

EXPLORATION TARGET ESTIMATED FOR THE PENIKAT PROJECT, FINLAND

Kingsrose Mining Limited (ASX: KRM) (“Kingsrose” or the “Company”) is pleased to announce the results of an independently prepared JORC Code (2012) Exploration Target for the Penikat PGE-Nickel-Copper project, Finland (Table 1 and Figure 1).

The Exploration Target was prepared by Jeremy Witley, Head of Department – Mineral Resources, The MSA Group (Pty) Ltd (South Africa). Mr Witley has 33 years’ experience in Mineral Resource estimation, exploration and mine geology on PGE deposits hosted in the Bushveld (South Africa) and Great Dyke (Zimbabwe) intrusions, which are layered intrusions characterised by strong continuity of mineralisation, similar to Penikat. Previous clients include major PGE producers Anglo American Platinum, Implats, Northam Platinum, Zimplats and Lonmin.

Highlights

- JORC Exploration Target range of **21 to 32 million tonnes at 4.0 to 7.4 g/t 6E, for 2.8 to 7.7 million ounces 6E** (the sum of platinum, palladium, rhodium, iridium, ruthenium and gold) *
 - * *The potential quantity and grade of the PGE mineralisation at Penikat is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.*
- Exploration Target ranks Penikat as **one of the highest grade PGE exploration projects globally.**
- **Mineralisation occurs from surface** and estimation of the Exploration Target was limited to 500 metres depth, whereas regional seismic data and geological interpretations suggest potential to at least 1 kilometre depth as is commonly seen in similar deposits worldwide.
- Exploration Target estimation was limited to the SJ and PV Reefs which are exposed over a strike of 10 and 3.6 kilometres respectively on Kingsrose tenure, the **AP Reef was not included due to insufficient distribution of historical drilling however it is exposed over approximately 8 kilometres of strike and includes the “ballroom” feature** where drill hole resampling returned 8.8 metres at 8.1 g/t Pd, 2.3 g/t Pt, 0.2 g/t Rh, 0.5 g/t Au, 0.5 % Cu and 0.2 % Ni from surface (ASX Announcement dated 5 May 2022).
- **High palladium and rhodium content suggests high 6E basket price at current spot prices.**
 - Grade estimation did not include nickel and copper which may offer base metal credits as indicated by results of recent drill core resampling (ASX Announcement dated 14 March 2022).

Fabian Baker, Kingsrose Managing Director, commented “*This multimillion-ounce Exploration Target demonstrates the Tier-1 discovery potential at Penikat, and positions the project among the highest-grade PGE dominant exploration projects globally.*”

We have the opportunity to define a large and high-grade deposit that could deliver a domestic supply of critical metals in-line with the goals of the EU Action Plan on Critical Raw Materials, and our vision is for Penikat to be developed as a low impact, highly sustainable underground operation.

The continuous nature of mineralisation and widespread historical drilling data at Penikat gives us confidence in the potential to define Mineral Resources within the bounds of and possibly exceeding that indicated by this Exploration Target. Importantly, Penikat shows strong similarities to existing PGE mines that are typically high-grade underground operations and around which global PGE smelting capacity has been built.

We have a clear plan for the advancement of the project. Environmental surveys and stakeholder engagement that support permitting of exploration are underway, with drilling anticipated to commence in late 2023.”

