Palladium One Reports Mineral Resource Estimate for the Kaukua Deposit of the LK PGE-Ni-Cu Project in Finland

Improved Geological Interpretation

Kaukua Deposit Remains Open for Resource Expansion

Vancouver, British Columbia--(Newsfile Corp. - September 9, 2019) - **Palladium One Mining Inc. (TSXV: PDM0) (FSE: 7N11)** (the "**Company**" or "**Palladium One**") is pleased to announce the Company's Mineral Resource estimate for the Kaukua Deposit within the 100% owned Läntinen Koillismaa ("LK") PGE-Cu-Ni project, located in north-central Finland (Figure 1).

Highlights

- An optimized pit-constrained Mineral Resource, at a 0.3 g/t Pd ("grams per tonne" "palladium") cut-off, for the Kaukua Deposit includes:
    - **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
    - Metal prices assumption used in pit optimization:

Commodity	Units	Pit Assumption (US$)
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 underlying price assumptions are conservative in the context of today's commodity price market, where for example, palladium is trading at $1,550 per ounce.*
    - The Kaukua Deposit is expected to have a low capital intensity given the favourable 3:1 stripping ratio of the conceptual pit-constrained resource
- The Kaukua South zone, located ~500 m 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
    - 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.
    - This zone, with very limited drilling has demonstrated up to 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 m in hole KAU08-035 and represents a key area for additional resource expansion
- Future drilling at the Kaukua Deposit is planned to target zones of higher-grade PGE-Cu-Ni mineralization within the current resource that were not followed up by previous drilling. Infill drilling is also planned to upgrade inferred resources to a higher category.
- Near term expansion of mineral resources in the Kaukua area will focus on Kaukua south, along with the eastern strike extension of the favourable basal contact (Figure 2) as well as the Murtolampi target (see press release

dated August 12, 2019).

- Additionally, future drilling is planned to target the Haukiaho Deposit, located 12 kms south of Kaukua, which hosts a 2013 historic inferred resource.
    - Haukiaho was drilled at very wide spacings. The Company believes that additional drilling is required prior to conducting a new Mineral Resource Estimate.
    - The Company also believes that grade can be increased with focused drilling targeting higher-grade pods/lenses of mineralization that were not followed up by previous drilling.

"We have compiled, re-assessed, verified, and validated historic exploration data for the Kaukua Deposit resulting in a revised and much more robust geological model. This work has resulted in over 97% of Indicated and 85% of the Inferred Resources being converted into the pit-constrained Mineral Resource Estimate. Additionally, 50% of the pit-constrained Mineral Resource is classified as Indicated Resources," commented Derrick Weyrauch, President and CEO of Palladium One.

"There is still a lot more work to do at Kaukua and the rest of the LK Project, significant potential exists for additional tonnage and higher-grade discoveries. The LK Project remains wide open with less than 4 km of the current ~25 km mafic-ultramafic basal contact systematically drill tested. The favourable basal contact at Kaukua remains open along-strike both to the east and west, while the deepest drill hole to date is only 420 meters long. We plan to conduct geophysics and diamond drilling on the LK Project during the 2019-2020 winter months with the goal of significantly expanding the current Mineral Resources in order to outline a large-tonnage, palladium dominant open pit mining operation. Our geological team has identified a number of high priority targets at the LK Project that we plan to explore, as we look to expand and compliment the Kaukua Deposit."

Neil Pettigrew, Vice President - Exploration, commented, "*Significant potential exists to expand the historic Haukiaho Deposit along strike both to the east and west. For example, 1960's era historic drilling by Outokumpu ~2 km east of the historic 2013 Haukiaho inferred resource returned up to 36.36 m grading 0.20% Cu and 0.19% Ni from 1.64 m to 38.00 m downhole in hole R692 (no PGE analysis was conducted). Reconnaissance prospecting by Palladium One in the vicinity of this historic drill hole returned up to 0.51% Cu, 0.33% Ni, 0.19 g/t Pt, 0.56 g/t Pd, and 0.21 g/t Au (0.96 g/t PGE), (see press release dated August 12, 2019). Palladium one recently applied for the Haukiaho East Reservation, (see press release date Sept. 5, 2019), which, if approved, the Company would control ~24 km of the favourable Haukiaho basal contact."* (Figure 3).

