

ASX Announcement

29 January 2024

## DIAMOND DRILLING COMMENCES TO FOLLOW UP EXCITING NEW VHMS BASE METAL DISCOVERY AT CARDINIA

Plus, four additional favourable VHMS horizons identified within the Minerie Domain, expanding the base metal potential over a 40km strike length to +10km wide

### Highlights

- Diamond drilling underway to follow up the exciting Albus base metal target (recently reported intercept of 5.7m @ 5.3% Zn, 0.34% Cu, 0.3% Pb, 40 g/t Ag, 1g/t Au) and two deeper gold targets.
- Detailed geochemical analysis demonstrates a total of five favourable VHMS horizons (Viktor, Albus, Minerva, Cedric, Luna) at Cardinia, significantly expanding the scale of the opportunity.
- VHMS anomalous rock chip results returned from the Viktor Gossan, along a mapped chert in the Viktor Horizon.
- Kin holds tenure encompassing the entire 40km strike of this newly identified VHMS belt.
- Kin Mining well-placed to pursue this opportunity following the recent GMD transactions.

Kin Mining NL (ASX: KIN or “the Company”) is pleased to advise that follow-up diamond drilling has commenced to further evaluate the recently discovered VHMS mineralisation at Albus, within its 100%-owned Cardinia East Project in Western Australia.

Diamond drilling is underway to extend and understand the recently reported Albus intercept (see ASX release, 8 January 2024) as part of a new systematic and multi-pronged exploration program targeting the newly identified base metal potential throughout the Minerie Domain.

The discovery has been made as part of an ongoing strategic review of the broader potential of the Cardinia Project for new discoveries and other styles of mineralisation including base metals.

Recent geochemical analysis has further expanded the scale of the base metal potential at Cardinia East, identifying four additional favourable horizons for VHMS mineralisation over a +40km long corridor.

Commenting on the latest developments, Kin Mining Executive Chairman Rowan Johnston said:

*“We are excited to be drilling and testing the Albus intersection with down-hole EM also planned to evaluate the mineralisation. Now we have outlined these new prospective horizons, the size and scope of this project will greatly increase the potential for a significant base metal discovery.*”

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#### ASX Code: KIN

Shares on issue: 1178 million

Market Capitalisation: \$79 million

Cash: \$2.8 million (31 December 2023)

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*“The quality of the new work demonstrates the enthusiasm and excitement from our exploration team to prove the potential that our tenure offers. We are continuing to apply modern and collaborative exploration techniques and knowledge to quickly demonstrate the potential for a major discovery and build a platform of new data to drive our fully-funded exploration effort.*

*“Understanding of this newly discovered base metal system will also further enhance our deep targeting for high-grade gold deposits and ongoing testing of key structural zones at Cardinia.*

*“The diamond drilling program has just commenced, and we are excited to see core from the first hole targeting Albus in the coming weeks, although complete assays may be some weeks away.”*

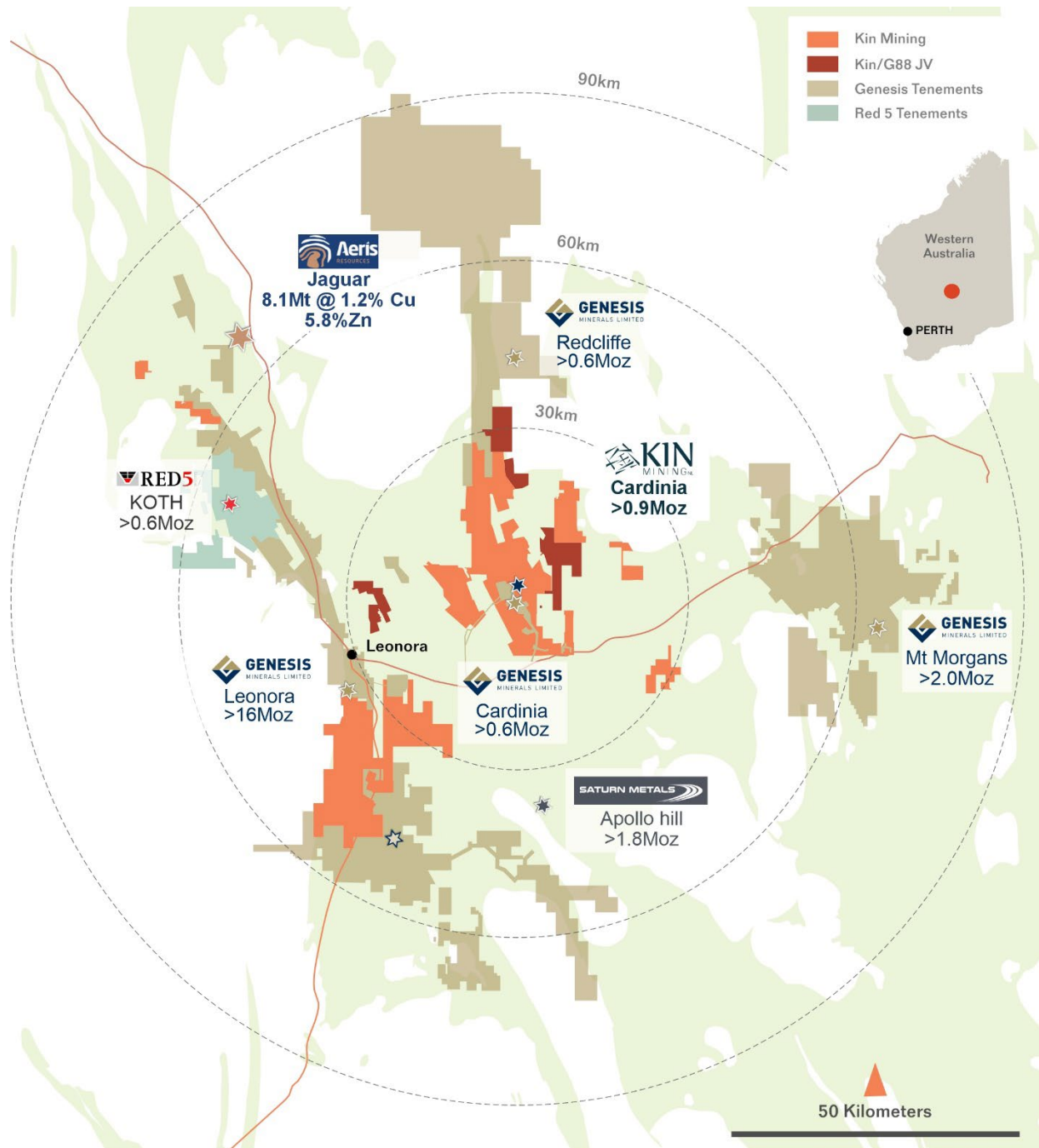


Figure 1 – Regional overview showing KIN tenure and surrounding projects with Resources.

