

# AN INDEPENDENT COMPETENT PERSONS' REPORT ON THE KARO PGE PROJECT, ZIMBABWE

Prepared for Karo Platinum (Pvt) Ltd

## COMPETENT PERSONS

Mineral Resources:

Kenneth Graham Lomborg  
BSc (Hons)(Geology), BCom (Economics and Statistics), MEng  
(Mining Engineering), PrSciNat, GSSA

Mineral Reserves:

Otto Wilhelm Warschkuhl  
BEng (Hons) (Mining Engineering), Pr.Eng. SAIMM, CIM

## COMPETENT VALUATOR

Jacobus Adriaan Myburgh  
BSc (Mathematics), CFA, IASSA, GSSA

**EFFECTIVE DATE: 30 September 2024**  
**VALUATION DATE: 30 November 2024**

**ISSUE DATE: 09 April 2025**



## DATE AND SIGNATURE PAGE

This Report titled An Independent Competent Persons' Report on the Karo PGE Project, Zimbabwe prepared for Karo Platinum (Pvt) Ltd has been prepared by VBKOM (Pty) Ltd in accordance with the rules and guidelines as embodied in the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2016 Edition) (SAMREC Code), the South African Code for the Reporting of Mineral Asset Valuations (2016 Edition) (SAMVAL Code), and the Listings Requirements (Section 12) of the Johannesburg Stock Exchange.

The Competent Persons responsible for this Report are Mr. Ken Lomberg (Geology and Mineral Resources), Mr. Wilhelm Warschkuhl (Mineral Processing, Mineral Extraction, and Mineral Reserves), and Mr. Jaan Myburgh (Mineral Economics). Mr Myburgh also acts as the Competent Valuator for this Report.

The Mineral Resources and Mineral Reserves as presented in this Report have an effective date of 30 September 2024 and the valuation date of 30 November 2024. The Report has been prepared and signed on 09 April 2025 by the following authors:

### Competent Persons



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**Kenneth Graham Lomberg**

**Competent Person: Mineral Resources**

BSc (Hons) (Geology), BCom (Economics and Statistics),  
MEng (Mining Engineering), PrSciNat, GSSA



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**Otto Wilhelm Warschkuhl**

**Competent Person: Mineral Reserves**

BEng (Hons) (Mining Engineering), Pr.Eng., SAIMM, CIM

### Competent Valuator



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**Jacobus Adriaan Myburgh**

BSc (Mathematics), CFA, IASSA, GSSA

## Key Technical Staff and Contributing Authors



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**Chantelle Cassandra Obermeyer**

**Principal Geologist, Mineral Resource Reviewer**

BSc (Hons) (Geology), MSc (Geology)  
PrSciNat



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**Wilhelmina Fredrika Van der Vyver**

**Principal Metallurgist**

PhD Metallurgy, PMP, PrSciNat, SAIMM



---

**Tiaan Ackermann**

**Industrial Engineer**

BEng (Industrial), Pr.Eng, MBA, PRINCE2



---

**Maria Antoniadou**

**Senior Geologist**

BSc (Hons) (Gly), MSc (Env.Sci.), PrSciNat, GSSA, SAIMM



---

**Armand van Wyngaardt**

**Senior Mining Engineer**

BEng Mining, MMCC, SAIMM



---

**Divine-Ito Ile**

**Mining Engineer**

BEng Mining, BEng (Hons) Mining, MEng Mining cum  
laude



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**Petrus Gerhardus Kriel**

**Mineral Asset Valuator**

B.Sc. (Mathematics), BCom (Hons) (Economics), CFA,  
IASSA, GSSA, GASA

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## EXECUTIVE SUMMARY

### I. Purpose

#### JSE 12.10(h)(i)(xi)

VBKOM was requested by Karo Platinum (Pvt) Ltd (Karo Platinum or the Company) to complete a Competent Persons' Report (CPR) with a full mineral asset valuation on the Karo platinum group metal (PGM) development project (Karo) situated on the Great Dyke, Zimbabwe. The Company aims to establish a large-scale PGMs mining complex, located in the Great Dyke.

Tharisa plc (Tharisa) is an effective 64.79% shareholder in Karo Platinum and is listed on the Johannesburg Stock Exchange (JSE:THA). The Report has been commissioned to comply with regulations of the Johannesburg Stock Exchange (JSE) for listed companies, with the purpose of presenting the Mineral Resources and Mineral Reserves of the Project and of valuing the mineral asset. The Report is compiled in compliance with the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2016 Edition) (SAMREC Code), and the South African Code for the Reporting of Mineral Asset Valuation (2016 Edition) (SAMVAL Code). All requirements of Section 12.10 of the JSE Listings Requirements for Mineral Companies and the SAMREC Code and SAMVAL Code have been complied with.

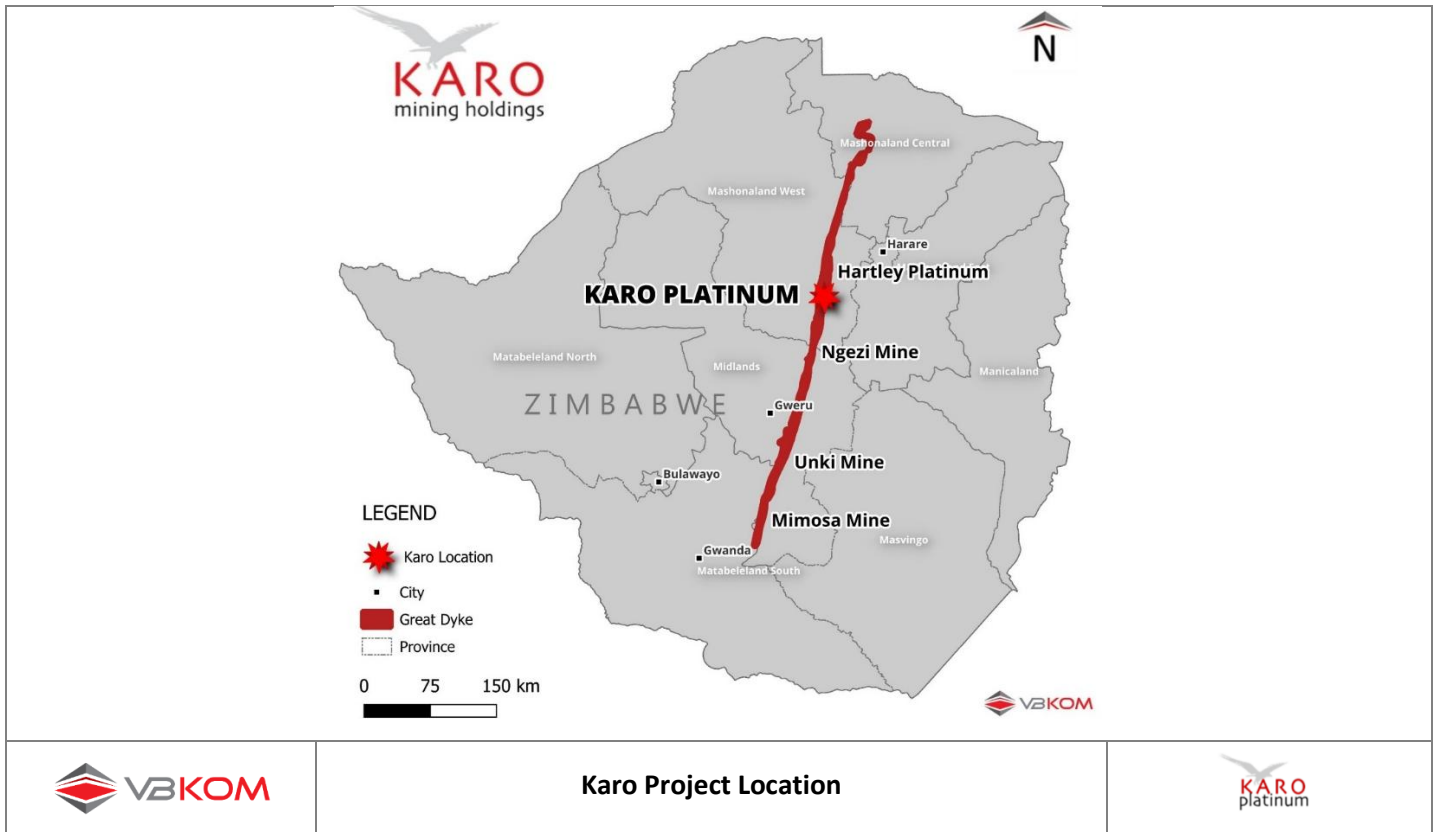
The Competent Persons and Competent Valuator deem this summary to be a true and accurate reflection of the full CPR.

### II. Project Outline

#### JSE 12.10(h)(ii)(iii)

Karo is an open-pit PGM asset under construction, located some 85 km west-southwest (WSW) of Harare in the Mashonaland West Province of Zimbabwe (refer to the figure overleaf). The area is relatively flat with the project area having a very slight ridge orientated north-south and an elevation fall-off to the south towards the tributaries of the Mupfure River.

The project is subdivided into six areas of focus for current work, namely: Karo Project East (KPE), Karo Project North East (KPNE), Karo Project North West (KPNW), Karo Project South East (KPSE), Karo Project South West (KPSW), and Karo Project West (KPW). Mineral Resources and Mineral Reserves are declared only for the areas as listed in the table overleaf, supported by detailed exploration and technical work, culminating in a recently completed Feasibility Study. Mine development will comprise the sequential development of four open pits, commencing with KPSE. Ore will be processed at an on-site, 220 ktpm processing facility and sold at gate to a smelter.



Location of the Karo Project.

Target Areas Mineral Resources and Mineral Reserves coverage.

Target Area	Mineral Resources	Mineral Reserves
KPSW	Yes	No
KPW	No	No
KPNW	Yes	Yes
KPNE	Yes	Yes
KPE	Yes	Yes
KPSE	Yes	Yes

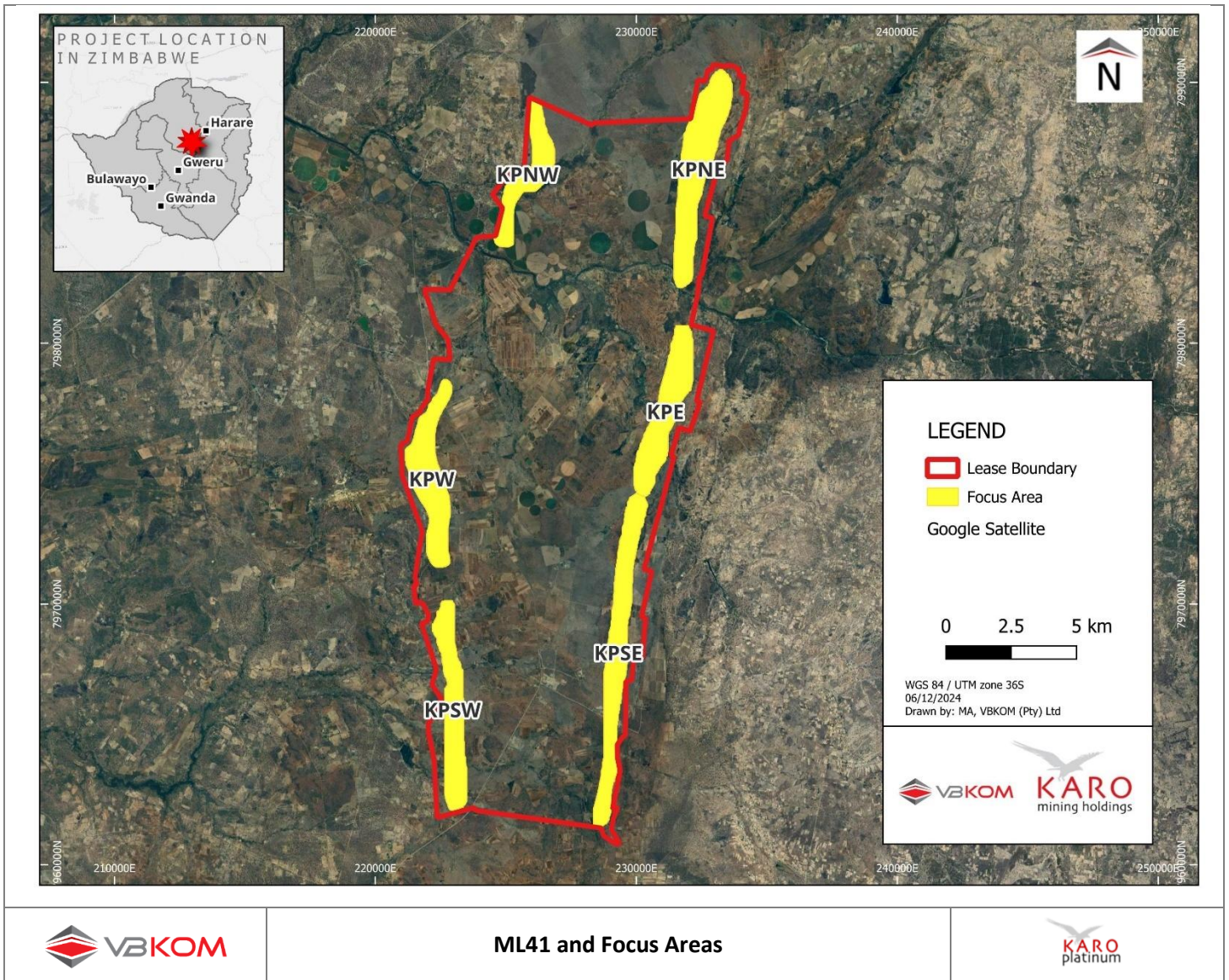
### III. Legal Aspects and Tenure

#### JSE 12.10(h)(iii)(iv)

Karo Platinum is an effective 64.79% indirect subsidiary of Tharisa plc. All licences and permits relating to Karo are held in the name of Karo Platinum. Karo Platinum have addressed Zimbabwe legal compliance requirements, including licencing and environmental and social aspects, and subscribe to the International Finance Corporation (IFC) Performance Standards and the Equator Principles. There are no major risks identified in association with the current and planned permitting.

The Project Area is encompassed in a 23,903-hectare Mining Lease 41 (ML41; illustrated to follow) issued for PGMs on 12 March 2021 and is valid for the duration of the life of mine (LOM). Base metals are intended to be extracted in

association with the PGMs. Although these are not specifically included in the Mining Lease issued, sections 150 and 169 of the Mines and Minerals Act (Chapter 21:05) 38 of 1961, as amended (MMA), provides for rights to Karo Platinum for the extraction of such minerals within the vertical limits of the defined mining lease area. This is supported by an accepted notification to this effect by the Mining Commissioner. In terms of these, confirmation that base metals may be extracted has been provided by legal practitioners based in Zimbabwe. Annual inspections are carried out by the competent authorities and fees are payable by the holder, allowing the continued validity of the ML41.



*ML41 and focus areas of the Karo Project.*

Section 178 of the MMA provides rights Karo Platinum to access and use the surface within the boundaries of the mining location for all necessary mining purposes. Notwithstanding, the MMA Amendment Bill makes instruction for landowner compensation in case of land loss due to mining activities in the form of land reallocation or outright purchase. Karo Platinum owns two properties encompassed within ML41, while lease agreements are in place for the balance of the farm areas. Resettlement action planning is underway, notably for the southern portion of KPSE, with

relocation and compensation agreements in process. Additionally, Karo Platinum have obtained wayleaves, granting land access for the power supply and bulk water supply projects.

In terms of the Environmental Management Act [Chapter 20:27] (EMAct), several regulatory approvals related to environmental authorisations have been finalised to permit the project infrastructure development and planned mining activities. Environmental Impact Assessment (EIA) certificates are held for platinum mining and processing at KPSE, additional exploration activities, and construction and operation of bulk power facilities and of bulk water supply networks. An addendum Environmental and Social Impact Assessment (ESIA) will be undertaken once mining at KPE is imminent, for the development of additional opencast pits (KPE, KPNE, and KPNW) and supplementary supporting infrastructure. Several Effluent Disposal, Hazardous Substance, and Air Emissions licences are in place, with a number of additional permits required for full operation of the intended mine, for which applications must be submitted timeously. There is a reasonable basis to believe that all outstanding permits required for the Project will be obtained.

A number of water use authorisations (surface and groundwater) for Karo are in place by means of various agreements and permits. However, there is a water balance shortfall in the current authorisations. To address this, a provisional water permit is in place for the development of the Chirundazi Dam, with a total capacity of 5,000 ML in phase 1 and 11,000 ML in phase 2. Per the water permit, 2,100 ML have been allocated to Karo in phase 1, thereby covering 100% of requirements. Supporting specialist studies towards an ESIA have been completed for this new dam. The ESIA is due to be submitted to the Environmental Management Agency (EMA) in February 2025, with construction planned to be completed in time to facilitate water catchment during the 2025–2026 rainy season.

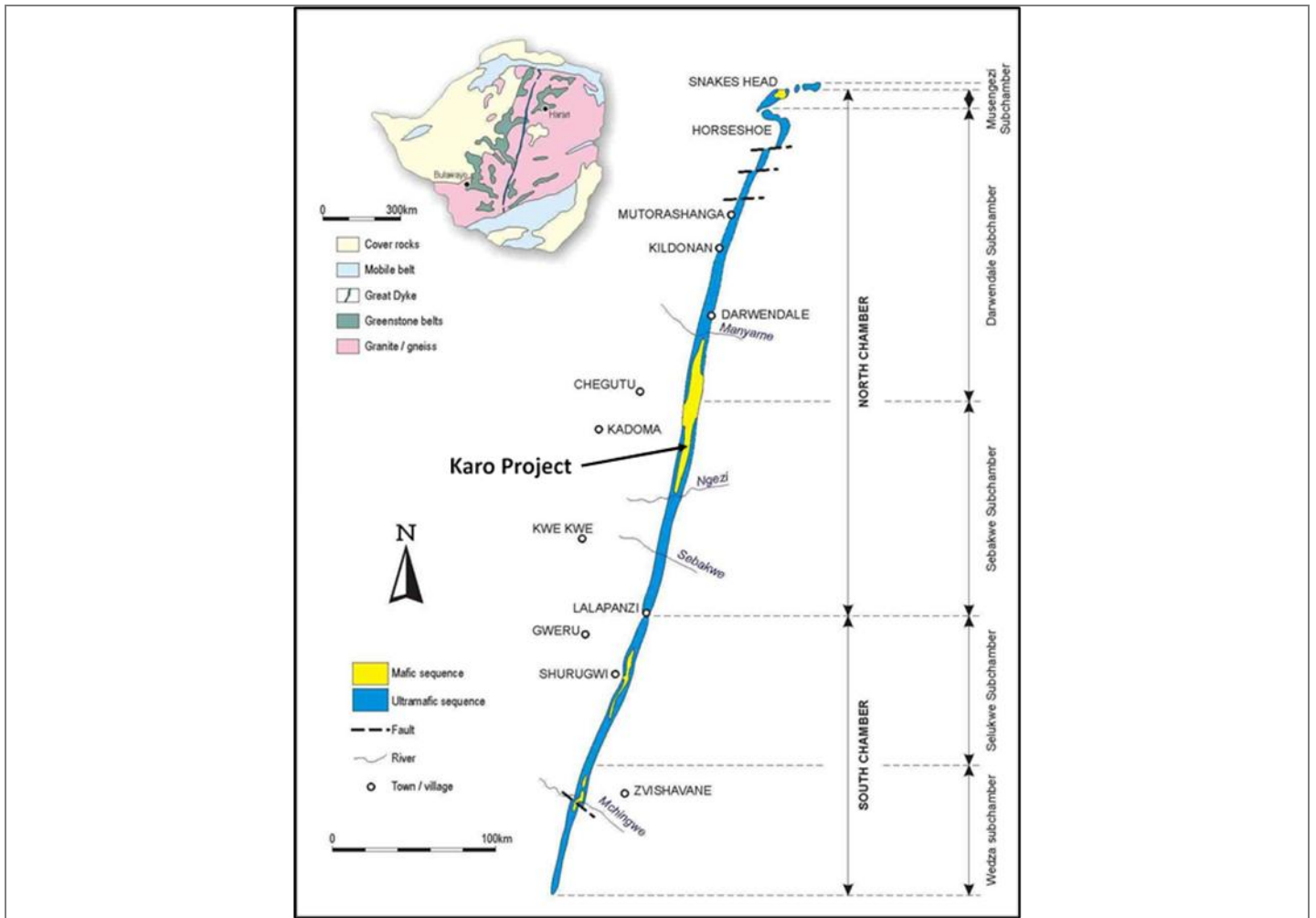
There are no disputes, risks or impediments associated with the legal aspects and tenure of the Project. All necessary outstanding permits and authorisations are expected to be obtained timeously.

## **IV. Geology and Mineralisation**

### **JSE 12.10(h)(v)**

#### **The Great Dyke**

The Great Dyke is an elongated, slightly sinuous, 550 km long, layered igneous intrusion, with a width of between 4–11 km, in central Zimbabwe (refer to the figure overleaf). The Great Dyke bisects the country in a north-northeast orientation and is a 2.5 billion-year-old layered igneous intrusion comprising ultramafic to mafic igneous rocks.

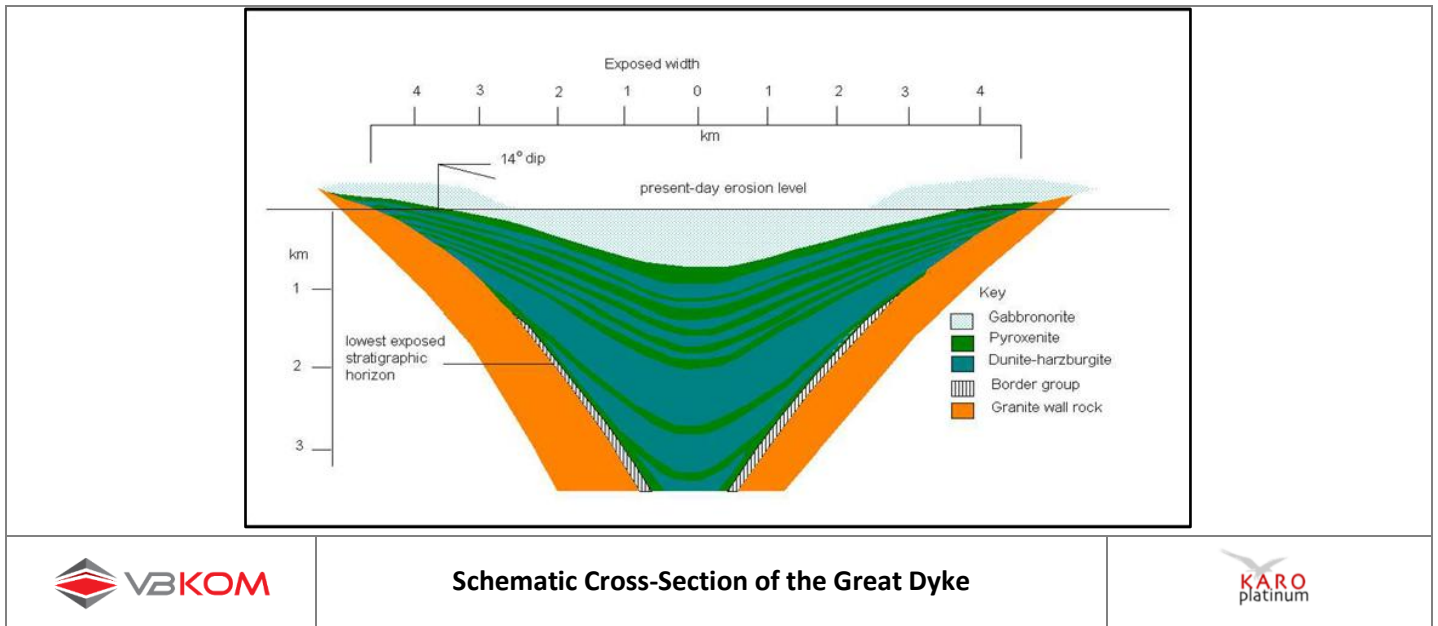


After Prendergast and Wilson, 1989.

	<p><b>Simplified Map of the Great Dyke showing Karo Project Location</b></p>	
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*Simplified map of the Great Dyke showing the location of the Karo Project.*

The Dyke is divided vertically into an ultramafic sequence, dominated from the base upwards by cyclic repetitions of dunite, harzburgite, and pyroxenite and an upper mafic sequence consisting mainly of gabbro and gabbronorite. It is V to Y-shaped in section, with the layering dipping from the sides of the Dyke and flattening towards the axis of the intrusion (refer to the figure overleaf). Much of the mafic sequence has been removed by erosion. Contained within the ultramafic sequence is the P1 pyroxenite, directly below the mafic-ultramafic contact. The P1 pyroxenite, in turn, hosts economically exploitable quantities of platinum group elements (PGEs) in the Main Sulphide Zone (MSZ), which is generally found 10 to 50 m from the top of the ultramafic sequence.



**Schematic Cross-Section of the Great Dyke**

*Schematic cross-section of the Great Dyke.*

The Great Dyke developed as a series of initially discrete magma chambers or compartments which joined up as the chambers filled. The chambers coalesced below the MSZ. Before erosion, the MSZ would have been continuous along the length of the Dyke.

In its present plane of erosion, the Great Dyke is exposed as a series of narrow contiguous layered complexes or chambers, namely a northern chamber consisting of the Musengezi, Darwendale, and Sebakwe sub-chambers and a southern chamber consisting of the Selukwe and Wedza sub-chambers. The mafic remnant of the Darwendale and Sebakwe sub-chambers is collectively known as the Hartley Complex.

The MSZ is a lithologically continuous layer, typically between 2 and 3 m thick, that forms an elongated keel shape. It generally contains iron-nickel-copper sulphides, while elevated PGE concentrations occur towards its base. Peak values for the PGEs and base metals are commonly offset, while the ratio between platinum and palladium also varies vertically. It is often difficult to identify mineralisation visually in the MSZ. Below the MSZ are several chromitite layers that are mined for chromium, as their PGE content is too low. The project area is located on both the eastern and western flanks of the Great Dyke. There is no outcrop as the mafic and ultramafic rocks weather easily to a black cotton soil. The area is underlain by both the Mafic and Ultramafic sequences dipping at 20° to the east on the western side of the Great Dyke and 22° to the west on the eastern side of the Great Dyke. The MSZ is estimated to be up to 700 m deep in the southern end of the tenement and 800 m deep in the northern end of the tenement. Based on drill logs, a number of faults have been interpolated. These are assumed to be vertical and trend east-west/down dip. A regional structural interpretation was undertaken by Dr Friese. This structural interpretation includes a number of structural elements i.e. faults, dykes, and shear zones. Where faults or shear zones are presented, the trace is indicated but the throw is generally not provided. The actual traces of the Friese interpretation are generally not coincident with the Mineral Resource estimation interpretation, although the orientations are often similar. The majority of the designated faults (yellow) lines are not confirmed based on the Mineral Resource estimation interpretation. The Karo Project area is characterised by very little outcrop which has restricted meaningful geological field mapping. The uppermost 25 m to 30 m of bedrock is also variably oxidised and weathered. The depth of weathering and oxidation has been estimated at an average of 15 m below the surface (mbs) with a transitional weathering zone between 15 mbs and 30 mbs. Locally, the depths of weathering and oxidation may be influenced by faulting, dykes or closely

spaced joints. The Great Dyke was mapped and researched in detail in the 1950s by Dr BG Worst. Subsequent mapping of the surface geology is restricted to the regional mapping of the area and field mapping done by Anglo American in the early 1960s. The latter work was recorded in imperial units. A diamond drilling programme was undertaken between November 2018 and July 2019 by Titan Drilling Pvt Ltd and Hall Core (Pty) Ltd, both being reputable drilling contractors. The drilling strategy was to examine the shallower areas along outcrop. Based on available information that suggested the western flank would more likely be higher grade, drilling commenced on the western side. Subsequently, additional drilling (February 2022 to June 2023) was undertaken on the eastern side by Titan Drilling Pvt Ltd and was completed in December 2023. The drilling programme was undertaken in six areas: east (KPE), northeast (KPNE), northwest (KPNW), southeast (KPSE), southwest, (KPSW), and west (KPW). The key drill programme statistics are summarised in the table below.

*Summary of drill hole database.*

Area	Number of Drill Holes	Meterage	Grid
KPE	37	5,628.10	200 m x 100 m 500 m x 125 m
KPNE	63	5,210.65	450 m x 150 m
KPNW	38	3,173.91	500 m x 250 m
KPSE	201 (38)	15,657.79 (2,037.4)	300 m x 330 m 240 m x 240 m 140 m x 140 m
KPSW	130	14,092.33	250 m x 125 m
KPW	91	15,018.93	250 m x 125 m 125 m x 125 m
<b>Total</b>	<b>563</b>	<b>58,943.41</b>	

The drill hole collars were surveyed by a qualified surveyor. Only about 5% of the drill hole deviations were measured using a downhole survey. No significant deviation was observed. The logging and sampling were undertaken under the supervision of suitably experienced geologists. The procedures used conformed with the expected industry standards and were implemented in a professional manner.

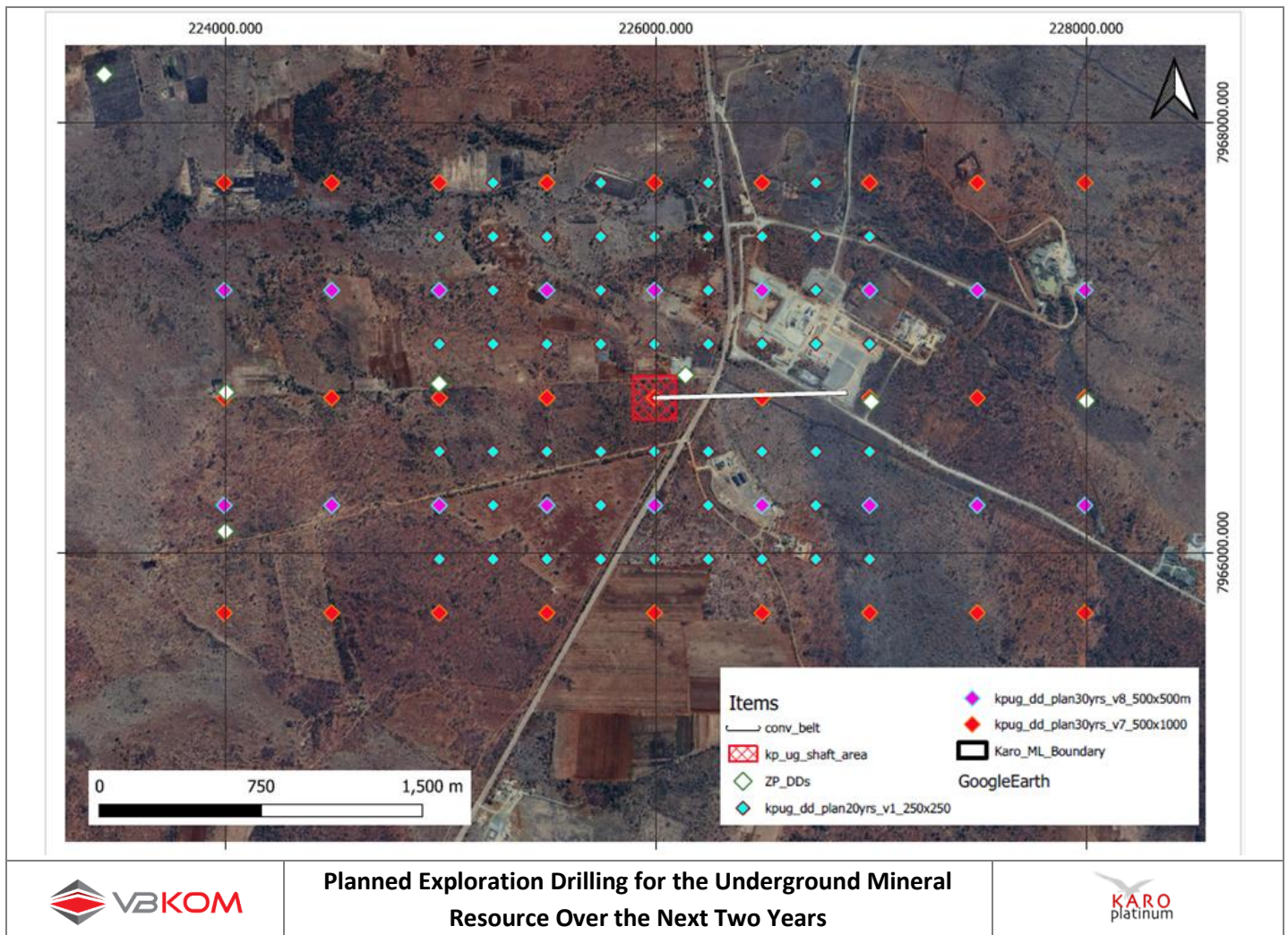
The samples were dispatched to Intertek laboratory in Johannesburg, South Africa, where sample preparation was undertaken. A pulp sample was sent to Perth, Australia, for analysis. Intertek is an accredited laboratory. The PGE concentration was determined using NiS collection and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) finish, and the base metals were determined by aqua regia digestion, also with an ICP-MS finish. Importantly, S was also analysed to assist with the determination of the base of the Main Sulphide Zone (BMSZ). A quality control and quality assurance (QA/QC) programme was implemented to confirm the precision and accuracy of the assay laboratory. It was concluded that the assay data were suitable and of sufficient quality to be used in a Mineral Resource estimation. Bulk density data determinations of all samples were performed using the Archimedean method.

## V. Status of Exploration

### JSE 12.10(h)(vi)

In line with the production schedule of the open pits, in addition to the evaluation drilling for the pilot plant delineation, Karo will conduct evaluation drilling in the KPSE pit area to ensure there is at least a one-year Mineral Resource buffer before the commencement of mining. Over the next two years, Karo plans to conduct two phases of evaluation drilling, totalling 21,500 metres, at a budget cost of USD3.44 million.

With the commencement of open-pit mining, which has a 10-year LOM, Karo have initiated exploration drilling to delineate the underground ore body, its size, and quality. A three-phased programme of 1,000 m x 500 m (phase 1), 500 m x 500 m (phase 2), and 250 m x 250 m (phase 3) is planned for the coming two years (refer to the figure below). This will total 66,600 metres, with a budget of USD13.34 million.



## VI. Key Environmental and Social Aspects

### JSE 12.10(h)(viii)

Biophysical and socio-economic risks have been evaluated in detail, and comprehensive mitigation measures have been developed that have been or will be implemented later as they are triggered. An Environmental and Social Action Plan, complementing the Project Environmental and Social Management Plan, has been developed. The status of each action item is periodically reviewed and updated by an external specialist. Karo Platinum have executed meaningful stakeholder engagement processes during the ESIA developments, and a Stakeholder Engagement Plan has been adopted.

General infrastructure is planned to be constructed in areas already modified by local agricultural and artisanal mining activities. Tailings storage facility (TSF) and some waste rock dumps (WRDs) footprints will be located directly within wetland areas, resulting in a direct loss thereof. The TSF and WRDs are thus required to be adequately lined and adequate water and waste management systems implemented to avoid further wetland deterioration. Further significant risks include the destruction of fauna resources, surface- and groundwater contamination, surface water siltation, and loss of soil resources and land capability during construction and pilot mining activities. Mitigation measures have been developed for all risks identified. There are no biophysical environmental factors identified and not accounted for, that can have a material effect on the likelihood of the extractive activities. Continued adherence to EMAct regulations and EMA audit outcomes is required.

A number of persons occupy various critical land portions directly affected by the intended project, notably at KPSE and Chirundazi Dam. Intensive resettlement planning and budgeting have taken place, and a Resettlement Framework has been developed setting out the key principles and objectives for all resettlement operations. Specific Resettlement Action Plans will then be developed for each resettlement operation. KPSE resettlement is currently on hold, with affected farmers continuously updated on study progress. Studies for Chirundazi Dam are progressing well.

All resettlement operations are planned and managed in line with the requirements of IFC Performance Standard and the most recent guidance released by IFC. No major threats or Project development hindrances have been associated with or anticipated for the resettlement plans. Working groups are established and active engagements are undertaken. A Livelihood Restoration Plan is still to be developed, which is expected to take up to 36 months, with diminishing support provided year after year.

## VII. Development and Operations

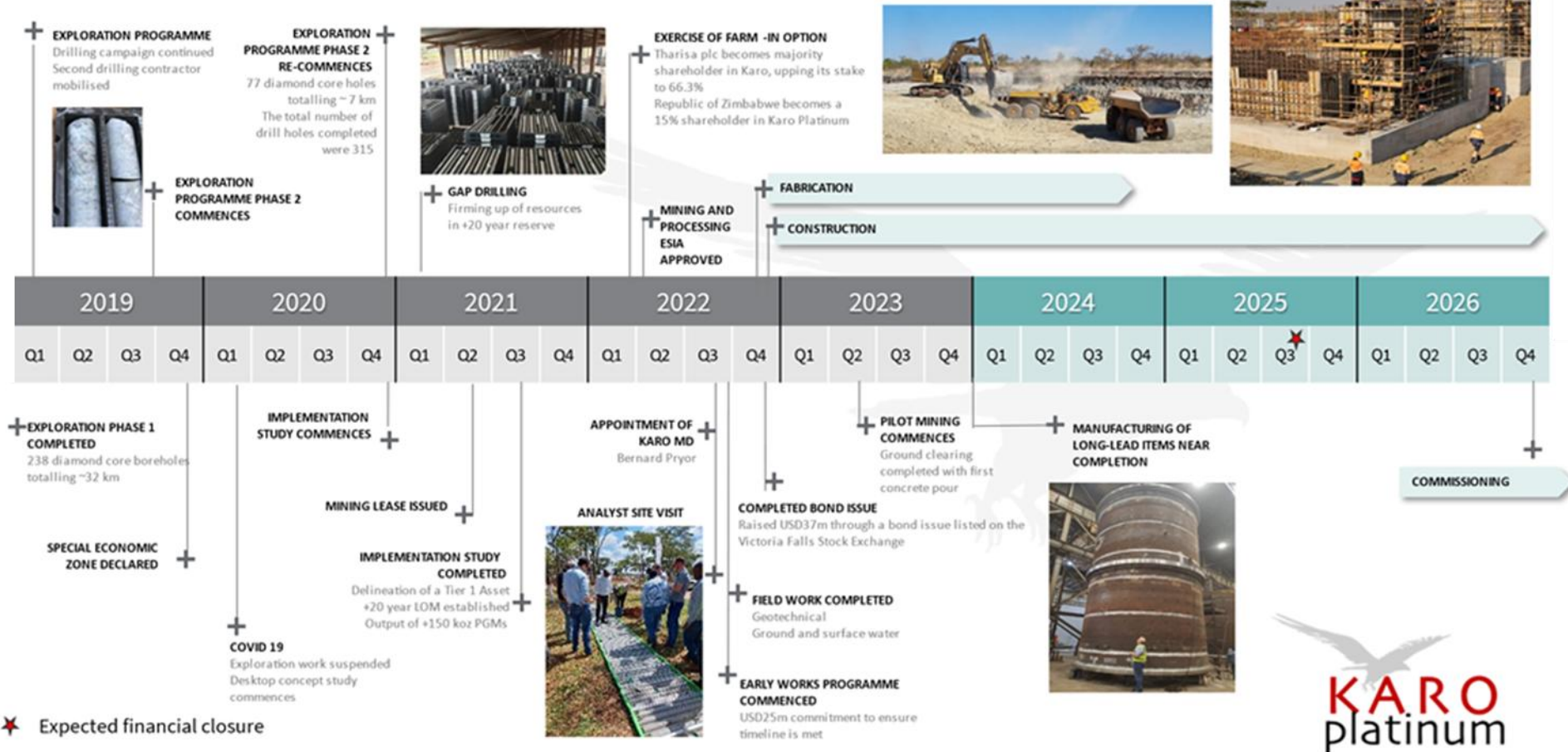
### Historical

Zimplats previously held the tenure over the subject area but did not undertake any mining production. An unknown quantity of material was extracted from the project area at the Zinca Shaft by Rio Tinto during its trial phase of operations. The Zinca Shaft is located in the southwestern corner of the concession, an area where Zimplats had also previously declared a Mineral Resource. No records could be found to quantify production from the shaft, which according to available information, was sunk in the early 1980s by Rio Tinto. Based on the dimensions of a nearby slimes dam, an estimated 20,000 tonnes of material from the shaft had been processed.

### Karo PGE Project

A timeline of the Karo Project is presented in the figure overleaf.

# MILESTONES AND PATHWAY TO DEVELOPMENT



## Mining

### JSE 12.10(h)(vii)

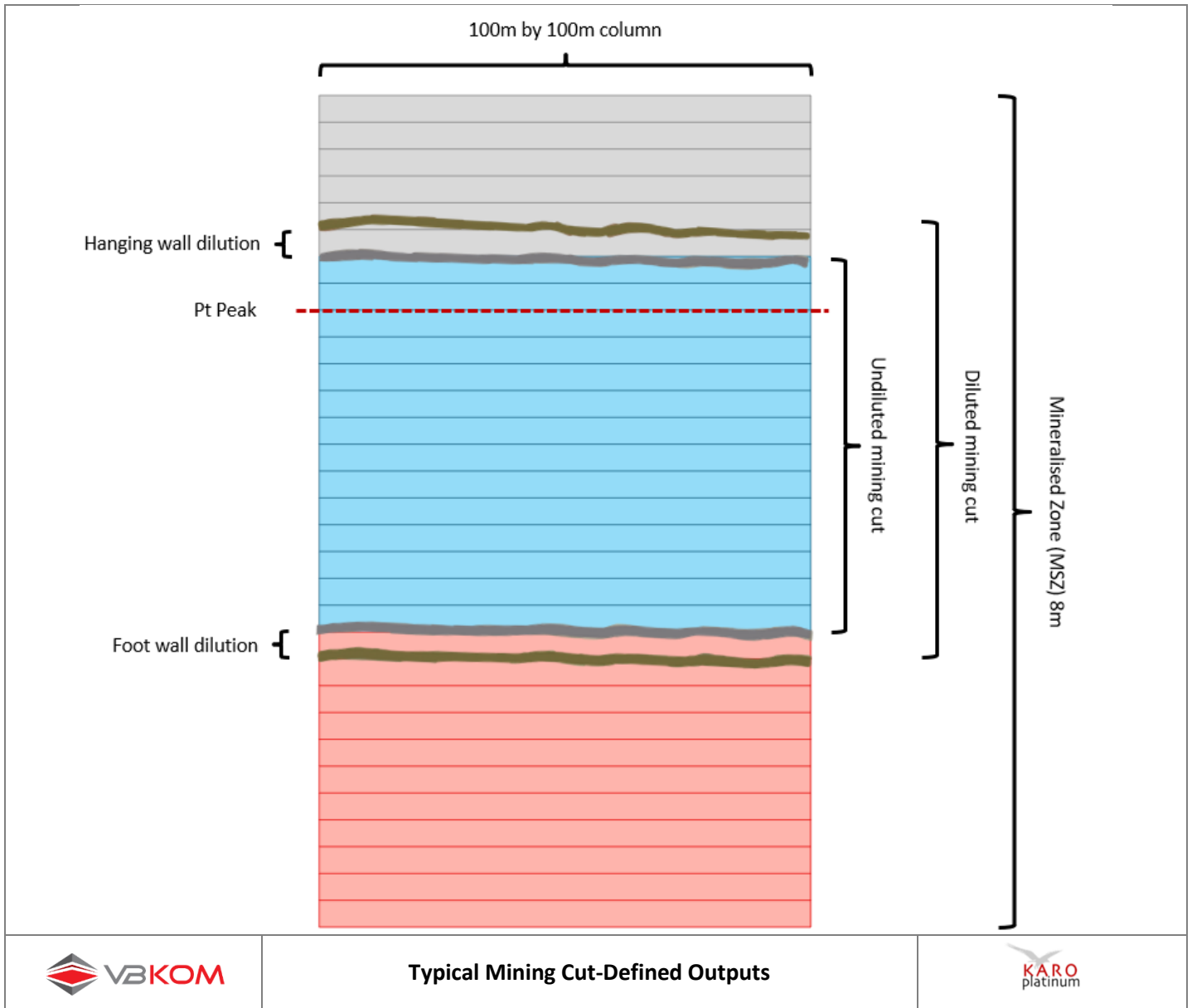
The study was based on the development of a 2.64 Mtpa run of mine (ROM) operation, comprising several open pits and employing a conventional open pit, truck and shovel operation. The following areas form part of the operation:

- KPSE
- KPE
- KPNE
- KPNW

A graphical representation of the typical mining cut selection output is shown overleaf. From the diagram, the identification of the Pt peak can be seen with the addition of at least 600 mm above the Pt peak to ensure the optimal extraction of the high mineralisation. The dilution factor includes the additional layers and structures of induced material. The undiluted mining cut results in an average 3E + Au grade of approximately 3.0 g/t, and with the inclusion of an additional 200 mm of highwall dilution and 200 mm of low-wall dilution, the overall 3E + Au grade amounts to 2.8 g/t on a weighted average basis. The Mineral Resource cut is not necessarily offset from the mining cut but represents a separate selection parameter that may not align with the diluted mining cut on a block-by-block basis.

The study assumes a contractor mining model for a truck and shovel open-pit operation, delivering ROM reef to a centrally located concentrator plant. The open pits were designed to access the upper levels of the MSZ up to a maximum depth of 110 m below surface, depending on practical constraints and techno-economic viability.

A detailed LOM plan was completed for the surface mining operations, based on the geological model which served as the basis for the Mineral Resource estimate. No Inferred Mineral Resources were included in the LOM plan. Various technical aspects were considered, and appropriate mining-related modifying factors were applied in the mine design and schedule, including the geotechnical parameters, mining methodology, mining sequence, production rates, and practical mining considerations.



*Typical mining cut-defined outputs.*

The geotechnical input parameters used allow for a combination of free-diggable weathered material, as shown below.

*Geotechnical parameters.*

Input Parameter	Depth [m]	Overall slope angle [°]
Weathered free dig	5 m	36
Competent waste and ore	Bottom of open pit	56

The table overleaf summarises the modifying factors that were employed to convert the Mineral Resources to Mineral Reserves.

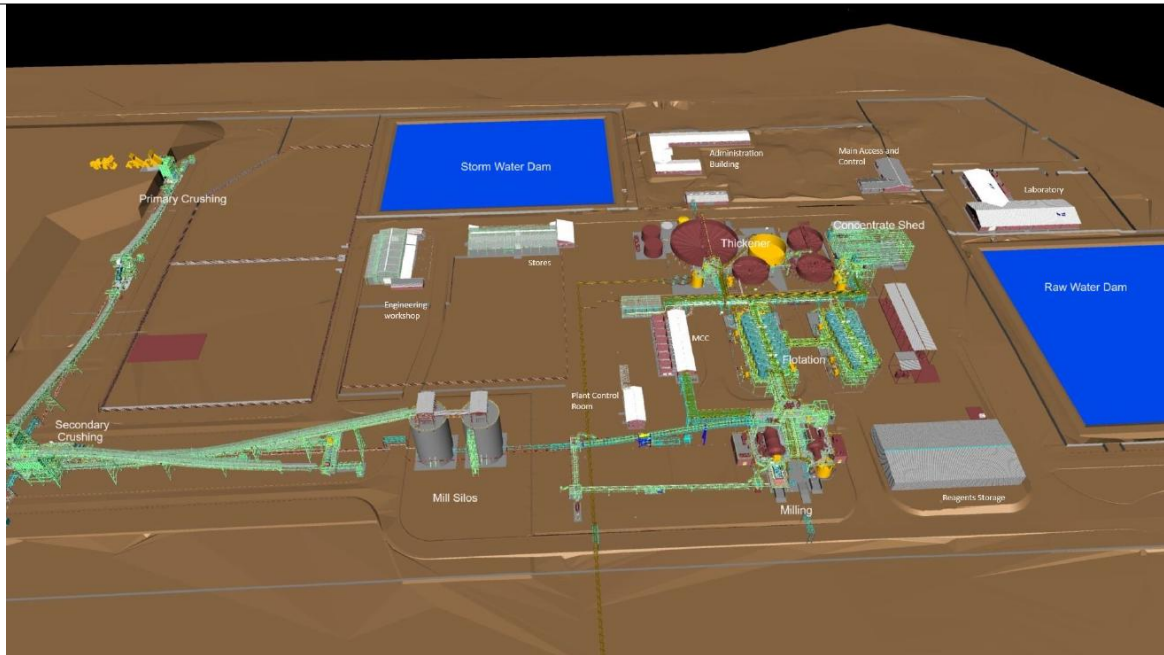
Summary of the modifying factors.

Modifying Factor	Feasibility Study
Measured geological loss	5%
Indicated geological loss	10%
Inferred geological loss	15%
Mining losses	2%
Mining dilution	The geological losses cater for the minor faulting and expected internal dilution. 200 mm of footwall and hanging wall dilution included.

**Processing**

Metallurgical testwork commenced in 2021 and is still ongoing. The testwork reports were analysed by ENC Minerals (Pty) Ltd (ENC) in the report titled *Karo metallurgical and process design FS vs 0 - 22 February 2024*. The ENC report and the testwork results were used by METC for design basis.

METC Engineering were appointed to complete the metallurgical and process plant design for the Karo Platinum Project. The process flowsheet and design criteria are based on a flotation metallurgical test programme conducted on core samples from the Karo site, benchmark data, and experience from similar/surrounding Great Dyke PGM concentrator operations. The process plant employs a conventional mill-float-mill-float (MF2) configuration for the PGM process circuit with a three-stage crushing plant, primary milling and flotation, secondary milling and flotation, tailings dewatering and transfer pumping and concentrate dewatering and stockpiling. Construction of the plant has commenced and earthworks for the plant has been completed. The general arrangement of the concentrator plant is illustrated in the figure below.



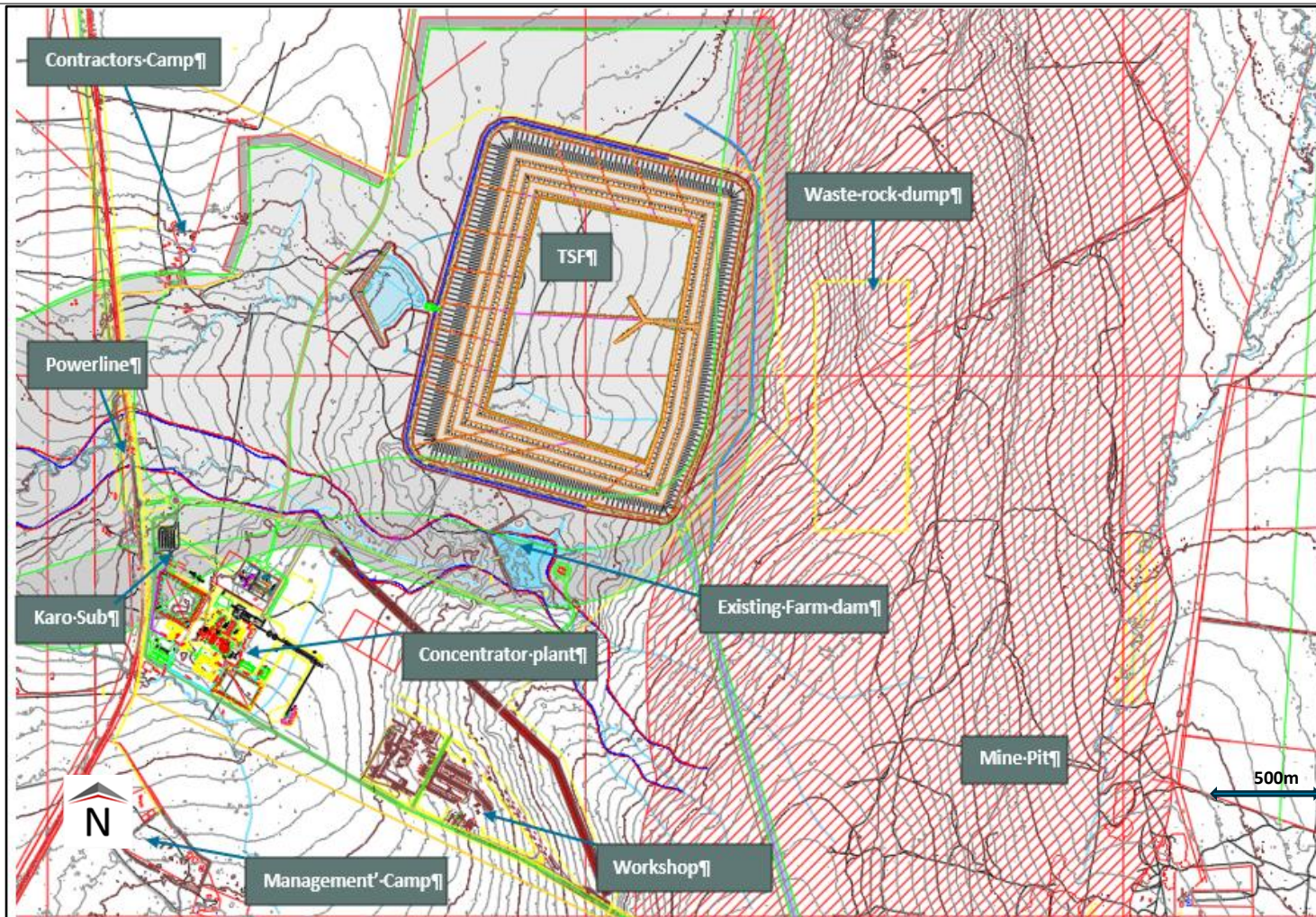
*General arrangement drawing of the concentrator plant.*

The flotation concentrate is dried and bagged and transported to Northam Platinum and sold based on 3E+Au qualities for further processing.

### **Engineering and Infrastructure**

The general layout and infrastructure planning are shown in the figure overleaf. Major earthworks for the general infrastructure, including the concentrator plant area, have been completed. The infrastructure planning includes:

- Bulk power supply;
- Bulk water supply;
- Accommodation camps;
- Access roads and intersections (excluding the concentrator plant);
- TSF (co-disposal), including return water dam, water reticulation, and clean and dirty water management; and
- Support services buildings.



## Capital Cost

The peak financing requirement is USD512.9 million, which is the maximum cumulative pre-financing cash flows from July 2022 to October 2026, when the monthly net cash flow turns positive. Pre-production capital amounts to USD475,163,714 and includes escalation (4.4% of total capital expenditure (CAPEX)) and contingency (0.1% of CAPEX). The largest pre-production capital item is Mining and Mining Infrastructure (30.7% of total CAPEX) and the second largest is Site Wide Infrastructure (16.7%).

Historical CAPEX, before 30 September 2024, is not included in the project net present value (NPV) calculation and this amounts to USD137,110,30. Therefore, the remaining CAPEX to be spent after 30 September 2024 is included in the NPV calculation and amounts to **USD338,053,413**. The table below shows the breakdown of the pre-production capital item summary.

### Pre-production capital.

Item	Historical CAPEX (USD)	Remaining CAPEX (USD)	Total CAPEX (USD)
Mining Costs - Capitalised to Balance Sheet	-	58,206,711	58,206,711
Mining & Mining Infrastructure	44,093,472	101,759,266	145,852,739
Site-Wide Infrastructure	20,165,507	59,136,275	79,301,782
Concentrator & Concentrator Infrastructure	4,570,538	6,786,695	11,357,233
Project Indirects	5,417,616	-	5,417,616
Environmental & Land Acquisition	14,336,152	23,028,526	37,364,678
Insurances & Legal	2,729,820	2,257,868	4,987,688
Other	34,501,730	40,579,205	75,080,935
Owners	9,860,629	3,017,568	12,878,197
Financial Costs & Taxes	554,294	22,878,710	23,433,004
Escalation	336,997	20,402,590	20,739,586
Contingency on Project Cost	543,545	-	543,545
<b>Capital   Pre-Prod. - Total</b>	<b>137,110,300</b>	<b>338,053,413</b>	<b>475,163,714</b>

## Economic Analysis

For the purpose of financial evaluation, Karo Platinum developed a Technical Financial Model, *250112 Detailed Technical Calculations - Rev CT (Output to VBKOM)*, that incorporates the mine plan outputs and results developed by VBKOM. This Technical Financial Model was then reviewed by VBKOM after being updated by Karo Platinum with the inputs and calculations.

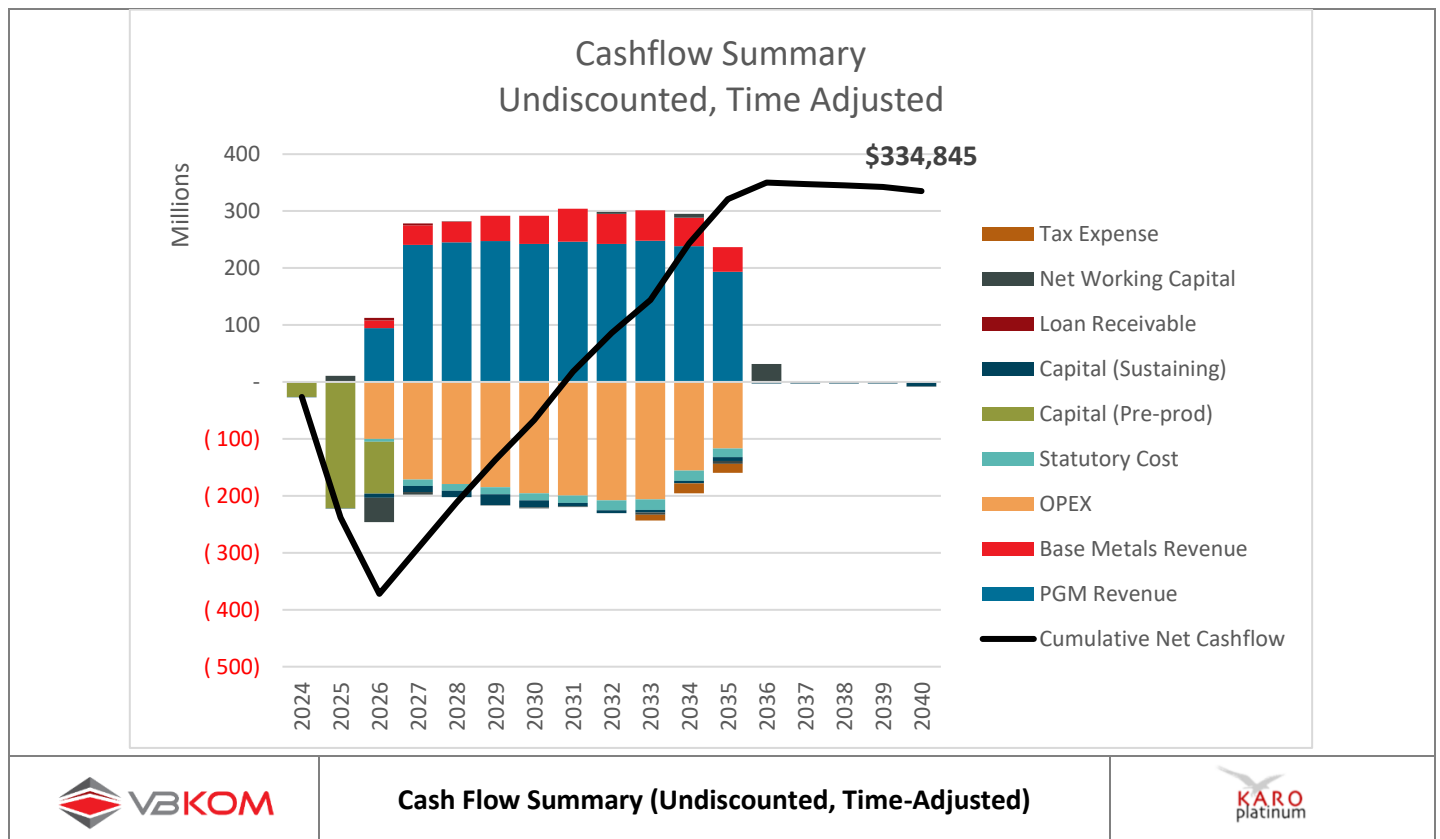
The project shows a positive NPV of USD83.3 million, at an 8% real discount rate post-tax, and an Internal Rate of Return (IRR) of 12.68%.

The peak financing requirement is USD512.9 million which is the maximum cumulative pre-financing cash flows from July 2022 to October 2026, when the monthly net cash flow turns positive. This is also 26 months after the Present Value Date.

Key economic metrics.

Item	Unit	Value
Peak Project Financing	USD	512,915,888
Project NPV (8% post-tax)	USD	83,310,490
Project IRR	%	12.68

The capital payback period and break-even point of the Project is after **7.08 years**, represented in the figure below.



Cash flow summary (undiscounted, time-adjusted).

The NPV is calculated from the time-adjusted cash flows at a discount rate of 8% and amounts to USD83.31 million. See the breakdown in the table and figure below of present values:

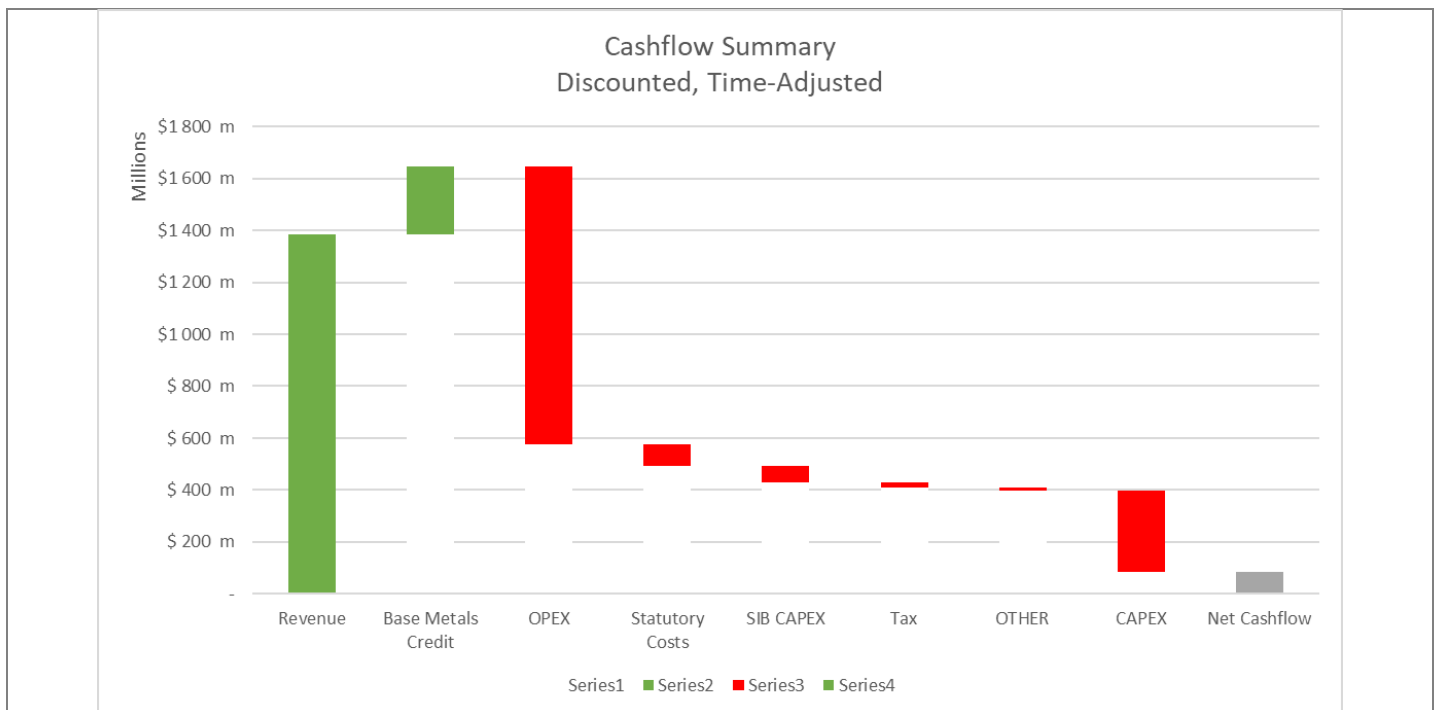
Cash flow summary (discounted, time-adjusted).


Item	<sup>1</sup> USD/ Product Ounces	Total (USD)
Revenue   PGM – Total	733.41	1,385,630,097
Revenue   Base Metals – Total	138.74	262,119,094
Operating Costs - Total   Total (Add back Inventory Capitalisations pre-prod)	(567.46)	(1,072,100,676)
Statutory Cost   Total	(43.52)	(82,221,454)
Capital   Pre-Prod. – Total	(166.24)	(314,079,905)

Item	<sup>1</sup> USD/ Product Ounces	Total (USD)
Capital   Sustaining : Total	(34.23)	(64,677,330)
Loan Receivable   Zimbabwe Electricity Transmission and Distribution Company (ZETDC) Loan - Repayments Received	3.56	6,731,802
Net Working Capital   Movement	(9.72)	(18,355,347)
Tax Expense   Tax Payable (Pre-Financing)	(10.45)	(19,735,791)
<b>Project Cashflow (Pre-Financing)</b>	<b>44.10</b>	<b>83,310,490</b>

**Note:**

1. Total production PGM metal contained in concentrate (t/oz)



	<b>Cash Flow Summary (Discounted, Time-Adjusted)</b>	
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*Cash flow summary (discounted, time-adjusted).*

**Risks**

A sensitivity analysis showed that the following factors could pose risks to the positive NPV and project viability:

- **Discount Rate:** The discount rate of 8% was benchmarked to other similar projects to support the rate assumption, however this discount rate modelled in the Karo financial model is much lower than the SAMVAL Valuation discount rate of 14.91% (see section 11.12.5) and poses a risk to the project economic assessment. A sensitivity of the discount rate at 12.68% shows that the project NPV would then be USD0, and a discount rate higher than 12.68%, as it is currently modelled, would hamper the project economics.

- **MDA Incentives:** The government incentives for taxation and royalties are not substantiated by a written agreement and are subject to change. Without these incentives applied, the NPV will decrease as follows:
  - In the case of taxation, the NPV will decrease from USD83.31 million to USD70.15 million if the tax rate of 25.75% were applied throughout the project period.
  - In the case of royalties, the NPV will decrease from USD83.31 million to USD61.77 million if the royalties rates of 7% for Pt and 4% for Pd were applied throughout the project period.
- **Metal Prices:** Prices are modelled according to the Bloomberg Case for each metal. A sensitivity analysis shows that should prices be reduced by more than 6.1%, as modelled, it would result in a negative NPV. As a result, it is observed that every 2% step change in overall metal prices has an impact on the NPV to the value of ~USD27 million.
- **Capital Estimate:** The contingency estimated in the pre-production capital estimate is 0.1% of the total estimate. Industry benchmarks are closer to 10% and this could indicate a risk in the capital estimate being underestimated. A sensitivity analysis shows that the NPV decreases from USD83.31 million to USD55.08 million when changing the contingency to 9.1%. Therefore, the NPV remains positive and does not influence the declaration of Mineral Reserves in this Report.

### Opportunities

Sales and logistics have been modelled as per the current agreement between Tharisa, Karo Platinum and the Northam Smelter in Rustenburg, South Africa. This incurs a logistics cost of USD61.11/tonne concentrate and a total Opex Logistics cost of USD35,910,990 over the LOM period. In this case, the NPV is stated as USD83.31 million with an IRR of 12.68%.

Should Karo Platinum enter into a take-off agreement with Zimplats instead of Northam, then the concentrate will have little to no logistics cost as the Zimplats smelter is neighbouring the Karo Platinum mine. As a sensitivity of the opportunity, the logistics cost was removed whilst keeping all other parameters constant. This sensitivity results in an NPV stated as USD103.45 million with an IRR of 13.77%.

Therefore, an opportunity exists to sell concentrate to the Zimplats smelter next to Karo Platinum, and this will increase the NPV by USD20.14 million (+24%) and increase the IRR by 1.09% (+8.6%).

## **VIII. Mineral Resource and Mineral Reserve Estimates**

### **JSE 12.10(h)(ix)**

#### **Mineral Resources**

The approach to the grade modelling was to undertake an estimate of the MSZ grade and tonnage based on the existing project data using the three-dimensional (3D) software package Datamine™. A Mineral Resource estimate was undertaken for each of the six areas, namely KPE, KPNE, KPNW, KPSE, KPSW, and KPSW. The estimate utilises a 3PGE+Au cut-off grade (COG) of 1.7 g/t in the selection of the cut for the Mineral Resource declaration.

A critical aspect that was considered in the generation of the estimate is the selection of the appropriate Mineral Resource cut. Selection of the potential mining cut/Mineral Resource cut required the identification of the MSZ in general and the determination of the BMSZ in particular by drawing heavily on the geochemical signature derived from the sampling data. The selection of the BMSZ is based on the understanding of the geochemical signature as well as the importance of identifying an observable parameter for referencing the proposed cut. The position of the sulphides

and S peak and PGE peaks and their relationship with the Cu and Ni peaks were used. The typical geochemical signature has the precious metal signature slightly displaced from the base metal signature. The typical geochemical signature was noted for the KPE, KPNE, and KPSE areas, whereas in the KPNW, KPSW, and KPW areas, the geochemical signatures indicate that the base and precious metal profiles are coincident and located immediately above the BMSZ.

Mineral Resource cut optimisation was undertaken as part of the mining engineering investigation on a block-by-block basis. Each 100 m x 100 m block was assessed based on a 1.7 g/t 3PGE+Au grade. Based on the mineralisation and the number of samples, the potential cut was limited to 4 m above the BMSZ and 4 m below the BMSZ. The average Mineral Resource cuts selected for the estimation are presented in the table below. A dynamic best cut was determined by utilising the following parameters: minimum cut of 120 cm and grade of the full cut > 1.7 3PGE+Au (g/t). Where the grade at 120 cm was < 1.7 3PGE+Au (g/t), the minimum cut was selected.

*Average selected Mineral Resource cuts.*

Area	Vertical Thickness (cm)	Hanging Wall (cm)	Footwall (cm)	Mining Cut (cm)
KPNE	414	88	295	383
KPE	393	215	141	356
KPSE	392	158	206	364
KPNW	320	253	67	277
KPW	Not Assessed			
KPSW	232	151	81	223

Areas were defined for the different optimised hanging wall (above the BMSZ) and footwall (below the BMSZ) cuts. Each hanging wall or footwall intersection was composited across the full thickness of the intersection/selected cut of the MSZ as defined after consideration of the optimal value. The Pt, Pd, Rh, Au, Ru, Ir, Cu, Ni, and Co concentrations were composited utilising the weighting by density and thickness. Statistical analysis was then completed on the average cuts for the respective areas.

The data were examined to determine if any of the sample data should be considered as an outlier value that could have a negative effect on the estimation. Based on the analysis of the dataset, no cutting or capping was deemed necessary.

A two-dimensional (2D) estimate was undertaken. The block model cell size of 100 m x 100 m was based on drill hole spacing. A three-pass estimation strategy was applied to each domain, applying progressively expanded and less restrictive sample searches to successive estimation passes and only considering blocks not previously assigned an estimate.

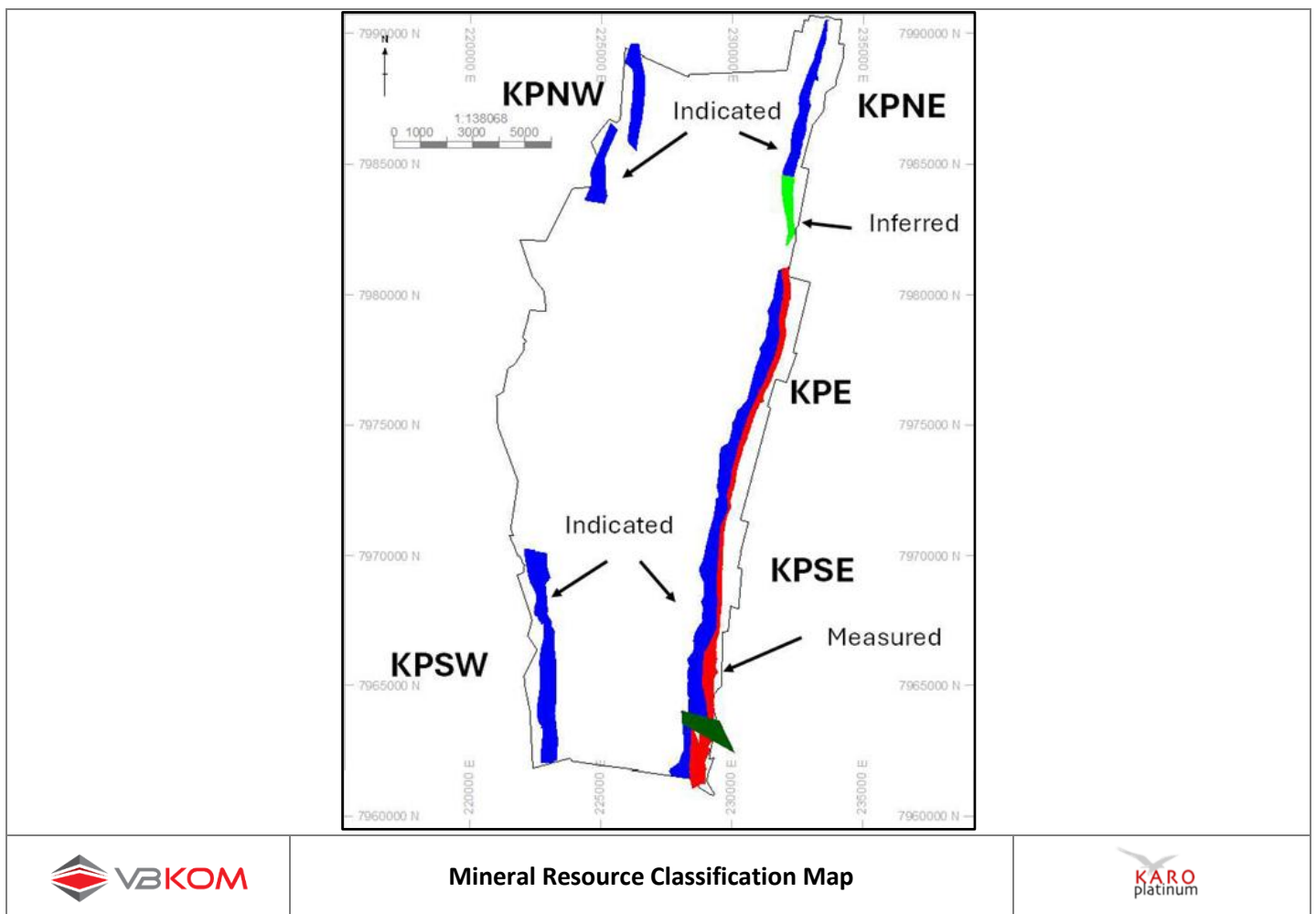
The estimation of each parameter (Pt, Pd, Rh, Au, Ru, Ir, Cu, Ni, and Co) as well as the assigned density were independently undertaken by inverse distance weighting to the power 2 (IDW<sup>2</sup>). The hanging wall and footwall cuts were estimated interdependently considering the boundaries between optimised cuts as soft boundaries. The model was checked visually and statistically to ensure that the results could be confidently reported. The hanging wall and footwall estimates for the blocks were combined.

There are very few known geological features to suggest that the MSZ is locally poorly developed and would not have a realistic chance of eventual economic extraction. Of note is the presence of a dolerite sill that has been intersected in the southern part of KPSE. A geological loss to represent where the MSZ is either not developed or is very difficult

to identify was estimated by Pivot at 5% for the Measured Mineral Resource, 10% for the Indicated Mineral Resource, and 15% for the Inferred Mineral Resource.

The confirmation of the 'Reasonable Prospects for Eventual Economic Extraction' (RPEEE) was undertaken using a simple financial assessment, assuming an initial opencast operation followed by a transition to an underground operation and a concentrator.

- The drill spacing for the KPE area is considered sufficient to declare Measured Mineral Resources and Indicated Mineral Resources.
- The drill spacing for the KPNE area is considered sufficient for an Indicated Mineral Resource and an Inferred Mineral Resource in the gap towards KPE.
- The drill spacing for the KPNW area is considered sufficient for an Indicated Mineral Resource.
- The drill spacing for the KPSE area is sufficient to declare Measured and Indicated Mineral Resource classified material.
- The drilling spacing for the KPSW area is sufficient to declare an Indicated Mineral Resource.
- The grade for the majority of the KPW area is too low to be considered to have RPEEE.



Map showing the Mineral Resource classification.

The Mineral Resource declaration and the attributable Mineral Resource declaration (64.79%) are presented in the tables overleaf. The respective Mineral Resource classification is depicted in the figure above. The declaration and classification of the Mineral Resources was undertaken in accordance with the guidelines of the SAMREC Code. The following notes are applicable to the Mineral Resource tables:

1. The Mineral Resource is reported inclusive of Mineral Reserves.
2. The Mineral Resource is reported as contained in-situ estimates.
3. No cut-off grades were applied in the Mineral Resource estimate.
4. Numbers may not add up due to rounding of decimals.
5. Approximately 6% of the Mineral Resource is considered as transitional (partly weathered material).

Mineral Resource estimate (30 September 2024) (100% attributable basis).

Category	Level of Oxidation	Tonnage (ex Geol Loss)	True Thickness (m)	Density (t/m <sup>3</sup> )	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	3PGE+ Au (g/t)	Ru (g/t)	Ir (g/t)	5PGE+ Au (g/t)	Cu (%)	Ni (%)	Co (%)	Dip (°)
Measured	Fresh	57.13	3.76	2.91	0.96	0.82	0.09	0.18	2.05	0.09	0.04	2.18	0.10	0.12	0.005	22.5
	Transitional	6.41	3.26	2.83	0.97	0.79	0.09	0.19	2.03	0.08	0.04	2.15	0.10	0.12	0.005	22.8
	<b>Total</b>	<b>63.54</b>	<b>3.70</b>	<b>2.91</b>	<b>0.96</b>	<b>0.82</b>	<b>0.09</b>	<b>0.18</b>	<b>2.04</b>	<b>0.09</b>	<b>0.04</b>	<b>2.17</b>	<b>0.10</b>	<b>0.12</b>	<b>0.005</b>	<b>22.5</b>
Indicated	Fresh	105.89	3.14	2.96	0.88	0.80	0.08	0.18	1.94	0.08	0.04	2.06	0.11	0.12	0.005	21.8
	Transitional	2.53	3.73	2.52	0.87	0.71	0.08	0.15	1.80	0.08	0.04	1.92	0.07	0.09	0.004	20.9
	<b>Total</b>	<b>108.42</b>	<b>3.15</b>	<b>2.95</b>	<b>0.88</b>	<b>0.80</b>	<b>0.08</b>	<b>0.18</b>	<b>1.94</b>	<b>0.08</b>	<b>0.04</b>	<b>2.06</b>	<b>0.11</b>	<b>0.12</b>	<b>0.005</b>	<b>21.7</b>
Inferred	Fresh	5.50	3.03	2.97	0.75	0.71	0.08	0.12	1.67	0.08	0.04	1.79	0.07	0.13	0.006	22.9
	Transitional	0.76	3.77	2.77	0.86	0.73	0.09	0.12	1.81	0.09	0.04	1.95	0.08	0.12	0.006	21.4
	<b>Total</b>	<b>6.26</b>	<b>3.11</b>	<b>2.95</b>	<b>0.77</b>	<b>0.71</b>	<b>0.08</b>	<b>0.12</b>	<b>1.69</b>	<b>0.08</b>	<b>0.04</b>	<b>1.81</b>	<b>0.07</b>	<b>0.12</b>	<b>0.006</b>	<b>22.7</b>
Total	Fresh	168.51	3.34	2.94	0.90	0.80	0.08	0.18	1.97	0.08	0.04	2.09	0.10	0.12	0.005	22.0
	Transitional	9.71	3.50	2.72	0.93	0.76	0.08	0.17	1.95	0.08	0.04	2.08	0.09	0.11	0.005	22.1
	<b>Total</b>	<b>178.22</b>	<b>3.35</b>	<b>2.93</b>	<b>0.91</b>	<b>0.80</b>	<b>0.08</b>	<b>0.18</b>	<b>1.97</b>	<b>0.08</b>	<b>0.04</b>	<b>2.09</b>	<b>0.10</b>	<b>0.12</b>	<b>0.005</b>	<b>22.0</b>
Category	Level of Oxidation	Pt:Pd:Rh:Ru:Au (%)	Pt:Pd:Rh:Ru:Ir:Au (%)	Pt (koz)	Pd (koz)	Rh (koz)	Au (koz)	3PGE+ Au (koz)	Ru (koz)	Ir (koz)	5PGE+ Au (koz)	Cu (t)	Ni (t)	Co (t)		
Measured	Fresh	47:40:4:9	44:38:4:4:2:8	1,755	1,510	162	332	3,759	161	75	3,995	54,700	66,300	3,200		
	Transitional	48:39:4:9	45:36:4:4:2:9	200	162	18	39	418	17	8	444	6,400	7,600	400		
	<b>Total</b>	<b>47:40:4:9</b>	<b>44:38:4:4:2:8</b>	<b>1,954</b>	<b>1,672</b>	<b>179</b>	<b>372</b>	<b>4,177</b>	<b>179</b>	<b>84</b>	<b>4,439</b>	<b>61,100</b>	<b>73,900</b>	<b>3,600</b>		
Indicated	Fresh	46:41:4:9	43:39:4:4:2:9	3,013	2,716	280	603	6,612	280	131	7,024	113,700	128,600	5,500		
	Transitional	48:39:4:8	45:37:4:4:2:8	71	58	6	12	147	6	3	156	1,800	2,300	100		
	<b>Total</b>	<b>46:41:4:9</b>	<b>43:39:4:4:2:9</b>	<b>3,083</b>	<b>2,774</b>	<b>286</b>	<b>615</b>	<b>6,758</b>	<b>287</b>	<b>135</b>	<b>7,180</b>	<b>115,500</b>	<b>130,900</b>	<b>5,600</b>		
Inferred	Fresh	45:43:5:7	42:40:5:5:2:7	133	126	14	22	295	14	6	315	3,900	6,900	300		
	Transitional	48:40:5:7	44:38:5:5:2:6	21	18	2	3	44	2	1	48	600	900	40		
	<b>Total</b>	<b>45:42:5:7</b>	<b>42:40:5:5:2:7</b>	<b>154</b>	<b>144</b>	<b>17</b>	<b>25</b>	<b>339</b>	<b>17</b>	<b>7</b>	<b>363</b>	<b>4,500</b>	<b>7,800</b>	<b>340</b>		
Total	Fresh	46:41:4:9	43:38:4:4:2:8	4,900	4,352	456	957	10,665	456	213	11,334	172,400	201,700	9,000		
	Transitional	48:39:4:9	45:37:4:4:2:8	291	238	26	54	609	26	13	648	8,800	10,800	500		
	<b>Total</b>	<b>46:41:4:9</b>	<b>43:38:4:4:2:8</b>	<b>5,192</b>	<b>4,589</b>	<b>482</b>	<b>1,012</b>	<b>11,274</b>	<b>482</b>	<b>226</b>	<b>11,982</b>	<b>181,100</b>	<b>212,500</b>	<b>9,504</b>		

Mineral Resource estimate (30 September 2024) (64.79% attributable basis).