Table 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									
Classification	Tonnes (kt)	Pd g/t	Pt g/t	Au g/t	PGE (Pd+Pt+Au) g/t	Ni %	Cu %	Pd_Eq^5	
								g/t	Oz
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

1. *CIM definitions have been followed for the Mineral Resources,*
2. *Bulk densities of 2.9 t/m3 have been assumed for all lithologies within the block model,*
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.*

Table 2 - Exploration Target Potential for Kaukua South Zone

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		Cu % Range		Ni % 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	0.8	0.055	0.06	0.04	0.05	0.7	1.0

** 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.*

Mineral Resource Estimation Methodology

The Kaukua drillhole database comprises 83 drillholes for 6,449 samples. An updated 3D geological model has been constructed using Leapfrog software version 4.5 (Figure 4). Key lithological units modelled include the basement gabbro and granodiorite as well as the intrusive or Marginal Series pyroxenite, peridotite and gabbronorite units. 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. Faults outline the southern, western and eastern boundaries of the Main Zone. A series of stacked, sub-horizontal, reverse faults have been modelled within the North zone, effectively splitting and stacking the mineralized zones on top of each other. A topographic surface has been generated using the drillhole collar coordinate data.

Prior to modelling, elemental correlation between Pt, Pd, Au, Cu and Ni within the deposit has been calculated with the results indicating that Pd and Pt have essentially the same distribution within the deposit. The remaining elements returned a lower correlation and as such have been modelled independently with the exception of Au which has a distinct relationship with Cu. Therefore, the Au grades have been estimated inside the Cu domains.

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.

A composite length of 2 m has been used, with the composites within each mineralized domain assessed for the need to apply grade caps. The absence of extreme values within the mineralized domains resulted in grade capping not being necessary. Continuity analysis (variography) has been completed on the composited samples within the various mineralization domains with the resultant variograms checked against the mineralization domain to ensure geological consistency.

A Kriging Neighbourhood Analysis (KNA) has been completed on the main mineralized domains for all elements in order to optimize the grade estimation parameters including the parent block size, minimum and maximum number of samples, search ellipse size and orientation, and the level of discretization. The KNA returned very similar results for both Pt and Pd.

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. The block size has been based on the KNA results, drillhole spacing and geometry of the deposit in order to optimize the estimation of grade. No sub-celling or rotation of the block model has been undertaken.

The block model has been coded by lithology and mineralization domain for each element. The later, cross-cutting diabase dykes and overburden have been coded into the block model with the grades for Pd, Pt, Cu, Ni and Au set to background values in the block model.

The estimation of grade has been undertaken in 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:

- Pass 1 estimations have been undertaken using a minimum of seven and a maximum of 30 samples into a search ellipse set at the variogram range for all mineralized domains, with a limit of 2 samples for each drillhole applied as an additional constraint,

- Pass 2 estimations have been undertaken using a minimum of five and a maximum of 30 samples into a search ellipse set at one and a half times the range of the variogram for all three directions in all the mineralized domains, with a limit of 2 samples for each drillhole applied as an additional constraint,

- Pass 3 estimations have been undertaken using a minimum of three and a maximum of 30 samples into a search ellipse set at twice the range of the variogram for all three directions in all the mineralized domains,

Final grade estimates for Pd, Pt, Ni, Cu and Au have been validated by statistical analysis and visual comparison to the input drillhole composite data. As the Ordinary Kriging interpolation method effectively de-clusters during the estimation, de-clustering using Snowden Supervisor v8.9 de-clustering algorithm has been completed prior to validation for those domains that have been impacted by clustered data. The estimated Pd, Pt, Cu, Ni and Au 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 National Instrument and CIM definitions for Indicated and Inferred Resources. No Measured Resources have been assigned within the deposit. Plan maps and sections illustrating the Mineral Resource Estimate are shown in Figure 5 through 9 below.

Optimized Pit Shell Cut-Off Grade Sensitivity

Grade-Tonnage graphs have been generated for both Inferred and Indicated Resources at incremental Pd cut-off grades for all elements within the optimized pit shell, with the results tabulated in Tables 4 and 5.