## Drilling Commenced

Diamond drilling at Albus is underway as part of a considered 3,000m diamond program, with assay results expected towards the end of Q1, 2024. Down-hole electromagnetic (DHEM) surveys will be carried out on all appropriate drill-holes in order to test the viability of this tool with the mineralisation.

Other targets to be tested in this program include one 600m DD hole underneath the Helens gold deposit and one 600m DD hole underneath Cardinia Hill. Both holes have been designed to pierce the projected mineralised gold structures at >200m down depth, with the aim of expanding the potential gold footprint.

In conjunction with the drilling, these favourable horizons and other chert zones identified in our existing drill database will be the target of re-logging. Favourable horizons will be mapped along strike and sampled across the entire tenement package to build the database and close-in on new drill targets.

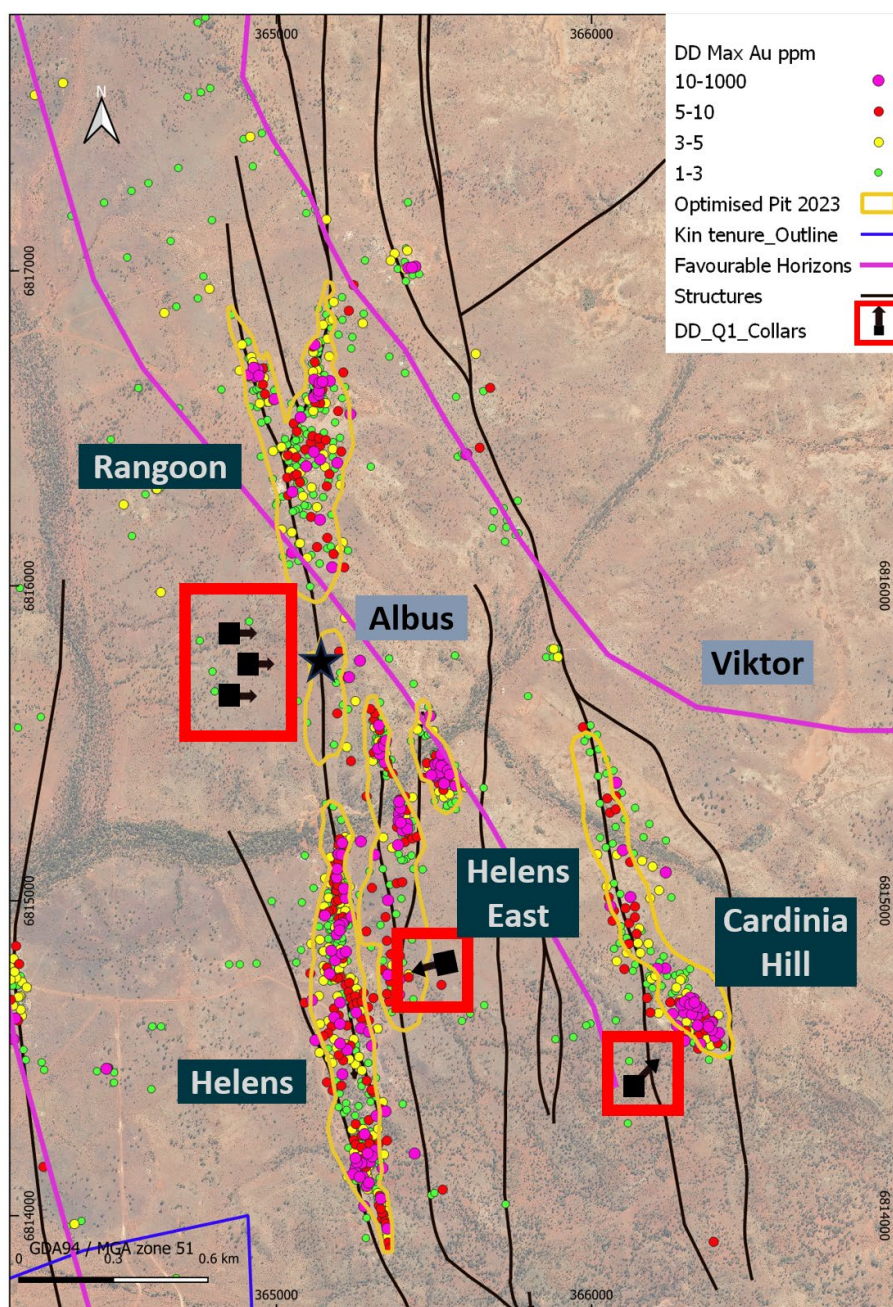


Figure 2 – Drill plan for the Q1 2024 diamond program, showing Max Au ppm and the VHMS Albus target.

