313760	155.4	357	-81.11
	LK20_017	556206.91	7313515	194.2	356.9	-80.51
Kaukua South	LK20_018	556207	7313515	109	356.9	-43.13
	LK20_019	554647	7313760	60.45	358.5	-45.4
	LK20_020	556834	7313447	173.5	358.1	-68.97
	LK20_021	556834	7313447	148.7	358.1	-46.67
	LK20_022	556207	7313465	278.3	356.9	-80.79
	LK20_023	554354	7313700	196.6	357.6	-45.84
Murtolampi	LK20_024	554621	7316126	229.7	318.2	-75
	LK20_025	554981.0435	7316564.173	167.2	308.2	-65.84
	LK20_026	555070	7316425	133.3	307.7	-44.88
Total				4,482.25		

The Phase I drill program tested 4 different zones including the Kaukua deposit (6 drillholes), Kaukua South (12 drillholes), Murtolampi (5 drillholes), and Haukiaho (3 drillholes). By far the most significant result from the drill program was the discovery of the Kaukua South extension with drillhole LK20-006 returning 166.7 meters @ 1.16 g/t Palladium Equivalent ("Pd\_Eq"), including 63.4 meters @ 1.88 g/t Pd\_Eq. This drillhole confirmed that the Kaukua South extension IP chargeability anomaly was due to Cu-Ni-PGE sulphide mineralization. Follow up drilling in the summer of 2020 tested 3 km of the Kaukua South extension IP anomaly with every drillhole intersecting Cu-Ni-PGE mineralization. Intercepts included drillhole LK20-016 returning 62.7 meters @ 3.52 g/t Pd\_Eq, including 18.5 meters @ 4.58 g/t Pd\_Eq. The Kaukua South Zone has now been defined over 4 km strike length and is interpreted to be the faulted eastern extension of the Kaukua deposit.

Significant results were also returned at Murtolampi with drillhole LK20-026 intersecting 79 meters @ 2.0 g/t Pd\_Eq, including 13 meters at 3.4 g/t Pd\_Eq, effectively defining mineralization over 600 m of strike. These results were significantly wider and higher grade than the shallow historic GTK drilling and indicates that Murtolampi could prove to be a valuable satellite deposit if follow-up drilling returns similar results.

A total of 6 drillholes targeted the Kaukua deposit, with 5 shallow drillholes in the NE of the deposit completed with the intent of increasing the confidence in the current inferred resources in this area and to better define near surface mineralization for a future bulk sample. These drillholes returned grades and widths in line with the block model grades with LK20-001 returning the best intersection of 32.6 meters @ 2.86 g/t Pd\_Eq, from 33 m down hole. A deeper drillhole, LK20-007 was drilled testing the base of the Kaukua resource. This drillhole confirmed a higher-grade SW plunging shoot within the Kaukua deposit, returning 41.6 meters grading 2.16 g/t Pd\_Eq.

Finally, 3 drillholes were completed on the historic Haukiaho deposit. The Company originally intended to drill the bulk of the Phase I program at Haukiaho with the goal of up grading the historic resource to 43-101 standards, however the discovery of Kaukua South caused a re-allocation of the program resources. The Haukiaho drilling was primarily infill in nature and focused on infilling a 200 m gap in the historic drilling near the centre of the deposit. Drillhole LK20-010 returned the best result of 83.3 m @ 1.27 g/t Pd\_Eq, including 34.2 m @ 2.09 g/t Pd\_Eq. Table 10-3 of the Technical Report provides detailed information of the significant drillhole intercepts from the 2020 drilling program.

Palladium equivalent is calculated using US\$1,100 per ounce for palladium, US\$950 per ounce for platinum, US\$1,300 per ounce for gold, US\$6,614 per tonne for copper, and US\$15,4332 per tonne for nickel. This calculation is consistent with the calculation in the Company's September 2019 NI 43-101 Kaukua resource estimate.

## Sampling, Analysis and Data Verification

Drill is collected from the drill site by the Company contract personnel and transported to the Company's secure core handling facility in Taivalkoski. Drill core is logged using Geotic Software and photos are taken of all core. Drill core samples were sawed in half with half retained in the core box and stored indoors at a facility in Taivalkoski. The samples were individual bagged and placed in a large wood box on a pallet and saran wrapped for shipping. The samples were transported by courier from the Company's core handling facility in Taivalkoski, to ALS Global ("ALS") laboratory in Outokumpu, Finland.

ALS is an accredited lab and are ISO compliant (ISO 9001:2008, ISO/IEC 17025:2005). PGE analysis was performed using a 30 gram fire assay with an ICP-AES finish. Multi-element analyses, including copper and nickel were completed by four acid digestion using 0.25 grams with an ICP-AES finish. Certified standards, blanks and crushed duplicates are placed in the sample stream at a rate of one QA/QC sample per 10 core samples. Results are analyzed for acceptance at the time of import into the Geotic database.

Blank material used is "Sauna Rock" which is commercially widely available, it consists of medium grained unaltered diabase, and was also historically used by Nortec and Finore in their drill programs.

Standards used in the Phase I drill program were sourced from CDN Resources Laboratories Ltd. of Langley B.C., Canada.

Assay results of the used Standards of the Phase I Drill Program show systematically higher values than provided by the CDN Resource Laboratories Ltd. and occasionally exceed two standard deviation but fall within three standard deviations. As for assessing Exploration Target Potential the observed deviation can, however, be regarded immaterial.

#### **Data Verification**

The Company provided original laboratory assay certificates for all of the samples analysed as part of the Phase I 2020 drilling program. These have been provided as both comma delimited text files and as pdf's and included the results of the Standards, blanks and crush duplicate samples as well as primary assays. Approximately 30% of the assay and QAQC data contained within the drillhole database for this Phase I drilling have been verified against the source data files with no discrepancies identified.

The Company provided original laboratory assay certificates on analyses of the 2011-2012 drilling used for the Mineral Resource estimate. Assay data provided also included results of blanks, standards and inter-laboratory check assays. Original certificates in pdf format have been read by Camelot software and converted into a format enabling a cross check between the Resource estimate table and assay certificate by Python software. This verification covered 100% of samples but has only been undertaken on the Kaukua 2012 drilling.

A copy of the assay database of Nortec drilling (2007-2009) has been in the possession of Markku Iljina (Ph.D., EurGeol) since 2009 as part of his work on the 2011 and 2012.

In addition, Markku Iljina (Ph.D., EurGeol) has visited the LK project several times in 2020 during the course of assisting the Company's Phase I drill program, the most recent visit being on July 1<sup>st</sup> - 3<sup>rd</sup> and October 14<sup>th</sup> – 16<sup>th</sup> of 2020. During this visit he:

- Visited Phase I drill collar and historic drill collar locations and GPS'd them with a differential GPS.
- Visited core logging/office and core storage facilities.

In 2019, during the preparation of the technical report dated September 25, 2019 entitled "Technical Report for the Kaukua Deposit, Läntinen Kollismaa Project, Finland", he visited the project site four times. These visits took place on April 24th, May 3rd - 6th, June 6th, and July 22nd - 26th of 2019. During these visits he:

- Visited target areas of Haukiaho and Kaukua together with Neil Pettigrew, M.Sc., P. Geo., Vice President of Exploration and a director of the Company and checked property geology and drilling sites
- Visited core logging/office and core storage facilities and supervised ¼ splitting of 105 drill core samples (done by Markku Iljina GeoConsulting Oy) for check analyses
- Discussed with the local technicians who participated in the drilling programs between 2007 and 2012
- Met the mayor of the municipality of Posio and the neighbouring Taivalkoski
- Checked the registry of the region for development plans
- Was provided with two project computers containing project data

Mr. Iljina has also participated in exploration programs on the Company's properties in the past as an employee of Outokumpu and GTK in 1981-1989 and 1996-2010, respectively. He also authored Technical NI 43-101 Reports for the LK Project on behalf of Nortec in 2011 and Finore 2012, respectively. He also visited the Haukiaho site during the winter drilling in 2011.

Mr. Iljina has not detected any deviations in the assay database cross-checks mentioned above. Site visits have verified the exploration work and the available data, and all those are in line with exploration and research experience accumulated in the course of Mr. Iljina's past works at Koillismaa. However, Mr. Iljina advised the Company on the need for higher precision collar survey of 2011 and 2012 drill collars, better organised data storage and backup scheme, and more secured core storage. Nevertheless, these issues are not material for the purpose of the Technical Report.

It is concluded by Mr. Iljina that the Nortec 2007-2009 and 2011-2012 Finore historic (pre 2019) exploration and drill hole assay data are adequate for use in the 2019 Mineral Resource estimate. Additionally, Mr. Iljina concludes the exploration and drill hole assay data from Palladium's 2020 Phase I diamond drill program are adequate for the identification of exploration targets as used in the current Technical Report.