Table 3 - Block Model Indicated tonnes and grade for the five estimated elements at incremental Pd cut-off grades within the optimized pit shell

Cut-Off	Tonnes	Pd g/t	Pt g/t	Au g/t	PGE (Pd+Pt+Au) g/t	Cu %	Ni %	Pd_Eq g/t	Pd_Eq Oz
0.0	16,583,000	0.55	0.18	0.07	0.80	0.11	0.06	1.26	671,800
0.1	12,086,000	0.75	0.25	0.09	1.09	0.14	0.08	1.70	660,600
0.2	11,484,000	0.78	0.26	0.09	1.13	0.15	0.08	1.75	646,100
0.3	**10,985,000**	**0.81**	**0.27**	**0.09**	**1.17**	**0.15**	**0.09**	**1.80**	**635,700**
0.4	10,534,000	0.83	0.28	0.09	1.20	0.15	0.09	1.84	623,200
0.5	9,556,000	0.87	0.29	0.09	1.25	0.15	0.09	1.90	583,700
0.6	7,901,000	0.93	0.31	0.10	1.34	0.16	0.09	2.02	513,100
0.7	6,156,000	1.01	0.34	0.11	1.46	0.17	0.09	2.16	427,500
0.8	4,655,000	1.10	0.38	0.11	1.59	0.18	0.10	2.31	345,700
0.9	3,322,000	1.19	0.42	0.12	1.73	0.19	0.10	2.49	265,900
1.0	2,273,000	1.31	0.45	0.13	1.89	0.20	0.10	2.67	195,100

Table 4 - Block Model Inferred tonnes and grade for the five estimated elements at incremental Pd cut-off grades within the optimized pit shell

Cut-Off	Tonnes	Pd	Pt	Au	PGE (Pd+Pt+Au) g/t	Cu	Ni	Pd_Eq	Pd_Eq Oz
0.0	60,675,000	0.13	0.04	0.02	0.18	0.03	0.02	0.32	624,200
0.1	14,128,000	0.54	0.16	0.07	0.77	0.12	0.08	1.31	595,000
0.2	12,221,000	0.60	0.18	0.07	0.85	0.12	0.08	1.42	557,900
0.3	**10,875,000**	**0.64**	**0.20**	**0.08**	**0.92**	**0.13**	**0.08**	**1.50**	**524,500**
0.4	9,835,000	0.68	0.21	0.08	0.96	0.13	0.08	1.55	490,100
0.5	8,035,000	0.72	0.22	0.09	1.03	0.14	0.08	1.62	418,500
0.6	5,645,000	0.80	0.25	0.09	1.14	0.15	0.08	1.75	317,600
0.7	3,728,000	0.88	0.28	0.10	1.26	0.15	0.08	1.88	225,300
0.8	2,191,000	0.97	0.30	0.11	1.37	0.16	0.09	2.03	143,000
0.9	1,375,000	1.04	0.31	0.10	1.45	0.15	0.09	2.11	93,300
1.0	719,000	1.13	0.32	0.09	1.54	0.15	0.10	2.23	51,500

Technical Information and Qualified Person

The Mineral Resources in this estimate were independently prepared by Mr Alexei Sokolov a Qualified Person as defined by the National Instrument 43-101 and an Associate of Mining Plus Pty Ltd, Dr. Markku Iljina (EurGeol) a Qualified Person as defined by National Instrument 43-101 verified the drillhole database and other input data supporting the Mineral Resource estimation. Verification included four (4) site visits.

The technical information in this release has been reviewed and verified by Neil Pettigrew, M.Sc., P. Geo, Vice President of Exploration and a director of the Company and the Qualified Person as defined by National Instrument 43-101.

About LK PGE-Cu-Ni project

The LK Project land package consists of a total of 2,480 hectares and comprises two exploration permit renewals and seven exploration permit applications covering over 25 km of the prospective basal unit in the Koillismaa layered mafic-ultramafic complex in north-central Finland.

The Koillismaa Complex is part of a suite of Paleoproterozoic continental rift-related intrusions which are highly prospective for PGE-Cu-Ni deposits such as the nearby Suhanko (Arctic Platinum) deposit located 90 km northwest of the LK Project. Suhanko hosts a SAMREC Code Compliant Measured and Indicated resources of 5.4 million ounces of palladium grading 1.44 g/t Pd and 1.3 million ounces of platinum grading 0.35 g/t Pt at a cut-off of 1.0g/t 2PGEAu as well as Inferred Resources of 4.4 million ounces of palladium grading 1.50 g/t Pd and 1.1 million ounces of platinum

grading 0.38 g/t Pt. Mineralization hosted on adjacent and nearby properties is not necessarily indicative of mineralization hosted on the Company's property.