Table 1: Penikat Exploration Target

	Tonnes (millions)	4E (g/t)	4E (Moz)	6E (g/t)	6E (Moz)
PV Reef					
Lower Limit	3.2	2.4	0.3	2.5	0.3
Upper Limit	4.6	6.1	0.9	6.4	0.9
SJ Reef					
Lower Limit	18	4.1	2.4	4.3	2.5
Upper Limit	28	7.2	6.4	7.6	6.7
Total					
Lower Limit	21	3.8	2.7	4.0	2.8
Upper Limit	32	7.0	7.3	7.4	7.7
Notes:					
1. All tabulated data have been rounded and as a result minor computational errors may occur.					
2. No economic viability is implied.					
3. The potential quantity and grade of the PGE mineralisation at Penikat is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.					
4. The Exploration Target is reported as a range of grade and tonnages for the project based on drillhole data statistical confidence limits and various assumptions of continuity.					
5. 4E = Pt+Pd+Rh+Au in proportions estimated as					
PV Reef 53% Pt, 36% Pd, 2% Rh, 9% Au					
SJ Reef 42% Pt, 53% Pd, 4% Rh, 1% Au					
6. 6E = Pt+Pd+Rh+Au+Ru+Ir. In proportions estimated as					
PV Reef 51% Pt, 34% Pd, 1% Rh, 8% Au 1% Ru, 3% Ir					
SJ Reef 40% Pt, 51% Pd, 4% Rh, 1% Au, 2% Ru, 2% Ir					