# Mineral Processing and Metallurgical Testing

#### Haukiaho

North Atlantic Natural Resources ("NAN") carried out the earliest metallurgical work on the Haukiaho area mineralization in 2001. NAN collected 120 kg of material from mineralized boulders in the Haukiaho area, with a representative 50 kg sample crushed and shipped to Lakefield Research in Ontario, Canada for bench scale studies involving grinding tests and production of a bulk sulphide concentrate. The composite yielded a head grade of 0.37% Cu, 0.25% Ni, 0.23g/t Pt, 0.57g/t Pt and 0.31g/t Au. Five rougher and two cleaner tests were performed. The most successful floatation test resulted in recoveries of 89% Cu, 64% Ni, approximately 80% for both Pt and Pd, and 65% Au resulting in a concentrate grading 9.7% Cu, 5.0% Ni, 5.6g/t Pt, 14.7g/t Pd, and 5.5g/t Au.

#### Kaukua

Nortec performed limited mineral processing and metallurgical tests in 2009 and 2010 on drill core from the Kaukua deposit.

SGS Metallurgical Laboratory in Vancouver received two shipments totalling 161 samples of drill core from the project (SGS Canada Inc., 2010) collected by Nortec in Finland. The first shipment contained various different lithological units, and a single rougher floatation test was performed on each lithology. These individual lithological units were then used to prepare a Master Composite consisting of 20% mixed basement, 60% pyroxenite, 5% gabbronorite, and 15% peridotite, which roughly represents the abundance of the various mineralized lithological units in the Kaukua resource. The Master Composite was then used in 10 different optimization floatation tests, as well as separately to test comminution and variability, and the viability of creating a separate Ni and Cu concentrate. The second shipment was used to create another Master Composite for Platsol<sup>TM</sup> metallurgical testing.

Physical testing used to predict the grindability of the various rock units and the power used developed a SAG Power Index (SPI) and Bond BWI for the gabbronorite, peridotite, pyroxenite, and mixed basement composites. These tests showed some variability and more grinding tests are recommended before final design of a mill is undertaken.

Batch rougher flotation test work focused on improving copper and nickel performance and investigated the primary grind size and the effect of various reagents. Testing indicates a primary grind size of 80% passing 80 microns and the recommended reagents, SIPX and Danafloat 245 (Dithiophosphate), are adequate for optimum rougher flotation recovery. A total of eight Rougher floatation tests were performed, the average of which resulted in a recovery of 95% Cu, 55.8% Ni, 72.5% Pt, 86.3% Pd, and 84.7% Au.

Ten additional optimization tests were undertaken which identified that the regrind was found to not be beneficial in improving the grades and that Guar gum addition was shown to improve the concentrate grade by suppressing non sulphide gangue flotation. An additional single test (KF19) was undertaken to produce separate copper and nickel concentrates, however the grade of the nickel concentrate was not sufficiently high to warrant further work.

Optimization tests showed that the Master Composite could generate a final concentrate> 15% Cu+Ni along with keeping MgO at or below 4% (tests KF17 and 18). Optimization test KF17 resulted in a final concentrate grade of 11.4% Cu, 4.5% Ni, 8.99 g/t Pt, 48.20 g/t Pd, 5.12 g/t Au, and 3.6% MgO, with final recoveries of 89.0% Cu, 39.9% Ni, 43.3%Pt, 65.7% Pd, and 75.0% Au (KF17).

While the 2010 SGS test results showed that a saleable concentrate could be produced, PGE recovery did suffer some losses in achieving these higher-grade, low MgO concentrates. As such, Nortec undertook Platsol<sup>TM</sup> testing on a second Master Composite sample. Platsol<sup>TM</sup> testing on the bulk concentrate was tested to extract the metals.

Platsol<sup>™</sup> is a single step, pressure leaching process to recover platinum group metals (PGMs), gold and base metals such as Cu, Ni and Co from a variety of high and low grade ores. Initial Platsol<sup>™</sup> testing on a bulk concentrate from the Kaukua deposit assaying 7.8% Cu, 3.9% Ni, 0.15% Co, 3.3 g/t Au, 6.1 g/t Pt and 22.8 g/t Pd produced extraction efficiencies of 99.8%, 98.8%, 95.8%, 98.6%, 90%, and 98% respectively under typical Platsol<sup>™</sup> conditions: 225°C, 120 minutes retention time, 10 g/l NaCl, and 100 psi oxygen overpressure. Platsol<sup>™</sup> is therefore a processing option to optimize overall recoveries.

#### Mineral Resource Estimate

A Mineral Resource Estimate (MRE) has been completed for Pd, Pt, Au, Cu and Ni for the Kaukua deposit, using Leapfrog EDGE version 4.5 modelling software. The drillhole database for the Kaukua deposit comprises 83 drillholes with collar coordinates, downhole surveys, lithology and assays. The coordinate system for the drillhole collars is the old Finnish KKJ Zone 3 (ESPG 2393) coordinate system. A total of 6,449 samples have been loaded into Leapfrog Geo v4.5 software, where a high-level validation has been completed.

An updated structural and lithological interpretation of the Kaukua deposit has been 3D modelled using Leapfrog Geo software version 4.5. The major controlling structures have been used to split the deposit into four zones, with subsidiary faults, major stratigraphic units, diabase dykes and the overburden modelled within these four zones. Thetopographic surface has been generated using the drillhole collar coordinate data. The structural and lithological units have been used as the primary control on the modelling of the mineralization domains for Pd, Pt, Au, Cu and Ni. The mineralization has been modelled using the Indicator approach in Leapfrog Geo within the geological constraints as determined. For all elements, an encompassing low-grade halo has also been modelled.

All samples within the mineralized domains have been flagged with unique geological and estimation domain codes with a composite length of 2 m applied to these raw samples prior to grade capping, continuity modelling and grade estimation.

The grade distribution of the composites within each mineralized domain has been analysed to ensure that they are indicative of a single population with no need for additional domaining. In addition, they have also been assessed as to whether the population is affected by extreme grades which could influence the estimation of grade inside the block model. No grade capping has been applied prior to continuity modelling and grade estimation.

Continuity analysis (variography) has been completed on the composited samples within the various mineralization domains using spherical variogram models. Experimental semi-variograms have been generated for each element with the direction of maximum continuity recorded in three directions and then checked against the mineralization domain to ensure geological consistency.

A block model has been constructed in LeapFrog EDGE software using a 15 m (X) by 5 m (Y) by 5 m (Z) block size. No sub-celling or rotation of the block model has been undertaken. The block model has been coded by the lithology and mineralization domains for each element. The estimation of Pd, Pt, Au, Cu and Ni grades have been undertaken using Ordinary Kriging interpolation into blocks using three interpolation passes, with the mineralization wireframes used as hard-boundaries during the estimation. Each subsequent interpolation pass has used an increased search ellipse size and a decrease in the minimum number of samples required.

Final grade estimates for Pd, Pt, Au, Cu and Ni have been validated by statistical analysis and visual comparison to the input drillhole composite data. The estimated Pd, Pt, Au, Cu and Ni grades validate within acceptable limits to the input composite grades. Therefore, the block model is considered a true and accurate representation of the input grades at a global scale.

The Mineral Resource Estimate for the Kaukua has been classified according to the NI 43-101 and CIM definitions for Indicated and Inferred Resources. No Measured Resources have been assigned within the deposit. The Mineral Resource classification has been based on a combination of the drilling density, confidence in the geological interpretation, continuity of the grade within the geological units, variogram model ranges, statistics of the data population and rock bulk density.

The Mineral Resource has been reported inside an optimized pit shell at a cut-off of 0.3 g/t Pd for the open pit resource, with the results detailed in Table 6.

Table 6 – Pit Constrained Mineral resource for Kaukua Deposit

Mineral Resource Estimate for the Kaukua Deposit – September 2019 reported at a 0.3 g/t Pd									
	cut-off								
	Tonnes	Pd	Pt	Au	PGE			Pd_1	Eq <sup>5</sup>
Classification	(kt)	g/t	g/t	g/t	(Pd+Pt+Au)	Ni%	Cu%	g/t	Oz
Indicated	10,985,000	0.81	0.27	0.09	1.17	0.09	0.15	1.80	635,600
Inferred	10,875,000	0.64	0.20	0.08	0.92	0.08	0.13	1.50	525,800
1. CIM definit	ions have been	n followed	for the Mi	neral Reso	ources.				
2. Bulk densit	ies of $2.9 \text{ t/m}^3$	have been	assigned f	for all lith	ologies within th	e block	model exce	pt the overbu	rden which
was a bulk density of 2.1 t/m <sup>3</sup> assigned.									
3. The optimiz	zation has used	l metal pri	ces (in US	D) of \$1,1	100/oz for Pd, \$9	50/oz fo	or Pt, \$1,300	)/oz for Au, \$	66,614/t for
Cu and \$15	432/t for Ni	_							

Table 7 – Whittle Open Pit Optimization Parameters for Reporting the Mineral resource

Pd Eq is the weighted sum of the Pd, Pt, Au, Ni and Cu grades based on the commodity price as outlined.