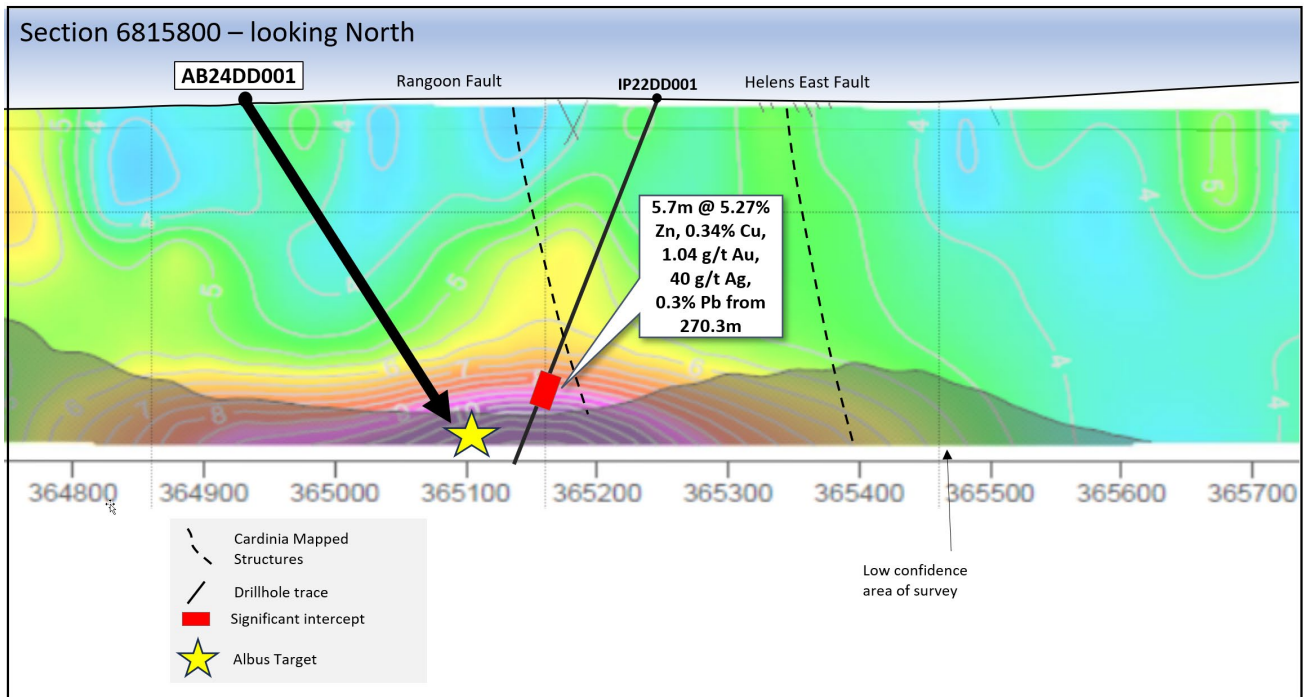


Figure 3 – IP Cross section through current drill hole AB24DD001 and VHMS mineralisation in IP22DD001.

## FURTHER FAVOURABLE HORIZONS

At the time of recognising the VHMS mineralisation in previous drill-hole IP22DD001, a detailed mapping exercise was initiated on the eastern Kin tenements in the Welcome Well area by Model Earth and Kin geologists.

The Viktor horizon was mapped along surface by following a chert horizon which was contained in an outcrop of gossan (named the Viktor Gossan). Recently returned geochemical results show moderate elevations in zinc (0.1%), antimony (23 ppm), silver (1.6 g/t), copper (408ppm) and lead (95ppm).

It is important to note that gossans do not retain zinc and copper due to weathering processes, but the location of the gossan along the favourable chert horizon and the presence of ex-sulphides with the boxwork texture is highly encouraging.