Figure 1. Location map of LK Project in Finland

To view an enhanced version of Figure 1, please visit:
https://orders.newsfilecorp.com/files/6502/47634_f277308254357807_001full.jpg

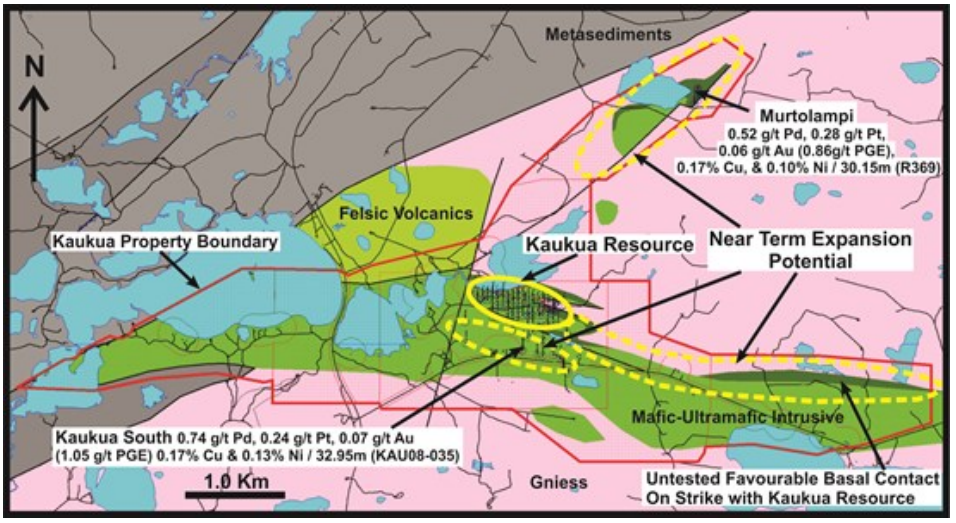

Figure 2. Near Term potential for Resource expansion at Kaukua

To view an enhanced version of Figure 2, please visit:
https://orders.newsfilecorp.com/files/6502/47634_f277308254357807_002full.jpg

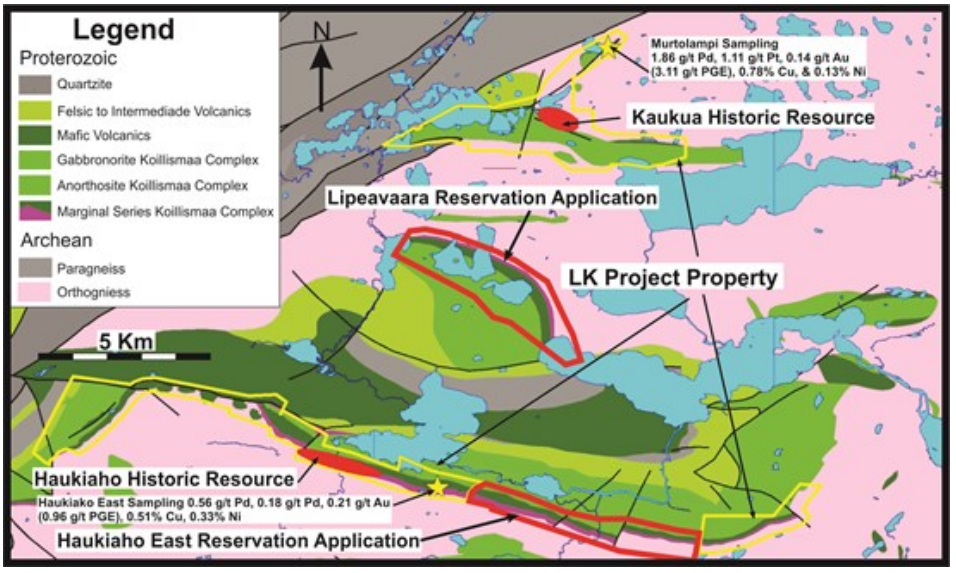

Figure 3. Historic Haukiaho Resource expansion potential

To view an enhanced version of Figure 3, please visit:
https://orders.newsfilecorp.com/files/6502/47634_f277308254357807_003full.jpg