Mining dilution and recovery factors have been assumed at 5% and 95% respectively.

Errors may occur due to rounding to appropriate significant figures.

5.

Whittle Optimization Parameters	Value
Mining Recovery	95%
Mining Dilution	5%
Pd price \$/oz	\$1,100
Pt price \$/oz	\$950
Au price \$/oz	\$1,300
Cu price \$/t	\$6,614
Ni price \$/t	\$15,432
Currency	USD
Royalties	1% NSR
Processing cost (incl. G&A)	\$9.75/t
Mining cost	\$2.20/t
Cut-off grad Pd	0.3
Overall Wall Angle	54.96

The optimized pit tonnage is 87,291,075 tonnes (assuming 2.1 t/m<sup>3</sup> for bulk density of the overburden) which generated a conceptual waste tonnage of 65,431,683 tonnes for a stripping ratio of 3:1.

This is an early stage project and therefore no detailed mining economics have been completed. Mineral Reserves cannot be defined until a positive economic evaluation is defined at the Prefeasibility or Feasibility level. There are no Mineral Reserve Estimates stated for this Project.

## **Historic Drilling Summary**

A partial history of drilling on the project has been summarized in Section <u>6 History</u>, with a more detailed description of the historic drilling on the property summarized in Table 10-1.

*Table 10-1 -* Drilling History Summary

Company / Year	Number of Drillholes	Permit Group	<b>Number of Meters Drilled</b>
Outokumpu / 1963-1966	36	Haukiaho	6,327.85
University of Oulu /1973	2	Lipeävaara	83.10
GTK / 1997-1999 and 2004-2005	46	Haukiaho	6,206.01
GTK / 1999 and 2004	16	Kaukua	1,951.75
GTK / 1999	7	Lipeävaara	999.29
NAN / 2001	7	Haukiaho	893.60
Nortec / 2007-2009	50	Kaukua	10,292.80
Finore / 2011-2012	25	Haukiaho	4,668.80
Finore / 2012	23	Kaukua	6,116.20
Total	212		37,539.40

Much of the historic drilling done by the GTK has been done for geological mapping purposes; this is particularly the case on Salmivaara and Lipeävaara properties. Distribution of historic drillholes is shown in Figure 10-1.

Nortec conducted four phases of exploration drilling over the Kaukua property from October 2007 to May 2009 for a total of 10,292.8 meters of drilling. The drilling programs explored for east-west trending, southerly dipping PGE+Au-Cu-Ni mineralization, plunging to the WSW.

The Phase I exploration drilling program by Nortec has been carried out by the GTK Technical Services Group using a GM-100 based rig and BQTK equipment for 40.7 mm diameter core. From Phase II forward swivel drive drill rigs have been used to produce NQ2 size core (50.7 mm). High precision collar positions have been surveyed by Rovamitta Oy. Downhole surveys have been done by Nivalan Timanttikairaus oy using the Reflex Maxibor II ® gyro instrument for the drillhole KAU08-017 and subsequent drillholes.

Finore undertook a diamond drilling program from October, 2011 to April 2012, for a total of 10,785.0 meters of NO2 drilling in 48 drillholes testing the Kaukua and the Haukiaho.

Targets. Drillholes have been surveyed by Reflex Maxibor II ® gyro instrument by the drilling company, Nivalan Timanttikairaus oy. Collar positions have been measured by handheld GPS.

Finore's core logging, sample processing and custody program follows the principles used by Nortec in their preceding drilling. These included a spreadsheet-based logging format with validated fields, core cutting by company staff and samples submitted to the ALS Minerals facility in the town of Outokumpu or to Labtium, an independent State-owned laboratory outsourced from GTK in 2007.

Figure 10-1 - Distribution of historic drilling between 1963 and 2005, light red polygons represent Palladium One Exploration Permit Applications, light green represent reservation applications. Coordinate system EUREF FIN TM35FIN.

## Summary

Platinum, palladium, gold, copper, cobalt and nickel are known to be present and have been analyzed in drilling and surface sampling on the LK property. The deposit type is a basal accumulation of PGE-rich base metal sulphides hosted in the Koillismaa layered mafic-ultramafic complex, which forms part of the Paleoproterozoic (2.5-2.4 Ga) Tornio- Näränkävaara Layered Intrusion Belt ("TNB") that extends east west across Finland and into Russia.

Palladium One completed validation of the input data and an update of the Mineral Resource Estimate ("MRE") for the Kaukua PGE-Cu-Ni deposit on the LK property. The scope of works included the re-interpretation of the geology and mineralization within the deposit, geostatistical analysis and estimation of the Mineral Resource.

The updated MRE is the result of an extensive data compilation, verification, re-evaluation, and re-modelling exercise. As a result of this work, 97% of the Indicated Resources and 85% of the Inferred Resources are now pit-constrained at a robust 0.3 g/t Pd cut-off. Additionally, 50% of the pit-constrained Mineral Resource is classified as Indicated Resources. Highlights from the MRE are as follows:

- An optimized pit-constrained Mineral Resource, at a 0.3 g/t Pd cut-off, for the Kaukua Deposit includes:
  - o 635,600 Pd\_Eq ounces contained within 11 million tonnes of Indicated Resources grading 1.80 g/t Pd Eq; and
  - 525,800 Pd\_Eq ounces contained within 11 million tonnes of Inferred Resources grading 1.50 g/t Pd Eq.
- Metal price assumption used in pit optimization:

Element	Unit	Price (USD)
Palladium	per oz	\$1,100
Platinum	per oz	\$950
Gold	per oz	\$1,300
Copper	per lbs	\$3.00
Nickel	per lbs	\$7.00

- The Kaukua Deposit is expected to have a low capital intensity given the favourable 3:1 strip ratio of the conceptual pit-constrained resource.
- The Kaukua south zone, located roughly 500 metres south of the current pit constrained Mineral Resource, hosts an Exploration Target Potential range of between 0.23 and 3.0 million tonnes grading 0.7 to 1.0 g/t Pd Eq.
  - O The potential quantity and grade is conceptual in nature. Insufficient exploration has been performed to define a Mineral Resource and it is uncertain if a Mineral Resource will be delineated.
  - O This zone, with very limited drilling and intercepts of up 0.74 g/t Pd, 0.24 g/t Pt, 0.07 g/t Au (1.05 g/t PGE), 0.17 % Cu and 0.13% Ni over 32.95 metres in drillhole KAU08-035, represents a key area for additional definition and testing of the mineralization.

The drillhole and other input data that have been used in the estimation of the Mineral Resource have been provided by the management of Palladium One. This data set has been independently verified by Dr. Markku Iljina, the qualified person responsible for various sections of the Technical Report. In order to verify such information, Dr. Iljina has completed site visits to the LK property on April 24, May 3-6, June 6 and July 22-26 throughout the

course of the year ended 2019. Mr. Alexei Sokolov, an Associate Principal Geologist of Mining Plus Pty Ltd., has assumed qualified person responsibility for other sections of the Technical Report.

A Mineral Resource Estimate has been completed for Pd, Pt, Au, Cu and Ni for the Kaukua Deposit, using Leapfrog EDGE version 4.5 modelling software. The drillhole database for the Kaukua Deposit comprises 83 drillholes with collar coordinates, downhole surveys, lithology and assays. The coordinate system for the drillhole collars is the old Finnish KKJ Zone 3 (ESPG 2393) coordinate system. A total of 6,449 samples have been loaded into Leapfrog Geo v4.5 software, where a high-level validation has been completed.

An updated structural and lithological interpretation of the Kaukua Deposit has been modelled, in three dimensions, using Leapfrog Geo software version 4.5. The major controlling structures have been used to split the deposit into four zones, with subsidiary faults, major stratigraphic units, diabase dykes and the overburden modelled within these four zones. The topographic surface has been generated using the drillhole collar coordinate data.

The structural and lithological units have been used as the primary control on the modelling of the mineralization domains for Pd, Pt, Au, Cu and Ni. The mineralization has been modelled using the indicator approach in Leapfrog Geo within the geological constraints as determined. For all elements, an encompassing low-grade halo has also been modelled.

All samples within the mineralized domains have been flagged with unique geological and estimation domain codes with a composite length of 2 meters applied to these raw samples prior to grade capping, continuity modelling and grade estimation.

The grade distribution of the composites within each mineralized domain has been analyzed to ensure that they are indicative of a single population with no need for additional domaining. In addition, they have also been assessed as to whether the population is affected by extreme grades which could influence the estimation of grade inside the block model. No grade capping has been applied prior to continuity modelling and grade estimation.

Continuity analysis (variography) has been completed on the composited samples within the various mineralization domains using spherical variogram models. Experimental semi-variograms have been generated for each element with the direction of maximum continuity recorded in three directions and then checked against the mineralization domain to ensure geological consistency.