Category	Level of Oxidation	Tonnage (ex Geol Loss)	True Thickness (m)	Density (t/m <sup>3</sup> )	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	3PGE+ Au (g/t)	Ru (g/t)	Ir (g/t)	5PGE+ Au (g/t)	Cu (%)	Ni (%)	Co (%)	Dip (°)
Measured	Fresh	37.01	3.76	2.91	0.96	0.82	0.09	0.18	2.05	0.09	0.04	2.18	0.10	0.12	0.005	22.50
	Transitional	4.16	3.26	2.83	0.97	0.79	0.09	0.19	2.03	0.08	0.04	2.15	0.10	0.12	0.005	22.75
	<b>Total</b>	<b>41.17</b>	<b>3.70</b>	<b>2.91</b>	<b>0.96</b>	<b>0.82</b>	<b>0.09</b>	<b>0.18</b>	<b>2.04</b>	<b>0.09</b>	<b>0.04</b>	<b>2.17</b>	<b>0.10</b>	<b>0.12</b>	<b>0.005</b>	<b>22.52</b>
Indicated	Fresh	68.61	3.14	2.96	0.88	0.80	0.08	0.18	1.94	0.08	0.04	2.06	0.11	0.12	0.005	21.76
	Transitional	1.64	3.73	2.52	0.87	0.71	0.08	0.15	1.80	0.08	0.04	1.92	0.07	0.09	0.004	20.87
	<b>Total</b>	<b>70.25</b>	<b>3.15</b>	<b>2.95</b>	<b>0.88</b>	<b>0.80</b>	<b>0.08</b>	<b>0.18</b>	<b>1.94</b>	<b>0.08</b>	<b>0.04</b>	<b>2.06</b>	<b>0.11</b>	<b>0.12</b>	<b>0.005</b>	<b>21.74</b>
Inferred	Fresh	3.56	3.03	2.97	0.75	0.71	0.08	0.12	1.67	0.08	0.04	1.79	0.07	0.13	0.006	22.92
	Transitional	0.49	3.77	2.77	0.86	0.73	0.09	0.12	1.81	0.09	0.04	1.95	0.08	0.12	0.006	21.41
	<b>Total</b>	<b>4.05</b>	<b>3.11</b>	<b>2.95</b>	<b>0.77</b>	<b>0.71</b>	<b>0.08</b>	<b>0.12</b>	<b>1.69</b>	<b>0.08</b>	<b>0.04</b>	<b>1.81</b>	<b>0.07</b>	<b>0.12</b>	<b>0.006</b>	<b>22.74</b>
Total	Fresh	109.18	3.34	2.94	0.90	0.80	0.08	0.18	1.97	0.08	0.04	2.09	0.10	0.12	0.005	22.03
	Transitional	6.29	3.50	2.72	0.93	0.76	0.08	0.17	1.95	0.08	0.04	2.08	0.09	0.11	0.005	22.08
	<b>Total</b>	<b>115.47</b>	<b>3.35</b>	<b>2.93</b>	<b>0.91</b>	<b>0.80</b>	<b>0.08</b>	<b>0.18</b>	<b>1.97</b>	<b>0.08</b>	<b>0.04</b>	<b>2.09</b>	<b>0.10</b>	<b>0.12</b>	<b>0.005</b>	<b>22.00</b>

Category	Level of Oxidation	Pt:Pd:Rh:Au (%)	Pt:Pd:Rh:Ru:Ir:Au (%)	Pt (koz)	Pd (koz)	Rh (koz)	Au (koz)	3PGE+ Au (koz)	Ru (koz)	Ir (koz)	5PGE+ Au (koz)	Cu (kt)	Ni (kt)	Co (kt)
Measured	Fresh	47:40:4:9	44:38:4:4:2:8	1,137	978	105	215	2,435	104	49	2,588	35,400	43,000	2,100
	Transitional	48:39:4:9	45:36:4:4:2:9	129	105	11	25	271	11	5	288	4,100	4,900	300
	<b>Total</b>	<b>47:40:4:9</b>	<b>44:38:4:4:2:8</b>	<b>1,266</b>	<b>1,083</b>	<b>116</b>	<b>241</b>	<b>2,706</b>	<b>116</b>	<b>54</b>	<b>2,876</b>	<b>39,500</b>	<b>47,900</b>	<b>2,300</b>
Indicated	Fresh	46:41:4:9	43:39:4:4:2:9	1,952	1,760	181	391	4,284	182	85	4,551	73,700	83,300	3,600
	Transitional	48:39:4:8	45:37:4:4:2:8	46	37	4	8	95	4	2	101	1,200	1,500	100
	<b>Total</b>	<b>46:41:4:9</b>	<b>43:39:4:4:2:9</b>	<b>1,998</b>	<b>1,797</b>	<b>185</b>	<b>399</b>	<b>4,379</b>	<b>186</b>	<b>87</b>	<b>4,652</b>	<b>74,800</b>	<b>84,800</b>	<b>3,600</b>
Inferred	Fresh	45:43:5:7	42:40:5:5:2:7	86	81	9	14	191	9	4	204	2,500	4,500	200
	Transitional	48:40:5:7	44:38:5:5:2:6	14	12	1	2	29	1	1	31	400	600	0
	<b>Total</b>	<b>45:42:5:7</b>	<b>42:40:5:5:2:7</b>	<b>100</b>	<b>93</b>	<b>11</b>	<b>16</b>	<b>220</b>	<b>11</b>	<b>5</b>	<b>235</b>	<b>2,900</b>	<b>5,100</b>	<b>200</b>
Total	Fresh	46:41:4:9	43:38:4:4:2:8	3,175	2,819	295	620	6,910	295	138	7,343	111,700	130,700	5,800
	Transitional	48:39:4:9	45:37:4:4:2:8	189	154	17	35	395	17	8	420	5,700	7,000	300
	<b>Total</b>	<b>46:41:4:9</b>	<b>43:38:4:4:2:8</b>	<b>3,364</b>	<b>2,973</b>	<b>312</b>	<b>655</b>	<b>7,305</b>	<b>312</b>	<b>146</b>	<b>7,763</b>	<b>117,400</b>	<b>137,700</b>	<b>6,200</b>



### Mineral Reserves

The LOM schedule was derived from an iterative approach to maximise grade and match the targeted feed grade to the concentrator with a steady stockpile maintained throughout the schedule. The average monthly target of 220 kt was achieved throughout the schedule and the total annual volumes scheduled during steady-state mining increased to 20.6 million bankable cubic metres (MBCM) in KPSE before KPE was scheduled in 2028. The table overleaf summarises the annual tonnes, volumes, and grades for the LOM schedule.

Annual production plan, including grades.

Description	Unit	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Total
Topsoil	MBCM	0.73	0.51	0.73	1.13	0.23	0.65	0.53	0.39	0.18	0.07	0.02	5.18
Softs	MBCM	4.12	3.58	3.24	3.94	4.71	4.33	3.79	3.38	2.42	0.47	0.27	34.26
Hards	MBCM	11.32	16.03	17.27	17.29	17.45	17.70	17.95	18.63	14.18	2.85	0.91	151.58
<b>Total waste</b>	<b>MBCM</b>	<b>16.17</b>	<b>20.12</b>	<b>21.23</b>	<b>22.36</b>	<b>22.40</b>	<b>22.69</b>	<b>22.27</b>	<b>22.40</b>	<b>16.78</b>	<b>3.39</b>	<b>1.21</b>	<b>191.02</b>
Transition ore	Mt	0.15	0.09	0.09	0.15	0.23	0.21	0.15	0.31	0.46	2.41	0.78	5.03
Fresh ore	Mt	0.42	2.40	2.55	2.49	2.41	2.37	2.44	2.33	2.18	0.23	0.00	19.81
<b>Total ore</b>	<b>Mt</b>	<b>0.56</b>	<b>2.49</b>	<b>2.64</b>	<b>2.64</b>	<b>2.64</b>	<b>2.59</b>	<b>2.59</b>	<b>2.64</b>	<b>2.64</b>	<b>2.64</b>	<b>0.78</b>	<b>24.84</b>
<b>Total ore KPSE</b>	<b>Mt</b>	<b>0.56</b>	<b>2.49</b>	<b>2.64</b>	<b>2.64</b>	<b>2.43</b>	<b>0.07</b>	<b>0.01</b>	<b>0.15</b>	<b>0.35</b>	<b>1.33</b>	<b>0.00</b>	<b>12.68</b>
<b>Total ore KPE</b>	<b>Mt</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.20</b>	<b>2.37</b>	<b>1.93</b>	<b>0.00</b>	<b>0.00</b>	<b>0.85</b>	<b>0.00</b>	<b>5.35</b>
<b>Total ore KPNW</b>	<b>Mt</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.20</b>	<b>0.80</b>	<b>0.17</b>	<b>0.34</b>	<b>1.50</b>
<b>Total ore KPNE</b>	<b>Mt</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.15</b>	<b>0.64</b>	<b>2.29</b>	<b>1.49</b>	<b>0.30</b>	<b>0.44</b>	<b>5.31</b>
Strip ratio	t:t	79.2	22.5	22.3	23.3	23.8	24.4	23.9	23.6	17.7	3.6	4.3	21.4
3E+Au	g/t	2.83	2.78	2.79	2.82	2.80	2.83	2.82	2.83	2.92	2.80	2.80	2.82
Cu	%	0.07	0.07	0.07	0.08	0.10	0.14	0.12	0.11	0.12	0.11	0.14	0.10
Ni	%	0.09	0.09	0.09	0.11	0.12	0.15	0.14	0.13	0.15	0.14	0.16	0.13

The Karo Mineral Reserves at September 2024, shown in the tables below, was reported on a 100% basis and on an attributable basis (64.79%) and are inclusive of Mineral Reserves.

*Mineral Reserve estimate (30 September 2024) (100% attributable basis).*

Mineral Reserve Category	Tonnage	3PGE+Au	5PGE+Au	Cu [%]	Ni	3PGE+Au	5PGE+Au	Cu (t)	Ni (t)
	(Mt)	(g/t)	(g/t)		(%)	(koz)	(koz)		
Proved	17.9	2.81	2.98	0.10	0.12	1,559	1,658	17,382	21,454
Probable	7.0	2.86	3.04	0.12	0.14	621	660	8,416	9,813
Total/ave	24.8	2.82	3.00	0.10	0.13	2,180	2,318	25,798	31,267

**Notes:**

1. The Mineral Reserve estimate is reported in accordance with the guidelines of the SAMREC Code.
2. The Mineral Resources were reported inclusive of the Mineral Reserve.
3. The Mineral Reserve is Reported as delivered run of mine material to the concentrator plant, or related run of mine stockpile.
4. Tonnage estimates are in metric units and reported as million tonnes (Mt).
5. 3PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Au grade (g/t).
6. 5PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Ir grade (g/t) + Ru grade (g/t) + Au grade (g/t).
7. Numbers may not add up due to rounding.
8. Mineral Reserve reported on a 100% project basis.
9. The level of accuracy of the study completed in September 2024, as basis for the Mineral Reserve estimate, complies to the minimum requirements as set out in the SAMREC Code.
10. The Mineral Reserves are dependent on the approval of royalty and tax incentives as shown in the financial model.

*Mineral Reserve estimate (30 September 2024) (64.79% attributable basis).*

Mineral Reserve Category	Tonnage	3PGE+Au	5PGE+Au	Cu [%]	Ni	3PGE+Au	5PGE+Au	Cu (t)	Ni (t)
	(Mt)	(g/t)	(g/t)		(%)	(koz)	(koz)		
Proved	11.6	2.81	2.98	0.10	0.12	1,010	1,074	11,262	13,900
Probable	4.5	2.86	3.04	0.12	0.14	402	428	5,453	6,358
Total/ave	16.1	2.82	3.00	0.10	0.13	1,412	1,502	16,714	20,258

**Notes:**

1. The Mineral Reserve estimate is reported in accordance with the guidelines of the SAMREC Code.
2. The Mineral Resources were reported inclusive of the Mineral Reserve.
3. The Mineral Reserve is Reported as delivered run of mine material to the concentrator plant, or related run of mine stockpile.
4. Tonnage estimates are in metric units and reported as million tonnes (Mt).
5. 3PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Au grade (g/t).
6. 5PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Ir grade (g/t) + Ru grade (g/t) + Au grade (g/t).
7. Numbers may not add up due to rounding.
8. Mineral Reserve reported on a 64.79% project basis.
9. The level of accuracy of the study completed in September 2024, as basis for the Mineral Reserve estimate, complies to the minimum requirements as set out in the SAMREC Code.
10. The Mineral Reserves are dependent on the approval of royalty and tax incentives as shown in the financial model.

## IX. Valuation

### JSE 12.10(h)(xii)

The valuation of Karo was completed in accordance with SAMVAL Code with a valuation date of 30 November 2024. VBKOM relied on the Market Approach and the Cash Flow Approach to value Karo.

Any changes to the assumptions utilised in the mineral asset valuation for the Karo Project, would directly affect the valuation results presented in this report.

For the Market Approach, VBKOM relied on the Mineral Valuation Group (Minval Group) database of in-situ values for the Market Approach. Karo falls in the lower range of the dataset (i.e. the 5<sup>th</sup> to 10<sup>th</sup> percentile of values). The in-situ value ranges attributable to Karo's PGM interest are USD8.00/oz to USD14.00/oz for the contained Measured PGM Mineral Resources, USD4.50/oz to USD7.20/oz for the contained Indicated PGM Mineral Resources and USD1.20/oz to USD2.00/oz for the contained Inferred PGM Mineral Resources. This gives a value range of USD68.26 million to USD114.57 million to the asset. The preferred value is the lower value of USD68.26 million.

For the Cash Flow Approach, VBKOM developed a techno-economic model in Microsoft Excel and used proprietary software to perform Monte-Carlo simulation analysis on the model. The Base Case NPV is negative USD7.0837.91 million at a discount rate of 14.44%.

Based on the results from the simulation analysis, the sensitivity analysis and the Base Case Model; VBKOM considers the appropriate value range for the project to be the 56<sup>th</sup> to 66<sup>th</sup> percentile from the Simulation Analysis. This is the positive NPV from the middle third of the simulation results at a 14.44% discount rate. The reason for this range is based on the optionality that exists in the execution of the project. This gives a value range to the asset of USD0 million to USD39.11 million. The preferred value is USD19.16 million.

Combining the two valuation methodologies, VBKOM considers the value range for Karo to be USD39.11 million to USD68.26 million. The range is informed by the lower value of the Market Approach and the Upper Value of the Cash Flow Approach. The preferred value is the mid-value of the range, USD53.69 million (refer to the table below).

#### Valuation Results

Description	Lower (USDm)	Upper (USDm)	Preferred (USDm)
Market Approach	68.26	114.57	68.26
Cash Flow Approach	0.00	39.11	19.16
<b>Preferred Value Range</b>	<b>39.11</b>	<b>68.26</b>	<b>53.69</b>

## X. Risks

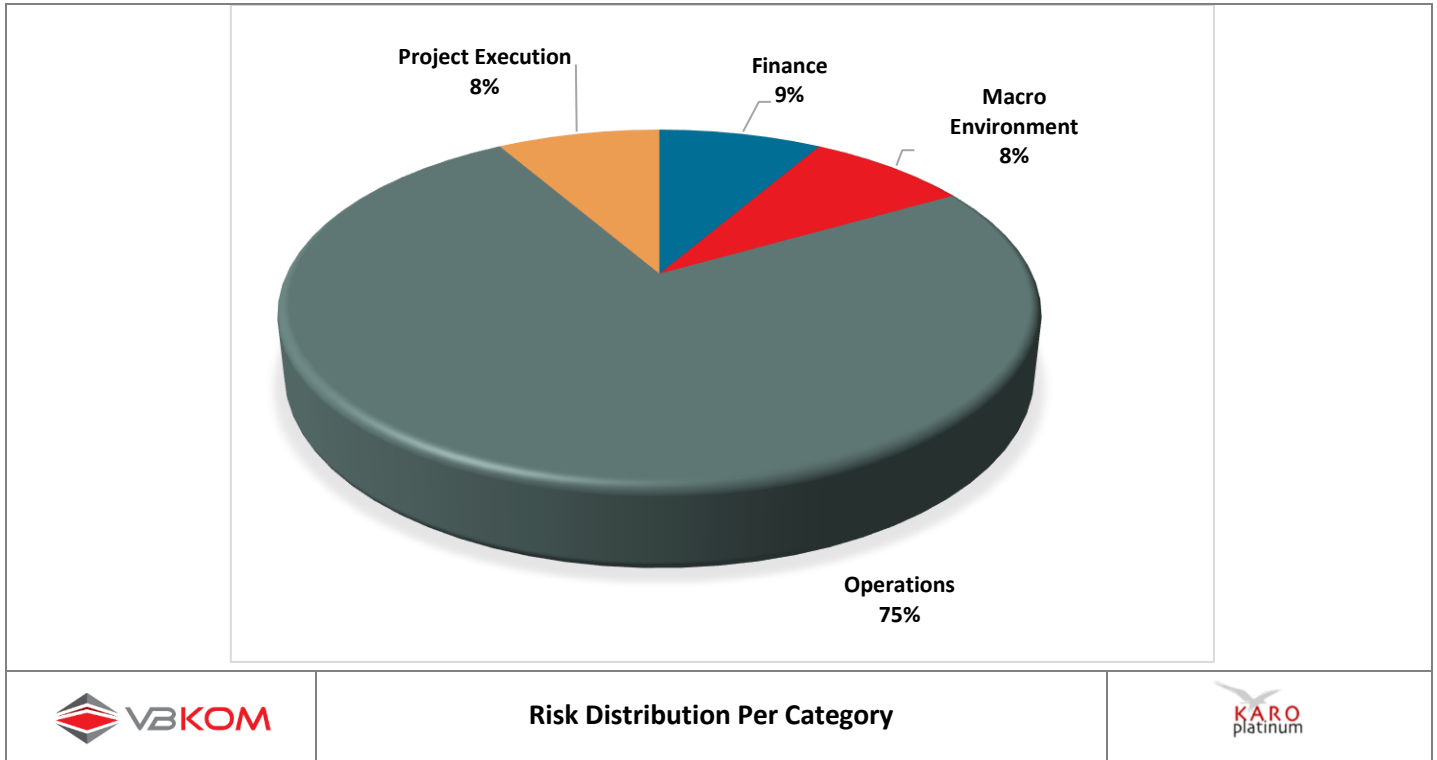
### JSE 12.10(h)(x)

A risk workshop was held in December 2024. The distribution, per category, of the 12 risks identified is displayed in the figure overleaf. After mitigating factors were applied, the following risks presented as residually medium or significant:

- Timeous securing of strategic equity partners to bridge the funding gap to implement the project as planned.

- Commodity Price and Market Risks.
- Timeous offtake agreement.

The risks are further detailed in Chapter 10.2 of the CPR.



*Risk distribution per category.*

## XI. Competent Persons Conclusions and Recommendations

### Legal Aspects and Tenure

Karo Platinum is authorised to commence mining and processing of PGMs at KPSE through the provisions of ML41 granted in terms of the MMA and authorisations in terms of the EMAAct. This is supported by several additional licences allowing supporting activities, with a number of additional permits required for full operation. Applications must be made timeously, and the Company must uphold all conditions of authorisations including annual inspections, payments, and renewals to maintain the register.

While there is a water balance shortfall in current water authorisations, a number of plans are in place for additional supply, including the construction of the Chirundazi Dam.

The development of KPE, KPNE, and KPNW pits is subject to the completion of an ESIA and obtaining all necessary associated permits that are not directly shared with the current authorised activities.

Karo Platinum is proactively undertaking thorough resettlement planning with robust mechanisms implemented to maintain the social licence to operate.

## Mineral Resources

The drilling of 563 drill hole intersections confirmed that the geology intersected and interpreted is consistent with the existing geological understanding of the Great Dyke. Broad structures could be interpolated with an interpretation of the local MSZ being made. The continuity of the geology and grade were demonstrated. Very little structure has been identified, but it was possible to interpolate some major east-west or dip faults with interpreted throws of up to nearly 100 m.

The level of oxidation has been estimated to be down to 25 m below surface (mbs) for the KPSW sector i.e. material shallower than 25 mbs is oxidised. For the eastern side of the Great Dyke (KPNE, KPE, and KPSE) as well as KPNW, the level of oxidation has been estimated to be at 15 mbs with a transitional (slightly weathered) material being estimated to occur to a depth of 30 mbs. The material at shallower depths (< 15 mbs) is not expected to be viable to mine due to inter alia grade, recovery, and the ability to mine efficiently. The material was therefore excluded from the declaration of the Mineral Resource.

The geochemical signature for the eastern flank presents a typical profile where the precious and base metal profiles are disconnected. The geochemical signature for the western flank typically exhibits coincident precious and base metals peaks. Higher grades are associated with the narrower cut. The most advantageous Mineral Resource cut (highest in-situ value) would be 120 cm for both the eastern and western flanks. However, a wider Mineral Resource cut produces more metal and has other technical advantages. The grade on the eastern flank is slightly higher than the western flank.

A Mineral Resource estimate was undertaken over the six referenced areas of the tenement. The 3PGE+Au grade of the KPW is very low, too low to be considered for the declaration of a Mineral Resource in terms of the guidelines of the SAMREC Code. The KPSW area, although densely drilled over a narrow strip, has been declared as an Indicated Mineral Resource as geological and grade continuity can be assumed. The KPNE and KPNW areas have been declared as Indicated Mineral Resources as the geological and grade continuity can be assumed. The KPE and KPSE areas are well drilled with continuity of both grade and geology being demonstrated and where a Measured Mineral Resource has been declared, both grade and geology can be confirmed. The southern part of the KPSE area is characterised by a sill that has eliminated or disturbed the MSZ.

## Mineral Reserves

The LOM production plan as basis for the Mineral Reserve estimate was designed to sustain a concentrator feed rate of 2.64 Mtpa over a steady nine-year mining period. To achieve this, an average of 61 Mtpa waste stripping will be required for the duration of the LOM at an average stripping ratio (S/R) of 21.4 on a tonne:tonne basis.

The strategic scheduling sequence prioritised the higher-confidence southern regions, gradually progressing northwards towards lower-confidence Mineral Resources.

Prioritising in-pit backfilling wherever practically feasible and selecting the closest surface short-haul dump points significantly reduced hauling distances and the mine's long-term closure liabilities. Approximately 137 million cubic meters of waste material were scheduled for surface WRD placement, while 40 MBCM were strategically scheduled for in-pit backfilling throughout the LOM.

An upside exists whereby the Base Metal Reef (BMR) material could be processed at the end of LOM.

Grade control as part of the ore mining cycle was identified as a material risk with the selective ore package not identifiable visually. The effective on-grade extraction to the pre-defined mining height is highly reliant on pre- and

post-drilling and blasting grade-control procedures. Any deviation from these procedures can introduce an immediate and significant reduction in the grade of the ore extracted by increasing the dilution introduced to the ROM ore or introducing ore losses.

Non-modelled geological features are considered to pose a risk. However, this has been mitigated to a degree by the application of a geological loss factor to the various Mineral Resource categories as well as application of dynamic grids of both evaluation and RC drilling.

Detailed geohydrological studies are in progress and could pose a minor risk regarding the impact of water on the geological features.

The timely approval and construction (completion Q4 2025) of the Chirundazi Dam is crucial to meet the processing plant's water needs.

Detailed geotechnical pit slope design parameters were prepared for the four mining pits, KPSE, KPE, KPNE, and KPNW. The following considerations were noted for the pit designs:

- Wireframes detailing the different material types overlying the mineralised material were created and considered during the analysis of the final slope angles. The impact on slope angles was analysed and determined to pose a minor risk.
- The density of the various hard wastes was uniform and should be updated with the relevant density per lithology.
- Several rivers, dams, seasonal streams, and wetlands branch throughout the Karo project area. These aspects can impact pit perimeters, dump positions, and plant throughput if appropriate approvals are not received. Timely initiation and submission of appropriate specialist studies lend to a reasonable assumption that these applications will be approved.
- The commodity prices and associated USD exchange rate fluctuations are significant sensitivity drivers for the project.
- The royalty and tax incentives may pose a risk to the project's economic viability as these incentives are still pending approval.
- A discount rate of 8% was incorporated which provides a positive business case. Sensitivities on the discount rate show that economic viability is highly dependent on this attribute.

## Valuation

The Valuation of Karo was done using the Market Approach and the Cash Flow Approach. The MinValGroup used both methodologies to inform the value of Karo, and VBKOM incorporated this valuation in the CPR. The value range is US\$39.11 million to US\$68.26 million. The preferred value is US\$53.69 million.

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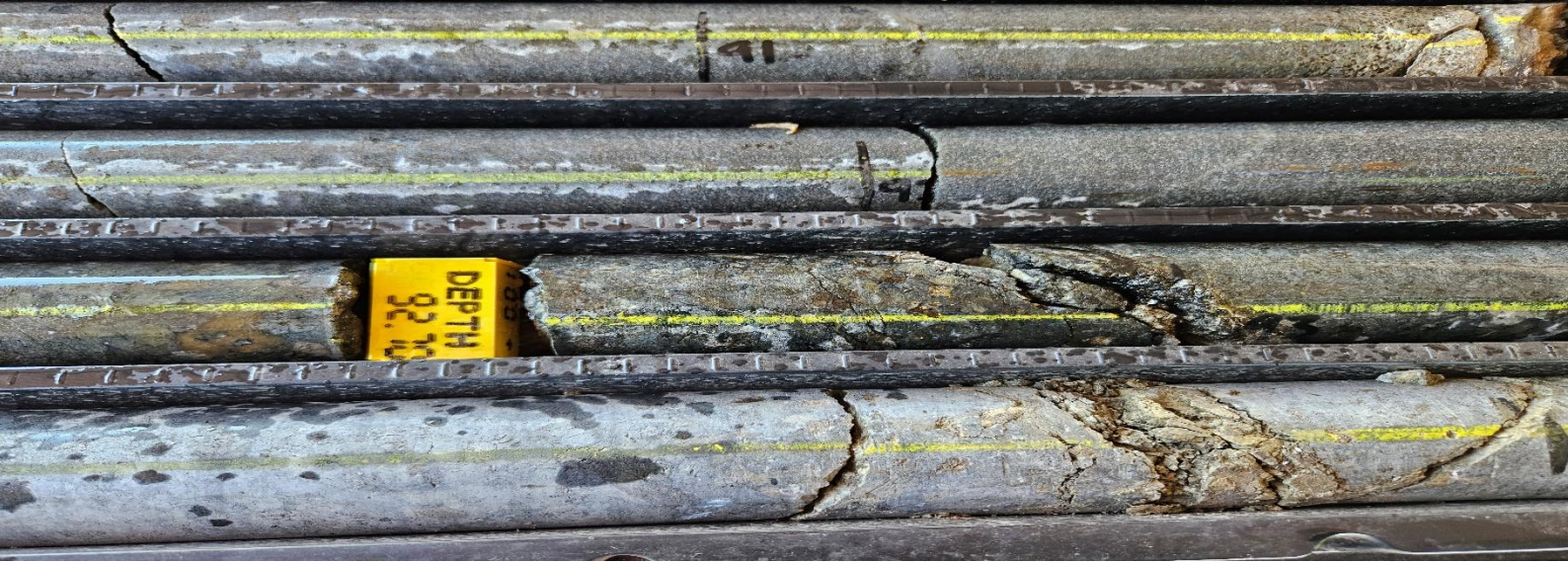
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# 1 INTRODUCTION

## 1.1 Terms of Reference and Scope of Work

T1.2, T1.3

### 1.1.1 Scope of the Report

JSE 12.10(a)

VBKOM (Pty) Ltd (VBKOM) was requested by Karo Platinum (Pvt) Ltd (Karo Platinum or the Company) to complete a Competent Persons' Report (CPR) with a full mineral asset valuation on the Karo Platinum Group Metal (PGM) Development Project (Karo), situated on the Great Dyke, Zimbabwe. The Company aims to establish a 2.64 Mtpa run of mine (ROM) operation, structured around multiple open pits. Mine development will comprise the sequential development of four open pits, commencing with Karo Project South East (KPSE). Ore will be processed at an on-site facility.

The initial phase will focus on an open-pit mining operation producing separate PGM and, in future, base metals concentrates. Karo will produce PGM concentrate to sell to a refinery at gate for further beneficiation. The Project is based on proven technologies and industry best practices.

The operational model adopts a contractor-based approach for a truck and shovel open-pit setup, facilitating the transportation of ROM reef to a centrally located, 220 ktpm concentrator plant. The design of these open pits strategically targets access to the upper levels of the Main Sulphide Zone (MSZ), with a maximum depth of 110 m below the surface (mbs).

The effective date of the Mineral Resources and Mineral Reserves presented herein is 30 September 2024. The mineral asset valuation date is 30 November 2024.

### 1.1.2 Purpose of the Report

JSE 12.10(e), T1.4

Tharisa plc (Tharisa) is an effective 64.79% shareholder in Karo Platinum and is listed on the Johannesburg Stock Exchange (JSE:THA). The Report has been commissioned to comply with regulations of the Johannesburg Stock Exchange (JSE) for listed companies, with the purpose of presenting the Mineral Resources and Mineral Reserves of the Project and valuing the mineral asset. The Report is compiled in compliance with the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2016 Edition) (SAMREC Code) and the South African Code for the Reporting of Mineral Asset Valuation (2016 Edition) (SAMVAL Code). All requirements of

Section 12 of the JSE Listings Requirements for Mineral Companies and the SAMREC Code (including Table 1) and SAMVAL Code (including Appendices and Tables) have been complied with.

### 1.1.3 Competent Persons and Competent Valuator

#### S9.1(i), T1.0

The Competent Person (CP) for the Mineral Resources presented in this CPR is Mr Ken Lomborg, while the CP responsible for the Mineral Reserves is Mr Wilhelm Warschkuhl. Messers Lomborg and Warschkuhl have appropriate experience in the estimation, assessment, and evaluation of relevant Mineral Resources and/or Mineral Reserves based on the class of deposit and mining methodology and thus qualify as CPs as such term is defined in the SAMREC Code.

**Mr Lomborg** is employed by Pivot Mining Consultants (Pty) Ltd (located at Island House, Constantia Office Park, Cnr 14th Ave and Hendrik Potgieter Rd, Johannesburg, 1709, South Africa) and is registered with the South African Council for Natural Scientific Professions (Private Bag X540, Silverton, 0127, South Africa), registration number 400038/01. He holds BSc (Hons) Geology, BCom, and MEng (Mining Engineering) degrees.

Mr Lomborg is a geologist with 38 years' experience in the minerals industry, with specific expertise in Mineral Resource estimation in respect of PGM deposits in the Great Dyke. He has been involved in exploration and mine geology and has experience in the technical development of mining projects from inception to full production. He is a respected professional with advanced capability in Project Management, Mineral Exploration, Mine Operations, and Mineral Resource and Mineral Reserve estimation applications as a result of his career exposure to a wide range of mineral sector independent consulting assignments. Mr Lomborg has undertaken Mineral Resource and Mineral Reserve estimations and technical reviews for platinum, chromite, gold, copper, uranium, and fluorite projects. He has experience in the review or estimation of local and regional diamond and coal projects. He has assisted with or compiled Competent Persons Reports/NI 43-101 for various companies that have been listed on the Toronto Stock Exchange (TSX), JSE, and Alternative Investment Market (AIM).

The Mineral Reserve was prepared under the supervision of **Mr Warschkuhl** of VBKOM (95 Lyttelton Road, Clubview, Centurion, 0157, South Africa) in his role as Mineral Reserve CP. He holds a BEng (Hons) Mining Engineering degree and has more than five years of experience in respect of this and similar commodities. He is registered with the Engineering Council of South Africa (ECSA, Private Bag X691, Bruma, South Africa), registration number 20170173. He is a Principal Mining Engineer and Management Executive.

Mr Warschkuhl has gained more than 14 years' experience in the mining industry. During this time, he has held various mining engineering positions including Graduate Engineer, Mining Engineer, and Project Lead Engineer. He worked at VBKOM from 2015–2016 as a Mining Engineer, and then again from 2018 in the role of Senior Mining Engineer and later Principal Mining Engineer. In addition, he has held the position of Management Executive since 2023. Wilhelm has been involved in Concept studies, Pre-feasibility studies, Feasibility studies, Due Diligence assessments, and compilation of Reserve Estimations for a multitude of commodities including coal, manganese, heavy mineral sands, aggregates, gold, platinum group metals, copper, fluorspar, and phosphates.

The mineral asset valuation was prepared by **Mr Iaan Myburgh**, a full time employee of Mineral Valuation Group (Pty) Ltd (Minval Group; located 479 Cliff Ave, Waterkloof Ridge, Pretoria, South Africa). Iaan has 15 years' experience in the valuation of mineral assets and holds a BSc Mathematics degree. He is an affiliate member of the Geological Society of South Africa (GSSA) and a member of the Investment Analysts Society (IAS) of South Africa. He is also a Chartered

Financial Analyst® charter holder. Mr Myburgh is a Competent Valuator (CV) as such term is defined in the SAMVAL Code.

All facts presented in the report are correct to the best of the CPs and CVs knowledge.

#### 1.1.4 Independence of the Issuer

**JSE 12.10(c), S9.1(ii), T1.0**

Neither VBKOM nor personnel nominated for the completion or review of work, including the CPs and CV, has any interest (present or contingent) in Tharisa and its subsidiaries (including Karo Platinum), its directors, senior management, advisers or the mineral properties reported on in this CPR. The proposed work, and any other work done by VBKOM for Karo Platinum, is strictly in return for professional fees. The fees for this engagement are not contingent on any aspect of this report and were determined before commencement of the engagement. Payment for the work is not in any way dependent on the outcome of the work, nor on the success or otherwise of Tharisa and its subsidiaries' own business dealings. The CPs, CV, and authors have no bias with respect to the assets that are the subject of the Report, or to the parties involved with the assignment. The CPs, CV, and authors are all independent of the issuer. There is no conflict of interest in VBKOM undertaking the CPR as contained in this document.

### 1.2 Sources of Information

Access to the *Karominingholdings* data room administered by Firmex, including:

- Bankable Feasibility Study report
- Corporate Documentation
- Karo Mineral Resource Estimate Report, June 2024

Various employees of the Client have provided information utilised in this CPR, and/or verification thereof. Various other sources of information have been used, as duly referenced throughout the CPR.

### 1.3 Units and Currency

This CPR is prepared in units reflecting metric terms, as listed in Table 1-1. The main currency used in this CPR is the United States Dollar (USD). Tables presented in this CPR may not compute due to rounding.

*Table 1-1: List of units.*

Unit	Definition
°	Degree
%	Per Cent
°C	Degree Celsius
µm	Micrometre
BCM	Bank Cubic Metre
BCM/hr	Bank Cubic Metres per Hour
BCM/m	Bank Cubic Metres per Metre
cm	Centimetre

Unit	Definition
g	Gram
g/oz	Grams per Ounce
g/t	Grams per Tonne
Ga	Giga Annum
ha	Hectare
kg/BCM	Kilograms per Bank Cubic Metre
km	Kilometre
km/hr	Kilometres per Hour
koz	Kilo Ounces
kt	Kilotonne
ktpm	Kilotonnes per Month
kV	Kilovolt
kWh/t	Kilowatt Hours per Tonne
m	Metre
m <sup>2</sup>	Square Metre
m <sup>3</sup>	Cubic Metre
m/hr	Metres per Hour
m <sup>3</sup> /a	Cubic Metres per Annum
m <sup>3</sup> /h	Cubic Metres per Hour
Ma	Mega Annum
mamsl	Metres Above Mean Sea Level
masl	Metres Above Sea Level
MBCM	Million Bank Cubic Metres
mbs	Metres Below Surface
mg/L	Milligram per Litre
ML	Megalitre
mm	Millimetre
Mm <sup>3</sup>	Cubic Megametre
Moz	Million Ounces
Mt	Million Tonnes
Mtpa	Million Tonnes per Annum
MVA	Mega Volt Ampere
Oz	Ounce
ppb	Part per Billion
ppm	Part per Million

Unit	Definition
t	Tonne
t/m <sup>3</sup>	Tonnes per Cubic Metre
tpa	Tonne per Annum
tph	Tonne per Hour
tpm	Tonne per Month
USD	United States Dollar
USD/BCM	United States Dollars per Bank Cubic Metre
USD/kWh	United States Dollars per Kilowatt Hour
USD/L	United States Dollars per Litre
USD/m <sup>3</sup>	United States Dollars per Cubic Metre
USD/oz	United States Dollars per Ounce
USD/t	United States Dollars per Tonne
USDm	Millions of United States Dollars
ZiG	Zimbabwe Gold
ZWD	Zimbabwean Dollar
ZWG	Zimbabwe Gold

The 3E+Au package consists of the following three PGEs and gold:

- Pd: Palladium.
- Pt: Platinum.
- Rh: Rhodium.
- Au: Gold.

The 5E+Au package consists of the 3E+Au elements in addition to:

- Ir: Iridium.
- Ru: Ruthenium.

## 1.4 Site Inspection or Field Involvement of CPs

### S1.1(iii), T1.0

#### 1.4.1 Mineral Resource CP

Mr Lomberg visited the Project property on 18–21 February 2019, 16–17 July 2019, 24–26 January 2022, and 27–29 November 2023 in order to review the drilling progress and operational procedures during each of the recent drilling phases of the Project. Some of the activities undertaken during the respective site visits included:

- Visual inspections of the core.

- Checking collars in the field using a handheld Garmin Global Positioning System (GPS), confirming collars were located in their measured location.

### 1.4.2 Mineral Reserve CP

Mr Warschkuhl visited the subject property on 20 and 21 November 2024. The site visit entailed visiting and verifying the mining areas, project infrastructure, and pilot pit. During the site visit, discussions were held regarding the project with various stakeholders to identify risks.

Figure 1-1 shows the mining areas visited for Karo Project South East (KPSE), Karo Project East (KPE), Karo Project North East (KPNE), and Karo Project North West (KPNW). The Figure 1-2 shows the pilot pit area.

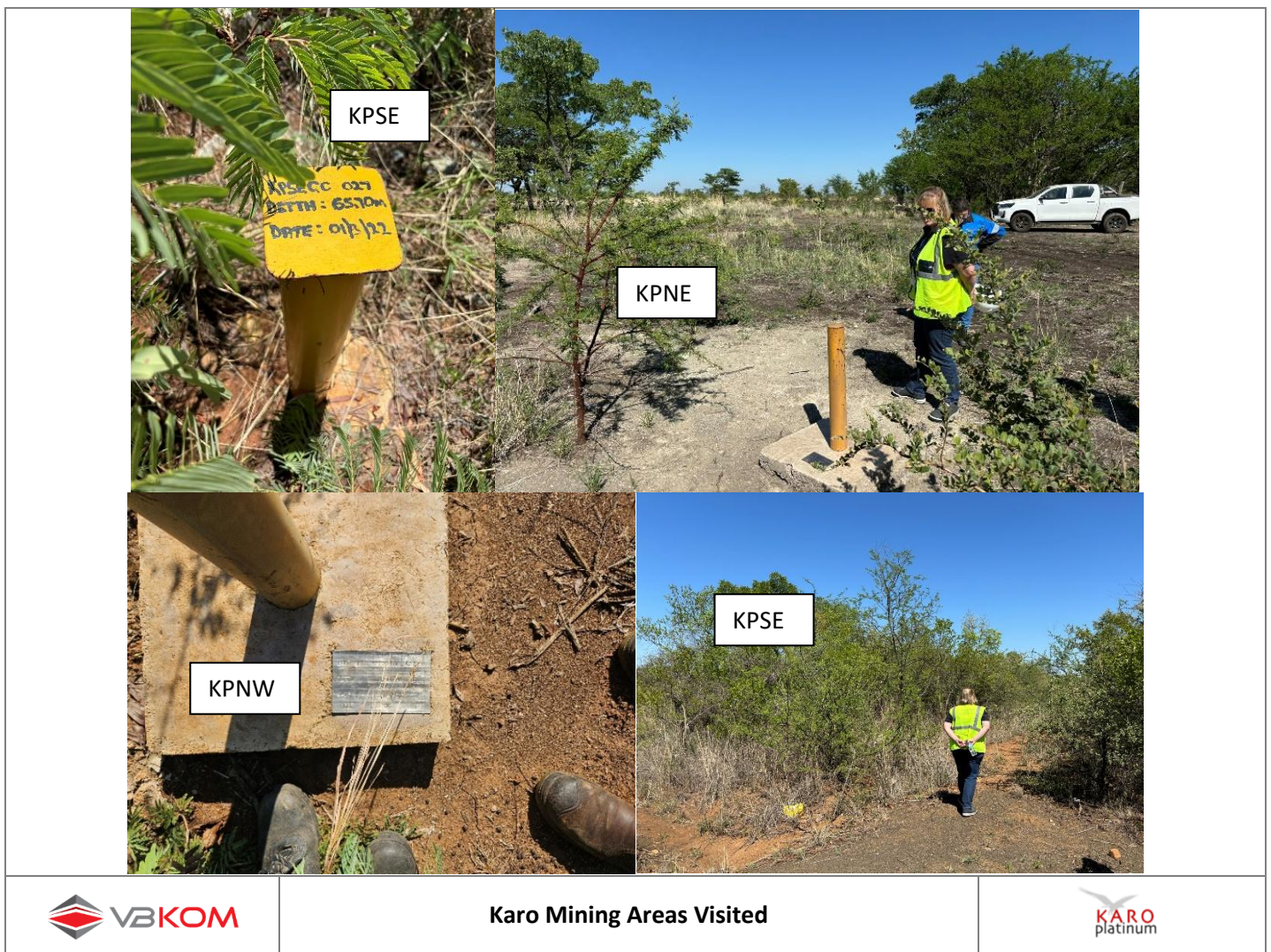


Figure 1-1: Karo mining areas visited.



Figure 1-2: Location of the Karo pilot pit area.

### 1.4.3 Competent Valuator

Due to time constraints, Mr Myburgh did not visit the subject property and has relied on the technical expertise and site visit feedback received from the CPs.

## 1.5 Disclaimers and Reliance on Other Experts or Third-Party Information

The CPs have relied on historical and recent information provided by Karo personnel. A bankable feasibility study (BFS), which is aligned with the Feasibility Study (FS) as defined in Table 2 of the SAMREC Code, for the proposed mine is near completion, with scopes commissioned out to various experts. For the purposes of this CPR, the study will be referred to as the FS.

Reliance on the contents of the FS was made for the following, with due verification made of information where possible:

- Social and environmental aspects
- Processing and metallurgy
- Infrastructure

Financial modelling for the Project was generated by the Company and supplied to VBKOM. Due checks and verifications were made where possible. The financial model supported the economic assessment relating to the Mineral Reserves, and capital and operating costs were sourced directly from this model.

Additional sources of information have been utilised in the compilation of this CPR as duly referenced throughout.

## 2 PROJECT OUTLINE

T1.2, T1.5

### 2.1 Property Description and Location

S1.1(i), 1.2(i)(iii)

The Karo Project is a feasibility stage project, located on the Great Dyke which is an elongated, slightly sinuous, 550 km long, layered igneous intrusion with a width of between 4 km and 11 km, in central Zimbabwe. The Project is situated in the central sector of the Hartley Complex within the boundary region of the Sebakwe and Darwendale sub-chambers of the Great Dyke, approximately 85 km west-southwest (WSW) of the capital Harare and approximately 35 km southeast of the town Chegutu, in the Mashonaland West Province of Zimbabwe. The project is centred on the coordinates 30°25'23"E and 18°17'07"S. The coordinate reference system utilised for the Project is World Geodetic System 1984 (WGS 84) / Universal Transverse Mercator (UTM) 36S. The location of the Project is shown in Figure 2-1.

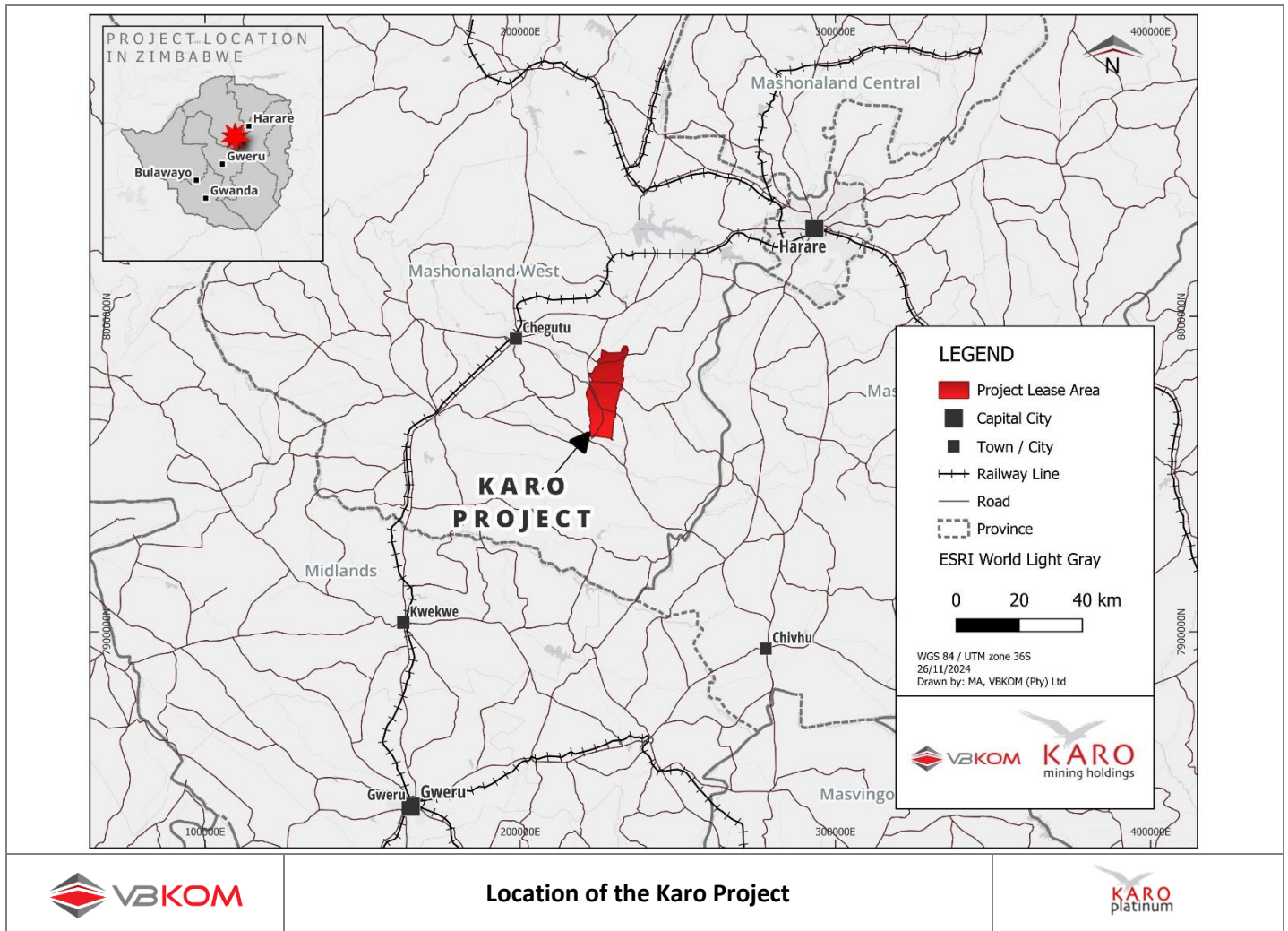


Figure 2-1: Geographic locality of the Karo Project.

The surrounding area is relatively flat with the project area having a very slight ridge-oriented north-south and a fall-off in elevation to the south towards the tributaries of the Mupfure River. A topocadastral map of the Project Area is provided in Figure 2-2.

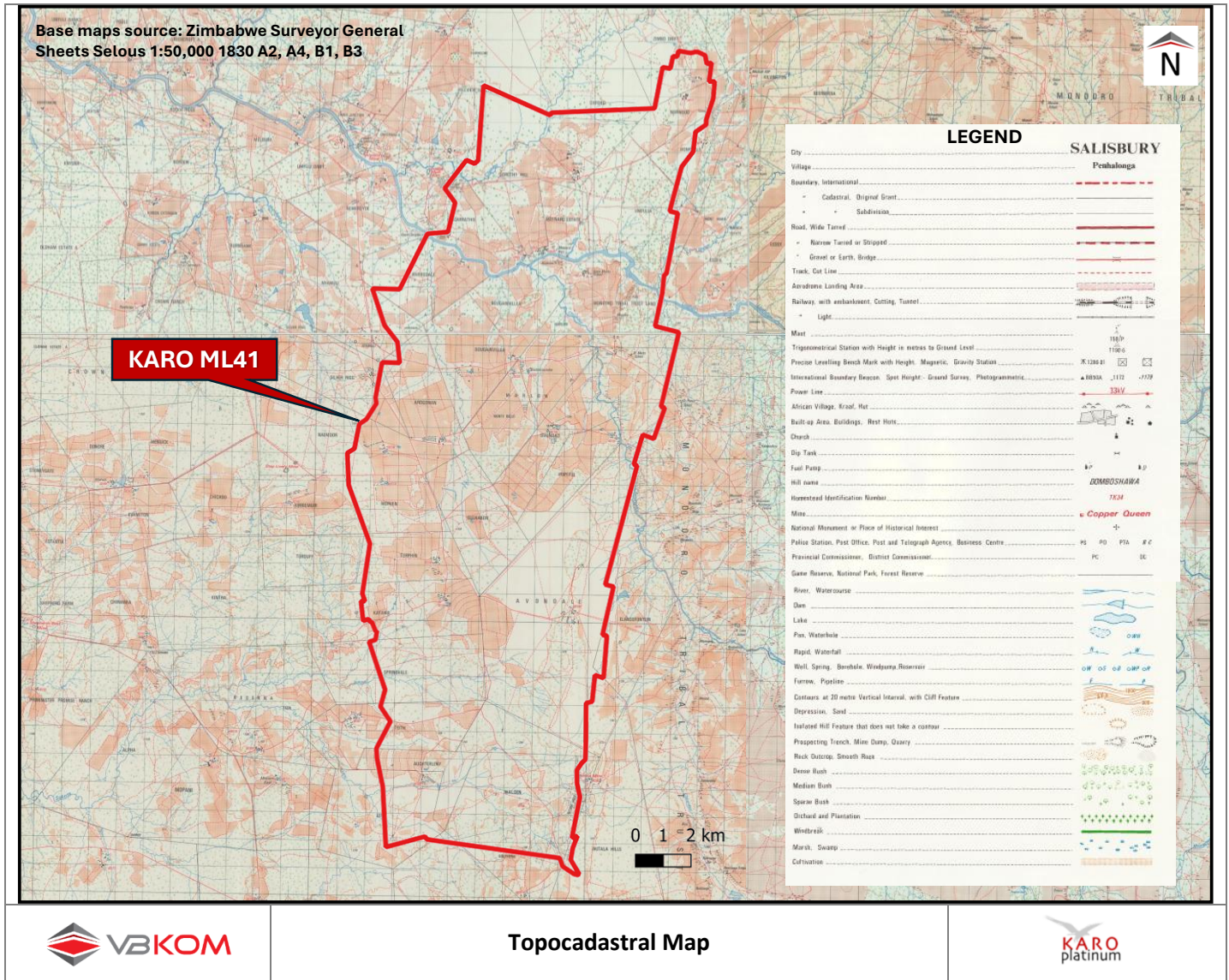


Figure 2-2: Topocadastral map.

The northern boundary of the Karo project is approximately 11 km south of the Selous traffic circle along the Ngezi road, an all-weather tarred road constructed by Zimplats Holdings Limited (Zimplats) for its road trains that bring ore/concentrate from the Ngezi Mine that borders Karo in the south, to the Selous product located at its Hartley complex north of Karo.

The exploration drilling strategy was targeted to investigate the shallower areas of the deposit along outcrop. Based on available information that suggested the western flank would more likely be higher grade, drilling commenced on the western side of the project area. Subsequently, drilling was undertaken on the eastern side. The project is subdivided into six areas of focus for current work, namely KPE, KPNE, KPSW, KPSE, KPSW, and KPW, as illustrated in Figure 2-3.

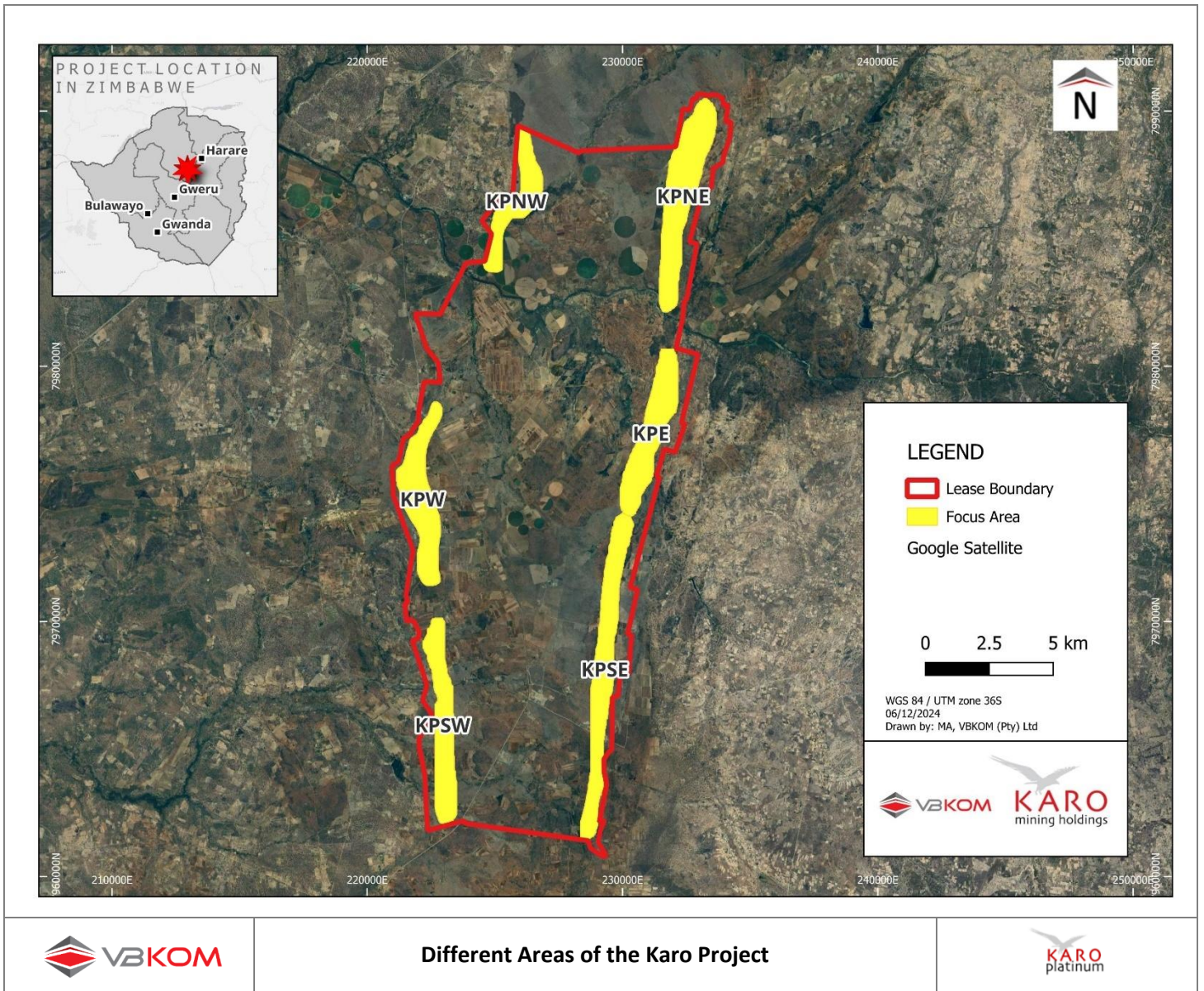


Figure 2-3: Different areas of the Karo Project.

Mineral Resources and Mineral Reserves are declared only for the areas as listed in Table 2-1.

Table 2-1: Target areas Mineral Resources and Mineral Reserves coverage.

Target Area	Mineral Resources	Mineral Reserves
KPW	No	No
KPSW	Yes	No
KPNW	Yes	Yes
KPNE	Yes	Yes
KPE	Yes	Yes
KPSE	Yes	Yes

## 2.2 Country Profile

### S1.2(ii)

#### 2.2.1 Demographics and Geographic Setting

Zimbabwe is a landlocked country bounded to the south by the Republic of South Africa, to the southwest and west by Botswana, to the north by Zambia, and to the northeast and east by Mozambique. As of 2024, the population is approximately 17.15 million, with a population growth rate of 1.91%. English is widely spoken as a first or second language, with a literacy rate of 89.85% (2022 estimate). Shona, Ndebele, and English are official languages with 13 minority languages also being spoken.

Zimbabwe is a constitutional democracy. The legal system is a mixture of English Common Law, Roman-Dutch Civil Law, and Customary Law.

The country has ageing infrastructure, having made significant progress in infrastructure development in its early period as an independent state, building a national electricity network with regional interconnections, an extensive and internationally connected road network, and a water and sewer system. The country has been unable to maintain its existing infrastructure since it became immersed in economic and political turmoil in the late 1990s. Zimbabwe now faces a number of important infrastructure challenges, the most pressing of which lie in the power and water sectors, where deteriorating conditions pose risks to the economy and public health. The country suffers from numerous blackouts due to the lack of electrical grid capacity.

#### 2.2.2 History

For three decades post-independence, President Robert Mugabe was Zimbabwe's only ruler who dominated the country's political system. Until the 2008 parliamentary elections, Zimbabwe was effectively a one-party state, ruled over by Mugabe's ZANU-PF party. Following months of political turmoil, Mugabe agreed to a historic power-sharing deal with the opposition in September 2008. After months of difficult negotiations, the new government was formed in February 2009 with Mugabe remaining president and Morgan Tsvangirai becoming prime minister. In 2013, elections were held with ZANU-PF winning with an increased majority of 61%. Electoral interference was widely reported. The Supreme Court of Zimbabwe ruled that the election was "free, fair and credible". In November 2017, Vice President Emmerson Mnangagwa took over following a military intervention that forced Mugabe to resign. Mnangagwa was inaugurated as President days later, promising to hold presidential elections in 2018. In July 2018, Mnangagwa won the presidential election after a close contest with Movement for Democratic Change Alliance candidate Nelson Chamisa. Mnangagwa has since resorted to the government's longstanding practice of violently disrupting protests or opposition rallies. In August 2023, President Emmerson Mnangagwa won a second term in an outcome of the election rejected by the opposition and questioned by observers. Official inflation rates soared in 2019 to 225% and further soared to 577% in 2020 and decreased to 98.6% in 2021.

Zimbabwe is rich in agricultural and Mineral Resources. However, periodic weather-related downturns in farm production, low commodity prices, and poor fiscal and monetary management have all contributed to creating a pattern of uneven performance. Moreover, the violent implementation of fast-track land reform aimed at benefiting landless black Zimbabweans has led to sharp falls in production and the collapse of the agriculture-based economy.

Indeed, since Mugabe's land restructuring plan was put into effect, Zimbabwe, which had once been known as the "breadbasket" of Africa, saw its agricultural economy devastated and the effective collapse of commercial agriculture. The country has been relegated to reliance on food importation and has suffered food shortages. Its recent move to ensure the controlling interest of foreign companies in Zimbabwe was expected to deleteriously affect foreign

investment in the country. Critics of Mugabe's regime have accused the Zimbabwean president of destroying the country's once vibrant economy and miring Zimbabwe with an exceedingly high rate of inflation (around 100,000 per cent), debilitating unemployment (around 80 per cent), devolving public services, critical food and fuel shortages, rampant crime, rising incidences of police violence and other human rights abuses, as well as deteriorating levels of human development and democracy.

### **2.2.3 Overview of Mining in Zimbabwe**

Zimbabwe has abundant natural resources in the form of coal, chromium ore, asbestos, gold, nickel, copper, iron ore, vanadium, lithium, tin, and platinum group metals (PGMs). Modern mining began in 1892 and by 1990 over 40 minerals were being exploited. Over the first 100 years of modern mining activity, the two most valuable products by far were gold and asbestos but this has changed with the emergence of nickel and ferrochrome as major exports and, very recently, the exploitation of PGMs platinum, palladium, and rhodium. Platinum was discovered on the Great Dyke by Maufe in 1925, two years after the discovery of the Merensky Reef in the Bushveld Complex, with the economic potential of the chromitite layers having been recognised a few years earlier.

All existing mines operate under constraints, most notably the exchange rate, which has decimated gold production, and shortages of power, skills, ore, and low-sulphur coal required by the ferrochrome sector. The platinum industry consists of three underground mines at Unki (Anglo American), Ngezi (Impala Platinum Limited (Impala)), and Mimosa. The Zimbabwean Government is currently exploring plans to encourage mining companies to set up a PGM smelter so that the PGM concentrate can be beneficiated in Zimbabwe. These plans and their implementation date have not been announced. According to [www.dotzedw.com](http://www.dotzedw.com), the mining industry in Zimbabwe contributes 70% to Foreign Direct Investment, 80% to exports, 19% to government revenues, 3% to direct formal employment, and 13.5% to National Income (Gross Domestic Product (GDP) and Gross National Income (GNI)).

### **2.2.4 Political and Financial Status**

Zimbabwe's economy depends heavily on its mining and agriculture sectors. Following a contraction from 1998 to 2008, the economy recorded real growth of more than 10% per year in the period 2010–2013 before falling below 3% in the period 2014–2017 due to poor harvests, low diamond revenues, and decreased investment. The economy contracted by 6.3% in 2019 ([www.cia.gov](http://www.cia.gov)) because of economic instability and the removal of subsidies on maize meal, fuel, and electricity prices; suppressed foreign exchange earnings; and excessive money creation. The onset of the COVID-19 pandemic and continued drought led to a 7.8% contraction in real GDP in 2020 ([www.cia.gov](http://www.cia.gov)). Lower mineral prices, infrastructure and regulatory deficiencies, a poor investment climate, a large public and external debt burden, and extremely high government wage expenses impede the country's economic performance. The real GDP improved to 8.5% in 2021. The GDP for 2021 is estimated at USD33.83 billion ([www.cia.gov](http://www.cia.gov)).

Until early 2009, the Reserve Bank of Zimbabwe (RBZ) routinely printed money to fund the budget deficit, causing hyperinflation. Adoption of a multi-currency basket in early 2009 – which allowed currencies such as the Botswana pula, the South African rand, and the United States dollar to be used locally – reduced inflation below 10% per year. In January 2015, as part of the government's efforts to boost trade and attract foreign investment, the RBZ announced that the Chinese renminbi, Indian rupee, Australian dollar, and Japanese yen would be accepted as legal tender in Zimbabwe, though transactions were predominantly carried out in USDs and South African rand until 2016 when the rands devaluation and instability led to near exclusive use of the USD. The government, in November 2016, began releasing bond notes, a parallel currency legal only in Zimbabwe which the government claims will have a one-to-one exchange ratio with the USD, to ease cash shortages. Bond notes began trading at a discount of up to 10% in the black market by the end of 2016.

The very high inflation rate in December 2019 was attributed by the RBZ to the shocks associated with the currency reforms pursued by the Zimbabwean Government in 2019 to rebalance the economy. After experiencing economic stability based on a fixed exchange rate multi-currency system for a decade, the country's currency reform journey which started in October 2018 through the reclassification of foreign currency accounts – separation of physical and virtual USD balances and subsequently by the establishment of an interbank market for foreign exchange in February 2019 – was perceived negatively by consumers and business. This led to the sharp depreciation of the local currency from ZWD2.5/USD in February 2019, at the commencement of the interbank foreign exchange market, to ZWD16/USD by the end of 2019. In June 2019, the RBZ abolished the multiple-currency system and replaced it with a new Zimbabwe dollar (the RTGS Dollar), which was the only official currency in the country between June 2019 and March 2020, after which multiple foreign currencies were allowed to be traded again.

The Zimbabwe Gold (ZiG; code: ZWG) has been the official currency of Zimbabwe since 8 April 2024, backed by USD575 million worth of hard assets: foreign currencies, gold, and other precious metals. It replaced the Zimbabwean dollar, which suffered from rapid depreciation, with the official exchange rate surpassing ZWD30,000/USD on 5 April 2024, while the parallel market rate reached 40,000 per USD. Annual inflation in Zimbabwe hit 55.3% in December 2023. Currently the USD:ZiG rate is 13.7358 (July 2024).

The RBZ, through its Exchange Control Division, administers and facilitates foreign investments into existing entities and operations which require specific Exchange Control approval. Foreign investors may invest up to 100% in unlisted companies for existing projects and Exchange Control permission is granted for such investments.

Zimbabwe guarantees investment security to all investors in line with international best practices. Zimbabwe is a signatory to a number of bilateral and international agreements. Furthermore, Zimbabwe has ratified Bilateral Investment Treaties (BITs) with Denmark, Germany, Netherlands, Swiss Federation, Yugoslavia, China, South Africa, and Russia.

There are still sanctions in place against certain individuals and corporations in Zimbabwe, relating to the Office of Foreign Assets Control list.

The World Bank has indicated that Zimbabwe has strong foundations for accelerating future economic growth and improving living standards ([www.worldbank.org](http://www.worldbank.org) Sep 25, 2023). Further to this, the World Bank has indicated that the economy has excellent human capital, comparable to that of upper-middle-income economies in Sub-Saharan Africa, although some skill shortages are emerging in some sectors. Moreover, Zimbabwe possesses abundant mineral and natural resources that, if well managed, can support the country's development objectives.

### **2.2.5 Mineral Licencing System**

Mining activity in Zimbabwe is open to both local and foreign individuals and companies. Mineral Resources of Zimbabwe are vested in the State through the President of Zimbabwe. The Mines and Minerals Act (Chapter 21:05) 38 of 1961, as amended (MMA), regulates the issue and control of mineral rights in Zimbabwe. It is administered through the Provincial Mining Director of each regional mining district.

The MMA identifies that mineral interest can be held under a Prospecting Licence, Exclusive Prospecting Order (EPO), Mining Claim, Mining Lease, Special Mining Lease or Special Grant. A mining claim covers a small area which differs in size, depending on whether the mineral targeted is a precious or base metal and, frequently, several claims are grouped to form a block of claims and registered on a single certificate. Over larger areas, a block of claims may be converted into a Mining Lease.

Of significance to Karo is the Special Grant and Mining Lease. When a Special Grant is issued for a mining operation, provisions in the Act apply to the registration of the mining locations. Where areas within the Special Grant are deemed to be open for prospecting, the MMA allows the Minister to create a registered block i.e. allowing others to prospect in the area. Typically, Special Grants are issued for a period of two years, which is renewable if there is satisfactory progress on the project. The holder of a registered mining location or of contiguous registered mining locations can apply for a Mining Lease in respect of a defined area. The Mining Lease is typically for life of mine (LOM) and the incentives arising thereof are governed by the MMA.

The claim or lease confers on the holder the exclusive right to explore and mine the claim in perpetuity, with the holder liable for fulfilment of certain conditions. Mining claims are dependent on the claim holder paying an annual inspection fee and obtaining an annual inspection certificate from the Provincial Mining Director. Failure to pay inspection fees may lead to forfeiture of the claim.

## 2.3 Legal Aspects and Permitting

**S1.5(ii)(iii), 4.3(iv), T1.5**

### 2.3.1 Business Arrangement

As at 30 September 2024, Tharisa holds a 76.51% interest in Karo Mining Holdings Limited, which in turn holds a 100% interest in Karo Zimbabwe Holdings (Pvt) Ltd, under which Karo Platinum is an 85% subsidiary. The mineral tenure for the Project is held under Karo Platinum. The balance of 15% shareholding in Karo Platinum is held by Generation Minerals (Pvt) Ltd, the representation of the Zimbabwe Ministry of Finance. The company structure relating to the Project is illustrated in Figure 2-4. The Tharisa attributable beneficial interest in Karo Platinum as at 30 September 2024 is 64.79%.

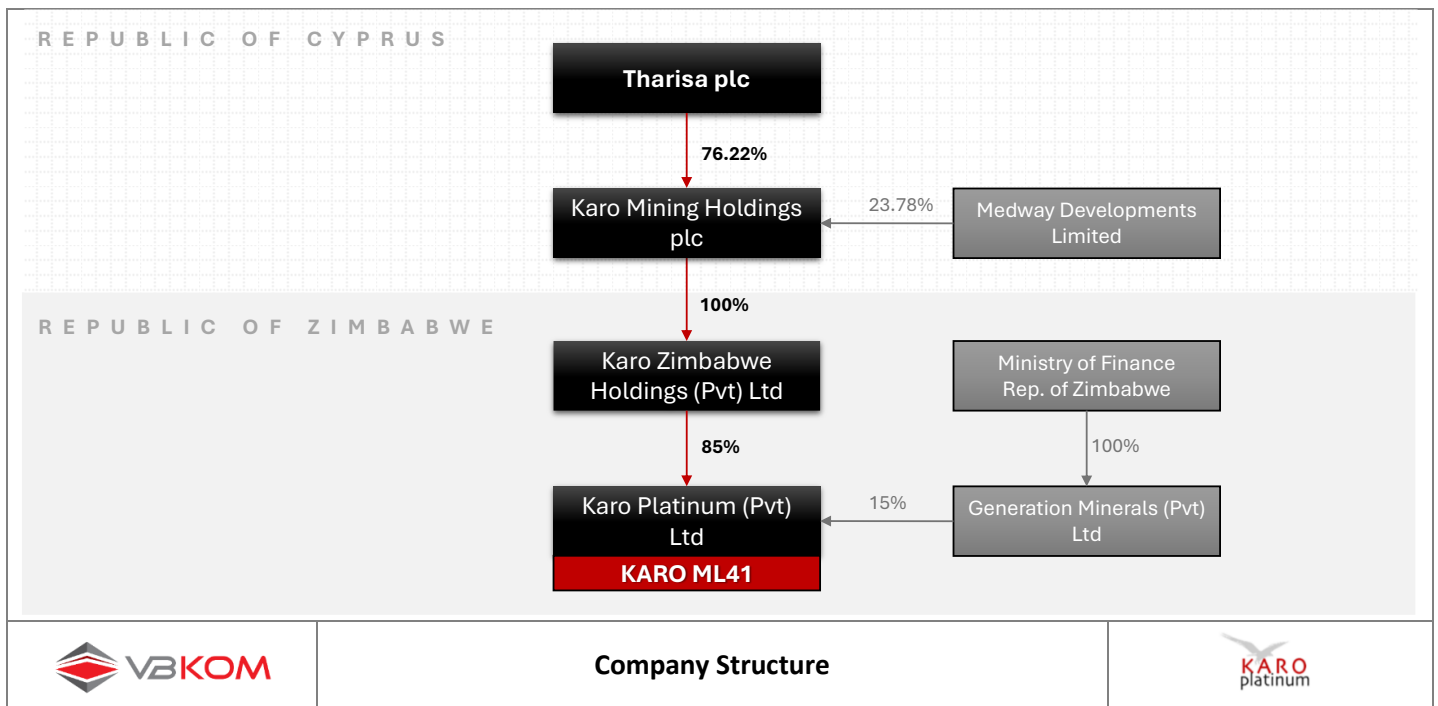


Figure 2-4: Company structure relating to the Karo Project.

## 2.3.2 Rights to Mine and Prospect

### S1.5(i)

In accordance with the MMA, Karo Platinum was awarded a Special Grant (number 6876) in the Mashonaland West Mining District on 8 June 2018. The 23,903-hectare area was allocated for the extraction of PGMs and was valid for a period of five years. Subsequently, the Special Grant was converted to a Mining Lease under registration number 41 (ML41), over the same concession area. The Mining Lease was issued on 12 March 2021 and is valid for the duration of the LOM (refer to Table 2-2). The latest annual inspection certificate issued towards ML41 (being the fourth obtained) is valid until 12 August 2025.

Table 2-2: Mining Lease summary.

Mining Lease Number	Holder	Mining District	Area (ha)	Principal Mineral	Other Minerals	Date of Issue / Addition	Valid Period
ML41	Karo Platinum (Pvt) Ltd	Mashonaland West	23,903	PGM	None	12-Mar-2021	Duration of LOM

Karo Platinum intends to extract base metals associated with the mining of the PGMs contained within the MSZ. Base metals were not specifically included in the Mining Lease issued. In terms of sections 150 and 169 of the MMA, provision is made to the mining lease holder the exclusive right to prospect for any minerals and, if discovered, the holder will have the right to extract such minerals within the vertical limits of the defined mining lease area. Based on this, and as confirmed by legal practitioners Gill, Godlonton & Gerrans based in Zimbabwe, Karo Platinum has the right to mine, extract, and sell associated base minerals contained within the PGM mineralisation of the MSZ. On 15 September 2022, Karo Platinum submitted written notification to the Mining Commissioner, in terms of section 150 of the MMA, that nickel, copper, and cobalt minerals were discovered at the ML41 property. Karo legal counsel has advised that the stamped acceptance of the Change of Notification, of which VBKOM has had site, allows for the extraction of such minerals. Further, no non-compliances or directives in this regard have been issued to Karo; the CPs are thus satisfied that Karo Platinum holds title to mine PGMs and base metals.

The CPs have inspected a scanned copy of the ML41 title and the latest inspection certificate and are satisfied with their validity. The ML41 is not subject to dispute as of the date of this CPR and there is no known title risk.

Figure 2-5 shows an outline of the approved ML41 and the encompassing farm boundaries.

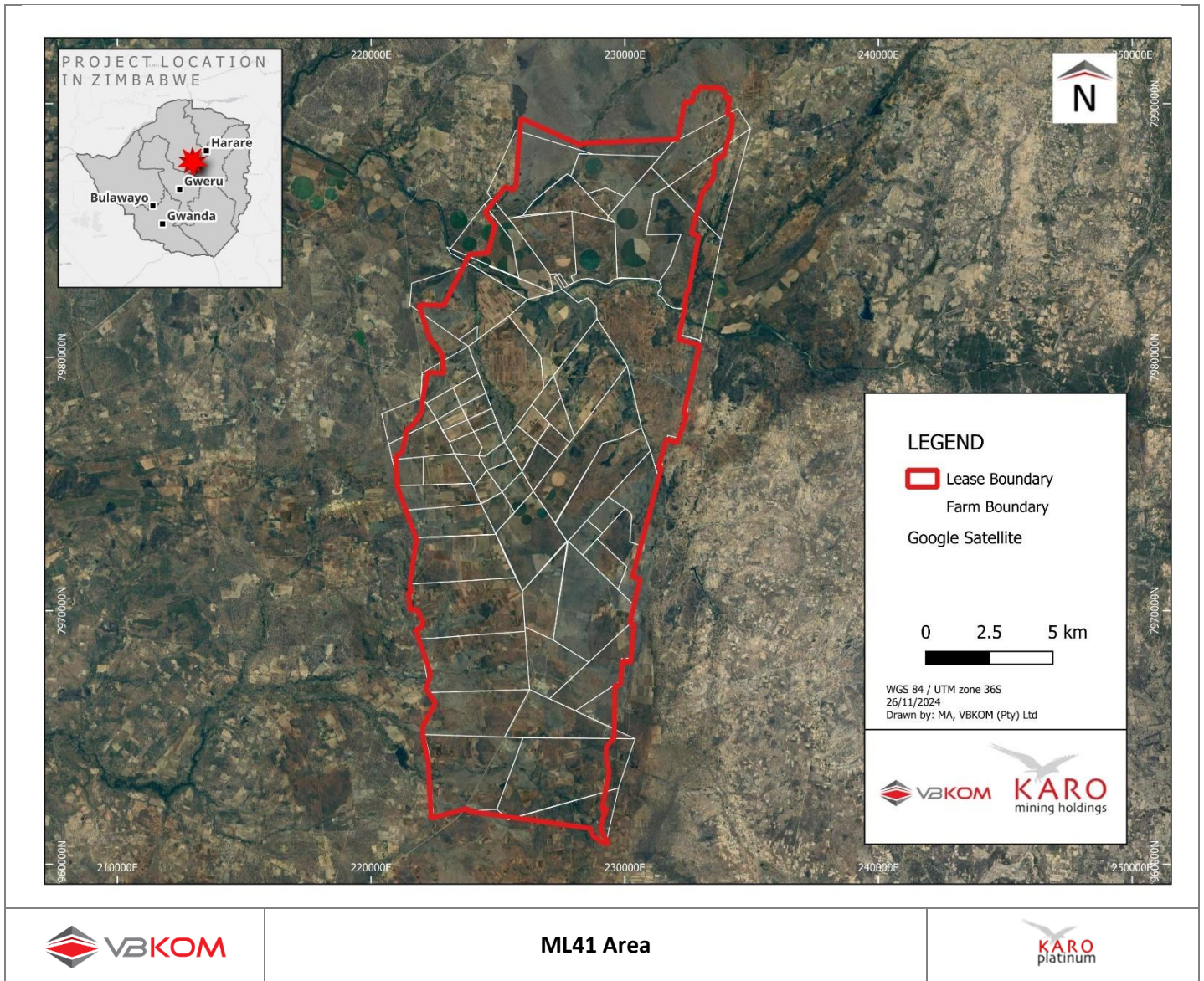


Figure 2-5: Mining Lease ML41 area.

### 2.3.3 Surface Rights

#### S1.1(ii), 1.2 (iii), 1.5(i)

The farm boundaries encompassed by the ML41 are defined by boundary peg markers. Records of farm demarcations and ownerships are retained at and maintained by the Ministry of Lands, Agriculture, Fisheries, Water and Rural Development.

In terms of Section 178 of the MMA, the claim holder's surface rights are limited to the use of the surface within the boundaries of the mining location for all necessary mining purposes. Section 178(2)(a)(b)(c) dictates that the owners of any registered mining location (including a Mining Lease) possess surface rights that include the:

- Use of any surface within the boundaries for all necessary mining purposes;
- Right to use, free of charge, soil, waste rock or indigenous grass situated within the boundaries of the claims for all necessary mining purposes; and

- Right to sell or dispose of recovered waste rock.

This generally provides sufficient rights to use the surface area encompassed by ML41 for the current and intended mining and processing activities of Karo Platinum. However, the MMA Amendment Bill makes instructions for landowner compensation in case of land loss due to mining activities in the form of land reallocation or outright purchase.

Various purchase or lease agreements related to surface rights or surface usage rights have been concluded as part of the consolidated project development plan for the plant and ancillary infrastructure, the camp, and the central sections of KPSE. Currently, Karo Platinum holds ownership over two farms, Coburn 3 (392 ha) and Coburn 8 (a 100-hectare subdivision) (title deed still being processed), while lease agreements are in place for four of the farms relating directly to the main operational site as illustrated in Figure 2-6. Additional land use agreements will be required to accommodate the other opencast pit areas. More land will be required to resettle affected parties as a result of the Chirundazi Dam development.