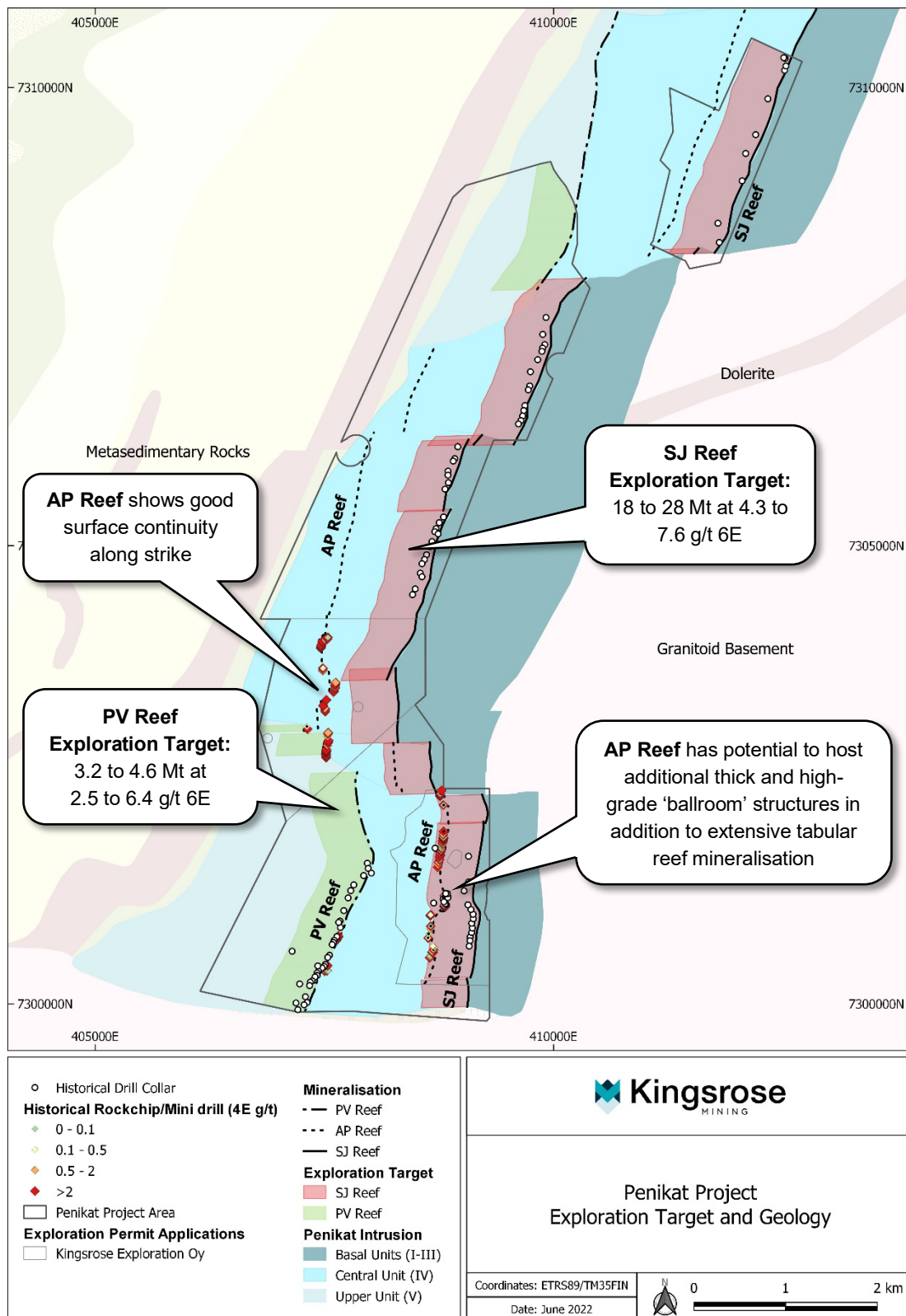


FIGURE 1: Penikat Geology and Exploration Target. Exploration Target dips 45° West to 500m depth.

Exploration Target Estimation

The Exploration Target was estimated by Mr Jeremy Witley, Head of Department – Mineral Resources, The MSA Group (Pty) Ltd, who is a Competent Person as defined in accordance with the JORC Code (2012). Mr Witley visited the Penikat project on 17th and 18th May 2022, including a field visit to observe mineralised outcrops and historical drill collars, followed by observations on historical drill core.

Jeremy Witley is a geologist with 33 years' experience in Mineral Resource estimation, exploration and mine geology, including tabular mafic hosted PGE reefs common in the Bushveld Complex of South Africa and the Great Dyke of Zimbabwe, which show strong similarities to the Penikat deposits. Jeremy has consulted on significant PGE projects including audits, detailed reviews or Mineral Resource estimates at mines and deposits owned and operated by Anglo American Platinum, Implats, Northam Platinum, Zimplats, Lonmin and others.

Geology

Penikat is a 25 km long, 1-3 km thick, north-northeast trending, layered mafic-ultramafic intrusion that is host to three mineralised reefs which dip approximately 45° west. The reefs comprise of the lower most SJ Reef, the central AP Reef and the upper PV Reef. The reefs have been mapped over a cumulative strike length of 23 km within Kingsrose's tenements, with variable quantities of historical drilling and sampling data available for each reef.

Data used to estimate the Exploration Target

The estimate was based on the results of 108 historical drill holes completed by Outokumpu between 1982 and 1987 and Goldfields Arctic Platinum in 2007, for a total of 4628.4 metres drilling, averaging 43 metres deep with a maximum depth of 298.5 metres. Historical surface sampling of the mineralised reefs was also used to define the known mineralised strike length, using a total of 797 sample points. Kingsrose has re-sampled and relogged several historical holes to verify and further delineate mineralised zones, as announced to the ASX on 10 November 2021, 24 November 2021, 14 March 2022 and 5 May 2022, and this data was also used to inform the Exploration Target estimation.

MSA reviewed the data and geological interpretations for each reef, including validation of the drillhole database, QAQC results, comparison of historical versus Kingsrose assay results and analysis of the attributes of each reef (Table 2 and Table 3).

Exploration Target

The SJ and PV reefs were considered to have sufficient data to prepare an Exploration Target estimate, using the mapped strike length as a base case for determining overall strike length. The strike length was adjusted using the proportion of positive intersections (reef cut > 1.0 g/t 2E) to estimate the mineralised strike length of each reef. Each reef was extrapolated to 500 metres depth at a dip of 45°, based on the continuity of similar deposits globally, and a 'base case' estimation of tonnes and grade was applied to each reef. The base case was used to approximate a range of tonnages and grades for the Exploration Target estimate shown in Table 1, in accordance with the JORC Code (2012). The ranges were derived from expected upper and lower densities for the dominant rock types in each reef and the 90% confidence interval for declustered true thickness and historical and resampled drill hole grade data. The grade range was estimated based on the 90% confidence interval of the grade of the positive reef cuts. Top caps were applied to the SJ Reef (8.3 g/t Pt, 11.3 g/t Pd, 0.9 g/t Rh).