A block model has been constructed in LeapFrog EDGE software using a 15 meter by 5 meter by 5 meter block size. No sub-celling or rotation of the block model has been undertaken. The block model has been coded by the lithology and mineralization domains for each element. The estimation of Pd, Pt, Au, Cu and Ni grades have been undertaken using ordinary kriging interpolation into blocks using three interpolation passes, with the mineralization wireframes used as hard-boundaries during the estimation. Each subsequent interpolation pass has used an increased search ellipse size and a decrease in the minimum number of samples required.

Final grade estimates for Pd, Pt, Au, Cu and Ni have been validated by statistical analysis and visual comparison to the input drillhole composite data. The estimated Pd, Pt, Au, Cu and Ni grades validate within acceptable limits to the input composite grades. Therefore, the block model is considered a true and accurate representation of the input grades at a global scale.

The Mineral Resource Estimate for the Kaukua Deposit has been classified according to NI 43-101 and CIM definitions for Indicated and Inferred Resources. No Measured Mineral Resources have been assigned within the deposit. The Mineral Resource classification has been based on a combination of the drilling density, confidence in

the geological interpretation, continuity of the grade within the geological units, variogram model ranges, statistics of the data population and rock bulk density.

The Mineral Resource has been reported inside an optimized pit shell at a cut-off of 0.3 g/t Pd for the open pit resource, with the results detailed in Table 1-1 below.

*Table 1-1 – Pit-Constrained Mineral Resource for the Kaukua Deposit* 

Mineral Resource Estimate for the Kaukua Deposit - September 2019 reported at a 0.3 g/t Pd cut-off									
	Tonnes	Pd	Pt	Au	PGE			Pd	_Eq <sup>5</sup>
Classification	(kt)	g/t	g/t	g/t	(Pd+Pt+Au)	Ni	Cu %	g/t	Oz
					g/t	%			
Indicated	10,985	0.81	0.27	0.09	1.17	0.09	0.15	1.80	635,600
Inferred	10,875	0.64	0.20	0.08	0.92	0.08	0.13	1.50	525,800

#### Notes:

- 1. CIM definitions have been followed for the Mineral Resources.
- 2. Bulk densities of 2.9t/m<sup>3</sup> have been assigned for all lithologies within the block model except the overburden which has a bulk density of 2.1t/m<sup>3</sup> assigned.
- 3. The optimization has used metal prices (in USD) of \$1,100/oz for Pd, \$950/oz for Pt, \$1,300/oz for Au, \$6,614/t for Cu and \$15,432/t for Ni.
- 4. Mining dilution and recovery factors have been assumed at 5% and 95%, respectively.
- 5. Pd Eq is the weighted sum of the Pd, Pt, Au, Ni and Cu grades based on the commodity price as outlined.
- 6. Errors may occur due to rounding to appropriate significant figures.

The pit shell has been optimized using the input parameters summarized in Table 1-2 below. Numerous optimizations have been run at different revenue factors (RF), with the optimized pit shell being at an RF = 1.

Table 1-2 – Whittle Open Pit Optimization Parameters for Reporting the Mineral Resource

Whittle Optimization Parameters	Value
Mining Recovery	95%
Mining Dilution	5%
Pd Price \$/oz	\$1,100
Pt Price \$/oz	\$950
Au Price \$/oz	\$1,300
Cu Price \$/t	\$6,614
Ni Price \$/t	\$15,432
Currency	USD
Royalties	1% NSR
Processing cost (incl. G&A)	\$9.75/t
Mining cost	\$2.20/t
Cut-off grade Pd	0.3
Overall Wall Angle	54.96

The optimized pit tonnage is 87,291,075 tonnes (assuming 2.1 t/m3 for bulk density of the overburden) which generated a conceptual waste tonnage of 65,431,683 tonnes for a stripping ratio of 3:1.

The Exploration Target Potential has been estimated for the Kaukua south zone located roughly 500 meters south of the Kaukua optimized pit shell, which results are summarized in Table 1-3 below.

Table 1-3 – Exploration Target Potential for the Kaukua Deposit, September 2019

Exploration Target Potential* - September, 2019															
Tonnage Range (kt)		Pd g/t Range		Pt g/t Range		Au g/t Range		PGE (Pd+Pt+Au) g/t Range		Ni ppm Range		Cu ppm Range		Pd_Eq g/t Range	
Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
230	3,000	0.3	0.6	0.04	0.13	0.03	0.03	0.34	0.80	400	500	550	600	0.7	1.0

<sup>\*</sup>The Exploration Target Potential quantity and grade is conceptual in nature. Insufficient exploration has been performed to define a Mineral Resource, and it is uncertain if a Mineral Resource Estimate will be delineated. The exploration target potential is based on 7 drillholes all of which intercepted PGE mineralization.

## **DESCRIPTION OF SHARE CAPITAL**

#### **Common Shares**

The Corporation is authorized to issue an unlimited number of Common Shares without par value. As of the date of this AIF, there are 236,566,852 Common Shares issued and outstanding as fully paid and non-assessable.

The holders of Common Shares are entitled to one vote for each Common Share on all matters to be voted on by the shareholders. Each Share is equal to every other Common Share and all Common Shares participate equally on liquidation, dissolution or winding up of our Company, whether voluntary or involuntary, or any other distribution of our assets among our shareholders for the purpose of winding up our affairs after the Company has paid out its liabilities. The shareholders are entitled to receive pro rata such dividends as may be declared by the board of directors out of funds legally available for such purpose and to receive pro rata the remaining property of the Company upon dissolution. No Common Shares have been issued subject to call or assessment. There are no preemptive or conversion rights, and no provisions for redemption, retraction, purchase or cancellation, surrender, sinking fund or purchase fund. Provisions as to the creation, modification, amendment or variation of such rights or such provisions are contained in the *Business Corporations Act* (British Columbia) and the articles of the Company.

The Company has neither declared nor paid dividends on its Common Shares. The Company has no present intention of paying dividends on its Common Shares, as it anticipates that all available funds will be invested to finance the growth of its business.

#### **DIVIDENDS AND DISTRIBUTIONS**

The Corporation has not declared any cash dividends or distributions since the Corporation's formation and currently intends to retain future earnings, if any, to finance further business development. The payment of any cash dividend or distributions to shareholders of the Corporation in the future will be at the discretion of the directors of the Corporation and will depend on, among other things, the financial condition, capital requirements and earnings of the Corporation, and any other factors that the directors may consider relevant. The BCBCA provides that a corporation may not declare or pay a dividend if there are reasonable grounds for believing that the corporation is, or would be after the payment of the dividend, unable to pay its liabilities as they become due or the realizable value

of its assets would thereby be less than the aggregate of its liabilities and stated capital of all classes of shares of its capital.

# TRADING PRICE AND VOLUME OF SECURITIES

From January 1, 2020 to December 31, 2020, the Common Shares traded on the TSX-V under the symbol "PDM". The following table sets forth the price range and volume of trading of the Common Shares on the TSX for each month during that period.

2020	High	Low	Volume
	(\$)	(\$)	(Number of Shares)
January	0.240	0.160	23,153,735
February	0.185	0.130	9,835,508
March	0.140	0.045	17,488,456
April	0.125	0.045	23,111,293
May	0.095	0.080	8,353,964
June	0.095	0.075	6,959,737
July	0.125	0.085	10,488,750
August	0.140	0.100	5,343,877
September	0.150	0.085	16,932,520
October	0.250	0.130	62,851,883
November	0.195	0.105	16,398,050
December	0.285	0.150	27,009,115

# PRIOR SALES OF UNLISTED SECURITIES

During the financial year ended December 31, 2020, the Corporation did not issue options to purchase Common Shares. Options are not listed on the TSX-V or any other marketplace. The following options to purchase Common Shares were granted during the year ended December 31, 2020: nil

During the financial year ended December 31, 2020, the Corporation issued warrants to purchase Common Shares. Warrants are not listed on the TSX-V or any other marketplace. The following warrants to purchase Common Shares were granted during the year ended December 31, 2020:

Date of Grant	Exercise Price per Share <sup>(1)</sup>	Number of Shares Under Warrants	Expiry Date
May 20, 2020	0.13 <sup>(1)</sup>	5,639,000	May 20, 2022
February 24, 2021	0.45	21,550,000	February 24, 2023
February 24, 2021	0.29	2,586,000	February 24, 2023

# Note:

(1) Exercise price will go up to \$0.22 per warrant in the second year from issuance.

# ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER

As at the date of this AIF, there were no escrowed securities or securities subject to contractual restriciont on transfer.

# **DIRECTORS AND OFFICERS**

# Name, Occupation and Security Holding

The following table sets forth, for each of the directors and executive officers of the Corporation as of the date hereof, the person's name, province and country of residence, position and office held with the Corporation, principal occupation during the last five years and, if a director, the period or periods during which the person has served as a director of the Corporation. Each of the directors of the Corporation has been appointed to serve until the next annual meeting of the shareholders of the Corporation.