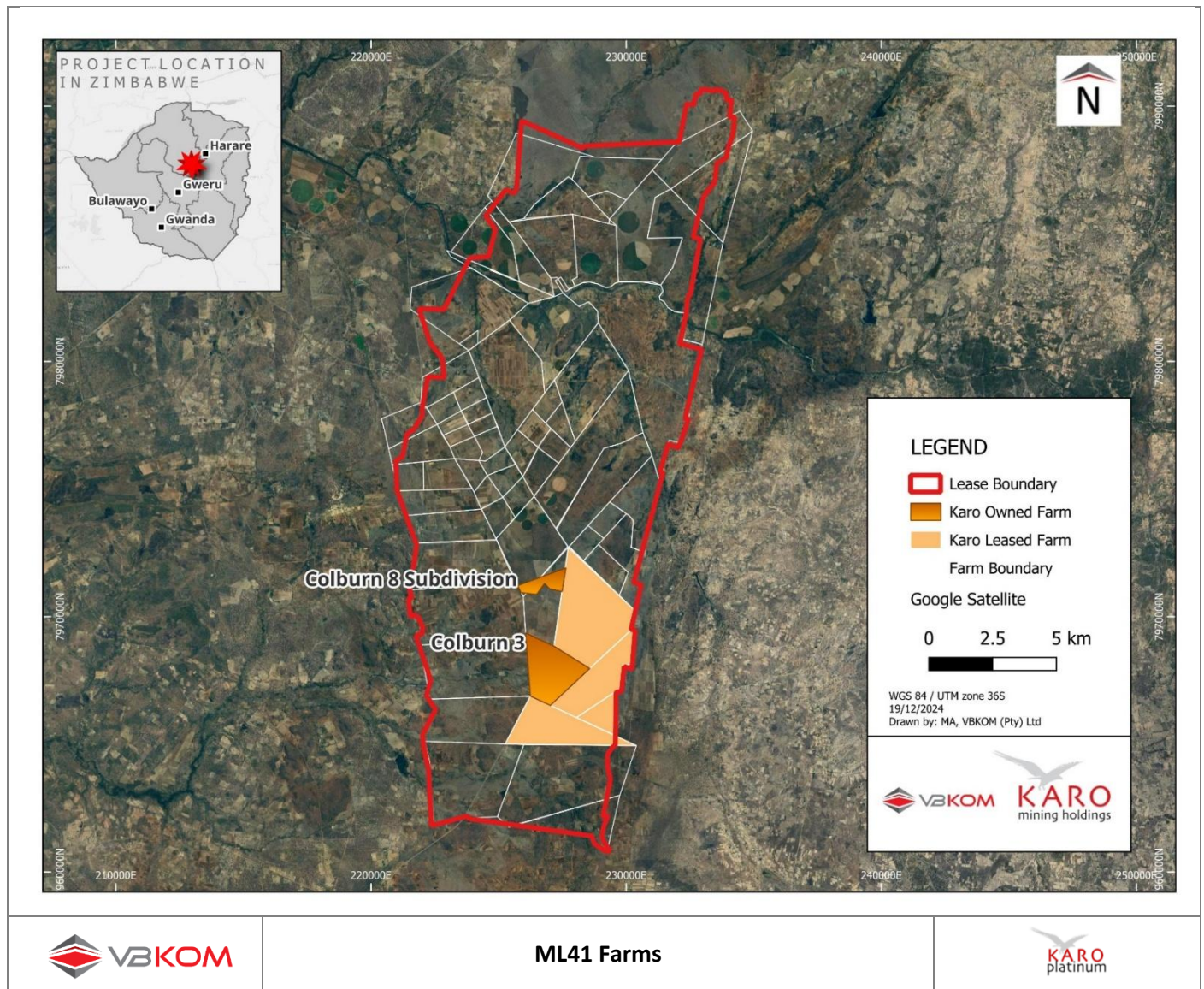


Figure 2-6: Farm areas.

As described in the FS, “negotiations are underway for the northern section part of KPSE (privately owned by a single owner) and the southernmost extremity, which is occupied by farmers who will need to be resettled. Engagement is well underway with all stakeholders, and a potential host site has been set aside for Karo’s use by the Ministry of Land Affairs. Pits KPE, KPNE and KPNW and Chirundazi Dam are located predominantly on communal land, which is owned by government and managed by the local authorities. Some engagement has been undertaken as part of the ongoing ESIA studies. Further discussions have also been initiated regarding the availability of replacement land for the households affected by the development of Chirundazi Dam. For the other pits, local authorities will be engaged 24 months before mining is due to begin, to secure access to replacement land.” The CPs are satisfied that there no associated risks with this approach, with ample time being provided to complete engagements and permitting processes, which will follow the approaches of the already approved areas. Karo actively manages scheduling of the processes and maintains relationships with stakeholders, which is deemed to be in favour of the future permitting activities.

A resettlement action plan for the southern portion of KPSE has been initiated, with relocation and compensation agreements with the Project Affected Persons (PAPs) in process. Resettlement operations undertaken are managed in line with the requirements of International Finance Corporation (IFC) Performance Standards.

Karo Platinum has obtained wayleaves, as listed in Table 2-3, granting land access for the power supply and bulk water supply projects.

Table 2-3: Wayleaves held.

Description	Issuer	Issue Date	Expiry Date
Wayleave for 132 kV & 11 kV Power Supply	Ministry of Lands (LE\4367)	26-Oct-23	Not applicable
Wayleave Bulk Water Supply		26-Oct-23	Not applicable

Based on the promulgated rights of the mining lease holder, the involvement of the Zimbabwean Government and the economic, social, and industrial importance of the project, it is reasonable to assume that any forward outstanding required surface areas to facilitate the development of surface infrastructure (to support the planned mining operations) will be obtained through the payment of appropriate compensation or commercial negotiations.

### 2.3.4 Environmental Permits

Several regulatory approvals related to environmental authorisations have been finalised to permit the project infrastructure development and planned mining activities. A number of Environmental Impact Assessment (EIA) certificates are held by Karo Platinum in respect of the Project Area, issued by the Environmental Management Agency (EMA) in terms of Section 100 of the Environmental Management Act [Chapter 20:27] (EMAct). The EIA certificates are issued for the following operational activities, are currently active, and are renewable annually or biannually as prescribed:

- Platinum mining and processing at KPSE
- Construction and operation of bulk power facilities
- Construction and operation of bulk water supply networks
- Additional platinum exploration activities

The valid EIA certificates are summarised in Table 2-4, permitting Karo Platinum to undertake the listed activities in accordance with the EAct under the specified terms and conditions. The CPs have inspected scanned copies of the certificates and are satisfied with their validity.

Table 2-4: EIA certificates held in respect of the Project Area.

Activity	Licence Number	Issue Date	Expiry Date	Comment	Renewal Date
Platinum Prospecting	L0000016628	25-Apr-24	25-Apr-25	-	25-Feb-25
Platinum Mining and Processing	L10000027530	19-Jul-23	19-Jul-25	<ul style="list-style-type: none"> <li>• KPSE only</li> <li>• Replaces EIA Certificate 8000110603</li> <li>• Includes addendum dated 03-Jul-24 for establishment of batching plant for concrete production needed during construction of concentrator and associated supporting infrastructure</li> <li>• Includes amendment dated 19-Jul-23 for moving of camp site position to a site on Coburn Farm outside TSF zone of influence</li> </ul>	20-Jul-25
Bulk Power Supply	8000117670	11-May-23	10-May-25	-	01-Apr-25
Bulk Water Supply	8000124934	20-Oct-23	20-Oct-25	Chiganze Dam	01-Sep-25

The CPs are not qualified to provide legal opinion, but have identified the requirement for a Change Notification to be submitted to the EMA for the certificate to reflect PGMs rather than only platinum, as well as base metals mining and processing. No changes in supporting processes or documents are triggered such as ESIA's – all original applications included the mining and processing of PGMs and base metals. The reflection of *platinum* rather than *PGMs* is considered nomenclature generalisation common in Zimbabwe. Karo legal counsel has advised that EMA notification is under preparation, and annual renewal application scheduled for July will refer to PGM and base metals. The CPs are satisfied that there no associated risks are identified.

Based on the EIA certificate issued for the KPSE Mining and Processing, certain special conditions were noted that included the submission of the approved designs for the tailings storage facility (TSF) and processing plant (including the design report) before the commencement of construction activities, as well as submission of the approved Siting of Works Plan by the Ministry of Mines and Mining Development to the EMA before the commencement of production operations:

- The design report for the processing plant as well as the approved Siting of Works Plan were submitted to EMA in December 2022.
- A TSF design report for a 205 ktpm operation was submitted to the EMA as per the conditions and accepted in July 2023.

Current studies focus on the establishment of a 220 ktpm plant. A design change notification is being prepared for submission to the regulator. The increased plant capacity affects the rate of rise of the TSF: this does not affect the

TSF design, but the regulator will be notified about the change in the rate of rise. There are no risks to these authorisations identified with these amendments.

In addition to the above, Environmental and Social Impact Assessment (ESIA) studies are underway in support of submitting new applications to obtain EIA certificates for the following:

1. Pits Extension KPSE
2. Chirundazi Dam
3. Waste Infrastructure

For the Waste Infrastructure, preliminary work toward an ESIA for a waste disposal site commenced in 2023, since which:

- A Waste Management Plan was developed and approved in March 2024, in accordance with an order received by the EMA (Order 0018801) in February 2024. This is an interim plan, pending the development of a dedicated Waste Management Facility.
- A suitable site has been identified to host the Karo Waste Management Facility and key equipment specifications have been defined.
- A prospectus was submitted to EMA on 11 November 2024 for this dedicated facility, with the ESIA to follow. The ESIA is underway and due to be submitted to the EMA in March 2025.

An addendum ESIA commenced in 2023 for the development of additional opencast pits (KPE, KPNE, and KPNW) and supplementary supporting infrastructure. The ESIA for the additional pit areas was halted in late 2024. The Company has decided to make this application at a later date, once mining at KPE is imminent. The rationale for this is that the additional pit areas are only targeted later in the total LOM, and that ESIA studies may be obsolete by the time development of these pits can commence.

### 2.3.5 Water Use Authorisations

Appropriate authorisations (surface and groundwater abstractions) for the project in terms of the Water Act (Chapter 20:24 of 1998) are in place. These are all issued in the name of Karo Platinum and are summarised in Table 2-5.

Table 2-5: Water abstraction permits held in respect of the Project.

Description	Permit Issuer	Permit Number	Issued Date	Expiry Date	Allocation
Water Abstraction Permit Mupfure	ZINWA	Water Supply Agreement	01-Nov-19	31-Dec-24	30,000 m <sup>3</sup> for the period
Temporary Ground Water Abstraction Permit	Sanyati Catchment Council	23218G (replaces 2323107G)	08-Jan-22	26-Sep-27	1,627,258 m <sup>3</sup> /a from 10 boreholes + 1 shaft
Water Abstraction Permit Teith Dam	ZINWA	Water Supply Agreement	15-Mar-23	31-Jul-42	800,000 m <sup>3</sup> /a
Desilting Permit for Chiganze Dam	Muzveze Subcatchment Council	Permission Letter	12-Jun-23	Valid for life of dam	-

Description	Permit Issuer	Permit Number	Issued Date	Expiry Date	Allocation
Chirundazi Surface Water Provisional Permit	Sanyati Catchment Council	23202	11-Mar-24	11-Jun-25	Abstraction 2,100 ML Storage 5,000 ML

There is a water balance shortfall in the current authorisations. To address this, a provisional water permit has been granted to Karo Platinum by the local Sanyati Catchment Council for the development of the Chirundazi Dam, with a total capacity of 5,000 ML in phase 1 and 11,000 ML in phase 2. Per the water permit, 2,100 ML have been allocated to Karo in phase 1, thereby covering 100% of requirements. The supporting specialist studies for the ESIA have been completed for this new dam. The ESIA is due to be submitted to EMA in February 2025, with approval expected shortly after and construction planned to be completed in time to facilitate water catchment during the 2025–2026 rainy season.

### 2.3.6 Other Permits

Karo Platinum holds a number of additional permits for the proposed mining operation, including Effluent Disposal, Hazardous Substance, and Air Emissions licences, as summarised in Table 2-6. Each licence is renewable either quarterly or annually with fees payable.

Table 2-6: Additional operational permits held.

Description	Licence/ Permit Number	Issued Date	Expiry Date
<b>Air Emissions</b>			
Air Emission Licence (Location: Laboratory)	L10000032622	<sup>1</sup> (2024)	31-Dec-24
Air Emission Licence (Location: Laboratory)	L10000032619	<sup>1</sup> (2024)	31-Dec-24
Air Emission Licence (Location: Chiganze Farm)	L10000032620	<sup>1</sup> (2024)	31-Dec-24
Air Emission Licence (Location: Canteen)	L10000032621	<sup>1</sup> (2024)	31-Dec-24
<b>Hazardous Substances</b>			
Hazardous Storage and use Licence (Fuel - Diesel)	8000124094	21-Sep-23	<sup>2</sup> 20-Sep-24
Hazardous Substance Importation Licence (Mineral processing & lab chemicals)	8000104466	29-Nov-23	28-Nov-24
Hazardous Storage and Use Licence (Mineral processing & lab chemicals)	8000104468	29-Nov-23	28-Nov-24
Hazardous Substance Transportation Licence	TBA	<sup>2</sup> New application	
<b>Effluent</b>			
Effluent Disposal Licence (Septic tanks and soak away)	L0000016766	25-Apr-24	31-Dec-24
Effluent Disposal Licence (Mining)	L0000016767	25-Apr-24	31-Dec-24

**Notes:**

1. Unknown, licence copy not provided to VBKOM.
2. Payment made, waiting for issuance of licence by EMA.

Several additional permits will be required for full operation of the intended mine. These are listed overleaf. Applications must be submitted timeously before the associated activities can commence:

- Sand and clay extraction licence
- Air Emissions licence
  - Plant stack 1
  - Plant stack 2
- Effluent Disposal Licence
  - Concentrator Plant pollution control dam
  - Workshop oil separator
  - Vehicle wash bay
- Solid Waste Disposal Licence
  - Municipal and office waste
  - TSF
- Hazardous Waste Generation Licence – lead, acid, oils, chemicals

Certain portions of the ML41 land overlap with a special economic zone (SEZ) declared by the Zimbabwe Special Economic Zones Authority in October 2019. Karo Platinum holds a SEZ Investors Licence issued on 9 October 2019 and expiring on 8 October 2029. In terms of this licence, the Company is obliged to make an investment to the value of USD475 million.

### **2.3.7 Legal Proceedings**

#### **S1.5(iv)(v)**

The CPs have relied on information provided by the Client that all necessary statutory mining authorisations, permits, and licences have been obtained or where they have not, the process for application is underway. There is reasonable basis to believe that all outstanding applications will be approved timeously.

The CPs are not aware of legal impediment for the continued mining operation or any undisclosed situation that would affect the likely viability of the Project and/or the estimation and classification of Mineral Resources and Mineral Reserves as reported in this CPR.

The CPs are not aware of any legal proceedings against the Company or other such factors or risk that may adversely affect access or title to the property or affect its ability or right to exploit the Karo Mineral Resources and Mineral Reserves.

### **2.4 Royalties and Liabilities**

#### **S5.6(vii)**

A SEZ is located on certain pieces of land covered by grants issued to Karo and various subsidiaries. With the declaration of SEZ status, Karo and its licenced subsidiaries will be entitled to several fiscal incentives that further enhance the economics of the project including reduced tax rates, duty-free importation of raw materials, and equipment and exchange control rulings. These Mining Development Agreement (MDA) incentives by the Zimbabwean Government are applied for a certain period to the Karo Platinum Project in terms of Royalties and Tax.

## 2.4.1 Government Royalties

### S1.6(i)

The Zimbabwean Government's Mining Development Agreement (MDA) Incentive Period is applied from the start of the project until February 2032, thus reducing the royalty percentage of Platinum (Pt) and Palladium (Pd) from 7% and 4%, respectively, to 2% each during the MDA Incentive Period.

The royalties applied during the MDA Incentive Period are compared to royalties post-MDA period in Table 2-7.

Table 2-7: Summary of royalty percentages during and post-MDA incentive period.

Royalty	MDA Period (%)	Post-MDA Period (%)
<b>PGMs</b>		
Pt Royalty	2	7
Pd Royalty	2	4
Rh Royalty	4	4
Au Royalty	5	5
Ru Royalty	4	4
Ir Royalty	4	4
<b>Base Metals</b>		
Ni Royalty	2	2
Co Royalty	2	2
Cu Royalty	2	2

The total royalties (including base metals) amount to USD91.1 million over the LOM period.

## 2.4.2 Liabilities

### S1.7(i)

As part of the closure plan and fulfilment of the provisions of the MMA and EAct, operating mines are required to set aside money for rehabilitation and closure. Amendments to the MMA are being drafted by the Ministry of Mines to stipulate conditions for environmental protection through the Safety, Health and Rehabilitation Fund.

As at the effective date of this CPR, no fees are due as no statutory instrument has been gazetted implementing an environmental fund. As such, no environmental rehabilitation trusts and guarantees have been established for Karo in terms of Zimbabwean law. SLR Consulting (Africa) (Pty) Ltd (SLR) compiled a Preliminary Mine Closure Plan in April 2022, which assessed the LOM closure liability estimate for Karo. The liability was calculated at USD19,671,428 (excl. VAT) to achieve the activities outlined in Chapter 8.7.5. No money is set aside for the closure liability, but it is accounted for by the Company within accounting records, albeit minimal currently as minimal mining has taken place. The liability is modelled as equal monthly amounts as part of Sustaining Capital from the last 12 months of operations and 60 months thereafter.

It is noted that the pits and waste rock dump (WRD) designs have been altered in the declaration of the current Mineral Reserves, and the closure quantum thus requires revision.

### 2.4.3 Other Payments

Annual payments to retain registration of the ML41 are due to the Provincial Mining Director.

Other payments due are the unit taxes/levies to the local Municipality and are catered for. These payments do not affect mining operations.

## 2.5 Adjacent Properties

### S1.3(i)

The Karo ML41 lies central in the Selous/Hartley Complex, which is the deepest portion of the Great Dyke for PGMs mining. To the north, Karo shares a boundary with Global Platinum Resources while to the south, Karo has a common boundary with the Zimplats Ngezi Mine (Figure 2-7). To the east and west Karo shares a boundary with Salene Chrome Zimbabwe, a related party with chrome exploration and mining concessions.

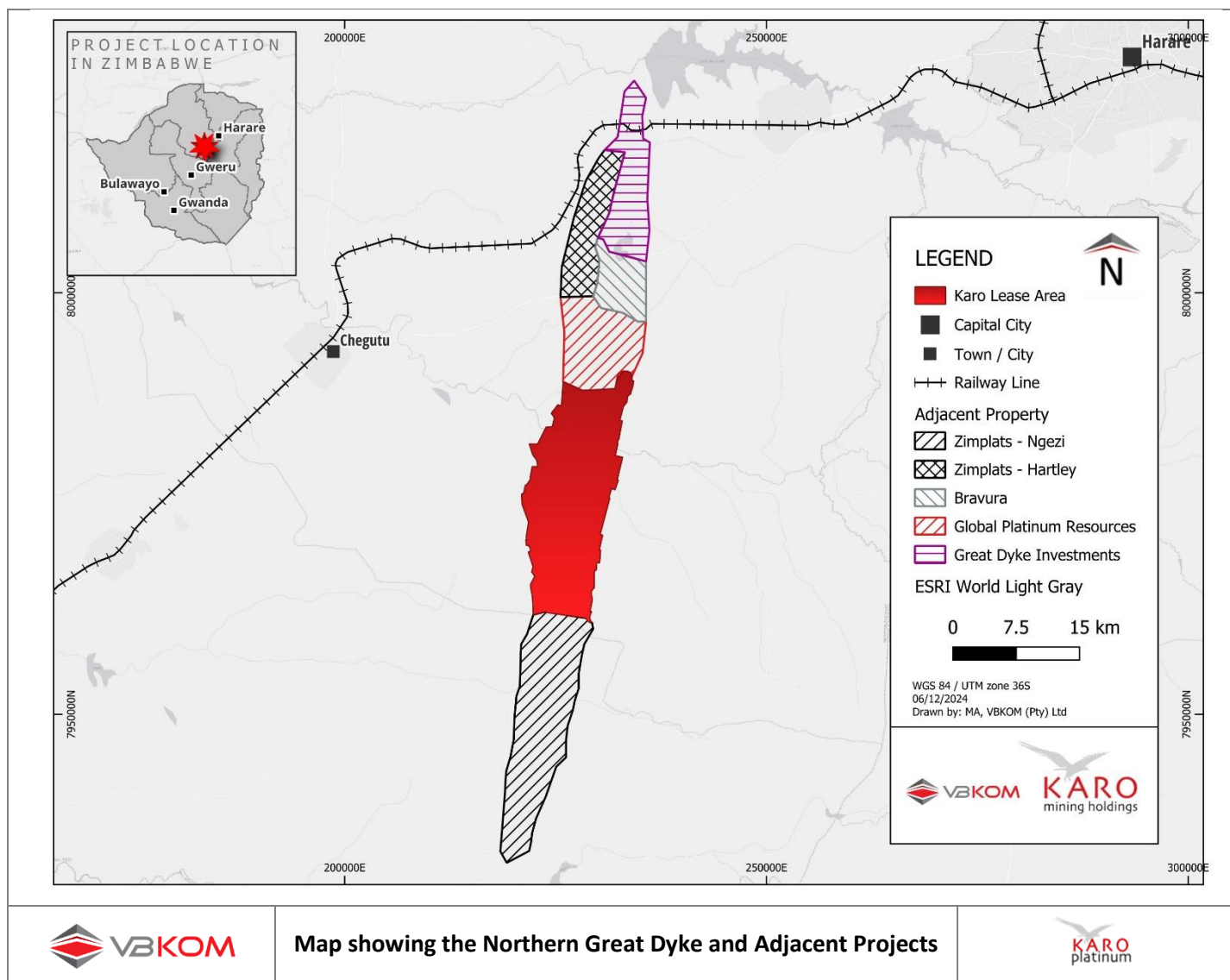


Figure 2-7: Map showing adjacent projects and the Mine's northern Great Dyke.

While public information regarding Global Platinum Resources could not be obtained, it appears from general media articles that the project has been stalled for a number of years. Zimplats is listed on the Australian Securities Exchange (ASX:ZIM) and publishes annual reports in accordance with continued listing obligations.

Hartley Platinum Mine at Selous, currently held by Zimplats, was originally a Broken Hill Proprietary Company Limited (BHP) Platinum mine and opened in 1995 but, following a string of geological and associated mining-related problems, the underground operations were suspended in June 1999. BHP's interests in Hartley Platinum were sold to Zimplats, which began to develop a new open pit mine further south, at Ngezi. The Selous Metallurgical Complex (SMC) plant at Hartley was subsequently restructured for the opencast mining at Ngezi. Operations here began in 2001, targeting PGM mineralisation in the MSZ.

The Zimplats mining operations consist of two underground mines on full production, namely Mupfuti and Bimha mines, while a third mine, Mupani, is under development. Pillar reclamation has been commenced at Rukodzi Mine (which was depleted in June 2022) after successful trial of the pillar reclamation project in FY2023. Ngwarati Mine has been placed in care and maintenance and is also earmarked for pillar reclamation. In their 2024 financial year, Zimplats reported 7.9 Mt of mine production tonnes, with 641 koz 6PGE sold.

The operation utilises a mechanised room and pillar mining method on a narrow reef to extract ore from stopes with a nominal planned width of 2.5 m. Ore from the mines is processed by two concentrators, one at the SMC and the other at Ngezi. A third concentrator plant (0.9 Mtpa) located at Ngezi was commissioned in September 2022.

The Zimplats Ngezi Mineral Resources and Mineral Reserves declaration (2024) is presented in Table 2-8 and Table 2-9, respectively, reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves, 2012 Edition (JORC Code), as presented in their published Integrated Annual Report 2024. The Mineral Resources are reported inclusive of Mineral Reserves.

Table 2-8: Zimplats Mineral Resources as at 30 June 2024.

Mineral Resource Category	Tonnes (Mt)	6PGE Grade (g/t)	6PGE Oz (Moz)
<b>Mining Lease 36 (ML36) (Hartley)</b>			
Measured	19.3	4.08	2.53
Indicated	139.9	3.84	17.27
Inferred	53.2	3.89	6.66
<b>Total</b>	<b>212.3</b>	<b>3.88</b>	<b>26.5</b>
<b>Mining Lease 37 (ML37) (Ngezi)</b>			
Measured	231.8	3.48	25.98
Indicated	334.6	3.53	37.97
Inferred	122.0	3.47	13.62
<b>Total</b>	<b>688.4</b>	<b>3.50</b>	<b>77.6</b>
<b>Oxides</b>			
Measured	-	-	-
Indicated	29.9	3.38	3.25
Inferred	35.8	3.43	3.95
<b>Total</b>	<b>65.7</b>	<b>3.41</b>	<b>7.2</b>
<b>Grand Total</b>	<b>966.4</b>	<b>3.58</b>	<b>111.2</b>

Table 2-9: Zimplats Mineral Reserves as at 30 June 2024.

Mineral Reserve Category	Tonnes (Mt)	6PGE Grade (g/t)	6PGE Oz (Moz)
Proved	126.6	3.33	13.5
Probable	120.7	3.25	12.6
<b>Total</b>	<b>247.3</b>	<b>3.29</b>	<b>26.2</b>

While mineralisation and quantification of Mineral Resources and Mineral Reserves at Ngezi are not necessarily indicative of mineralisation and PGM content at Karo, the properties lie contiguous along the northern extent of the Great Dyke, where PGMs occur in a similar fashion.

## **3 ACCESSIBILITY, PHYSIOGRAPHY, CLIMATE, LOCAL RESOURCES, AND INFRASTRUCTURE**

### **S1.1(ii), T1.5**

#### **3.1 Topography, Elevation, Fauna, and Flora**

Although the Great Dyke is a dominant topographic feature across Zimbabwe, the landscape is generally flat with little topography, except for the drainage lines of the Chirundazi and Mupfure Rivers. The project site has an average elevation of 1,239 metres above sea level (masl) with a gradient fall-off to the north towards the Mupfure River.

Rutara Hills (1,346 masl) are found about 200 m southeast of the Karo project site. There are also hills inside ML41 area near Rutara Hills, and one of these hills (1,293 masl) has been identified as a heritage site with historical farm workers graves. Other hills of heritage significance within the project site include the apostolic gathering site 1.6 km north of Mupfure River (1,231 masl), the low stone-walled structures north of Mupfure River (1,245 masl), and the extensive area of historical heritage materials (1,238 masl). The elevation profile of the Karo Platinum mining lease area is presented in Figure 3-1. Note that Figure 3-1 is to illustrate the elevation profile only.

The Mupfure River flows from east to west across the ML41 some 6 km south of the northern boundary. Part or all of the original farms (Hillview, Oxford, Zimbo Drift, Norwood, Stokesay, Dorothy Hill, Angler's Rest, Kincarrathie, Maynard, Umfulia, and Homedale) are situated north of the Mupfure River. The Chimbo River transects the northeast corner while the service road to Three Cheers Mine passes across these farms.

The western mining lease boundary passes south from Hartley Hill and crosses the Mupfure River just west of the Upper Seignury Weir and continues over some 24 km to the old Zinca Platinum Mine on Leny Farm. The southern boundary of the mining lease area is shared with Zimplats Mining Lease 27 Extension I, extending east across the Great Dyke for approximately 7 km to a point south of the now-disused Rutara Hills chrome mine. The irregular eastern boundary then follows north for about 28 km, crossing the Mupfure River to the southern extent of Zimbo Drift Farm. The Chirundazi River marks the boundary between the original farms and Mhondoro Communal Land to the east. The upper reaches of the Sokose and Leny rivers drain west across the southern portion of the mining lease.

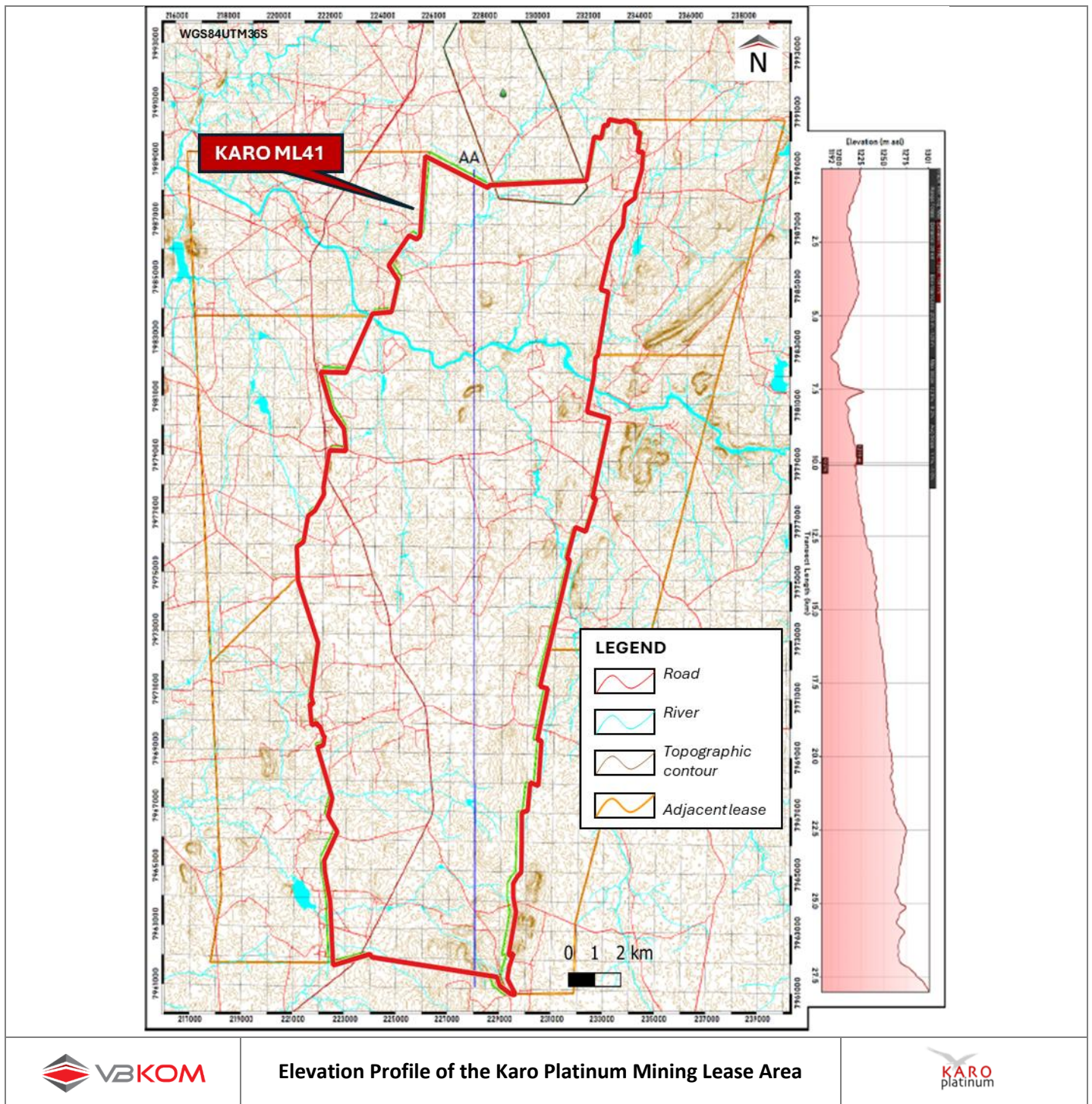


Figure 3-1: Elevation profile of the Karo Platinum Mining Lease area (green outline). The elevation profile along Section AA (blue line) is shown on the right-hand side.

The vegetation is Deciduous Miombo Savanna Woodland characterised by extensive grasslands and forested areas. Large concentrations of vegetation are observed along streams and within pockets and sections of the area which have experienced minimum disturbances in recent years. The forest is mainly the indigenous *Brachystegia* sp and the exotic *Eucalyptus* spp. The soils vary from red clay to sand soils with the project area being covered with typical black cotton soils that are a weathering product of mafic and ultramafic rocks. These conditions promote rapid vegetation growth with grasses growing to a height of about 2.5 m.

The flat topography coupled with relatively fertile soils resulted in much of the area being cleared for extensive commercial agriculture. The site is largely rural with most land used for mining, commercial and subsistence farming, resulting in highly modified natural vegetation with most of the natural bush being removed. Numerous boreholes and shallow wells have been developed for domestic, stock watering and supplementary irrigation.

Due to the seasonality of the rainfall, there are large-scale pivot irrigation systems using water from the Mupfure River and, further south, the irrigation is dependent on a system of groundwater boreholes. Various seasonal crops (e.g. maize, sorghum, sunflowers) are cultivated, with virtually no human settlements.

The vegetation types found on the site are common elsewhere in the country, and this is reflected in the avifauna. A total of 67 bird species are recorded, 38 of which are found in the riparian habitat and 24 in the Miombo woodlands. Intra-African migrant species like Yellow-billed storks that breed in southern Africa also occur.

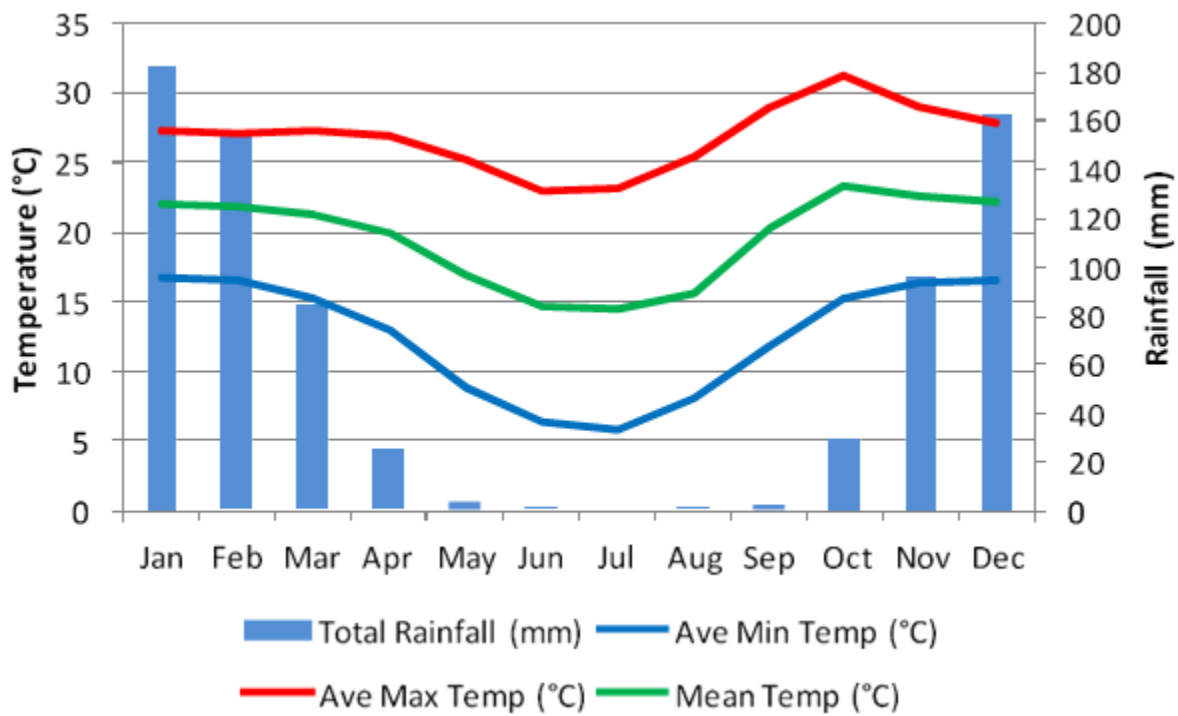
It is unlikely that there are significant populations of larger wild animals remaining given the level of land clearance and human settlement and disturbance. Only Vervet Monkeys or Tsoko/Shoko (*Chlorocebus pygerythrus*) and spoor of Common Duiker or Mhembwe (*Sylvicapra grimmia*) have been seen. Some 25 species of frogs may occur, none of which are endemic or rare or specially protected. Cattle and goat herds occur around the various homesteads and villages.

### 3.2 Climate and Weather

Zimbabwe is a subtropical country. A typical summer rainfall climate prevails in the area (refer to Figure 3-2). Summer rain occurs mainly in the form of thunderstorms with a mean annual precipitation of approximately 750 mm. Winters are cool and dry. Extreme weather conditions occur in the form of occasional hailstorms. The average annual temperature for the year ranges between 6°C and 30°C. The hottest months are September to March. The coldest months are June and July.

Wind direction is dominantly from the east-northeastern (ENE) and northeastern with eastern (NEE) southeastern winds being less frequent. Wind speeds rarely exceed 28 km/hr and are invariably gusty, being most frequent from August through October and during rainstorms.

The CPs have not identified any major climate or weather-related risks to the planned operations. Mining operations can be expected to be undertaken throughout the year.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave or Total
Ave Min Temp (°C)	16.8	16.5	15.3	13.0	8.9	6.4	5.9	8.0	11.8	15.3	16.4	16.6	12.6
Ave Max Temp (°C)	27.3	27.2	27.4	26.9	25.2	23.0	23.2	25.5	29.1	31.3	29.1	27.8	26.9
Mean Temp (°C)	22.0	21.8	21.3	19.9	17.0	14.7	14.5	15.7	20.4	23.3	22.7	22.2	19.6
Total Rainfall (mm)	183	156	85	25	4	1	0	1	3	30	96	163	747

Source: [www.en.climate-data.org](http://www.en.climate-data.org)

Figure 3-2: Climatic data for Chegutu, Zimbabwe.

### 3.3 Property Access

The main Zimplats tarred road from the Selous traffic circle to Ngezi Mine (~70 km south) runs outside but close to the Karo mining lease western boundary before cutting into the Karo mining lease at the central position, just South of the Mupfure River at the Tennis junction (refer to Figure 3-3). The Ngezi road continues further down south to the Ngezi mine, crossing the Karo mining lease southern boundary on the way. The Tennis junction, just south of the Mupfure River is where the north-south Zimplats Ngezi road intersects with the west-east Chegutu to Mubaira (Mhondoro) Road. The Chegutu-Mubaira straddles the central portion of the Karo mining lease area from the Tennis junction in the west to just before the Chirundazi primary school in the East. This is a gravel road which is well-maintained. There are a number of service roads, mostly east and west of the main Zimplats tarred road, which link what are now numerous farming subdivisions in the area.

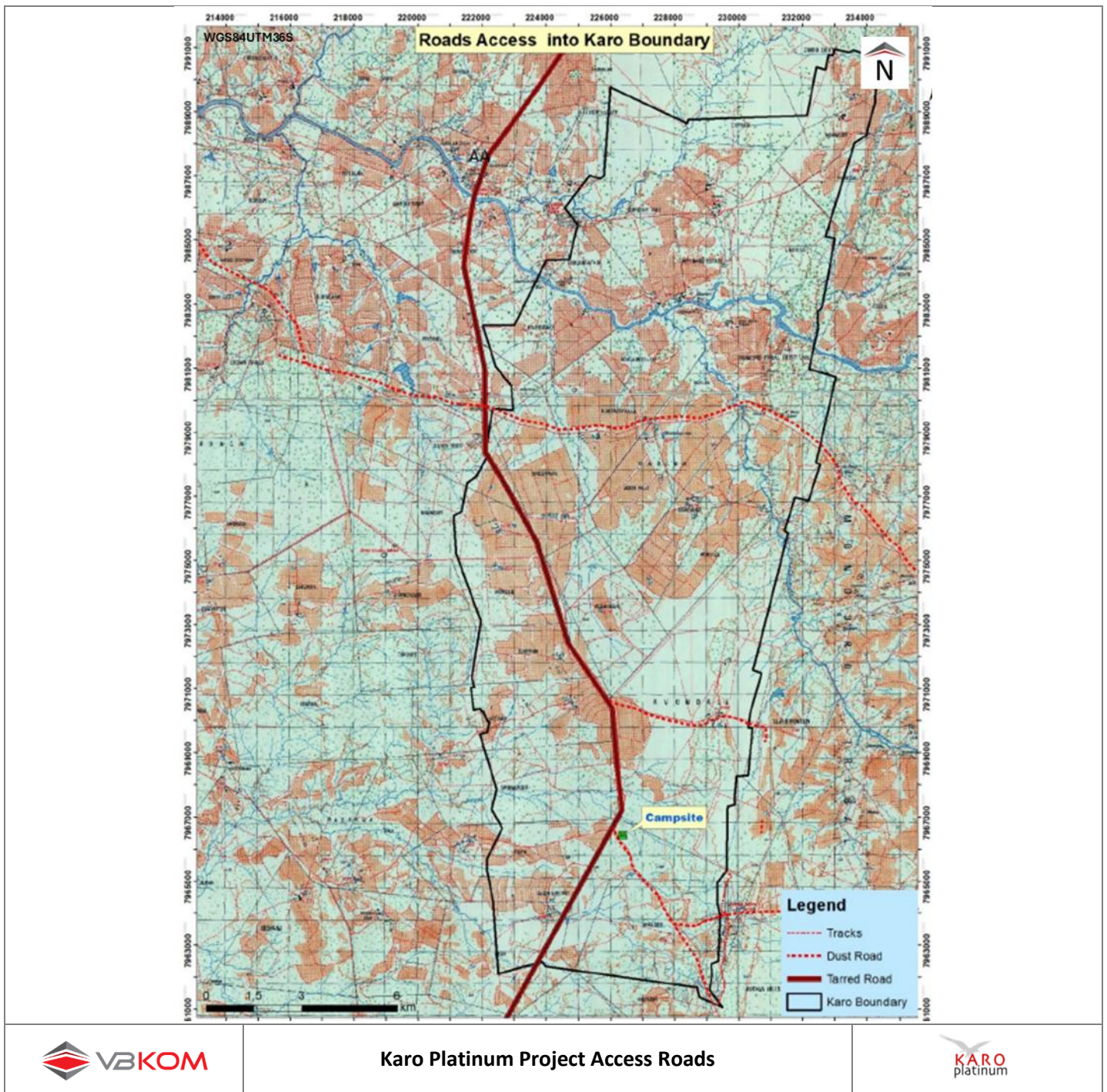


Figure 3-3: Access roads for the Karo Platinum Project.

All external roads, including access to the property, have been constructed and are in use. Haul roads to the TSF and the haul roads to the pit will be constructed by the mining contractor.

### 3.4 Proximity to Population Centres and Nature of Transport

The closest settlements are Norton, Chegutu, and Selous. These towns are situated along the A5 National Road that links to Harare and Bulawayo. Chegutu is a town some 105 km from Harare and is home to some 65,800 people (2022 census) which provides services to the local farming district (maize, tobacco, castor beans, cattle). Zimbabwe’s largest textile-weaving mill (cotton) was located at Chegutu. There are various mining activities related to gold, platinum,

chrome, and limestone deposits nearby. Chegutu is situated some 30 km from the Karo project area on a direct NW dirt road or 50 km via the main Ngezi and A5 tarred road. Selous is a smaller settlement, some 70 km from Harare along the A5, approximately 15 km immediately north of the project area. Both Selous and Chegutu have basic amenities in terms of health and education. Norton is situated 40 km from Harare on the A5 and also has similar basic infrastructure and amenities with a population of approximately 87,000 people (2022 census). The town is 50 km from the Karo project area along the A5 and Ngezi tarred road. Other mining operations in the area have historically bussed in employees from both Norton and Chegutu. A similar approach will be taken by Karo.

The capital Harare is the largest city in Zimbabwe. The city hosts numerous international hotels and other amenities including health and education facilities. It is the hub of the local transport system with an international airport. Lake Chivero on the Manyame River, near Norton, provides the main water supply to Harare. Harare has a population of 1.6 million (2022 census).

### **3.5 General Infrastructure**

#### **S5.4(i)**

Prior to implementation of the project, limited infrastructure was available. The project will provide for bulk water and power infrastructure, as well as some allowances for accommodation (refer to paragraph 8.6 for infrastructure planning).

#### **3.5.1 Communication**

Telecommunication signal in the project area is generally poor, with pockets where there is no signal. A permanent solution needs to be investigated to improve signal throughout the project area; this could include construction of a booster tower(s) by the service providers.

#### **3.5.2 Existing Mining Infrastructure within the Mining Lease Area**

Within the mining lease area, there are the old Dawn mine chrome workings by Rio Tinto which occur 1 km west of Chirundazi School in Mhondoro. The mine consists of an abandoned concrete-lined decline, the masonry portal, which is partially collapsed. The workings are flooded below an inclined distance of 53 m or at 20 mbs, thus preventing any illegal mining activity. The mine relates to the chromite seam, which was also being investigated for its sulphide mineral association. There are open pits developed on strike to a depth of about 7.5 m over distances of approximately 100 m north and south. Spoil heaps are present on both the footwall and hanging wall sides of these pits, which have probably been informally reworked for chromite.

Northwards along the strike of the chrome seam and beyond the road into Mhondoro, still within the Karo Platinum mining lease area, are numerous informal chromite workings in the form of pits and down-dip undercuts. During the field visits in September 2018, it was noted that an interlinking 'road' had been scraped and neat 1-tonne stacks of chromite ore had been placed from the workings for later collection from a buyer, presumably illegally operated within the Platinum mining lease area, but possibly associated with adjacent chromite claims ranging along the eastern boundary. The mining practices are dangerous and haphazard. Many of these informal miners have been in practice for many years and will represent a social challenge that will have to be addressed with respect to rehabilitation of the workings.

Such activities for chromite are not apparently present along the western boundary of the platinum mining lease but, significantly, the Hartley Hills in the far northwest abound with informal gold miners (makorokoza). Such miners are

also known to be very active at the Three Cheers Mine and on other claims both east and west of the Karo Platinum mining lease boundary. However, their activities appear not to encroach into the Karo Platinum mining lease area.

The only other mining activity within the Karo Platinum mining lease area is that of Rio Tinto's Zinca project on Leny Farm in the southwest which dates from the late 1970s into the 1980s. This was an investigation into the mining and milling of the MSZ on the western margin of the Great Dyke resulting in shaft sinking, a milling site, and an off-Dyke tailings dump. The facilities remain protected, and the tailings dump is stable and vegetated. The shaft has access for a pump which needs to be made safe if this is to be a source of water in the future.

A number of gravel pits and scrapes were noted close to major roads, primarily over decomposed granite, quartz reefs, iron-formation bands, and weathered but granular harzburgite. A notable pit is located in granite at the extreme southwestern corner of the mining lease which was apparently used for the main tar road construction and now remains perched. It is used locally for cattle watering by local A1 Plot holders.

## 4 PROJECT HISTORY

T1.2, T1.6

### 4.1 Previous Ownership

S1.4(i)(ii)

The Karo project concession area was previously held by Zimplats under its SML. On 6 June 2018, Zimplats released the project concession area to the Government, resulting in Zimplats holding two separate and non-contiguous mining leases over the (SMC) area and the Ngezi area.

Union Carbide Zimbabwe Limited (Union Carbide) initiated extensive exploration in 1968 of the Hartley Complex, north of Selous. Union Carbide mined a total of 6 kt of ore and extracted saleable PGMs, gold, nickel, and copper from this ore. In 1972, due to a low commodity pricing environment, Union Carbide abandoned its Selous claims.

In 1980, Rio Tinto Rhodesia Limited initiated a test operation at the historic Zinca Shaft of the Hartley Complex. Development drilling was conducted but the test operation was abandoned in 1981.

Once Union Carbide's claims lapsed, the next PGM concessions in the area were awarded to Delta Gold Limited (Delta) in 1986, under an EPO, awarded six years after the independence of Zimbabwe. In 1994, BHP entered into a joint venture agreement with Delta to develop the Hartley Platinum Mine (located near the current SMC). In 1998, the SPLs were extended to include all of the Hartley Complex of the Great Dyke, stretching through the project concession and including the Ngezi operations. Following this award, Delta moved the Rights into a special-purpose vehicle, creating Zimplats. A year later, BHP placed the Hartley Mine on care and maintenance, as it had failed to meet its development targets and subsequently divested from Zimplats. In 2001, Zimplats commenced the Ngezi/SMC project, whereby mining operations were conducted in the south of the concession and the ROM ore was processed at the SMC. The project was undertaken with investment from Impala.

In 2006, Zimplats released its tranche of ground to the Government of Zimbabwe, comprising some 36% of the SML area. In June 2018, Zimplats released the second tranche of its SML to the Government, measuring 23,907 ha, in support of the Government's plan to encourage other investment in the Zimbabwean platinum industry. The result was that Zimplats was awarded two Mining Leases measuring 18,027 ha (Ngezi concession) and 6,605 ha (Hartley concession). Due to the vast size of the mining concessions that Zimplats held, the Karo project concession area was never included in operations.

The Zimplats Ngezi operation is immediately south of the Karo project concession area, and its current operations comprise mining operations at the Ngezi complex, consisting of four shallow mechanised underground mines and two metallurgical concentrators. The SMC operations are a metallurgical concentrator and smelting facility.

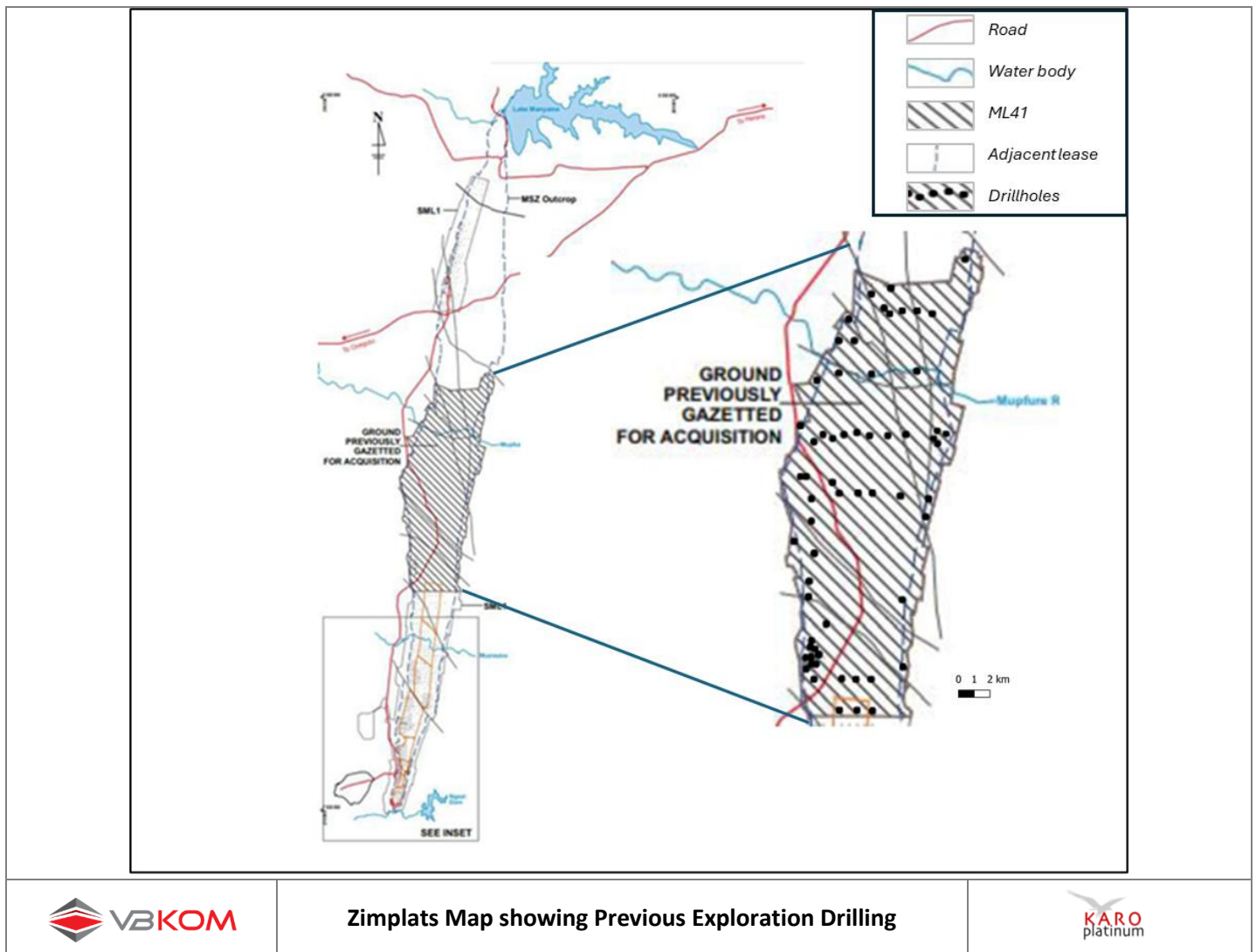
### 4.2 Previous Exploration and Project Development

S1.4(i)(ii)

The Great Dyke was mapped and researched in detail in the 1950s by Dr BG Worst. Subsequent mapping of the surface geology is restricted to the regional mapping of the area and field mapping done by Anglo American in the early 1960s.

The Karo Project concession area was previously explored by Zimplats, as evidenced by various Zimplats' annual reports. Zimplats is listed on the ASX and as a company is considered compliant and in good standing with the stock

exchange and its reporting requirements. Zimplats has operated as a listed entity since 2011, and it is, therefore, fair to assume that the company conducted its exploration activities in line with industry practice prevalent at that time and therefore in accordance with the JORC Code. The Project Area is approximately 85.5% of the land area referred to as "North of Portal 10" in the previous reporting. Figure 4-1, sourced from Zimplats Annual Report 2016, illustrates the positions of the drill holes from their exploration programme over the area. Some 122 drill holes were drilled across the concession.



### 4.3 Previous Mineral Resource Estimates

#### S1.4(iii)

In the last (2017) Zimplats Annual Report prior to the release of the Karo concession, the following Mineral Resource declaration was reported for the area "North of Portal 10". It is evident from Table 4-1 that the majority of the declared Mineral Resource was placed in the Inferred Mineral Resource category in accordance with the reporting requirements as stipulated within the JORC Code (2012).

Table 4-1: Previous Zimplats Mineral Resource estimate (30 June 2017).

Category	Tonnes (Mt)	Width (cm)	3PGE+Au (g/t)	5PGE+Au (g/t)	Ni (%)	Cu (%)	3PGE+Au (Moz)	5PGE+Au (Moz)
Indicated	70.0	192	3.44	3.70	0.20	0.18	7.7	8.3
Inferred	1,021.0	239	3.22	3.50	0.12	0.09	105.7	114.9
<b>Total</b>	<b>1,091.0</b>		<b>3.23</b>	<b>3.51</b>	<b>0.13</b>	<b>0.10</b>	<b>113.4</b>	<b>123.2</b>

Subsequently, Karo evaluated a significantly smaller area of the concession based on drilling conducted in 2019 (refer to Table 4-2) to declare a SAMREC Code-compliant Mineral Resource.

Table 4-2: Previous Karo Mineral Resource estimate (June 2020) (SAMREC Code).

Category	Tonnage (Mt)	Thickness (m)	3PGE+Au (g/t)	Pt:Pd:Rh:Ru:Au (%)	3PGE+Au (koz)	Cu (%)	Ni (%)
Measured	-	-	-	-	-	-	-
Indicated	82.67	3.09	1.96	45:41:4:10	5,196	0.12	0.13
Inferred	53.05	4.38	1.83	47:38:4:11	3,128	0.11	0.13
<b>Total</b>	<b>135.72</b>	<b>3.50</b>	<b>1.91</b>	<b>46:40:4:10</b>	<b>8,324</b>	<b>0.12</b>	<b>0.13</b>

In 2021, Karo drilled between the KPSE and KPE sections, and an updated evaluation of the concession was conducted in March 2022. In 2023, drilling at KPNE and KPNW was completed, and an updated Mineral Resource was declared (Table 4-3) in compliance with the SAMREC Code in the Tharisa Integrated Annual Report (IAR).

Table 4-3: Previous Karo Mineral Resource estimate (30 September 2023) (SAMREC Code).

Category	Tonnage (Mt)	Thickness (m)	Density	3PGE+Au (g/t)	5PGE+Au (g/t)		Cu (%)	Ni (%)
Measured	15.11	4.44	3.13	2.27	2.43		0.07	0.08
Indicated	128.23	3.17	3.04	1.95	2.08		0.11	0.13
Inferred	25.48	4.11	3.13	2.05	2.19		0.07	0.09
<b>Total</b>	<b>168.82</b>	<b>3.51</b>	<b>3.06</b>	<b>1.99</b>	<b>2.12</b>		<b>0.10</b>	<b>0.12</b>
Category	Strike (m)	Dip (°)	Pt:Pd:Rh:Ru:Au (%)	3PGE+Au (koz)	5PGE+Au (koz)	Pt:Pd:Rh:Ru:Ir:Au (%)	Cu (t)	Ni (t)
Measured	13,130	17.83	46:43:5:6	1,104	1,180	43:40:4:4:2:6	10,700	12,400
Indicated	41,100	26.60	45:42:4:9	8,032	8,560	42:40:4:4:2:8	143,800	163,600
Inferred	13,100	22.05	46:43:4:7	1,681	1,792	43:40:4:4:2:7	18,000	22,300
<b>Total</b>	<b>67,330</b>	<b>25.23</b>	<b>45:42:4:8</b>	<b>10,817</b>	<b>11,531</b>	<b>42:40:4:4:2:8</b>	<b>172,500</b>	<b>198,300</b>

**Notes:**

1. The Mineral Resource estimate is reported in accordance with the guidelines of The SAMREC Code.
2. The Mineral Resource is reported inclusive of Mineral Reserve.
3. The Mineral Resource is reported as contained in-situ estimates.
4. No cut-off grades were applied in the Mineral Resource estimate.
5. Approximately 6% of the Mineral Resource is considered as transitional (partly weathered material).
6. Numbers may not add up due to rounding of decimals.

7. The Mineral Resource is reported on a 100% project basis

## 4.4 Previous Mineral Reserve Estimates

### S1.4(iv)

No Mineral Reserve estimates for the Project Area were declared by Zimplats. Mineral Reserves were estimated in 2022 for the Project and subsequently exploration activities were conducted, and technical studies and LOM plan optimisation were completed in support of a Prefeasibility Study completed in 2023. Mineral Reserves were declared as presented in the Tharisa IAR and shown in Table 4-4, prepared by Ukwazi Mining Studies (Pty) Ltd. The estimation was undertaken in compliance with the SAMREC Code.

Table 4-4: Previous Mineral Reserve estimate (30 September 2023).

Category	Tonnage (Mt)	Grade			
		3PGE+Au (g/t)	5PGE+Au (g/t)	Cu (%)	Ni (%)
Proved	4.5	2.69	2.86	0.07	0.09
Probable	18.5	2.83	3.01	0.11	0.14
<b>Total</b>	<b>23.00</b>	<b>2.80</b>	<b>2.98</b>	<b>0.11</b>	<b>0.13</b>
		Contained Metal			
		3PGE+Au (koz)	5PGE+Au (koz)	Cu (t)	Ni (t)
Proved		388	413	3,052	4,038
Probable		1,688	1,792	21,159	25,093
<b>Total</b>		<b>2,077</b>	<b>2,205</b>	<b>24,211</b>	<b>29,131</b>

#### Notes:

1. The Mineral Reserve estimate is reported in accordance with the guidelines of the SAMREC Code.
2. The Mineral Resources were reported inclusive of the Mineral Reserve.
3. The Mineral Reserve is Reported as delivered run of mine material to the concentrator plant, or related run of mine stockpile.
4. Tonnage estimates are in metric units and reported as million tonnes (Mt).
5. 3PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Au grade (g/t).
6. 5PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Ir grade (g/t) + Ru grade (g/t) + Au grade (g/t).
7. Numbers may not add up due to rounding.
8. Mineral Reserve reported on a 100% project basis.
9. The level of accuracy of the study completed in October 2023, as basis for the Mineral Reserve estimate, complies to the minimum requirements as set out in the SAMREC Code.

## 4.5 Previous Production

### S1.4(iv)

A shaft known as the Zinca Shaft is located in the southwestern corner of the tenement, an area where Zimplats had also previously declared a Mineral Resource. No records could be found related to the production statistics from the shaft which, according to available information, was sunk in the early 1980s by Rio Tinto. Based on the dimensions of a nearby slimes dam, an estimated 20,000 t of material from the shaft may have been processed.

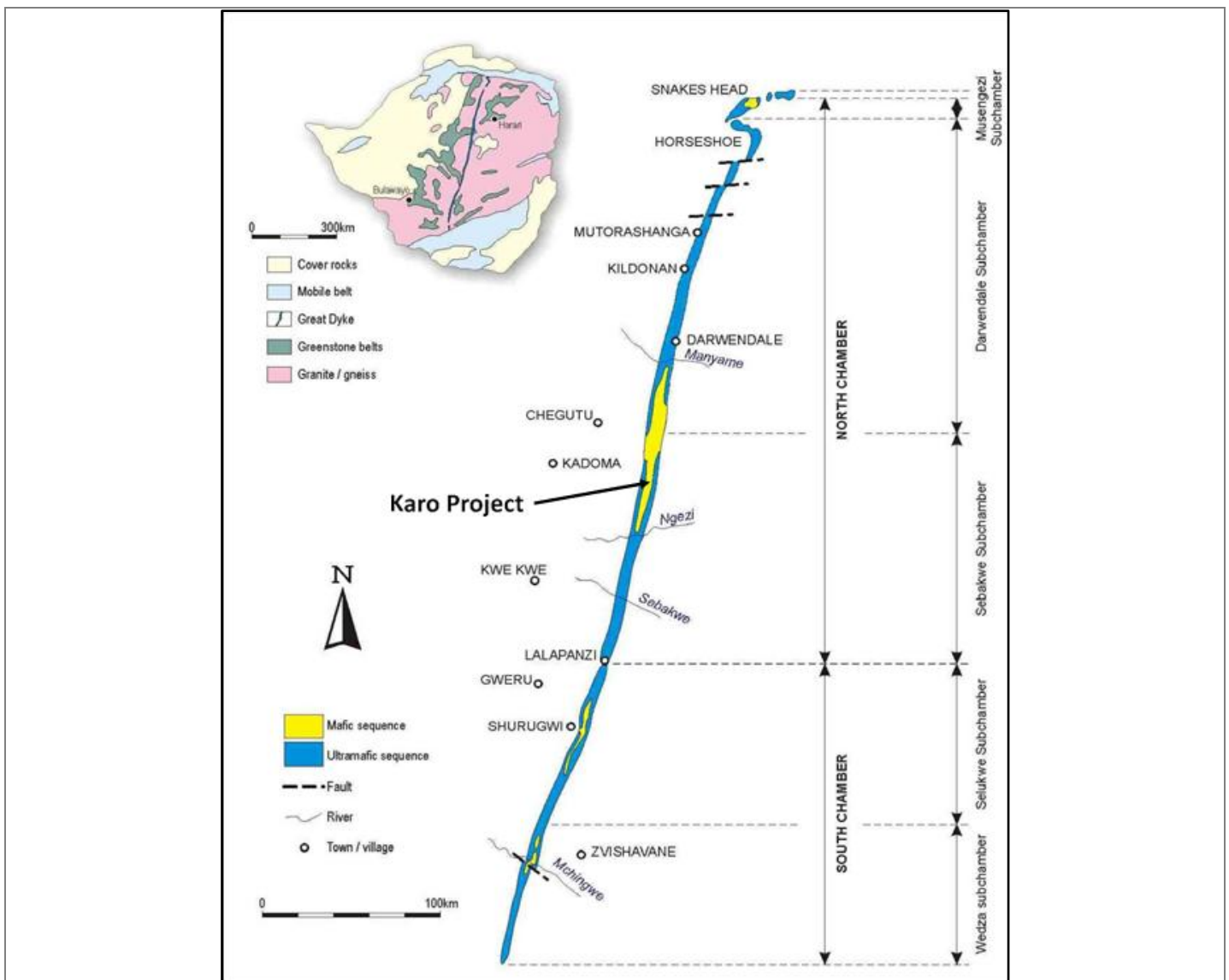
## 5 GEOLOGICAL SETTING, MINERALISATION, AND DEPOSIT TYPES

T1.2, T1.7

### 5.1 Regional Setting

#### S2.1(i)

The Great Dyke which hosts the MSZ is an elongated, slightly sinuous, 550 km long, layered igneous intrusion, with a width of 4–11 km, found in central Zimbabwe (Figure 5-1). The Great Dyke bisects the country in a north-northeast orientation and is a 2.5 billion-year-old (Ga) layered igneous intrusion comprising igneous rocks ranging in composition from ultramafic to mafic.



Source: After Prendergast and Wilson (1989).

Figure 5-1: Simplified map of the Great Dyke showing the two chambers and five sub-chambers, as well as the location of the Karo Project.

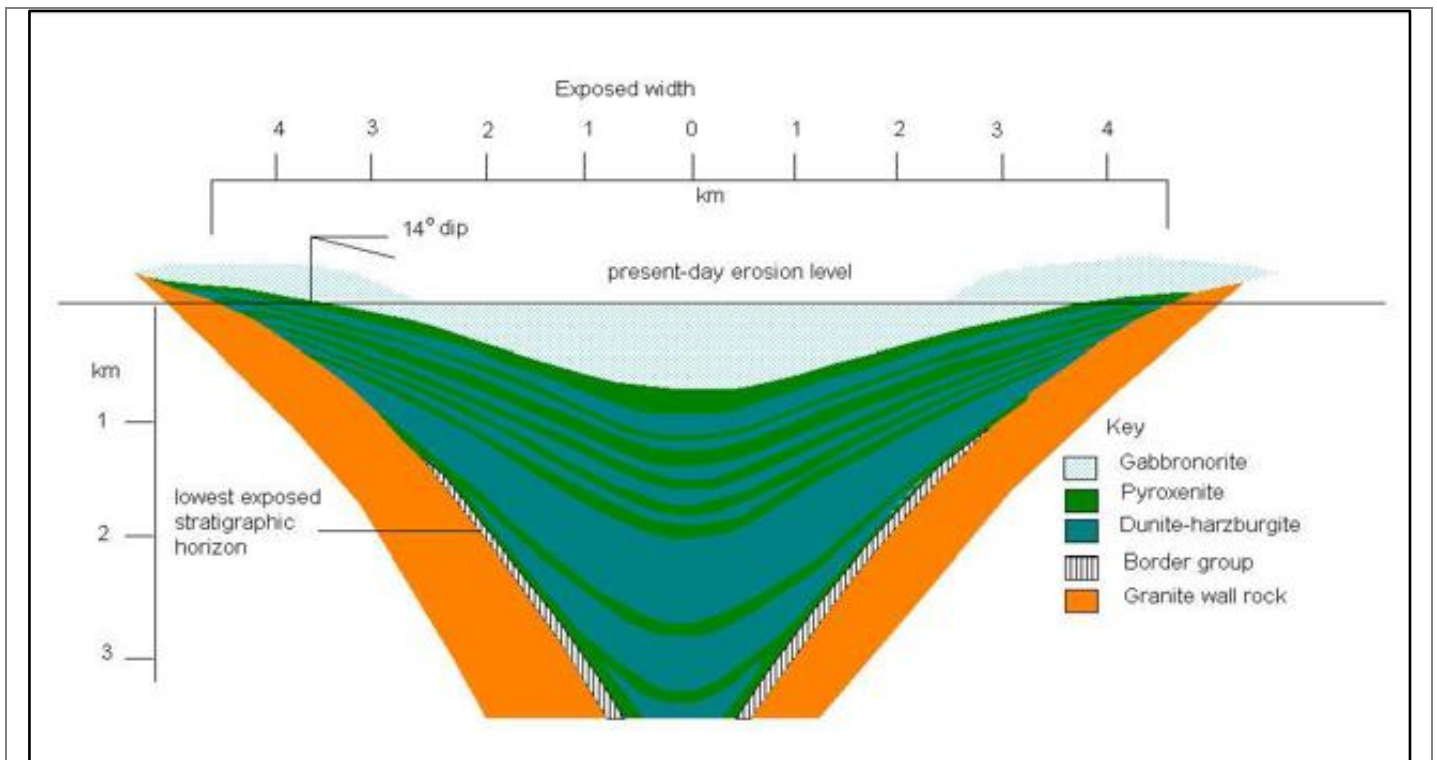
The stable Kaapvaal and Zimbabwe Cratons in southern Africa are characterised by the presence of large mafic to ultramafic layered complexes, the best known of which are the Great Dyke in the Zimbabwe Craton and the Bushveld and Molopo Complexes in the Kaapvaal Craton. Large-scale layered intrusions characterise stable cratonic areas in the late Archaean and early Proterozoic periods. The emplacement of the Great Dyke at 2.5 Ga is the only major geological event of this period and therefore marks the Archaean-Proterozoic boundary of the Zimbabwe Craton.

The northern end of the Great Dyke is bounded by the margin of the Zambezi Province where it underwent deformation, fragmentation, and rotation related to the 500 Ma Pan African orogeny. The southern limit of the Great Dyke is about 30 km north of the margin of the Limpopo Province. Associated with and parallel to the Great Dyke are sets of major cratonic fractures and a suite of satellite dykes. Quartz gabbro satellite dykes flank the northern part of the Great Dyke, whereas ultramafic rocks comprise the southern satellite dyke complex.

The ultramafic sequence of the Great Dyke is well layered and is capped at four localities by gabbro-norite of the mafic sequence. The positions of the gabbro-norite caps represent the centres of up to five discrete magma chamber compartments that make up the Great Dyke. These are from north to south the Musengezi, Darwendale, Sebakwe, Selukwe, and Wedza sub-chambers (Figure 5-1). Apart from the tectonic controls that gave rise to the series of linked magma chambers that comprise this intrusion, the width-to-length ratio profoundly affected the layering style, rock types, mineral compositions, and the form of the ore mineralisation.

The Great Dyke is divided vertically into an ultramafic sequence, dominated from the base upwards by cyclic repetitions of dunite, harzburgite and pyroxenite, and an upper mafic sequence consisting mainly of gabbro and gabbro-norite. It is V to Y-shaped in section, with the layering dipping from the sides of the Dyke and flattening towards the axis of the intrusion (Figure 5-2).

Much of the mafic sequence has been removed by erosion. Contained within the ultramafic sequence is the P1 pyroxenite, directly below the mafic-ultramafic contact. The P1 pyroxenite, in turn, hosts economically exploitable quantities of PGEs in the MSZ which are generally found 10 to 50 m from the top of the ultramafic sequence.



Source: Brown (2008)

	<b>Schematic Cross-Section of the Great Dyke</b>	
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Figure 5-2: A schematic cross-section of the Great Dyke.

The Great Dyke developed as a series of initially discrete magma chambers or compartments, which joined up as the chambers filled. The chambers coalesced below the MSZ and, before erosion, the MSZ would have been continuous along the length of the Dyke.

In its present plane of erosion, the Great Dyke is exposed as a series of narrow contiguous layered complexes or chambers, namely a northern chamber consisting of the Musengezi, Darwendale, and Sebakwe sub-chambers and a southern chamber consisting of the Selukwe and Wedza sub-chambers. The mafic remnant of the Darwendale and Sebakwe sub-chambers is collectively known as the Hartley Complex.

The MSZ is a lithologically continuous layer, typically between 2 and 3 m thick, that forms an elongated keel shape. It generally contains iron-nickel-copper sulphides, while elevated PGE concentrations occur towards its base. Peak values for the PGEs and base metals may be offset and the ratio between platinum and palladium also varies vertically. It is often difficult to identify mineralisation visually in the MSZ. Below the MSZ are several chromitite layers that are mined for chromium, as their PGE content is too low.

The Great Dyke contains economic PGE and chromite mineralisation, with copper, nickel, cobalt, and gold as associated by-products. PGEs are currently mined at Ngezi Mine south of Selous by Zimplats of the Impala Platinum Group, at Unki Mine near Shurugwi by Anglo American, and at Mimosa Mine near Zvishavane for the Impala/Sibanye-Stillwater JV.

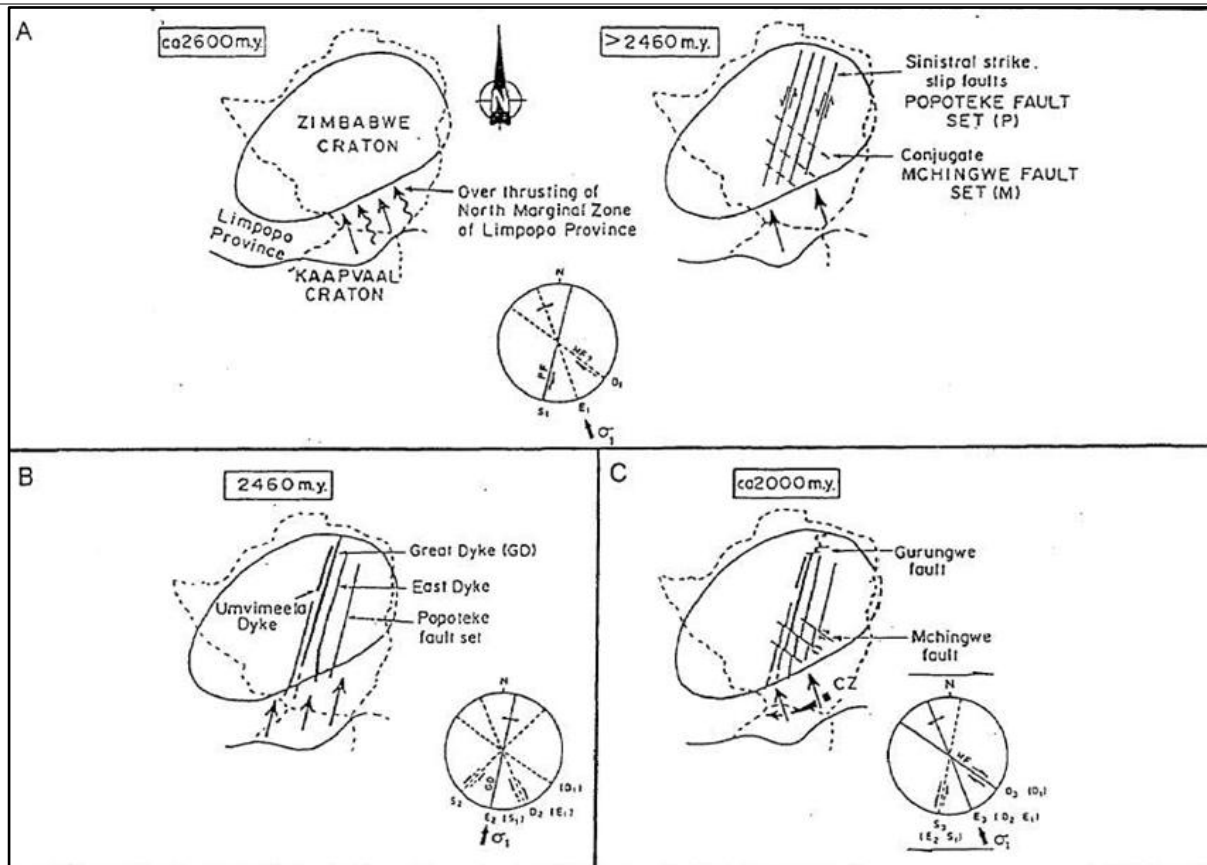
### 5.1.1 Tectonic Evolution

There have been a number of theories proposed for the tectonic evolution of the Great Dyke (Figure 5-3).

**Stages 1 and 2 (ca 2,600–2,460 Ma):** A north-northwest-directed maximum compressive stress, as a result of overthrusting of the north marginal zone of the Limpopo Province onto the southern part of the Zimbabwe Craton, induced the major Popoteke fracture system, together with the conjugate Mchingwe fault set. Sinistral strike-slip movement occurred along the faults.

**Stage 3 (ca 2,460 Ma):** Extension occurred along these faults by rotation of the maximum compressive stress (from north-northwest to north-northeast with subsequent emplacement of the Great Dyke magma into the dilated fracture system as a series of linked magma chambers. There is evidence that magma was emplaced periodically and over an extended period of time. Coeval with this main emplacement event; the satellite dykes that flank the entire length of the Great Dyke were also emplaced.

**Stage 4 (ca 2,000 Ma):** Following emplacement of the Great Dyke, rotation of the maximum compressive stress back to the north-northwest direction caused dextral movement along the Mchingwe fault set together with further dyke emplacement on the north-northwest fracture pattern.

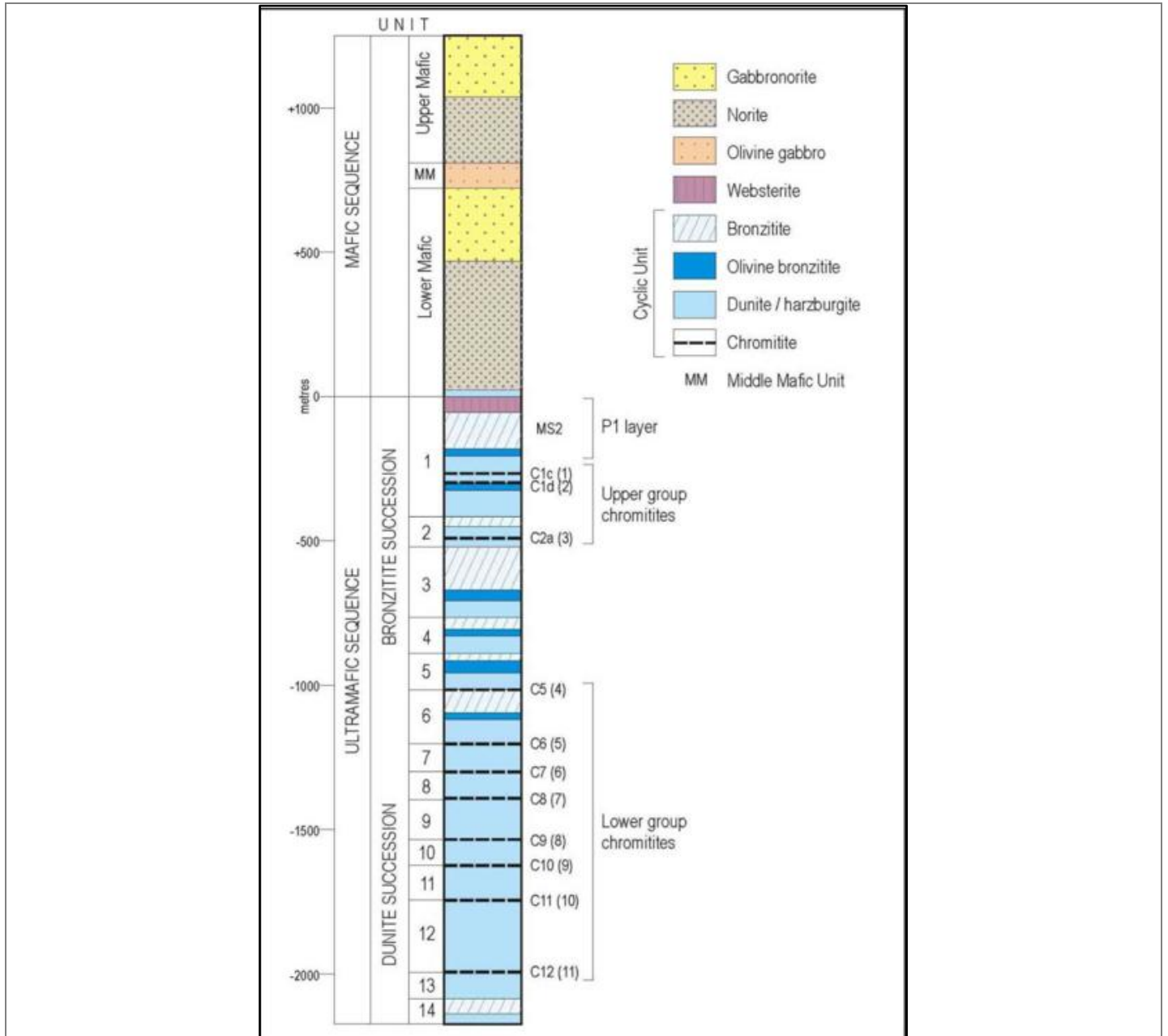


Source: Mason-Apps (1998)

Figure 5-3: A schematic diagram of the emplacement of the Great Dyke.

## 5.2 Stratigraphy

The Great Dyke is formally subdivided into the lower Ultramafic Sequence and the upper Mafic Sequence (Figure 5-4).



Source: Prendergast and Wilson (1989)

Figure 5-4: The stratigraphy of the Great Dyke.

The lateral continuity of layers of pyroxenite, serpentinite, and chromite of the Ultramafic Sequence was established and numbered by each lithologically distinct layer downwards from the top of the sequence. The Ultramafic Sequence can be further subdivided into an upper pyroxenite succession and a lower dunite succession, each containing easily

recognisable differentiated units. In the Darwendale sub-chamber, 14 units are recognised. Dunite in the Great Dyke is not preserved in surface outcrop as it has been totally replaced by serpentinite. The degree of serpentinisation decreases with depth, with unaltered dunites being encountered at about 300 m.

Although designation of subdivisions on a finer scale is possible in all units, this only becomes practically possible in the uppermost and well-exposed Unit 1 or cyclic units. This unit represents the topmost portion of the Ultramafic Sequence and is also characterised by the first appearance of cumulus clinopyroxene in the distinctive websterite layer at the very top. Unit 1 is subdivided into six sub-units on the basis of changes in lithology and narrow chromitite layers. By local convention, the pyroxenite layers are referred to on a “P” notation with that in Unit 1 being the economical P1 pyroxenite which hosts the MSZ a few metres below the uppermost websterite layer.