The AP Reef has a limited amount of historical drilling over a 120 metre strike length and the data was considered insufficient to estimate an Exploration Target. However, the AP Reef represents excellent exploration potential given the reef has been mapped for a total strike length of 8 kilometres on Kingsrose tenure and historical drilling has defined areas of thick and high-grade sulphide mineralisation.

Planned Exploration Work

Kingsrose is working towards the grant of relevant exploration licences and permits to conduct diamond drilling. An initial program of approximately 15,000 - 20,000 metres is planned to commence in December 2023, as soon as the permitting process is complete. This initial phase of diamond drilling will test priority targets within the Exploration Target area with a view to estimating a maiden Mineral Resource, which will be grown incrementally with later drill campaigns.

TABLE 2: Reef Attributes

Attribute	PV Reef	AP Reef ¹	SJ Reef
Data Mean 2E grade of intersections greater than 1.0 g/t 2E ²	3.8 g/t	3.2 g/t (incl. internal waste)	5.3 g/t
Average apparent thickness (1 m minimum cut)	1.50 m	10 – 20 m	1.53 m
Rock Type Association	Anorthosite	Mottled Gabbro and Anorthosite	Peridotite and Pyroxenite
Total drillholes	33	12	53
Number of positive drillholes > 1.0 g/t 2E	12	11	34
Probability of positive intersection	36%	NA ¹	64%
<p>*Notes:</p> <ol style="list-style-type: none"> All except one of the AP Reef intersections are in a thick “ballroom” like structure with irregular grade distribution, rather than in a typical narrow tabular reef, and is not evaluated on the same basis as PV and SJ reefs. 2E = platinum+palladium 			

TABLE 3: Average Prill Split for the PV and SJ Reefs

	Pt	Pd	Rh	Au	Ru	Ir
PV Reef						
4E Prill Split	53%	36%	2%	9%	-	-
6E Prill Split	51%	35%	2%	8%	1%	3%
SJ Reef						
4E Prill Split	42%	53%	4%	1%	-	-
6E Prill Split	40%	51%	4%	1%	2%	2%

-ENDS-

This announcement has been authorised for release to the ASX by the Board.

For further information regarding the Company and its projects please visit www.kingsrosemining.com

For more information please contact:

Dani McIntosh

Investor Relations

+61 8 9389 4498

info@kingsrosemining.com

About Kingsrose Mining Limited

Kingsrose Mining Limited is a leading ESG-conscious and technically proficient mineral exploration company listed on the ASX. In 2021 the Company commenced a discovery-focused strategy, targeting the acquisition and exploration of Tier-1 mineral deposits, that resulted in the acquisition of the Penikat and Porsanger PGE-Nickel-Copper projects in Finland and Norway respectively. The Company previously operated the Way Linggo mine in Indonesia, having produced over 200koz gold and 1.5MOz silver, and is currently assessing opportunities for the divestment of this project.

Forward-looking statements

This announcement includes forward-looking statements, including forward looking statements relating to the future operation of the Company. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of the Company, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement to reflect the circumstances or events after the date of this announcement.

You are strongly cautioned not to place undue reliance on forward-looking statements, particularly in light of the current economic climate and the significant volatility, uncertainty and disruption caused by COVID-19.

Competent Person's statement

The information in this report that relates to Exploration Results is based on information compiled under the supervision of Andrew Tunningley, who is a Member and Chartered Professional (Geology) of the Australasian Institute of Mining and Metallurgy and is Head of Exploration for Kingsrose Mining Limited. Mr Tunningley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves." Mr Tunningley consents to the inclusion in this report of the matter based on his information in the form and context in which it appears.