Name and		Principal Occupation During Last Five	Date First Became a
Residence Position		Years	Director
Derrick Weyrauch(1) (2) Ontario, Canada	President, Chief Executive Officer and Director	President and CEO of the Company since March 2019, CFO Cardinal Resources Ltd. From July 2017 to November 2018, CEO of Magna Mining Corp from Dec 2016 to July 2018, and a director of Banro Corporation from December 2013 to May 2018. Previously the CFO of Jaguar Mining Inc. from April 2014 to February 2016.	March 28, 2019
Peter C. Lightfoot(1) (2) Ontario, Canada	Director	Peter C. Lightfoot is an independent consultant to the global minerals industry and is the founder and owner of Lightfoot Geoscience Inc., a consulting company providing services to companies exploring for magmatic nickel-cobalt-copper and precious metal ore deposits. Previously he was with Inco and Vale for 20 years, and was responsible for nickel exploration at Voisey's Bay, Sudbury and Carajas. In 2017, Dr. Lightfoot was appointed as the Hutchinson Visiting Industry Professor at the University of Western Ontario.	September 10, 2019
Lawrence Roulston(1)(2) British Columbia, Canada	Director	Lawrence Roulston is a mining professional with over 35 years of diverse hands-on experience. From 2014-2016 Lawrence was President of Quintana Resources Capital, which provided resource advisory services for US private investors. Prior to this, Lawrence was an analyst or executive with various companies in the	March 28, 2019

Name and		Principal Occupation During Last Five	Date First Became a
Residence	Position	Years	Director
		resources industry, both majors and	
		juniors. He has graduate-level training	
		in business and holds a B.Sc. in	
		geology.	
Giovanna Bee	Director	Giovanna Bee Moscoso is an	April 2, 2021
Moscoso, Utah, USA		experienced mining executive with	
		over 28 years of experience, including	
		progressive responsibilities over 25	
		years at Barrick Gold Corporation,	
		where previously she was a partner,	
		Vice President and Assistant General	
		Counsel. Giovanna has managed legal,	
		regulatory, permitting and contractual matters for various mines in the	
		Americas during exploration,	
		development, operations and mine	
		closures, and held responsibilities for	
		coordinating government and public	
		relations, and developing social	
		outreach programs to foster positive	
		relations with stakeholders, including	
		long-term agreements with indigenous	
		communities and private landowners.	
		Her background also includes	
		providing legal and governance	
		oversight to major mining operations	
		in the Americas and Africa.	
Neil Pettigrew, Ontario,	Vice President of	Neil Pettigrew M.Sc., P.Geo. is	September 5, 2019
Canada	Exploration and	geologist with 20 years of experience	
	Director	in the mineral exploration industry.	
		Neil is a founding partner of Fladgate	
		Exploration Consulting Corporation	
		and has been employ yed as a Senior	
		Precambrian Geoscientist with the	
D 1 C	CEO	Ontario Geological Survey.	
Rob Scott,	CFO	Mr. Scott is a CA and CFA	
British Columbia, Canada		Charterholder with more than than 20	
Canada		years of professional experience He is	
		a founder and president of Corex  Management Inc., a private company	
		providing accounting, administration,	
		and corporate compliance services to	
		privately held and publicly traded	
		companies for the past 11 years.	
Jeff Dare,	Corporate	Through Corex Management Inc, Mr.	
British Columbia,	Secretary	Dare Serves as the Corporate Secretary	
Canada		for a number listed companies for the	
		past 11 years.	
L		<u> </u>	

# Notes:

(1) Member of the audit committee of the board (the "Audit Committee").

(2) Member of the audit committee of the board (the "Compensation Committee").

As of April 21, 2021 the directors and officers of the Corporation as a group, beneficially owned, directly or indirectly, or exercised control or direction over an aggregate of 3,295,335 Common Shares, representing approximately 1.39% of the then outstanding Common Shares.

# Cease Trade Orders, Bankruptcies, Penalties and Sanctions

Except as disclosed herein, to the knowledge of the Corporation:

- (a) none of the directors or executive officers of the Corporation is, or was within the ten years prior to the date hereof, a director, chief executive officer or chief financial officer of any corporation that was subject to a cease trade order, an order similar to cease trade order or an order that denied such corporation access to any exemption under securities legislation that was, in each case, in effect for a period of more than 30 consecutive days and that was issued while that person was acting in such capacity or that was issued after that person ceased to act in such capacity and which resulted from an event that occurred while that person was acting in such capacity;
- (b) none of the directors or executive officers of the Corporation, is, or was within the ten years prior to the date hereof, a director or executive officer of any corporation that, while that person was acting in such capacity, or within a year of that person ceasing to act in such capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets;
- (c) none of the directors or executive officers of the Corporation has within the ten years prior to the date hereof become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold his assets; and
- (d) none of the directors or executive officers of the Corporation has been subject to any penalties or sanctions imposed by, or entered into a settlement agreement before, a court or regulatory body, including any securities regulatory authority.

Derrick Weyrauch was elected to the board of directors of Jaguar Mining Inc. ("Jaguar") in June 2013. As part of a corporate turnaround and restructuring process, Jaguar declared insolvency and commenced a voluntary proceeding under the Companies' Creditors Arrangement Act (Canada) (the "CCAA") on December 23, 2013 in the Ontario Superior Court of Justice. This proceeding was commenced to implement a debt restructuring and financing transaction (the "Jaguar CCAA Plan") that was negotiated prior to the commencement of the CCAA proceeding. On April 22, 2014, Jaguar implemented the Jaguar CCAA Plan and emerged from court protection under the CCAA. On May 2, 2014, the shares of Jaguar began trading on the TSX-V. Following the voluntary proceeding under the CCAA, the Toronto Stock Exchange advised that it is reviewing the common shares of Jaguar with respect to meeting the requirements for continued listing pursuant to the Expedited Review Process. The common shares were subsequently suspended from trading on the Toronto Stock Exchange. In 2013, NYSE Regulations, Inc. ("NYSE Regulation") reached a decision to delist Jaguar's common shares in view of the fact that Jaguar's common shares had fallen below the New York Stock Exchange's (the "NYSE") continued listing standard for an average closing price of less than USD\$1.00 over a consecutive 30 trading day period. As a result, on June 3, 2013, NYSE Regulation commenced proceedings to delist the common shares of Jaguar from the NYSE and trading of Jaguar's common shares was suspended prior to the opening on June 7, 2013.

Additionally, Derrick Weyrauch was a director of Banro Corporation ("Banro"). On November 20, 2017, Banro became subject to a general cease trade order issued by the Ontario Securities Commission for failure to file its interim financial statements and management's discussion and analysis for the period ended September 30, 2017, and the certifications of such filings as required by National Instrument 52-109 – Certification of Disclosure in

Issuers' Annual and Interim Filings. The filings were not made due to significant uncertainty concerning Banro's ability to continue its operations. As part of a corporate turnaround and restructuring process, Banro declared insolvency and commenced a voluntary proceeding under the CCAA on December 22, 2017 in the Ontario Superior Court of Justice. This proceeding was commenced to implement a debt restructuring and sale and investment solicitation process (the "Banro CCAA Plan"). On May 3, 2018 Banro implemented the Banro CCAA Plan and emerged from court protection under the CCAA.

Mr. Roulston became a director of KBL Mining Ltd. ("KBL") in March 2015, a company listed on the Australian Stock Exchange at the time, as a result of being the director nominee of Quintana Resources Capital ULC (an investor in KBL by way of a streaming transaction which was secured by KBL's Mineral Hill mine). On September 7, 2016, Mr. Roulston resigned his position as director and on September 8, 2016, KBL was placed into voluntary administration and on September 19, 2016, receivers were appointed and the company is now in liquidation.

## **Conflicts of Interest**

The directors of the Corporation are required by law to act honestly and in good faith with a view to the best interest of the Corporation and to disclose any interests which they may have in any project or opportunity of the Corporation. However, the Corporation's directors and officers may serve on the boards and/or as officers of other companies which may compete in the same industry as the Corporation, giving rise to potential conflicts of interest. To the extent that such other companies may participate in ventures in which the Corporation may participate or enter into contracts with the Corporation, they may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. In the event that a conflict of interest arises at a meeting of the directors of the Corporation, such conflict of interest must be declared and the declaring parties must abstain from participating and voting for or against the approval of any project or opportunity in which they may have an interest. Provided such steps are followed and subject to any limitations in the Corporation's constating documents, a transaction would not be void or voidable because it was made between the Corporation and one or more of its directors or by reason of such director being present at the meeting at which such agreement or transaction was approved. The remaining directors will determine whether or not the Corporation will participate in any such project or opportunity.

To the knowledge of the Corporation, other than as set forth in this AIF, there are no known existing or potential conflicts of interest among the Corporation, its directors, its officers or other members of management of the Corporation as a result of their outside business interests.