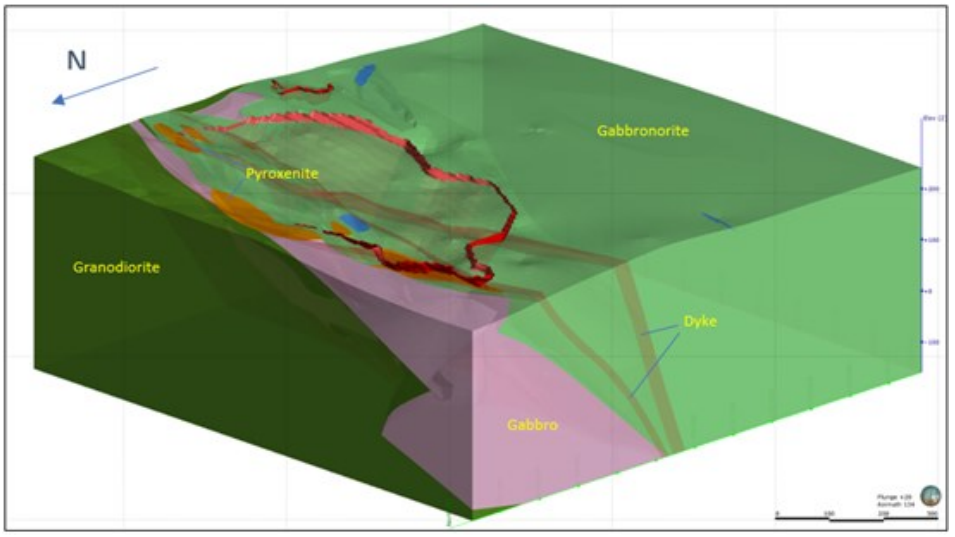

Figure 4. Three dimensional model of the Kaukua Deposit showing main lithological units in isometric view

To view an enhanced version of Figure 4, please visit:
https://orders.newsfilecorp.com/files/6502/47634_f277308254357807_004full.jpg

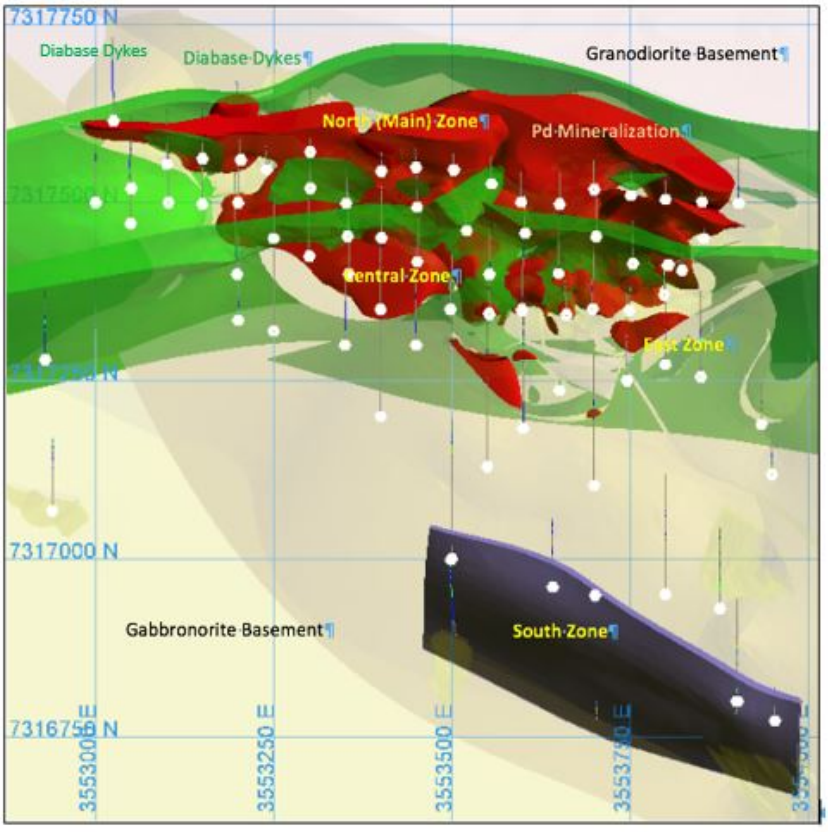

Figure 5. Plan view of the 3D model of the Kaukua Deposit with the separation into the four mineralized zones. Coordinate system is the old Finnish KKJ Zone 3 (ESPG 2393) coordinate system

To view an enhanced version of Figure 5, please visit:
https://orders.newsfilecorp.com/files/6502/47634_figure5.jpg