The Exploration Target estimate has been prepared by Mr. J.C. Witley (BSc Hons, MSc (Eng.)) who is a geologist with 33 years' experience in base and precious metals exploration and mining as well as Mineral Resource evaluation and reporting. He is a Principal Resource Consultant for The MSA Group (an independent consulting company), is registered with the South African Council for Natural Scientific Professions ("SACNASP") and is a Fellow of the Geological Society of South Africa ("GSSA"). Mr. Witley has the appropriate relevant qualifications and experience to be considered a "Competent Person" for the style and type of mineralisation and activity being undertaken as defined by the 2012 Edition of the JORC Code. Mr Witley consents to the inclusion in this report of the matter based on his information in the form and context in which it appears.

Appendices

1. JORC Code Table 1 for the Penikat Project

Appendix 1 – JORC Code Table 1 for the Penikat Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralization that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Resampling was conducted on quarter and half cut historical drill core. Core was quarter cut where historic sampling had been performed, and half cut in instances where whole core was present. Core was cut using a core saw to obtain samples with a minimum length of 10cm. Historic core diamond drilling was completed using BQ, AQ and Winkie diameter drill core Drill core is archived by the Geological Survey of Finland (GTK) and select intervals were observed and sampled by Kingsrose to match, where possible, historic sample intervals. Samples were crushed and pulverised to produce a 50g charge for fire assay and the pulp was retained for future reference.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Historic drilling by Outokumpu Oy (Outokumpu) was BQ, AQ and Winkie diameter core drilling. Drill core was not orientated.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Historic drill recoveries were not recorded Observations on historic drill core during Kingsrose's due diligence work indicates that the drill core is very competent and recoveries were generally above 95%. However not all mineralised intervals have been observed by Kingsrose and further re-logging of historic drill core is required. The relationship between sample recovery and grade has not been assessed as there is no historical drill core recovery data.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	<ul style="list-style-type: none"> Drill core samples were historically logged to a basic level of geological detail Future drilling will be required to obtain a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Historical logging was qualitative.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> There is no photographic record of historical core. Kingsrose has photographed archived core boxes from all holes which were resampled. All historic drill core (100%) was logged by Outokumpo.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Resampling was conducted using quarter cut core on historically sampled intervals and half cut core on whole core. Samples were prepared by ALS using code PREP-31 (Crush to 70% less than 2mm, riffle split off 250g, pulverise split to better than 85% passing 75 microns). Sample intervals matched exactly those of the historical sampling, where possible, so that the resampling results could be used as duplicate samples. Analysis of duplicate samples indicates that historical assay results are repeatable Sample sizes are appropriate to the grain size of the material.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> 52 samples from the AP Reef were submitted for rhodium-only analysis by ALS using fire assay, lead collection and ICP-MS finish (ALS code Rh-MS25) 60 samples in total were submitted from the SJ and PV Reefs for the full suite of PGE+gold analyses (gold, platinum, palladium, rhodium, iridium, ruthenium and osmium) by nickel sulphide collection fire assay and ICP-MS finish (ALS code PGM-MS25NS) Both techniques are considered total. No standards or blanks were inserted historically. Kingsrose inserted commercial blank and standard (certified reference material, or CRM) samples to assess for contamination and accuracy. The resampling program is considered a duplicate sampling program and acceptable levels of accuracy and precision have been established for the early stage of exploration.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> The results of verification sampling by Kingsrose demonstrate that historical platinum, palladium and gold assay results from the SJ and PV Reefs are repeatable. Rhodium, iridium, osmium and ruthenium were not routinely assayed historically. There is some variation between the duplicate length weighted intervals on the SJ Reef, which are largely due to wider zones of sampling being employed as part of the resampling program. There are no twin holes. Resampled intervals and corresponding unique sample ID were recorded in an Excel sheet. Assay