The directors and officers of the Corporation are aware of the existence of laws governing accountability of directors and officers for corporate opportunity and requiring disclosures by directors of conflicts of interest, and the Corporation will rely upon such laws in respect of any directors' and officers' conflicts of interest or in respect of any breaches of duty by any of its directors or officers.

## AUDIT COMMITTEE DISCLOSURE<sup>1</sup>

# **Composition of the Audit Committee**

The Audit Committee consists of three directors, being Lawrence Roulston (chair) Derrick Weyrauch and Peter Lightfoot. The directors of the Corporation have determined that each member of the Audit Committee is "financially literate" for the purpose of National Instrument 52-110 – Audit Committees of the Canadian Securities Administrators ("NI 52-110"). Each member of the Audit Committee is "independent" from the Corporation except Derrick Weyrauch. Further, each member of the Audit Committee has the ability to perform his responsibilities as an Audit Committee member based on his education and/or experience as summarized below.

<sup>&</sup>lt;sup>1</sup> Note to Draft: To be reviewed and completed by the Corporation.

In addition to each member's general business experience, each of the Audit Committee members has the ability to read and understand financial statements and has held director and/or officer positions with other reporting issuers in the mineral exploration and mining sector where he has been actively involved in financing and fundraising activities. See "Directors and Officers – Name, Occupation and Security Holding" above.

### **Audit Committee Charter**

The responsibilities and duties of the members of the Audit Committee are set out in the Audit Committee's charter, the text of which is set forth in Schedule "A" hereto.

## **Reliance on Certain Exemptions**

At no time since the commencement of the Corporation's most recently completed financial year has the Corporation relied on the exemption set out in section 2.4 (*De Minimis Non-audit Services*) of NI 52-110 or any exemption from NI 52-110, in whole or in part, granted under Part 8 (*Exemptions*) of NI 52-110.

# **Audit Committee Oversight**

At no time since the commencement of the most recently completed financial year of the Corporation was a recommendation of the Audit Committee to nominate or compensate an external auditor not adopted by the directors of the Corporation.

## **Pre-Approval Policies and Procedures**

The Audit Committee has adopted specific policies or procedures for the engagement of the Corporation's auditor to perform non-audit services, as described further in the Audit Committee's charter, a text of which is attached as Schedule "A" hereto.

## **External Auditor Service Fees (By Category)**

The aggregate fees billed by the external auditor of the Corporation, Davidson & Corporation LLP, during the two most recently completed financial years of the Corporation are as follows:

Financial Year	Audit Fees <sup>(1)</sup>	Audit Related Fees <sup>(2)</sup>	Tax Fees <sup>(3)</sup>	All Other Fees <sup>(4)</sup>
2019	\$32,900	\$nil	\$nil	\$nil
2020	\$25,000*	\$nil	\$nil	\$5,061

<sup>\*</sup>estimated for 2020

# Notes:

- (1) "Audit Fees" refers to the aggregate fees billed for audit services.
- (2) "Audit-Related Fees" refers to the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the Corporation's financial statements and are not reported under "Audit Fees".
- (3) "Tax Fees" refers to the aggregate fees billed for professional services for tax compliance, tax advice and tax planning.
- (4) "All Other Fees" refers to the aggregate fees billed for products and services, other than the services comprising the fees disclosed under "Audit Fees", "Audit-Related Fees" or "Tax Fees".

#### RISK FACTORS

An investment in the Unit Shares and Warrants comprising the Units is subject to a number of risks. Before deciding whether to invest in the Units, investors should carefully consider the risk factors set forth below, in the documents incorporated by reference in this Prospectus (including those discussed under the heading "Risk Factors" in the AIF and Interim MD&A and all of the other information in this Prospectus (including, without limitation, the documents incorporated by reference herein and therein)). The risks described above and below are not the only risks that affect the Company. Other risks and uncertainties that the Company does not presently consider to be material, or of which the Company is not presently aware, may become important factors that affect the Company's future condition and results of operations.

# Risks Related to Palladium's Securities and the Offering

# Price Volatility of Publicly Traded Securities.

The Company's Common Shares are listed on the TSX-V. Securities of small cap companies, particularly mineral exploration and development companies, have experienced substantial volatility in the past, often based on factors unrelated to the companies' financial performance or prospects. These factors include macroeconomic developments in North America and globally and market perceptions of the attractiveness of particular industries.

The price of the Common Shares is also likely to be significantly affected by short-term changes in gold, silver or other mineral prices or in the Company's financial condition or results of operations. Other factors unrelated to Company performance that may affect the price of the Common Shares include the following: the extent of analytical coverage available to investors concerning the Company's business may be limited if investment banks with research capabilities do not follow the Company; lessening in trading volume and general market interest in the Common Shares may affect an investor's ability to trade significant numbers of Common Shares; the size of the Company's public float may limit the ability of some institutions to invest in the Common Shares; and a substantial decline in the price of the Common Shares that persists for a significant period of time could cause the Common Shares to be delisted from the TSX-V, or any exchange the Common Shares are trading on, further reducing market liquidity. As a result of any of these factors, the market price of the Common Shares at any given point in time may not accurately reflect the Company's long-term value. Securities class action litigation often has been brought against companies following periods of volatility in the market price of their securities. The Company may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

#### Dilution.

Future sales or issuances of equity securities could decrease the value of the Common Shares, dilute shareholders' voting power and reduce future potential earnings per Common Share. The Company may sell additional equity securities in subsequent offerings and may issue additional equity securities to finance operations, development, exploration, acquisitions or other projects. The Company cannot predict the size of future sales and issuances of equity securities or the effect, if any, that future sales and issuances of equity securities will have on the market price of the Common Shares. Sales or issuances of a substantial number of equity securities, or the perception that such sales could occur, may adversely affect prevailing market prices for Common Shares. With any additional sale or issuance of equity securities, investors will suffer dilution of their voting power and may experience dilution in earnings per share.

# Securities or Industry Analysts.

The trading market for the Common Shares could be influenced by research and reports that industry and/or securities analysts may publish about the Company, its business, the market or its competitors. The Company does not have any control over these analysts and cannot assure that such analysts will cover the Company or provide favourable coverage. If any of the analysts who may cover the Company's business change their recommendation regarding the Company's stock adversely, or provide more favourable relative recommendations about its

competitors, the stock price would likely decline. If any analysts who may cover the Company's business were to cease coverage or fail to regularly publish reports on the Company, it could lose visibility in the financial markets, which in turn could cause the stock price or trading volume to decline.

# The Company has never paid, and does not currently anticipate paying, dividends.

The Company has paid no dividends on the Common Shares since incorporation and does not anticipate paying dividends in the immediate future. The payment of future dividends, if any, will be reviewed periodically by the board of directors of the Company (the "**Board**") and will depend upon, among other things, conditions then existing including earnings, financial conditions, cash on hand, financial requirements to fund its commercial activities, development and growth, and other factors that the Board may consider appropriate in the circumstances.

#### **Unlisted Warrants**

The Warrants are not listed on any exchange and the Company does not intend to list the Warrants on any exchange. Investors may be unable to sell the Warrants at the prices desired or at all. There is no existing trading market for the Warrants and there can be no assurance that a liquid market will develop or be maintained for the Warrants, or that an investor will be able to sell any of the Warrants at a particular time (if at all). The liquidity of the trading market in the Warrants and the sale price, if any, for the Warrants, may be adversely affected by, among other things:

- changes in the overall market for the Warrants;
- changes in the Company's financial performance or prospects;
- changes or perceived changes in the Company's creditworthiness;
- the prospects for companies in the industry generally;
- the number of holders of the Warrants; and
- the interest of securities dealers in making a market for the Warrants.

# U.S. and foreign investors may find it difficult to enforce U.S. or foreign judgments against the Company.

The Company is incorporated under the laws of British Columbia, Canada and the majority of the Company's directors and officers are not residents of the United States or foreign countries. Because all or a substantial portion of the Company's assets are abroad and the assets of certain directors are located in Canada, it may be difficult for U.S. or foreign investors to effect service of process within their jurisdiction upon the Company or upon such persons who are not residents of the United States or the foreign jurisdiction, or to realize in the United States or foreign jurisdictions upon judgments of U.S. or foreign courts predicated upon civil liabilities under U.S. or foreign securities laws. A judgment of a U.S. or foreign court predicated solely upon such civil liabilities may be enforceable in Canada by a Canadian court if the U.S. or foreign court in which the judgment was obtained had jurisdiction, as determined by the Canadian court, in the matter. There is substantial doubt whether an original action could be brought successfully in Canada against any of such persons or the Company predicated solely upon such civil liabilities.

## Discretion in the Use of Proceeds.

The Company currently intends to apply the net proceeds received from the Offering as described above under the heading "Use of Proceeds". However, management of the Company will have discretion concerning the use of the net proceeds of the Offering as well as the timing of their expenditures. As a result, an investor will be relying on the judgment of management for the application of the net proceeds of the Offering. Management may use the net proceeds of the Offering in ways that an investor may not consider desirable. The results and the effectiveness of

the application of proceeds are uncertain. If the proceeds are not applied effectively, the Company's results may suffer.