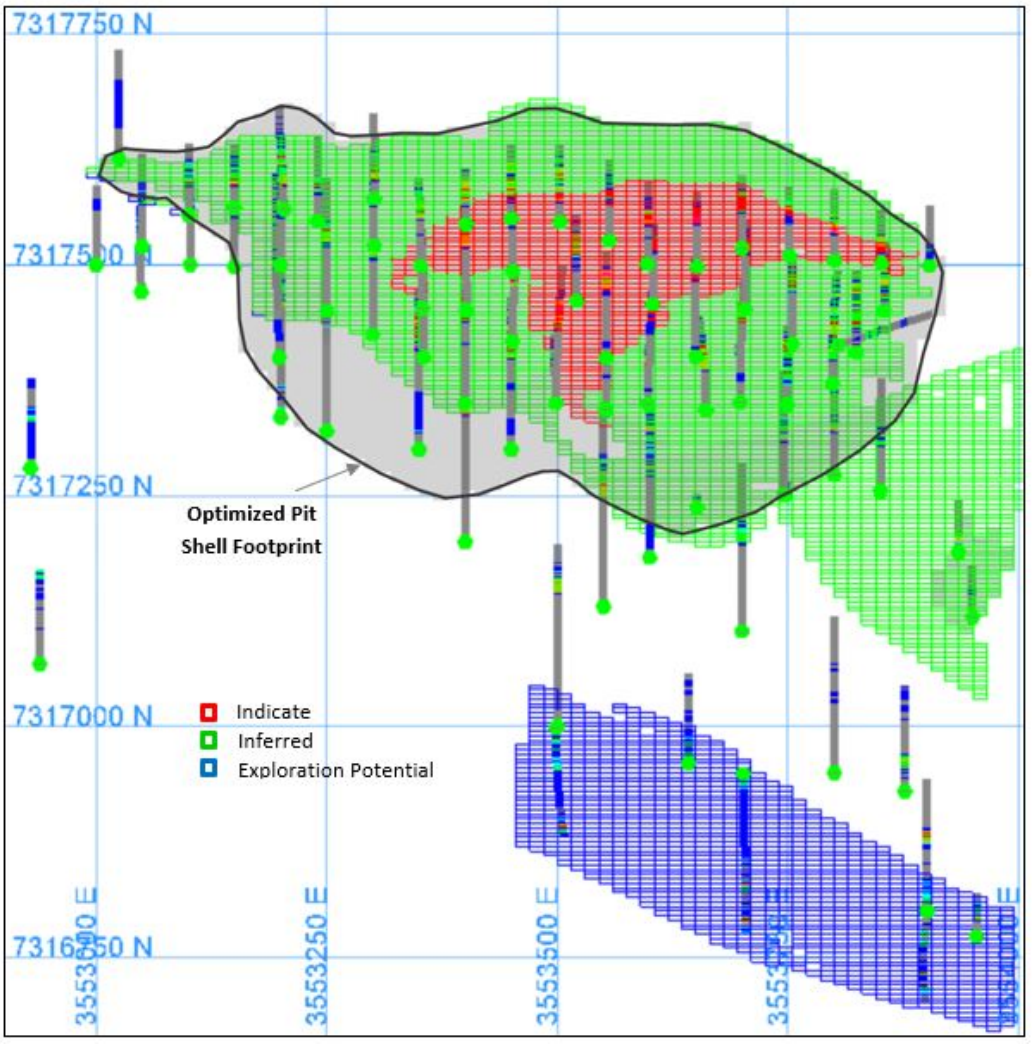

Figure 6. Kaukua Resource classification plan view. Coordinate system is the old Finnish KKJ Zone 3 (ESPG 2393)

To view an enhanced version of Figure 6, please visit:
https://orders.newsfilecorp.com/files/6502/47634_figure6.jpg