## 5.3 Mineralisation

### S2.1(ii)(v)(vi)

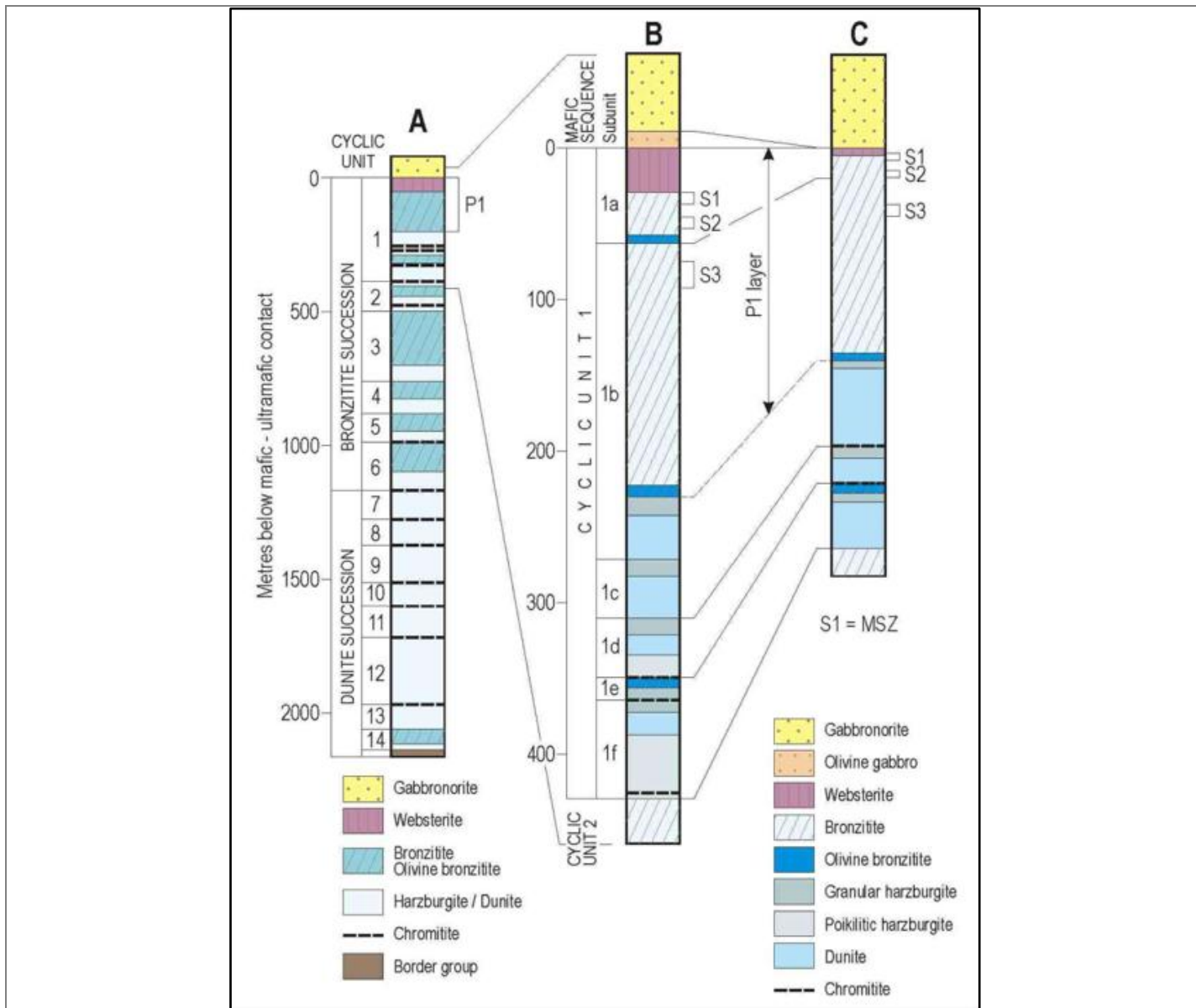
The PGE and chromite mineralisation of the Great Dyke has been known since 1925 when PGEs were first discovered in what is now known as the MSZ. While chromite mineralisation occurs throughout most of the pyroxenite units of the Ultramafic Sequence, PGE mineralisation only occurs near the top of the uppermost P1 pyroxenite (Figure 5-5). The host to the PGE (+ Cu, Ni, and Co) mineralisation is the uppermost S1 sulphide layer. The portion of this layer that hosts PGE and associated metals is known as the MSZ.

The MSZ at Hartley Mine (Zimplats) is a persistent mineralised zone with no magnetic signature. The host lithology is typically a medium-grained poikilitic feldspathic orthopyroxenite consisting of 85% cumulus orthopyroxene ( $En_{83-84}$ ) and 15% postcumulus plagioclase and augite oikocrysts. In addition, the rock contains intercumulus base metal sulphides (pyrrhotite, chalcopyrite, pentlandite, and pyrite), minor phlogopite, quartz, apatite, zircon, rutile, and micrographic intergrowths of K feldspar and quartz. The base metals sulphides are generally anhedral in shape, 0.2–0.3 mm in size and are intercumulus to the pyroxenites. They may be finely disseminated grains or net textured concentrations around oikocrysts. Where the pyroxene grains and base metal sulphides are in contact, the pyroxenes are commonly altered, and the base metals sulphides may be distributed along the pyroxene cleavage planes.

The vertical distribution of the economically important metals at Karo was expected to be similar to that found elsewhere on the Great Dyke. The PGEs are typically enriched just above the base of the main sulphide zone (BMSZ) and into the immediate footwall. The base metals (Cu, Ni) are typically enriched above the BMSZ with little metal concentration in the footwall (FW). The similarity was demonstrated from the work undertaken at the Karo Project.

The P1 pyroxenite is host to three sulphide zones known as S1, S2, and S3, respectively (Figure 5-5). The uppermost of these, the S1 zone, is host to the MSZ. The MSZ reef itself consists of the lowermost sulphide concentration of the 2 m to 3 m wide S1 zone and appears as a variably visible interstitial sulphide-rich layer of between 10 cm and 30 cm in width, hosted by the uppermost portion of the ~200 m wide P1 plagioclase pyroxenite. While an immediate upper contact of this lower sulphide concentration may not be obvious due to overlying sulphides that constitute the remainder of the S1, its lower contact is usually discernible and is used as a zero datum for sampling and mining. Somewhat unlike the PGE reefs of the Bushveld Complex, the MSZ reef is remarkably similar stratigraphically, petrologically, and geochemically throughout the entire Great Dyke. Also, unlike the Merensky Reef and UG2 Chromitite Layer of the Bushveld Complex, which are highly visible and easily distinguishable from their adjacent stratigraphy, the MSZ reef consists only of a relatively thin, variably visible intercumulus sulphide layer within plagioclase pyroxenite that is both overlain and underlain by relatively sulphide-poor plagioclase pyroxenite. Commonly, a second sulphide layer, virtually identical in appearance, occurs at approximately 1.2 m above the MSZ

reef. This layer is effectively PGE-barren. Unlike the Merensky Reef and UG2 Chromitite Layer, potholes do not occur in the MSZ.



Source: Wilson (1992)

Figure 5-5: Stratigraphy of the Main Sulphide Zone (MSZ).

The genesis of the MSZ has been explained by the sequential removal of PGE and Au in order of their partitioning ability into sulphide. Detailed computer simulation failed to reproduce the complex and persistent trends observed and, therefore, factors other than just metal-sulphide partitioning should be considered. Sulphide partitioning is proposed as the controlling influence, but that formation was a multistage event of emplacement of similar but heterogeneous magmas which had slightly different compositions and different ways of carrying the PGE. Olivine is

considered important which may have critically increased the sulphur solubility and therefore reduced its formation as a primary precipitate scavenging PGE.

Post-mineralisation intrusions of various types and scales which disrupt the mineralisation are known from the operating mines. Areas where the geochemical signature is disrupted and washouts are evident have been located in the MSZ at some operating mines. Potholes such as those found on the Bushveld Complex have not been found on the Great Dyke.

## **5.4 Geochemical Signature of the MSZ**

### **S2.1(iii)**

The MSZ consists of relatively thin, variably visible intercumulus sulphide-rich layers within medium-crystalline plagioclase pyroxenite and is both overlain and underlain by relatively sulphide-poor plagioclase pyroxenite. As a result, the identification of the MSZ is reliant on the identification of the geochemical signature. The signature relies on the identification of the BMSZ. This marker can be identified when looking down the sequence at the point where sulphide mineralisation ceases. The geochemistry reflects this with sudden drops in sulphur content and associated base metal mineralisation (Figure 5-6).

The various PGEs also have characteristic profiles with peaks around the BMSZ (Figure 5-6).

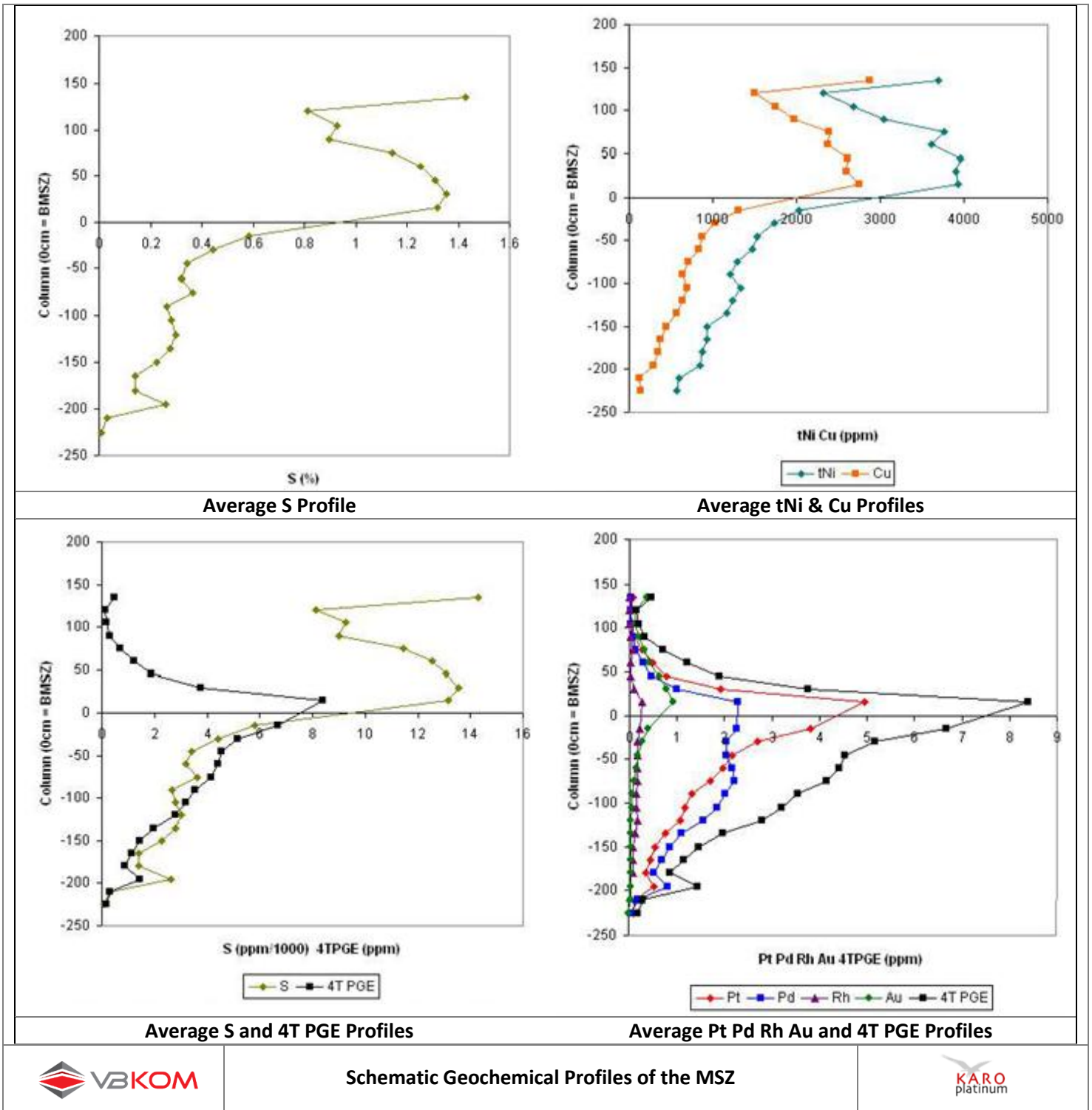


Figure 5-6: Schematic geochemical profiles of the MSZ.

## 5.5 Local Geology

**S2.1(ii)(iii), 3.1(vii), 3.3(iv), 4.1(i)(ii)**

The project area is located on both the eastern and western flanks of the Great Dyke (Figure 5-7). There is no outcrop as the mafic and ultramafic rocks weather easily to a black cotton soil. The area is underlain by both the mafic and ultramafic sequences dipping at 20–32° to the east on the western side of the Great Dyke and 15–33° to the west on the eastern side of the Great Dyke. The MSZ is estimated to be up to 700 m deep in the southern end of the tenement and 800 m deep in the northern end of the tenement. Based on the drilling, a number of faults have been interpolated. These are assumed to be vertical and trend east-west (Figure 5-8).

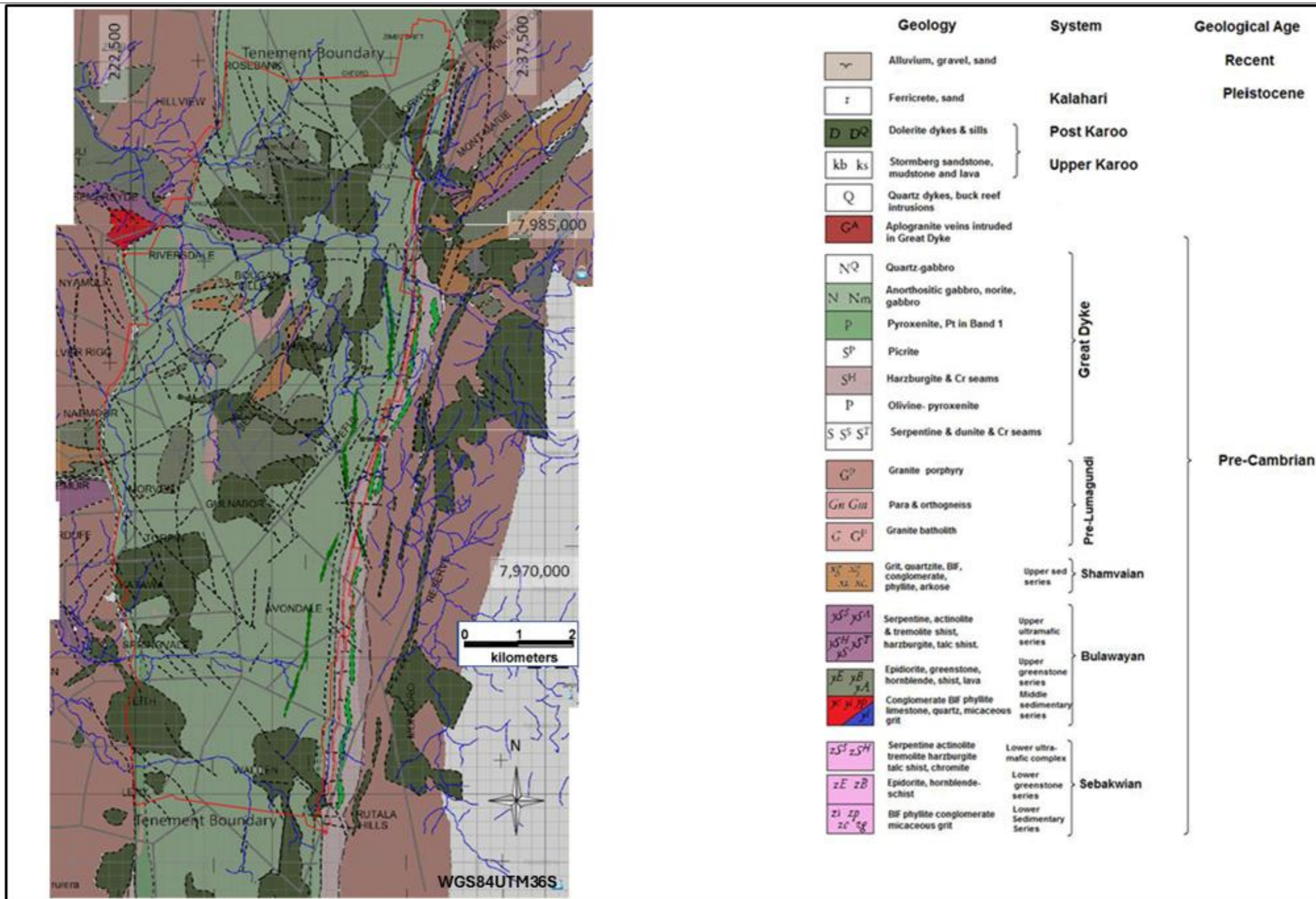
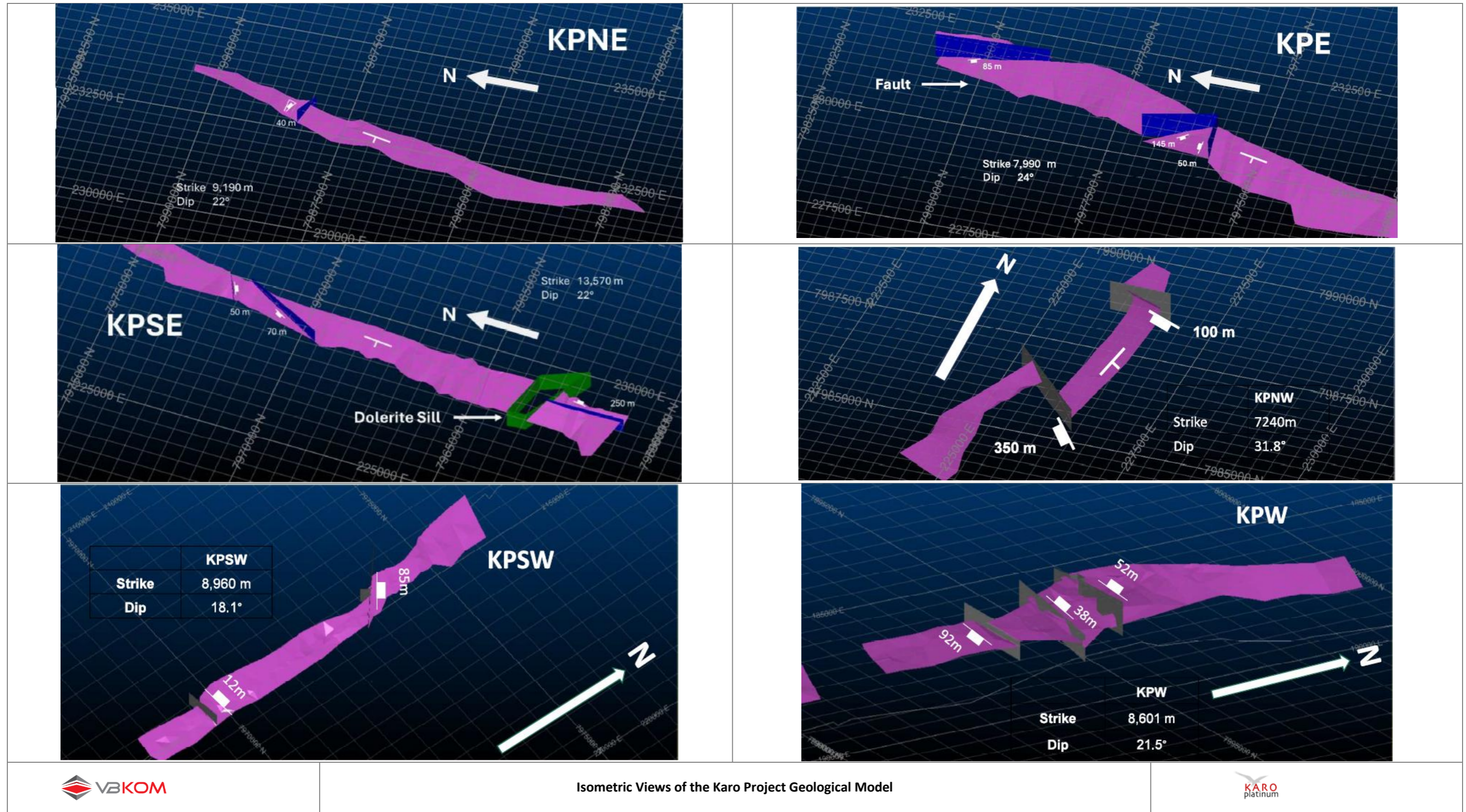


Figure 5-7: Karo Project local geology (source: After Wilson and Tredoux 1990).



Isometric Views of the Karo Project Geological Model

Figure 5-8: Isometric views of the geological model for the Karo Project (interpretation based on the base of the MSZ as a datum).

## 6 EXPLORATION AND DRILLING

### S3.1(i)(iii)(iv)(v), T1.2, T1.8

The first geological investigations of the Great Dyke were carried out by Lightfoot (1927, 1940) and Hess (1950). The most significant advance in the understanding of the Great Dyke was the work of Ben Worst (Worst, 1958 and Worst, 1960). Over a period of several years of research, B. G. Worst mapped almost the entire length of the Great Dyke, a monumental achievement given the scale of the intrusion.

Subsequent to Worst's publications, a number of researchers, notably Dr Alan Wilson and Dr Martin Prendergast, have further contributed to the current understanding of the Great Dyke. The growing interest in the vast platinum resources of the Great Dyke contributed to the considerable increase in technical papers and publications, particularly during the 1990s. This report has relied on much of this research to assist with discussing the current understanding of the MSZ mineralisation.

PGE mineralisation was discovered in the MSZ of the Great Dyke in 1925, two years after the discovery of the Merensky Reef in the Bushveld Complex. Less significant PGE mineralised zones, each with distinctive characteristics, have since been identified at several other stratigraphic levels e.g. the Lower Sulphide Zone (LSZ).

### 6.1 Exploration

#### S3.1(vii)

#### 6.1.1 Geological Mapping

The Karo Project area is characterised by very little outcrop which has restricted the coverage of meaningful geological field mapping. The uppermost 15 m to 30 m of bedrock is also variably oxidised and weathered. The depth of weathering and oxidation has been estimated up to 30 m below the surface with a transition from weathered to fresh material from 15–30 m. Locally, the depths of weathering and oxidation may be influenced by faulting, dykes or closely spaced joints.

No detailed geological mapping has taken place in the project area. The mapping information available is restricted to the compiled regional mapping of the area.

The Great Dyke was mapped and researched in great detail in the 1950s by Dr BG Worst. Subsequent mapping of the surface geology is restricted to the regional mapping of the area and field mapping done by Anglo American in the early 1960s on a scale of 1:40,000. The latter work was recorded in imperial units. Due to the paucity of outcrop in the area and the subsistence farming in the area, the regional mapping is considered sufficiently detailed for the purposes of the project.

#### 6.1.2 Trenching

The outcrop positions have not been trenched to confirm their positions. The nature of the soil profile and the MSZ make this a very difficult task. In addition, the Mineral Resource is declared for depths greater than 15 m due to the level of oxidation and its influence on the economic recovery of the PGMs, making the knowledge of the outcrop of little relevance.

## 6.2 Geophysics

An aero-geophysical survey was flown to identify the chromitite and pyroxenite layers that may contain minerals of interest. The processing of high-resolution magnetic and gamma-ray radiometric datasets facilitated the interpretation of the magnetic and radiometric data. These data add to the existing understanding of the lithologies present and geological structures visible in the project area and assist in determining if the geophysics can be correlated with the known target mineral occurrences. The topographic surface of the tenement area was also obtained from the survey.

### 6.2.1 Aeromagnetic Data

The flight lines were oriented east-west and with a 100 m line spacing. The tie-line spacing was 1,000 m except for over the eastern perimeter of the Great Dyke.

The total magnetic field (TMF) survey which shows many structures and faults dissecting the Great Dyke is indicated in Figure 6-1. The most obvious features are the many magnetic amplitude variations. This indicates that the Great Dyke rocks are magnetic and the presence of NW-SE striking faults.

To highlight the subtle lineaments in the data, a reduction to the magnetic north pole was calculated followed by a first vertical derivative (VD) (Figure 6-2) which accentuates shallower magnetic bodies with respect to deeper ones. The horizontal derivative was also determined and combined with the vertical derivative in the Analytical Signal (AS) (Figure 6-3). This allowed the magnetic tilt angle, which diminishes magnetic amplitudes and accentuates structures in the magnetic data, to be calculated. This interpretation can be combined in a ternary map further showing the internal structure of the Great Dyke (Figure 6-4).

### 6.2.2 Gamma-Ray Spectrometer Data

Most of the cost in airborne geophysical surveys is for the cost of flying since as many geophysical sensors as possible are crammed into the aircraft. Gamma-ray spectrometric sensors were used in this survey. Gamma-ray spectrometry, after numerous corrections, reflects the equivalent Potassium (eK), equivalent Uranium (eU), and equivalent Thorium (eTh) concentrations at surface, as gamma-ray spectrometry has virtually no depth penetration. The radioelement concentrations can be used to differentiate between different types of geology, and gamma-ray spectrometry complements geological maps and drainage patterns well. The total count map is frequently very useful to locate outcrops.

The eU abundance map (Figure 6-5) displays some of the granitic areas east of the Great Dyke.

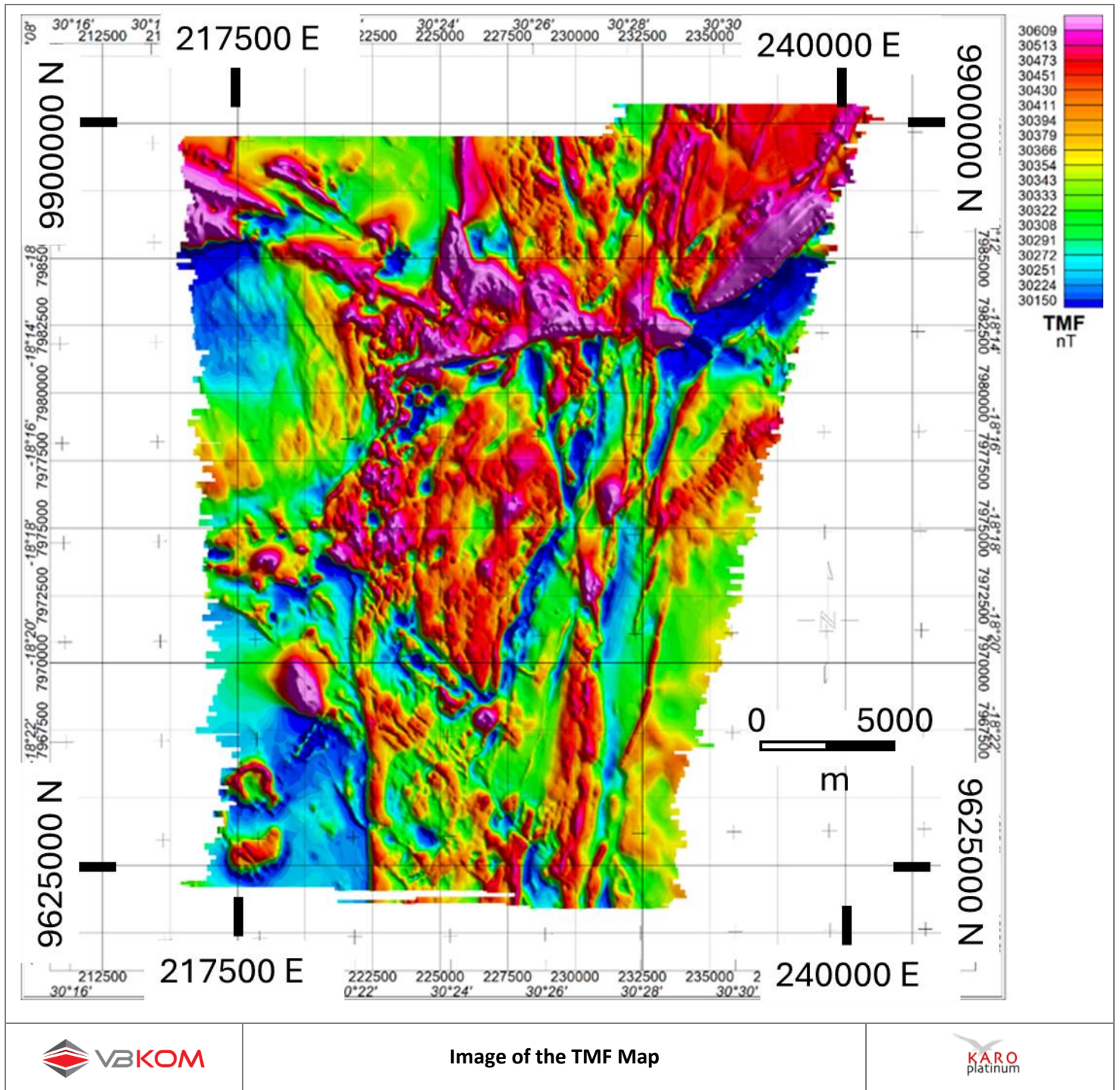


Figure 6-1: Image of the TMF map.

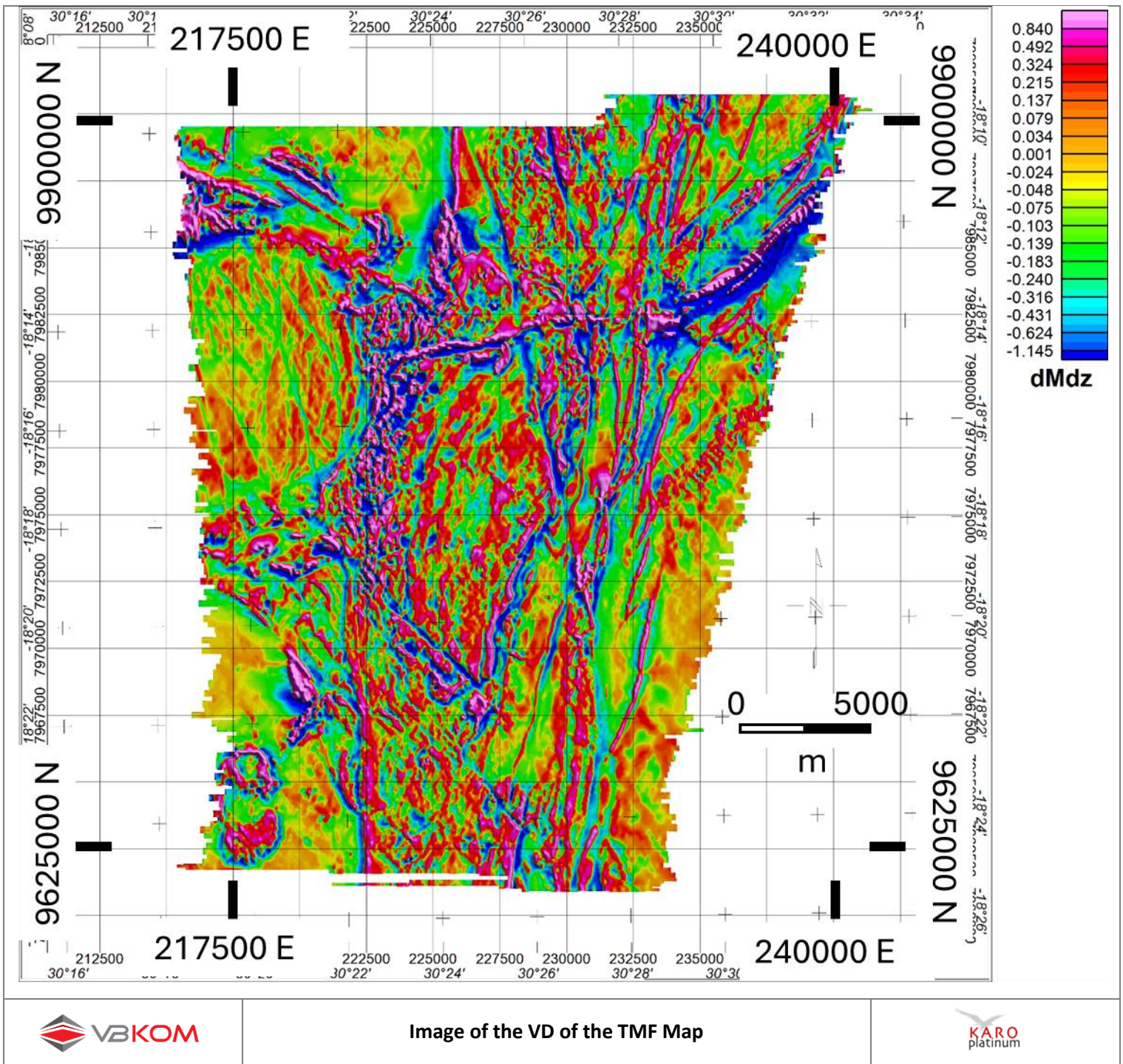


Figure 6-2: Image of the vertical derivative (VD) of the TMF map.

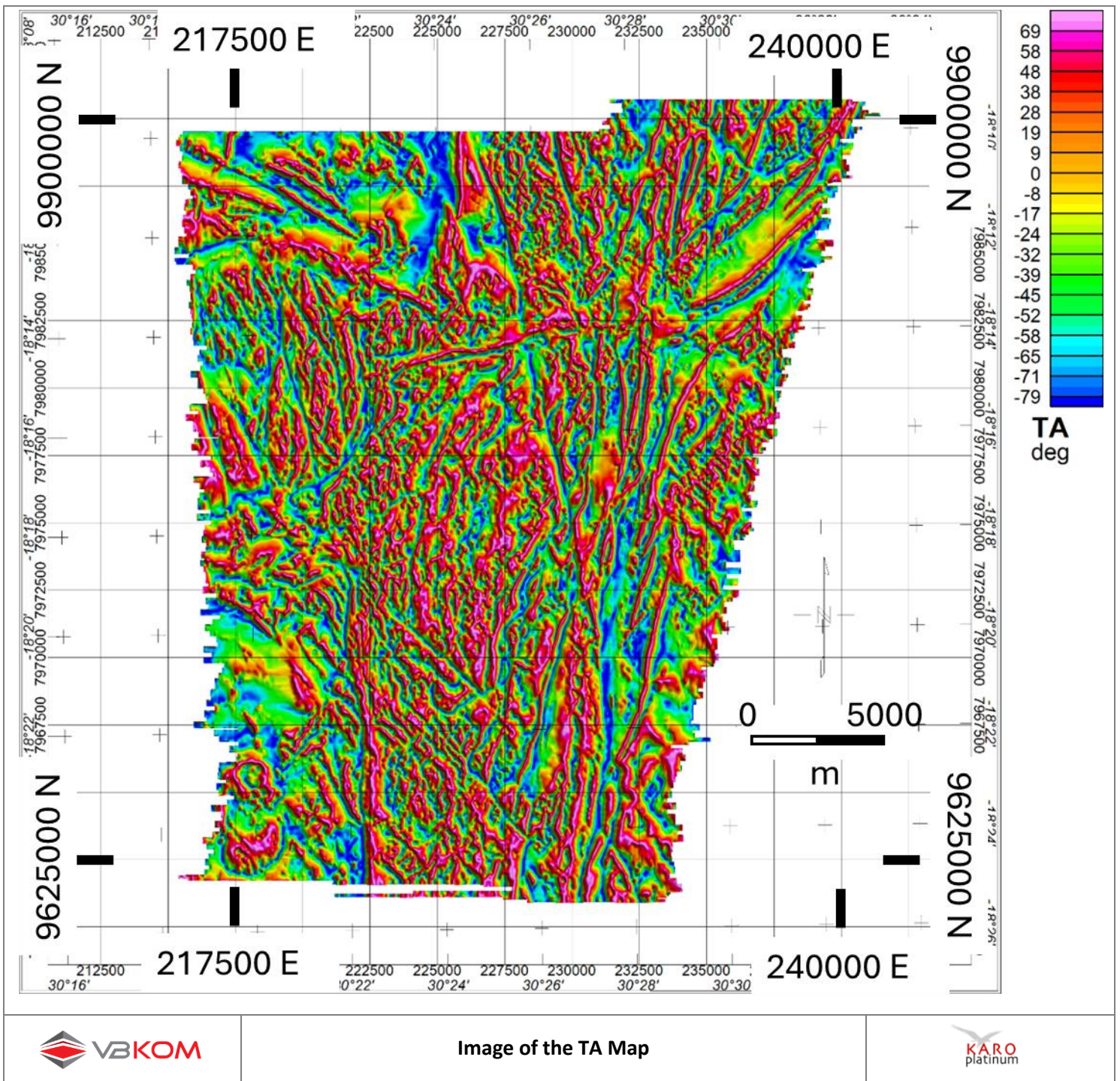


Figure 6-3: Image of the tilt angle (TA) map.

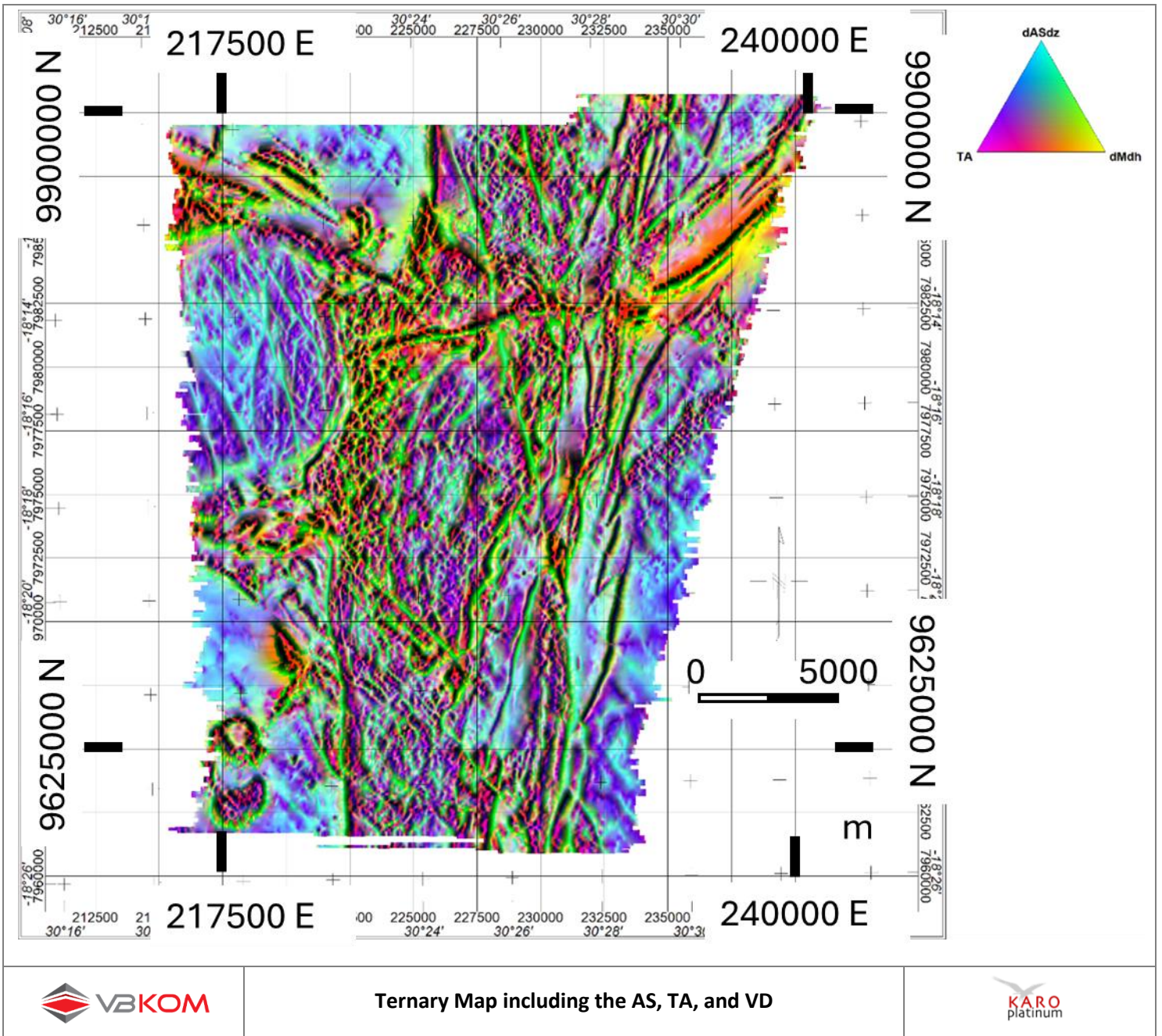


Figure 6-4: Ternary map including the AS, the TA, and the VD.

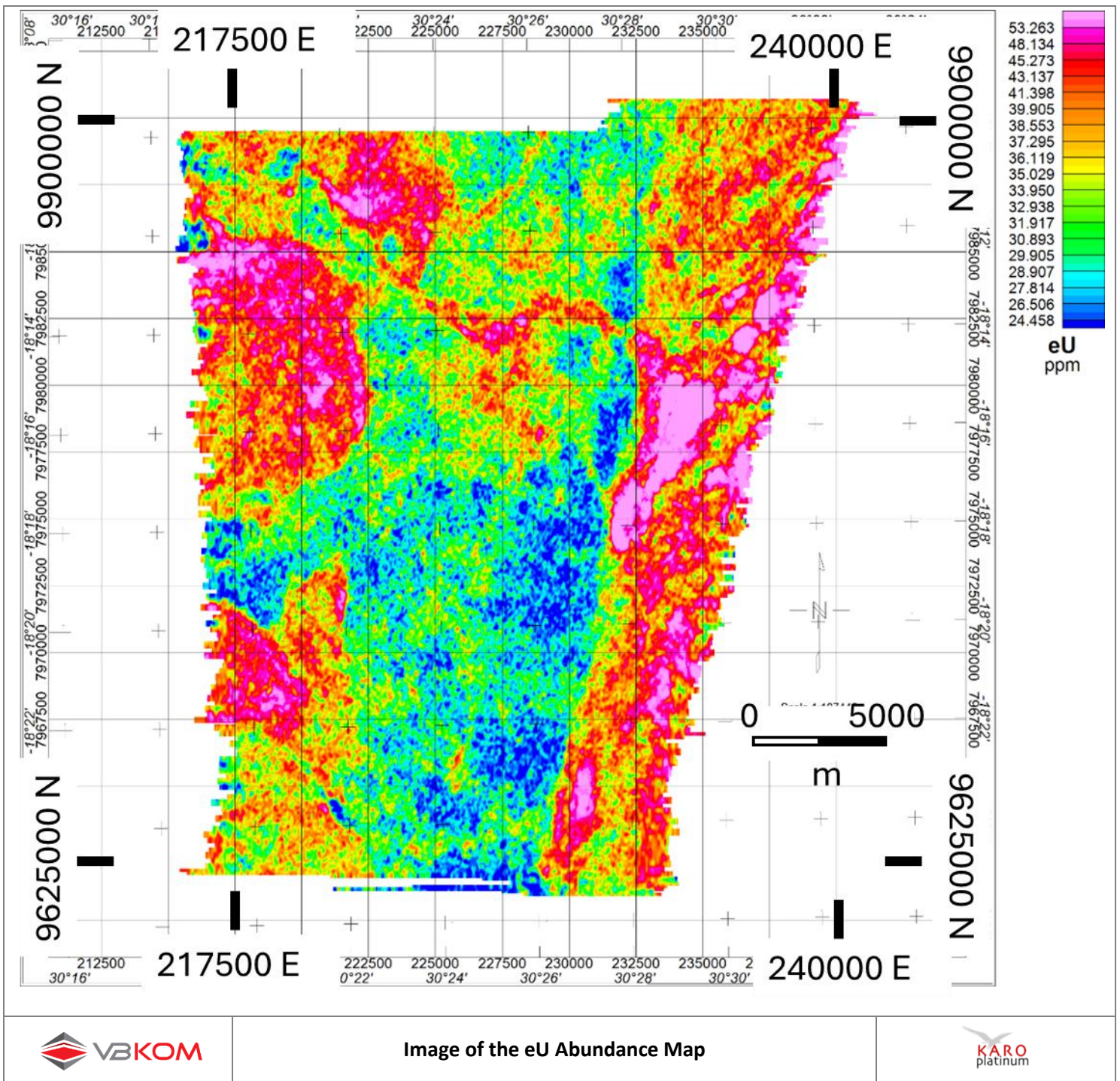


Figure 6-5: Image of the eU abundance map.

### 6.3 Structural Analysis

A structural study of the Karo Project was completed in June 2022 (Friese, 2022).

The primary objectives of the study were to assess the structural geology and tectono-structural evolution of the MSZ ore body within the mining lease area, to identify and understand the nature and style of major structural features and their complexities, as well as evaluate how these findings will impact on the ground stability in future open-pit and underground mining operations.

A detailed two-dimensional (2D) structural interpretation for the project area was achieved through an integrated interpretation of:

- Local and regional geophysical (high-resolution airborne magnetic and radiometric) and remote sensing (Landsat 5 TM and 7 ETM) datasets;
- Structural information extracted from drill core logs and photos;
- Elevation contour maps for the Mafic-Ultramafic Sequence and Websterite-Bronzitite contacts generated from the drill hole database; as well as
- Contextualised, relative to regional and semi-regional, published and unpublished, historical geological and geophysical information from surrounding environs.

The orientation, gross geometry, kinematic evolution, tectonite type, and fault zone-controlled igneous intrusions, combined with degree and type of hydrothermal alteration (metasomatism) and veining as well as crosscutting fabrics and thus important age relationships between structural elements were used to:

- Establish a classification for all structural discontinuities into individual genetic groups of faults with their associated set of joints that formed in response to syn- and post-Great Dyke craton-marginal orogenic activity and associated intracratonic tectonism; and
- To construct the deformation history and tectonic evolution of the project area.

The tectono-structural interpretation map for the initial mining area illustrates readily the large number of structural discontinuities, associated high degree and complexity of deformation, as well as high fracture frequencies and densities present in parts of the project area. Within the Mining Lease area the lateral continuity of the MSZ ore horizon is structurally disrupted by five distinct sets of syn- and post-Great Dyke, steeply inclined to near vertical faults or fault zones with their associated set of joints, layer-parallel shear zones both extensional and transtensional in nature, localised low-angle thrust faults, structurally controlled, late-stage (syn-Great Dyke) aplite and pegmatite dykes with associated magmatic/hydromagmatic K- and Ca- metasomatism (granitisation), as well as post-Great Dyke dolerite dykes and sills.

The development of a 2D structural interpretation and detailed three-dimensional (3D) geologic-structural understanding for the project area has aided in identifying geological and structural features and conditions that might represent natural hazards and could pose challenges to future open-pit and underground mining operations in the project area.

Potential challenges include, but are not limited to, aspects such as:

- Magnitude of displacement of the MSZ;
- Neotectonic stress and potential for rock mass failures;
- Groundwater ingress;
- Fault-controlled, localise depletion of PGE grades;
- Thickness, facies, and grade variations of MSZ; and
- Implications to Mineral Resource calculations and mine planning as outlined.

Faulting on all scales has modified the synformal shape of the Great Dyke and therefore the MSZ across the project area, and post-mineralisation intrusions also disrupt the mineralisation in the MSZ. The contact between the dyke margin and country rock is assumed to be a highly fractured zone with extensive parallel/sub-parallel structures defining the system. While Bushveld-style potholes have not been identified to date, these are areas characterised by disrupted metal profiles and hanging wall slumps.

The first regional geological mapping of the project area was undertaken as part of a comprehensive mapping project of the Great Dyke by the Geological Survey of Southern Rhodesia from 1951 to 1960. The results of the mapping project were published in nine geological map sheets, each accompanied by many cross-sections and a longitudinal section, as well as a comprehensive bulletin (Worst, 1960), which is the first detailed account of the Great Dyke in its entirety. The main lithostratigraphic units and structural features were mapped with fairly good precision, thus providing the current study with valuable information.

The first detailed litho-structural interpretation for the project area and environs was carried out by Dr E. Stettler for Karo Platinum in January 2019. The stand-alone geophysical interpretation (i.e. without incorporating drilling, remote sensing, and field geological information) was based on data derived from a high-resolution (helicopter-based) magnetic and gamma-ray spectrometric survey over the project area which was commissioned by Karo Platinum in late 2018. From the data processing process carried out by the geophysical consultant of Terra Explora Consulting, a number of derivatives were created (TMF, first VD, TA, and AS derivatives) from the aeromagnetic survey data, which returned good quality images and allowed the detailed interpretation of both lithology and structure. Numerous lineaments and magnetic features thought to represent faults, shear zones, intrusives, and dykes (Stettler & Ratshionye, 2019) were interpreted. However, the interpretation is a non-genetic representation of the actual complex structural geology of the Mining Lease area. It lacks a classification of all identified structural discontinuities into different genetic age groups of faults, dip-angle/-direction, and amount of net vertical displacement for each interpreted fault are not provided and cross-cutting relationships/off-sets between different fault groups are not shown.

A 3D geologic-structural interpretation based on the drill hole intersections was undertaken for each initial mining area by Pivot. The outcrop geometry was determined by extrapolation from the geological model. The model wireframes were then used in Datamine™ software to construct and complete the Mineral Resource estimation model. The base of the MSZ was used as an identifiable reference layer for the modelling. Very little structure has been identified, but it was possible to interpolate some major faults with throws up to nearly 100 m. These are assumed to be vertical and trend east-west (Figure 6-6). The area of the dolerite sill intersection identified in the KPSE area was delineated.

The strike of the MSZ is relatively constant across the mining lease area, with the reef horizon (and the strata in general) displaying a slight sinuous strike orientation, deviating from the Great Dyke's Regional NNE-SSW (20/200°) strike evident across the northern sector to a N-S (0/180°) strike in the southern sector of the mining lease. Throughout the mining lease area, the MSZ dips inwards from the Dyke's margins at shallow angles of ca. 20° to the east and 15–33° to the west along the western and eastern flanks of the dyke, respectively, thereby gradually flattening towards the centre (axial area) of the Great Dyke where the MSZ becomes horizontal.

The structural interpretation highlights (in yellow) faults/fault zones with significant displacement of the MSZ exceeding 5 m (Figure 6-6 and Appendix C).

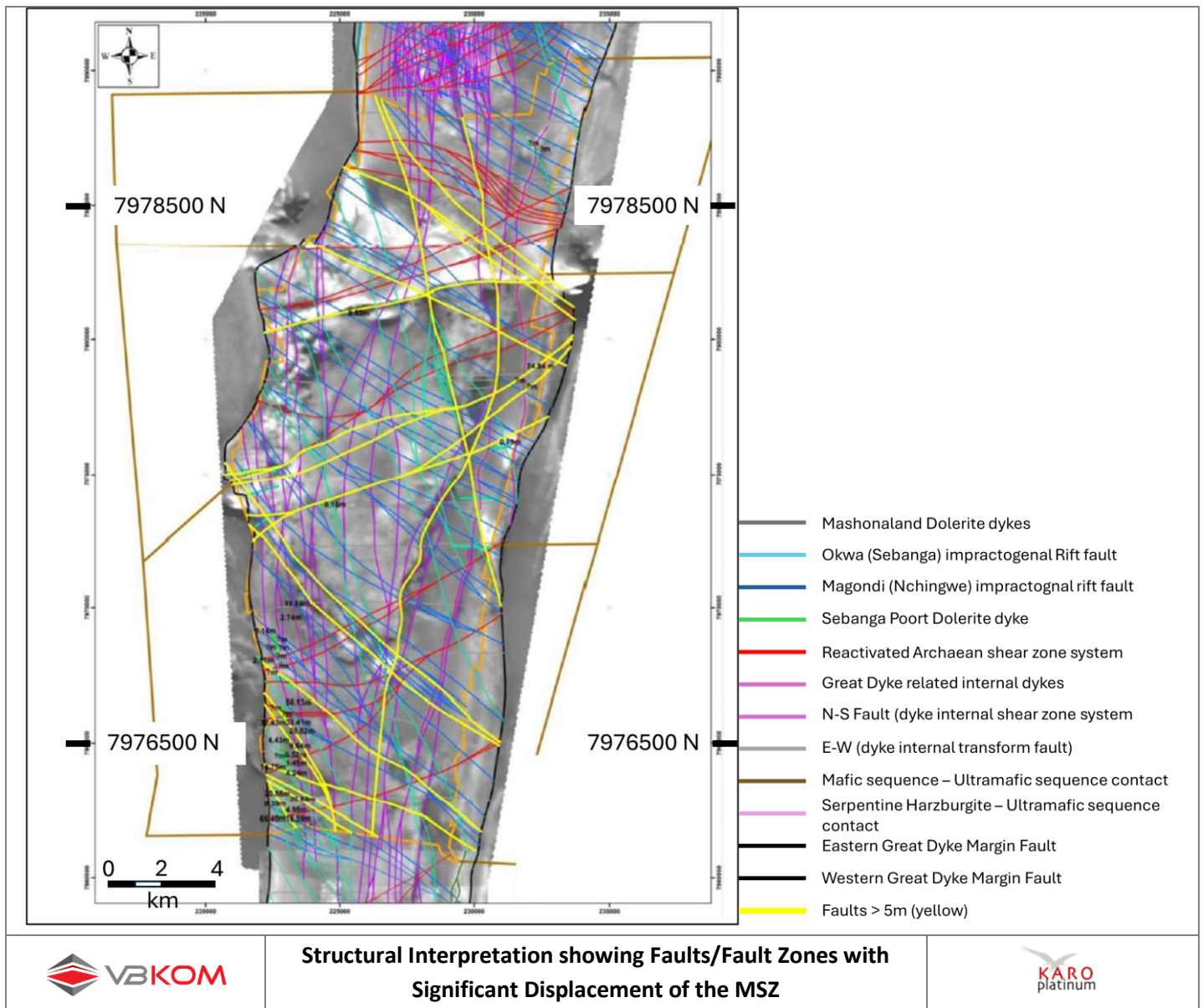


Figure 6-6: The structural interpretation showing faults/fault zones with significant displacement of the MSZ, exceeding 5 m.

## 6.4 Drilling

### S2.1(iv), 3.1(ii)(vi)(vii), 3.2(i-v), 3.3(i-iii,vi-vii), 3.5(iii)

At the inception of the project, very little information was available in the public domain on the potential tenor of the mineralisation in the concession. As a result, it was decided to initiate exploration activities on both the eastern (KPE) and western (KPW) sides of the Great Dyke in the central portion of the concession. At the time, common wisdom also held that the better PGM mineralisation was to be found at the western side of the Great Dyke. A decision was thus made to relocate the drilling programme from the eastern side (KPE) of the Dyke to the southwestern portion (KPSW) of the tenement.

The drilling strategy was to target and investigate the mineralisation in the shallower areas along outcrop. Based on available information that suggested the western flank would more likely contain higher grade, the drilling campaign was commenced on the western side (Table 6-1).

Diamond drilling was undertaken from November 2018 and continued until July 2019. All diamond drilling was undertaken by reputable drilling contractors (Titan Drilling (Pvt) Ltd and Hall Core (Pty) Ltd) and executed to expected industry standards. Titan drilled HQ3 size core (61.1 mm) and Hall Core drilled HQ core (63.5 mm).

Table 6-1: Summary of the drill hole database (July 2019).

Area	Number of Drill Holes	Meterage (m)	Grid
KPE	19	3,646.500	500 m x 250 m
KPSW	130	14,011.90	250 m x 125 m
KPW	91	15,018.93	250 m x 125 m 125 m x 125 m
<b>Total</b>	<b>240</b>	<b>32,677.33</b>	

The details typically recorded in a drilling programme such as drill hole and core size, drilling contractor and drilling equipment used, periods of the drilling, the logging and sampling personnel, the assay laboratory, the assay techniques utilised along the chain of custody, and the details of the collar surveyor are adequately captured in the database.

Subsequently, an infill drilling programme was undertaken in the KPE area and initial drilling was conducted at KPSE and KPNE. The drilling programme at KPSE was designed to look at the shallow part of the deposit with potential for open-pit extraction. The KPNE drilling programme was more exploratory in design. The drilling was conducted in November and December 2020. The details are provided in

Table 6-2. All the drilling undertaken was diamond drilling and was conducted by a reputable drilling contractor (Titan Drilling (Pvt) Ltd) and executed to industry standards.

Table 6-2: Summary of the drill hole database (December 2020).

Area	Number of Drill Holes	Meterage (m)	Grid
KPE	18	1,981.60	200 m x 100 m 500 m x 125 m
KPNE	20	1,874.15	450 m x 300 m
KPSE	39	3,789.01	300 m x 330 m
KPSW		No Additional Drilling	
KPW		No Additional Drilling	
<b>Total</b>	<b>77</b>	<b>7,644.76</b>	

An infill drilling programme was concluded at KPSE to fill the gap between KPE and KPSE in May and June 2021 (Table 6-3). The protocols and procedures used were the same as those used throughout the previous drilling campaigns.

Table 6-3: Summary of additions to the drill hole database (June 2021).

Area	Number of Drill Holes	Meterage (m)	Grid
KPE		No Additional Drilling	
KPNE		No Additional Drilling	
KPSE	16	1,887.40	240 m x 240 m
KPSW		No Additional Drilling	
KPW		No Additional Drilling	
<b>Total</b>	<b>16</b>	<b>1,887.40</b>	

An infill drilling programme was undertaken in January/February 2022 in the target area for a potential open pit with the anticipation of being able to declare some Measured Mineral Resource where the open pit would be mined (Table 6-4).

Table 6-4: Summary of additions to the drill hole database (February 2022).

Area	Number of Drill Holes	Meterage (m)	Grid
KPE		No Additional Drilling	
KPNE		No Additional Drilling	
KPSE	18	2,527.88	140 m x 140 m
KPSW		No Additional Drilling	
KPW		No Additional Drilling	
<b>Total</b>	<b>18</b>	<b>2,527.88</b>	

Further drilling was undertaken from March 2023 to June 2023 as infill drilling on the KPNE prospect and an initial drilling programme on the KPNW prospect (Table 6-5). The drilling was undertaken with an HQ drill bit cutting core with a diameter of 63.5 mm.

Table 6-5: Summary of additions to the drill hole database (June 2023).

Area	Number of Drill Holes	Meterage (m)	Grid
KPE		No Additional Drilling	
KPNE	18	2,679.60	
KPNW	38	3,173.91	
KPSE		No Additional Drilling	
KPSW		No Additional Drilling	
KPW		No Additional Drilling	
<b>Total</b>	<b>71</b>	<b>5,853.51</b>	

Further drilling was undertaken from March 2023 to June 2023 as infill drilling on the KPNE prospect to fill the gap between KPNE and KPE and infill drilling on the KPSE prospect (Table 6-6). The drilling was undertaken with an HQ drill bit cutting core with a diameter of 63.5 mm.

Table 6-6: Summary of additions to the drill hole database (December 2023).

Area	Number of Drill Holes	Meterage (m)	Grid
KPE	1	161.7	
KPNE	10	656.60	
KPNW		No Additional Drilling	
KPSE	128	7,453.50	
KPSW		No Additional Drilling	
KPW		No Additional Drilling	
<b>Total</b>	<b>139</b>	<b>8,271.8</b>	

A summary of the total drilling completed to date is presented in Table 6-7.

Table 6-7: Summary of the drill hole database (December 2023).

Area	Number of Drill Holes	Meterage (m)	Grid
KPE	37	5,628.10	200 m x 100 m 500 m x 125 m
KPNE	63	5,210.65	450 m x 150 m
KPNW	38	3,173.91	500 m x 250 m
KPSE (KPSEGC)	201 (38)	15,657.79 (2,037.4)	300 m x 330 m 240 m x 240 m 140 m x 140 m KPSEGC - 50 m x 50 m
KPSW	130	14,092.33	250 m x 125 m
KPW	91	15,018.93	250 m x 125 m 125 m x 125 m
<b>Total</b>	<b>563</b>	<b>58,781.71</b>	

#### 6.4.1 Drill Hole Collars

The X, Y, and Z coordinates of all drill collars were accurately determined by a qualified surveyor (Figure 6-7 and Appendix D). The WGS 84 / UTM 36S coordinate system is used for this Project.

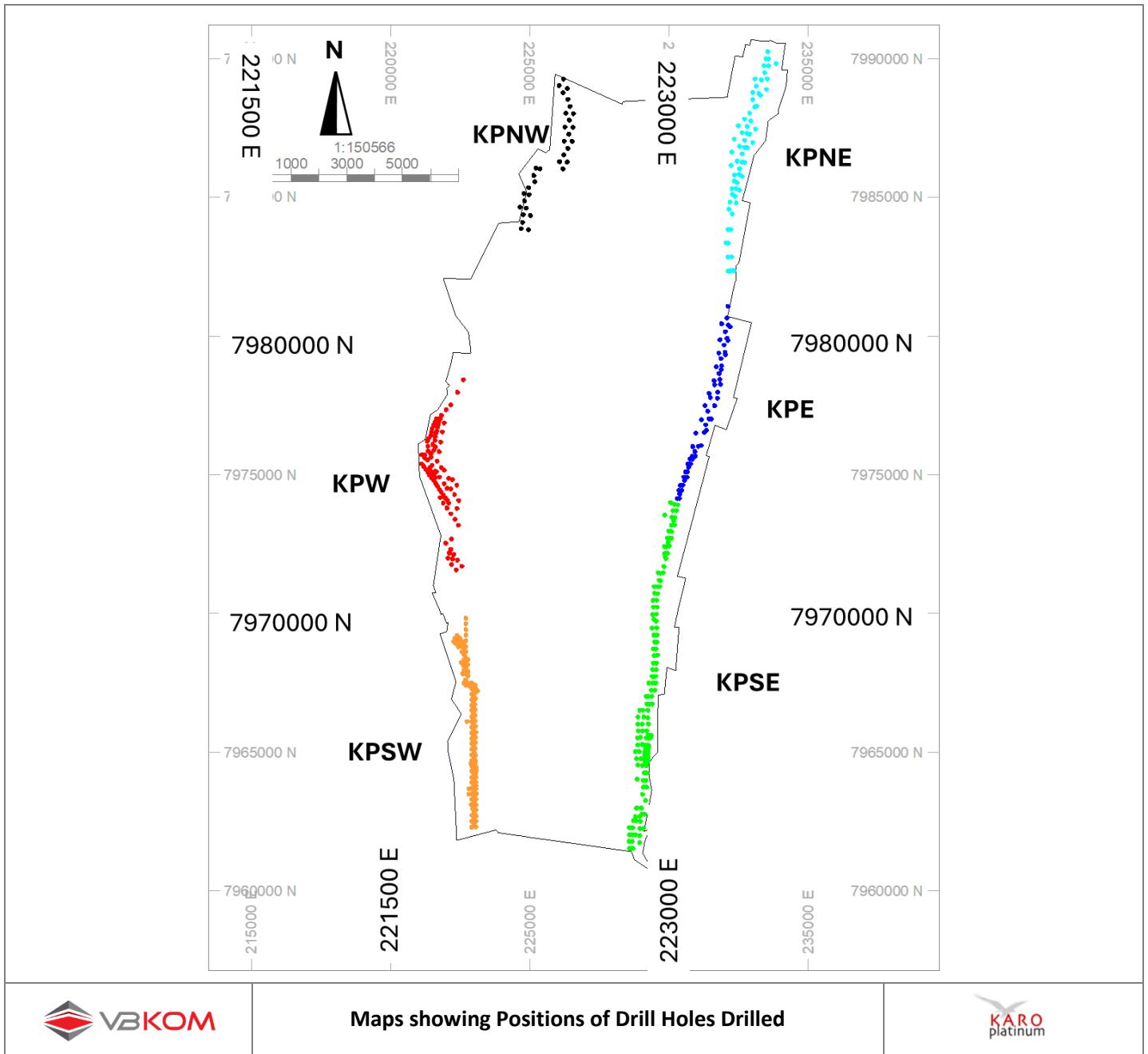


Figure 6-7: Maps showing the positions of the drill holes drilled.

### 6.4.2 Downhole Surveying

Downhole surveys were undertaken for 20 of the drill holes during the initial drilling campaign in 2019. The results confirmed that there is little deflection evident during the drilling of vertical drill holes.

### 6.4.3 Core Recovery

Core recoveries were required to be better than 95%. Intersections of mineralisation with core recoveries less than 95% were discarded or re-drilled.

#### 6.4.4 Logging

A trained geo-technician fitted and oriented the core and reconciled all drilling losses/gains before marking out 1 m depth intervals on the core with a black paint marker prior to logging by a geologist. Records of the reconciliation were compiled and kept on record. Thereafter, a detailed geological log of each drill hole was compiled. Core was logged in detail, recording and coding the various lithologies, dip angles, contact characteristics, grain size, rock texture, alteration, weathering, mineralisation, and structures on a customised log sheet.

Logging was recorded on dedicated log sheets according to predetermined codes to facilitate electronic capture into a database. Data from these hardcopy log sheets were then captured into a Microsoft Excel database, where it was validated and stored.

#### 6.4.5 Sampling Methodology

After logging, representative samples were marked out on the core with a paint marker to identify the relevant mineralised intersections. The drill holes intersected the mineralisation at up approximately 30° depending on the local dip. All sampling was undertaken on the vertical lengths of the drill holes. Unique sample numbers, from a sample duplicate ticket book, were assigned to each sample. Information for each sample, such as drill hole number, FROM and TO depths, and lithology and reef were recorded in the sample ticket book and on the corresponding duplicate sample ticket. The unique sample numbers were written onto both halves as well as on each piece of core constituting an individual sample. Core samples were marked out, numbered, and photographed with a digital camera, both when dry and wet. Subsequently, the core was cut in half vertically along its length and across to obtain the respective marked-out samples. Typically, only quarter core samples were submitted for analyses (together with the original corresponding sample ticket). Each sample was bagged separately with the numbered ticket inside, and the sample number was also written on the outside of the sample bag. The other three-quarters of the core sample was retained in the core tray for future reference or use.

Sampling information, such as drill hole number, unique sample number, sample interval (FROM–TO depths), sample length, dominant lithology, and sampling date, was recorded on dedicated sample sheets, according to predetermined codes, to facilitate electronic capture into a database. Data from these hardcopy log sheets were then captured into a Microsoft Excel database and validated. A duplicate dispatch form was completed and submitted along with every batch of samples dispatched to the laboratory in order to ensure the total number of samples and correct sample numbers were recorded and to maintain a full chain of custody. These protocols and procedures conform to recognised industry standards for sampling of PGM deposits.

The focus during sampling was to sample sufficiently to cover the intersection recognised as the MSZ so that when the analyses were returned the geochemical signature could be recognised and the BMSZ determined.

Sample intervals range from a minimum of 20 cm to 40 cm. Sample intervals were selected so as to encompass the smallest possible lithological/geological variation per sample, practically possible.

#### 6.4.6 Bulk Density Measurements

##### S3.7(i-iv)

During all exploration drilling phases, bulk density data determinations of samples informing the Mineral Resources within the MSZ were performed (and recorded) using the Archimedean method – “weight in air/weight in water” – for density determinations by the exploration team. As the core is essentially impermeable and normally contains no vugs or voids (in the unweathered zone), the result is considered appropriate as a bulk density measurement.

#### 6.4.7 Chain of Custody

##### S3.3(v), 3.5(ii)

Drill core is currently retained and stored in an enclosed building in a secure area on the mine. During the exploration, the core was processed and retained in a secure building on a local farm. As samples were exported for analysis, the coarse rejects and pulps were not retained. Further sampling on the half core remaining in the core box is possible.

A full chain of custody was implemented for the sample submission by the geologists to the analytical laboratory.

The details of the samples to be submitted were recorded on standard documentation on site. The samples are to be checked by sampling personnel and the geologists prior to shipment and export to South Africa. All details will be provided on the despatch notes. All the necessary export documentation and permits were obtained prior to dispatch from site.

The assay certificates were emailed to the Project Geologist as .csv files. Cross-checking of the assay certificates with the results was undertaken.

#### 6.4.8 Laboratory and Analytical Procedures

##### S3.4(i-iii)

The samples were dispatched to Intertek laboratory in Johannesburg, South Africa, where sample preparation was undertaken. The pulp samples were sent to Perth Australia for analysis. Intertek is an accredited Laboratory.

The precious metals (Pt, Pd, Rh, Ru, Ir, Os, Au) concentrations were determined by the nickel sulphide (NiS) collection fire assay method from a 25 g subsample. The precious metals are collected in a nickel sulphide matte which is dissolved leaving the Au and PGEs as a residue. This residue is filtered off, dissolved in aqua regia, and read on an Inductively Coupled Plasma Mass Spectrometer (ICP-MS) for low ppb detection limits. The lower detection limits are presented in Table 6-8.

The base metals (Cu, Ni, Co) concentrations were determined by Aqua Regia digestion using a 1 g subsample. The analysis is undertaken using an Inductively Coupled Plasma Spectrometer (ICP). The detection limits are presented in Table 6-8.

The total sulphur (S) concentration was determined using a Carbon Sulphur (CS) analyser. The sample is melted in a pure oxygen atmosphere in an induction furnace causing the sulphur to react to form sulphur dioxide (SO<sub>2</sub>). The combustion gases pass through a dust filter and moisture absorber for purification. In the next step, the sulphur dioxide is detected in infrared cells. The detection limits are presented in Table 6-8.

Table 6-8: Summary of the detection limits.

Element	Analytical Technique	Detection Limit	
		Lower	Upper
Au	25 g NiS fire assay / ICP-MS	2 ppb	
Pt		1 ppb	
Pd		1 ppb	
Rh		1 ppb	
Ru		1 ppb	

Element	Analytical Technique	Detection Limit	
		Lower	Upper
Ir		1 ppb	
Os		1 ppb	
Cu	Aqua Regia Digestion/ICP	0.005%	2%
Ni		0.001%	2%
Co		0.001%	1%
S	CS Analyser	0.01%	50%

## 6.4.9 Analytical Quality Assurance and Quality Control Data

### S3.5(i)(iii), S3.6(i)

A comprehensive quality assurance and quality control (QA/QC) programme was undertaken. The QA/QC programme identifies various aspects of the results that could have negatively influenced the subsequent Mineral Resource estimate. It was possible to identify samples that had been swapped, missing samples, and incorrect labelling, amongst other aspects.

The QA/QC aims to confirm both the precision and accuracy of the laboratory and thereby confirm that the data used in the Mineral Resource estimate are of sufficient quality.

The control samples used comprised two different standards, a blank and a duplicate within every 20 samples submitted. The intended aim was 5% coverage for each of the control sample types. The quality control data were analysed and have generated some queries with the laboratory, some of which are still outstanding.

The precision and accuracy are presented in terms of the following statistical measures routinely applied by Pivot.

- **Rank HARD Plot**, which ranks all assay pairs in terms of precision levels measured as half of the absolute relative difference from the mean of the assay pairs (HARD), used to visualise relative precision levels and to determine the percentage of the assay pairs population occurring at a certain precision level.
- **Mean vs HRD Plot** illustrates relative precision levels by showing the range of HRD over the grade range but the sign is retained, thus allowing negative or positive differences to be computed. This plot gives an overall impression of precision and also shows whether or not there is significant bias between the assay pairs by illustrating the mean per cent half relative difference between the assay pairs (mean HRD).
- **Correlation Plot** is a simple plot of the value of assay 1 against assay 2. This plot allows an overall visualisation of precision and bias over selected grade ranges. Correlation coefficients are also used.
- **Quantile-Quantile (Q-Q) Plot** is a means by which the marginal distributions of two datasets can be compared. Similar distributions should be noted if the data is unbiased.

The results are presented in Appendix E.

### 6.4.9.1 Drilling Programme (November 2019)

Quality control monitoring protocols involved submission of blanks, duplicates, and certified reference standards with the core sample batches. After every 8<sup>th</sup> sample, an alternating blank or duplicate was allocated to the sampling sequence followed by a standard as the 10<sup>th</sup> sample. The actual numbers of control samples submitted are shown in

Table 6-9. For field duplicates, an empty sample bag was submitted to the laboratory and instructions were given to split the preceding sample after crushing during sample preparation. Three different standards were used in the programme. A summary of the expected values for all three standards can be seen in Table 6-10. All standards were supplied by African Mineral Standards (Pty) Ltd (AMIS). Pool filter sand was used as the blank material. Analysis was undertaken by Genalysis Laboratory Services (Pty) Ltd (Genalysis) in Perth, Australia.

Table 6-9: Summary of the number of control samples (November 2019).

Control Sample	Submitted Rate of Control	Total No. of Samples	% Coverage
AMIS0442	102	18,583	0.5
AMIS0487	829		4.4
AMIS0500	927		5.0
Blanks	928		5.0
Duplicates	930		5.0

Table 6-10: Summary of the standard reference material (November 2019).

Element	Unit	AMIS0442		AMIS0487		AMIS0500	
		EV	2 Std Dev.	EV	2 Std Dev.	EV	2 Std Dev.
Pt	ppb	2,070	100	1,510	310	887	240
Pd	ppb	2,590	160	1,220	150	1,050	130
Rh	ppb	185	17	83	20	160	21
Au	ppb	300*	50	2,430	200	92	16
Ir	ppb	189*	22	100	30	149	32
Ru	ppb	50*	10	26	10	42	10
Cu	ppm	1,020	41				
Ni	ppm	1,758	105				
Co	ppm	64.5	4.17				

\* indicates provisional results

### AMIS0442

For the PGEs, greater than 91% of values for Pd, Rh, Au, and Ir are within two standard deviations of the expected value (EV). Only 80% of Pt values and 84% of Ru values were within this tolerance, however, 97% for both elements are within three standard deviations of the EV. All of these elements had a bias of less than -4%. For the base metal elements, Co had greater than 94% within two standard deviations of the EV; Cu and Ni had only 53% and 75%, respectively. When limits of three standard deviations were used, this improved to 79% and 92%, respectively, but there was still evidence of an issue, especially with the Cu results. When queried with the laboratory it was suggested that this standard was not ideal for Aqua Regia analysis as this method is normally used for low-level exploration sampling, so the laboratory automatically used a low-level certified reference material (CRM) for calibration. This could cause inaccuracy at higher levels. During the investigation, it was also discovered that there was a faulty Ru dispenser used in part of the analysis which could also account for poorer results.

The first four batches were re-analysed for Aqua Regia only and, although overall there was a nominal difference between the two datasets for real samples, the re-assays returned slightly higher results for the CRM samples, improving the graphs. It was, however, deemed prudent to cease the use of this CRM.

#### **AMIS0487**

Greater than 97% of values for all certified elements, except Au, are within two standard deviations of the EV. The bias for all elements except Ir is less than 3%. Only 86% of the values for Au are within two standard deviations of the EV, but 97% of samples are within three standard deviations. The EV for Au for this CRM is particularly high and the NiS method that has been used is not as good as lead collection for gold analysis. It is also possible that due to the high Au value in the CRM, there was some settling during transport between Johannesburg and Perth. This was queried with the laboratory and along with the above reasons it was also suspected that as the Au expected value is quite high, there could be an issue with how the instrument is calibrating over time. Since it was brought to the attention of the laboratory, the general trend of the result for Au has improved slightly and, as most results are within three standard deviations of the EV, the results have been deemed acceptable.

#### **AMIS0500**

Greater than 97% of values for all certified elements except Au are within two standard deviations of the EV and a bias of 2%, except for Pd and Rh which have a slightly high bias of 5%. For Au, 93% of values are within two standard deviations which is a little low, but 97% are within three standard deviations. One sample, C0940, was incorrectly named in the database and has since been corrected to AMIS0487. A few samples also failed in single elements but as the pattern was not repeated in the other elements it was not deemed necessary to re-assay.

#### **Blanks**

The blank samples returned higher than expected values in the Pt, Pd, Cu, and Ni graphs, which suggests contamination. While the level of contamination is generally low with 96% or more of the values for the PGEs falling below 10 times detection, a query was lodged with the laboratory. It is suspected that there is possible smearing occurring during the crushing and milling of the samples at the preparation facility in Johannesburg, and many of the anomalous results have a high-grade sample preceding it, further supporting the suspicion. Following the query, an improvement has been seen in the results returned, especially in the Cu and Ni graphs. It is recommended that a close eye is kept on future Blank samples to ensure that the laboratory continues to do its utmost to prevent contamination during sample preparation.

#### **Duplicates**

Greater than 93% of duplicate pairs fall within the accepted 20% HARD limits. A handful of duplicate pairs were noted as incorrect and, where possible, re-assays were requested. This has been done, and it was noted by the laboratory that some samples were compromised by the incorrect handling of the samples during preparation or testing. Corrective action and re-training of staff have been undertaken and no further action is required.

#### **Conclusion**

Whilst the analysis of the QA/QC samples has highlighted some issues with the preparation of the samples (Blanks) and some problems during testing e.g. calibration or faulty equipment, the issues seem to have only affected a small percentage of the results. The laboratory has been very helpful in determining and correcting the noted issues and therefore it is deemed that the assays are suitable to use in a Mineral Resource estimation.

#### 6.4.9.2 Drilling Programme 2020

Quality control monitoring protocols involved submission of blanks, duplicates, and certified reference standards with the core sample batches. The protocols used previously were continued. The actual numbers of control samples submitted are shown in Table 6-11. For field duplicates, an empty sample bag was submitted to the laboratory and instructions were given to split the preceding sample after crushing during sample preparation. Three different standards were used in the programme. A summary of the expected values for all four standards can be seen in Table 6-12. All standards were supplied by AMIS. Pool filter sand was used as the blank material. Analysis was undertaken by Genalysis.

Table 6-11: Summary of the number of control samples (2020).

Control Sample	Submitted Rate of Control	Total No. of Samples	% Coverage
AMIS0448	105	3,862	2.7
AMIS0487	84		2.2
AMIS0498	162		4.2
AMIS0500	27		0.7
Blanks	189		4.9
Duplicates	192		5.0

Table 6-12: Summary of the standard reference material (2020).

Element	Unit	AMIS0448		AMIS0487		AMIS0498		AMIS0500	
		EV	2 Std Dev.	EV	2 Std Dev.	EV	2 Std Dev.	EV	2 Std Dev.
Pt	ppb			1,510	310	1,680	530	887	240
Pd	ppb			1,220	150	1,840	290	1,050	130
Rh	ppb			83	20	170	40	160	21
Au	ppb			2,430	200	187	22	92	16
Ir	ppb			100	30	182	21	149	32
Ru	ppb			26	10	49	10	42	10
Cu	ppm	1,287	90						
Ni	ppm	2,163	131						
Co	ppm	68.6	5.1						

#### AMIS0448

This CRM is certified for Base Metal elements only for the laboratory methods used. All values for Cu and Co returned with two standard deviations of the EV with a negligible bias. The Ni values had a slightly bigger, but still acceptable, bias of -3%, and 9 values returned just outside two standard deviations of the EV but well within three standard deviations and the results are deemed acceptable.

#### **AMIS0487**

Greater than 99% of values for all certified elements are within two standard deviations of the EV except for Au which returned 96%. The EV for Au is particularly high and the NiS method that has been used is not as good as lead collection for gold analysis which would account for the slightly lower pass rate. The bias for all elements except Ir is less than 3%. A single sample, C4330, fails on all of the elements except Pt. It could not be determined if this was due to a sample swap or incorrectly identified CRM.

#### **AMIS0498**

Greater than 98% of values for all elements except Au (92%) are within two standard deviations of the EV. The bias for all elements is 5% or less except for Pd which has a bias of 7%. The EV for Pd is high, and it is possible that the NiS method used is not as good as lead collection and could account for the higher-than-expected bias. However, all values except 1 fall within two standard deviations of the EV and therefore the results are deemed acceptable. While only 92% of Au values are within two standard deviations, all values are within three standard deviations and so are deemed acceptable.

#### **AMIS0500**

All values for the certified elements except Pd are within two standard deviations of the EV and a bias of 4%, except for Pd and Rh which have a high bias of 9% and 7%, respectively. Three values for Pd are just outside two standard deviations but well within three standard deviations and are therefore considered suitable. While a higher bias has been noted in the previous campaign, this round of analyses has produced a much higher comparative bias, and it is recommended that the data be sent to the laboratory for comment and feedback.

#### **Blanks**

The blank samples have returned results of 95% or more of the PGE elements falling below 10 times detection. The few samples that returned slightly higher results could indicate potential contamination; however, the levels are so low (< 20 ppb) that they are not deemed to be an issue.

#### **Duplicates**

Greater than 94% of duplicate pairs fall within the accepted 20% HARD limits. A handful of duplicate pairs were noted as incorrect and, where possible, re-assays have been requested and are being re-tested.

#### **Conclusion**

Whilst the analysis of the QA/QC samples have highlighted some minor issues, only a small percentage of the results are affected and as such the results are deemed suitable to use in a Mineral Resource estimation as per industry standards.

#### **6.4.9.3 Drilling Programme 2021**

Quality control monitoring protocols involved submission of blanks, duplicates, and certified reference standards with the core sample batches. The protocols used previously were continued. The actual numbers of control samples submitted are shown in Table 6-13. For field duplicates, an empty sample bag was submitted to the laboratory and instructions were given to split the preceding sample after crushing during sample preparation. Two different standards were used in the programme. A summary of the expected values for both standards can be seen in Table

6-14. All standards were supplied by AMIS. Pool filter sand was used as the blank material. Analysis was undertaken by Genalysis.

Table 6-13: Summary of the number of control samples (2021).

Control Sample	Submitted Rate of Control	Total No. of Samples	% Coverage
AMIS0448	41	848	4.8
AMIS0498	43		5.1
Blanks	42		5.0
Duplicates	42		5.0

Table 6-14: Summary of the standard reference material (2021).

Element	Unit	AMIS0448		AMIS0498	
		EV	2 Std Dev.	EV	2 Std Dev.
Pt	ppb			1,680	530
Pd	ppb			1,840	290
Rh	ppb			170	40
Au	ppb			187	22
Ru	ppb			182	21
Ir	ppb			49	10
Cu	ppm	1,287	90		
Ni	ppm	2,163	131		
Co	ppm	68.6	5.1		

### AMIS0448

This CRM is certified for Base Metal elements only for the laboratory methods used. All values for Cu returned with two standard deviations of the EV with a negligible bias. The Ni and Co values had a slightly bigger, but still acceptable, bias of -2% and 2 values for each element returned just outside two standard deviations of the EV but well within three standard deviations and the results are deemed acceptable.

### AMIS0498

Greater than 98% of values for all certified elements are within two standard deviations of the EV except for Ru which returned 91%. Of the four Ru values that fell outside the 2 standard deviation range, three are well within three standard deviations and so not considered a problem. The fourth is a sample fail but, as the sample did not fail for any other element, it is not necessary to follow up with the laboratory. The bias for all elements except Pd is less than 3%. Pd has a high bias of 5%, however, the EV for Pd is high and it is possible that the NiS method used is not as good as lead collection and could account for the higher-than-expected bias.

### Blanks

For all elements, the blank samples have returned results of 95% or more of the samples falling below 10 times detection. The few samples that returned slightly higher results could indicate potential contamination; however, the

levels are so low (less than 20 ppb) that they are not deemed to be an issue. Sample D7639\_1 returned anomalous results for the PGEs. Upon review, the samples surrounding this Blank were high grade which suggests some minor contamination during sample preparation.

### Duplicates

Greater than 97% of duplicate pairs for all elements except Ir and Ru fall within the accepted 20% HARD limits. Ir had a single sample fail, resulting in only 94% within acceptable limits and Ru had two samples fail resulting in only 89% within acceptable HARD limits. However, as these samples failed only in these elements it is not deemed necessary to follow up with the laboratory and request re-assays at this time.

### Conclusion

Following the analysis of the QA/QC, the results are deemed suitable to use in a Mineral Resource estimation as per industry standards.

#### 6.4.9.4 Drilling Programme 2022

Quality control monitoring protocols involved submission of blanks, duplicates, and certified reference standards with the core sample batches. The protocols used previously were continued. The actual numbers of control samples submitted are shown in Table 6-15. For field duplicates, an empty sample bag was submitted to the laboratory and instructions were given to split the preceding sample after crushing during sample preparation. Two different standards were used in the programme. A summary of the expected values for both standards can be seen in Table 6-16. All standards were supplied by AMIS. Pool filter sand was used as the blank material. Analysis was undertaken by Genalysis.