Criteria	JORC Code explanation	Commentary
		<p>results were matched using unique sample IDs. Data is stored on Kingsrose cloud-based system.</p> <ul style="list-style-type: none"> There has been no adjustment to assay data
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Data points were located in the field by Outokumpu and their procedures are not known. Kingsrose has identified several historic drill collars in the field and recorded their position using hand held GPS to an accuracy of +/- 10 metres. This has confirmed the position relative to historical maps and drill collar records. The Finnish "ETRS-TM35FIN" transverse Mercator grid system is used for Penikat. Publicly available LIDAR derived topographic data is used for topographic control which is adequate for the early stage of exploration.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Historical drill holes were located 20 to 150 m apart. No Mineral Resource or Ore Reserve estimations are being reported. Length weighted composites used for the Exploration Target Estimate.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Historical drilling was angled perpendicular to the mapped mineralisation at surface to achieve unbiased sampling. Localised deviations in the dip and strike of mineralisation may cause overestimation of true thicknesses given the early stage of exploration, and future drilling is required to better understand the morphology of the deposit.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Outokumpu's procedures to ensure sample security are not known. Kingsrose samples were collected and stored in the secure GTK logging facility in Loppi, Finland, prior to despatch by courier direct to ALS Sodankyla in northern Finland where ALS took custody of the samples.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> There have been no audits of sampling techniques and data.

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Mineral tenement and	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title 	<ul style="list-style-type: none"> The Penikat Project comprises three exploration permit applications and two reservation notifications totalling 2012.5 hectares. Kingsrose owns 100% of the project through its subsidiary

Criteria	JORC Code explanation	Commentary
land tenure status	<p>interests, historical sites, wilderness or national park and environmental settings.</p> <ul style="list-style-type: none"> The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<p>Kingsrose Exploration Oy. The project is subject to a 1% NSR royalty payable to Mr Andrew Dacey (the project vendor).</p> <ul style="list-style-type: none"> The Penikat Project covers part of the Martimoaapa-Lumiaapa-Penikat Natura 2000 conservation and mire reserve area. An environmental assessment is required to support the application for an Exploration Licence. A stream in the centre of the project area is protected by the Water Act, which mandates that a permit would be required if there were to be any change in the state, depth, water level or flow, shore, or aquatic environment of the water body or the quality or quantity of groundwater. There are nine archaeological sites in the Penikat Project area and all of them are protected by the Act on Archaeological Remains. <p>Exploration Permit Applications</p> <ul style="list-style-type: none"> Kingsrose has submitted applications for three contiguous exploration permits totalling 962.9 hectares: Ala Penikka (ML2021:0132), Penikat Kaltio (ML2021:0133) and Penikat Pooki (ML2021:0134). The exploration permit applications are subject to completion of Natura Assessment studies and reports, which are currently in progress. <p>Reservation Notifications</p> <ul style="list-style-type: none"> Kingsrose owns two Reservation Notifications. The Keski Penikka reservation (VA2021:0065) is contiguous with the Penikat Kaltio exploration application and covers 841.2 hectares. The Yli Penikka (VA2021:0069) reservation is located 870 m northeast of the Keski Penikka reservation and covers 208.4 hectares. The Reservation Notifications expire on 9th December 2023 (Keski Penikka) and 22nd December 2023 (Yli Penikka). Kingsrose intends to complete Natura Assessment studies and reports on these areas for submission of exploration permit applications prior to their expiry.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Penikat was discovered in 1981 by Outokumpu. In total there are 108 historical drill holes for 4268.4 metres of drilling metres on the Penikat Project. Outokumpu mapped the deposit in detail. Arctic Platinum Partnership Oy held claims over the area between 2000-2003. It is not known what exploration was conducted in this period. Gold Fields Arctic Platinum Oy drilled six holes for 564.15 metres on the PV reef in 2007 (included in the above total meterage). The GTK holds regional airborne geophysical data for the region

Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Penikat is a mafic-ultramafic intrusion hosted PGE-nickel-copper deposit. The Penikat intrusion is >20 km long and 1-3km thick, and is part of the larger 300km long Tornio-Narankavaara belt which contains >20 mafic-ultramafic intrusions. The Penikat intrusion has been divided into five layered megacyclic units (MCU-I to MCU-V), composed of alternating sequences of bronzite, pyroxenite, gabbro and anorthosite cumulates. Mineralisation occurs in three sub-parallel reefs, all of which are hosted in MCU-IV and are each spatially and temporally related to compositional reversals. Within the Penikat project area, the mineralised reefs have been mapped historically over a cumulative strike length of approximately 25 km, and are typically 0.5 to 1.5 metres thick, composed of disseminated sulphide (pyrrhotite, pentlandite, chalcopyrite and bornite) mineralisation hosted in websterite, gabbro and anorthosite. Chromite and silicate type PGE mineralisation is also observed. The reefs are termed, from the lowermost to uppermost, as the SJ, AP and PV reefs. The SJ and AP reefs are typically 450 metres apart, and the AP and PV reefs are typically 850 metres apart. Locally the reefs may pinch and swell, with the AP reef recording >20 metre thickness over <100 metres strike at the colloquially termed 'AP Ballroom' structure.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> See Table 1 and Appendix 2
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high 	<ul style="list-style-type: none"> For the estimation of the Exploration Target: A reef cut was defined at a 0.4 g/t 2E (Pt+Pd) threshold for each drillhole that intersected the mineralised unit.

Criteria	JORC Code explanation	Commentary
	<p>grades) and cut-off grades are usually Material and should be stated.</p> <ul style="list-style-type: none"> Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>A positive reef cut is where the average grade of the cut is greater than 2.0 g/t 2E at a minimum length of 1.0 m.</p> <p>The dip area was estimated by the mapped strike length multiplied by the proportion of positive reef cuts and a dip length of 707 m (equalling 500 m depth at 45° dip).</p> <p>The volume range was estimated by calculating the 90% confidence interval of the length of the positive reef cuts and multiplying by the estimated area.</p> <p>The tonnes range was estimated by multiplying the lower limit volume by the lower assumed density (2.8 t/m³ for PV and 3.1 t/m³ for SJ) and the upper limit volume by the upper assumed density (3.0 t/m³ for PV and 3.3 t/m³ for SJ)</p> <p>The grade range was estimated based on the 90% confidence interval of the grade of the positive reef cuts after top caps were applied (8.33 g/t Pt, 11.28 g/t Pd, 0.885 g/t Rh).</p> <p>Mean and standard deviation for the confidence interval calculation were based on data declustered on a 25 m grid.</p> <ul style="list-style-type: none"> No metal equivalent values are reported. It is common practice in the PGE interval to express PGE values of as additive grades and quantities. 2E = Pt+Pd 3E = Pt+Pd+Au 4E = Pt+Pd+Rh+Au 6E = Pt+Pd+Rh+Au+Ru+Ir
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> All intercepts are reported as downhole lengths. True widths are assumed for the Exploration Target estimate and are based on a 45° dip. Drill holes are drilled largely perpendicular to the inferred dip of the mineralised reefs, however further drilling is required to define the geometry of the mineralisation and therefore true widths.
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Maps and sections are provided in the body of the report.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Collar locations are presented in the appendices.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> No other substantive exploration data.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Further work will include large scale step-out drilling of approximately 10,000 to 15,000 metres, to explore the down-dip and lateral extents of the mineralised reefs defined at shallow levels. Step out drilling will be completed at a typical spacing of between 250 and 500 metres between sample points. Step-out drilling will be accompanied by bench scale metallurgical testing to characterise the mineralogy and PGM deportment (i.e silicate, chromite or sulphide hosted).