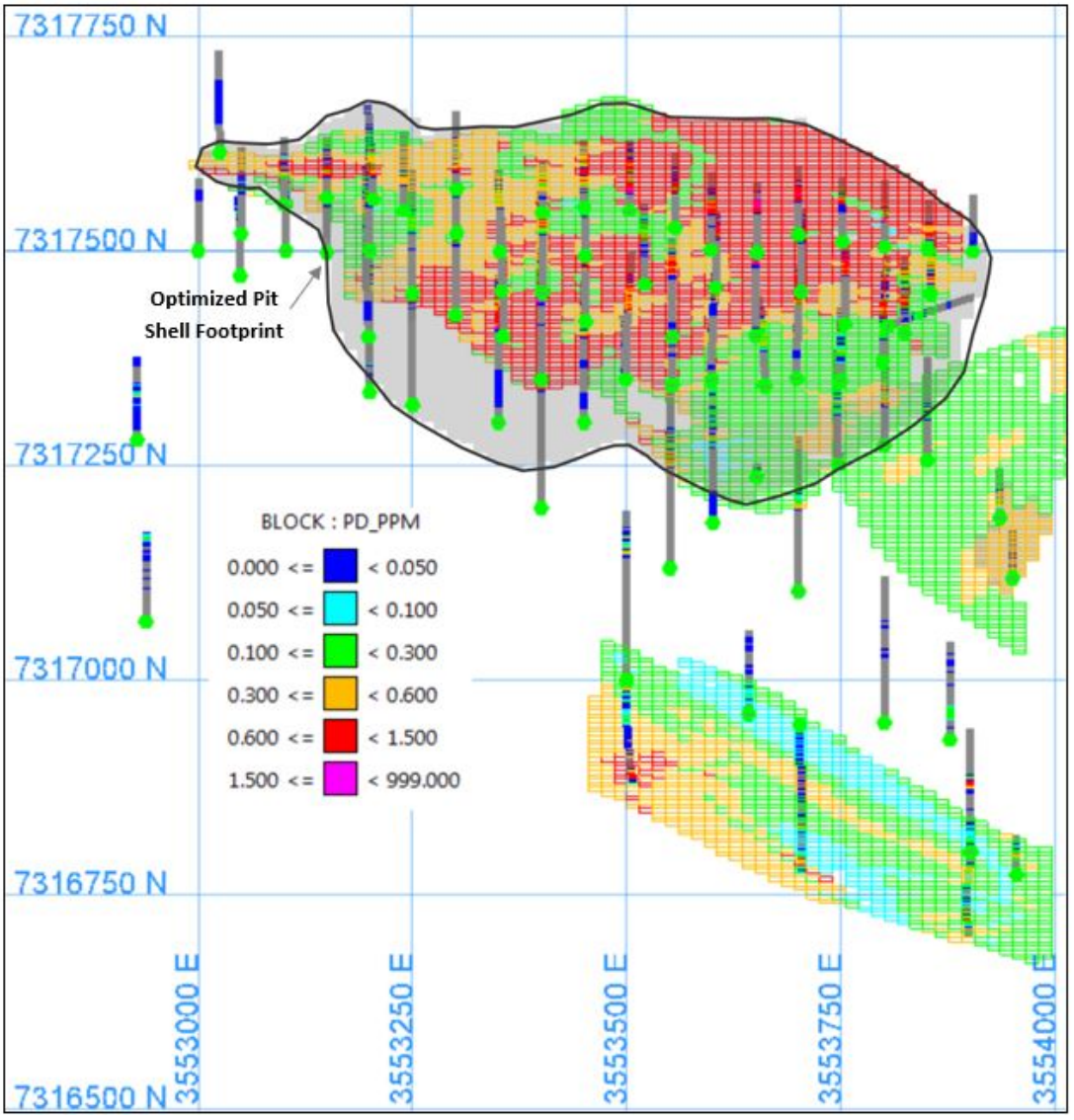

Figure 7. Kaukua Resource plan view showing block and drill hole grades for Pd. Coordinate system is the old Finnish KKJ Zone 3 (ESPG 2393)

To view an enhanced version of Figure 7, please visit:
https://orders.newsfilecorp.com/files/6502/47634_figure7.jpg