Table 6-15: Summary of the number of control samples (2022).

Control Sample	Submitted Rate of Control	Total No. of Samples	% Coverage
AMIS0448	68	1,366	5.0
AMIS0498	68		5.0
Blanks	68		5.0
Duplicates	68		5.0

Table 6-16: Summary of the standard reference material (2022).

Element	Unit	AMIS0448		AMIS0498	
		EV	2 Std Dev.	EV	2 Std Dev.
Pt	ppb			1,680	530
Pd	ppb			1,840	290
Rh	ppb			170	40
Au	ppb			187	22
Ru	ppb			182	21
Ir	ppb			49	10
Cu	ppm	1,287	90		
Ni	ppm	2,163	131		

Element	Unit	AMIS0448		AMIS0498	
		EV	2 Std Dev.	EV	2 Std Dev.
Co	ppm	68.6	5.1		

### AMIS0448

This CRM is certified for Base Metal elements only for the laboratory methods used. Greater than 93% of values for the certified elements are within two standard deviations of the EV and a bias of 4% or less, which is deemed acceptable.

There was a single sample which failed for all three elements: Sample M3150 from Batch 1298\_1\_2204907. This was queried with the laboratory but the result or the re-assay is not known. It was also noted that Batch 1298\_1\_2204902 returned much higher results than the other batches, though just within acceptable limits. This was likely caused by poor calibration of the machine and was corrected for subsequent batches.

### AMIS0498

Greater than 96% of values for all certified elements are within two standard deviations of the EV. The bias for all elements except Pd is less than 3%. Pd has a high bias of 5%, however, the EV for Pd is high and it is possible that the NiS method used is not as good as lead collection and could account for the higher-than-expected bias.

### Blanks

For all elements except Cu and Ni the blank samples have returned results of 99% or more of the samples falling below 10 times detection. Ni has 90% of the samples falling below 10 times detection and Cu only has 67%. The source of the Blank material likely contains small traces of Cu and Ni and the method used to test these elements has a very low detection limit. All samples except one returned values lower than 20 ppm but this is not deemed to be a cause for concern.

### Duplicates

Greater than 91% of duplicate pairs for all elements fall within the accepted 20% HARD limits. Four duplicate pairs failed, and re-assays were requested but the results of the re-analysis are not known. Two duplicate samples, H0009 and H0609, failed for PGEs only; duplicate sample M3129 failed for base metals only and H0549 failed on all elements.

### Conclusion

Following the analysis of the QA/QC data, the results are deemed suitable to use in a Mineral Resource estimation as per industry standards.

#### 6.4.9.5 Drilling Programme 2023

Quality control monitoring protocols involved submission of blanks, duplicates, and certified reference standards with the core sample batches. After every 8<sup>th</sup> sample, an alternating blank or duplicate was allocated to the sampling sequence followed by a standard as the 10<sup>th</sup> sample. The actual numbers of control samples submitted are shown in Table 6-17.

For field duplicates, an empty sample bag was submitted to the laboratory and instructions were given to split the preceding sample after crushing during sample preparation.

Two different standards were used in this programme. A summary of the expected values for the two standards used can be seen in Table 6-18. All standards were supplied by AMIS. A coarse ( $\pm 13$  mm) silica sand was used as the blank material so that the samples go through the crushing as well as pulverising process. Analysis was undertaken by Genalysis.

Table 6-17: Summary of the number of control samples (2023).

Control Sample	Submitted Rate of Control	Total No. of Samples	% Coverage
AMIS0448	187	3,676	5.1
AMIS0498	179		4.9
Blanks	184		5.0
Duplicates	182		5.0

Table 6-18: Summary of the standard reference material (2023).

Element	Unit	AMIS0448		AMIS0498	
		EV	2 Std Dev.	EV	2 Std Dev.
Pt	ppb			1,680	530
Pd	ppb			1,840	290
Rh	ppb			170	40
Au	ppb			187	22
Ru	ppb			182	21
Ir	ppb			49	10
Cu	ppm	1,287	90		
Ni	ppm	2,163	131		
Co	ppm	68.6	5.1		

### AMIS0448

This CRM is certified for Base Metal elements only for the laboratory methods used. Greater than 98% of values for the certified elements are within two standard deviations of the EV and a bias of -3% or less which is deemed acceptable.

### AMIS0498

Greater than 95% of values for all certified elements are within two standard deviations of the EV. The bias for all elements except Pd is less than 4%. Pd has a slightly higher bias of 5%, however, the EV for Pd is high and it is possible that the NiS method used is not as good as lead collection and could account for the higher-than-expected bias.

### Blanks

For all elements, the blank samples have returned results of 98% or more of the samples falling below 10 times detection. Sample F6179 was an obvious fail and, on further investigation, it was determined that this sample was in fact a duplicate of the preceding sample, not a blank.

## Duplicates

Greater than 98% of duplicate pairs for all elements fall within the accepted 20% HARD limits, except for Pt where 95% of pairs were within limits. One duplicate sample pair, W4168 and W4169, failed for PGEs only and the reason could not be determined so the duplicate pair plus five samples on either side should be re-assayed. One duplicate pair, W4948 and W4949, failed on base metals only. The reason could not be determined so the duplicate pair plus five samples on either side should be re-assayed. One duplicate pair, W4148 and W4149, also failed on base metals but further investigation determined that W4149 was not a duplicate but a Blank.

## Conclusion

Following the analysis of the QA/QC the results are deemed suitable to use in a Mineral Resource estimation as per industry standards.

### 6.4.9.6 Drilling Programme 2024

Quality control monitoring protocols involved submission of blanks, duplicates, and certified reference standards with the core sample batches. After every 8<sup>th</sup> sample, an alternating blank or duplicate was allocated to the sampling sequence followed by a standard as the 10<sup>th</sup> sample. The actual numbers of control samples submitted are shown in Table 6-19.

For field duplicates, an empty sample bag was submitted to the laboratory and instructions were given to split the preceding sample after crushing during sample preparation.

Two different standards were used in this programme. A summary of the expected values for the two standards used can be seen in Table 6-20. All standards were supplied by AMIS. A coarse ( $\pm 13$  mm) silica sand was used as the blank material so that the samples go through the crushing as well as pulverising process. Analysis was undertaken by Genalysis.

Table 6-19: Summary of the number of control samples (2024).

Control Sample	Submitted Rate of Control	Total No. of Samples	% Coverage
AMIS0448	248	4,994	5.0
AMIS0498	248		5.0
Blanks	249		5.0
Duplicates	250		5.0

Table 6-20: Summary of the standard reference material (2024).

Element	Unit	AMIS0448		AMIS0498	
		EV	2 Std Dev.	EV	2 Std Dev.
Pt	ppb			1,680	530
Pd	ppb			1,840	290
Rh	ppb			170	40
Au	ppb			187	22
Ru	ppb			182	21
Ir	ppb			49	10

Element	Unit	AMIS0448		AMIS0498	
		EV	2 Std Dev.	EV	2 Std Dev.
Cu	ppm	1,287	90		
Ni	ppm	2,163	131		
Co	ppm	68.6	5.1		

### AMIS0448

This CRM is certified for Base Metal elements only for the laboratory methods used. For the certified elements, 100% of values returned are within two standard deviations of the EV and a bias of -2%.

### AMIS0498

Greater than 97% of values for all certified elements are within two standard deviations of the EV. The bias for all elements except Pd and Rh is less than 2%. Both Pd and Rh have a slightly higher bias of 5%. However, the EV for Pd is high, and it is possible that the NiS method used is not as good as lead collection which could account for the higher-than-expected bias.

### Blanks

For all elements, the blank samples have returned results of 99% or more of the samples falling below 10 times detection.

### Duplicates

Greater than 95% of duplicate pairs for all elements fall within the accepted 20% HARD limits, except for Pt where 91% of pairs were within limits. One duplicate sample pair, S4648 and S4649, is an obvious fail and, on further investigation, it is suspected that S4649 is, in fact, a Blank QA/QC sample, not a Duplicate. Most of the other duplicate pairs that fall outside the accepted 20% HARD limits are results that are lower than 10 times the detection limit which accounts for the poorer reproducibility.

### Conclusion

Following the analysis of the QA/QC the results are deemed suitable to use in a Mineral Resource estimation as per industry standards.

## 6.5 Drill Hole Database Validation

The drilling data were reviewed and validated. Validation took the form of fixed routines within Micromine software.

The following procedure was undertaken during database validation:

- Ensure compatibility of total drill hole depth data in each of the collar, survey, assay, mineralisation, alteration, and geology database files.
- Check for missing and overlapping intervals in geology and overlapping intervals in all files.
- Replacements of blanks and missing values in the assay data file with zero. Checking of database coding.
- Checking if collar elevation is consistent with topographic data where available.

- Checking for duplicate drill hole numbers and coordinates as well as geological and assay intervals.

Visual inspections of the core were undertaken during the respective site visits.

The collars of a selection of drill hole collars were checked using a handheld Garmin GPS. The collars were confirmed to be in the measured location.

## 6.6 Exploration Expenditure

### JSE 12.10(e)

#### 6.6.1 Exploration Expenditure Incurred to Date

Karo has conducted geophysical and structural studies, multiple drilling programmes with associated assays, Mineral Resource estimates with updates as well as geotechnical work. The total exploration Expenditure incurred by Karo is presented below in Table 6-21.

Table 6-21: Exploration expenditure incurred to date.

Exploration Type	Cost (USD)
Aerial survey	78,452.39
Geophysics	72,141.79
Structural studies	13,650.00
Diamond drilling	7,154,879.24
Sampling	704,323.49
Assay	2,116,666.23
Mineral Resource estimation	298,829.58
Geotechnical	11,328.00
Overheads (labour, etc.)	307,738.98
<b>Total exploration expenditure</b>	<b>10,758,009.70</b>

#### 6.6.2 Planned Exploration Expenditure

In line with the production schedule of the open pits, Karo will conduct evaluation drilling in the KPSE pit area to ensure there is at least a one-year Resource buffer before the commencement of mining. Over the next two years, Karo plans to conduct two phases of evaluation drilling, totalling 21,500 m, at a budget cost of USD3.44 million.

With the commencement of open-pit mining, which has a 10-year LOM, Karo has initiated exploration drilling to delineate the underground ore body, its size, and quality. A three-phased programme of 1,000 m x 500 m (phase 1), 500 m x 500 m (phase 2), and 250 m x 250 m (phase 3) is planned for the coming two years (refer to Figure 6-8). This will total 66,600 m, with a budget of USD13.34 million.

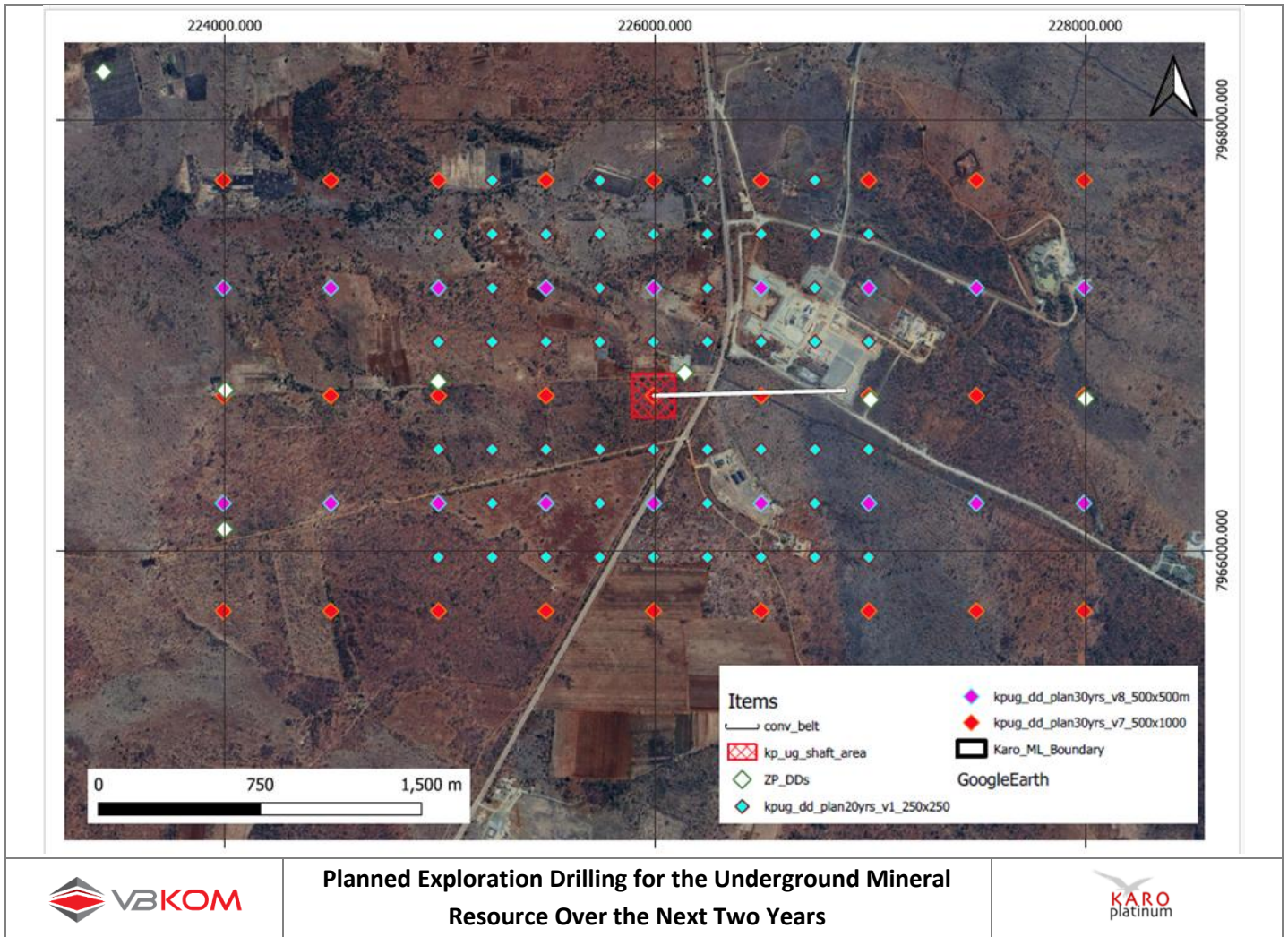


Figure 6-8: Planned exploration drilling for the underground Mineral Resource over the next two years.

## 7 MINERAL RESOURCE ESTIMATES

### T1.2, T1.10

A Mineral Resource estimate was undertaken for each of the six areas of the Karo Project (KPE, KPNE, KPNW, KPSE, KPSW, and KPSW). Each area was considered independently in terms of the determination and selection of the best cut.

### 7.1 Database

#### S3.1(ii), 3.3(iii), 4.1(ii)(iv)

The database is comprised of collar coordinates, downhole surveys, lithological core logs, bulk density data, and assay data for the 563 drill holes completed on the project.

Some drill holes were excluded from the estimation due to poor core recovery or other sub-standard issues. These are summarised in Table 7-1.

Table 7-1: Drill hole exclusions.

MSZ Not Identified/Not Sampled			Core Loss		MSZ Not Sampled	Geological Loss
KPE001	KPNE013	KPSE057	KPNE060	KPSEGC010	KPW011	KPSW001
KPE023	KPNE016	KPSE058	KPNE061	KPSEGC013	KPW014	KPSW120
KPE027	KPNE017	KPSE093	KPSE033	KPSEGC016		KPSE063
KPE029	KPNE035	KPSE095	KPSE056	KPSEGC017		KPSE101
KPE031	KPSE014	KPSE100	KPSE103	KPSW061		
KPNE002	KPSE016	KPSE109	KPSE113	KPSW061A		
KPNE003	KPSE029	KPSE110	KPSE119	KPSW062		
KPNE004	KPSE034	KPSE123	KPSE120	KPSW063		
KPNE005	KPSE037	KPSE154	KPSE124	KPSW064		
KPNE009	KPSE038	KPSW049	KPSE127	KPW024		
KPNE010	KPSE041	KPSW094	KPSE142	KPW031		
KPNE011	KPSE045	KPW039	KPSE147	KPW079		
KPNE012	KPSE055	KPW046	KPSE149			

### 7.2 Geological Modelling

#### S2.1(vii), 3.1(vii), 4.1(i)(ii)

A 3D structural geological interpretation based on the drill hole intersections was undertaken (Section 5, Figure 5-8) for each area. The outcrop geometry was determined by extrapolation from the geological model. The model wireframes were then used in Datamine™ software to complete the Mineral Resource estimation model. The base of the MSZ was used as an identifiable reference layer for the modelling. A number of dip faults were interpolated from

the drilling. The area of the dolerite sill intersection identified in the KPSE area has been delineated and excluded from the Mineral Resource estimate.

A comparison of the structural interpretation completed during the Mineral Resource estimation with the regional interpretation completed by Dr Friese is presented in Appendix C. The structural interpretation relating to the Mineral Resource estimation identifies possible larger faults as the distance between the drill holes precludes the identification of smaller faults (estimated <10 m). It is anticipated that there are potential smaller faults than identified in the geological interpretation for the Mineral Resource estimation which may affect the mining operation and in an open-pit operation will easily be negotiated. The identified faulting is considered not to have had any lateral displacement and so does not significantly affect the Mineral Resource estimation which would require the estimation of fault blocks independently.

The orientation and location of the structures interpreted for the Mineral Resource estimation include some structures that are similar or close to those presented in the regional interpretation.

The regional structural interpretation includes a number of structural elements including faults, dykes, and shear zones. Where faults or shear zones are presented, the trace is indicated but the throw is generally not provided. Whilst the orientation of these structures may be common for the different structural elements, not all the structures represented by lines on the map are faults.

The actual traces of regional interpretation are generally not coincident with the Mineral Resource estimation interpretation although the orientations are generally similar. The majority of the designated faults (yellow) lines (Appendix C) are not confirmed based on the Mineral Resource estimation interpretation.

### **7.3 Level of Oxidation**

The estimation of a Mineral Resource includes the determination of the “reasonable prospects of economic extraction” of the deposit. This involves consideration of the grade, the related economics, and the assessment of any technical aspect that should be considered. One key aspect to be considered when assessing a deposit is the upper limit of weathering or specific geological demarcation of where the prospect of eventual economic extraction is unlikely.

Close to surface, the rocks become weathered due to their exposure to water and air. The movement of water also has an effect and can leach some metals (e.g. palladium and sulphur) from the deposit. In the case of platiniferous deposits, the level of weathering or oxidation also reduces the prospect of metal recovery from the weathered zone.

The weathering profile may also be strongly influenced by localised structural factors i.e. the presence of faults and fractures that allow water to percolate and increase the depth of weathering. In contrast, the lack of structures, permeability or porosity would result in less weathered rocks closer to surface.

#### **7.3.1 Level of Oxidation – KPSW**

An analysis of the weathering profile based on the data from KPSW is presented in Figure 7-1. The graph shows an overall trend of more weathered material at surface and fresh ground at depth. The shallowest fresh sample is logged at 25 mbs but weathering continues to a depth of nearly 40 mbs. Based on this analysis, the rocks above 25 mbs have been characterised as “substantially weathered” and the rocks between 25 mbs and 50 mbs have been designated as “slightly or partially weathered”. To determine the depth at which the rocks may be categorised as fresh, the study identified where the levels of weathering were reduced and/or where the rocks were logged as fresh. This was estimated to be at 45–50 mbs.

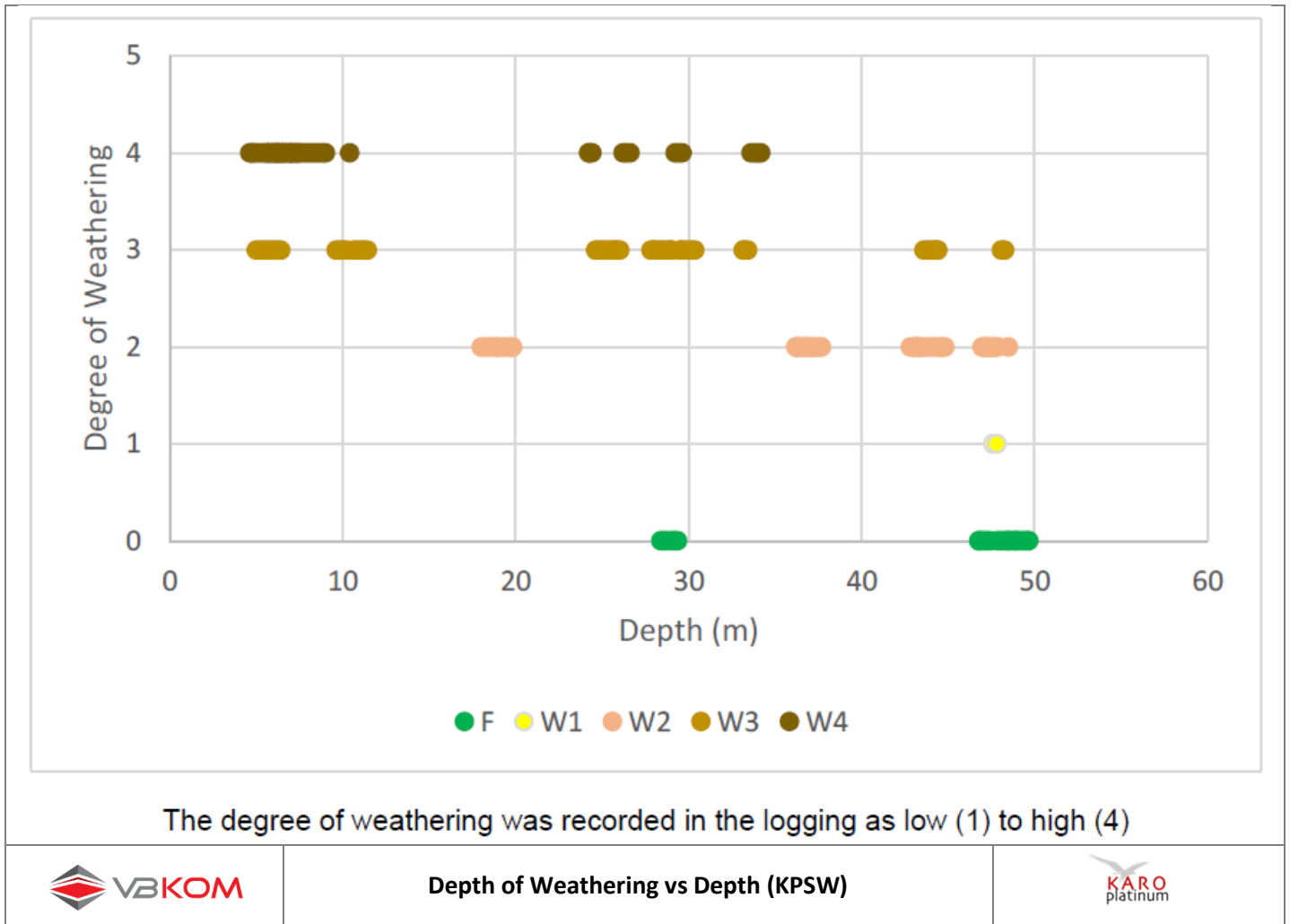


Figure 7-1: Graph showing the depth of weathering vs depth (KPSW).

It is also prudent to test whether the depth below surface, a proxy for weathering, has a relationship to the grade. In this analysis, the individual samples that are included in the designated 2 m Mineral Resource cut were considered (Figure 7-3). The analysis shows that the shallowest samples all have low concentrations and that at approximately 15 mbs samples are associated with typical 3PGE+Au concentrations. The analysis of Cu and Ni shows a similar trend with low concentrations at shallower depths with a distinct change at approximately 10 mbs, although completely weathered samples (Figure 7-3) are present at approximately 35 mbs. The analysis of sulphur also mimics this trend. However, the increase to typical concentrations is evident at 25–30 mbs. A review considering the depth at which fresh rocks are encountered with little or no negative effects in terms of recovery or grade indicated that fresh rocks are present at 45–50 mbs.

Consideration of the density shows the point at which material has been removed by the exposure to the water table. Considering the density of the rocks to be 3.2 t/m<sup>3</sup>, the effect of weathering is noted to a depth of approximately 35 mbs (Figure 7-2).

Based on the analysis, the Mineral Resource was declared from a depth of 25 mbs to the depth extent limit of the drill holes. Figure 7-3 plots the relationship of metal grade vs depth and indicates the depth of weathering in KPSW.

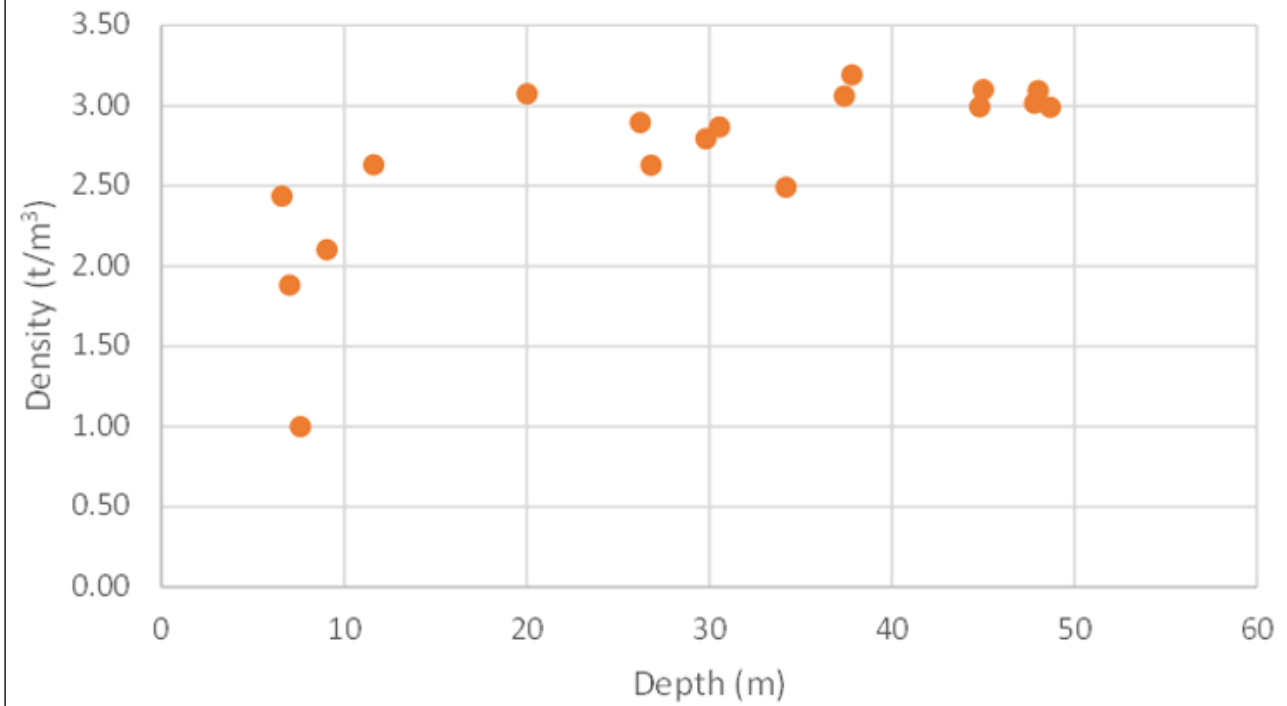
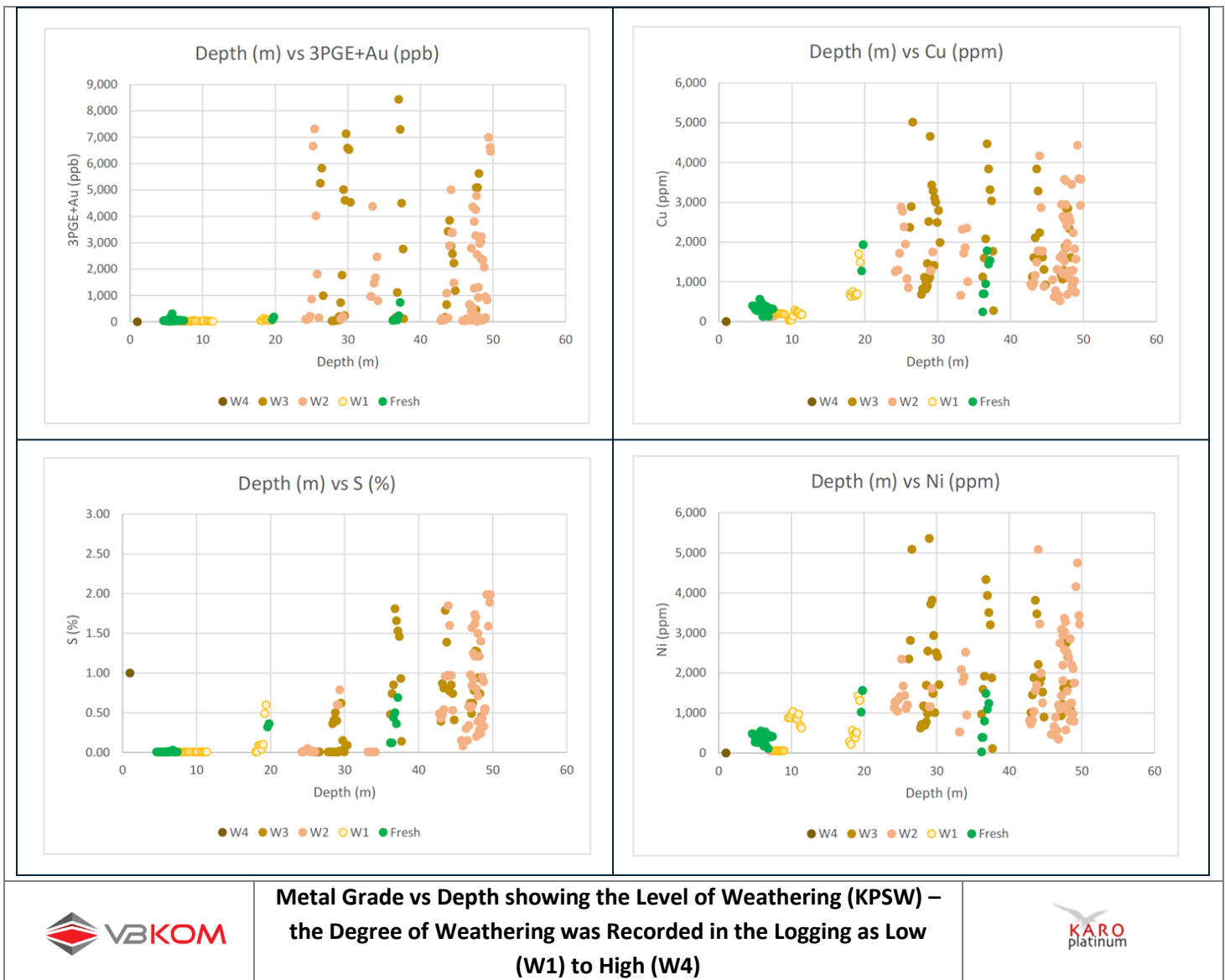


Figure 7-2: Graph of the density vs depth (KPSW).



**Metal Grade vs Depth showing the Level of Weathering (KPSW) – the Degree of Weathering was Recorded in the Logging as Low (W1) to High (W4)**

Figure 7-3: Graph of the metal grade vs depth showing the level of weathering (KPSW) – the degree of weathering was recorded in the logging as low (W1) to high (W4).

### 7.3.2 Level of Oxidation – KPSE Grade Control (GC)

In June 2022, 38 “grade control” (GC) drill holes were drilled to review the parameters required for operational grade control. As these drill holes intersected the MSZ in the oxide/transition/fresh zone, they afforded the opportunity to estimate the depth of weathering with more accuracy than was previously possible. Some 10 of the 38 BMSZ intersections were logged at less than 25 m. The analysis took individual samples for which grades have been determined.

The weathering analysis is presented in Figure 7-4. The graph shows an overall trend of more weathered material at surface and fresh at depth. The shallowest fresh sample is at 38 mbs but weathering continues to a depth of at least 60 m. To determine the depth at which the rocks may be categorised as fresh, the analysis identified where the levels of weathering are reduced and/or where the rocks are significantly assigned as fresh. This is estimated to be at about 30 mbs (Figure 7-4).

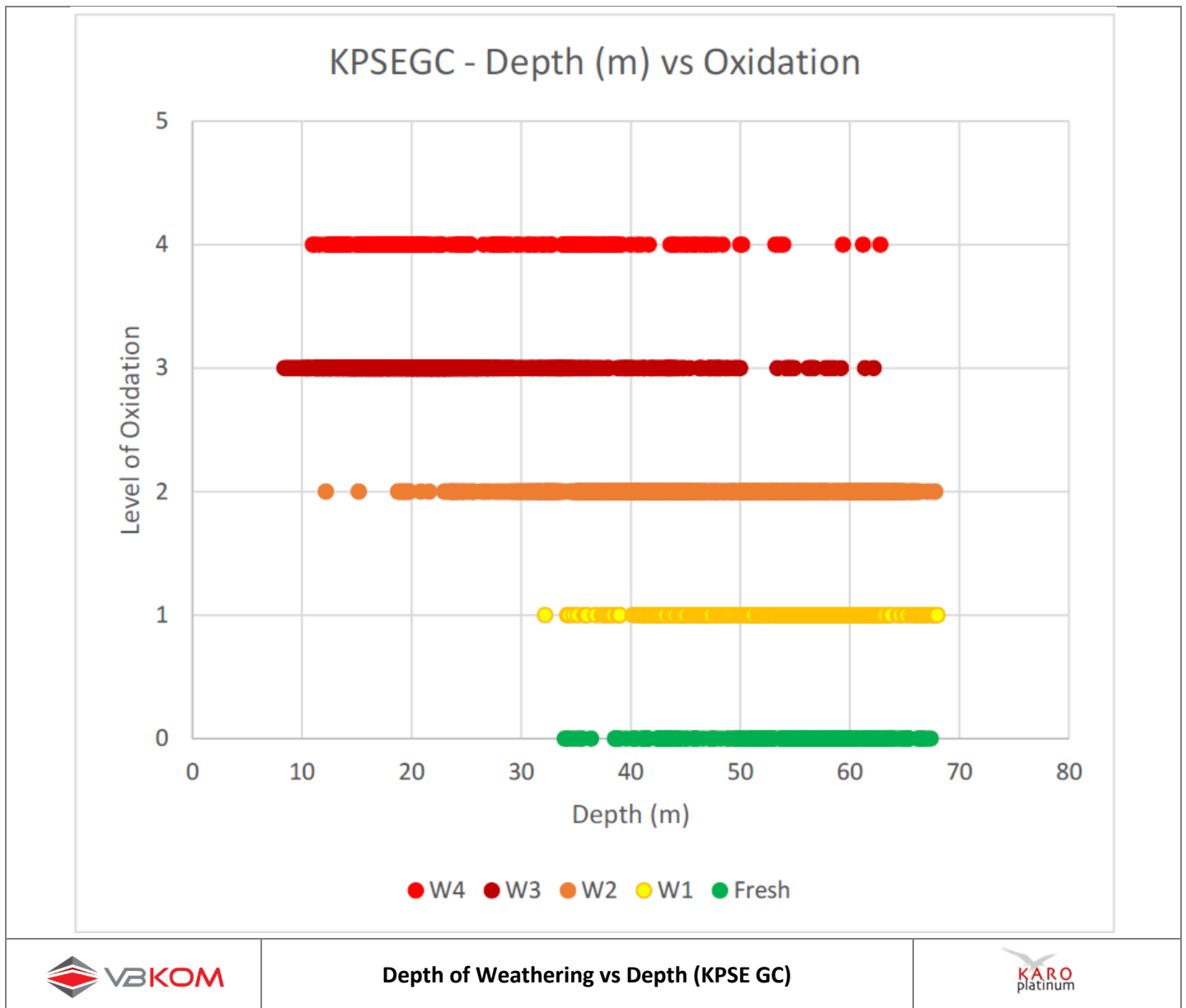


Figure 7-4: Graph showing the depth of weathering vs depth (KPSE GC).

The analysis presented considers the assigned level of weathering in relation to the metal grade distribution to depth for each sample (Figure 7-5). The analysis shows that the shallowest samples all have low concentrations and that at approximately 15 mbs samples are associated with typical 3PGE+Au concentrations. At greater depths, the 3PGE+Au grade doesn't show any significant relationship to depth such as increasing in value with depth. This suggests that a depth of approximately 15 m is where the 3PGE+Au grades are no longer affected by the weathering process.

The analysis of sulphur demonstrates a significant lack of sulphur until a depth of 32 mbs and no significant relationship with further depth (Figure 7-5). This suggests that a depth of approximately 30 mbs is where the rocks are unaffected by the weathering process.

The analysis of Cu and Ni does not show any significant effect of the weathering process (Figure 7-5). This is critical as the identification of the BMSZ is related to the sudden drop off in sulphur grade and base metal grade (Figure 7-6). The implication is that at shallower depths where the visual identification of the optimal cut may be difficult because

of the lack of sulphur in the rocks, the presence/geochemical profile of Cu and Ni could be used to indicate the BMSZ and therefore direct mining to the designated Mineral Resource cut.

Analysis of density indicated the point at which material was potentially removed by exposure to the water table. Considering the average density of the rocks to be 3.2 t/m<sup>3</sup>, the effect of weathering was noted to a depth of approximately 30 mbs (Figure 7-5). Based on the analysis, the Mineral Resource was estimated from a depth of 25 mbs to the depth extent limit of the drill holes.

Based on this analysis the rocks above 15 mbs are “substantially weathered” (“oxidised”), the rocks between 15 mbs and 30 mbs are “partially weathered” (“transition”), and rocks below 30 mbs are considered “slightly weathered” or “unweathered”.

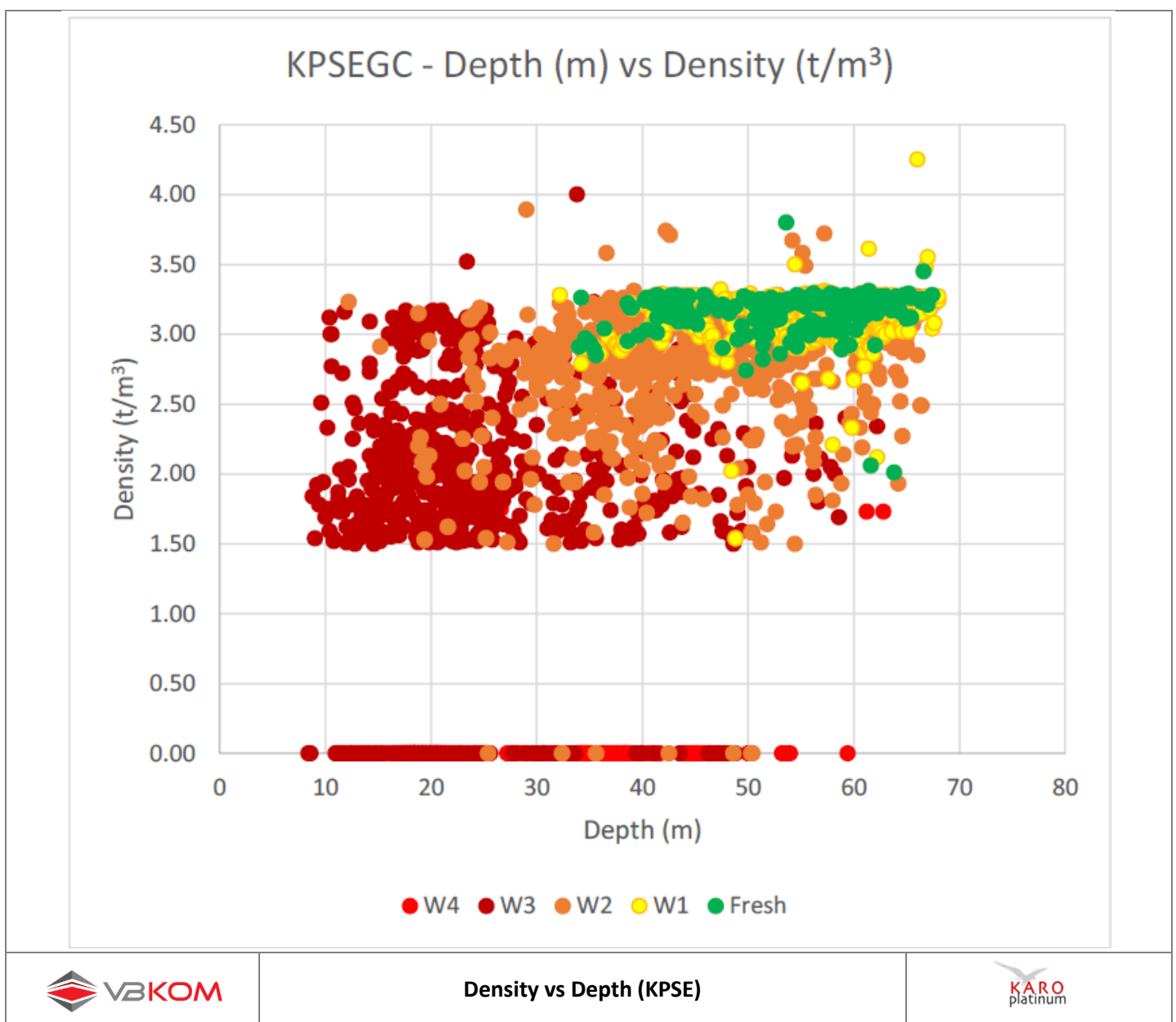
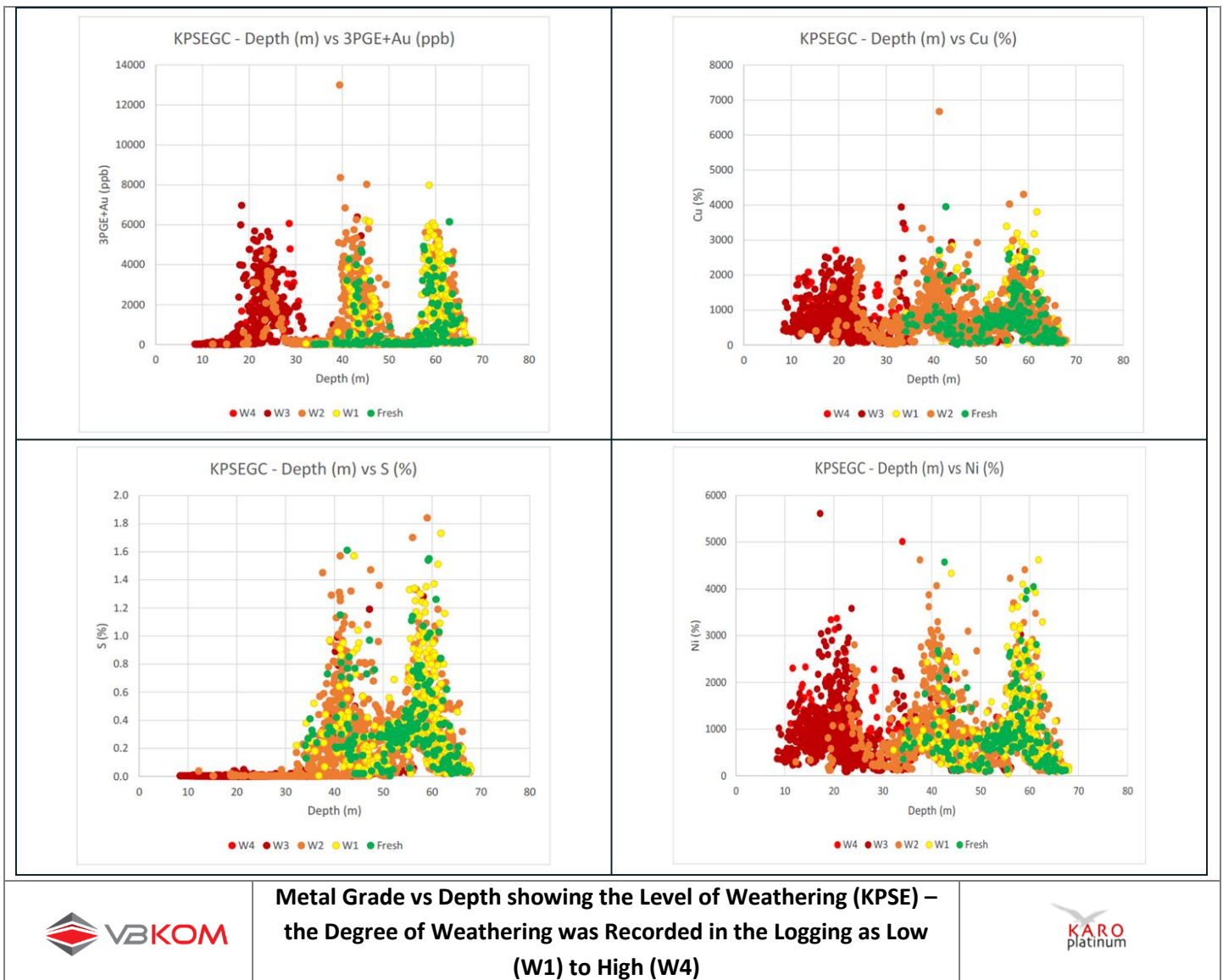


Figure 7-5: Graph of the density vs depth (KPSE).

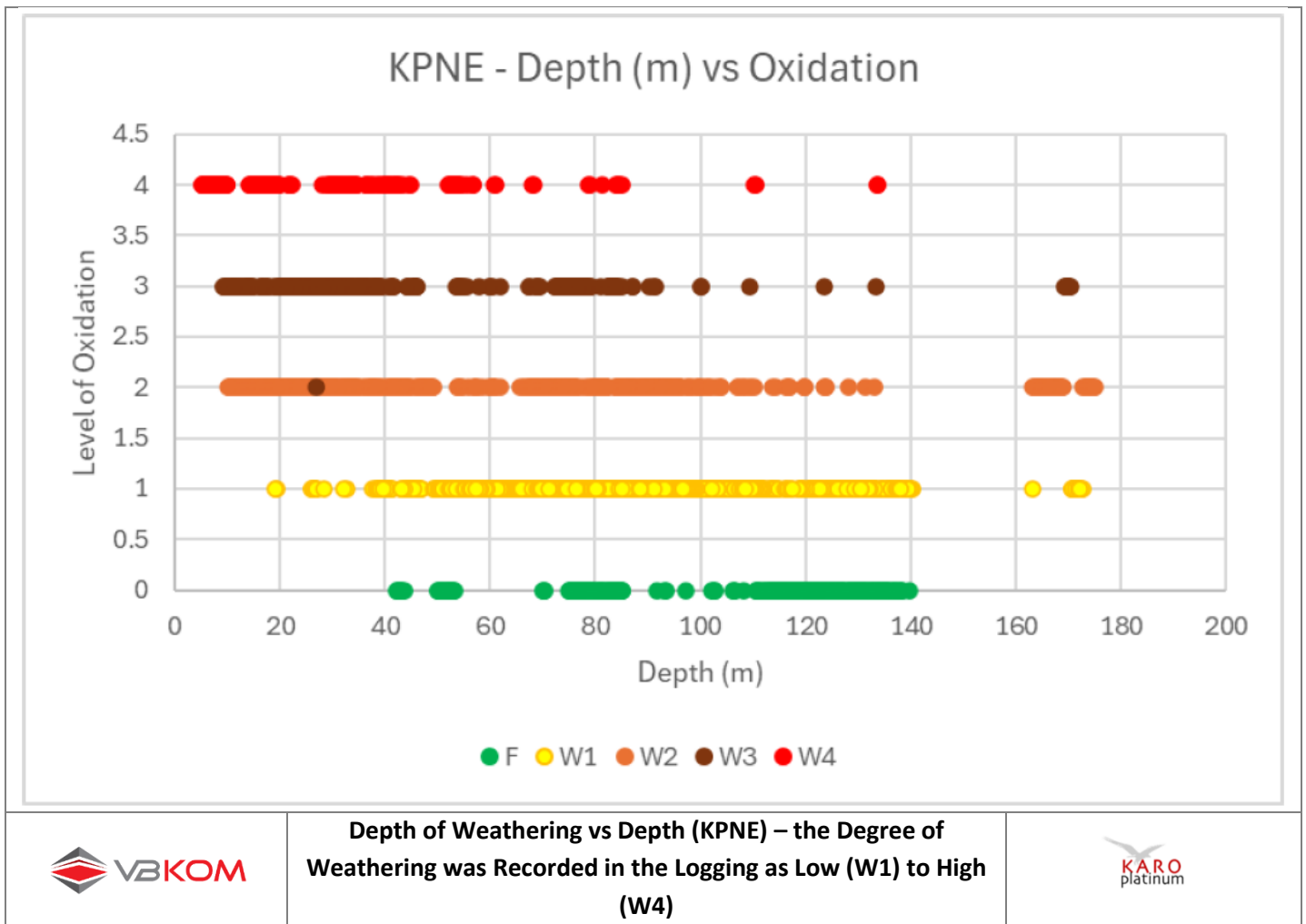


**Metal Grade vs Depth showing the Level of Weathering (KPSE) – the Degree of Weathering was Recorded in the Logging as Low (W1) to High (W4)**

Figure 7-6: Graph of the metal grade vs depth showing the level of weathering (KPSE) – the degree of weathering was recorded in the logging as low (W1) to high (W4).

### 7.3.3 Level of Oxidation – KPNE

An analysis of the weathering profile based on the data from KPNE is presented in Figure 7-7. The graph shows an overall trend of more weathered material at surface and fresh ground at depth. The shallowest fresh sample is logged at 38 mbs but weathering continues to a depth of nearly 40 mbs. “Slightly or partially weathered” material has been intersected from 18 mbs. Based on this analysis, the rocks above 18 mbs could be characterised as “substantially weathered” and the rocks between 18 mbs and 38 mbs designated as “slightly or partially weathered”.



**Depth of Weathering vs Depth (KPNE) – the Degree of Weathering was Recorded in the Logging as Low (W1) to High (W4)**

*Figure 7-7: Graph showing the depth of weathering vs depth (KPNE) – the degree of weathering was recorded in the logging as low (1) to high (4).*

Analysis of density indicated the point at which material was potentially removed by exposure to the water table. Considering the average density of the rocks to be 3.2 t/m<sup>3</sup>, the effect of weathering was noted to a depth of approximately 35 mbs (Figure 7-8). No significant change in density is noted for the boundary between the oxidised and transitional material.

It is also prudent to test whether the depth below surface, a proxy for weathering, has a relationship to the grade. In this analysis, the individual samples were considered (Figure 7-9). The analysis shows that very shallow samples all have low concentrations and that at approximately 15 mbs samples are associated with typical 3PGE+Au concentrations. The analysis of Cu and Ni shows a similar trend with low concentrations at shallower depths with a distinct change at approximately 8–10 mbs although completely weathered samples (Figure 7-9) are present at depths of up to 45 mbs. The analysis of sulphur also mimics this trend. However, the increase to typical concentrations is evident at 35 mbs. A review considering the depth at which fresh rocks are encountered with little or no negative effects in terms of recovery or grade indicated that fresh rocks are present at 35–50 mbs.

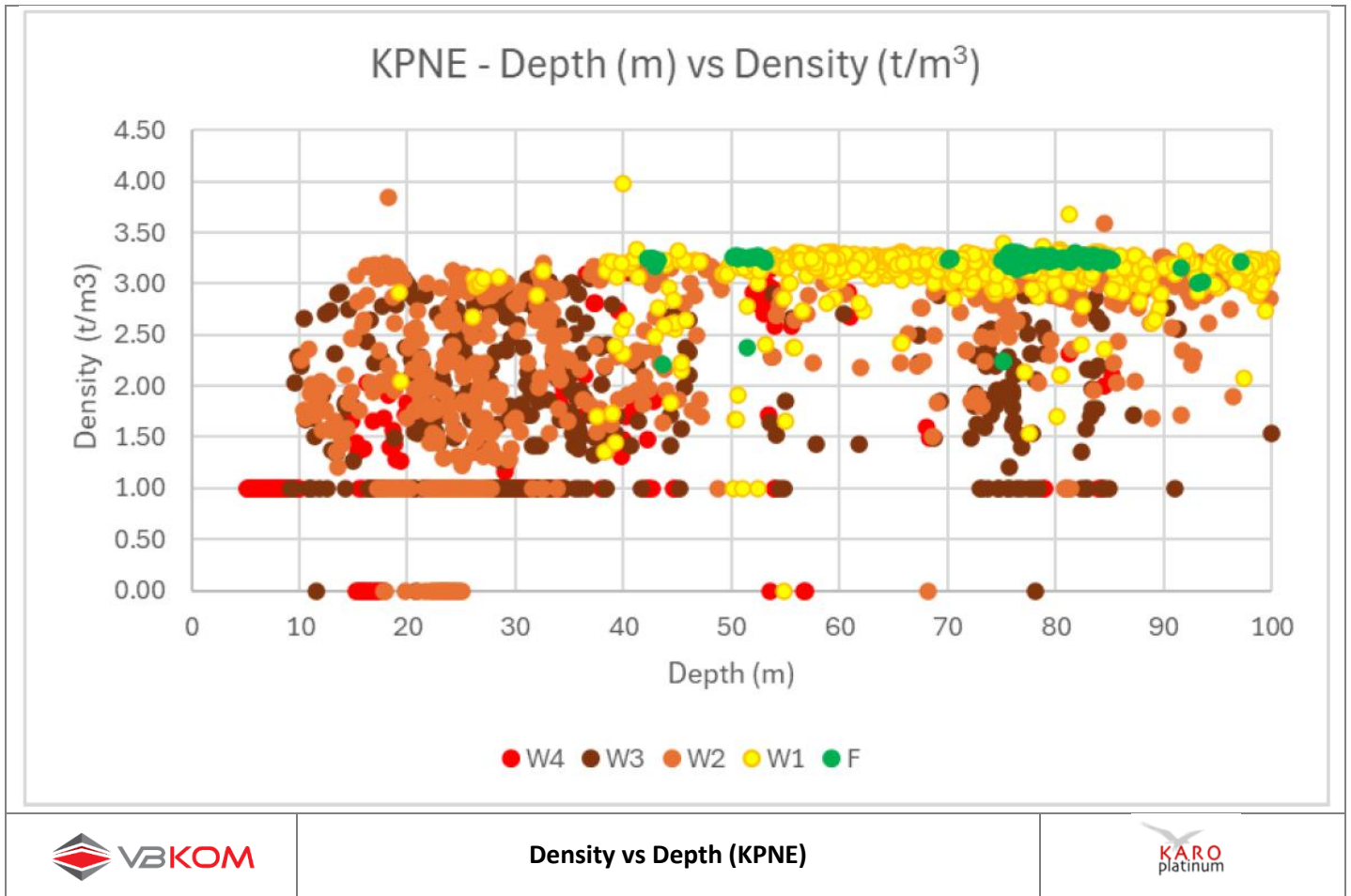
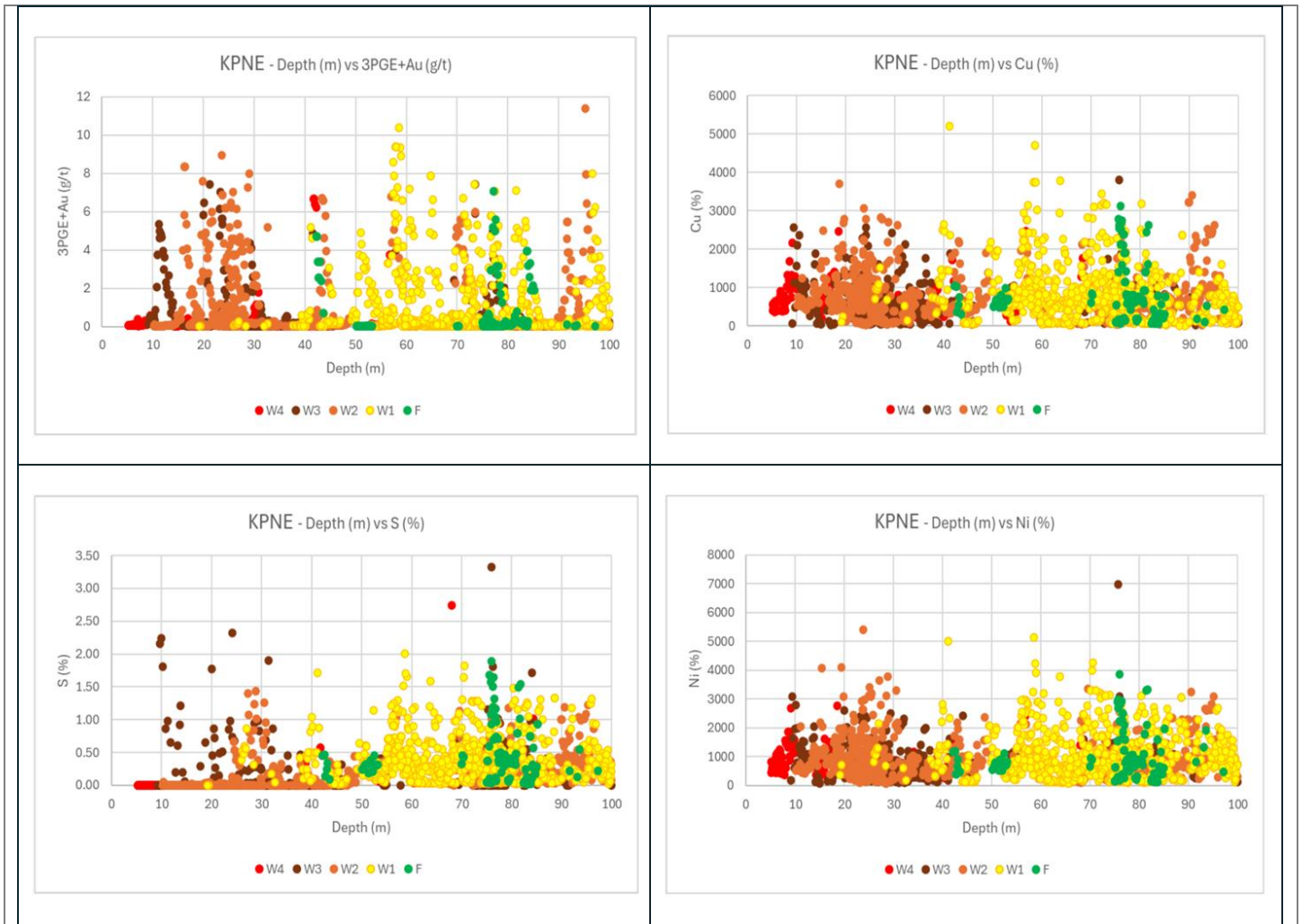


Figure 7-8: Graph of the density vs depth (KPNE).

Consideration of the density shows the point at which material has been removed by the exposure to the water table. Considering the density of the rocks to be 3.2 t/m<sup>3</sup>, the effect of weathering is noted to a depth of approximately 35 mbs (Figure 7-8).

Based on the analysis and consideration of the KPNE data, the Mineral Resource was declared from a depth of 15 mbs representing oxidised material, with material that is “slightly or partially weathered” being reported to a depth of 30 mbs. The material below 30 mbs is considered “unweathered”.



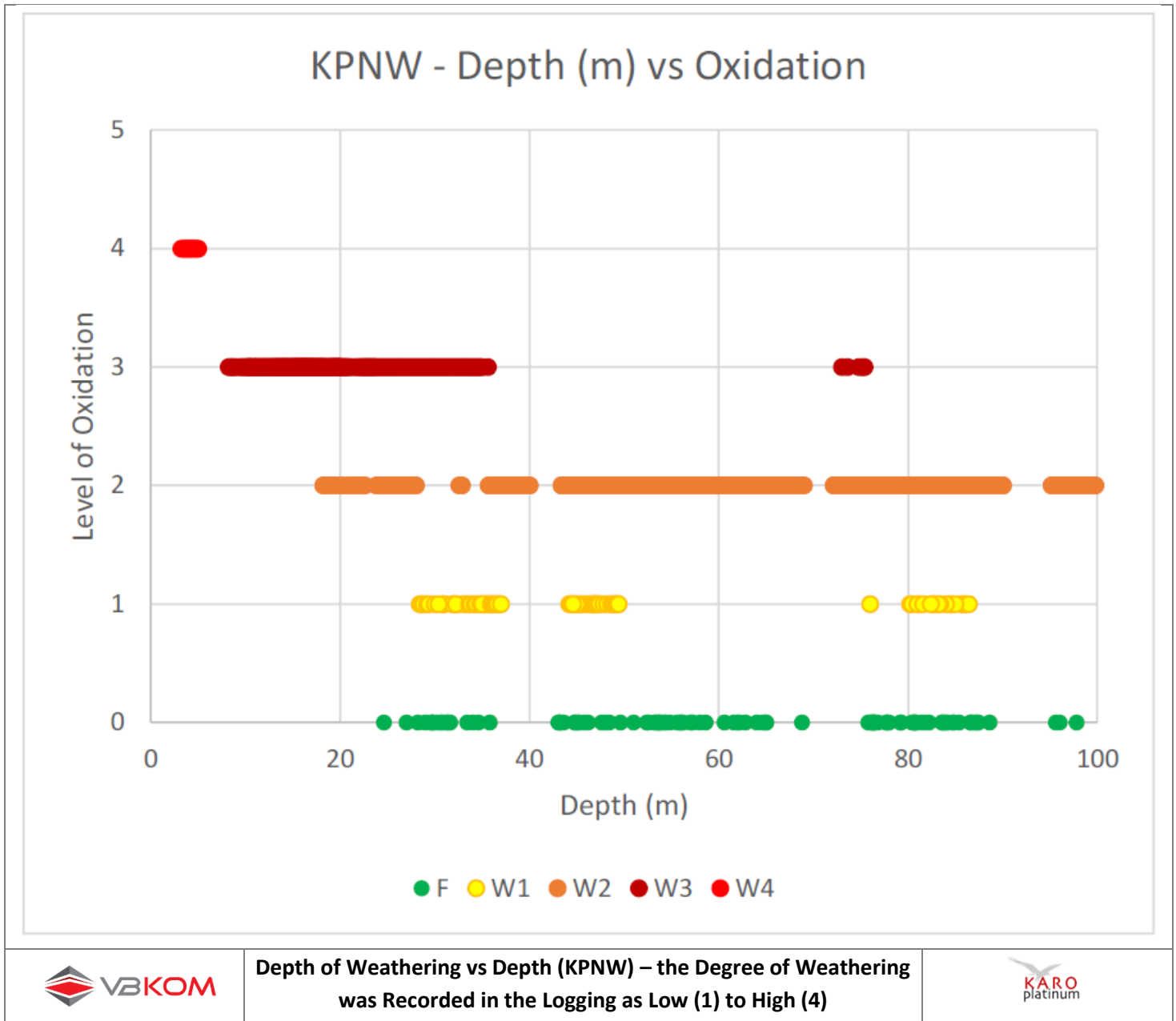
**Metal Grade vs Depth showing the Level of Weathering (KPNE) – the Degree of Weathering was Recorded in the Logging as Low (W1) to High (W4)**



Figure 7-9: Graph of the metal grade vs depth showing the level of weathering (KPNE) – the degree of weathering was recorded in the logging as low (W1) to high (W4).

### 7.3.4 Level of Oxidation – KPNW

An analysis of the weathering profile based on the data from KPNW is presented in Figure 7-10. The graph shows an overall trend of more weathered material at surface and fresh ground at depth. The shallowest fresh sample is logged at 23 mbs but weathering continues to a depth of nearly 40 mbs. “Slightly or partially weathered” material has been intersected from 18 mbs. Based on this analysis, the rocks above 18 mbs could be characterised as “substantially weathered” and the rocks between 18 mbs and 25 mbs designated as “slightly or partially weathered”.



**Depth of Weathering vs Depth (KPNW) – the Degree of Weathering was Recorded in the Logging as Low (1) to High (4)**

*Figure 7-10: Graph showing the depth of weathering vs depth (KPNW) – the degree of weathering was recorded in the logging as low (W1) to high (W4).*

It is also prudent to test whether the depth below surface, a proxy for weathering, has a relationship to the grade (Figure 7-12). The analysis shows that the shallowest samples (<10 mbs) have low concentrations and that at approximately 25 mbs samples are associated with more typical 3PGE+Au concentrations. The analysis of Cu and Ni shows a similar trend with low concentrations at shallower depths with a distinct change at approximately 10 mbs, although completely weathered samples (Figure 7-12) are present at approximately 35 mbs. The analysis of sulphur also mimics this trend with low concentrations to a depth of about 18 mbs and an increase to typical concentrations is evident at about 40 mbs. A review considering the depth at which fresh rocks are encountered with little or no negative effects in terms of recovery or grade indicated that fresh rocks are present at 30–50 mbs.

Consideration of the density shows the point at which material has been removed by the exposure to the water table. Considering the density of the rocks to be 3.2 t/m<sup>3</sup>, the effect of weathering is noted to a depth of approximately 30 mbs (Figure 7-11).

Based on the analysis and consideration for the analysis for KPNW, the Mineral Resource was declared from a depth of 15 mbs representing oxidised material, with material that is “slightly or partially weathered” being reported to a depth of 30 mbs. The material below 30 mbs is considered “unweathered”.

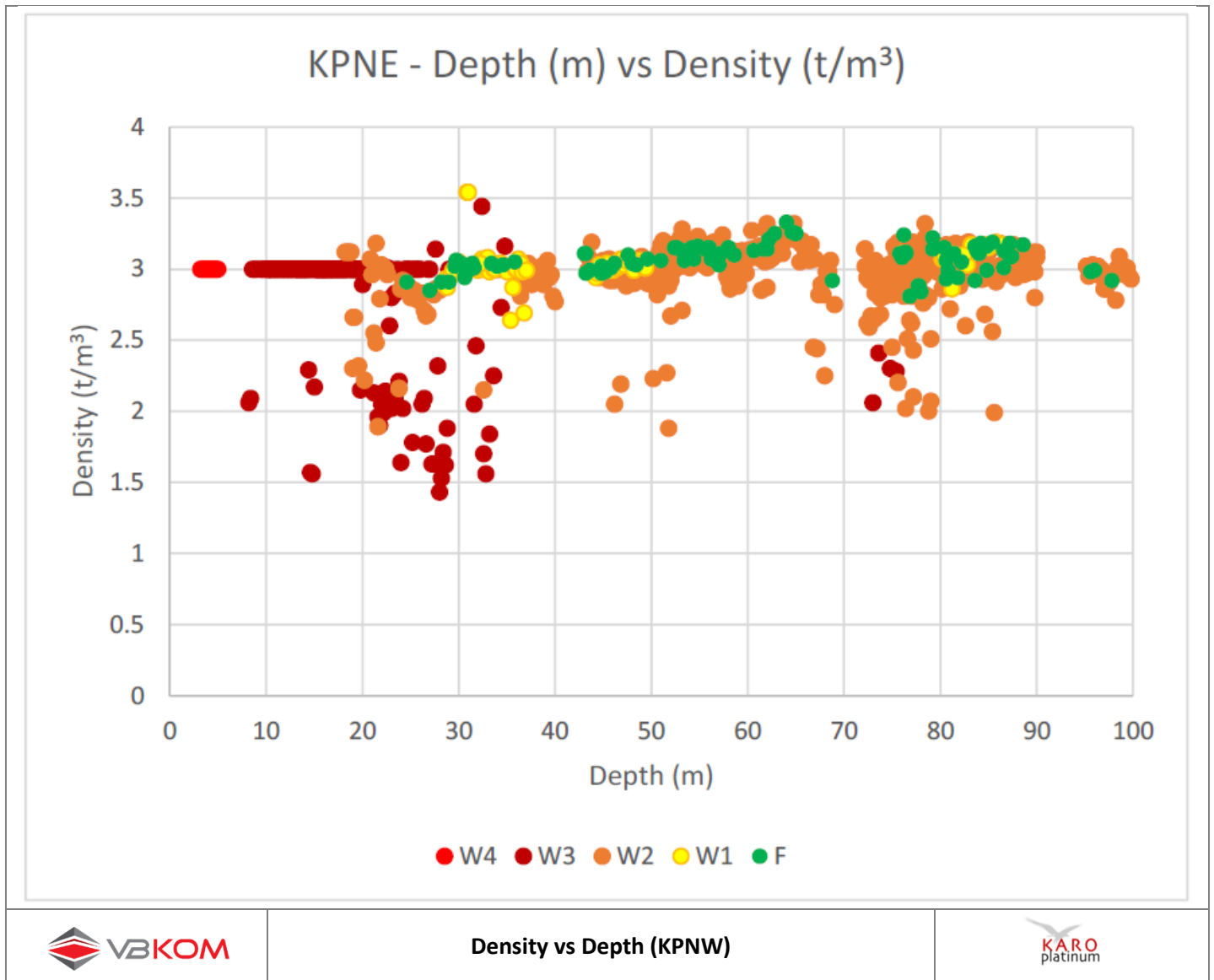


Figure 7-11: Graph of the density vs depth (KPNW).

Based on this analysis, the rocks above 25 mbs have been characterised as “substantially weathered” and the rocks between 25 mbs and 50 mbs have been designated as “slightly or partially weathered”. To determine the depth at which the rocks may be considered to be fresh, the analysis considers where the levels of weathering are reduced and/or where the rocks are significantly assigned as fresh. This is estimated to be at 45–50 mbs.

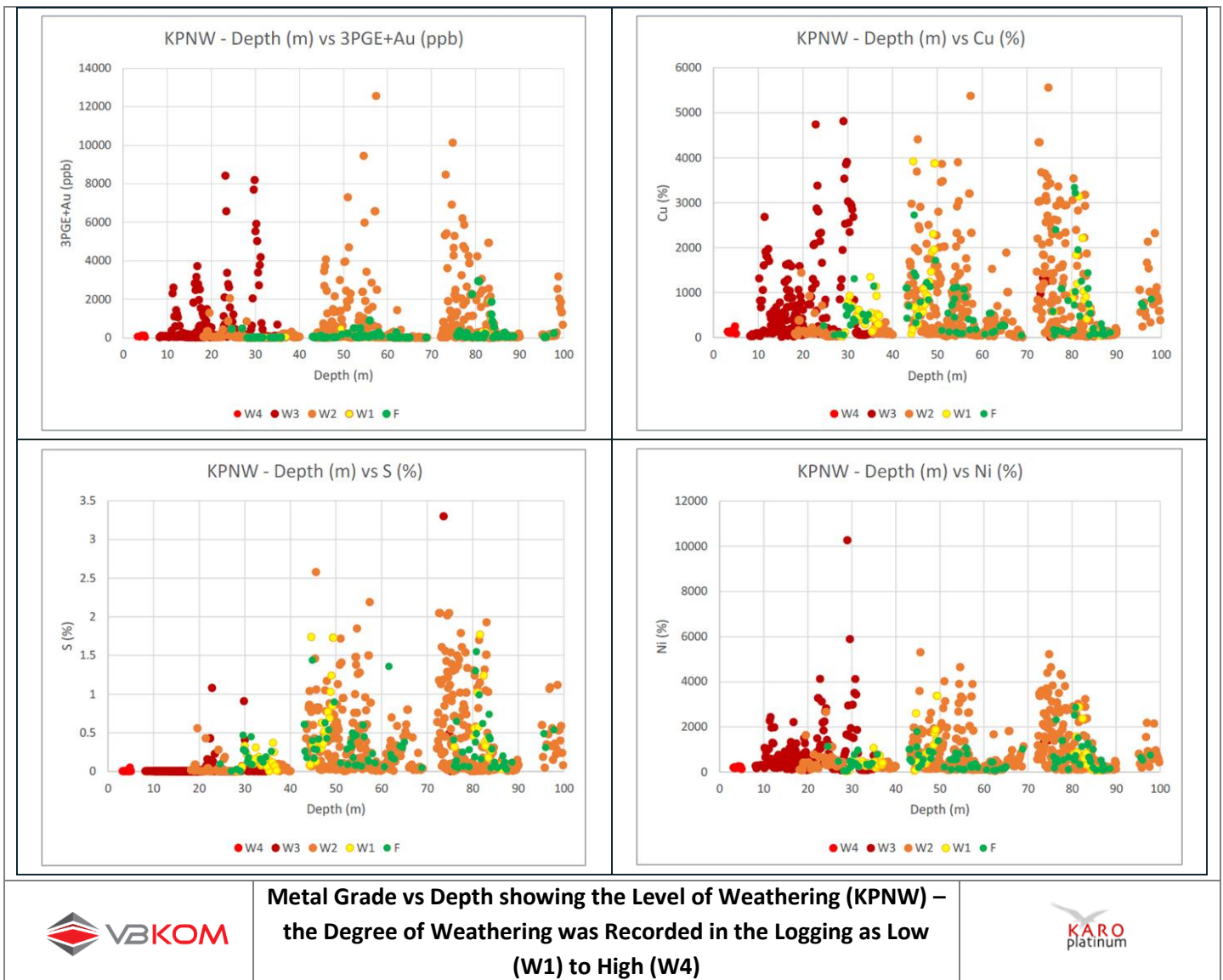


Figure 7-12: Graph of the metal grade vs Depth showing the level of weathering (KPNW) – the degree of weathering was recorded in the logging as low (W1) to high (W4).

### 7.3.5 Level of Oxidation – Summary

The analysis concluded that “substantially weathered” (“oxidised”) material is present above 15 mbs and “partially weathered” (“transition”) material between 15 mbs and 30 mbs. These parameters have been applied to KPSE, KPE, KPNE, and KPNW. The overall distribution of the interpreted oxidised/transitional/fresh characterisation is presented in Figure 7-13.

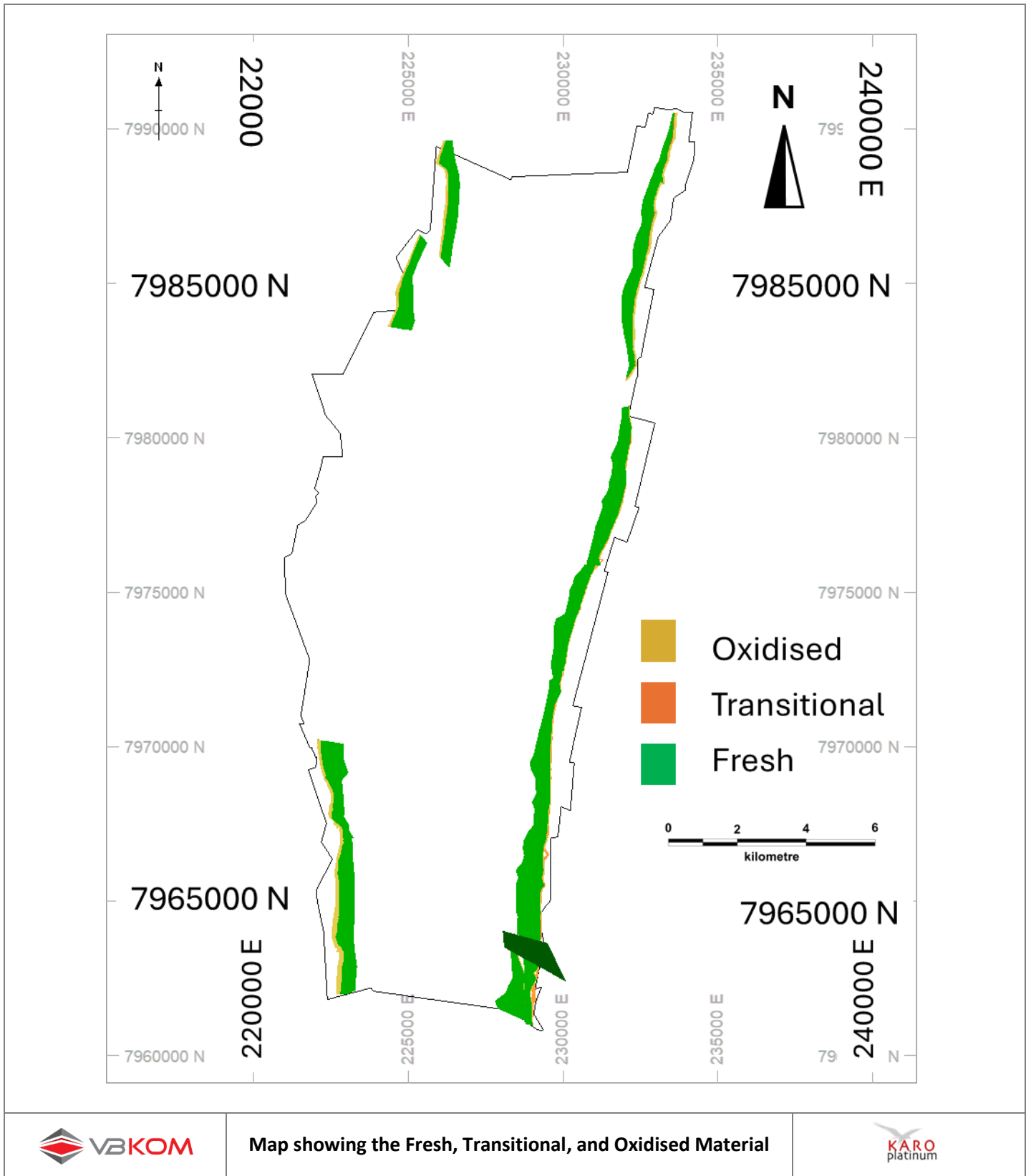


Figure 7-13: Map showing the fresh, transitional, and oxidised material.

## 7.4 Grade Modelling Methodology

S4.1(v), 4.2(ii), 4.5(ii)

The approach applied was to undertake an estimate of the MSZ grade and tonnage relating to the project based on the existing data using the 3D software package Datamine™.

Detailed descriptive statistical analyses were completed using the data included in the geological model developed.

The most critical step in the estimate is the determination of the potential Mineral Resource cut which requires the identification of the MSZ, in general, and the determination of the BMSZ, in particular, by drawing heavily on the characteristic geochemical signature. The selection of the BMSZ is to relate the cut to a visual marker for further mining. Accordingly, the presence of sulphides, the sulphur profile, and the Pt and Pd peaks and their relationship with the Cu and Ni peaks were used to determine the BMSZ.

## 7.5 Mineral Resource Cut Selection and Optimisation

S3.1(viii), 4.2(iii)

A critical aspect to be considered in the generation of the estimate is the selection of a Mineral Resource cut. The vertical distribution of the economically important metals at Karo was expected to be similar to that found elsewhere on the Great Dyke. The PGEs are typically enriched just above the base metal sulphide zone (BMSZ) and into the immediate footwall. The base metals (Cu, Ni) are typically enriched above the BMSZ with little metal concentration in the footwall (FW). The similarity was demonstrated from the work undertaken at the Karo Project (Figure 7-14 to Figure 7-19). The Mineral Resource cut was determined for each block based on a 1.7 g/t 3PGE+Au cut-off for intersections greater than 120 cm. The cut-off grade of 1.7 g/t 3PGFE+Au applied to the mining cut was determined based on a financial model utilising the anticipated metal prices, the prill split and expected operating costs (Section 7.17). The hanging wall (above the BMSZ) and footwall cuts (below the BMSZ) were then estimated utilising all the intersections prior to selection of the areas of the optimised Mineral Resource cut.

For KPE, KPNE, and KPSE, the geochemical signature displays a precious metal signature slightly displaced from the base metal signature. The metal value is used to determine the most valuable cut. In the case of KPSW and KPNW, the precious metal and base metal signatures are coincident and located immediately above the BMSZ (Figure 7-20). The geometry of the mineralisation relative to the drill holes is known based on the geological modelling of the deposit. No relationship between the intercept length or intercept angle and the grades have been demonstrated.

The optimisation of the cut was undertaken on a block-by-block basis using 20 cm increments from the BMSZ to 4 m in the hanging wall and 4 m in the footwall. Each 100 m x 100 m block was assessed based on the 3PGE+Au grade and minimum thickness. Based on the mineralisation and the number of samples, the potential cut was limited to 4 m above the BMSZ and 4 m below the BMSZ. The criteria set for cut selection are a minimum mining width of 120 cm and a grade of greater than 1.7 g/t 3PGE+Au. The maximum cut was determined by the 4 m above and below the BMSZ. A limit was required as sampling further from the BMSZ is limited and therefore the grades are less reliable. Where the grade at the minimum thickness was less than 1.7 g/t 3PGE+Au, the Mineral Resource cut of 120 cm was used. The cuts were checked in plan and were rationalised so that there was constancy within areas i.e. cuts for isolated 100 m x 100 m blocks were assigned to the most prominent cut locally (Figure 7-20).