#### Positive Return in an Investment in the Units is Not Guaranteed

There is no guarantee that an investment in the Units will earn any positive return in the short term or long term. A purchase under the Offering involves a high degree of risk and should be undertaken only by purchasers whose financial resources are sufficient to enable them to assume such risks and who have no need for immediate liquidity in their investment. An investment in the Units is appropriate only for purchasers who have the capacity to absorb a loss of some or all of their investment.

# Negative Operating Cash Flow

As at September 30, 2020, the Company had working capital of \$2,229,396 and cash of \$2,741,901. In addition, the Company had operating losses of \$3,103,782 during the nine months ended September 30, 2020. Additionally, continuing operations of the Company are dependent on its ability to generate future cash flows or obtain additional financing. Management believes that sufficient working capital will be obtained from external financing to meet the Company's current and future liabilities and commitments as they become due, though there is a significant risk that additional financing may not be available on a timely basis or on terms acceptable to the Company.

# Activities of the Company may be impacted by the spread of the COVID-19 novel coronavirus.

In December 2019, a novel strain of coronavirus known as COVID-19 emerged and spread around the world causing significant business and social disruption. COVID-19 was declared a worldwide pandemic by the World Health Organization on March 11, 2020. The speed and extent of the spread of COVID-19 and the duration and intensity of resulting business disruption and related financial and social impact, are uncertain. Such adverse effects related to COVID-19 and other public health crises may be material to the Company. The impact of COVID-19 and efforts to slow the spread of COVID-19 could severely impact the exploration and any development of the Company's mineral projects. To date, a number of governments have declared states of emergency and have implemented restrictive measures such as travel bans, quarantine and self-isolation and the length of impact of the COVID-19 and associated restrictions remain uncertain. If the exploration and any development of the Company's mineral projects is disrupted or suspended as a result of these or other measures, it may have a material adverse impact on the Company's financial position and trading price of the Common Shares.

COVID-19 and efforts to contain it may have broad impacts on the Company's supply chain or the global economy, which could have a material adverse effect on the Company's financial position. While governmental agencies and private sector participants are seeking to mitigate the adverse effects of COVID-19, and the medical community is seeking to develop vaccines and other treatment options, the efficacy and timing of such measures is uncertain.

The Company's business could be significantly adversely affected by the effects of COVID-19 or any other widespread global outbreak of contagious disease. The Company cannot accurately predict the impact COVID-19 will have on third parties' ability to meet their obligations with the Company, including due to uncertainties relating to the severity of the disease, the duration of the outbreak, and the extent of travel and quarantine restrictions imposed by governments of affected countries.

In response to the COVID-19 pandemic, exploration in Finland may be impacted by government restrictions on the Company's operations. Potential stoppages on exploration activities could result in additional costs, project delays, cost overruns, and operational restart costs. The Finnish government continues to impose restrictions on travel into Finland. The total amount of funds that the Company needs to carry out the proposed operations may increase from these and other consequences of the COVID-19 pandemic.

In addition, the current outbreak of COVID-19, and any future emergence and spread of contagious disease, could have a material adverse impact on global economic conditions, which may adversely impact: the market price of the Common Shares, the Company's operations, its ability to raise debt or equity financing for the purposes of

mineral exploration and development, and the operations of the Company's suppliers, contractors and service providers.

# **Indigenous Peoples**

Various international and national laws, codes, resolutions, conventions, guidelines, and other materials relate to the rights of indigenous peoples. The Company operates in some areas presently or previously inhabited or used by indigenous peoples. Many of these materials impose obligations on government to respect the rights of indigenous people. Some mandate that government consult with indigenous people regarding government actions which may affect indigenous people, including actions to approve or grant mining rights or permits. The obligations of government and private parties under the various international and national materials pertaining to indigenous people continue to evolve and be defined. The Company's current and future operations are subject to a risk that one or more groups of indigenous people may oppose continued operation, further development, or new development of the Company's projects or operations. Such opposition may be directed through legal or administrative proceedings or expressed in manifestations such as protests, roadblocks or other forms of public expression against the Company's activities. Opposition by indigenous people to the Company's operations may require modification of or preclude operation or development of the Company's projects or may require the Company to enter into agreements with indigenous people with respect to the Company's projects. Such agreements may have a material adverse effect on the Company's business, financial condition and results of operations.

On June 26, 2014, the Supreme Court of Canada issued a decision in the case *Tsilhqot'in Nation v. British Columbia* (the "**Tsilhqot'in Decision**") that may affect the Tyko Property and Disraeli Property, located in Ontario. In the Tsilhqot'in Decision, the Court issued the first declaration of aboriginal title in Canadian history. The Court confirmed that the Tsilhqot'in held aboriginal title to an area in northern British Columbia within their traditional territory. While the Tyko Property and Disraeli Property are not located within the areas involved in the Tsilhqot'in Decision, the decision has legal precedent implications for all areas in Canada where indigenous peoples claim aboriginal title. While an aboriginal title claim remains unsettled either by a treaty or court ruling, there is a potential for aboriginal title to be established along with the inherent rights associated with aboriginal title, which includes the exclusive right to decide how the land is used and the right to benefit from those uses.

In areas where indigenous people claim treaty rights, or aboriginal rights (including aboriginal title), the Crown (federal and provincial government agencies) must act honourably in its actions that may affect treaty or aboriginal rights (proven or asserted). When a Crown action – such as granting a permit – may adversely affect those rights, then the Crown has a duty to consult with the affected indigenous group before deciding on the permit. The Crown must then consider the potential impacts and how any impact may be avoided, mitigated or accommodated.

The Company relies on the Crown to adequately discharge its duty of consultation before issuing any permit or right to the Company, including the grant of mineral titles and associated rights. To assist in managing the risk associated with any adverse impact on treaty or aboriginal rights, the Company works to establish good relations and relationship agreements with affected indigenous groups to confirm their support or consent for the Company's rights and permits.

The Company cannot accurately predict whether aboriginal rights and title claims will have a material adverse effect on the Company's ability to carry out its intended exploration and work programs on its properties located in Canada. The legal basis for and the strength of an aboriginal rights or title claim is complex issue, and the prospect and impact of any resolution of any such claim through court decision or settlement with the government is beyond the control of the Company and cannot be predicted with certainty.

Since the LK Project and KS Project are located in Finland and the Tsilhqot'in Decision relates to aboriginal title in Canada, the Company does not expect the Tsilhqot'in Decision to have any affect its title to the LK Project and KS Project.

On December 16, 2020, the Ministry of Energy, Northern Development and Mines issued a Notice of Caution covering approximately 40,000 square kilometres along the northern shore of Lake Superior and includes both the

Tyko and Disraeli Projects. This notification serves to inform mineral claim landowners in the area that ongoing litigation to which Ontario is a defendant, known as the Michano litigation, in which First Nations have asserted Aboriginal rights and title to their traditional lands. While the Notice of Caution does not prevent new mining claim registrations or the submission of exploration plans or exploration permit applications, it is intended to alert the mineral exploration and mining industry to the presence of Aboriginal Title claims in the area and ensure proponents are aware that there may be heightened Crown consultation and accommodation obligations for future exploration, development and related activities in this area.

Additionally, on December 16, 2020, the Ministry of Energy, Northern Development and Mines issued a notice that Canada and Ontario have commenced Aboriginal Title claim settlement negotiations with each of Biigtigong Nishnaabeg and Pic Mobert First Nations. To support the ongoing negotiations, the Ministry of Energy, Northern Development and Mines (ENDM) has made orders to withdraw certain areas from being open for new mining claim registrations. The withdrawal area is located to the south of the Tyko Project and does not cover any of the claims that comprise the Tyko Project.

On January 5, 2021, the Company received notice that GBFN had filed on December 30, 2021 an application for judicial review of the MENDM decision dated November 30th, 2020 to issue Exploration Permit PR-20-000255 to Tyko Resources Inc. Pursuant to the judicial review, the GBFN seeks to quash and set aside the MENDM's decision to issue the Exploration Permit and require MENDM to consult further with the GBFN about the Company's proposed mining exploration activities. The GBFN asserts Aboriginal Rights within the Disraeli Lake area where the Company's mining claims are located and the exploration activities will occur. The MENDM and the Company have filed appearances to defend the judicial review. The initial case management conference was convened on January 21, 2021. No schedule has yet been set for the review.

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

There are no legal proceedings material to Palladium One to which Palladium One or its subsidiaries is a party or to which any of the Palladium One's properties is subject, and no such proceedings are known by Palladium One to be contemplated.

## INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the knowledge of the Corporation, except as otherwise disclosed herein, no director, executive officer or insider of the Corporation, or any associate or affiliate of any of them, has or has had any material interest, direct or indirect, in any transaction within the last three most recently completed financial years of the Corporation that has materially affected or is reasonably expected to materially affect the Corporation.