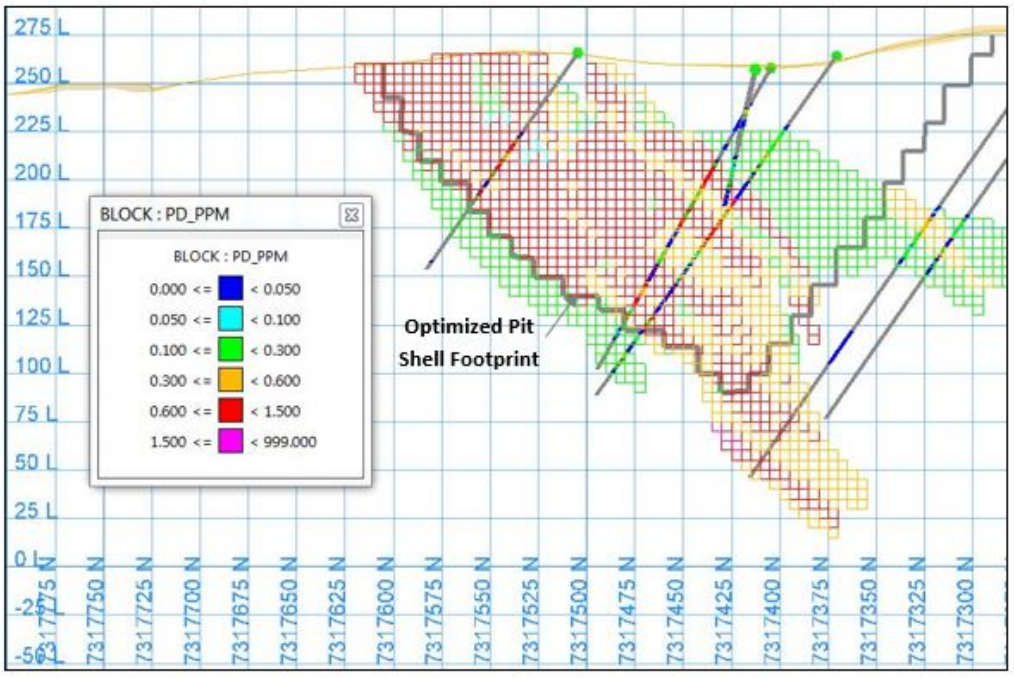

Figure 8. Cross Section at 3,553,810 mE showing block model and drillhole grades for Pd. Coordinate system is the old Finnish KKJ Zone 3 (ESPG 2393)

To view an enhanced version of Figure 8, please visit:
https://orders.newsfilecorp.com/files/6502/47634_figure8.jpg

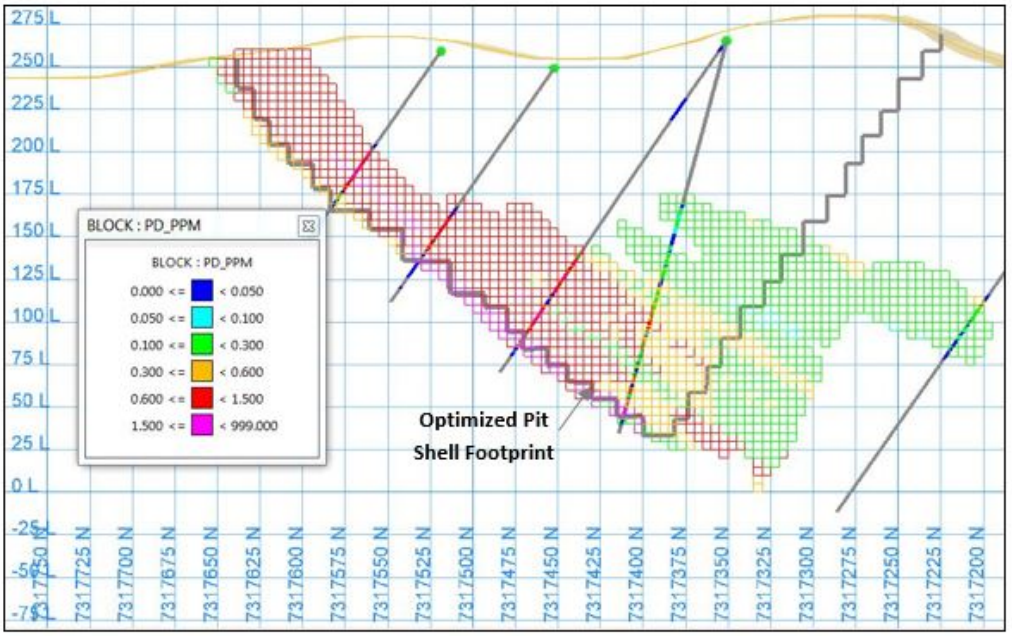

Figure 9. Cross Section at 3,553,610 mE showing block model and drillhole grades for Pd. Coordinate system is the old Finnish KKJ Zone 3 (ESPG 2393)

To view an enhanced version of Figure 9, please visit:
https://orders.newsfilecorp.com/files/6502/47634_figure9.jpg

Definitions:

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

About Palladium One:

Palladium One Mining Inc. is a PGE, nickel, copper exploration and development company. Its assets consist of the Lantinen Koillismaa ("LK") PGE-Cu-Ni project, located in north-central Finland and the Tyko Ni-Cu-PGE property, near Marathon, Ontario, Canada.

ON BEHALF OF THE BOARD:

"Derrick Weyrauch"
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