Building on the Viktor mapping, a review of existing geochemical data highlighted a VHMS signature which, prior to that point, had not been recognised as independent to the gold mineralisation.

The VHMS signature consists of Sn Se As Bi Cu Pb Zn Tl In Cd Sb and a log additive index is calculated in order to visualise the trends. The gold mineralisation is associated with Mo and W, and has a very distinct spatial distribution.

This signature can be seen at Viktor, Albus and three other VHMS horizons, now called Minerva, Cedric and Luna (Figure 4). This has significantly expanded the scale of the base metal exploration opportunity at Cardinia East.

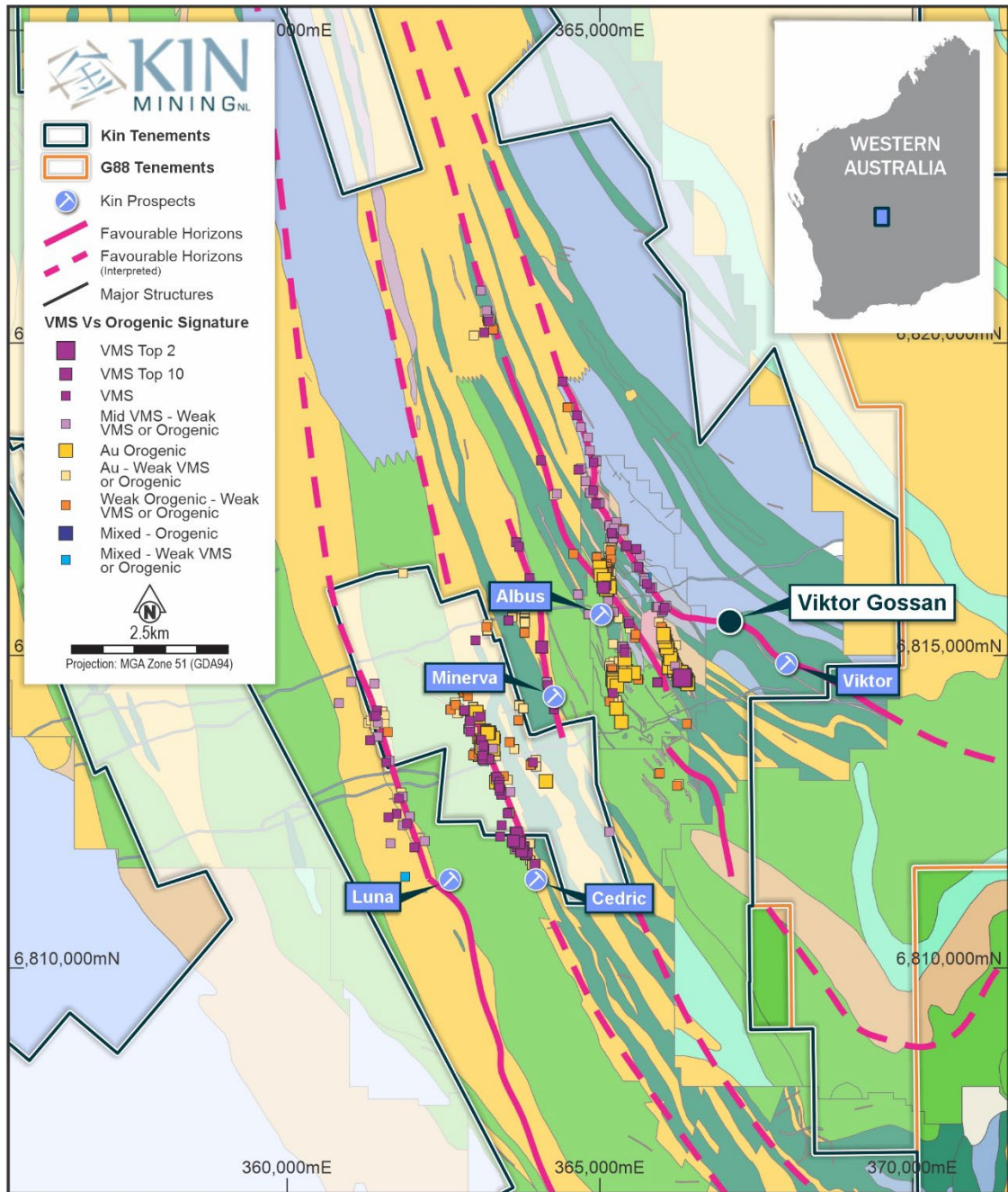
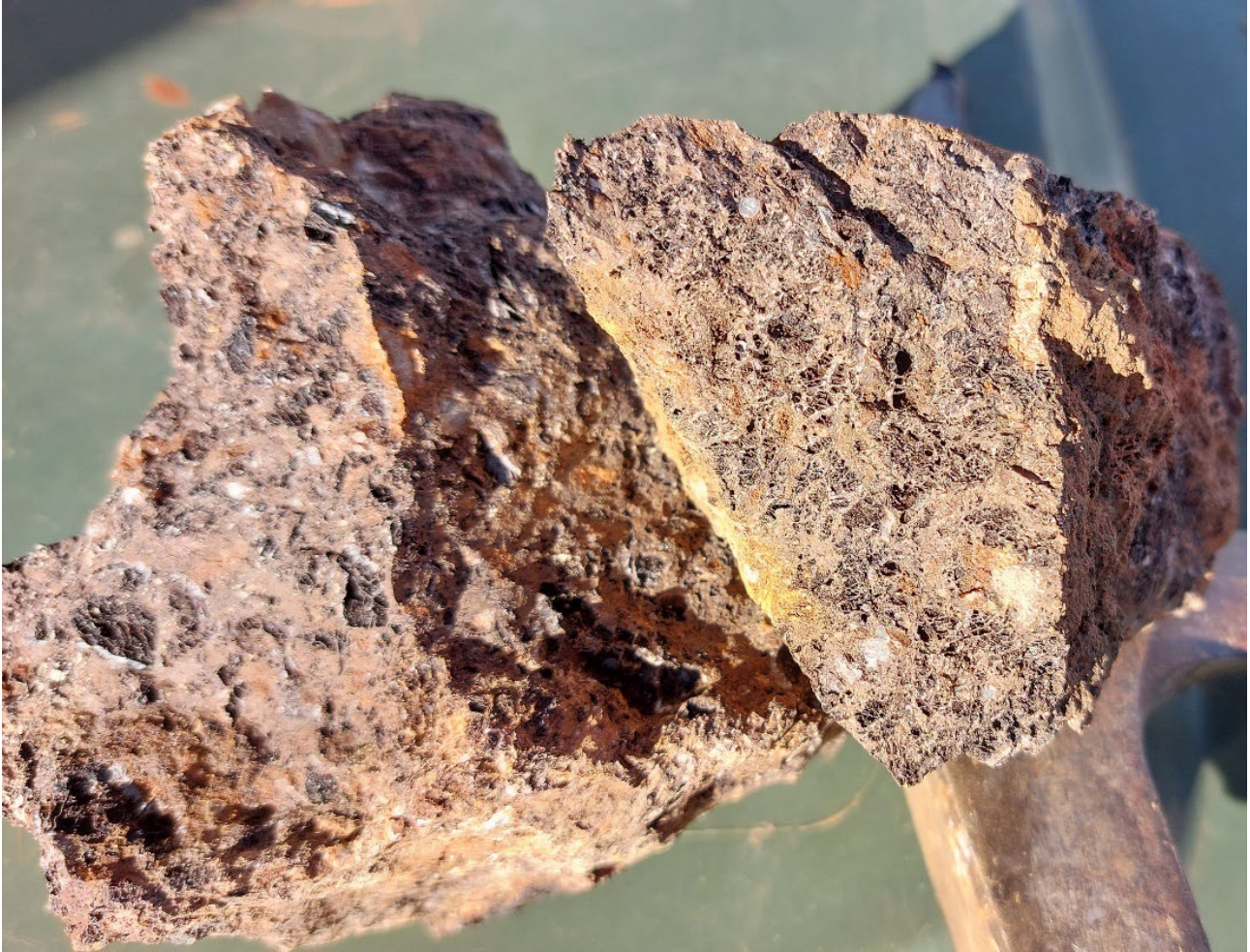