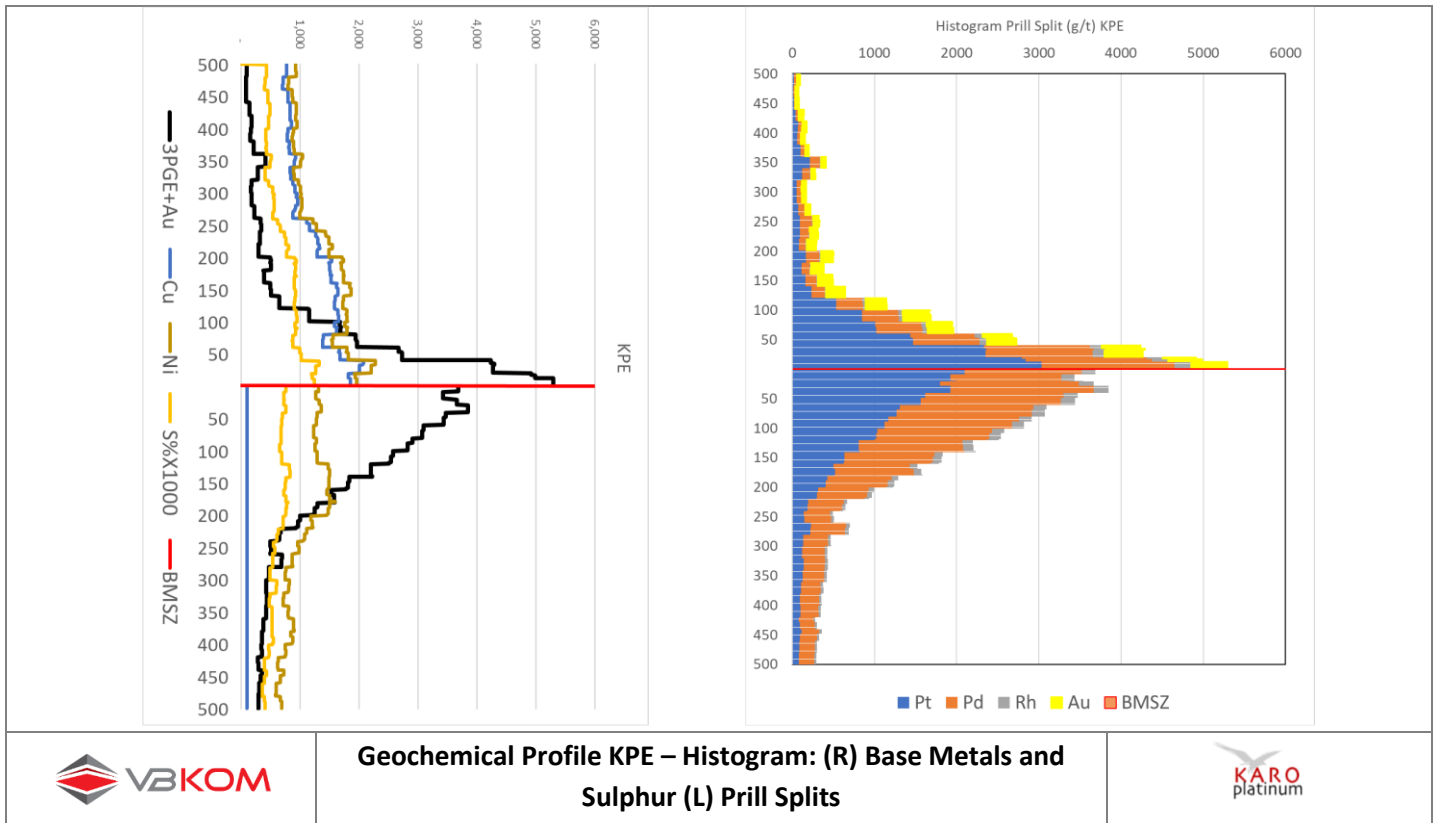


Figure 7-14: Geochemical profile KPE – histograms.

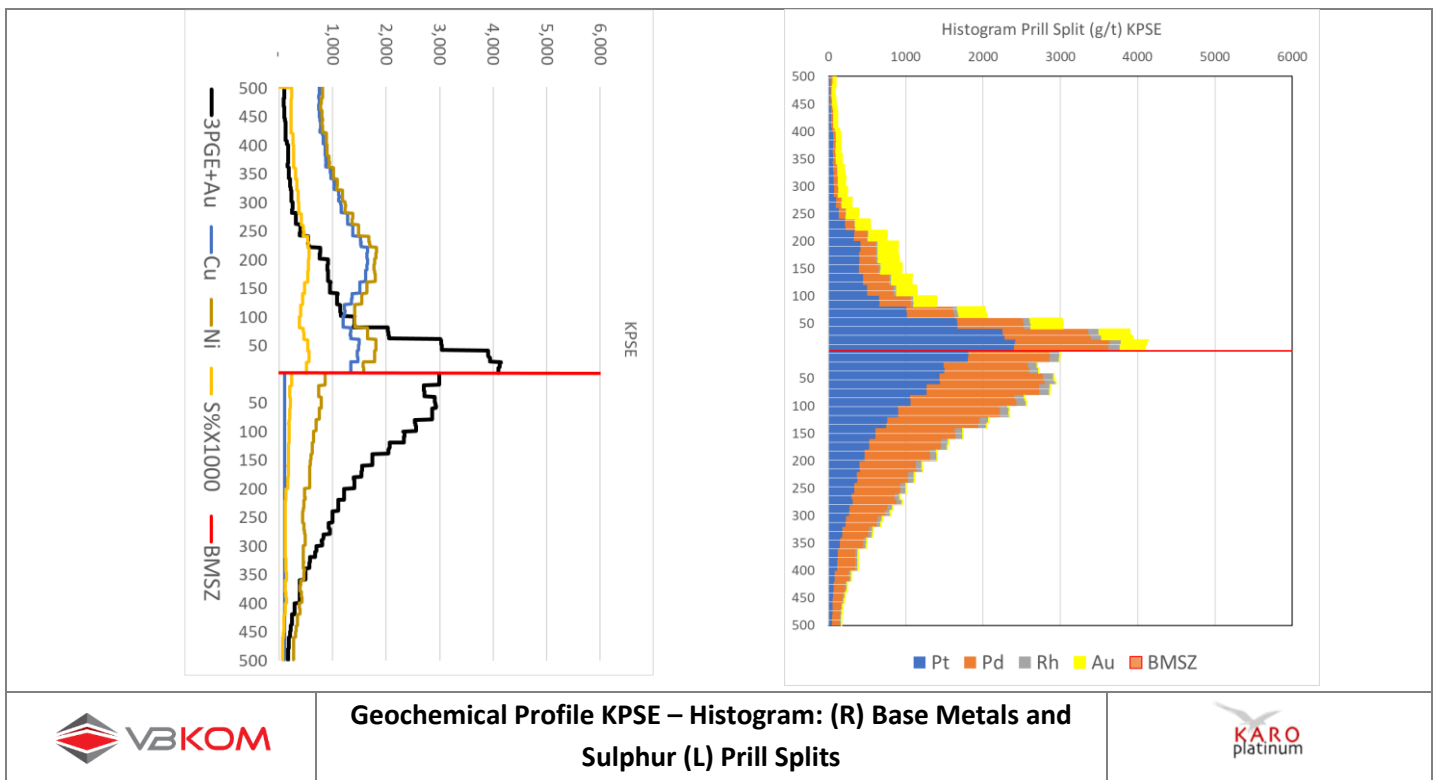
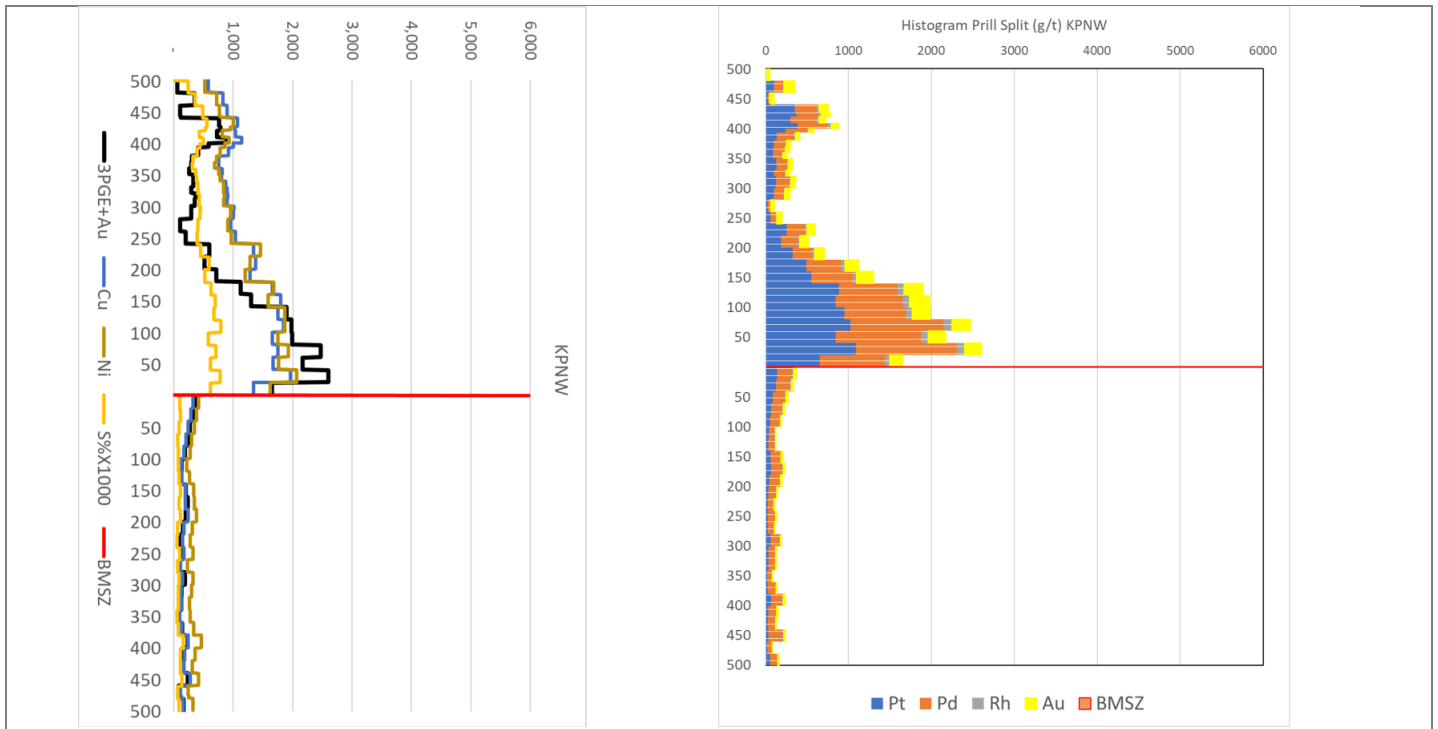
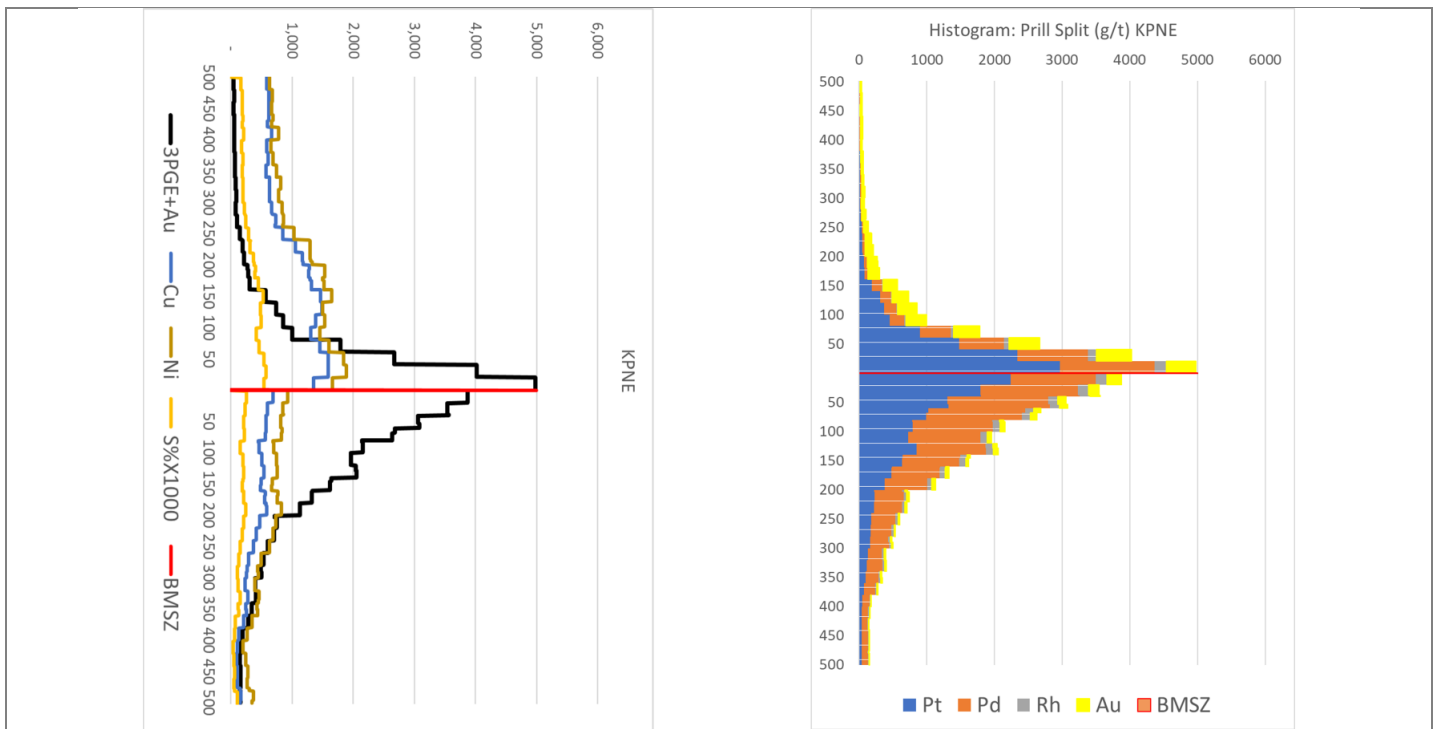


Figure 7-15: Geochemical profile KPSE – histograms.



**Geochemical Profile KPNW – Histogram: (R) Base Metals and Sulphur (L) Prill Splits**

Figure 7-16: Geochemical profile KPNW – histograms.



**Geochemical Profile KPNE – Histogram: (R) Base Metals and Sulphur (L) Prill Splits**

Figure 7-17: Geochemical profile KPNE – histograms.

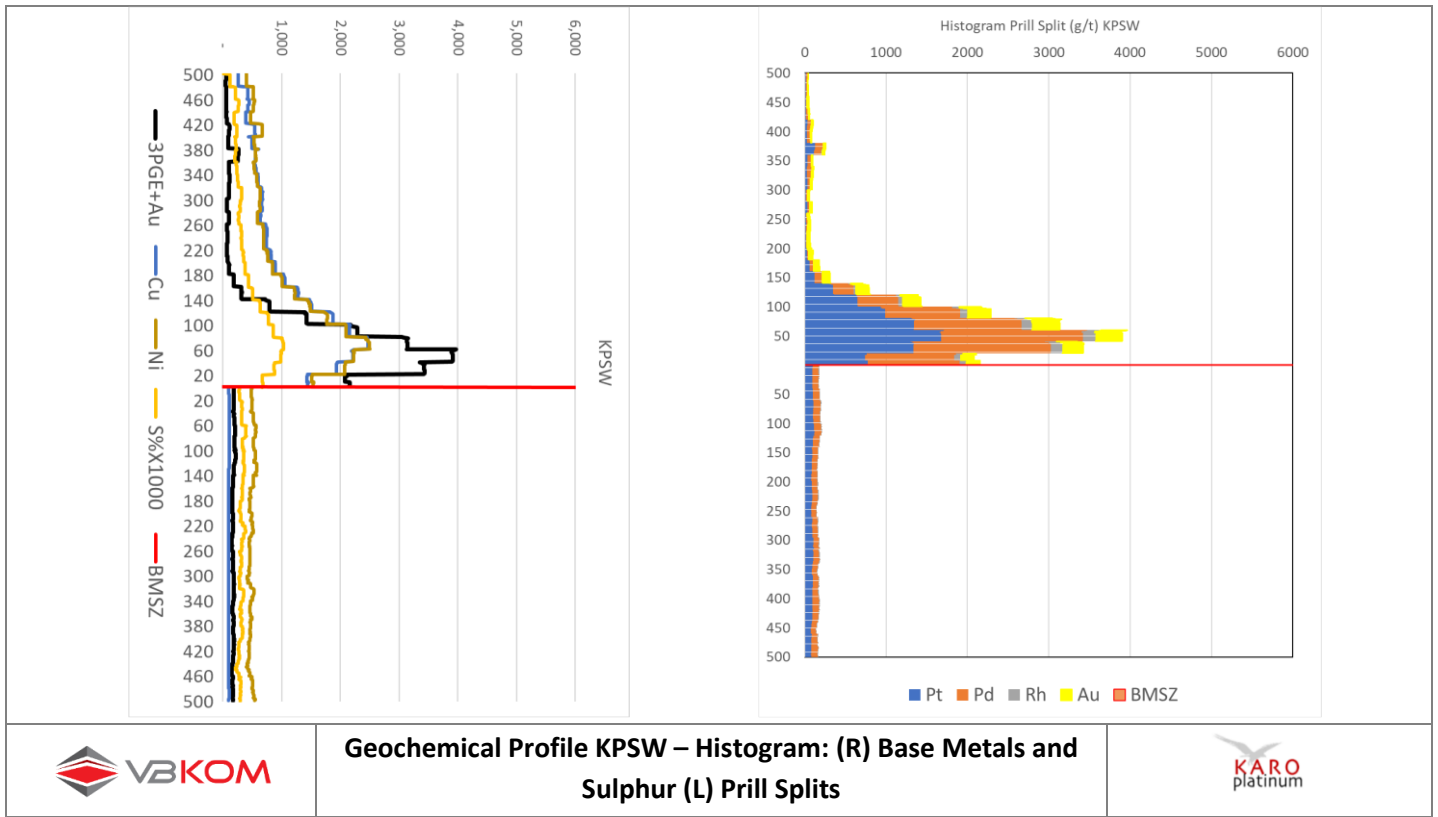


Figure 7-18: Geochemical profile KPSW – histograms.

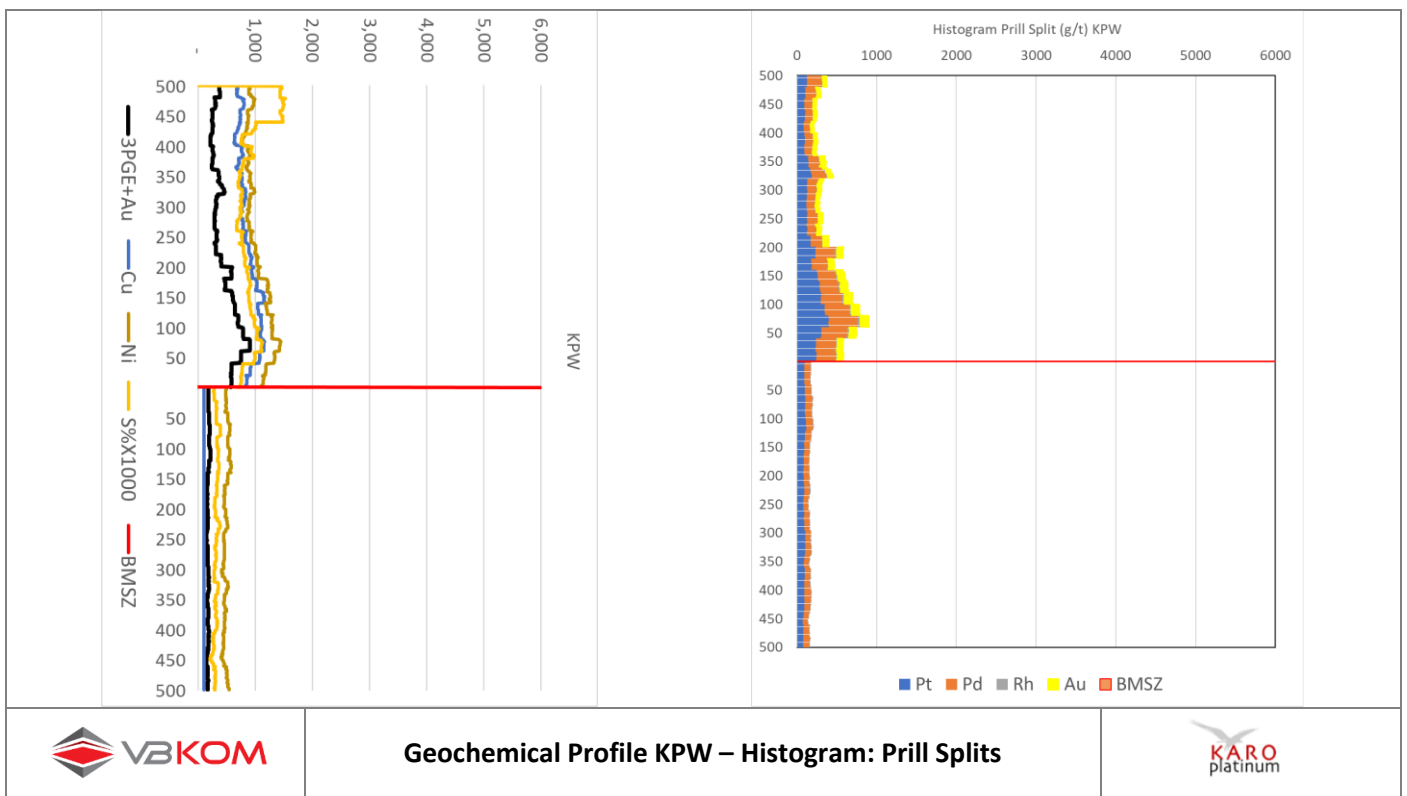
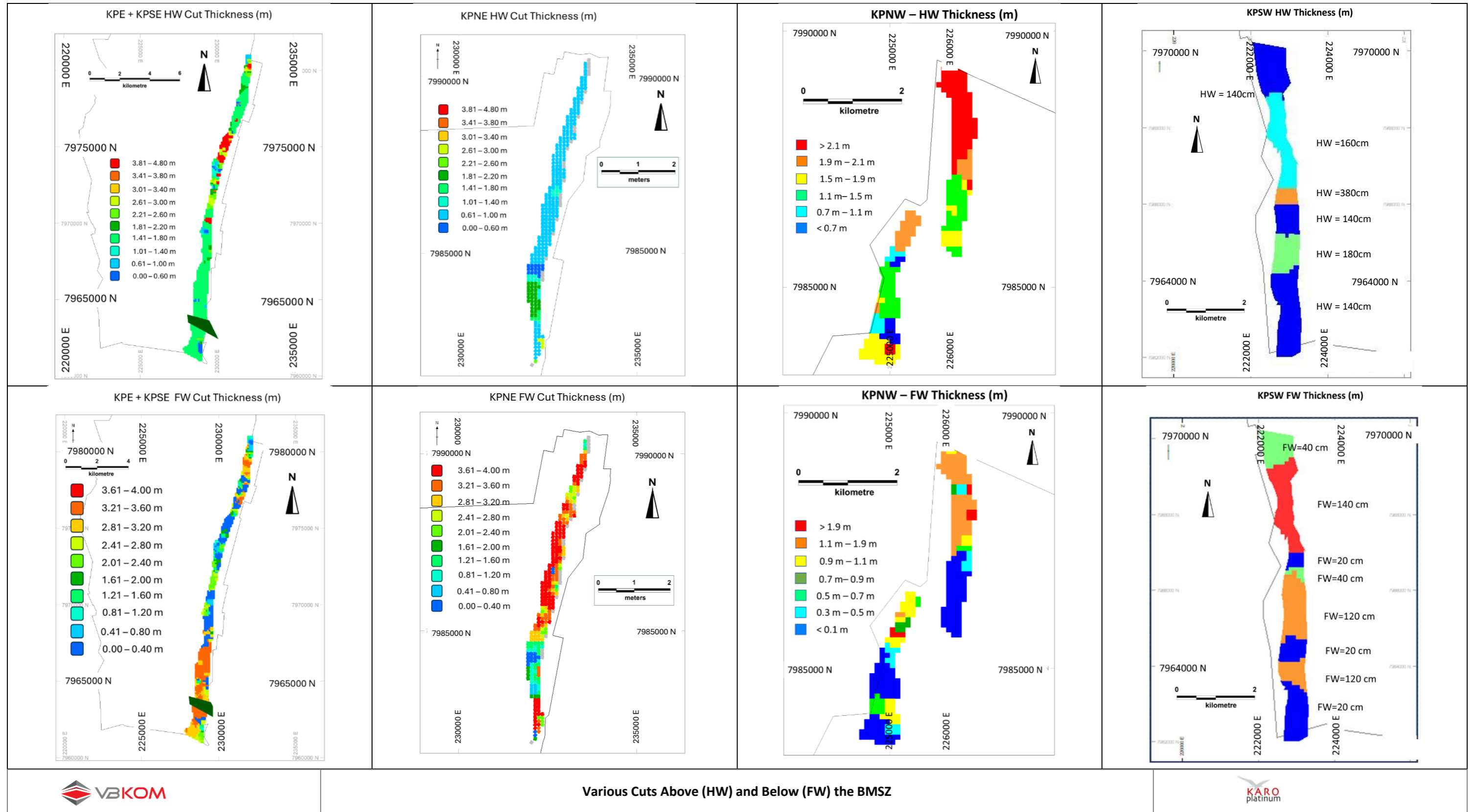


Figure 7-19: Geochemical profile KPW – histograms.



Various Cuts Above (HW) and Below (FW) the BMSZ

Figure 7-20: Plans showing the various cuts above (HW) and below (FW) the BMSZ.

The most valuable cut is the narrowest cut above the BMSZ. However, in considering a practical mining cut, the average Mineral Resource cuts selected for the estimation for each respective modelled area are presented in Table 7-2.

Table 7-2: Average selected Mineral Resource cuts.

Area	Vertical Thickness (cm)	Hanging Wall (cm)	Footwall (cm)	Mining Cut (cm)
KPNE	414	88	295	383
KPE	393	215	141	356
KPSE	392	158	206	364
KPNW	320	253	67	277
KPW	Not Assessed			
KPSW	232	153	81	223

## 7.6 Composites

### S4.2(iii)

Each intersection was composited across the full thickness of the hanging wall and footwall intersection of the MSZ as defined after consideration of the cut at a cut-off grade (COG) of 1.7 g/t 3PGE+Au. The Pt, Pd, Rh, Au, Ru, Ir, Cu, Ni, and Co concentrations were composited utilising the weighting by density and thickness. This is considered necessary as the lithologies have significantly different densities.

## 7.7 Domaining

The assessment was undertaken on the six drilling areas: KPE, KPNE, KPNW, KPSE, KPSW, and KPW, with a cut optimisation methodology using a grade cut-off of 1.7 g/t 3PGE+Au. The domains were estimated independently.

## 7.8 Statistical Analysis

Statistical analysis was completed on the average cut for the different areas as summarised in Table 7-3 and represented graphically in Figure 7-21.

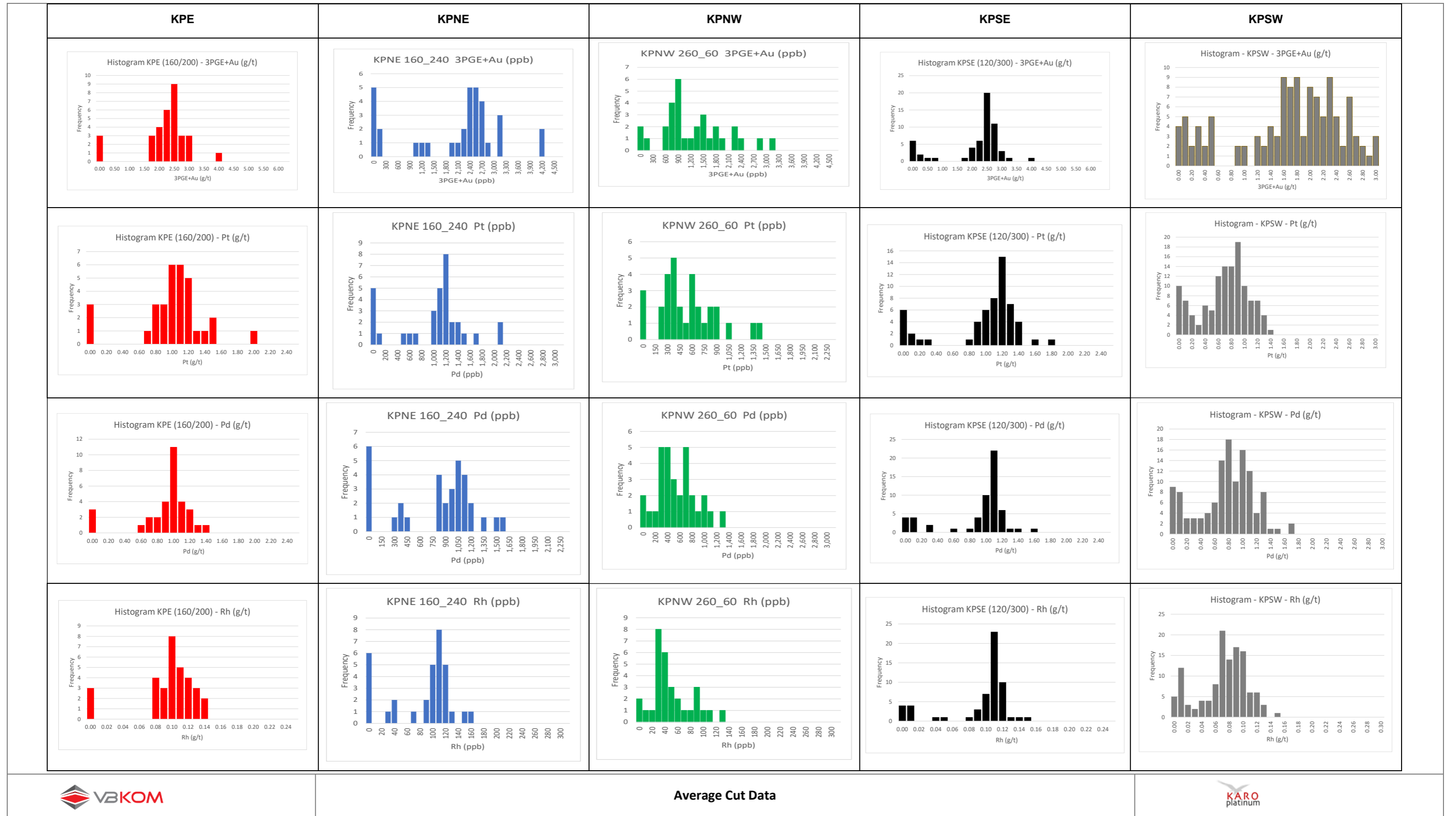


Figure 7-21: Histogram of average cut data.

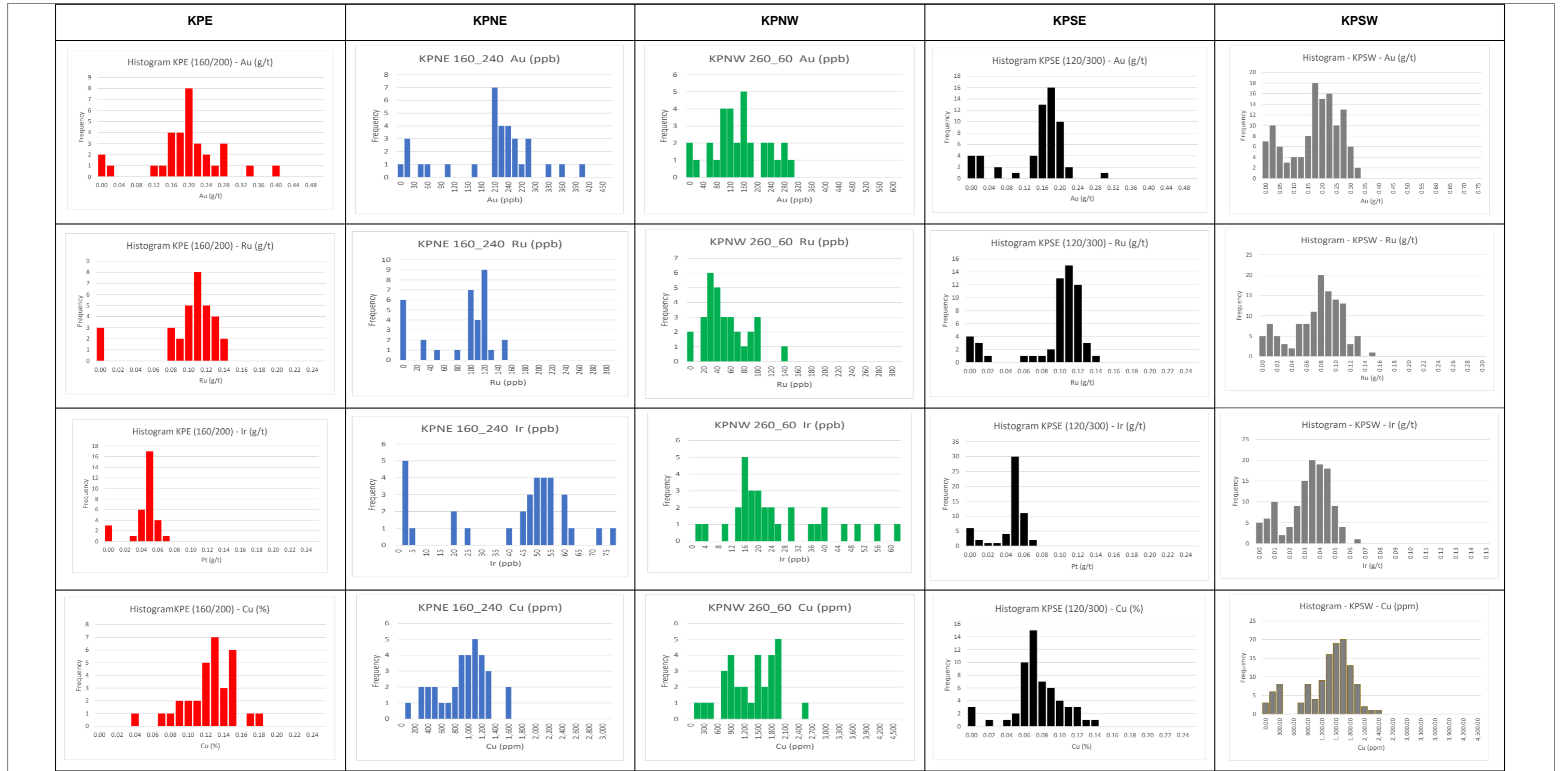


Figure 7-21: Histogram of average cut data continued.

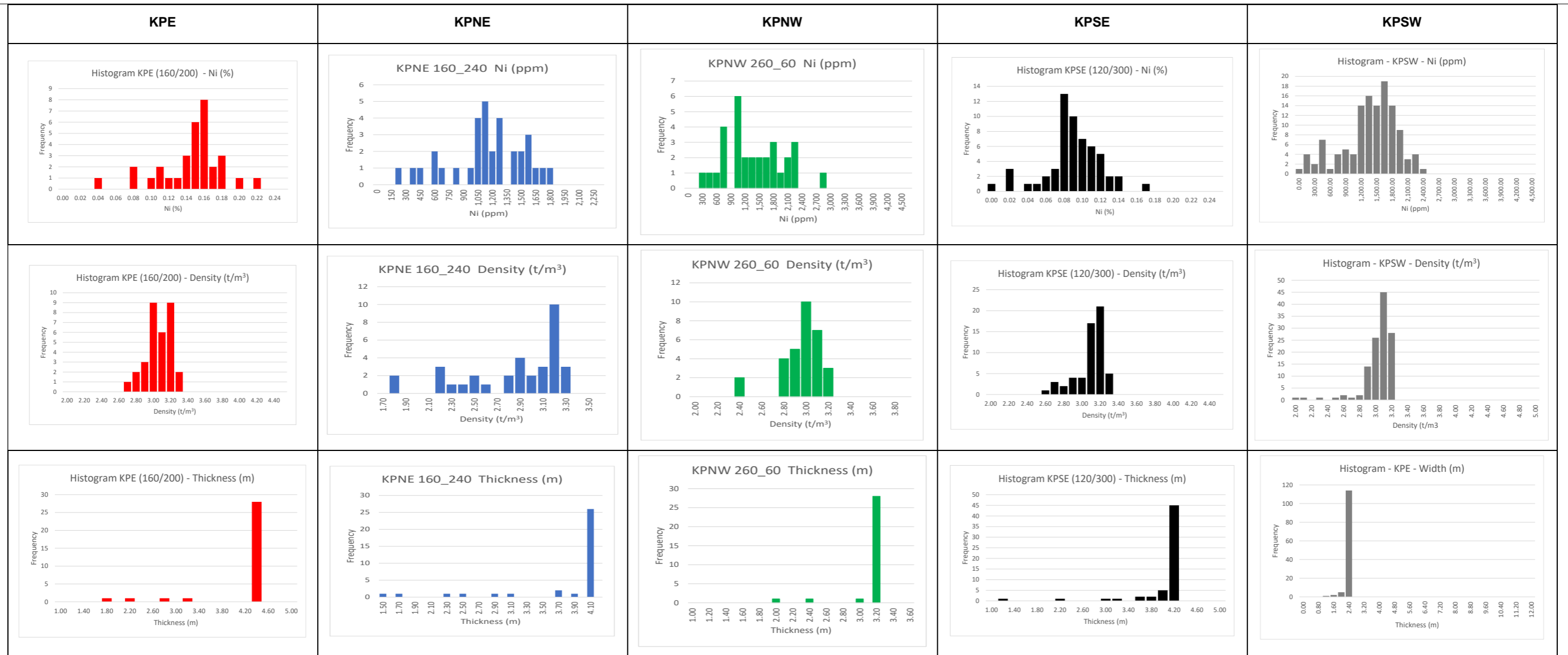


Figure 7-21: Histogram of average cut data continued.

Table 7-3: Composite statistics.

Item	3PGE+Au (g/t)	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	Ru (g/t)	Ir (g/t)	Cu (ppm)	Ni (ppm)	Density (t/m <sup>3</sup> )	S (%)	Thickness (m)
<b>KPE (100/320)</b>												
Count	53	53	53	53	53	53	53	53	53	53	53	53
Mean	2.12	0.99	0.83	0.09	0.21	0.09	0.04	1,316	1,472	3.08	0.72	3.66
Min.	0.01	0.00	0.00	0.00	0.00	0.00	0.00	254	475	2.53	0.01	1.41
Max.	3.41	1.65	1.36	0.14	0.39	0.15	0.07	2,066	2,272	3.27	1.62	3.80
Range	3.40	1.64	1.36	0.14	0.39	0.15	0.06	1,812	1,797	0.74	1.61	2.39
Std Dev	0.78	0.38	0.33	0.03	0.09	0.04	0.02	383	394	0.16	0.34	0.43
Median	2.34	1.06	0.97	0.10	0.23	0.10	0.05	1,394	1,562	3.13	0.78	3.80
Mode				0.50		0.50						3.8
CoV	37%	38%	39%	38%	43%	39%	36%	29%	27%	5%	47%	12%
<b>KPNE (100/320)</b>												
Count	43	42	42	42	33	42	42	42	42	43	42	43
Mean	1.23	0.09	0.92	0.09	0.00	0.00	0.98	41	9	2.84	0.31	3.82
Min.	-	0.00	0.01	0.00	0.00	0.00	0.22	2	1	1.69	0.01	1.00
Max.	2.85	0.19	2.21	0.18	0.00	0.00	1.82	86	18	3.27	1.13	4.20
Range	2.85	0.18	2.20	0.17	0.00	0.00	1.60	84	18	1.58	1.13	3.20
Std Dev	0.74	0.04	0.55	4.00	0.00	0.00	0.34	21	4	0.41	0.25	0.78
Median	1.39	0.10	1.06	0.11	0.00	0.00	1.00	48	9	2.99	0.34	4.20
Mode		2.5		2.50		0.005		2.5	2.5		0.01	4.20
CoV	60%	53%	60%	49%	51%	79%	35%	51%	47%	14%	79%	20%
<b>KPNW (260/60)</b>												
Count	34	33	33	33	33	33	33	33	33	34	33	34
Mean	2.014	0.995	0.792	0.085	0.203	0.860	0.042	920	1,142	2.85	0.41	3.74
Min.	-	0.006	0.003	0.002	0.003	0.003	0.003	105	221	1.80	0.10	1.60
Max.	4.226	2.139	1.605	0.165	0.399	0.152	0.078	1,609	1,775	3.28	1.27	4.00
Range	4.226	2.133	1.602	0.163	0.395	0.149	0.075	1,503	1,554	1.48	1.17	2.40
Std Dev	1.198	0.572	0.468	0.048	0.101	0.047	0.022	366	389	0.43	0.31	0.60
Median	2.416	1.146	0.975	0.102	0.223	0.104	0.050	982	1,149	2.96	0.30	4.00
Mode				0.003		0.003	0.052				0.10	4.00
CoV	59%	57%	59%	56%	50%	55%	52%	40%	34%	15%	76%	16%
<b>KPSE (180/220)</b>												
Count	126	126	126	126	126	126	126	126	126	126	126	126
Mean	2.23	1.06	0.88	0.09	0.19	0.09	0.04	880	1,096	2.99	0.29	3.90

Item	3PGE+Au (g/t)	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	Ru (g/t)	Ir (g/t)	Cu (ppm)	Ni (ppm)	Density (t/m <sup>3</sup> )	S (%)	Thickness (m)
Min.	0.02	0.00	0.00	0.00	0.00	0.00	0.00	22	44	2.18	0.01	1.80
Max.	3.17	1.59	1.31	0.13	0.32	0.13	0.06	1,785	2,094	3.29	0.87	4.00
Range	3.15	1.59	1.31	0.13	0.32	0.13	0.06	1,763	2,050	1.11	0.86	2.20
Std Dev	0.74	0.37	0.30	0.03	0.07	0.03	0.01	287	329	0.27	0.20	0.37
Median	2.48	1.18	0.98	0.10	0.21	0.10	0.05	851	1,111	3.11	0.37	4.00
Mode										3.14	0.01	4.00
CoV	33%	34%	34%	32%	36%	32%	31%	33%	30%	9%	69%	9%
KPSW (140/80)												
Count	122	122	122	122	122	122	122	122	122	122	122	122
Mean	1.71	0.70	0.76	0.07	0.17	0.07	0.03	1,353	1,375	3.02	0.57	2.17
Min.	0.02	0.01	0.01	0.00	0.00	0.00	0.00	38	57	1.41	0.01	1.37
Max.	3.51	1.35	1.71	0.15	0.33	0.15	0.06	6,540	2,420	3.20	1.66	2.20
Range	3.48	1.35	1.70	0.15	0.33	0.15	0.06	6,502	2,363	1.80	1.65	0.83
Std Dev	0.85	0.36	0.40	0.03	0.09	0.03	0.01	721	521	0.22	0.31	0.13
Median	1.80	0.77	0.82	0.08	0.20	0.08	0.03	1,446	1,464	3.07	0.64	2.20
Mode							0.00			3.15	0.01	2.20
CoV	50%	51%	52%	49%	52%	47%	47%	53%	38%	7%	54%	6%

## 7.9 Outlier Analysis

The data were examined to determine if any of the grade values should be considered as an outlier that may have a negative effect on the estimation. An assessment of the high-grade samples was completed for each target to determine the requirement for possible high-grade cutting or capping. The approach taken for the assessment of the high-grade samples and outliers is summarised as:

- Detailed review of histograms and probability plots with significant breaks in populations interpreted as possible outliers.
- Investigation of clustering of the higher-grade data.
- High-grade data which clustered were assumed to be real, while high-grade samples not clustered with other high-grade data were considered to be possible outliers that required further consideration either through cutting and/or search restriction.

Based on the analysis of the dataset, no cutting or capping was deemed necessary.

## 7.10 Specific Gravity and Bulk Tonnage Data

Bulk density measurements are described in Chapter 6.4.6.

## 7.11 Bulk Sampling/Trial Mining

### S3.8(i-iv)

A pilot mining site within the KPSE 2 footprint was developed (refer to Figure 7-22).

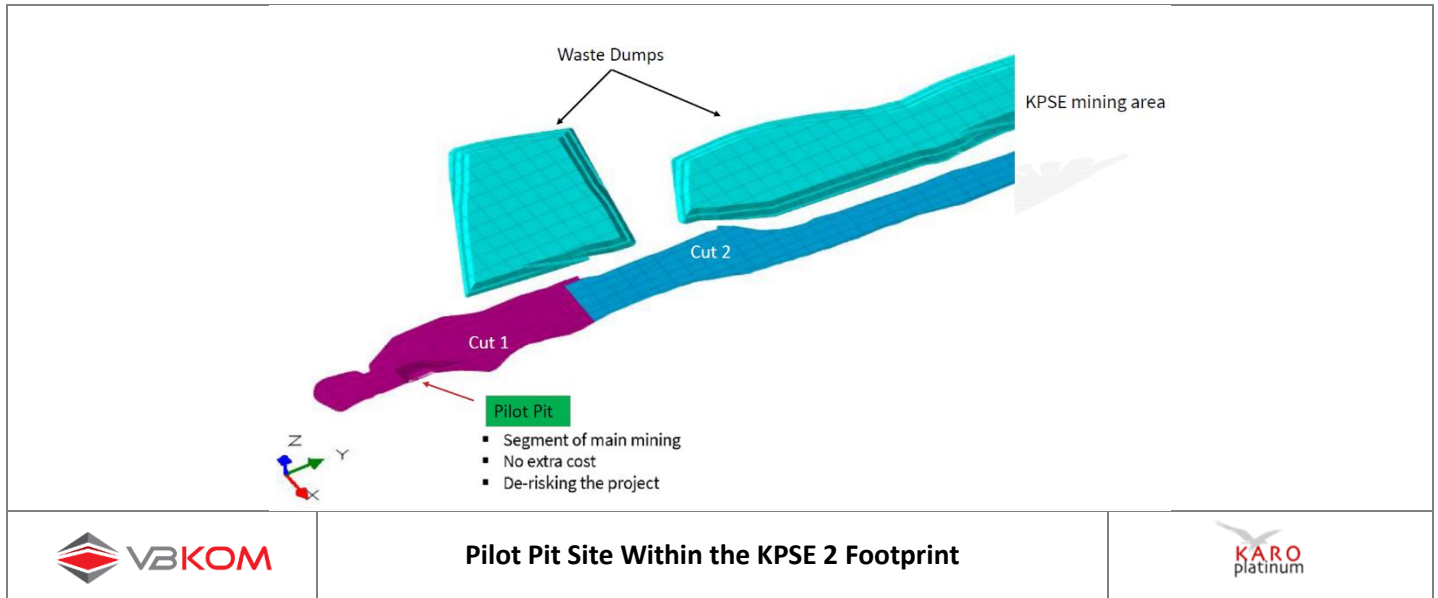


Figure 7-22: Pilot pit site within the KPSE 2 footprint.

The objectives of the pilot pit were to confirm:

- That the selected mining method delivers the objectives as set out in the Project, namely:
  - A mining cut with associated dilution factors in the 3–3.5 m range
  - A resultant 4E grade estimated at 2.8 g/t
- A suite of equipment that can safely operate on orebody dips of about 20°
- To develop:
  - A set of guidelines within which men and equipment can efficiently and safely operate on the select waste/ore benches
  - A broken ore loading protocol
  - A GC regime that includes Reverse Circulation drilling, sampling, and management of both selective waste and ore
  - Any other extra controls required when dealing with steeper mining zones
- To utilise:
  - The ore mined to run a continuous pilot plant test on representative ore (refer to Figure 7-23 indicating the ore mined during the pilot pit test)
  - The overburden to save on construction material required for earthworks



Figure 7-23: PGM stockpile at the pilot pit.

It was concluded that the selective ore mining method (conventional drill, load and haul equipment) is appropriate for ore mining and able to deliver the required monthly ROM tonnages of 220 kt. It was also confirmed that it is appropriate to mine a 20° dipping orebody. The ROM target grade of 2.67 g/t 4E was achieved within the pilot pit mining area and 58,700 t of transitional ore and 8,800 t of fresh ore were mined and both will be utilised for further metallurgical testwork.

It was found that the actual ore tonnage vs planned tonnage was less, with a negative variance of 2,600 t, and that strict GC modelling and loading protocols are required. Also noted was that the ore bench drilling sequence requires detailed planning to ensure that the production cycles are achieved as planned.

## 7.12 Block Model Development

### S3.1(viii), 4.2(iii)

A 2D estimate was undertaken for each area of the project independently. The block model cell size of 100 m x 100 m was based on drill hole spacing (Table 7-4).

Table 7-4: Summary of block model details.

Centroid Based	Block Model Origin (Centroid)		Parent Cell Size	No. of Blocks	Sub-Cell Splitting
	Min	Max			
<b>KPSW</b>					
<b>XC</b>	221,000	235,000	100	140	No
<b>YC</b>	7,961,000	7,991,000	100	300	No

Centroid Based	Block Model Origin (Centroid)		Parent Cell Size	No. of Blocks	Sub-Cell Splitting
	Min	Max			
ZC	-0.5	0.5	1	1	No
<b>KPNW</b>					
XC	224,300	226,700	100	24	No
YC	7,983,400	7,989,700	100	63	No
ZC	-4	4	8	1	No
<b>KPNE</b>					
XC	227,000	230,000	100	30	No
YC	7,981,000	7,991,000	100	100	No
ZC	-4	4	8	1	No
<b>KPSE and KPE</b>					
XC	227,000	233,000	100	60	No
YC	7,960,000	7,982,000	100	220	No
ZC	-5	5	10	1	No

## 7.13 Grade Estimation

S3.5(iii), 4.1(v), 4.2(ii)(iv-vi), 4.5(i)(ii)

The estimation of each parameter (Pt, Pd, Rh, Au, Ru, Ir, Cu, Ni, and Co) as well as the density were independently undertaken by inverse distance weighting to the power 2 (IDW<sup>2</sup>).

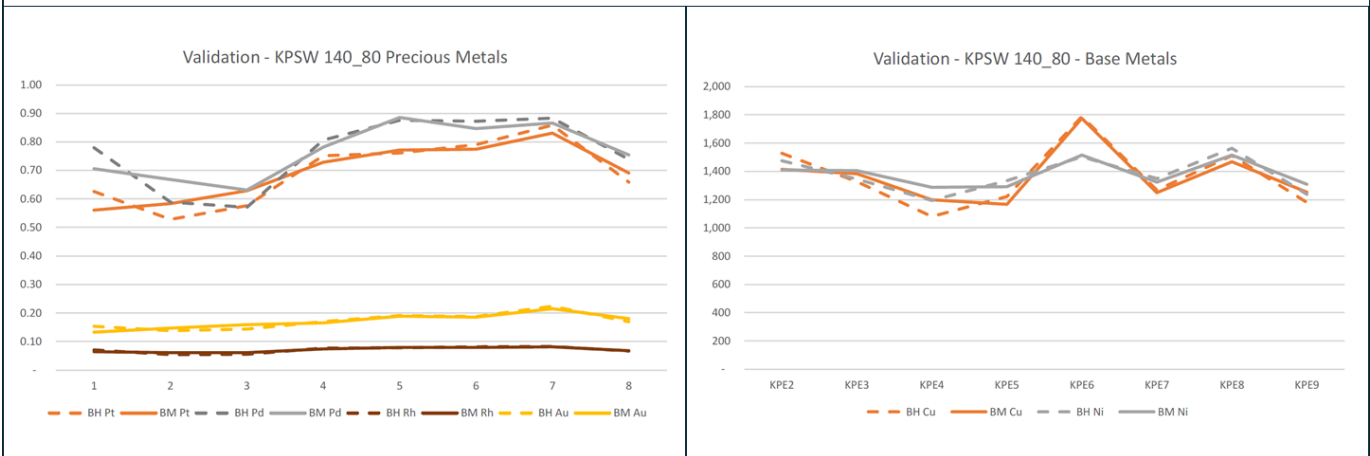
The search strategy applied used three search criteria and is summarised in Table 7-5. A three-pass estimation strategy was applied to each domain, applying progressively expanded and less restrictive sample searches to successive estimation passes and only considering blocks not previously assigned an estimate. The search criteria are designed to be informed from adjacent drill holes rather than be informed from data in the same drill hole.

Table 7-5: Estimation search parameters.

Estimation Pass	Search Distance (Elliptical)			Min. Samples	Max. Samples
	X	Y	Z		
XC	500	500	100	4	12
YC	750	750	150	4	12
ZC	2,500	2,500	500	4	12

The model was checked visually and statistically to ensure that the results can be confidently reported. The statistical analysis is shown in Figure 7-24.

### KPSW



### KPNE

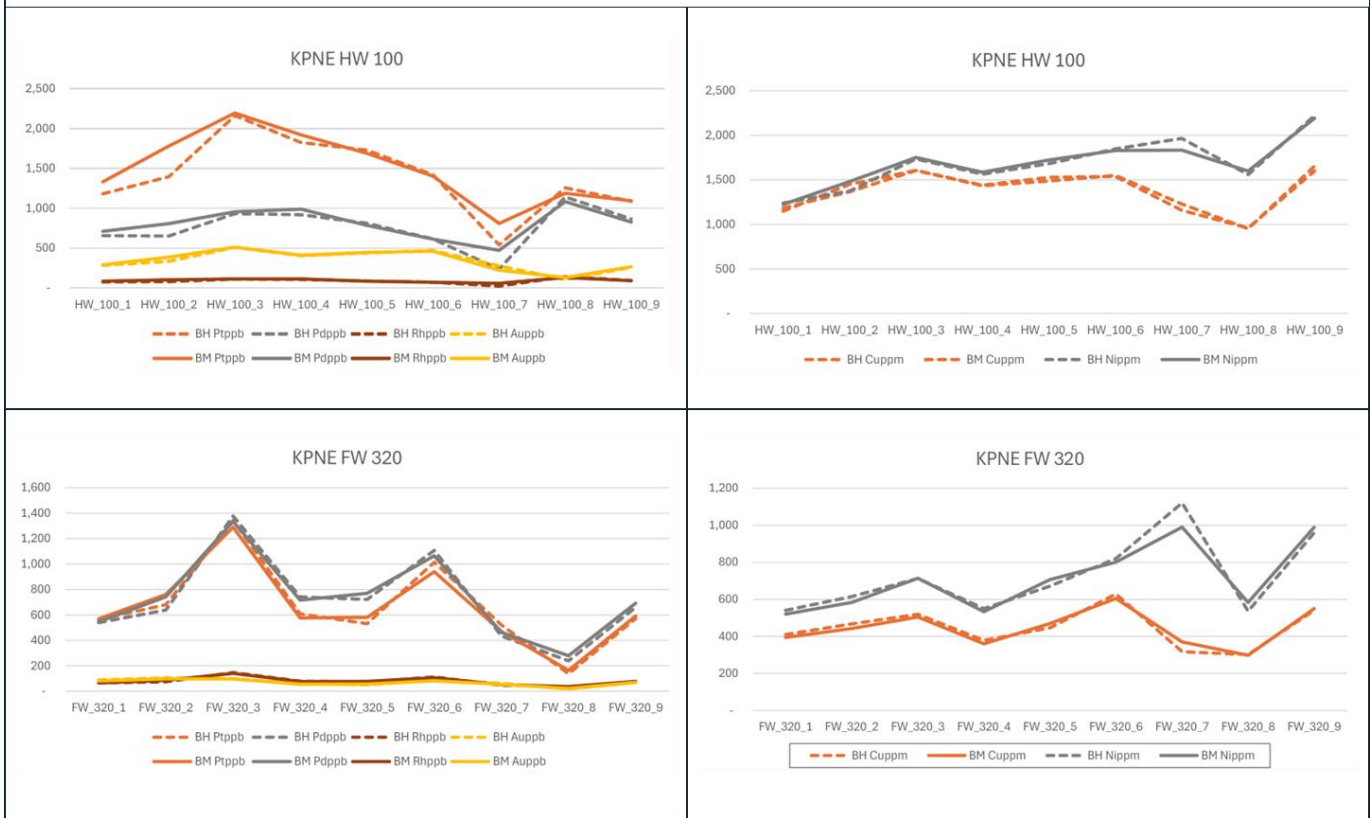
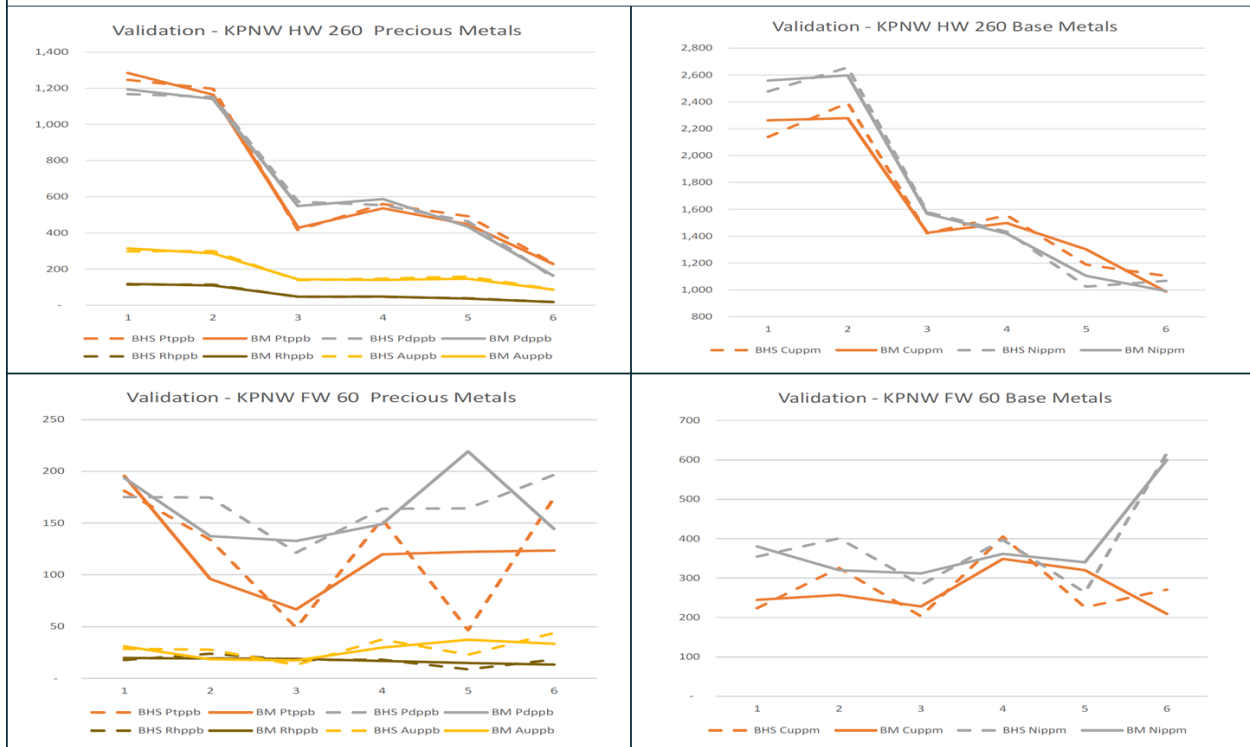


Figure 7-24: Block model validation: comparison of the block model and drill holes.

### KPNW



### KPE

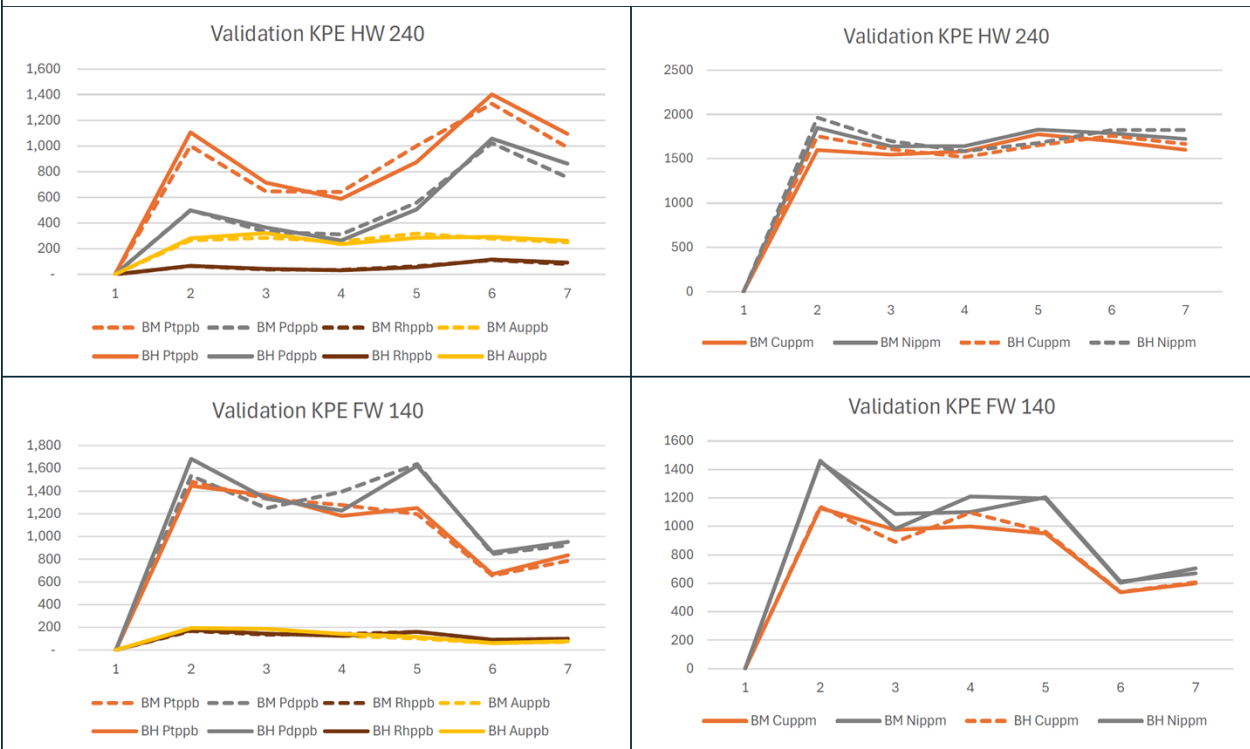


Figure 7-24: Block model validation: comparison of the block model and drill holes continued.

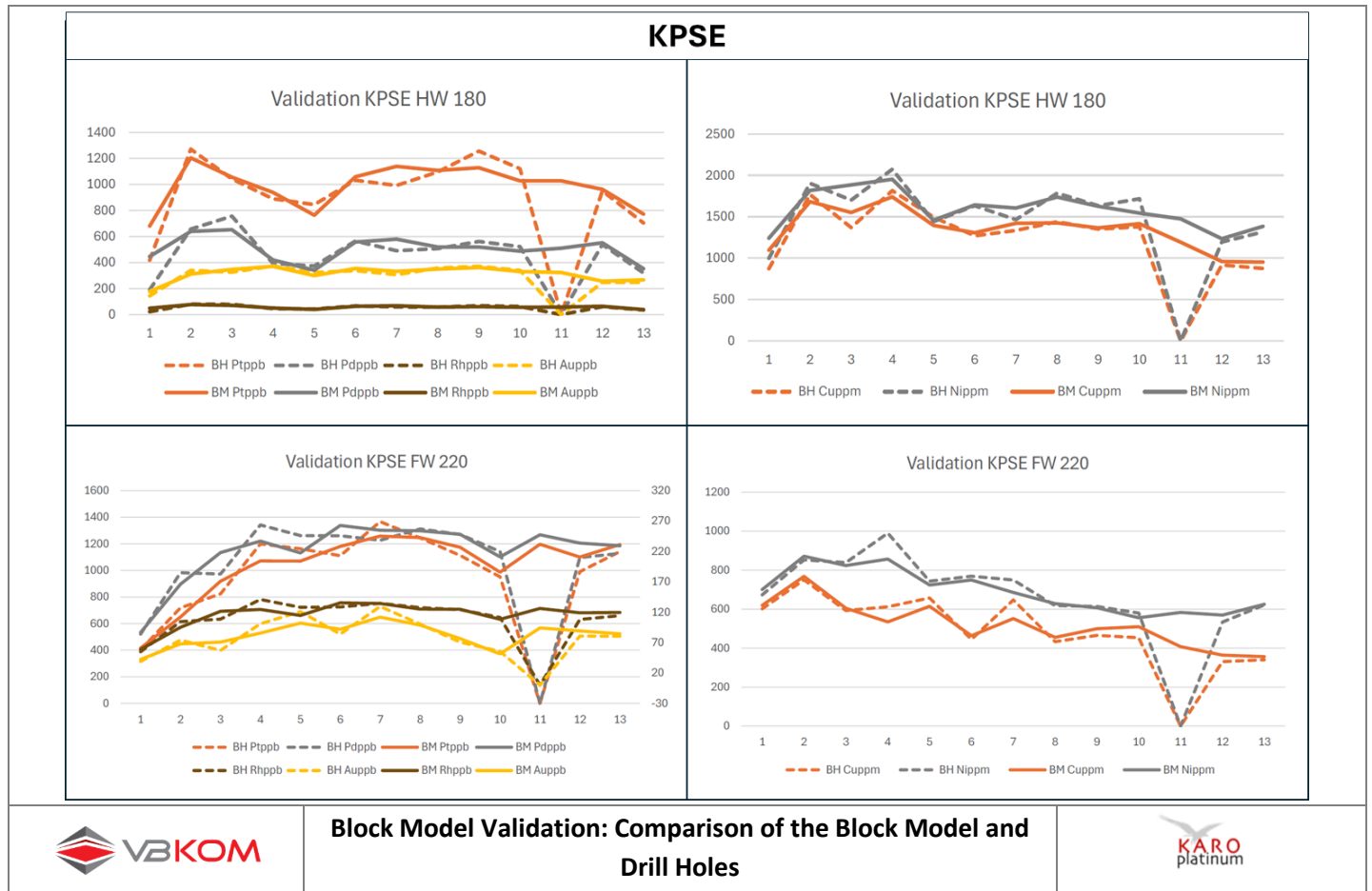


Figure 7-24: Block model validation: comparison of the block model and drill holes continued.

The results of the estimation are presented in Table 7-6 and Figure 7-25 to Figure 7-27. The plots illustrate true thickness, 3PGE+Au, and Ni% statistics in the respective project areas.

Table 7-6: Results of the grade estimation (June 2024).

Area	Tonnage (Mt)	Thickness (m)	Density (t/m <sup>3</sup> )	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	3PGE+Au (g/t)	Ru (g/t)	Ir (g/t)	5PGE+Au (g/t)	Cu (%)	Ni (%)	Co (%)
KPE	36.26	3.59	3.09	0.90	0.75	0.08	0.21	1.94	0.08	0.04	2.07	0.13	0.15	0.008
KPSE	82.54	3.64	2.85	0.98	0.84	0.09	0.17	2.08	0.09	0.04	2.21	0.08	0.10	0.004
KPNE	27.97	3.90	2.86	0.91	0.79	0.09	0.15	1.93	0.09	0.04	2.06	0.07	0.10	0.004
KPNW	6.95	2.71	2.89	0.80	0.79	0.07	0.20	1.87	0.08	0.04	1.98	0.17	0.18	0.007
KPSW	24.50	2.34	3.05	0.68	0.76	0.07	0.17	1.68	0.07	0.03	1.78	0.14	0.14	0.006
	<b>178.22</b>	<b>3.35</b>	<b>2.93</b>	<b>0.91</b>	<b>0.80</b>	<b>0.08</b>	<b>0.18</b>	<b>1.97</b>	<b>0.08</b>	<b>0.04</b>	<b>2.09</b>	<b>0.10</b>	<b>0.12</b>	<b>0.005</b>

Area	Strike (m)	Dip (°)	Pt:Pd:Rh:Au (%)	Pt (koz)	Pd (koz)	Rh (koz)	Au (koz)	3PGE+Au (koz)	Ru (koz)	Ir (koz)	5PGE+Au (koz)	Cu (t)	Ni (t)	Co (t)
KPE	7,990	24.18	46:39:4:11	1,053	878	95	241	2,266	97	44	2,408	47,900	53,800	3,000
KPSE	13,570	22.08	47:40:4:8	2,608	2,224	237	463	5,531	232	111	5,874	68,600	84,500	3,400
KPNE	9,190	21.89	47:41:5:8	816	715	78	131	1,739	78	37	1,855	19,400	27,500	1,200
KPNW	5,998	31.67	43:42:4:11	180	176	17	45	417	17	8	442	11,600	12,600	500
KPSW	8,960	16.06	41:45:4:10	536	598	55	132	1,320	58	25	1,403	33,700	34,100	1,400
	<b>45,708</b>	<b>21.61</b>	<b>46:41:4:9</b>	<b>5,192</b>	<b>4,589</b>	<b>482</b>	<b>1,012</b>	<b>11,274</b>	<b>482</b>	<b>226</b>	<b>11,982</b>	<b>181,200</b>	<b>212,500</b>	<b>9,500</b>

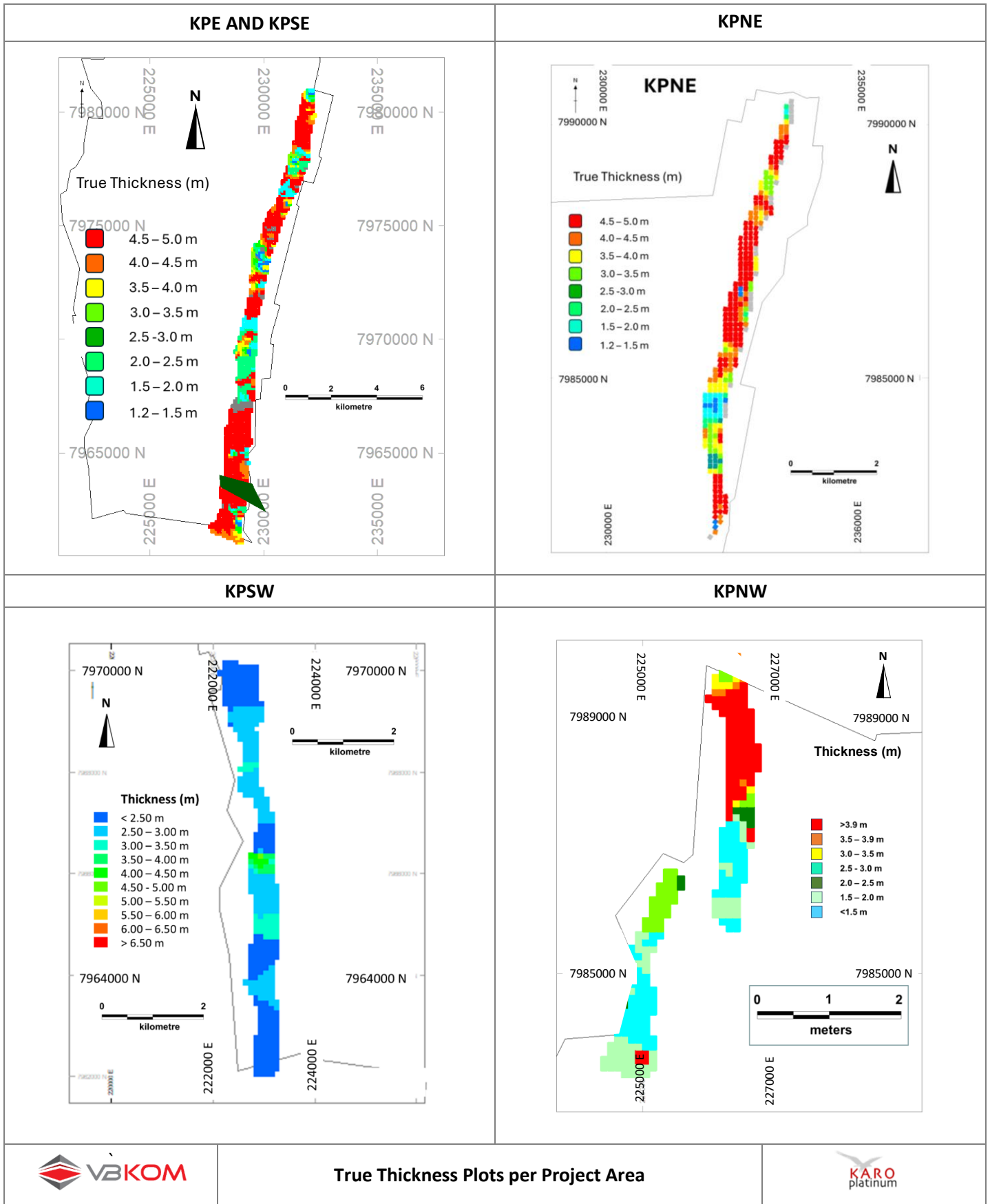


Figure 7-25: True thickness plots per project area.

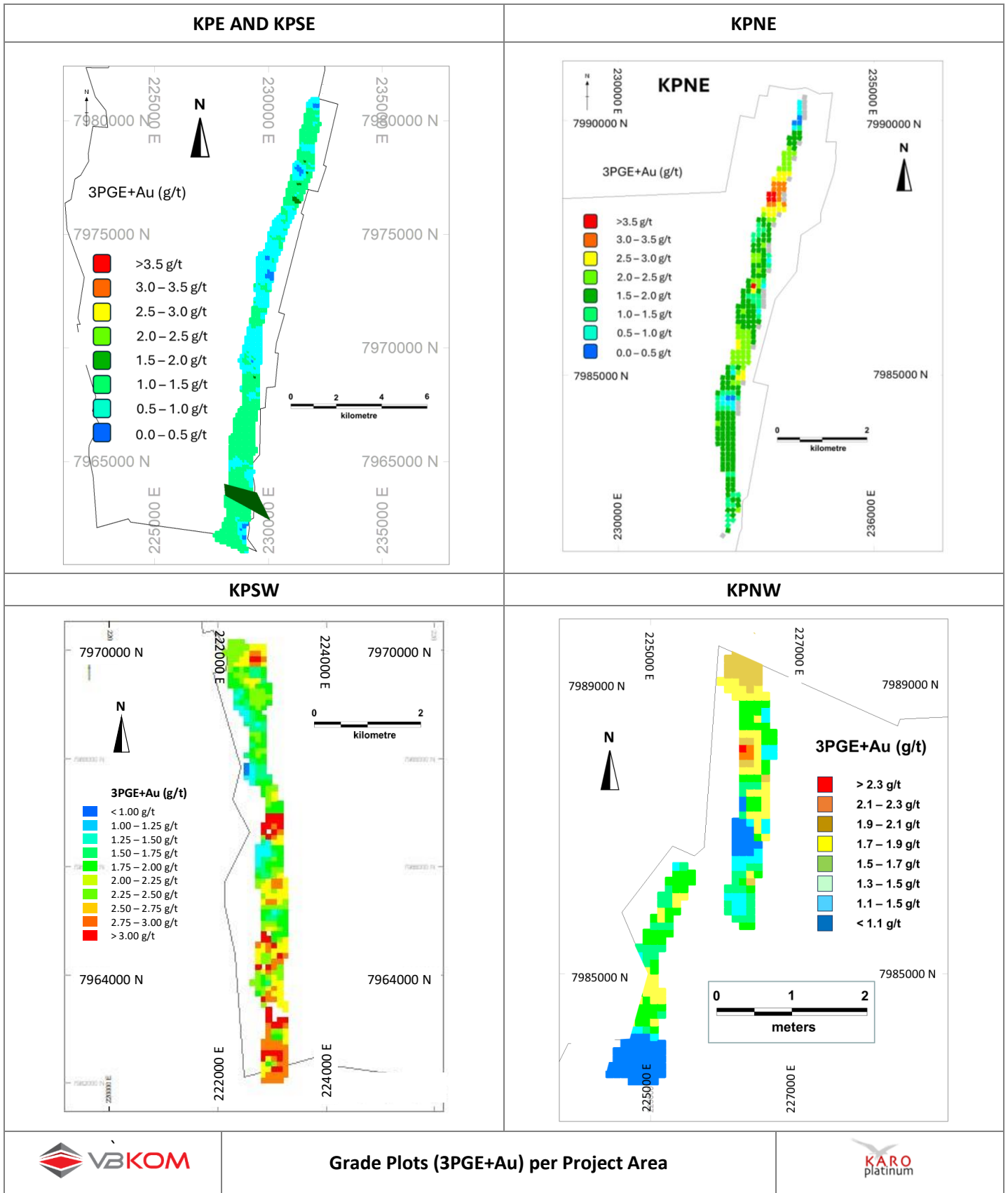


Figure 7-26: Grade plots (3PGE+Au) per project area.

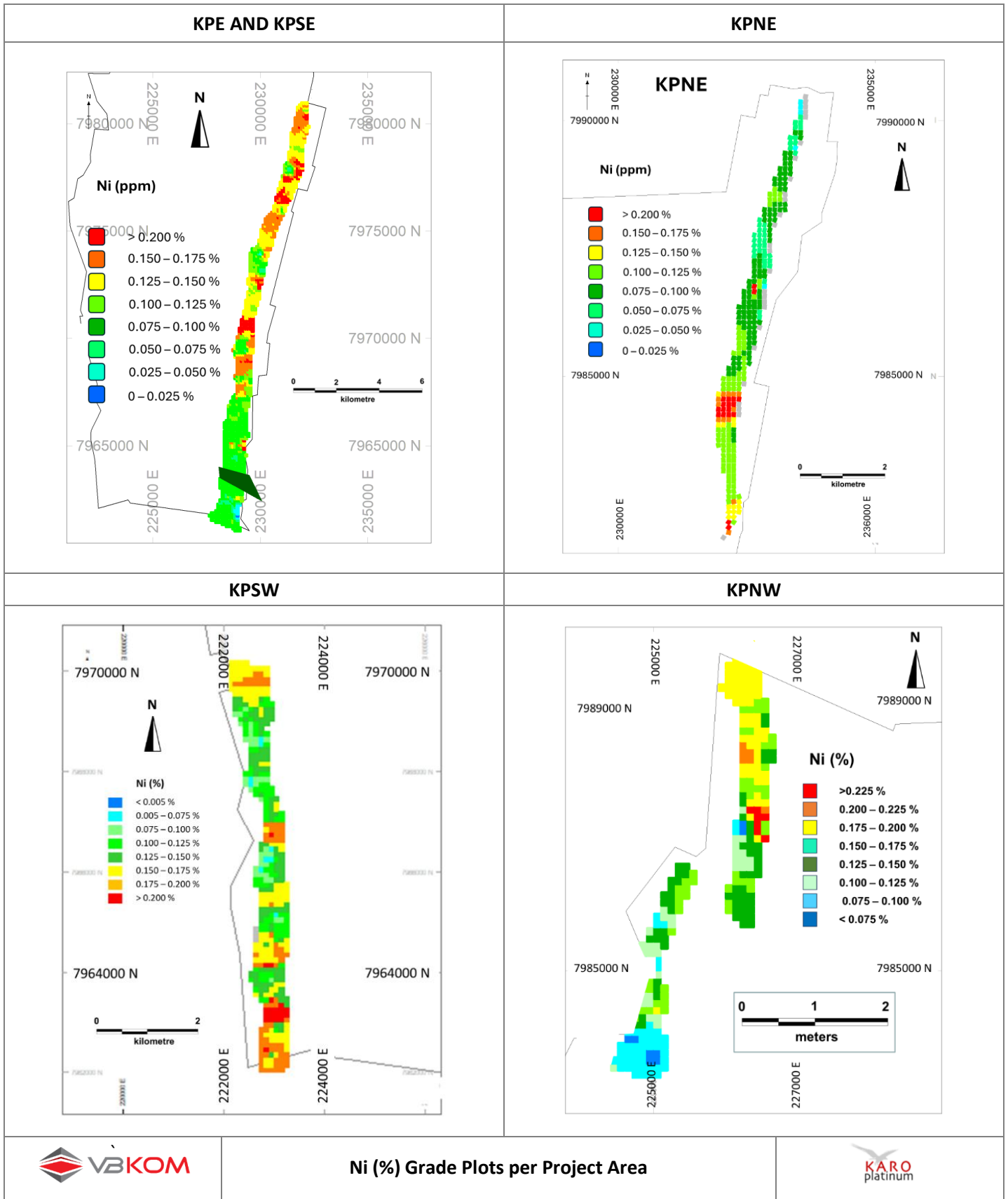


Figure 7-27: Ni (%) grade plots per project area.

## 7.14 Geological Losses

### S4.1(vi), 4.3(i)

There are very few currently known geological features which would adversely impact on the potential development of the MSZ or prevent a realistic chance of eventual economic extraction. A dolerite sill has been identified, delineated and excluded from the Mineral Resource estimate in the KPSE area. However, it is difficult to identify the MSZ in some drill holes. A geological loss to represent where the MSZ is either not developed or very difficult to identify was estimated by Pivot as follows:

- Measured Mineral Resource      5%
- Indicated Mineral Resource      10%
- Inferred Mineral Resource      15%

## 7.15 Mineral Resource Classification Criteria

### S4.3(i), 4.4(i)

The declaration has been made based on the criteria set out in Table 7-7.

Table 7-7: Criteria for the classification of the Mineral Resource.

Item	Discussion	Confidence
Drilling Techniques	Diamond drilling - typical industry standards applied.	High
Logging	Professional logging with industry standards applied	High
Drill Sample Recovery	>95% in the mineralised zones	High
Sub-sampling Techniques and Sample Preparation	Industry standards applied	High
Quality of Assay Data	QA/QC programme implemented and assays monitored	High
Verification of Sampling and Assaying	QA/QC programme employed	High
Location of Sampling Points	Collars surveyed by professional surveyor	High
Data Density and Distribution	Drilled with varying density	Moderate/High
Database Integrity	Industry standards applied	High
Geological Interpretation'	Stratigraphic definition and delineation applied local industry methodology. Major structures identified	High
Mineralisation Type	Able to correlate stratigraphy across the property	High
Estimation and Modelling Techniques	Inverse distance weighting - Power 2.	High
Cut-off Grades	Cut off applied to Cut Selection (1.7 g/t 3PGE+Au)	High
Mining Factors or Assumptions	Metallurgical recovery applied to fresh, transitional and oxidised profiles	Moderate/High

The drilling confirmed that the geology intersected is consistent with the established geological understanding of the Great Dyke. Broad structures could be interpolated with an interpretation of the MSZ being made. The continuity of the geology and grade can be demonstrated i.e. supports the Measured Mineral Resource categorisation. Where the geology and grade are sufficient to assume geological and grade continuity, an Indicated Mineral Resource has been declared.

The drill spacing for the KPSE area includes an area spacing 50 m x 50 m (GC area) which informed the declaration of a Measured Mineral Resource along the strike of the area. Confidence in the geology and grade is also confirmed in the downdip area which is declared as an Indicated Mineral Resource.

The drill spacing for the KPE area is considered sufficient for the declaration of the area closer to surface as Measured Mineral Resource and as an Indicated Mineral Resource downdip.

The drill spacing for the northern part of the KPNE area is sufficient to declare an Indicated Mineral Resource. The area between the KPNE and KPE is classified as an Inferred Mineral Resource due to the paucity of data.