## REGISTRAR AND TRANSFER AGENT

The registrar and transfer agent for the Common Shares is TSX Trust Company, 2700 - 650 West Georgia Street, Vancouver, British Columbia, V6B 4N9.

## **MATERIAL CONTRACTS**

There are no material contracts the Corporation has entered into since the beginning of the last financial year of the Corporation or before the last financial year that are still in effect.

#### INTEREST OF EXPERTS

The auditors of the Corporation are Davidson & Corporation LLP, Chartered Professional Accountants. Davidson & Corporation LLP is independent of the Corporation within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of Ontario.

The following persons have also prepared or certified a report, valuation, statement or opinion described or included in a filing, or referred to in a filing, made by the Corporation under National Instrument 51-102 – *Continuous Disclosure Obligations* of the Canadian Securities Administrators during, or relating to, the financial year of the Corporation ended December 31, 2020:

- Alexei Sokolov, Associate Principal Geologist, Mining Plus Pty Ltd.;
- Markku Iljina, Ph.D., EurGeol, Markku Iljina GeoConsulting Oy;
- Richard Buerger, Area Manager of Geology, Mining Plus Pty Ltd.; and
- Neil Pettigrew, M.Sc., P.Geo, Vice President of Exploration and a director of the Corporation.

To the knowledge of the Corporation, each of the aforementioned persons or companies held less than 1% of the Common Shares of the Corporation when they prepared the reports referred to above or following the preparation of such reports. None of the aforementioned persons or companies received any direct or indirect interest in any securities of the Corporation in connection with the preparation of such reports.

## ADDITIONAL INFORMATION

Additional information relating to the Corporation may be found on SEDAR at www.sedar.com. Additional information, including directors' and officers' remuneration and indebtedness, principal holders of securities of the Corporation and securities authorized for issuance under equity compensation plans is contained in the management information circular of the Corporation for its most recent annual meeting of shareholders that involved the election of directors. Additional financial information is provided in the financial statements of the Corporation and related management's discussion and analysis for the most recently completed financial year of the Corporation.

#### **GLOSSARY OF TERMS**

Various terms are defined throughout this AIF and indicated where applicable. While not exhaustive, the following is a glossary of some of the commonly used terms in this AIF.

"Au" is the chemical symbol for Gold.

"CIM" means the Canadian Institute of Mining, Metallurgy and Petroleum.

"Cu" is the chemical symbol for copper.

"Exploration Permit" means a permit that gives the recipient full rights to conduct exploration activities including test mining and construction of temporary roads and buildings, provided however that such activities are specified in the underlying Exploration Permit. Holding Costs range between €20-50 per ha per annum. The longer a claim is in place, the higher the annual fee. An exploration permit may only be held for a period of 15 years before being converted to a mining permit. Converting exploration permits to mining permits requires the project to reach an advanced stage such as pre-feasibility/feasibility studies.

"Exploration Reservation" means a reservation that gives the recipient up to 2 years to prepare an exploration permit application. During this 2-year period the recipient can conduct low impact exploration such as prospecing and mapping. There are no holding costs during the exploration reservation stage.

"Exploration Target Potential" means a statement or estimation of the exploration of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade, relates to mineralization for which there has been insufficient exploration to estimate a Mineral Resource.

"g/t" is grams per metric tonne.

"Indicated Mineral Resource" means that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

"Inferred Mineral Resource" means that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to indicated Mineral Resources with continued exploration.

"m" means metre.

"Measured Mineral Resource" is that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

"Mineral Resource" means a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's

crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

"Ni" is the chemical symbol for nickel.

"Pd" is the chemical symbol for palladium.

"ppm" means parts per million.

"Pt" is the chemical symbol for platinum.

"PGE" is platinum group element.

"qualified person" has the meaning ascribed to it in NI 43-101.

"SEDAR" means the System for Electronic Document Analysis and Retrieval.

"t" means tonne.

# SCHEDULE "A" AUDIT COMMITTEE CHARTER

#### Mandate

The primary function of the audit committee (the "Committee") is to assist the board of directors (the "Board") in fulfilling its financial oversight responsibilities by reviewing the financial reports and other financial information provided by the Corporation to regulatory authorities and shareholders, the Corporation's systems of internal controls regarding finance and accounting, and the Corporation's auditing, accounting and financial reporting processes. Consistent with this function, the Committee will encourage continuous improvement of, and should foster adherence to, the Corporation's policies, procedures and practices at all levels. The Committee's primary duties and responsibilities are to:

- serve as an independent and objective party to monitor the Corporation's financial reporting and internal control systems and review the Corporation's financial statements;
- review and appraise the performance of the Corporation's external auditors; and
- provide an open avenue of communication among the Corporation's auditors, financial and senior management and the Board.

# Composition

The Committee will be comprised of at least three directors as determined by the Board, the majority of whom will be free from any relationship that, in the opinion of the Board, would reasonably interfere with the exercise of his or her independent judgment as a member of the Committee. At least one member of the Committee should have accounting or related financial management expertise. All members of the Committee that are not financially literate must work towards becoming financially literate to obtain a working familiarity with basic finance and accounting practices. For the purposes of the Audit Committee's Charter, the definition of "financially literate" is the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can presumably be expected to be raised by the Corporation's financial statements. The members of the Committee shall be elected by the Board at its first meeting following the annual shareholders' meeting.

## **Meetings**

The Committee shall meet at least four times annually, or more frequently as circumstances dictate. As part of its job to foster open communication, the Committee will meet at least annually with the Chief Financial Officer and the external auditors in separate sessions.

## **Responsibilities and Duties**

To fulfill its responsibilities and duties, the Committee shall:

Documents/Reports Review

- (a) Review and update this Charter annually.
- (b) Review the Corporation's financial statements, MD&A and any annual and interim earnings, press releases before the Corporation publicly discloses this information and any reports or other financial information (including quarterly financial statements), which are submitted to any governmental body, or to the public, including any certification, report, opinion, or review rendered by the external auditors.

(c) Confirm that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements.

## External Auditors

- (a) Review annually, the performance of the external auditors who shall be ultimately accountable to the Board and the Committee as representatives of the shareholders of the Corporation.
- (b) Obtain annually, a formal written statement of the external auditors setting forth all relationships between the external auditors and the Corporation, consistent with the Independence Standards Board Standard 1.
- (c) Review and discuss with the external auditors any disclosed relationships or services that may impact the objectivity and independence of the external auditors.
- (d) Take, or recommend that the full Board take appropriate action to oversee the independence of the external auditors.
- (e) Recommend to the Board the selection and compensation and, where applicable, the replacement of the external auditors nominated annually for shareholder approval.
- (f) At each yearly audit meeting, consult with the external auditors, without the presence of management, about the quality of the Corporation's accounting principles, internal controls and the completeness and accuracy of the Corporation's financial statements.
- (g) Review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former external auditors of the Corporation.
- (h) Review with management and the external auditors the audit plan for the year-end financial statements and intended template for such statements.
- (i) Review and pre-approve all audit and audit-related services and the fees and other compensation related thereto, and any non-audit services, provided by the Corporation's external auditors. The pre- approval requirement is waived with respect to the provision of non-audit services if:
  - i. the aggregate amount of all such non-audit services provided to the Corporation constitutes not more than five percent of the total amount of fees paid by the Corporation to its external auditors during the fiscal year in which the non-audit services are provided;
  - ii. such services were not recognized by the Corporation at the time of the engagement to be non-audit services; and
  - such services are promptly brought to the attention of the Committee by the Corporation and approved prior to the completion of the audit by the Committee or by one or more members of the Committee who are members of the Board to whom authority to grant such approvals has been delegated by the Committee. Provided the pre-approval of the non-audit services is presented to the Committee's first scheduled meeting following such approval, such authority may be delegated by the Committee to one or more independent members of the Committee.

## Financial Reporting Processes

(a) In consultation with the external auditors, review with management the integrity of the Corporation's financial reporting process, both internal and external.

- (b) Consider the external auditors' judgments about the quality and appropriateness of the Corporation's accounting principles as applied in its financial reporting.
- (c) Consider and approve, if appropriate, changes to the Corporation's auditing and accounting principles and practices as suggested by the external auditors and management.
- (d) Review significant judgments made by management in the preparation of the financial statements and the view of the external auditors as to appropriateness of such judgments.
- (e) Following completion of the annual audit, review separately with management and the external auditors any significant difficulties encountered during the course of the audit, including any restrictions on the scope of work or access to required information.
- (f) Review any significant disagreement among management and the external auditors in connection with the preparation of the financial statements.
- (g) Review with the external auditors and management the extent to which changes and improvements in financial or accounting practices have been implemented.
- (h) Review any complaints or concerns about any questionable accounting, internal accounting controls or auditing matters.
- (i) Review certification process.
- (j) Establish a procedure for the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters.

# Other

(a) Review any related-party transactions.