Figure 4 – VHMS vs orogenic signature over geology with purple indicating VHMS favourable horizon chemistry and orange indicating orogenic gold signature. Location of Viktor Gossan shown with black circle.



*Figure 5 – Field photo of Viktor Gossan showing boxwork after pyrite crystals. Zn = 0.1%. Location of Gossan shown in Figure 6.*

Where these areas were identified, Kin geologists carried out small-scale surface mapping and rock chip collection for detailed geochemical analysis, particularly the H-REE signature, in order to confirm the assumptions.

A standard 4 acid digest for 48 elements ICPMS was used for the zinc mineralisation, along with selected samples that were analysed by laser ablation ICPMS to accurately fingerprint different magma series, aiding stratigraphic interpretation.

Rather than being structurally controlled, the development of weak VHMS anomalism along favourable horizons appears stratigraphically controlled and runs parallel to stratigraphy.

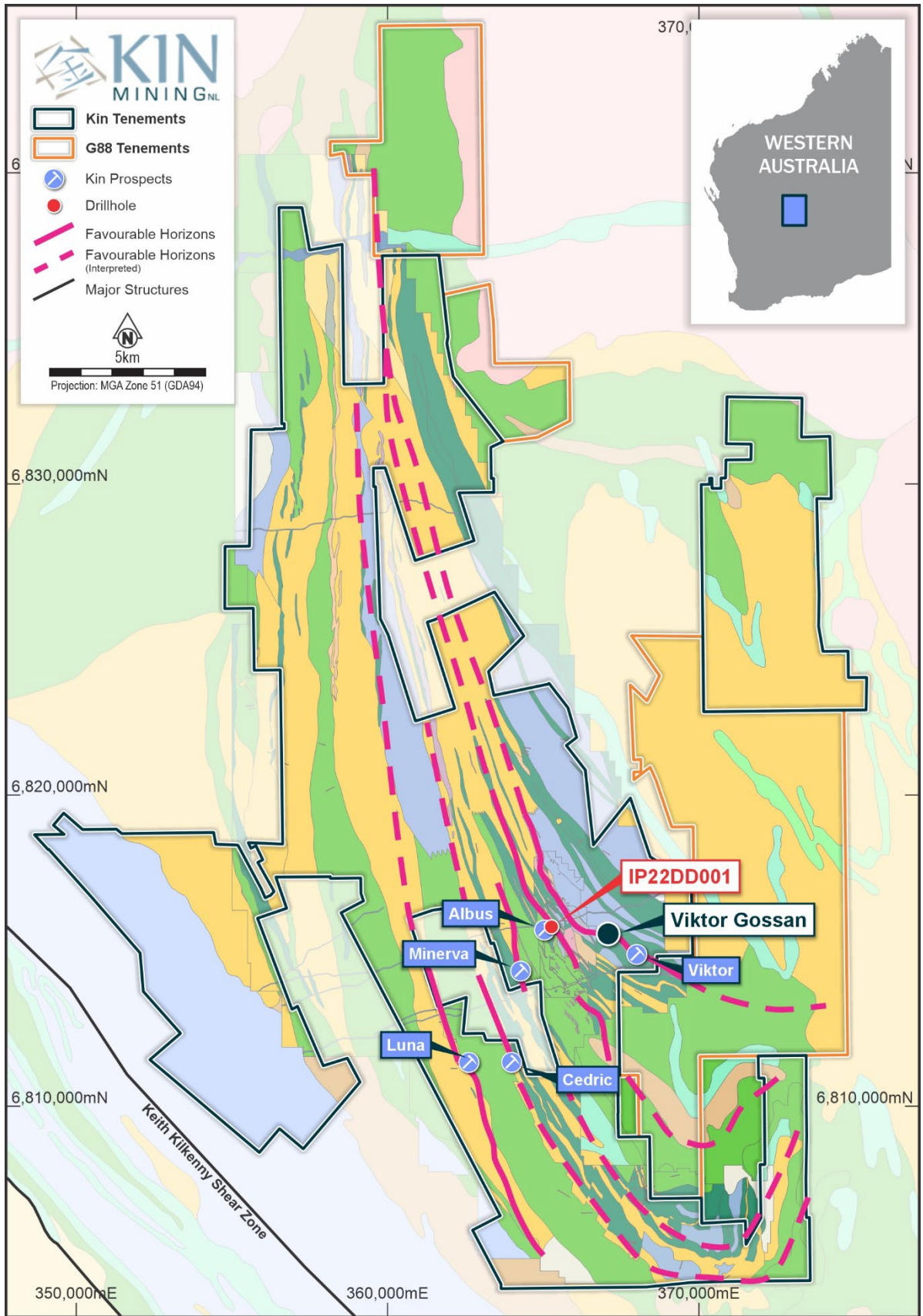


Figure 6 – Geology and location of Kin tenure and potential strike extent of interpreted favourable horizons. Viktor Gossan highlighted with black circle and IP22DD001 with red arrow.

The Albus mineralisation intersected in IP22DD001 (see ASX announcement 8<sup>th</sup> January 2024), has been logged as sphalerite-dominated massive sulphides with subordinate chalcopyrite, pyrite and galena with the zone sitting within cherty sediments along a contact of basalt and felsic volcanics from 270.3m down-hole, a typical VHMS host setting.

The geology and mineral assemblage is consistent with the distal facies of a volcanogenic base metals sulphide deposit (VHMS) and contains a footwall sulphide-rich feeder zone that contains minor copper in chalcopyrite.

An intersection of 5.7m @ 5.3% Zn, 0.34% Cu, 0.3% Pb, 40g/t Ag, 1.0 g/t Au from 270.3m, including 0.7m @ 10% Zn, 0.23% Cu, 1.5g/t Au, 77g/t Ag, 1.6% Pb from 270.3m. See ASX announcement 8<sup>th</sup> January 2024.

Targets generated from this work will be drill tested as soon as practical later in the year, in conjunction with Kin's gold exploration. Highly prospective targets have also been identified under cover. Kin Mining will focus initial air-core (AC) drilling traverses across these extensions to systematically generate and test VHMS targets in what promises to be a highly prospective district.

### **Cardinia Geology and Geological Interpretation**

The Cardinia Project area is located in the Minerie Domain in the central part of the Norseman-Wiluna Greenstone Belt, which extends for some 600km on a NNW trend across the Archean Yilgarn Craton of Western Australia.

The regional geology comprises a suite of NNE to North trending greenstones positioned within the Mertondale Shear Zone (MSZ) a splay limb of the Kilkenny Lineament. The MSZ was historically thought to denote the contact between Archean felsic volcanics and sediment sequences in the west and Archean mafic volcanics in the east and truncate the Benalla Anticline.

At Cardinia East, it is now believed that the gold mineralisation is a later event, possibly overprinting and remobilising VHMS mineralisation, which has followed the pre-existing structures from a period of extension, which now exist as steep N-S oriented shear zones.

Gold mineralisation sits in a range of stratigraphic positions (mafic or contacts with felsic volcanics) and the ore zones are associated with increased shearing, intense alteration and disseminated sulphides. Understanding of the Base Metal system will further enhance the deep targeting for high grade gold deposits and test key structural zones.

### **VHMS Deposits**

VHMS deposits are one of the best understood of the mineral systems, and the only one for which it has been possible to directly observe mineralisation as it forms by observing modern deep seafloor where VHMS mineral systems are active today as black smokers.

More than a thousand significant ancient VHMS deposits have been recognised on land worldwide and they very commonly cluster into camps. Kin's ground position at Cardinia covers ~40 strike kilometres of the host Minerie Domain, the potential VHMS district.

Well known VHMS districts like Mount Read in Tasmania, Kidd Creek, Noranda and Bathurst-New Brunswick in Canada and the Iberian Pyrite Belt in Spain contain both large and numerous smaller, deposits.

In Western Australia, DeGrussa-Monty, Golden Grove – Scuddles and the Teutonic Bore District are examples of VHMS Districts that have proven to be long operating, profitable mines. VHMS mineralisation forms along "favourable horizons" and several discrete deposits may be found along this same horizon, with commonly multiple horizons.



-ENDS-

*Authorised for release by the Board of Directors*

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**ABOUT KIN MINING NL**

Kin Mining NL (ASX: KIN) is a West Australian based gold development and exploration company. Kin's key focus is its 100% owned Cardinia Gold Project (CGP) located in the highly prospective North-Eastern Goldfields region of Western Australia. The CGP has a 0.9Moz gold Mineral Resource (see Table 3) defined in both oxide and deeper primary mineralisation with considerable potential to grow this resource with further drilling.

Kin's exploration effort is the systematic program of exploration across the Cardinia Mining Centre that seeks to advance a number of targets in parallel while developing a pipeline of exploration targets for ongoing Mineral Resource expansion.