The drill spacing for the KPNW area is appropriate for the classification of an Indicated Mineral Resource.

The drilling spacing and drill pattern for the KPSW area is sufficient to support the declaration of an Indicated Mineral Resource.

The grade for the majority of the KPW area is too low to be considered to have Reasonable Prospects for Eventual Economic Extraction (RPEEE).

## 7.16 By-Products or Deleterious Elements

The MSZ has elevated concentrations of precious metals (Pt, Pd, Rh, Ru, Os, Ir, and Au) and base metals (Cu, Ni, and Co). It is expected that they will all be recovered and contribute to the revenue derived from the operation.

## 7.17 Reasonable Prospects for Eventual Economic Extraction

**S4.2(vi), 4.3(i-vii)(ix), 4.5(i)(v), 5.2(i)**

Consideration of the RPEEE was undertaken using a simple financial assessment, assuming the MSZ is mined in an open pit transitioning to an underground mining operation and a concentrator. It is noted that the MSZ mineralisation is dispersed a significant distance above and below the BMSZ. The mineralisation immediately adjacent to the mining cut is generally of a similar grade to the mineralisation at the top and bottom of the mining cut. Diluted tonnages are typically mineralised with grades close to the grades at the margins to the defined mining cut.

A number of interactions of open pit and underground mining operations have been completed as technical studies to support the declaration of Mineral Reserves. These studies demonstrate the technical and economic viability of mining the MSZ.

A typical Mill – Float – Mill – Float (MF2) concentrator is anticipated with the concentrate being sold to a smelter. Various testwork has been completed to confirm the geometallurgical characteristics of the ore and the anticipated recoveries for fresh and transitional material.

Power and water sources are available in relatively close proximity to the anticipated mining operations. A site selection has been completed for a potential tailings storage facility.

The necessary ESIA's have been completed. Further details are presented in Section 8.7.

A Mining Lease has been obtained which is valid for the life of the operations with the mining of PGMs being the principal commodity to be recovered.

Various marketing studies have been completed. Section 8.8 presents a current market study. Considering the outlook for PGMs considering both supply and demand, it is anticipated that there is a market for the metals produced from this project.

The simple financial model is presented, with the assumptions summarised in Table 7-8. Based on these assumptions, there is potential for an open-pit operation initially, and subsequently an underground mine; hence, a Mineral Resource can be declared.

Table 7-8: Assumptions used for assessment of the RPEEE.

Commodity	Metal Prices	Mining	
Pt	USD950/oz	Annual Production	2,100,000 tpa
Pd	USD1,250/oz	<b>Metallurgical Recoveries</b>	
Rh	USD4,300/oz	Precious Metals	78%
Au	USD1,950/oz	Base Metals	75%
Cu	USD8,300/t	<b>Value Recovered</b>	
Ni	USD19,350/t	Precious Metals	85%
<b>Financial</b>		Base Metals	65%
Operating expenditure (Opex)/Cash Cost on Mine	USD61,6/t		

No further parameters were considered for RPEEE, and no material risks have been identified. A risk assessment has been prepared and is presented in Section 7.20.

## 7.18 Mineral Resource Statement

### S4.5(vii), T1.9

The 2024 combined Mineral Resource is declared in terms of the Guidelines on the SAMREC Code and is presented in Table 7-9 and illustrated in Figure 7-28. The Mineral Resource is reported on a 100% basis as in-situ tonnes and grade.

While it would be reasonable to expect that the majority of Inferred Mineral Resources would upgrade to Indicated Mineral Resources with continued exploration, due to the uncertainty of Inferred Mineral Resources, it should not be assumed that such upgrading will always occur.

The Mineral Resource declaration for each prospective area is presented in Table 7-10, Table 7-11, Table 7-12, Table 7-13, and Table 7-14.

The following notes are applicable to the Mineral Resource tables:

1. The Mineral Resource is reported inclusive of Mineral Reserves.
2. The Mineral Resource is reported as contained in-situ estimates.

3. No cut-off grades were applied in the Mineral Resource estimate.
4. Numbers may not add up due to rounding of decimals.
5. Approximately 6% of the Mineral Resource is considered as transitional (partly weathered material).

Table 7-9: Mineral Resource estimate (30 September 2024) (100% attributable basis).

Category	Level of Oxidation	Tonnage (ex Geol Loss)	True Thickness (m)	Density (t/m <sup>3</sup> )	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	3PGE+ Au (g/t)	Ru (g/t)	Ir (g/t)	5PGE+ Au (g/t)	Cu (%)	Ni (%)	Co (%)	Dip (°)
Measured	Fresh	57.13	3.76	2.91	0.96	0.82	0.09	0.18	2.05	0.09	0.04	2.18	0.10	0.12	0.005	22.5
	Transitional	6.41	3.26	2.83	0.97	0.79	0.09	0.19	2.03	0.08	0.04	2.15	0.10	0.12	0.005	22.8
	<b>Total</b>	<b>63.54</b>	<b>3.70</b>	<b>2.91</b>	<b>0.96</b>	<b>0.82</b>	<b>0.09</b>	<b>0.18</b>	<b>2.04</b>	<b>0.09</b>	<b>0.04</b>	<b>2.17</b>	<b>0.10</b>	<b>0.12</b>	<b>0.005</b>	<b>22.5</b>
Indicated	Fresh	105.89	3.14	2.96	0.88	0.80	0.08	0.18	1.94	0.08	0.04	2.06	0.11	0.12	0.005	21.8
	Transitional	2.53	3.73	2.52	0.87	0.71	0.08	0.15	1.80	0.08	0.04	1.92	0.07	0.09	0.004	20.9
	<b>Total</b>	<b>108.42</b>	<b>3.15</b>	<b>2.95</b>	<b>0.88</b>	<b>0.80</b>	<b>0.08</b>	<b>0.18</b>	<b>1.94</b>	<b>0.08</b>	<b>0.04</b>	<b>2.06</b>	<b>0.11</b>	<b>0.12</b>	<b>0.005</b>	<b>21.7</b>
Inferred	Fresh	5.50	3.03	2.97	0.75	0.71	0.08	0.12	1.67	0.08	0.04	1.79	0.07	0.13	0.006	22.9
	Transitional	0.76	3.77	2.77	0.86	0.73	0.09	0.12	1.81	0.09	0.04	1.95	0.08	0.12	0.006	21.4
	<b>Total</b>	<b>6.26</b>	<b>3.11</b>	<b>2.95</b>	<b>0.77</b>	<b>0.71</b>	<b>0.08</b>	<b>0.12</b>	<b>1.69</b>	<b>0.08</b>	<b>0.04</b>	<b>1.81</b>	<b>0.07</b>	<b>0.12</b>	<b>0.006</b>	<b>22.7</b>
Total	Fresh	168.51	3.34	2.94	0.90	0.80	0.08	0.18	1.97	0.08	0.04	2.09	0.10	0.12	0.005	22.0
	Transitional	9.71	3.50	2.72	0.93	0.76	0.08	0.17	1.95	0.08	0.04	2.08	0.09	0.11	0.005	22.1
	<b>Total</b>	<b>178.22</b>	<b>3.35</b>	<b>2.93</b>	<b>0.91</b>	<b>0.80</b>	<b>0.08</b>	<b>0.18</b>	<b>1.97</b>	<b>0.08</b>	<b>0.04</b>	<b>2.09</b>	<b>0.10</b>	<b>0.12</b>	<b>0.005</b>	<b>22.0</b>
Category	Level of Oxidation	Pt:Pd:Rh:Ru:Ir:Au (%)	Pt:Pd:Rh:Ru:Ir:Au (%)	Pt (koz)	Pd (koz)	Rh (koz)	Au (koz)	3PGE+ Au (koz)	Ru (koz)	Ir (koz)	5PGE+ Au (koz)	Cu (t)	Ni (t)	Co (t)		
Measured	Fresh	47:40:4:9	44:38:4:4:2:8	1,755	1,510	162	332	3,759	161	75	3,995	54,700	66,300	3,200		
	Transitional	48:39:4:9	45:36:4:4:2:9	200	162	18	39	418	17	8	444	6,400	7,600	400		
	<b>Total</b>	<b>47:40:4:9</b>	<b>44:38:4:4:2:8</b>	<b>1,954</b>	<b>1,672</b>	<b>179</b>	<b>372</b>	<b>4,177</b>	<b>179</b>	<b>84</b>	<b>4,439</b>	<b>61,100</b>	<b>73,900</b>	<b>3,600</b>		
Indicated	Fresh	46:41:4:9	43:39:4:4:2:9	3,013	2,716	280	603	6,612	280	131	7,024	113,700	128,600	5,500		
	Transitional	48:39:4:8	45:37:4:4:2:8	71	58	6	12	147	6	3	156	1,800	2,300	100		
	<b>Total</b>	<b>46:41:4:9</b>	<b>43:39:4:4:2:9</b>	<b>3,083</b>	<b>2,774</b>	<b>286</b>	<b>615</b>	<b>6,758</b>	<b>287</b>	<b>135</b>	<b>7,180</b>	<b>115,500</b>	<b>130,900</b>	<b>5,600</b>		
Inferred	Fresh	45:43:5:7	42:40:5:5:2:7	133	126	14	22	295	14	6	315	3,900	6,900	300		
	Transitional	48:40:5:7	44:38:5:5:2:6	21	18	2	3	44	2	1	48	600	900	40		
	<b>Total</b>	<b>45:42:5:7</b>	<b>42:40:5:5:2:7</b>	<b>154</b>	<b>144</b>	<b>17</b>	<b>25</b>	<b>339</b>	<b>17</b>	<b>7</b>	<b>363</b>	<b>4,500</b>	<b>7,800</b>	<b>340</b>		
Total	Fresh	46:41:4:9	43:38:4:4:2:8	4,900	4,352	456	957	10,665	456	213	11,334	172,400	201,700	9,000		
	Transitional	48:39:4:9	45:37:4:4:2:8	291	238	26	54	609	26	13	648	8,800	10,800	500		
	<b>Total</b>	<b>46:41:4:9</b>	<b>43:38:4:4:2:8</b>	<b>5,192</b>	<b>4,589</b>	<b>482</b>	<b>1,012</b>	<b>11,274</b>	<b>482</b>	<b>226</b>	<b>11,982</b>	<b>181,100</b>	<b>212,500</b>	<b>9,504</b>		

Table 7-10: Mineral Resource estimate KPE (30 September 2024) (100% attributable basis).

Category	Level of Oxidation	Tonnage (ex Geol Loss)	True Thickness (m)	Density (t/m <sup>3</sup> )	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	3PGE+Au (g/t)	Ru (g/t)	Ir (g/t)	5PGE+Au (g/t)	Cu (%)	Ni (%)	Co (%)	Dip (°)
Measured	Fresh	18.64	4.11	3.08	0.91	0.77	0.08	0.2	1.97	0.09	0.04	2.1	0.13	0.15	0.008	24.2
	Transitional	2.05	3.40	3.04	0.93	0.78	0.08	0.21	2	0.08	0.04	2.12	0.14	0.15	0.008	22.4
	<b>Total</b>	<b>20.69</b>	<b>4.02</b>	<b>3.07</b>	<b>0.91</b>	<b>0.77</b>	<b>0.08</b>	<b>0.21</b>	<b>1.98</b>	<b>0.09</b>	<b>0.04</b>	<b>2.1</b>	<b>0.13</b>	<b>0.15</b>	<b>0.008</b>	<b>23.9</b>
Indicated	Fresh	15.57	3.79	3.11	0.89	0.72	0.08	0.21	1.9	0.08	0.04	2.02	0.13	0.15	0.008	24.5
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>15.57</b>	<b>3.79</b>	<b>3.11</b>	<b>0.89</b>	<b>0.72</b>	<b>0.08</b>	<b>0.21</b>	<b>1.9</b>	<b>0.08</b>	<b>0.04</b>	<b>2.02</b>	<b>0.13</b>	<b>0.15</b>	<b>0.008</b>	<b>24.5</b>
Inferred	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Total	Fresh	34.21	3.95	3.09	0.9	0.75	0.08	0.21	1.94	0.08	0.04	2.06	0.13	0.15	0.008	24.3
	Transitional	2.05	3.40	3.04	0.93	0.78	0.08	0.21	2	0.08	0.04	2.12	0.14	0.15	0.008	22.4
	<b>Total</b>	<b>36.27</b>	<b>3.92</b>	<b>3.09</b>	<b>0.9</b>	<b>0.75</b>	<b>0.08</b>	<b>0.21</b>	<b>1.94</b>	<b>0.08</b>	<b>0.04</b>	<b>2.06</b>	<b>0.13</b>	<b>0.15</b>	<b>0.008</b>	<b>24.4</b>
Category	Level of Oxidation	Pt:Pd:Rh:Au (%)	Pt:Pd:Rh:Ru:Ir:Au (%)	Pt (koz)	Pd (koz)	Rh (koz)	Au (koz)	3PGE+Au (koz)	Ru (koz)	Ir (koz)	5PGE+Au (koz)	Cu (t)	Ni (t)	Co (t)		
Measured	Fresh	46:39:4:10	43:37:4:4:2:10	547	464	50	123	1,183	52	23	1,258	24,600	28,000	1,600		
	Transitional	47:39:4:10	44:37:4:4:2:10	61	51	5	14	132	6	3	140	2,800	3,100	200		
	<b>Total</b>	<b>46:39:4:10</b>	<b>43:37:4:4:2:10</b>	<b>608</b>	<b>515</b>	<b>55</b>	<b>136</b>	<b>1,315</b>	<b>57</b>	<b>26</b>	<b>1,398</b>	<b>27,400</b>	<b>31,000</b>	<b>1,700</b>		
Indicated	Fresh	47:38:4:11	44:36:4:4:2:10	445	363	39	105	951	40	18	1,010	20,500	22,800	1,200		
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-		
	<b>Total</b>	<b>46:38:4:11</b>	<b>44:36:4:4:2:10</b>	<b>445</b>	<b>363</b>	<b>39</b>	<b>105</b>	<b>951</b>	<b>40</b>	<b>18</b>	<b>1,010</b>	<b>20,500</b>	<b>22,800</b>	<b>1,200</b>		
Inferred	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-		
	<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		
Total	Fresh	46:39:4:11	44:36:4:4:2:10	992	826	89	227	2,135	92	42	2,268	45,100	50,700	2,800		
	Transitional	47:39:4:10	44:36:4:4:2:10	61	51	5	14	132	6	3	140	2,800	3,100	200		
	<b>Total</b>	<b>46:39:4:11</b>	<b>44:36:4:4:2:10</b>	<b>1,053</b>	<b>877</b>	<b>95</b>	<b>241</b>	<b>2,266</b>	<b>97</b>	<b>44</b>	<b>2,407</b>	<b>47,900</b>	<b>53,800</b>	<b>2,900</b>		

Table 7-11: Mineral Resource estimate KPSE (30 September 2024) (100% attributable basis).

Category	Level of Oxidation	Tonnage (ex Geol Loss)	True Thickness (m)	Density (t/m <sup>3</sup> )	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	3PGE+Au (g/t)	Ru (g/t)	Ir (g/t)	5PGE+Au (g/t)	Cu (%)	Ni (%)	Co (%)	Dip (°)
Measured	Fresh	38.48	4.06	2.83	0.98	0.85	0.09	0.17	2.08	0.09	0.04	2.21	0.08	0.1	0.004	21.7
	Transitional	4.37	3.62	2.73	0.99	0.79	0.09	0.18	2.04	0.08	0.04	2.17	0.08	0.1	0.004	22.9
	<b>Total</b>	<b>42.85</b>	<b>4.01</b>	<b>2.82</b>	<b>0.98</b>	<b>0.84</b>	<b>0.09</b>	<b>0.17</b>	<b>2.08</b>	<b>0.09</b>	<b>0.04</b>	<b>2.21</b>	<b>0.08</b>	<b>0.1</b>	<b>0.004</b>	<b>21.8</b>
Indicated	Fresh	39.7	3.86	2.88	0.99	0.84	0.09	0.18	2.09	0.09	0.04	2.22	0.09	0.1	0.004	22.3
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>39.7</b>	<b>3.86</b>	<b>2.88</b>	<b>0.99</b>	<b>0.84</b>	<b>0.09</b>	<b>0.18</b>	<b>2.09</b>	<b>0.09</b>	<b>0.04</b>	<b>2.22</b>	<b>0.09</b>	<b>0.1</b>	<b>0.004</b>	<b>22.3</b>
Inferred	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Total	Fresh	78.18	3.96	2.86	0.98	0.84	0.9	0.17	2.09	0.09	0.04	2.22	0.08	0.1	0.004	22
	Transitional	4.37	3.62	2.73	0.99	0.79	0.9	0.18	2.04	0.08	0.04	2.17	0.08	0.1	0.004	22.9
	<b>Total</b>	<b>82.54</b>	<b>3.94</b>	<b>2.85</b>	<b>0.98</b>	<b>0.84</b>	<b>0.09</b>	<b>0.17</b>	<b>2.08</b>	<b>0.08</b>	<b>0.04</b>	<b>2.2</b>	<b>0.08</b>	<b>0.12</b>	<b>0.004</b>	<b>22.1</b>

Category	Level of Oxidation	Pt:Pd:Rh:Au (%)	Pt:Pd:Rh:Ru:Ir:Au (%)	Pt (koz)	Pd (koz)	Rh (koz)	Au (koz)	3PGE+Au (koz)	Ru (koz)	Ir (koz)	5PGE+Au (koz)	Cu (t)	Ni (t)	Co (t)
Measured	Fresh	47:41:4:8	44:38:4:4:2:8	1,208	1,046	112	210	2,575	110	52	2,737	30,100	38,300	1,600
	Transitional	48:39:4:9	45:36:4:4:2:8	138	111	12	26	287	12	6	304	3,600	4,500	200
	<b>Total</b>	<b>47:40:4:8</b>	<b>44:38:4:4:2:8</b>	<b>1,346</b>	<b>1,157</b>	<b>124</b>	<b>235</b>	<b>2,862</b>	<b>121</b>	<b>58</b>	<b>3,041</b>	<b>33,600</b>	<b>42,800</b>	<b>1,800</b>
Indicated	Fresh	47:40:4:9	45:38:4:4:2:8	1,261	1,067	113	228	2,669	111	53	2,833	34,800	41,700	1,600
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>47:40:4:9</b>	<b>45:38:4:4:2:8</b>	<b>1,261</b>	<b>1,067</b>	<b>113</b>	<b>228</b>	<b>2,669</b>	<b>111</b>	<b>53</b>	<b>2,833</b>	<b>34,800</b>	<b>41,700</b>	<b>1,600</b>
Inferred	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Total	Fresh	47:40:4:8	44:38:4:4:2:8	2,469	2,113	225	437	5,245	220	105	5,570	65,000	80,000	3,200
	Transitional	48:39:4:9	45:36:4:4:2:8	138	111	12	26	287	12	6	304	3,600	4,500	200
	<b>Total</b>	<b>47:40:4:8</b>	<b>44:38:4:4:2:8</b>	<b>2,608</b>	<b>2,224</b>	<b>237</b>	<b>463</b>	<b>5,532</b>	<b>232</b>	<b>111</b>	<b>5,851</b>	<b>68,600</b>	<b>84,500</b>	<b>3,400</b>

Table 7-12: Mineral Resource estimate KPNE (30 September 2024) (100% attributable basis).

Category	Level of Oxidation	Tonnage (ex Geol Loss)	True Thickness (m)	Density (t/m <sup>3</sup> )	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	3PGE+Au (g/t)	Ru (g/t)	Ir (g/t)	5PGE+Au (g/t)	Cu (%)	Ni (%)	Co (%)	Dip (°)
Measured	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indicated	Fresh	19.39	3.93	2.91	0.96	0.83	0.09	0.15	2.03	0.09	0.04	2.16	0.07	0.09	0.004	22.1
	Transitional	2.32	3.74	2.48	0.87	0.7	0.08	0.14	1.8	0.08	0.04	1.91	0.06	0.08	0.006	0.41
	<b>Total</b>	<b>21.71</b>	<b>3.9</b>	<b>2.86</b>	<b>0.95</b>	<b>0.82</b>	<b>0.09</b>	<b>0.15</b>	<b>2.01</b>	<b>0.09</b>	<b>0.04</b>	<b>2.14</b>	<b>0.07</b>	<b>0.09</b>	<b>0.006</b>	<b>21.88</b>
Inferred	Fresh	5.5	3.03	2.97	0.75	0.71	0.08	0.12	1.67	0.08	0.04	1.79	0.07	0.13	0.006	22.92
	Transitional	0.76	3.77	2.77	0.86	0.73	0.09	0.12	1.81	0.09	0.04	1.95	0.08	0.12	0.006	21.41
	<b>Total</b>	<b>6.26</b>	<b>3.11</b>	<b>2.95</b>	<b>0.77</b>	<b>0.71</b>	<b>0.08</b>	<b>0.12</b>	<b>1.69</b>	<b>0.08</b>	<b>0.04</b>	<b>1.81</b>	<b>0.07</b>	<b>0.12</b>	<b>0.006</b>	<b>22.76</b>
Total	Fresh	24.88	3.68	2.93	0.91	0.81	0.09	0.15	1.95	0.09	0.04	2.08	0.07	0.1	0.004	22.28
	Transitional	3.09	3.75	2.55	0.87	0.71	0.08	0.14	1.8	0.08	0.04	1.92	0.07	0.09	0.004	20.66
	<b>Total</b>	<b>27.97</b>	<b>3.69</b>	<b>2.88</b>	<b>0.91</b>	<b>0.79</b>	<b>0.09</b>	<b>0.15</b>	<b>1.93</b>	<b>0.09</b>	<b>0.04</b>	<b>2.06</b>	<b>0.07</b>	<b>0.1</b>	<b>0.004</b>	<b>22.08</b>
Category	Level of Oxidation	Pt:Pd:Rh:Au (%)	Pt:Pd:Rh:Ru:Ir:Au (%)	Pt (koz)	Pd (koz)	Rh (koz)	Au (koz)	3PGE+Au (koz)	Ru (koz)	Ir (koz)	5PGE+Au (koz)	Cu (t)	Ni (t)	Co (t)		
Measured	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Indicated	Fresh	47:41:4:8	44:38:4:4:2:7	597	519	56	95	1,266	56	27	1,349	13,000	18,000	770		
	Transitional	49:39:4:8	46:37:4:4:2:7	65	52	6	11	134	6	3	143	1,000	2,000	80		
	<b>Total</b>	<b>47:41:4:8</b>	<b>44:38:4:4:2:7</b>	<b>662</b>	<b>571</b>	<b>62</b>	<b>106</b>	<b>1,400</b>	<b>62</b>	<b>30</b>	<b>1,492</b>	<b>15,000</b>	<b>20,000</b>	<b>850</b>		
Inferred	Fresh	45:43:5:7	42:40:5:5:2:7	133	126	14	22	295	14	6	315	4,000	7,000	330		
	Transitional	48:40:5:7	44:38:5:5:2:6	21	18	2	3	44	2	1	48	1,000	1,000	40		
	<b>Total</b>	<b>45:42:5:7</b>	<b>42:40:5:5:2:7</b>	<b>154</b>	<b>144</b>	<b>17</b>	<b>25</b>	<b>339</b>	<b>17</b>	<b>7</b>	<b>363</b>	<b>5,000</b>	<b>8,000</b>	<b>380</b>		
Total	Fresh	47:41:4:7	44:39:4:4:2:7	730	644	70	117	1,561	70	33	1,664	17,000	25,000	1,100		
	Transitional	48:39:5:8	45:37:4:4:2:7	86	70	8	14	179	8	4	191	2,000	3,000	120		
	<b>Total</b>	<b>47:41:5:8</b>	<b>44:39:4:4:2:7</b>	<b>816</b>	<b>715</b>	<b>78</b>	<b>131</b>	<b>1,739</b>	<b>78</b>	<b>37</b>	<b>1,855</b>	<b>19,000</b>	<b>28,000</b>	<b>1,230</b>		

Table 7-13: Mineral Resource estimate KPNW (30 September 2024) (100% attributable basis).

Category	Level of Oxidation	Tonnage (ex Geol Loss)	True Thickness (m)	Density (t/m <sup>3</sup> )	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	3PGE+Au (g/t)	Ru (g/t)	Ir (g/t)	5PGE+Au (g/t)	Cu (%)	Ni (%)	Co (%)	Dip (°)
Measured	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indicated	Fresh	6.74	3.16	2.89	0.8	0.79	0.07	0.2	1.87	0.08	0.04	1.98	0.17	0.18	0.01	31.8
	Transitional	0.21	4.05	2.89	0.8	0.76	0.08	0.21	1.85	0.08	0.04	1.96	0.16	0.18	0.01	25.9
	<b>Total</b>	<b>6.95</b>	<b>3.18</b>	<b>2.89</b>	<b>0.8</b>	<b>0.79</b>	<b>0.07</b>	<b>0.2</b>	<b>1.87</b>	<b>0.08</b>	<b>0.04</b>	<b>1.98</b>	<b>0.17</b>	<b>0.18</b>	<b>0.01</b>	<b>31.6</b>
Inferred	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	Fresh	6.74	3.16	2.89	0.8	0.79	0.07	0.2	1.87	0.08	0.04	1.98	0.17	0.18	0.01	31.8
	Transitional	0.21	4.05	2.89	0.8	0.76	0.08	0.21	1.85	0.08	0.04	1.96	0.16	0.18	0.01	25.9
	<b>Total</b>	<b>6.95</b>	<b>3.18</b>	<b>2.89</b>	<b>0.8</b>	<b>0.79</b>	<b>0.07</b>	<b>0.2</b>	<b>1.87</b>	<b>0.08</b>	<b>0.04</b>	<b>1.98</b>	<b>0.17</b>	<b>0.18</b>	<b>0.01</b>	<b>31.6</b>
Category	Level of Oxidation	Pt:Pd:Rh:Au (%)	Pt:Pd:Rh:Ru:Ir:Au (%)	Pt (koz)	Pd (koz)	Rh (koz)	Au (koz)	3PGE+Au (koz)	Ru (koz)	Ir (koz)	5PGE+Au (koz)	Cu (t)	Ni (t)	Co (t)		
Measured	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Indicated	Fresh	43:42:4:11	41:40:4:10:4:2	174	171	16	44	404	16	8	429	11,300	12,200	500		
	Transitional	44:41:4:11	41:39:4:11:4:2	5	5	1	1	13	1	0	13	300	400	20		
	<b>Total</b>	<b>43:42:4:11</b>	<b>41:40:4:10:4:2</b>	<b>180</b>	<b>176</b>	<b>17</b>	<b>45</b>	<b>417</b>	<b>17</b>	<b>8</b>	<b>442</b>	<b>11,600</b>	<b>12,600</b>	<b>520</b>		
Inferred	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total	Fresh	43:42:4:11	41:40:4:10:4:2	174	171	16	44	404	16	8	429	11,300	12,200	500		
	Transitional	44:41:4:11	41:39:4:11:4:2	5	5	1	1	13	1	0	13	300	400	20		
	<b>Total</b>	<b>43:42:4:11</b>	<b>41:40:4:10:4:2</b>	<b>180</b>	<b>176</b>	<b>17</b>	<b>45</b>	<b>417</b>	<b>17</b>	<b>8</b>	<b>442</b>	<b>11,600</b>	<b>12,600</b>	<b>520</b>		

Table 7-14: Mineral Resource estimate KPSW (30 September 2024) (100% attributable basis).

Category	Level of Oxidation	Tonnage (ex Geol Loss)	True Thickness (m)	Density (t/m <sup>3</sup> )	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	3PGE+Au (g/t)	Ru (g/t)	Ir (g/t)	5PGE+Au (g/t)	Cu (%)	Ni (%)	Co (%)	Dip (°)
Measured	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indicated	Fresh	24.5	2.34	3.05	0.68	0.76	0.07	0.17	1.68	0.07	0.03	1.78	0.14	0.14	0.01	16.09
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>24.5</b>	<b>2.34</b>	<b>3.05</b>	<b>0.68</b>	<b>0.76</b>	<b>0.07</b>	<b>0.17</b>	<b>1.68</b>	<b>0.07</b>	<b>0.03</b>	<b>1.78</b>	<b>0.14</b>	<b>0.14</b>	<b>0.01</b>	<b>16.1</b>
Inferred	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	Fresh	24.5	2.34	3.05	0.68	0.76	0.07	0.17	1.68	0.07	0.03	1.78	0.14	0.14	0.01	16.09
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>24.5</b>	<b>2.34</b>	<b>3.05</b>	<b>0.68</b>	<b>0.76</b>	<b>0.07</b>	<b>0.17</b>	<b>1.68</b>	<b>0.07</b>	<b>0.03</b>	<b>1.78</b>	<b>0.14</b>	<b>0.14</b>	<b>0.01</b>	<b>16.1</b>
Category	Level of Oxidation	Pt:Pd:Rh:Au (%)	Pt:Pd:Rh:Ru:Ir:Au (%)	Pt (koz)	Pd (koz)	Rh (koz)	Au (koz)	3PGE+Au (koz)	Ru (koz)	Ir (koz)	5PGE+Au (koz)	Cu (t)	Ni (t)	Co (t)		
Measured	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Indicated	Fresh	41:45:4:10	38:43:4:4:2:9	536	598	55	132	1,320	58	25	1,403	33,700	34,100	1,400		
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	<b>41:45:4:10</b>	<b>38:43:4:4:2:9</b>	<b>536</b>	<b>598</b>	<b>55</b>	<b>132</b>	<b>1,320</b>	<b>58</b>	<b>25</b>	<b>1,403</b>	<b>33,700</b>	<b>34,100</b>	<b>1,400</b>		
Inferred	Fresh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total	Fresh	41:45:4:10	38:43:4:4:2:9	536	598	55	132	1,320	58	25	1,403	33,700	34,100	1,400		
	Transitional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	<b>41:45:4:10</b>	<b>38:43:4:4:2:9</b>	<b>536</b>	<b>598</b>	<b>55</b>	<b>132</b>	<b>1,320</b>	<b>58</b>	<b>25</b>	<b>1,403</b>	<b>33,700</b>	<b>34,100</b>	<b>1,400</b>		

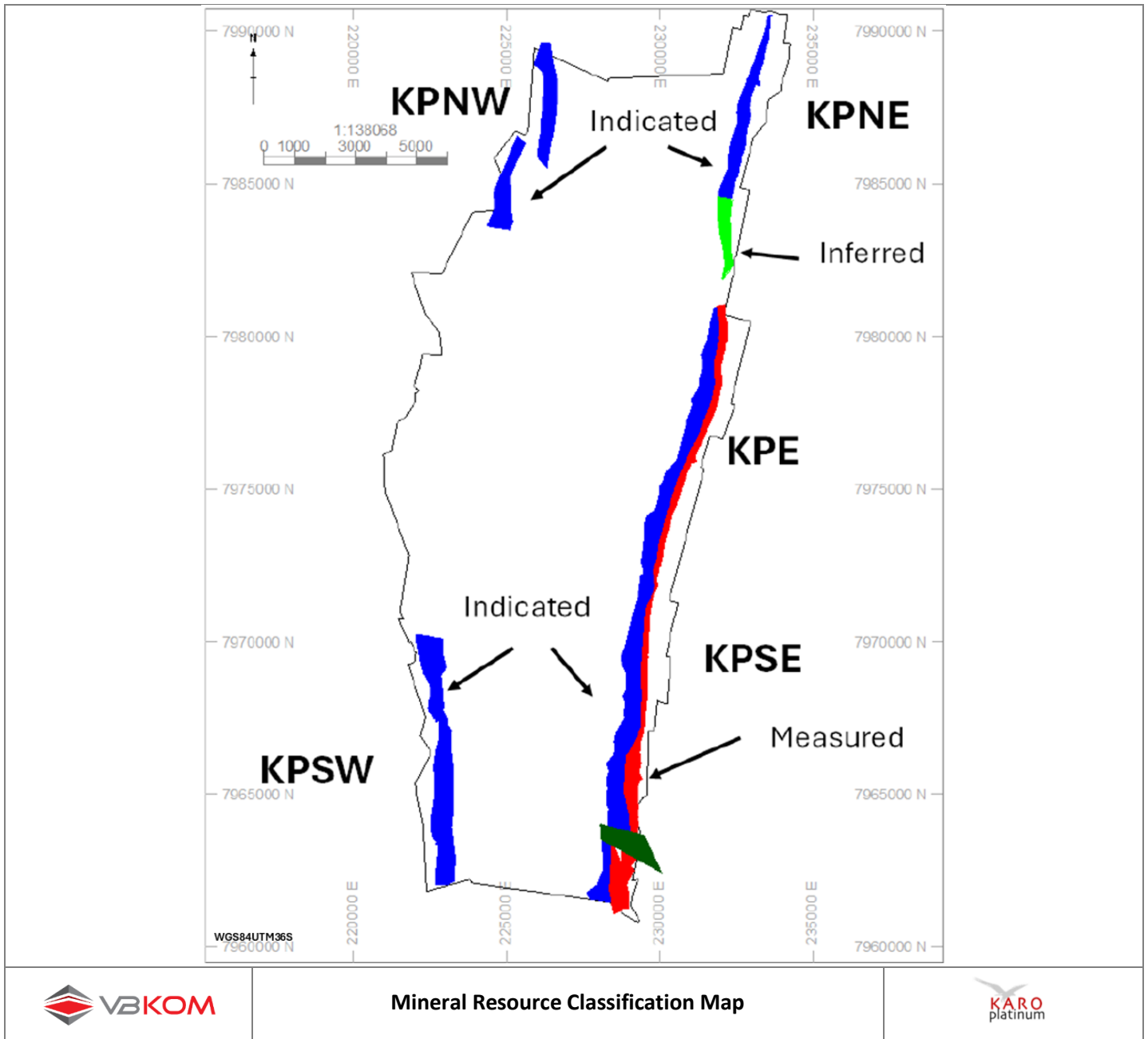


Figure 7-28: Map showing the Mineral Resource classification (30 September 2024).

## 7.19 Mineral Resource Reconciliation

### S4.5(vi)

The previous estimate undertaken in September 2023 was undertaken with less available information on the eastern side of the Great Dyke (KPNE, KPE, and KPSE).

A comparison between the September 2023 and September 2024 Mineral Resource estimates is presented in Table 7-15.

Table 7-15: Reconciliation between the September 2023 and September 2024 Mineral Resource estimates.

Mineral Resource Declaration (September 2024) SAMREC Code											
Mineral Resource Classification	Tonnage (Mt)	Thickness (m)	3PGE+Au (g/t)	Pt:Pd:Rh:Ru:Ir:Au (%)	3PGE+Au (koz)	5PGE+Au (g/t)	Pt:Pd:Rh:Ru:Ir:Au (%)	5PGE+Au (koz)	Cu (%)	Ni (%)	Co (%)
Measured	63.54	3.7	2.04	47:40:4:9	4,177	2.17	44:38:4:4:2:8	4,439	0.10	0.12	0.005
Indicated	108.42	2.73	1.94	46:41:4:9	6,758	2.06	43:39:4:4:2:9	7,180	0.11	0.12	0.005
Inferred	6.26	3.11	1.69	45:42:5:7	339	1.81	42:40:5:5:2:7	363	0.07	0.12	0.005
<b>Total</b>	<b>178.22</b>	<b>3.06</b>	<b>1.97</b>	<b>46:41:4:9</b>	<b>11,274</b>	<b>2.09</b>	<b>43:38:4:4:2:8</b>	<b>11,982</b>	<b>0.10</b>	<b>0.12</b>	<b>0.005</b>
Mineral Resource Declaration (September 2023) SAMREC Code											
Mineral Resource Classification	Tonnage (Mt)	Thickness (m)	3PGE+Au (g/t)	Pt:Pd:Rh:Ru:Ir:Au (%)	3PGE+Au (koz)	5PGE+Au (g/t)	Pt:Pd:Rh:Ru:Ir:Au (%)	5PGE+Au (koz)	Cu (%)	Ni (%)	Co (%)
Measured	15.11	4.44	2.27	46:43:5:6	1,104	2.43	43:40:4:4:2:6	1,180	0.07	0.08	0.003
Indicated	128.23	3.20	1.95	45:42:4:9	8,032	2.08	42:40:4:4:2:8	8,560	0.11	0.13	0.006
Inferred	25.48	4.11	2.05	46:43:4:7	1,681	2.19	43:40:4:4:2:7	1,792	0.07	0.09	0.004
<b>Total</b>	<b>168.82</b>	<b>3.53</b>	<b>1.99</b>	<b>45:42:4:8</b>	<b>10,817</b>	<b>2.12</b>	<b>42:40:4:4:2:8</b>	<b>11,531</b>	<b>0.10</b>	<b>0.12</b>	<b>0.005</b>
Proportional Difference*											
Mineral Resource Classification	Tonnage (Mt)	Thickness (m)	3PGE+Au (g/t)	Pt:Pd:Rh:Ru:Ir:Au (%)	3PGE+Au (koz)	5PGE+Au (g/t)	Pt:Pd:Rh:Ru:Ir:Au (%)	5PGE+Au (koz)	Cu (%)	Ni (%)	Co (%)
Measured	321%	-17%	-10%		278%	-11%		276%	35%	41%	60%
Indicated	-15%	-14%	0		-16%	-1%		-16%	-5%	-5%	-13%
M+I	20%	-7%	0		20%	-1%		19%	-5%	-3%	-7%
Inferred	-75%	-24%	-18%		-80%	-17%		-80%	3%	42%	67%
<b>Total</b>	<b>6%</b>	<b>-13%</b>	<b>-1%</b>		<b>4%</b>	<b>-2%</b>		<b>4%</b>	<b>-1%</b>	<b>1%</b>	<b>-1%</b>

\* Note the rounding can make the difference appear to be significant, especially for the base metals.

A reconciliation based on tonnage is presented in Figure 7-29 and discussed below.

**KPNE:** The additional information has allowed for a revised geological interpretation and extrapolation. KPNE has been extended into the gap between KPE and KPNE. However, the available data have not been sufficient to allow the declaration of an indicated Mineral Resource in this area.

**KPE:** Although only one drill hole was added to this area, additional drilling took place in KPSE which is contiguous to KPE. As a result, the geological model was re-interpreted and the dip has been modelled in line with that applied in the other areas. The re-interpretation has introduced some additional faulting and less extrapolation resulting in a reduction in tonnage.

**KPSE:** A significant number of intersections have been added resulting in a re-interpretation of the geological model. The application of a cut selection on a cut-off of 1.7 g/t 3PGE+Au has influenced model grade extrapolation. The density and cut thickness together with the re-interpreted geological model resulted in additional tonnage.

A comparison of the overall grade indicates a small change but it is well within realistic expectations for a Mineral Resource estimation. The grades are similar to those reported in the previous estimate.

As a result, there is an increase in tonnage and therefore recoverable metal (Table 7-15) in the latest estimate.

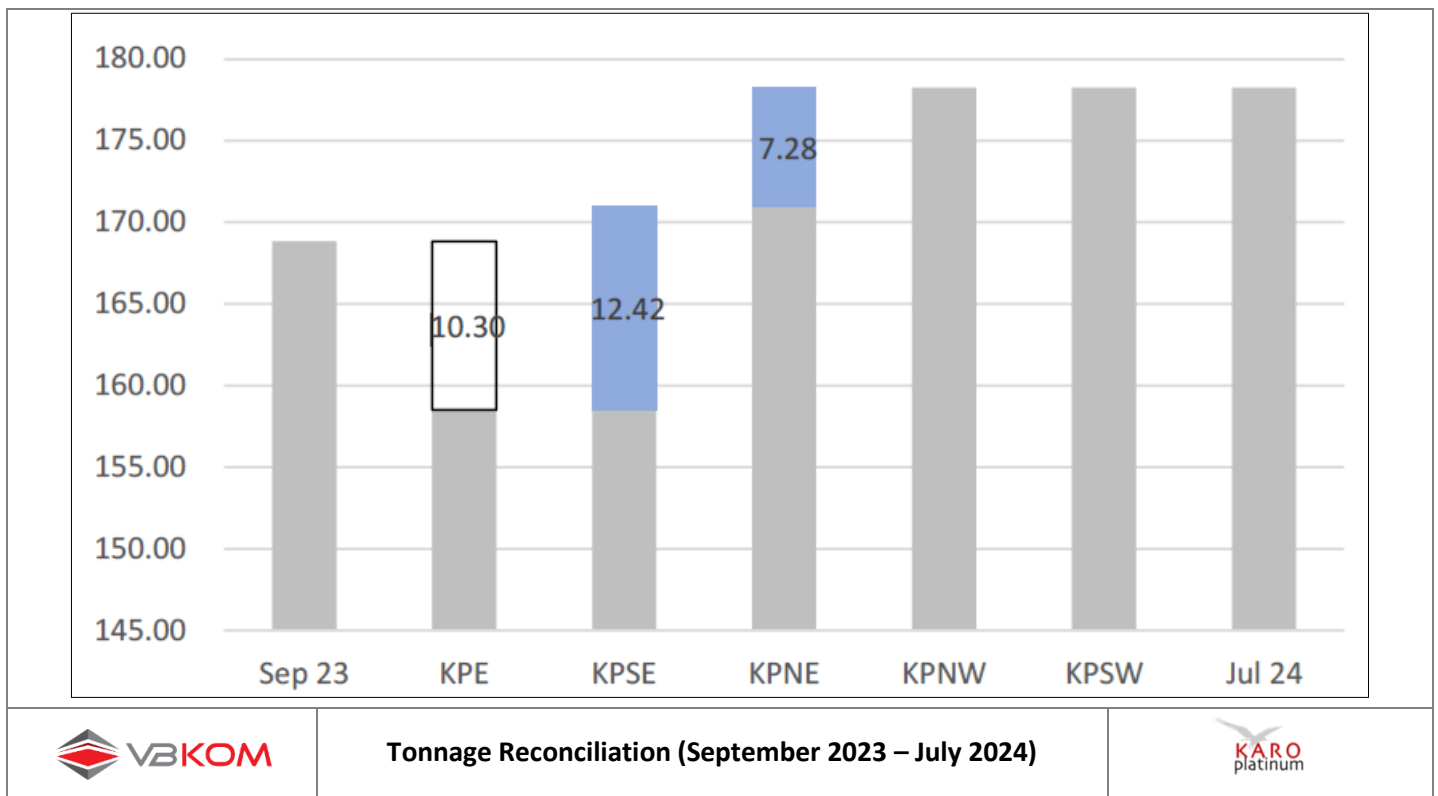


Figure 7-29: Tonnage reconciliation (September 2023 – July 2024).

## 7.20 CP Opinion on Mineral Resource Risk

### S4.3(viii)

The risk analysis presented in this report is not a formal risk assessment. The approach by the Mineral Resource CP is to highlight areas of risk and the potential impacts of that risk that would normally be expected in similar operations. The focus is on highlighting areas of risk that are of relevance to project financiers or to potential project purchasers or investors and future work programmes.

In this Report the risk analysis determines the level of risk, which is classified from minor to major, as indicated in Table 7-16.

Table 7-16: Definitions of the levels of risk relating to the Mineral Resources.

Level of Risk	Explanation
Major Risk	The factor poses an immediate danger of a failure, which if uncorrected, will have a material effect (>15% to 20%) on the project cash flow and performance and could potentially lead to project failure.
Moderate Risk	The factor, if uncorrected, could have a significant effect (10% to 15% or 20%) on the project cash flow and performance unless mitigated by some corrective action.
Minor Risk	The factor, if uncorrected, will have little or no effect (<10%) on project cash flow and performance.

The likelihood of a risk must also be considered in this analysis and is defined as the likelihood that within a seven-year period an event may occur and is classified as 'Likely' (will probably occur), 'Possible' (may occur) or 'Unlikely' (unlikely to occur).

The impact of a risk and its likelihood are combined into an overall risk assessment as presented in Table 7-17.

Table 7-17: Risk assessment matrix relating to the Mineral Resources.

Likelihood of Risk (within a 7-Year Period)	Level of Risk		
	Minor	Moderate	Major
Likely	Medium	High	High
Possible	Low	Medium	High
Unlikely	Low	Low	Medium

Based on the parameters described above, a summary of the perceived risks to the Karo Project are presented in Table 7-18.

Table 7-18: Risk assessment analysis relating to the Mineral Resources.

Hazard/Risk Issue	Likelihood	Consequence Rating	Overall Risk Assessment
Significant Variance in Resource Tonnage	Unlikely	Moderate	Low
Significant Resource Grade Variation	Unlikely	Moderate	Low
Significant Variance in Geological losses	Unlikely	Minor	Low
Misidentification of the MSZ	Likely	Moderate	Medium

Based on the above risk summary, the CP considers the estimation of the Mineral Resource for the Karo Project to have an overall Low to Medium Risk.

The level of technical risk is defined as the likelihood of variation of Mineral Resource tonnage and/or grade from the stated values.

The tonnage determination is largely a function of the selection of a practical mining cut that has economic potential and the determination of the bulk in-situ density. As these parameters are well constrained, the risk of a significant change in the tonnage is considered low.

The estimation of the grade is based on a limited number of intersection points. Although care has been taken to provide a robust estimate, the grade is expected to change on a local scale but is unlikely to vary significantly on a global scale.

The geological model developed presents a tabular deposit with some dykes and faults crossing the property. Smaller scale faulting (<10 m throw) may potentially be encountered on a local scale. The application of the geological loss is made based on knowledge of the Great Dyke and consideration of the nature of the various drill hole intersections and is intended to represent those areas where the MSZ is intersected by faults or dykes or disrupted by other geological features i.e., where the MSZ is absent or where mining is economically constrained.

The MSZ is difficult to identify. The estimation has relied on the geochemical signature which is the product of a long and expensive process. As the potential operation will not be able to wait for such a process, there is risk that on occasion, the optimal mining cut of the MSZ will not be properly determined. Hence this is the most important risk to the Mineral Resource estimate and to the operation of a mine.

## 8 TECHNICAL STUDIES

### T1.2, T1.10

#### 8.1 Study Level Assessment

##### S5.1(i)

The technical study work relates to the FS. Table 8-1 below qualifies the FS status per requirement as provided in Table 2 of the SAMREC Code.

Table 8-1: Qualification of study as FS relative to Table 2 of the SAMREC Code.

General	Feasibility Study
Mineral Resource categories	Measured and Indicated
Mineral Reserve categories	Proved and Probable
Mining method and geotechnical constraints	Detailed and optimised
Mine design	Detailed mine plan and schedule
Scheduling	Monthly for much of payback period / Quarterly to annual
Mineral processing	Detailed and optimised
Permitting (water, power, mining, prospecting & environmental)	Authorities engaged and applications submitted
Social licence to operate	Contracts/agreements in place with local communities and municipalities (local government)
Risk tolerance	Low
Capital Cost	Feasibility Study
Basis of estimate to include: Civil/structural, architectural, piping/HVAC, electrical, instrumentation, construction labour, construction labour productivity, material volumes/amounts, material/equipment, pricing, infrastructure	Detailed from engineering at 20% to 50% complete, estimated material take-off quantities, and multiple vendor quotations
Contractors	Written quotes from contractor and subcontractors
Engineering, procurement, and construction management (EPCM)	-10% to +15% Design studies completed by Karo Platinum
Pricing	Free on Board mine site, including taxes and duties
Owner's costs	-10% to +15% Estimate from Karo Platinum
Environmental compliance / Closure Cost	Estimate prepared from benchmarked real costs relative to specific permit and project requirements
Escalation	Based on cost area with risk
Accuracy Range (Order of magnitude)	-10% to +15%
Contingency Range (Allowance for items not specified in scope that will be needed)	0.1% of CAPEX

Operating Cost	Feasibility Study
Basis	Detailed estimates
Operating quantities	Detailed estimates
Unit costs	Letter quotes from vendors; minimal factoring
Accuracy range	10% - 15%
Contingency Range (Allowance for items not specified in scope that will be needed)	+ 10% (actual to be determined based on risk analysis)

## 8.2 Geotechnical and Geohydrology

### S5.2(viii)

#### 8.2.1 Geotechnical

The geotechnical parameters utilised in the pit design are based on the geotechnical assessment reports completed by Middindi titled Slope Engineering Report – *Tharisa Karo Open Pit, Zimbabwe (2021)* and *Slope Engineering Report - Geotechnical Open Pit BFS Design for the KPNW and KPNE Pits at the Karo Platinum Project, Zimbabwe (2024)*. The geotechnical parameters allowed for a combination of free-diggable weathered material (no drilling and blasting required) and competent material that requires drilling and blasting activities. The following Mineral Resource models were employed for the different areas, as shown in Table 8-2.

Table 8-2: Mineral Resource models employed in the Study.

Area	Mineral Resource Model
KPE, KPSE	bm_stack_kpe_kpse.dm
KPNE	bm_kpne_stack_2024.dm
KPNW	bm_kpnw_stack_250.dm

Waste material definitions for Gabbronorite, Websterite, and Bronzite, as described in the geotechnical report (*Middindi Consulting, 2021 and Middindi Consulting, 2024*), were incorporated into mining models, and an overall slope angle representing the entire hard portion of the waste material was applied. The geotechnical input parameters used are shown in Table 8-3.

Table 8-3: Whittle geotechnical input parameters.

Input Parameter	Depth [m]	Overall Slope Angle [°]
Weathered free dig	8 m	36
Competent waste and ore	Bottom of open pit	56

Based on the geotechnical report, Bronzite could be designed at a stack angle of 50°. A stack angle for Websterite and Gabbronorite of 56° was incorporated and was the most abundant material type as confirmed by the specialists. The weathered soft material was estimated at 8 m deep at a stack angle of 36°. No drill and blast activities or costs were allocated to softs.

## 8.2.2 Geohydrology

Geohydrological assessments, in support of the open-pit mining project, were undertaken by SRK Consulting (SRK), Digby Wells Environmental (Digby Wells) and WSM Leshika Consulting (Pty) Ltd (WSM):

- July 2021: SRK phase 1 hydrogeological study
- November 2022: SRK phase 2 hydrogeological study
- June 2023: Digby Wells Hydrogeological Specialist Assessment
- November 2023: SRK updated Karo water balance
- December 2023: WSM groundwater resource assessment pumping tests (re-evaluated borehole tests as conducted by SRK)

In 2024, JMA Consulting (Pty) Ltd (JMA) was appointed to undertake a third-party review on these assessments with the intention to identify any gaps, limitations and possible fatal flaws in the assessments that could give rise to inaccurate and invalid water management information. The scope included providing Karo Platinum with a proposed way forward to address and quantify identified shortcomings.

### 8.2.2.1 Groundwater Resource and Aquifer Characteristics

As assessed by SRK and Digby Wells, the groundwater elevation across the area is recorded at 1,240–1,253 mamsl. Regional groundwater flow is controlled by regional drainage features. Groundwater flows in a predominantly north-westerly direction in the south of the ML41, and northwards in the central area, mimicking the north-south orientation of Great Dyke lithological contact zones which host contrasting hydraulic conditions. The baseline groundwater is considered to be of good quality, with a neutral to slightly alkaline pH, low electrical conductivity levels, and low background sulphate concentration (<20 mg/L).

The area is underlain mainly by mafic units of the Great Dyke and is expected to be underlain by intergranular (weathered) and fractured aquifers. While the intergranular and weathered zone is not expected to extend beyond 30 m depth, the fractured zone could be up to 60 m deep. When water levels are drawn down below the highly weathered zone, which occurs at 11–25 m depth, drawdown in boreholes becomes exponential as storage in this zone is much greater than in the fractured zone. Water levels should therefore not be drawn down below this level i.e. the critical water level (WSM, 2023).

The evaluation of the recharge and storage by WSM (2023) showed that the catchment area around the recommended production boreholes could yield up to 800,000 m<sup>3</sup>/a at a 98% assurance level i.e. only failing 2 of 100 years. This considers existing use and growth to a maximum of about 180,000 m<sup>3</sup>/a, as well as only utilising the first 5 m of storage in the aquifer to limit the impact on other users.

### 8.2.2.2 Operational Impact

Local communities and landowners rely extensively on the groundwater resource for agriculture, domestic, irrigation and livestock watering purposes. All geohydrological assessments have concluded that the proposed production boreholes will result in excessive drawdown of the aquifer and will negatively impact other existing users. The Project thus does not rely on groundwater as a primary water source for the planned operation.

The JMA review noted discrepancies in the conceptual geohydrological models presented, which impacts directly on the integrity and accuracy of mine water balance data, notably as it pertains to potential groundwater influxes into

the open pits. JMA noted that the SRK and Digby Wells water influx rates differ, and that the impact prediction results of Digby Wells generated for the open pit groundwater influxes are fatally flawed, while SRK documents a zero groundwater influx into the open pit in the water balance.

Based on JMA recommendations, the conceptual geohydrological model is being updated Artesium and is due in March 2025. This updated model will form the basis updated for numerical groundwater flow, mass transport, water supply/water demand management (pit dewatering) for the proposed operations, and ultimately mine water balances. Karo Platinum has indicated that the current water balance philosophies are based on previous open pit operations on the Great Dyke and that revisions are not deemed a significant risk for operations.

### 8.3 Modifying Factors used to Convert Mineral Resources to Mineral Reserves

#### S5.2(ii)(viii)

The mining-related modifying factors applied included geological losses, mining losses, and mining dilution to an appropriate level of accuracy to estimate Mineral Reserves. These are summarised in Table 8-4. No environmental, social or processing modifying factors have been identified.

Table 8-4: Summary of the modifying factors.

Modifying Factor	Value
Measured geological loss	5%
Indicated geological loss	10%
Inferred geological loss	15%
Mining losses	2%
Mining dilution	The geological losses cater for the minor faulting and expected internal dilution. 200 mm of footwall and hanging wall dilution included.

#### 8.3.1 Mining Loss

The estimation of mining loss requires an understanding of the Mineral Resource estimation, mine geology, blasting, and mining equipment. The dip, strike, width, and length of the zones within the deposit are the most significant considerations for mining loss and mining dilution. Further to these physical attributes, the variability in ore body geometry will have a significant impact on the efficiency of ore mining.

Ore and waste are blasted separately due to selective blasting and loading. The selected loading equipment capabilities must match the blasted rockpile profile and dig-ability. The equipment bucket size and direction of mining relative to deposit geometry and blast displacement impact the mining loss and dilution. Mining loss and dilution estimates affect revenue, costs, Mineral Reserves, and the project’s net present value (NPV).

The sources of mining losses for the open pit included mining activities close to geological features; a misaligned excavator bucket size, relative to the layer thickness; incorrect loading at the ore contacts; and losses due to blasting activities. A mining loss of 2% was applied to all the open pits in the scheduling software. This mining loss was benchmarked to similar operations as well as experience from the pilot pit reconciliation and, in this case, essentially allows for a material handling loss.

#### 8.3.2 Mining Dilution

The methodology applied to determine the dilution is as follows:

Dilution was incorporated within the creation of the 3D mining block model with block sizes of 100 m x 100 m x 0.2 m. The mining reef cut was determined by optimising the platinum peak within a block model column to 2.8 g/t 4E grade and a minimum reef cut thickness of 1.2 m. The optimum cut was determined in 0.2 m increments. The cut incorporated a minimum of three x 0.2 m blocks in the top reef contact to ensure the platinum peak is extracted and serves as dilution. The dilution is with content bearing rock, to maintain a feed grade of 2.8 g/t 4E. No external dilution was added.

### 8.3.3 Geological Loss

The geological loss is defined by the Mineral Resource geologist and is an indication of Mineral Resource estimation error, modelling inaccuracies or structural complexity of the deposit. The confidence level of the project study, the complexity of the deposit and the rigidity of the topography, normally influence assumptions pertaining to geological loss. The following geological loss was based on the Mineral Resource classification:

- Measured: 5%.
- Indicated: 10%.
- Inferred: 15%.

The geological losses cater for the minor faulting and expected internal dilution.

### 8.3.4 Mine Call Factor

Mine call factor (MCF) is defined as the ratio of total recovered mineral content called for during the sampling process, against the recovered mineral content achieved after processing. MCF is usually expressed as a percentage. Although the definition is not uniformly applied, benchmark operations target an MCF of typically between 95% and 100%, depending on the commodity, mining method, materials handling, and various other factors. The MCF for this study was set at 100% for the base case LOM schedules.

## 8.4 Mining Design

### S4.3(ii), 5.2(i)(iii)

The study utilised the Mineral Resources as described in Chapter 7 of this CPR and converted the block models to regularised mining models.

### 8.4.1 Mining Method

#### S4.3(ii), 5.2(ii)(v)(viii)

Due to the orebody's shallow nature, the mining method that will be employed at Karo will be a conventional open pit, truck and shovel operation, making use of suitably sized excavators, rigid dump trucks (RDTs) and articulated dump trucks (ADTs). The mining sequence will consist of the following actions in sequence:

- Bush clearing and topsoil stripping.
- Removal of the weathered softs by free digging truck and shovel.
- Drilling and blasting of the 10 m hard bulk waste benches.
- Load and haul the bulk waste to WRD or in-pit backfilling.
- GC drilling and analysis of the ore.

- Drill and blast the selective waste.
- Load selective waste to WRD.
- Confirm top of ore achieved.
- Drill and blast ore.
- Load ore to crushing plant/stockpiles.

The mining pits are remote and situated some distance from the closest formal settlements. The mining contractor will be required to institute an adequately sizeable staff in order to construct site offices, change houses, ablutions, and workshops. The contractor will be required to establish haul roads, designed at the side of the pit, to form access points for ore-carrying trucks to transport material to and from the mining pits. Haul roads will be designed around the mining pits on surface and will follow the closest practical route to dump locations.

Access to the ore horizon was designed based on highwall ramps and temporary in-pit ramps. The pits were designed to develop in sequential cuts, splitting the pits into smaller mining areas. Each cutback measured approximately 1.0–1.5 km on strike. The mining sequence of the cutbacks will balance the lower stripping ratio (S/R) low-wall cutback, with the higher S/R highwall cutback to complete the mining of the final highwall and allow backfilling to start.

Waste material will be moved from the pit via high-wall ramps to designated surface WRDs until adequate space becomes available in-pit for in-pit backfill placement of waste material within the depleted areas. Due to the delay in mining of the transitional ore to later in the project, backfill of waste material will only be up to a maximum of 30 m below surface, to allow access to the transitional ore without incurring any rehandle of dumped waste material.

Ore from the mining pits will be transported with large mining dump trucks to surface stockpiles at the ROM pad and ROM bin, as part of the concentrator plant front-end. Front-end-loaders with trucks will be used to re-handle approximately 50% of the ROM material from the blending stockpiles for a short haul to the ROM bin.

#### **8.4.1.1 Topsoil Removal**

Prior to mining topsoil, ‘cleaning and grubbing’ of vegetation will be done. This is the process of removing and disposing of trees, brush, weeds, and other organic materials.

The topsoil will be mined with a dedicated 95 t class excavator, Komatsu PC850 or equivalent hydraulic excavator (HEX). The loader was paired with Bell B45E or equivalent 40 t payload capacity ADTs. The topsoil will be hauled and stockpiled in a windrow at the designated topsoil dump area on the outcrop side of the pit, where it will be shaped and preserved as per the environmental and geotechnical requirements and considerations.

#### **8.4.1.2 Soft-Weathered Overburden Removal**

Softs will be mined to the required batter angles and depth as per the geotechnical recommendations. The soft horizon varies from 1 m to 8 m over the project area. Waste will be hauled to dedicated dumps to be placed as per design along the highwall to ensure a practical shortest haul possible.

#### **8.4.1.3 Hard Competent Overburden Removal**

The hards benches were scheduled to the required batter angles and benches, as per the geotechnical recommendations. The overburden material will be mined with the 300 t shovel and a matching dump truck fleet. Blasted waste material will be hauled with trucks to the allocated waste dumps along the pit high-wall perimeter,

where it will be placed based on dump design parameters or available in-pit backfill areas or placed for infrastructure requirements.

The hard waste mining sequence and production capacity were scheduled to advance the waste floor deeper than the active ore mining bench to allow for access to the ore from the down-dip side. The main pit ramps will be established in the highwall of the interim cut and the final pit layout.

Sequencing will be such to maintain access between the highwall ramp and the ore mining elevation, even though the hard waste stripping is further advanced and active at a lower elevation.

Waste will be mined in 10 m benches advancing from the access ramp box cut towards the ore. The waste mining sequence and block geometry will be dictated by the dip of the ore when approaching the ore and when transitioning to selective waste and ore mining. The ore body dip ranges from 15° to 30°, with an average dip of approximately 20°, which determines that once a surface is loaded at the dip angle, drills cannot access the block to continue drilling activities. This implies that a layer of selective waste cannot be presented parallel to the ore to drill and load selectively. Both selective waste and ore will be mined selectively, as informed by the pilot pit project. All drilling will therefore be done from a horizontal bench surface.

Once the bulk waste reaches the selective waste (Base Metal Reef, BMR) and ore mining zone, the bench will be split into 3 m benches. All blasted material will be loaded, and benches cleaned, presenting triangles of BMR (selective waste) on top of the ore for selective loading. The drill designs in this transition zone will be strictly controlled by grade and elevation control procedures.

The mining operations will adhere to the Labour Act, the National Employment Code of Conduct (Labour), and the Collective Bargaining Agreement: Mining Industry to ensure the health and safety of the workforce.

#### **8.4.1.4 Grade Control**

Karo Platinum Mine has a set of open-pit face mapping and sampling standards of practice (SOP) in place to assist with its GC and it is the responsibility of the Geology Department, with teamwork between the full Mineral Resource Management (MRM) Department and Mining team, to ensure its successful execution. This SOP is intended to establish the interaction of geological structures such as joints and faults with each other and to understand their influence on blasting or ore quality. More importantly, the geological mapping is intended to predict the position of the MSZ via isopach data from the base of the visible gabbro-norite hanging wall before exposing the MSZ while the sampling (direct and indirect) is intended to confirm the position and elevation of the MSZ predicted from the mapping. Timely predictive geological mapping will assist the short-term planning team to either change the access method or timing of access to a reef block or bench in order to create flexibility and to mitigate fluctuations in grade and reef production and will also assist in reducing potential ore dilution. The SOP also ensures safe geological sampling and mapping in the pit and that all geological, survey, and structural definition are collected as required and captured to standard. Planned task observations and safety assessments are conducted to ensure standards and safety requirements are maintained.

Mapping of the pit sidewalls and benches is conducted by the Geologist or Geological Technician who marks and records the faults and alteration/shear zones with red paint. Dips and strikes of all structures are measured. In addition, mapping of the gabbro-norite is recorded and marked with paint. All mapping should be picked up by the survey department to ensure accurate 3D placement and projections to locate the MSZ in the footwall before exposure.

All collected data (drilling mapping and sampling) will be incorporated into an isopach model which will give accurate input to the depth from the gabbronorite contact down to the BMSZ. This integral part of the GC process is currently being reviewed by the VBKOM's Chantelle Obermeyer and Mr Edgar Chiteka of Karo Platinum.

#### 8.4.1.5 Labour

Mining operations will be carried out by mining contractors, Karo will appoint key personnel to management positions to oversee and closely monitor the mining activities.

### 8.4.2 Mining Equipment

#### S5.2(viii)

The mining will be split into a bulk waste fleet for the softs and the hards waste and a smaller fleet for topsoil stripping, selective waste, and ore loading.

The topsoil material, which will be stockpiled separately from the other waste material. The same fleet size is planned to be deployed for all ore mining. The other waste material (hards overburden and softs overburden) is planned to be mined with a larger mining fleet, as briefly referred to in the haul road design section. Below (Table 8-5) is a description of the planned primary equipment for the different material types at Karo.

Table 8-5: Planned primary equipment at Karo.

Primary Loading Unit	Excavator	Bucket Capacity (m <sup>3</sup> )	Truck Type	Payload (t)	Estimated Production Rate (tph)
Topsoil	PC850	4.5	CAT 745 (Or Similar)	40	239
Softs Overburden	PC3000	15	CAT 777 (Or Similar)	90	1,788
Hards Overburden	PC3000	15	CAT 777 (Or Similar)	90	1,201
Base Metal Reef	PC850	4.5	CAT 745 (Or Similar)	40	279
Ore Material	PC850	4.5	CAT 745 (Or Similar)	40	279

#### 8.4.2.1 Bulk Waste Equipment

The bulk waste mining contractor will ramp up to deploy six 300 t hydraulic shovels (Komatsu PC3000 or equivalent) loading waste to a 90 t RDT (CAT777 or equivalent). The initial timing of the loading fleet was based on the expected plant start-up date and worked back to ensure adequate stockpile was available for the plant start date. Based on the mining schedule haulage simulations, practical experience on similar projects, and input from the mining contractor, an average rate of 560 bank cubic metres (BCM) per hour (hr) was allocated to the loaders.

#### 8.4.2.2 Secondary Excavator Fleet

This fleet will be responsible for topsoil removal, selective waste loading, and ore loading. Two 95 t HEXs (Komatsu PC850 or equivalent) were allowed for, paired with 40 t ADTs (CAT 745 or equivalent). The secondary fleet was scheduled with a loading rate of 169 BCM/hr on waste and 100 BCM/hr when loading ore. These loaders were scheduled to be deployed from month 8 onwards.

#### 8.4.2.3 Drilling Fleet

The bulk waste contractor will be responsible for the drilling and blasting operations.

Table 8-6 shows the drill parameters for bulk waste and selective/ore drilling. On bulk waste, 165 mm diameter production drill holes were allowed for at a burden and spacing that will deliver a 1.0 kg/BCM powder factor (PF) emulsion to waste ratio. On selective waste and ore, a 102 mm diameter hole will be drilled at an estimated 4.4 m<sup>2</sup> burden and spacing to deliver a PF of 1.2 kg/BCM.

The bulk waste total rate of penetration was scheduled at 20 m/hr and the selective waste and ore to 15 m/hr. All holes will be drilled vertically in bulk waste and at 90° to ore dip in reef.

Table 8-6. Drill parameters.

Material	Bench Unit	Hole Diameter [m]	Burden [m]	Spacing [m]	Bench Height [m]	Hole Angle [°]	Subdrill [m]	Stemming Height [m]
Bulk waste	10 m Bench	0.165	4.1	4.7	10	90	1.0	3.4
	5 m Bench	0.165	3.5	4.0	5	90	0.5	2.7
Selective/Ore	Selective	0.102	2.0	2.2	5	90	0.5	2.6

### 8.4.3 Pit Optimisation

#### S5.2(vi)(ix)

The pit optimisation and selection process for all the mining areas (KPSE, KPE, KPNE, and KPNW) was completed during this study, targeting a 2.8 g/t 3E+Au grade envelope.

Based on additional exploration activities and the material changes to the Mineral Resource after the 2023 technical study, the pit optimisation processes for all the mining areas were revisited. Pit shells were generated for these target areas using Deswik Pseudoflow. These shells were presented to the client and evaluated. Pits were selected mainly based on the targeted strip ratio and possible ROM tonnes, rather than the traditional optimal pit criteria and grade for the various areas.

The input parameters and assumptions used to generate the pits evaluated are discussed in this section.

#### 8.4.3.1 Pit Slope Angles

The geotechnical parameters allowed for a combination of free-diggable weathered material (no drilling and blasting required) and competent material that requires drilling and blasting activities. Waste material definitions for Gabbronorite, Websterite, and Bronzite, as described in the geotechnical report (Middindi Consulting, 2021 and Middindi Consulting, 2024), were incorporated into mining models, and an overall slope angle representing the entire hards portion of the waste material was applied. The geotechnical input parameters used are shown in Table 8-3.

Based on the geotechnical report, Bronzite could be designed at a stack angle of 50°. A stack angle for Websterite and Gabbronorite of 56° was supplied and was the most abundant material type as confirmed by the specialists. The weathered soft material was estimated at 8 m deep at a stack angle of 36°. No drill and blast activities or costs were allocated to softs.

#### 8.4.3.2 Relevant Cost and Economic Parameters

The cost estimate as basis for the pit optimisation process outlined in this section was updated in September 2024 from the 2024 optimisation process.

#### 8.4.3.2.1 Mining-Related Cost Parameters

The unit costs displayed in Table 8-7 represent a summary of the mining-related cost parameters used.

Table 8-7: Mining-related input parameters used for the Whittle model.

Mining Cost Parameter	Unit	Value
Drill and blast hard waste	USD/ [m <sup>3</sup> ]	2.00
Drill and blast selected waste and ore	USD/ [m <sup>3</sup> ]	5.18
Load and haul (L&H) topsoil	USD/ [m <sup>3</sup> ]	2.13
Mining cost – Hards load and haul	USD/ [m <sup>3</sup> ]	2.35
Mining cost – Softs load and haul	USD/ [m <sup>3</sup> ]	2.3
Mining cost – Selective waste load and haul	USD/ [m <sup>3</sup> ]	3.02
Mining cost – Ore load and haul (KPSE)	USD/ [m <sup>3</sup> ]	3.26
Mining cost – Ore load and haul (KPE)	USD/ [m <sup>3</sup> ]	3.26
Mining cost – Ore load and haul (KPNE)	USD/ [m <sup>3</sup> ]	4.72
Mining cost – Ore load and haul (KPNW)	USD/ [m <sup>3</sup> ]	4.83
Re-handle ROM to crusher	USD/ [m <sup>3</sup> ]	1.04
MRM (Central services)	USD/ [month]	464,251
Overheads (Employee cost, environmental Opex, SLP and SHEQ)	USD/ [month]	1,570,888
Contractor overheads	USD/ [month]	1,217,639

The softs and hards load and haul cost was adjusted by USD0.06 per 10 m increase in depth to allow for the incremental effort and hauling cost as the pit depth increases based on an industry benchmark. For the selective waste and ore, load and haul remain constant for the first 50 m from surface and was increased by USD0.06 for every 10 m increment in depth below the -50 m horizon.

The re-handle cost for ore to the crusher was based on a 100 m average one-way hauling distance.

Based on the verified client input, all rehabilitation and waste dump management costs were included as part of the mining cost. The MRM costs apply to all volumes moved, including waste and ore material, as they are time related. The time-related cost was based on the targeted production profile. A production ROM throughput target of 2.64 Mtpa was used.

#### 8.4.3.2.2 Processing-Related Parameters

The processing cost parameters and processing recovery assumptions were supplied by the client. A processing cost of USD17.13/t milled was supplied (tailings management costs included). The process recovery equation was derived from the metallurgical testwork data completed by the Client (Table 8-8).

Table 8-8: Overall recovery data points.

Parameter	Unit	Value
Average feed grade	(g/t)	2.8
Fresh ore PGEs process recovery equation	Eq	$y = 0.0653(\text{grade}) + 0.6345$
Fresh ore Cu recovery	(%)	78

Parameter	Unit	Value
Fresh ore Ni recovery	(%)	78
Eastern Transitional ore 15 m to 30 m below surface PGEs	(%)	65
Eastern Transitional ore 15 m to 30 m below surface Ni recovery	(%)	60
Eastern Transitional ore 15 m to 30 m below surface Cu recovery	(%)	60

The 2024 long-term commodity price forecast parameters used as the basis for the optimisation process are listed in Table 8-9. A payability factor of 85% was used for platinum and palladium, 60% was employed for ruthenium and iridium, 70% was used for nickel, and 73% was used for copper. Cobalt was not included in the Pit Optimisation.

Table 8-9: Long-term revenue parameters.

Revenue Parameter	Unit	Long-Term Forecast	Payability (%)
Platinum ("Pt")	USD/oz	1,225	85
Palladium ("Pd")	USD/oz	1,150	85
Gold ("Au")	USD/oz	1,875	84
Rhodium ("Rh")	USD/oz	5,000	83
Ruthenium ("Ru")	USD/oz	405	60
Iridium ("Ir")	USD/oz	4,484	60
Nickel ("Ni")	USD/t	17,654	70
Copper ("Cu")	USD/t	9,588	73

#### 8.4.3.2.3 Financial-Related Parameters

The selling and distribution-related parameters are displayed in Table 8-10.

Table 8-10: Financial parameters.

Cost Parameters – General	Unit	Value
Exchange rate	ZAR to USD	18.5
Discount rate	%	10.0
Grams per troy ounce	g/oz	31.10348
Selling and distribution	USD/oz sold	19.0
Royalty fee (Pt")	%	2
Royalty fee ("Pd")	%	2
Royalty fee ("Au")	%	5
Royalty fee ("Rh")	%	4
Royalty fee ("Ru")	%	4
Royalty fee ("Ir")	%	4
Royalty fee ("Ni")	%	2
Royalty fee ("Cu")	%	2

## 8.4.4 Mine Design and Schedule

### S5.2(vi)(viii)

#### 8.4.4.1 Pit Design

The selected pit shells were used as the basis for the practically mineable pit design and mining schedule process. This was done by viewing the selected shells in horizontal planes at increments common with the 10 m mining benches. Floor outlines were digitised at the lowest mining depth, at a minimum practical mining width. Benches were designed progressively from the top down, from crest to toe and bench to bench, using parameters specified by the geotechnical study and recommendations.

##### 8.4.4.1.1 Geotechnical Parameters

The geotechnical parameters utilised in the pit design are based on the geotechnical assessment reports carried out by Middindi titled *Slope Engineering Report – Tharisa Karo Open Pit, Zimbabwe* and *Geotechnical Open Pit BFS Design for the KPNW and KPNE Pits at the Karo Platinum Project, Zimbabwe*. KPNW and KPSW, which form part of the different areas shown in Figure 2-3, are excluded from the designs.

##### 8.4.4.1.1.1 KPE

The design sectors identified for the KPE pit are shown in Figure 8-1.

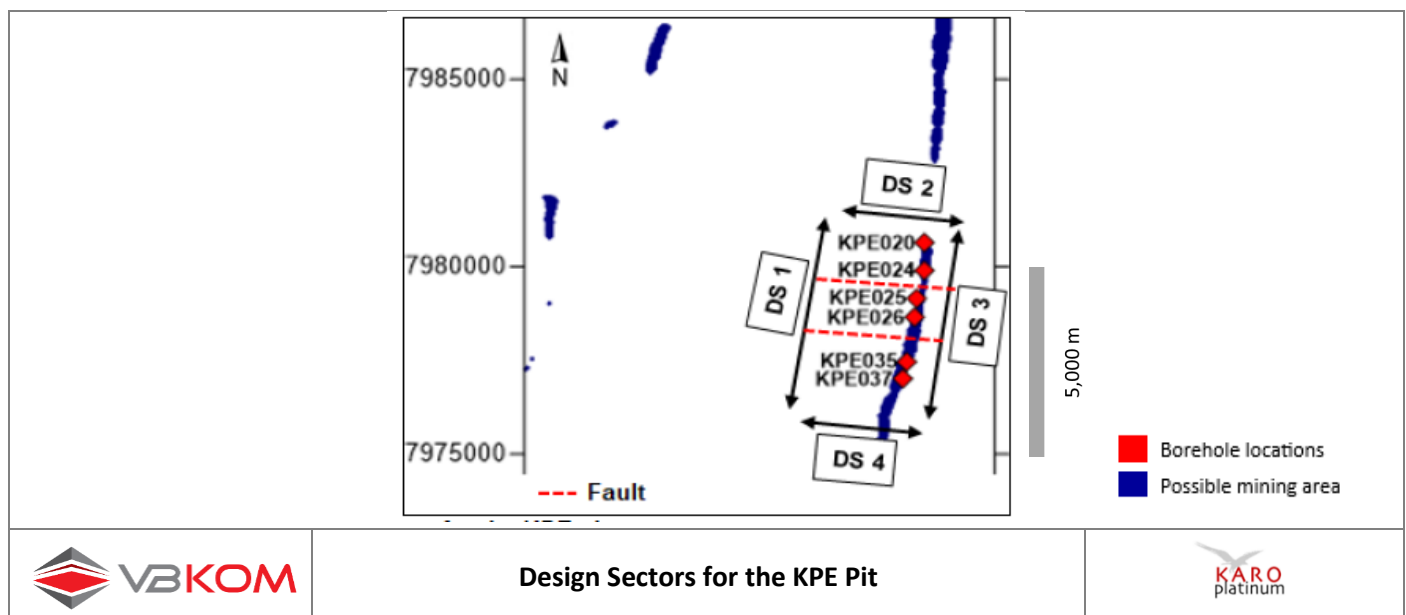


Figure 8-1: Design sectors for the KPE pit. (DS refers to design sectors.)

Table 8-11 to

Table 8-15 summarise the geotechnical design parameters for KPE's different design sectors. The topsoil and the softs are estimated to have a thickness of 1 m and 7 m, respectively. The parameters that were employed for the fresh material are the gabbronorite bench height of 10 m and the berm width of 5 m.

Table 8-11: Pit design parameters for design sector 1.

Design Sector Material	Bench Height (m)	Berm Width (m)	Geotechnical Berm Width (m)	Position of Berm (m)	Number of Benches	Bench Face Angle (°)	Stack Angle (°)	Overall Slope Angle (°)
Weathered	5.00	4.50	10.00	1,230	1.00	65	N/A	51
Gabbronorite	10.00	5.00	10.00	1,180	5.00	80	56	
Websterite	10.00	6.50	10.00	1,180	2.00	80	50	
Bronzitite	10.00	N/A	10.00	1,180	1.00	80	50	

Table 8-12: Pit design parameters for design sector 2.

Design Sector Material	Bench Height (m)	Berm Width (m)	Geotechnical Berm Width (m)	Position of Berm (m)	Number of Benches	Bench Face Angle (°)	Stack Angle (°)	Overall Slope Angle (°)
Weathered	4.00	4.50	10.00	1,226	1.00	65	36	49
Weathered	5.00	6.00	10.00	1,226	1.00	65	36	
Gabbronorite	10.00	5.00	10.00	1,176	5.00	80	56	
Websterite	10.00	6.50	10.00	1,176	1.00	80	50	
Bronzitite	10.00	N/A	10.00	1,176	1.00	80	50	

Table 8-13: Pit design parameters for design sector 3.

Design Sector Material	Bench Height (m)	Berm Width (m)	Geotechnical Berm Width (m)	Position of Berm (m)	Number of Benches	Bench Face Angle (°)	Stack Angle (°)	Overall Slope Angle (°)
Weathered	5.00	4.50	10.00	1,230	1.00	65	N/A	51
Gabbronorite	10.00	5.00	10.00	1,180	5.00	80	56	
Websterite	10.00	6.50	10.00	1,180	2.00	80	50	
Bronzitite	10.00	N/A	10.00	1,180	1.00	80	50	

Table 8-14: Pit design parameters for design sector 4.

Design Sector Material	Bench Height (m)	Berm Width (m)	Geotechnical Berm Width (m)	Position of Berm (m)	Number of Benches	Bench Face Angle (°)	Stack Angle (°)	Overall Slope Angle (°)
Weathered	4.00	4.50	10.00	1,226	1.00	65	36	48
Weathered	5.00	6.00	10.00	1,226	1.00	65	36	
Gabbronorite	10.00	5.00	10.00	1,176	1.00	80	52	
Websterite	10.00	6.50	10.00	1,176	2.00	80	52	
Bronzitite	10.00	N/A	10.00	1,176	1.00	80	52	

Table 8-15: Pit design parameters within the faulted zone for design sectors 1 and 3.

Design Sector Material	Bench Height (m)	Berm Width (m)	Geotechnical Berm Width (m)	Position of Berm (m)	Number of Benches	Bench Face Angle (°)	Stack Angle (°)	Overall Slope Angle (°)
Weathered	5.00	4.50	10.00	1,230	1.00	65	N/A	52
Dolerite	10.00	5.00	10.00	1,180	8.00	80	56	
Gabbronorite	10.00	5.00	10.00	1,130 and 1,080	7.00	80	56	
Websterite	10.00	6.50	10.00		1.00	80	50	
Bronzitite	10.00	N/A	10.00		1.00	80	50	

Figure 8-2 is a schematic that illustrates the slope design parameters for design sectors 1 and 3.

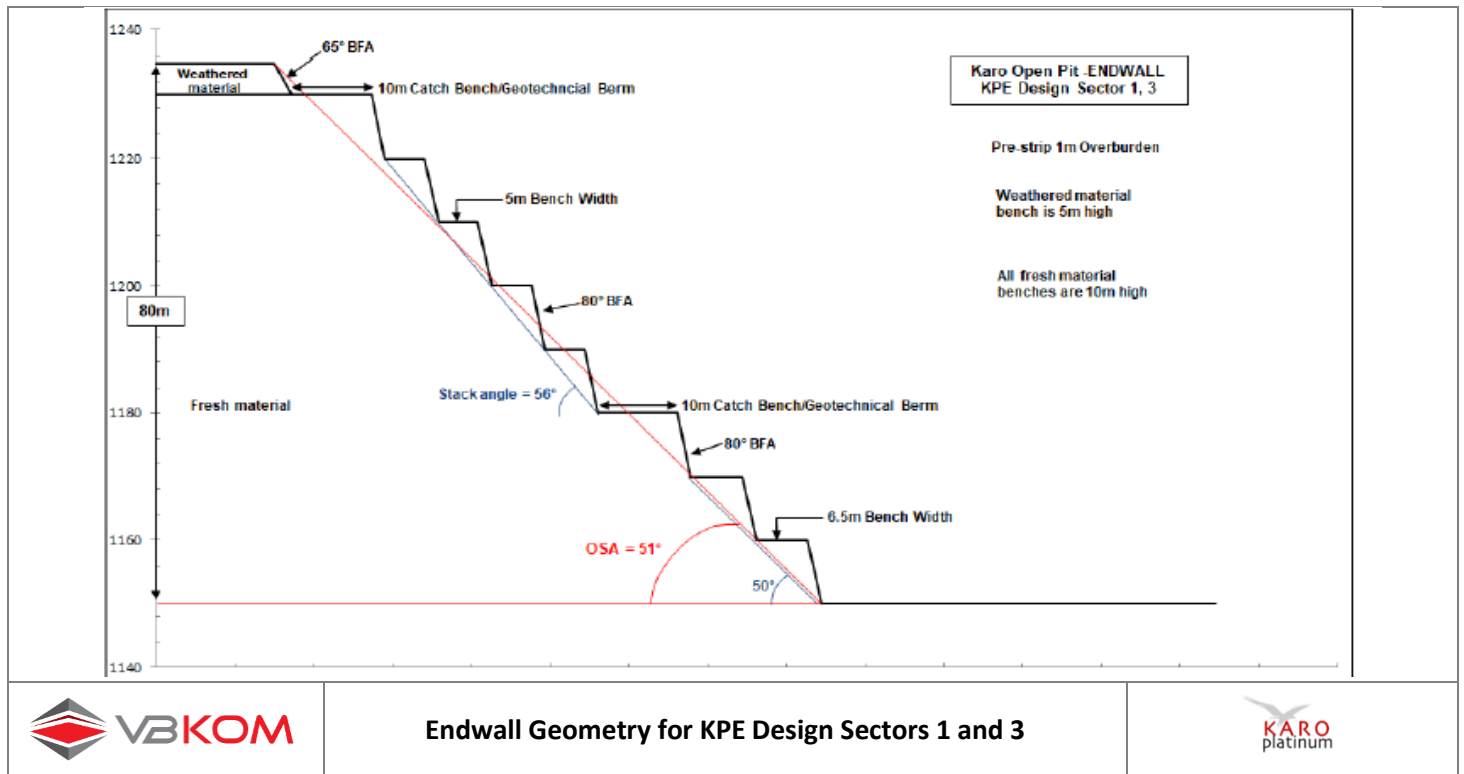


Figure 8-2: Endwall geometry for KPE design sectors 1 and 3.