**Table A1 - Mineral Resource Estimate Table September 2023<sup>1</sup>**

Cardinia East and Mertondale: Mineral Resources: September 2023															
Project Area	Resource Gold Price (AUD)	Lower Cut off (g/t Au)	Measured			Indicated			Inferred			Total Resources			Date Announced
			Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	
<b>Mertondale</b>															
Mertons Reward	\$ 2,600	0.4				0.9	2.1	62	2.0	0.6	41	2.9	1.11	103	26-Nov-20
Mertondale 3-4	\$ 2,600	0.4				1.3	1.8	80	1.0	1.0	32	2.4	1.46	112	26-Nov-20
Tonto	\$ 2,600	0.4				1.9	1.1	68	1.1	1.2	45	3.0	1.17	113	26-Nov-20
Mertondale 5	\$ 2,600	0.4				0.5	1.6	27	0.9	1.2	34	1.4	1.35	62	26-Nov-20
Eclipse	\$ 2,600	0.4							0.8	1.0	24	0.8	0.97	24	26-Nov-20
Quicksilver	\$ 2,600	0.4							1.2	1.1	42	1.2	1.08	42	26-Nov-20
Mertondale Underground		2.0				0.0	2.4	1	0.0	2.7	1	0.0	2.55	1	18-Oct-22
Subtotal Mertondale						4.6	1.6	237	7.0	1.0	220	11.7	1.22	457	
<b>Cardinia East</b>															
Helens	\$ 2,600	0.4				1.4	1.5	64	1.3	1.4	57	2.7	1.41	121	26-Jun-23
Helens East	\$ 2,600	0.4				0.4	1.7	24	1.0	1.5	46	1.4	1.57	70	26-Jun-23
Fiona	\$ 2,600	0.4				0.2	1.3	10	0.1	1.1	3	0.3	1.25	13	26-Jun-23
Rangoon	\$ 2,600	0.4				1.3	1.3	56	1.5	1.3	65	2.8	1.32	121	26-Jun-23
Hobby	\$ 2,600	0.4				0.0	0.0	0	0.6	1.3	23	0.6	1.26	23	17-May-21
Cardinia Hill	\$ 2,600	0.4				0.5	2.2	38	1.6	1.1	59	2.2	1.38	97	26-Jun-23
Cardinia Underground		2.0	0.002	3.0	0.2	0.0	2.6	1	0.4	2.4	29	0.4	2.41	29	18-Oct-22
Subtotal Cardinia East			0.002	3.0	0.2	3.9	1.5	193	6.4	1.4	282	10.4	1.42	475	
<b>TOTAL</b>			<b>0.002</b>	<b>2.97</b>	<b>0.2</b>	<b>8.6</b>	<b>1.56</b>	<b>430</b>	<b>13.5</b>	<b>1.16</b>	<b>501</b>	<b>22.1</b>	<b>1.31</b>	<b>932</b>	

**Table A1:** Cardinia Gold project Mineral Resource estimate. Mineral Resources estimated by Jamie Logan and reported in accordance with JORC 2012 using a 0.4 g/t Au cut-off within AUD2,600 optimisation shells. Underground Resources are reported using a 2.0 g/t cut-off grade outside AUD2,600 optimisation shells. Note \*Cardinia Hill and Hobby Resource Estimates completed by Cube Consulting, and also reported in accordance with JORC 2012 using a 0.4 g/t Au cut-off within AUD2,600 optimisation shells.

<sup>1</sup>The company confirms that it is not aware of any new information or data that materially affects the information included in the ASX Announcement of 3 July 2023 "Cardinia Gold Project Mineral Resource Passes 1.5Moz..", and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

## **COMPETENT PERSONS STATEMENT**

*The information contained in this report relating to exploration results relates to information compiled or reviewed by Leah Moore. Ms Moore is a member of the Australian Institute of Geoscientists and is a full time employee of the company. Ms Moore has sufficient experience of relevance to the styles of mineralisation and the types of deposit under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Ms Moore consents to the inclusion in this report of the matters based on information in the form and context in which it appears.*

## **CAUTIONARY STATEMENT**

In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of sulphide material abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory assay results are required to determine the widths and grade of the visible mineralisation reported in preliminary geological logging. The Company will update the market when laboratory analytical results become available.

## Appendix A

### JORC 2012 TABLE 1 REPORT

### Cardinia Gold Project - Section 1 & 2

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	• JORC Code explanation	Commentary
<i>Sampling techniques</i>	<p><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised 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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay’). In other</i></p>	<p><u>Diamond</u></p> <p>2022 diamond core samples, either HQ3 or NQ2 in size diameter, were cut in half longitudinally, using an automated Corewise core saw Core was placed in boats, holding core in place. Core sample intervals varied from 0.3 to 1.3m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts.</p> <p>500g charge pots of original sample intervals were re-submitted to Bureau Veritas in November 2023 for multi-element analysis.</p> <p><u>Rock Chips</u></p> <p>All rock chip samples are taken using a pick. The samples are taken from outcrop where possible. Samples are also taken from in situ float material or waste rock around historic workings, where outcrop is not present. Care is taken to ensure all samples are representative of the medium being sampled. For example, if a 1m sediment unit is being sampled, a channel sample will be taken across the entire unit.</p> <p>All recent drilling, sample collection and sample handling procedures were conducted and/or supervised by KIN geology personnel to high level industry standards. QA/QC procedures were implemented during each drilling program to industry standards.</p>

Criteria	• JORC Code explanation	Commentary
	<p><i>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.</i></p>	
<b>Drilling techniques</b>	<p><i>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).</i></p>	<p><u>Diamond</u></p> <p>Diamond coring was undertaken with a surface drill rig and an industry recognized contractor PXD.</p> <p>Core size is HQ until competent followed up NQ</p> <p>The core was orientated using a Reflex Ez-Ori Tool</p>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<p><u>Diamond</u></p> <p>Historic core recovery was recorded in drill logs for most of the diamond drilling programs since 1985. A review of historical reports indicates that core recovery was generally good (&gt;80%) with lesser recoveries recorded in zones of broken ground and/or areas of mineralisation. Overall recoveries are considered acceptable for resource estimation.</p> <p>Recent core recovery data was recorded for each run by measuring total length of core retrieved against the downhole interval actually drilled and stored in the database. KIN representatives continuously monitor core recovery and core presentation quality as drilling is conducted and issues or discrepancies are rectified promptly to maintain industry best standards. Core recoveries averaged &gt;95%, even when difficult ground conditions were being encountered. When poor ground conditions were anticipated, a triple tube drilling configuration was utilised to maximize core recovery</p>
<b>Logging</b>	<p><i>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.</i></p> <p><i>Whether logging is qualitative or</i></p>	<p>Logging data coded in the database, prior to 2014, illustrates at least four different lithological code systems, a legacy of numerous past operators (Hunter, MPI, Metana, CIM, MEGM, Pacmin, SOG, and Navigator). Correlation between codes is difficult to establish however, based on historical reports, drill hole logging procedures appear consistent with normal industry practices of the time.</p> <p>KIN has attempted to validate historical logging data and to standardize the logging code system by incorporating the SOG and Navigator logging codes into one.</p> <p><u>Diamond</u></p> <p>KIN DD logging is carried out on site once geology personnel retrieve core trays from the drill rig site. Core is collected from the</p>

Criteria	• JORC Code explanation	Commentary
	<p><i>quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>rig daily. The entire length of every hole is logged. Recorded data includes lithology, alteration, structure, texture, mineralisation, sulphide content, weathering and other features. Drillhole collar coordinates, azimuth, dip, depth and sampling intervals are also recorded. KIN DD logging is to geological contacts.</p> <p>Qualitative logging includes classification and description of lithology, weathering, oxidation, colour, texture and grain size. Quantitative logging includes percentages of identified minerals, veining, and structural measurements (using a kenometer tool). In addition, logging of diamond drilling includes geotechnical data, RQD and core recoveries.</p> <p>Drill core is photographed at the Cardinia site, prior to any cutting and/or sampling, and then stored in this location. Photographs are available for every diamond drillhole completed by KIN and a selection of various RC chip trays. SG data is also collect</p> <p>All information collected is entered directly into laptop computers or tablets, validated in the field, and then transferred to the database. The level of logging detail is considered appropriate for exploration and to support appropriate mineral resource estimation, mining studies, and metallurgical studies.</p>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p><u>Diamond</u></p> <p>Half core or quarter core sample intervals typically varied from 0.3m to 1.3m in length. 1m sample intervals were favoured and are the most common method of sampling, however sample boundaries do principally coincide with geological contacts. The remaining core was retained in core trays.</p> <p>All sub-sampling techniques and sample preparation procedures conducted and/or supervised by KIN geology personnel are to standard industry practice. Sub-sampling and sample preparation techniques used are considered to maximise representivity of drilled material. QA/QC procedures implemented during each drilling program are to industry standard practice.</p> <p>Samples sizes are considered appropriate for this style of gold mineralisation and as an industry accepted method for evaluation of gold deposits in the Eastern Goldfields of Western Australia.</p> <p>No duplicates are taken for rock chip sampling. Sample sizes are approximately 3kg, this is considered appropriate for the material being sampled.</p>

Criteria	• JORC Code explanation	Commentary
<p><b>Quality of assay data and laboratory tests</b></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>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.</i></p>	<p>Assaying and laboratory procedures used are NATA certified techniques for gold. Samples were prepared and assayed at NATA accredited Intertek Genalysis.</p> <p>Gold results were analysed in 2022 by Intertek Genalysis, with sample preparation either at their Kalgoorlie prep laboratory or the Perth Laboratory located in Maddington. Sample preparation included oven drying (105°C), crushing (&lt;6mm), pulverising (P90% passing 75µm) and split to obtain a 50 gram catchweight. Analysis for gold only was carried out by Fire Assay fusion technique with AAS finish.</p> <ul style="list-style-type: none"> <li>• KIN regularly insert blanks and CRM standards in each sample batch at a ratio of 1:25. Kin accepts that this ratio of QAQC is industry standard. Field duplicates are typically collected at a ratio of 1:25 samples and test sample assay repeatability. Blanks and CRM standards assay result performance is predominantly within acceptable limits for this style of gold mineralisation.</li> <li>• KIN requests laboratory pulp grind and crush checks at a ratio of 1:50 or less in order to better qualify sample preparation and evaluate laboratory performance. Samples have generally illustrated appropriate crush and grind size percentages since the addition of this component to the sample analysis procedure.</li> <li>• Intertek include laboratory blanks and CRM standards as part of their internal QA/QC for sample preparation and analysis, as well as regular assay repeats. Sample pulp assay repeatability, and internal blank and CRM standards assay results are typically within acceptable limits.</li> </ul> <ul style="list-style-type: none"> <li>• All samples are initially sent to Intertek sample Preparation facility in Kalgoorlie. Samples submitted for analysis via Photon assay technique were dried, crushed to nominal 85% passing 2mm, linear split and a nominal 500g sub sample taken (method code PAP3512R)</li> <li>• The 500g sample is assayed for gold by PhotonAssay (method code PAAU2) along with quality control samples including certified reference materials, blanks and sample duplicates.</li> <li>• About the Intertek Photon Assay Analysis Technique: <ul style="list-style-type: none"> <li>• Developed by CSIRO and the Chrysos Corporation, the PhotonAssay technique is a fast and chemical free alternative to the traditional fire assay process and utilizes high energy x-rays. The process is non-destructive on and utilises a significantly larger sample than the conventional 50g fire assay.</li> <li>• Intertek has thoroughly tested and validated the PhotonAssay process with results benchmarked against conventional fire assay.</li> <li>• The National Association of Testing Authorities (NATA), Australia's national accreditation body for laboratories, has issued Intertek with accreditation for the technique in compliance with ISO/IEC 17025:2018-Testing.</li> </ul> </li> <li>• In addition to the Company QAQC samples (described earlier) included within the batch the laboratory included its own CRM's, blanks and duplicates.</li> </ul> <p>Rock chips were submitted to Bureau Veritas Canning Vale lab using a standard 4 acid digest for 48 elements ICPMS for the zinc mineralisation, along with selected samples were analysed by fused bead laser ablation ICPMS for HREE elements. Glass bead from 66:34 flux with 4% lithium nitrate added.</p> <p>Spot pXRF results taken using Bruker 800. 1 standard and 1 blank is utilised every 100 measurements.</p>
<p><b>Verification of sampling and</b></p>	<p><i>The verification of significant</i></p>	<p>Intersection assays were documented by KIN's professional exploration geologists and verified by KIN's Exploration Manager.</p>

Criteria	• JORC Code explanation	Commentary
<b>assaying</b>	<p><i>intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <li>• No drillholes were twinned.</li> <li>• All assay data were received in electronic format from Intertek and Bureau Veritas, checked, verified and merged into KIN's database by the Database Administrator.</li> <li>• Original laboratory data files in CSV and locked PDF formats are stored together with the merged data.</li> <li>• There were no adjustments to the assay data.</li> </ul>
<b>Location of data points</b>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Recent KIN drill hole collars are located and recorded in the field by a contract surveyor using RTK-DGPS (with a horizontal and vertical accuracy of ±50mm). Location data was collected in the GDA94 Zone51 grid coordinate system.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>Drill hole spacing patterns vary considerably throughout the Cardinia Gold Project area and are deposit specific, depending on the nature and style of mineralisation being tested.</p> <p>Drill hole spacing within the resource areas is sufficient to establish an acceptable degree of geological and grade continuity and is appropriate for both the mineral resource estimation and the resource classifications applied.</p>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p>	<p>The Cardinia greenstone sequence displays a NNW to NW trend with a moderate dip to the west. Drilling and sampling programs were carried out to obtain unbiased locations of drill sample data, generally orthogonal to the strike of mineralisation.</p> <p>At Helens mineralisation is structurally controlled in sub-vertical shear zones, with supergene components of varying lateral extensiveness present in the oxide profile.</p> <p>The vast majority of historical drilling, pre-Navigator (pre-2004), and KIN drilling is orientated at -60°/245° (WSW) and -60°/065°</p>

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	(ENE). The chance of sample bias introduced by sample orientation is considered minimal. No orientation sampling bias has been identified in data thus far.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	KIN employees or contractors are utilised to transport samples to the laboratory. No perceived opportunity for samples to be compromised from collection of samples at the drill site, to delivery to the laboratory, where they were stored in their secure compound, and made ready for processing is deemed likely to have occurred.  On receipt of the samples, the laboratory independently checked the sample submission form to verify samples received and readied the samples for sample preparation. Intertek sample security protocols are of industry standard and deemed acceptable for resource estimation work.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews completed

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>  <i>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.</i>	The Cardinia Project, 35-40km NE of Leonora is managed, explored and maintained by KIN, and constitute a portion of KIN's Leonora Gold Project (LGP), which is located within the Shire of Leonora in the Mt Margaret Mineral Field of the North Eastern Goldfields.  The Helens and Rangoon area includes granted mining tenements M37/316 and M37/317, The tenements are held in the name of Navigator Mining Pty Ltd, a wholly owned subsidiary of KIN.  There are no known native title interests, historical sites, wilderness areas, national park or environmental impediments over the outlined current resource areas, and there are no current impediments to obtaining a licence to operate in the area.
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	At Cardinia, from 1980-1985, Townson Holdings Pty Ltd ("Townson") mined a small open pit over selected historical workings at the Rangoon prospect. Localised instances of drilling relating to this mining event are not recorded and are considered insubstantial and immaterial for resource modelling.. Companies involved in the collection of the majority of the gold exploration data since 1985 and prior to 2014 include: Thames Mining NL ("Thames") 1985; Mt Eden Gold Mines (Aust) NL (also Tarmoola Aust Pty Ltd "MEGM") 1986-2003; Centenary International Mining Ltd ("CIM") 1986-1988, 1991-1992; Metana Minerals NL ("Metana") 1986-1989; Sons of Gwalia Ltd ("SOG") 1989, 1992-2004; Pacmin Mining Corporation



Criteria	• JORC Code explanation	Commentary
		<p>("Pacmin") 1998-2001, and Navigator Resources Ltd ("Navigator") 2004-2014.</p> <p>In 2009 Navigator commissioned Runge Limited ("Runge") to complete a Mineral Resource estimate for the Bruno, Lewis, Kyte, Helens and Rangoon deposits. Runge reported a JORC 2004 compliant Mineral Resource estimate, at a cut-off grade of 0.7g/t Au, totaling 1.45Mt @ 1.3 g/t au (61,700 oz Au) for Helens and Rangoon, and totaling 4.34Mt @ 1.2 g/t au (169,700 oz Au) for Bruno, Lewis and Kyte.</p> <p>A trial pit (Bruno) was mined by Navigator in 2010, and a 'test parcel' of ore was extracted and transported firstly to Sons of Gwalia's processing plant in Leonora, and finally to Navigator's processing plant located at Bronzewing, where approximately 100,000 tonnes were processed at an average head grade of 2.33 g/t au (7,493 oz Au).</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Cardinia Project area is located in the central part of the Norseman-Wiluna Greenstone Belt, which extends for some 600km on a NNW trend across the Archean Yilgarn Craton of Western Australia.</p> <p>The regional geology comprises a suite of NNE-North trending greenstones positioned within the Mertondale Shear Zone (MSZ) a splay limb of the Kilkenny Lineament. The MSZ denotes the contact between Archean felsic volcanoclastics and sediment sequences in the west and Archean mafic volcanics in the east. Proterozoic dolerite dykes and Archean felsic porphyries have intruded the sheared mafic/felsic volcanoclastic/sedimentary sequence.</p> <p>Locally within the Cardinia Project area, the stratigraphy consists of intermediate, mafic and felsic volcanic and intrusive lithologies and locally derived epiclastic sediments, which strike NNW, dipping steep-to-moderately to the west. Structural foliation of the areas stratigraphy predominantly dips steeply to the east but localised inflections are common and structural orientation can vary between moderately (50-75°) easterly to moderately westerly dipping.</p> <p>Mineralisation at Helens is controlled by a cross-cutting fault, hosted predominantly in mafic rock units, adjacent to the felsic volcanic/sediment contacts. The ore zones are associated with increased shearing, intense alteration and disseminated sulphides. Minor supergene enrichment occurs locally within mineralised shears throughout the regolith profile.</p> <p>The mineralisation in IP22DD001 (named Albus) appeared as sphalerite dominated massive sulphide with subordinate chalcopyrite, pyrite and galena and was intercepted within cherty sediments along a contact of basalt and felsic volcanoclastics</p>
<b>Drill hole Information</b>	<p><i>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:</i></p> <ul style="list-style-type: none"> <li>• <i>easting and northing of the drill hole collar</i></li> <li>• <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>• <i>dip and azimuth of the hole</i></li> </ul>	<p>Material drilling information for exploration results has previously been publicly reported in numerous announcements to the ASX by Navigator (2004-2014) and KIN since 2014.</p>

Criteria	• JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul> <p><i>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.</i></p>	
<b>Data aggregation methods</b>	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>When exploration results have been reported for the resource areas, the intercepts are reported as weighted average grades over intercept lengths defined by geology or lower cut-off grades, without high grade cuts applied. Where aggregate intercepts incorporated short lengths of high grade results, these results were included in the reports.</p> <p>For these AC results, significant intercepts are recorded for maximum 5m internal waste and a minimum grade of 0.4 g/t.</p> <p>Since 2014, KIN have reported RC drilling intersections with low cut off grades of <math>\geq 0.4</math> g/t Au and a maximum of 2m of internal dilution at a grade of <math>&lt;0.4</math>g/t Au.</p> <p>There is no reporting of metal equivalent values.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	<p>The orientation, true width, and geometry of mineralised zones have been primarily determined by interpretation of historical drilling and continued investigation and verification of KIN drilling.</p> <p>Drill intercepts are reported as downhole widths not true widths.</p> <p>Accompanying dialogue to reported intersections normally describes the attitude of mineralisation.</p>
<b>Diagrams</b>	<p><i>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.</i></p>	<p>Appropriate maps and sections are included in the main body of this report.</p>
<b>Balanced reporting</b>	<p><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high</i></p>	<p>Public reporting of exploration results by KIN and past tenement holders and explorers for the resource areas are considered balanced.</p>

Criteria	<ul style="list-style-type: none"> <li>JORC Code explanation</li> </ul>	Commentary
	<p><i>grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>	<p>Representative widths typically included a combination of both low and high grade assay results. All meaningful and material information relating to this mineral resource estimate is or has been previously reported.</p>
<p><b>Other substantive exploration data</b></p>	<p><i>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.</i></p>	<p>Since 2018, a campaign of determining Bulk Densities has been undertaken. The water displacement method is used on drill samples selected by the logging geologist. These measurements are entered into the logging software interface and loaded to the Datashed database.</p>
<p><b>Further work</b></p>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>KIN have planned a small follow up diamond program commencing at the end of January. The diamond holes are designed to test down dip from the IP22DD001 intercept, and will have DHEM conducted on each hole. Additionally, further surface geochemistry is planned to determine any further VHMS mineralisation along strike along surface. This will likely involve subsequent AC/RC drilling later in the year.</p>