Figure 8-3 shows the slope design parameters for design sector 2.

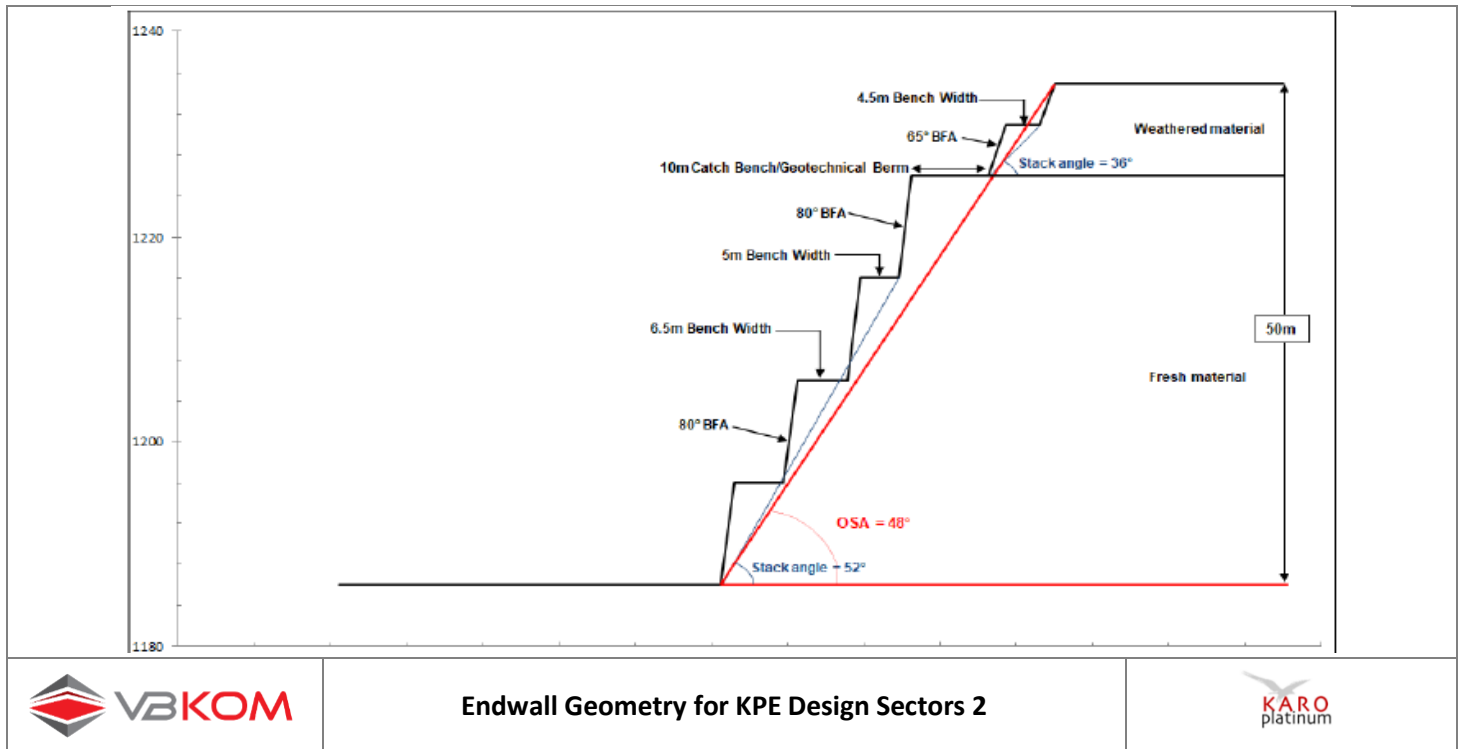


Figure 8-3: Endwall geometry for KPE design sector 2.

Figure 8-4 represents the slope design parameters for design sector 4.

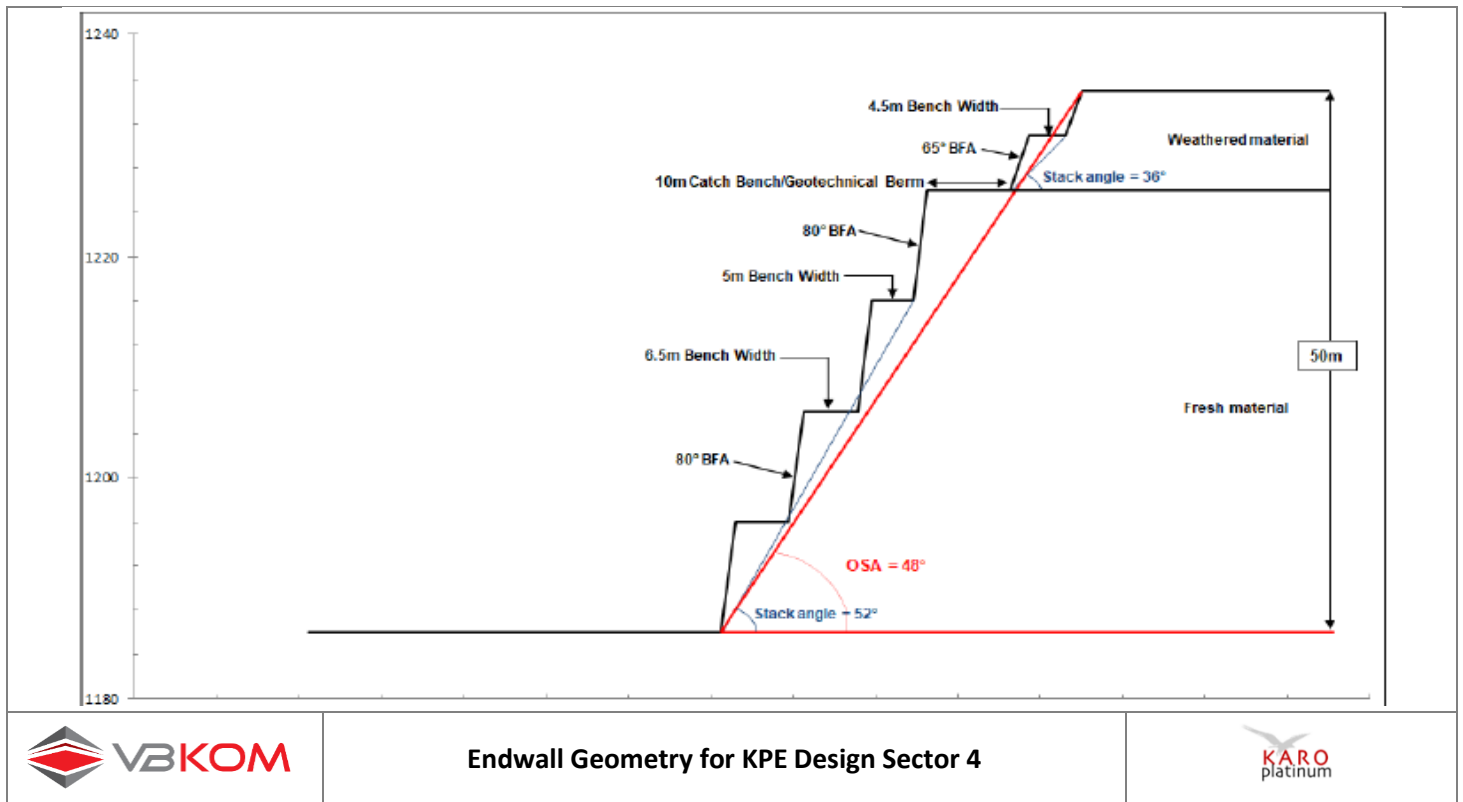
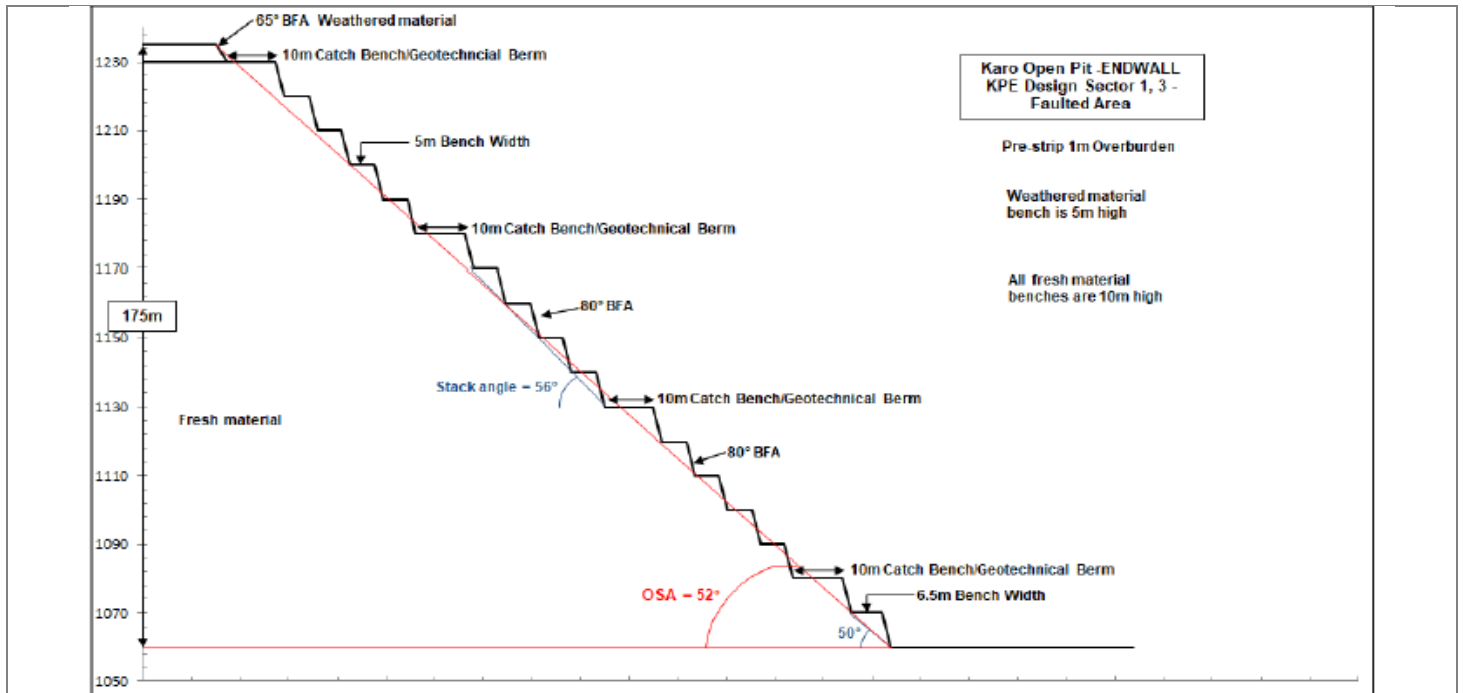


Figure 8-4: Endwall geometry for KPE design sector 4.

Figure 8-5 represents the slope design parameters for design sectors 1 and 3 within the faulted area.

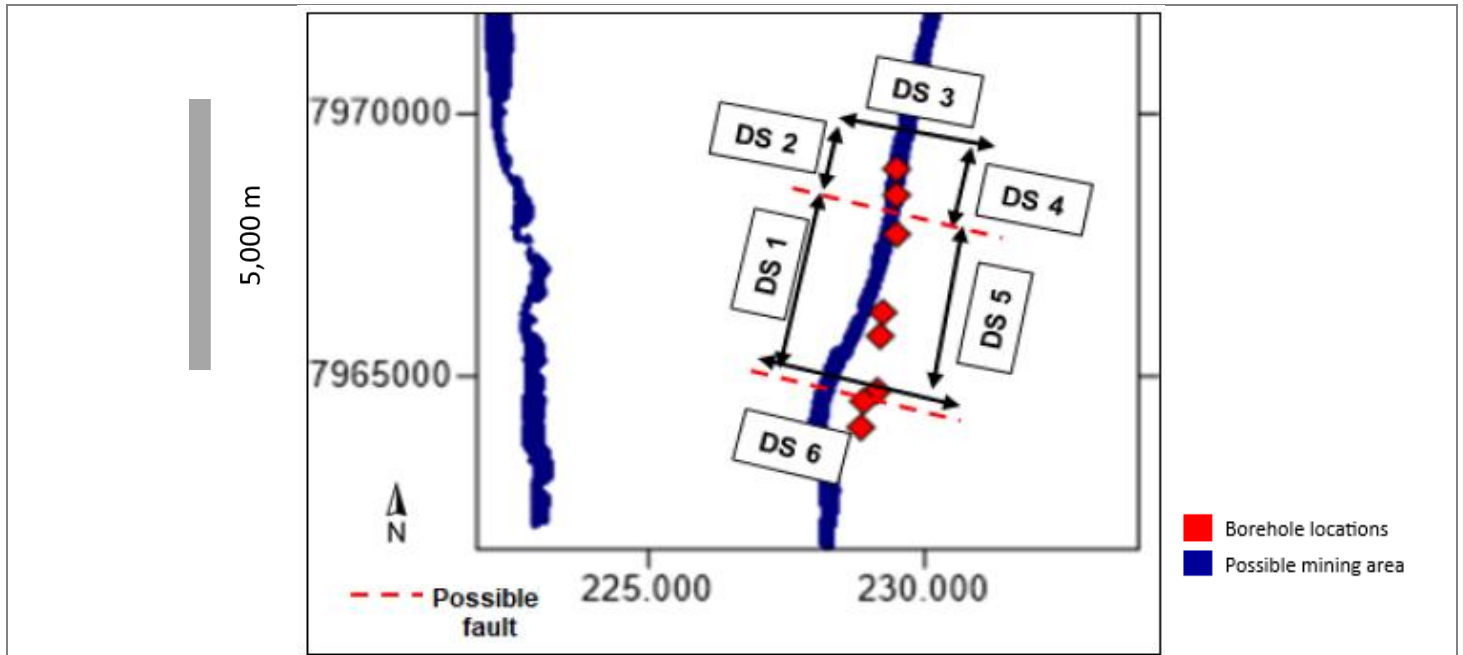


**Endwall Geometry for KPE Design Sectors 1 and 3 in the Faulted Area**

Figure 8-5: Endwall geometry for KPE design sectors 1 and 3 in the faulted area.

8.4.4.1.1.2 KPSE

The design sectors identified for the KPSE pit are shown in Figure 8-6. DS refers to design sectors, red squares show the drill hole locations and the blue is possible mining area.



**Design Sectors for the KPSE Pit**

Figure 8-6: Design sectors for the KPSE pit (DS refers to design sectors).

Table 8-16 and Table 8-17 contain the geotechnical design parameters for KPSE’s six design sectors.

Table 8-16: Pit design parameters for design sectors 1, 5, and 6.

Design Sector Material	Bench Height (m)	Berm Width (m)	Geotechnical Berm Width (m)	Position of Berm (m)	Number of Benches	Bench Face Angle (°)	Stack Angle (°)	Overall Slope Angle (°)
Weathered	4.00	4.50	10.00	1,226	1.00	65	36	47
Weathered	5.00	6.00	10.00	1,226	1.00	65	36	
Gabbronorite	10.00	5.00	10.00	1,186	4.00	80	56	
Websterite	10.00	6.50	10.00	1,186	1.00	80	38	
Bronzitite	6.00	N/A	10.00	1,186	1.00	80	38	

Table 8-17: Pit design parameters for design sectors 2, 3, and 4.

Design Sector Material	Bench Height (m)	Berm Width (m)	Geotechnical Berm Width (m)	Position of Berm (m)	Number of Benches	Bench Face Angle (°)	Stack Angle (°)	Overall Slope Angle (°)
Weathered	4.00	4.50	10.00	1,226	1.00	65	36	49
Weathered	5.00	6.50	10.00	1,226	1.00	65	36	
Gabbronorite	10.00	5.00	10.00	1,186	4.00	80	56	
Websterite	10.00	6.50	10.00	1,186	1.00	80	50	
Bronzitite	10.00	N/A	10.00	1,186	1.00	80	50	

The 2021 study recommended that fresh websterite would require a 6.5 m berm width throughout the KPE and KPSE open pits based on the results of a kinematic assessment that considered the jointing and shear bands. The kinematic assessment was performed for each design sector in the two areas, and the results of the assessment are contained in Appendix B. The design sectors of interest were DS1 for KPE and DS1 and DS2 for KPSE.

When interrogating the kinematic results, the 6.5 m berm width was derived based on the potential for wedge failure when joint set 3 (JS3) interacts with shear bands (SB1). The wedge analysis made use of a limiting factor of safety of 1.3. The tables in Appendix B indicate the following:

- When shear bands are present, the factor of safety is below 1.3 in DS2 in KPSE and DS6 in KPE.
- When no shear bands are present, either no wedges are formed, or the factor of safety is above 1.3.

The kinematic results for the websterite in the highwalls of KPE (DS1) and KPSE (DS1) indicate that either no wedges would form or that if wedges do form, they have a safety factor above 1.3. The pit walls that will be affected by unstable wedge formation are the low walls of DS2 in KPE and DS6 in KPSE. Furthermore, the increased potential for unstable wedge formation in the websterite is only seen in areas where shear bands are present. It would, therefore, seem conservative to apply a unanimous 6.5 m berm width through the KPE and KPSE open pits when they are only required in one design sector within each open pit.

Figure 8-7 is a schematic that shows the slope design parameters for design sectors 1, 5, and 6.

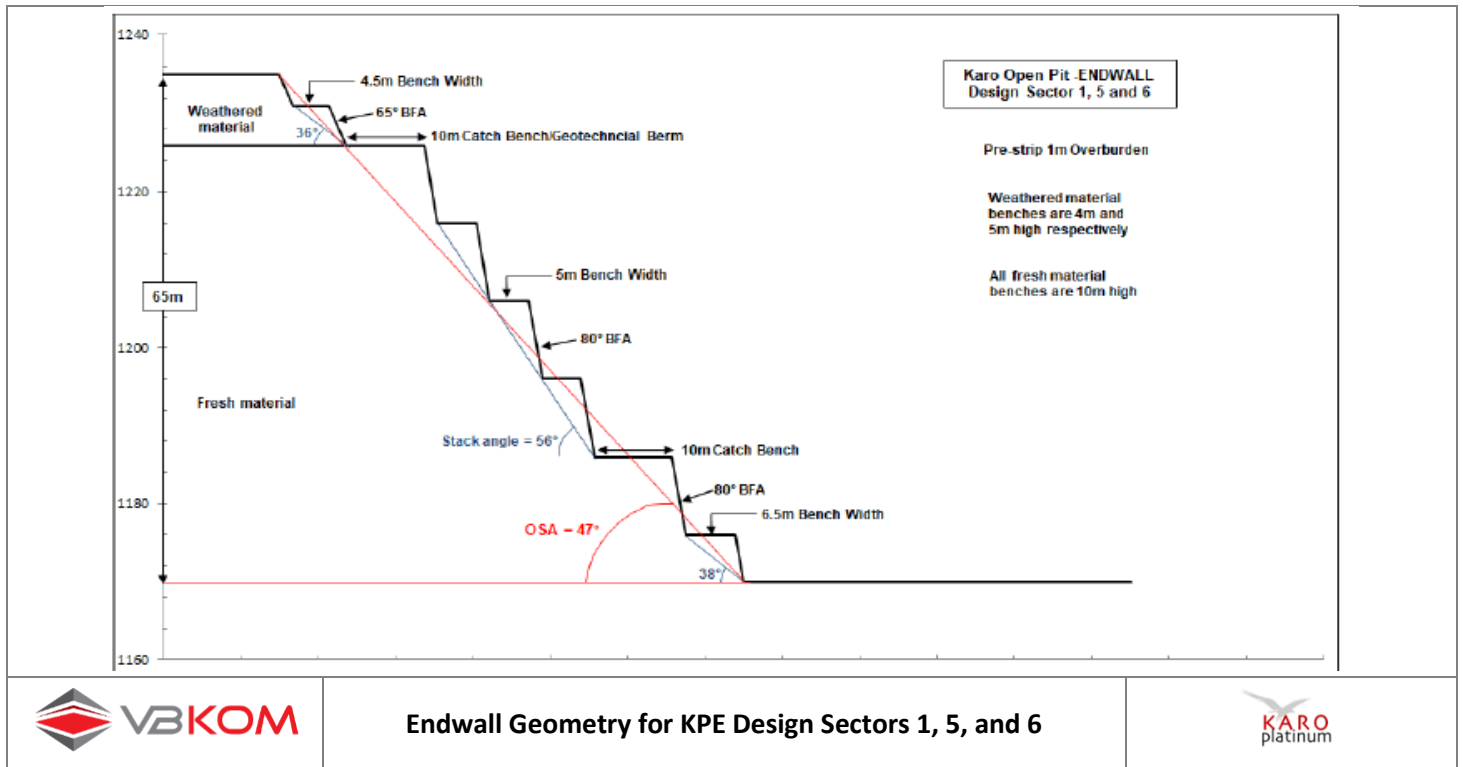


Figure 8-7: Endwall geometry for KPE design sectors 1, 5, and 6.

Figure 8-8 illustrates the slope design parameters for design sectors 2, 3, and 4.

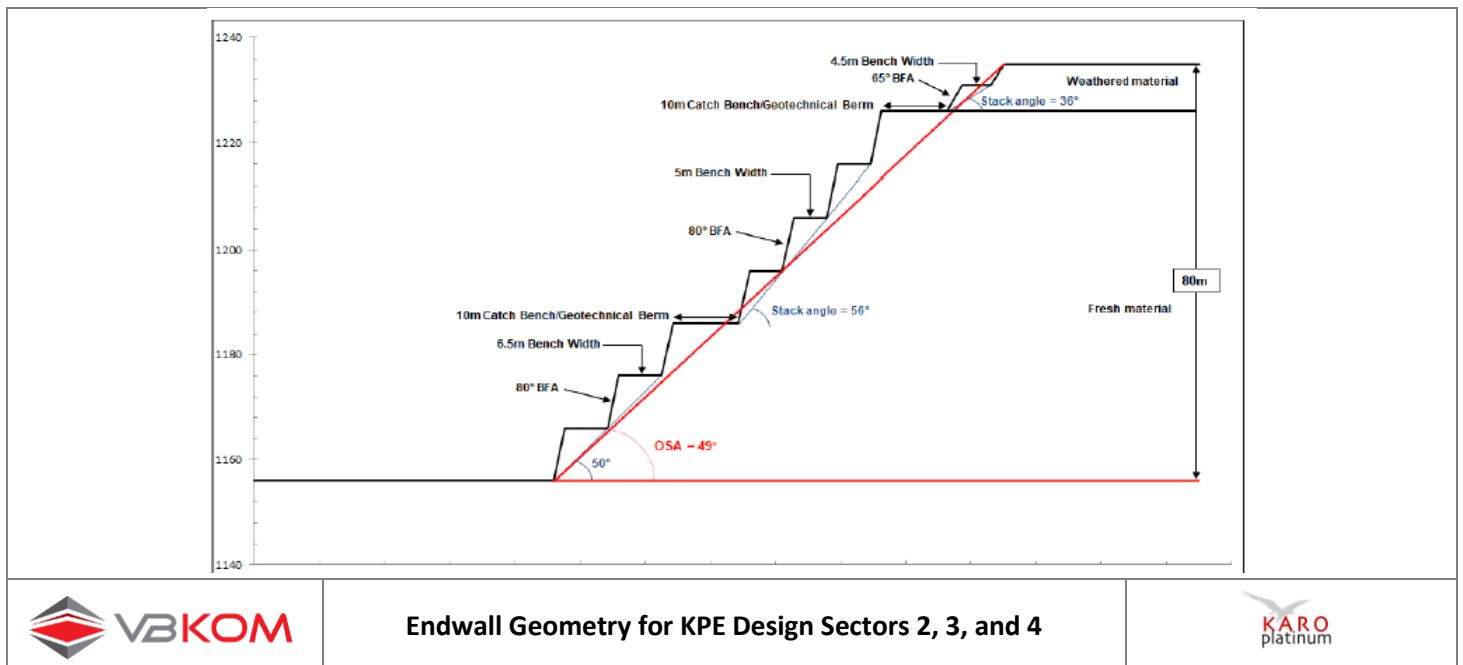


Figure 8-8: Endwall geometry for KPE design sectors 2, 3, and 4.

#### 8.4.4.1.1.3 KPNE

The design sectors identified for the KPNE pit are illustrated in Figure 8-9.

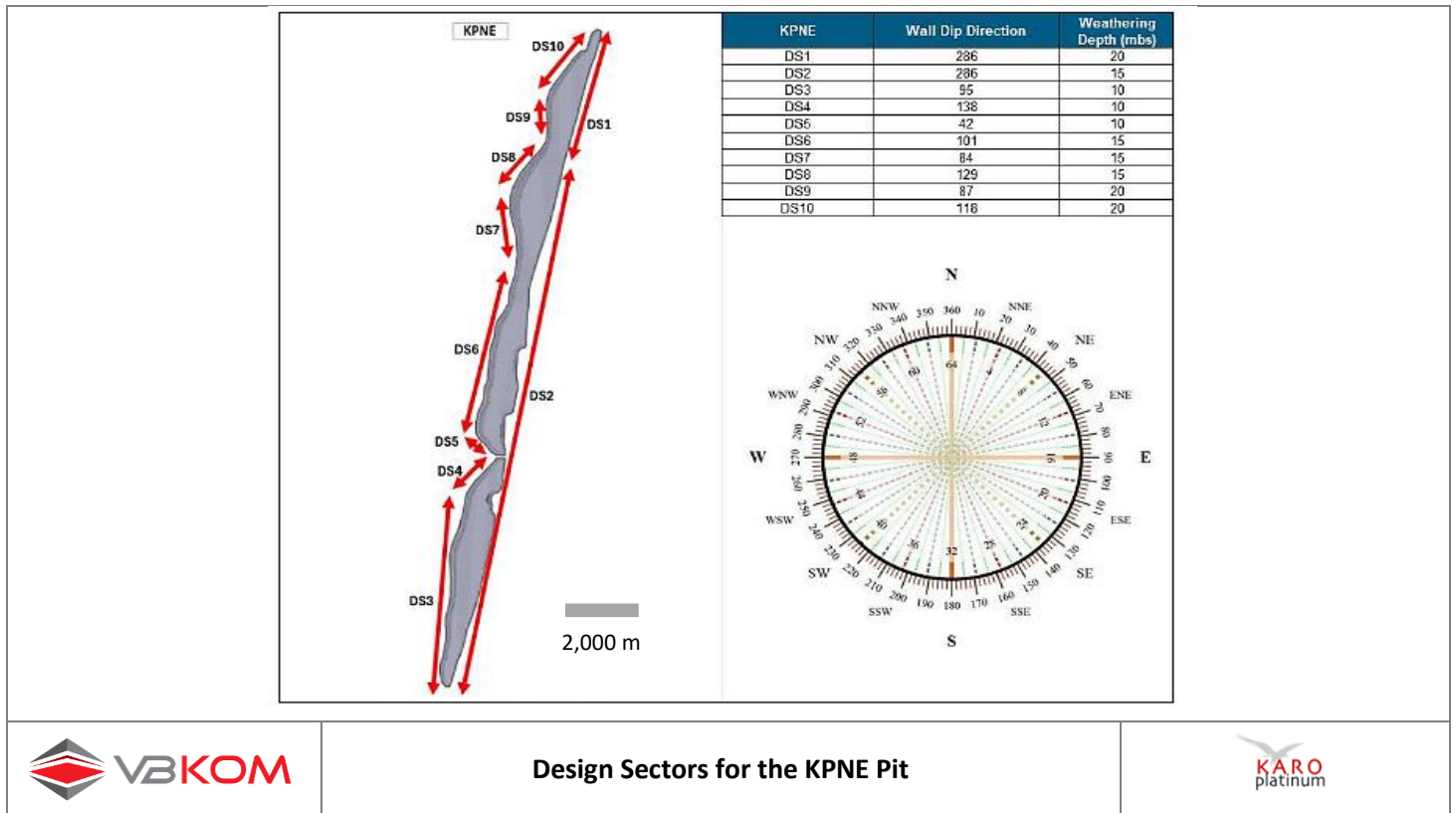


Figure 8-9: Design sectors for the KPNE pit. (DS refers to design sectors.)

The slope configurations for each sector are contained in Table 8-18.

Table 8-18: Pit slope configuration for KPNE's design sectors.

Slope Material	Number of Benches	Bench Height (m)	Berm Width (m)	Bench Face Angle (°)	Geotechnical Berm Width (m)	Stack Angle (°)	Overall Slope Angle (°)
<b>Design Sector 1</b>							
Weathered	-	-	-	-	-	-	20
Fresh	-	-	-	-	-	-	
<b>Design Sector 2</b>							
Weathered	-	-	-	-	-	-	26
Fresh	-	-	-	-	-	-	
<b>Design Sector 3</b>							
Weathered	2	5	5.5	65	10	33	51
Fresh	7	10	4.5	80	9	58	
<b>Design Sector 4</b>							
Weathered	2	5	5.5	65	10	33	52
Fresh	8	10	4.5	80	9	58	
<b>Design Sector 5</b>							
Weathered	2	5	5.5	65	10	33	51

Slope Material	Number of Benches	Bench Height (m)	Berm Width (m)	Bench Face Angle (°)	Geotechnical Berm Width (m)	Stack Angle (°)	Overall Slope Angle (°)
Fresh	7	10	4.5	80	9	58	
<b>Design Sector 6</b>							
Weathered	3	5	5.5	65	10	33	50
Fresh	7	10	4.5	80	9	58	
<b>Design Sector 7</b>							
Weathered	3	5	5.5	65	10	33	51
Fresh	12	10	4.5	80	9	58	
<b>Design Sector 8</b>							
Weathered	3	5	5.5	65	10	33	50
Fresh	10	10	4.5	80	9	58	
<b>Design Sector 9</b>							
Weathered	4	5	5.5	65	10	33	48
Fresh	7	10	4.5	80	9	58	
<b>Design Sector 10</b>							
Weathered	4	5	5.5	65	10	33	47
Fresh	4	10	4.5	80	9	58	

#### 8.4.4.1.1.4 KPNW

The design sectors identified for the KPNW pits are illustrated in Figure 8-10 and Figure 8-11.

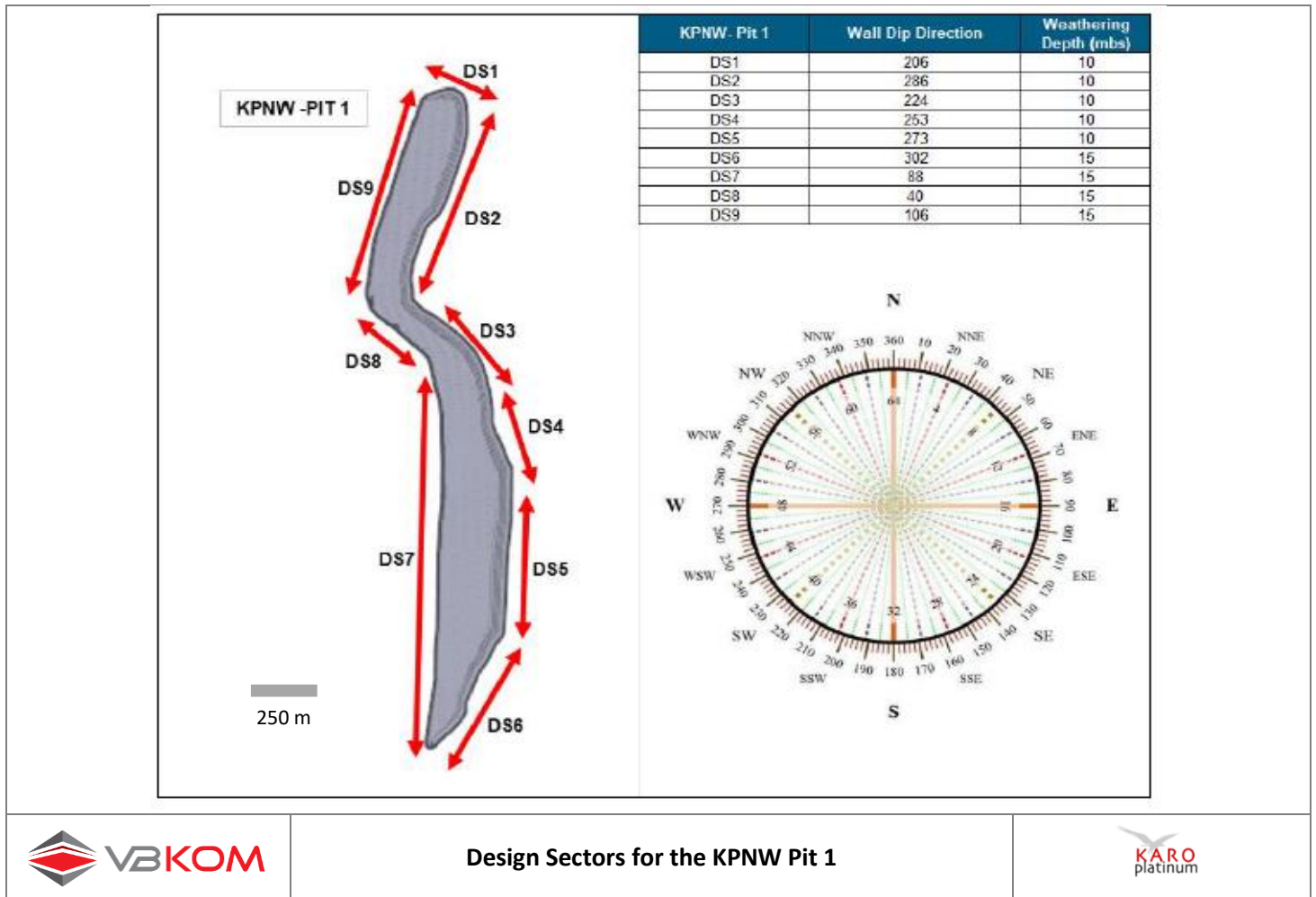


Figure 8-10: Design sectors for the KPNW pit 1. (DS refers to design sectors.)

The slope configurations for each sector are contained in Table 8-19 and Table 8-20.

Table 8-19: Slope configuration for KPNW pit 1's design sectors.

Slope Material	Number of Benches	Bench Height (m)	Berm Width (m)	Bench Face Angle (°)	Geotechnical Berm Width (m)	Stack Angle (°)	Overall Slope Angle (°)
<b>Design Sector 1</b>							
Weathered	2	5	5.5	65	10	33	52
Fresh	5	10	4.5	80	9	58	
<b>Design Sector 2</b>							
Weathered	2	5	5.5	65	10	33	51
Fresh	7	10	4.5	80	9	58	
<b>Design Sector 3</b>							
Weathered	2	5	5.5	65	10	33	50
Fresh	6	10	4.5	80	9	58	
<b>Design Sector 4</b>							

Slope Material	Number of Benches	Bench Height (m)	Berm Width (m)	Bench Face Angle (°)	Geotechnical Berm Width (m)	Stack Angle (°)	Overall Slope Angle (°)
Weathered	2	5	5.5	65	10	33	51
Fresh	7	10	4.5	80	9	58	
<b>Design Sector 5</b>							
Weathered	2	5	5.5	65	10	33	52
Fresh	8	10	4.5	80	9	58	
<b>Design Sector 6</b>							
Weathered	3	5	5.5	65	10	33	50
Fresh	5	10	4.5	80	9	58	
<b>Design Sector 7</b>							
Weathered	-	-	-	-	-	-	22
Fresh	-	-	-	-	-	-	
<b>Design Sector 8</b>							
Weathered	-	-	-	-	-	-	23
Fresh	-	-	-	-	-	-	
<b>Design Sector 9</b>							
Weathered	-	-	-	-	-	-	30
Fresh	-	-	-	-	-	-	

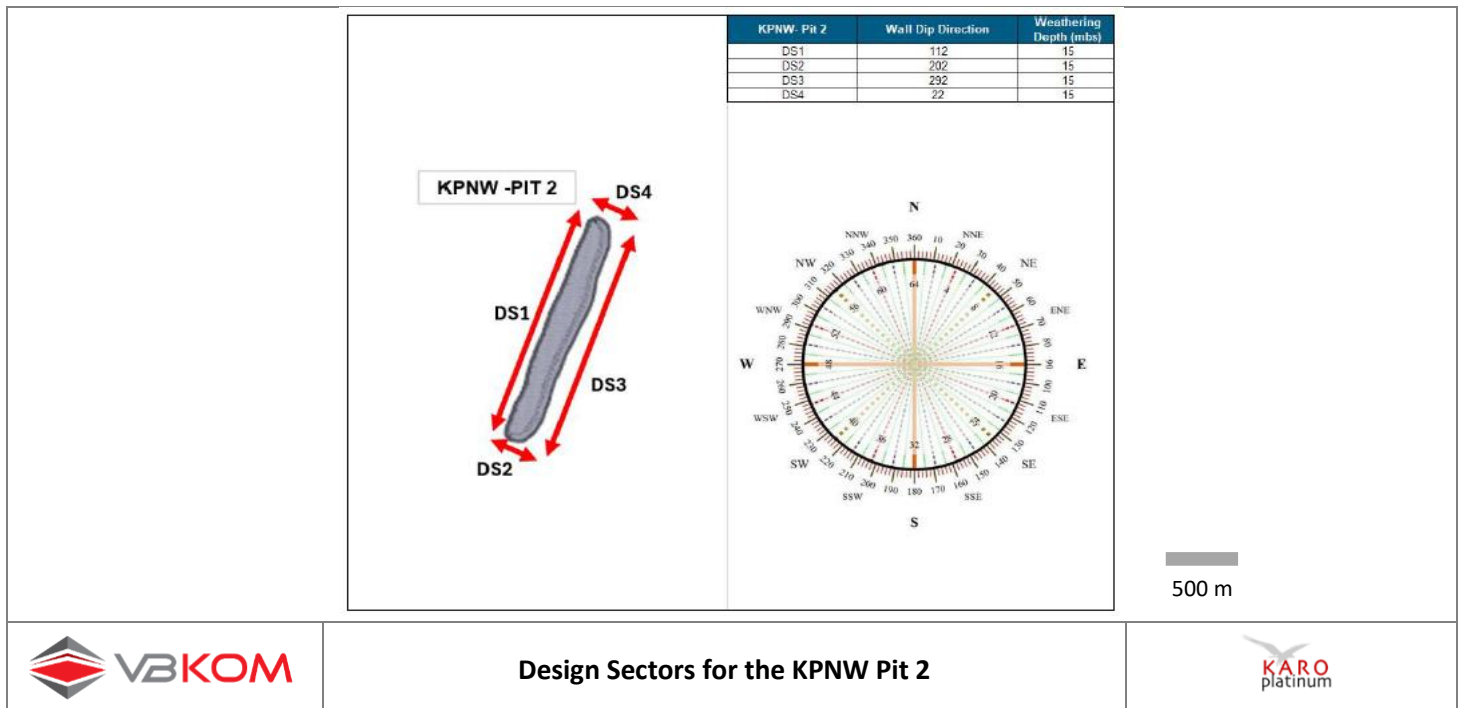


Figure 8-11: Design sectors for the KPNW pit 2. (DS refers to design sectors.)

Table 8-20: Slope configuration for KPNW pit 2's design sectors.

Slope Material	Number of Benches	Bench Height (m)	Berm Width (m)	Bench Face Angle (°)	Geotechnical Berm Width (m)	Stack Angle (°)	Overall Slope Angle (°)
<b>Design Sector 1</b>							
Weathered	-	-	-	-	-	-	32
Fresh	-	-	-	-	-	-	
<b>Design Sector 2</b>							
Weathered	3	5	5.5	65	10	33	47
Fresh	3	10	4.5	80	9	58	
<b>Design Sector 3</b>							
Weathered	3	5	5.5	65	10	33	49
Fresh	4	10	4.5	80	9	58	
<b>Design Sector 4</b>							
Weathered	3	5	5.5	65	10	33	47
Fresh	3	10	4.5	80	9	58	

#### 8.4.4.1.2 Practical Ramp Design Criterion

Sufficient room for manoeuvring must always be allowed for, to promote safety and maintain continuity in the haulage cycle. The width criterion for a haul segment is based on the widest vehicle in use.

#### 8.4.4.1.3 Haul Road and Ramp Design Parameters

To ensure safety and maintain continuity in the haulage cycle, the design must allow for vehicle manoeuvrability. The width criterion for a haul road segment is based on the widest vehicle used, which is the CAT777. Any smaller vehicle will, therefore, fit onto the ramps.

The guidelines for the determination of the total width required for a haul road specify that the vehicle width should be multiplied by a factor of 2.5 to 3 for a two-way traffic lane and a factor of 2.0 for a one-way traffic lane. This width is classified as the effective operating width and includes the road infrastructure such as the safety berm and drainage channel. Visual representation indicating the effective operating width for ADTs and CAT777-type trucks are depicted in Figure 8-12 and Figure 8-13.

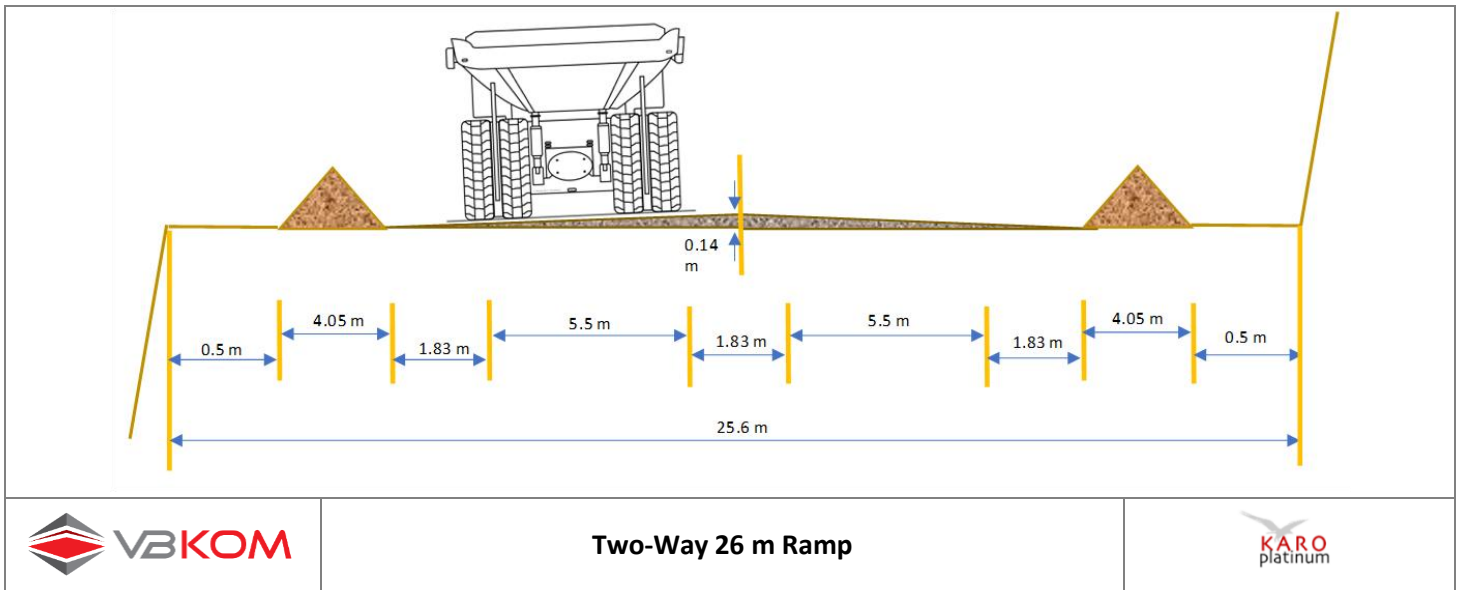


Figure 8-12: Two-way 26 m ramp (source: Haul Road Design\_Options.xlsx).

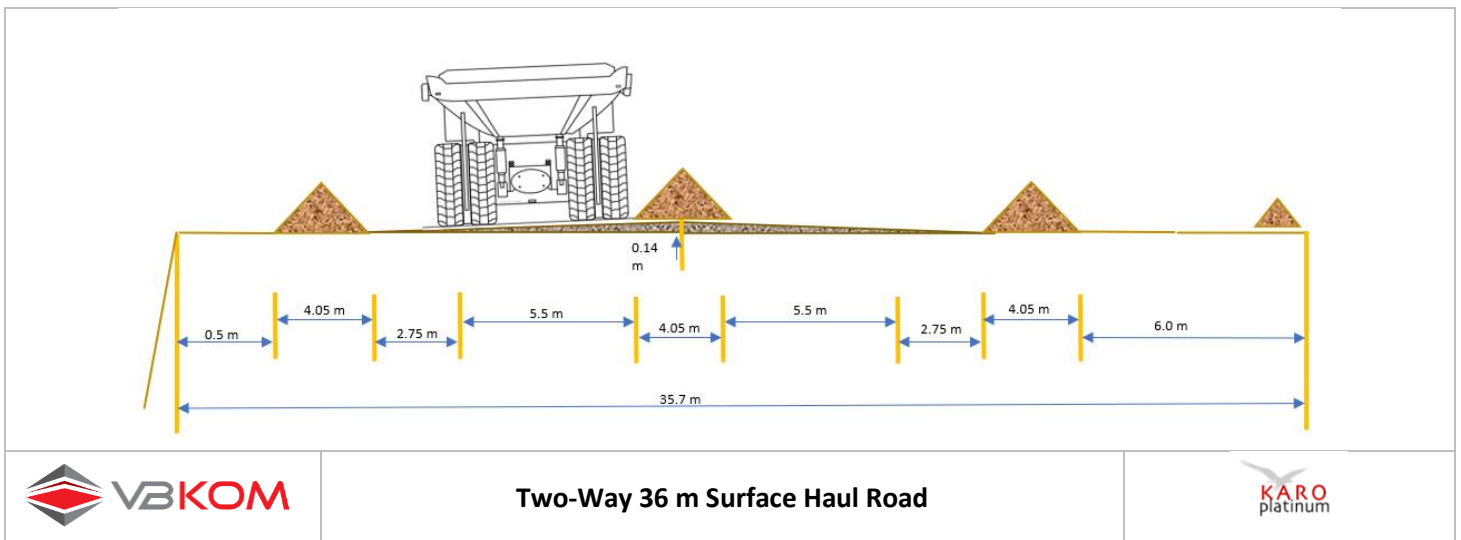


Figure 8-13: Two-way 36 m surface haul road (source: Haul Road Design\_Options.xlsx).

#### 8.4.4.1.4 Rock Dumps and Stockpile Design Parameters

The rock dumps and stockpiles are planned to be constructed on western side of the pit, apart from KPNW. The parameters to be incorporated into the design are detailed in Table 8-21.

Table 8-21: Rock dumps and stockpile design parameters.

Design Parameter	Unit	Value
Ramp Width (Waste Rock Dump)	m	26
Height of Topsoil Dump	m	5
Height of single WRD bench	m	20
Maximum height of WRDs	m	60
Berm width	m	15
Swell Factor	%	20

Design Parameter	Unit	Value
Overall Slope Angle	°	20
Bench Face Angle	°	35
Ramp Gradient	1:x	10

#### 8.4.4.1.5 Final Pit Designs

The designed pit shells, based on the selected optimised pits for KPSE, are shown in Figure 8-14. KPSE consists of a large central pit, 6.9 km in length, two smaller pits towards the south (Pit 1 and Pit 2), 1.3 km and 0.7 km in length, and two additional pits to the north (Pit 3 and Pit 4), and 100 m south of the Chirundazi River 100-year flood line. The KPSE pits span a total of 10 km from south to north. Waste rock dumps were designed along the western perimeter of the mining pits to reduce hauling distances for ex-pit waste from the associated pits. These dumps are used for surface placement of bulk waste up until such a time that the waste can be placed as backfill with the mining face progressing om south to north.

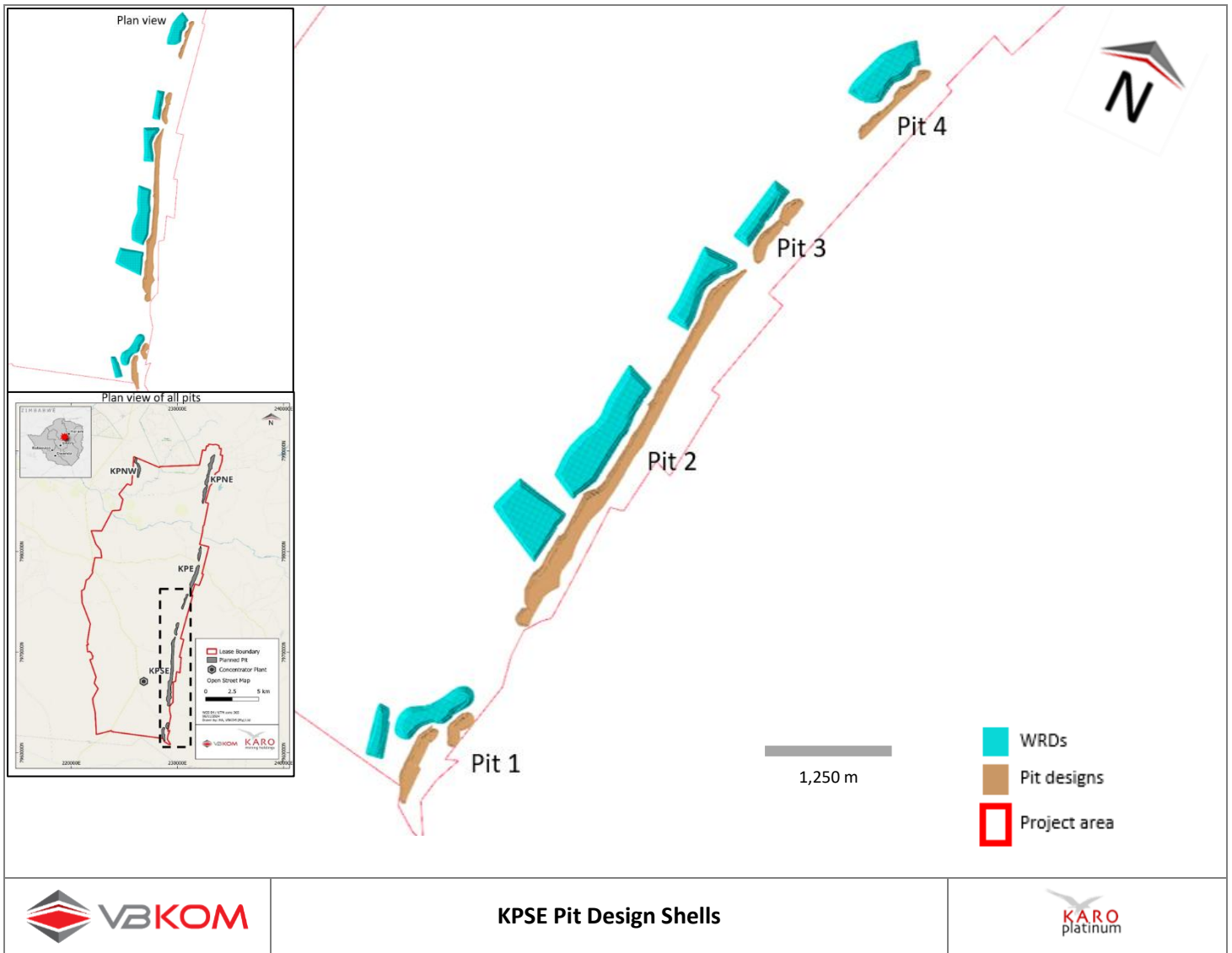
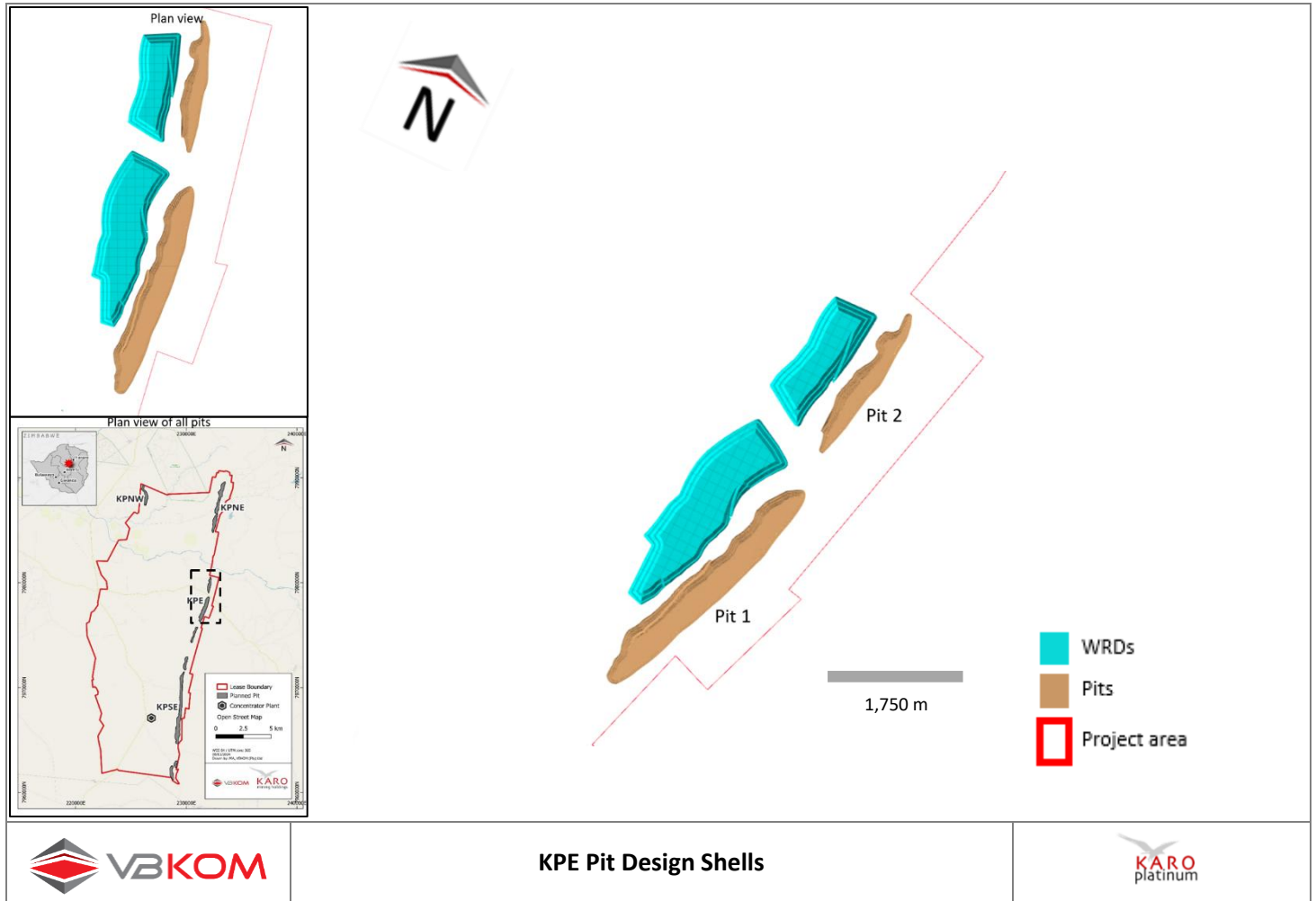


Figure 8-14: KPSE pit design shells.

The KPE pit design is shown in Figure 8-15. A single pit was designed to target the 4.4 km ore strike to the east of the project area and north of the Chirundazi River. The pit design was limited to 100 m from the 100-year flood line to the Chirundazi River. The WRD designs located next to the western perimeter of the pit were restricted on a similar basis and offset with 200 m on either side of the public road that passes through the KPE area.



The KPNE design was based on a pit at a strike length of 4.9 km, as displayed in Figure 8-16, with WRDs designed to the west of the pit to accommodate waste produced from this pit.

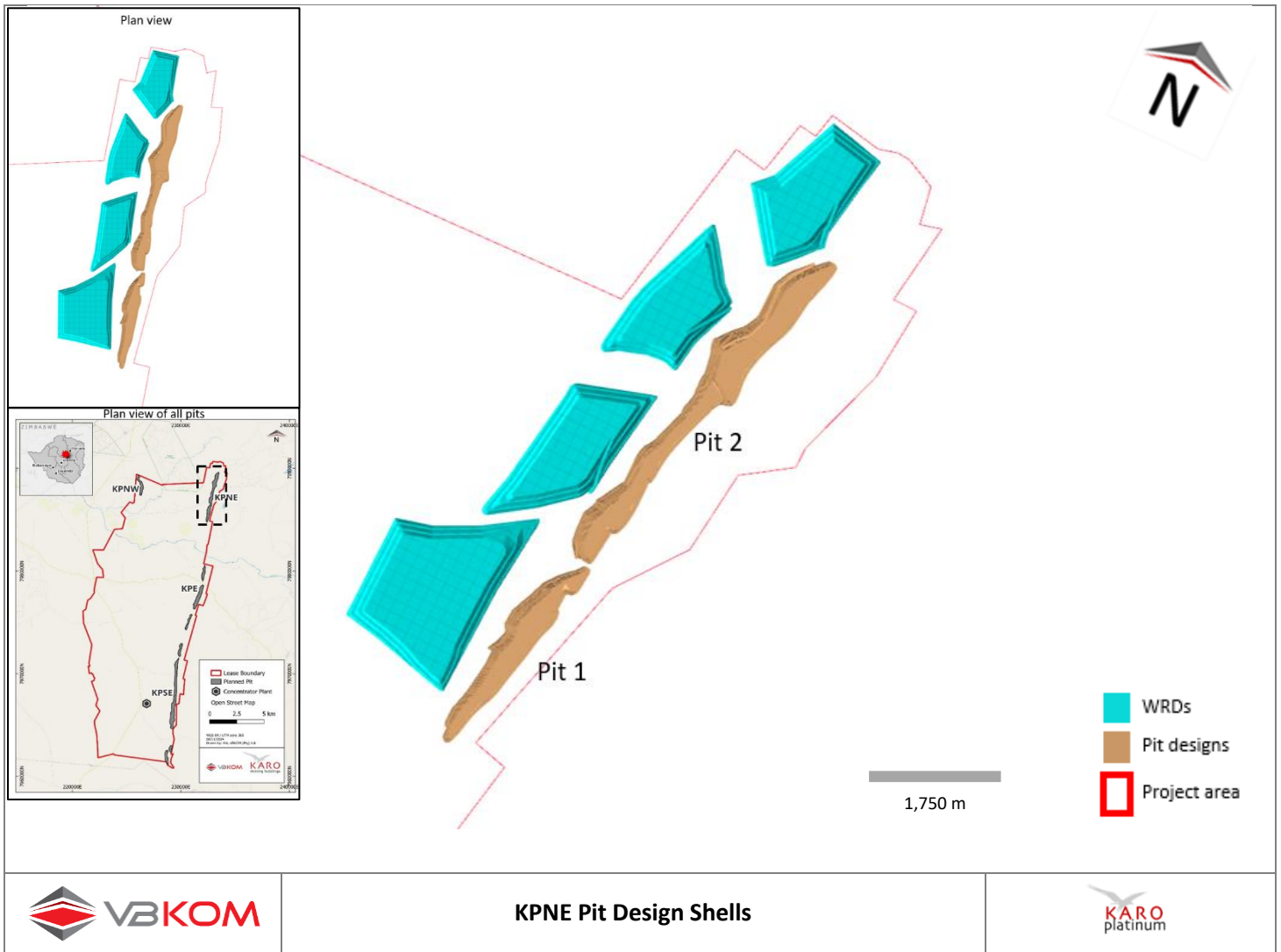


Figure 8-16: KPNE pit design shells.

The KPNW design shown in Figure 8-17 was based on a 2.3 km north pit. WRDs were designed on the eastern side of the pits to accommodate waste produced from the pits. The ore dips at an average of 19° from west to east.

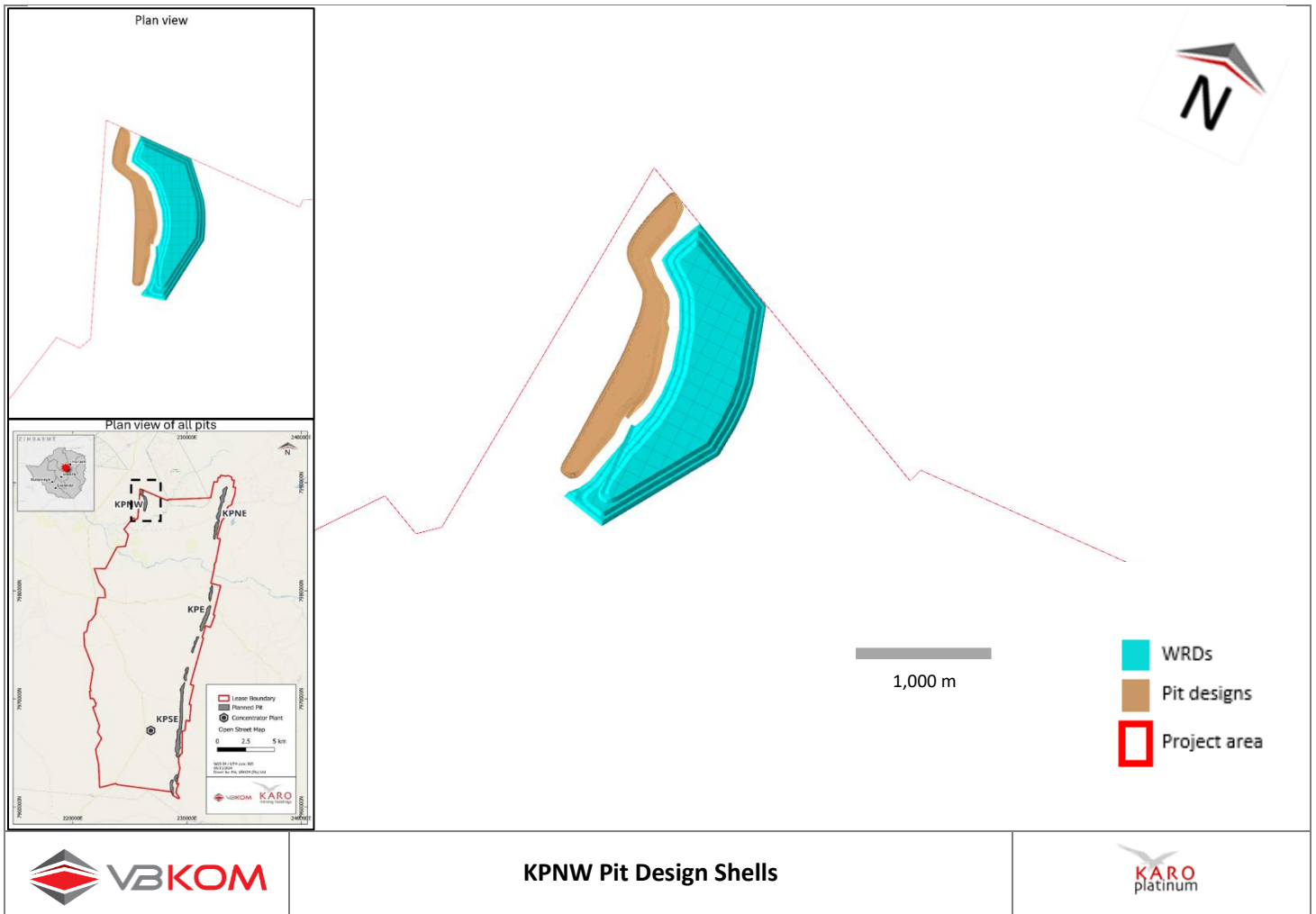


Figure 8-17: KPNW pit design shells.

#### 8.4.4.1.6 Pit Design Reconciliation to the Selected Optimised Pits

A reconciliation was done between the pit designs and the selected pit optimisation pit shells. The ore tonnes and 3E+Au grade contained in the selected shells were compared to the mining cut selection estimate and the final schedule model values. The overall aim of the reconciliation is to ensure that the waste included in the design is within 10% and the ore included in the design is within 5% of the overall tonnage compared to the pit optimisation shells. The reconciliation values are displayed in Table 8-22.

Table 8-22: Optimised pit selection tonnes and scheduled tonnes reconciliation.

Pit	Description	Unit	Selected Pit	Pit Design	Variance [%]
KPSE	Total waste	[Mt]	278.1	268.0	-4
	Transition ore	[Mt]	2.7	2.5	-8
	Fresh ore	[Mt]	10.2	10.2	0
	Total ore	[Mt]	12.9	12.7	-2
	Total 3E+Au grade	[g/t]	2.80	2.80	0
KPE	Total waste	[Mt]	108.1	105.3	-3
	Transition ore	[Mt]	1.1	1.2	8

Pit	Description	Unit	Selected Pit	Pit Design	Variance [%]
	Fresh ore	[Mt]	4.1	4.2	2
	Total ore	[Mt]	5.2	5.4	4
	Total 3E+Au grade	[g/t]	2.84	2.82	-1
KPNE	Total waste	[Mt]	123.6	123.6	0
	Transition ore	[Mt]	0.9	0.9	0
	Fresh ore	[Mt]	4.3	4.4	2
	Total ore	[Mt]	5.2	5.3	2
	Total 3E+Au grade	[g/t]	2.88	2.86	-1
KPNW	Total waste	[Mt]	33.5	33.7	1
	Transition ore	[Mt]	0.5	0.4	-25
	Fresh ore	[Mt]	1.0	1.1	9
	Total ore	[Mt]	2.86	1.5	0
	Total 3E+Au grade	[g/t]	2.98	2.85	-5
<b>Total</b>	<b>Total waste</b>	<b>[Mt]</b>	<b>543.3</b>	<b>530.6</b>	<b>-2</b>
	<b>Transition ore</b>	<b>[Mt]</b>	<b>5.2</b>	<b>5.0</b>	<b>-4</b>
	<b>Fresh ore</b>	<b>[Mt]</b>	<b>19.6</b>	<b>19.9</b>	<b>1</b>
	<b>Total ore</b>	<b>[Mt]</b>	<b>26.2</b>	<b>24.9</b>	<b>0</b>
	<b>Total 3E+Au grade</b>	<b>[g/t]</b>	<b>2.84</b>	<b>2.82</b>	<b>-1</b>

The total waste tonnes include topsoil, softs, hards, and BMR the ore in the pit shell. The pit design tonnes and grades represent the final tonnes modelled for scheduling purposes.

A negligible variance was noted overall. The fresh ore tonnes are higher in the designs at a fractionally lower grade and total waste. Due to the inclusion of minimum work areas at the bottom of the pits and the design of practical benches and restrictions around watercourses, variances in individual pits were observed.

#### 8.4.4.2 Mine Schedule

##### 8.4.4.3 Pit Deployment Strategy

Deployment of the mining fleet will begin at KPSE, at an initial S/R of 22.0 tonne:tonne, mining firstly southwards in cut 1 from the highest evaluation drilled GC area and then from cut 2 northwards towards the Chirundazi River, close to the concentrator plant. KPSE Pit 1 and Pit 3 will follow, at a S/R of 23.0 tonne:tonne. From there, the mining progresses further north to KPE and KPNE at a S/R of 22.5 tonne:tonne and then to KPNW at a S/R of 22.0 tonne:tonne.

For the initial cutback in KPSE, the transitional ore will be mined and placed on the ROM stockpile area as the base layer and used for subsequent ramp-up production of the concentrator plant. From this point onwards only fresh ore was targeted, and most transitional ore will be left in-pit throughout the LOM schedule. On depletion of the fresh ore, the mining fleets return to remove the transitional ore. This waste will be short-hauled to the nearest surface dump placement areas and used for construction of the TSF or as part of the backfill in-pit on mined-out areas when available.

#### **8.4.4.4 Production Schedule Drivers**

Production schedule drivers and constraints were identified prior to commencing the scheduling process. These included:

- Target an annual steady state ROM target of 2.64 Mtpa throughout the LOM;
- Maintain practical mining face advance;
- Maximise the annual, practical vertical rate of advance;
- Target a practically achievable waste production target and minimise peak material movement; and
- Maintain the shortest hauling options for waste removal and maximise backfill waste placement when possible.

#### **8.4.4.5 Monthly Schedule Results**

The scheduled loader performance over the life of the project including the production ramp-up is shown in Figure 8-18. The production timing of the loaders is as follows:

- Production ramp-up starts in Month 1 with the ore and topsoil fleet and the first primary waste loader beginning production to develop the KPSE cutback 1.
- Additional five 300 t large shovels and 95 t excavators were introduced to the schedule over the first 18 months.
- Loading capacity from the smaller PC850 excavators was deployed to assist in waste excavation and subsequent ore exposure, especially in areas in close proximity to the mineralised material.

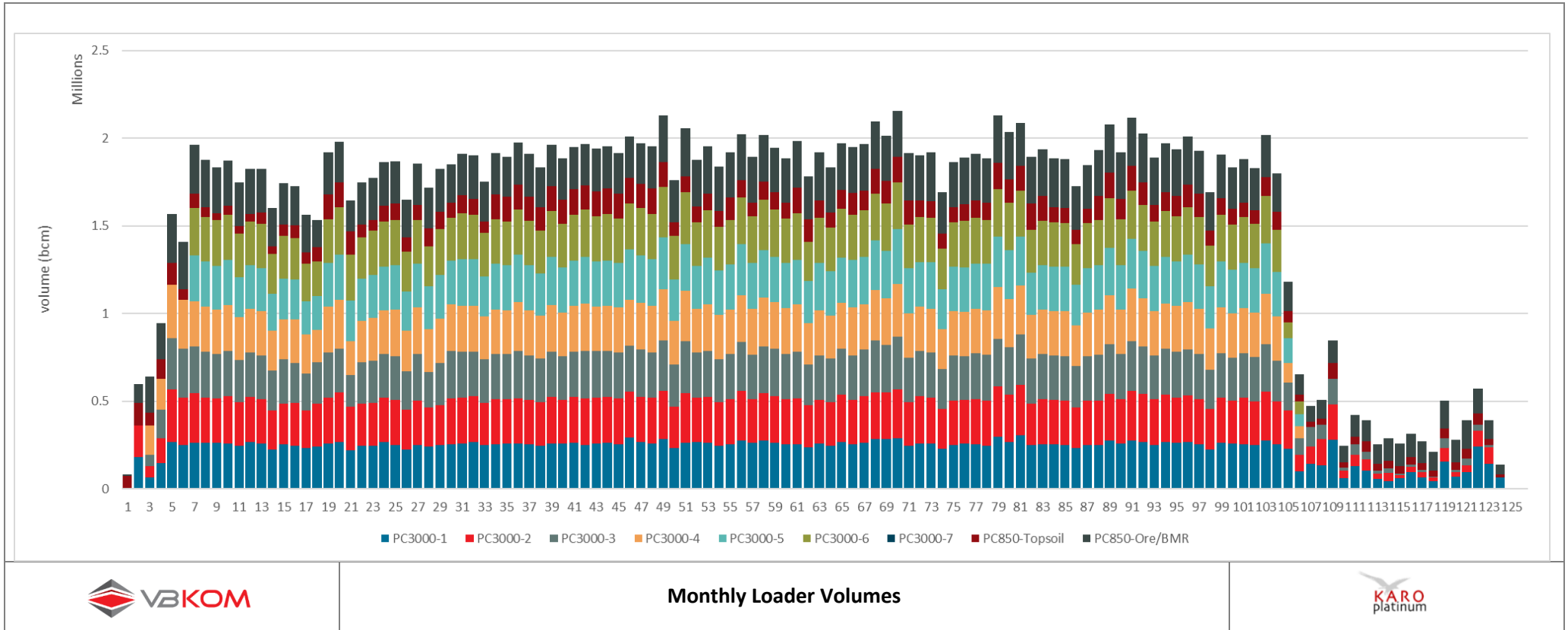


Figure 8-18: Monthly loader volumes.

The waste material destinations as part of the production schedule are displayed in Figure 8-19. Waste material was scheduled to be the closest available WRD apart from the allocated monthly requirement for the continuous construction of the TSF. Backfill into the pit was prioritised as it became available.

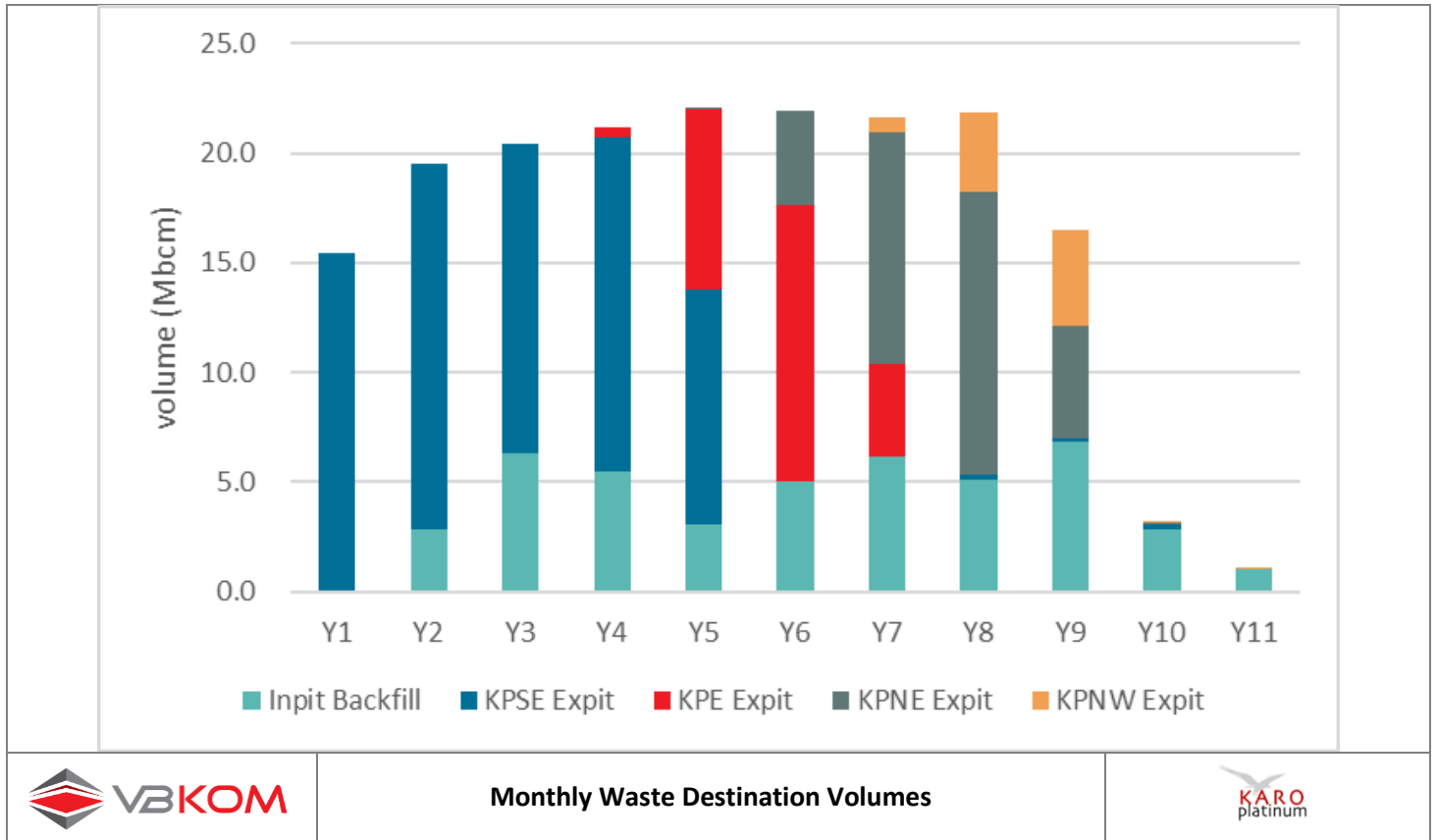


Figure 8-19: Monthly waste destination volumes.

The monthly ex-pit ore production and split between fresh ore and transitional ore is shown in Figure 8-20. The average monthly target of 220 kt was achieved throughout the schedule.

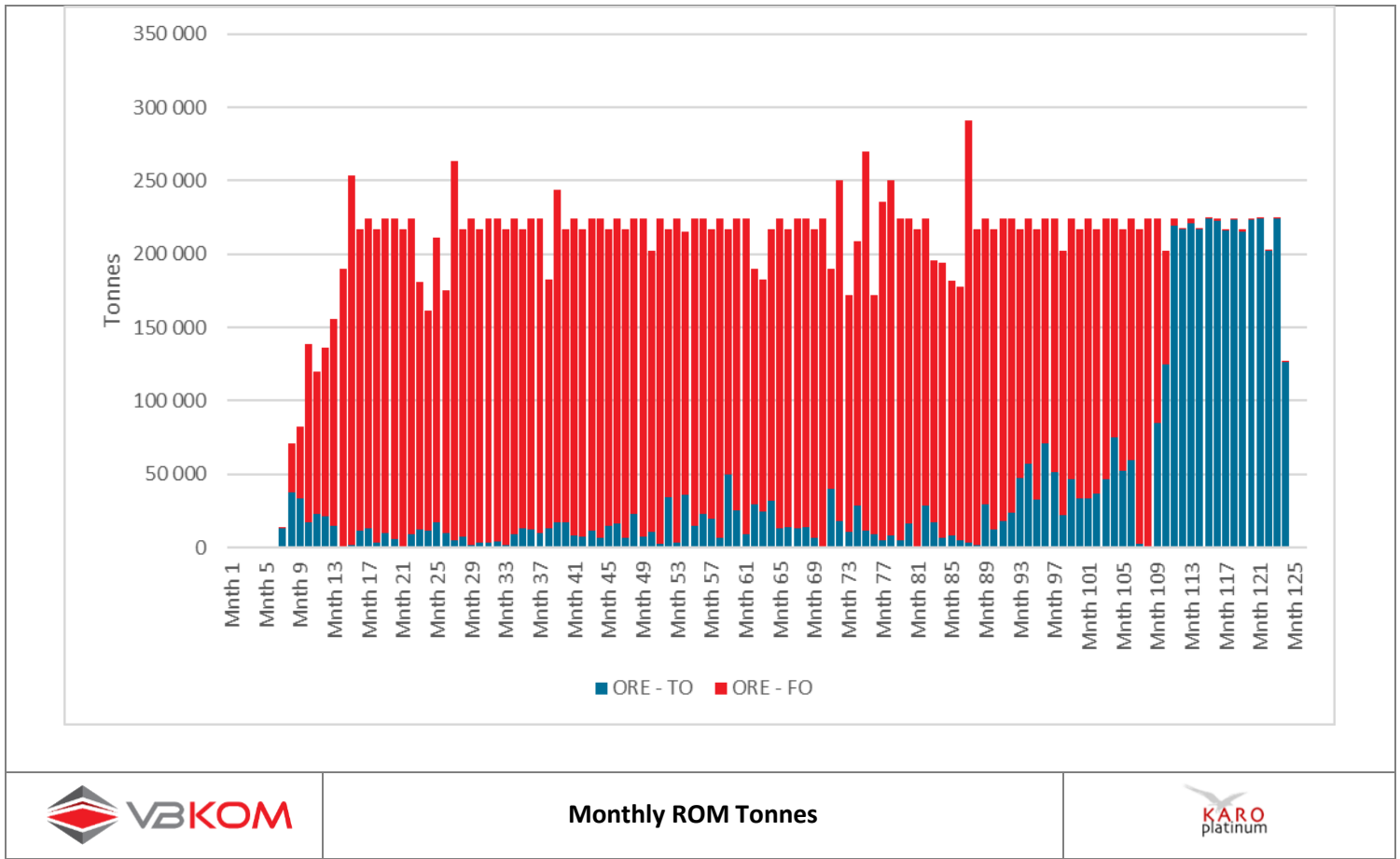


Figure 8-20: Monthly ROM tonnes.

The plant feed's average target of 220 ktpm was maintained in the schedule at an average 3PGE + Au grade of 2.8 g/t throughout the LOM.

#### 8.4.4.6 Total Life of Mine Schedule Results

The LOM schedule was derived from an iterative approach to maximise grade and match the targeted feed grade to the concentrator with a steady stockpile maintained throughout the schedule. The stockpile was used to regulate the feed grade throughout the LOM and blend the ex-pit grades to optimise the plant feed grade.

Figure 8-21 shows the total material movement throughout the LOM schedule. The total annual volumes scheduled during steady-state mining increased to 20.6 million BCM (MBCM) in KPSE before KPE was scheduled in 2028.

KPSE was scheduled from Y1 to Y6 with KPE starting in Y6 and KPNE in Y7. KPNW started in Y9 and was depleted with the transitional ore (TRO) mining from the other pits in Y11.

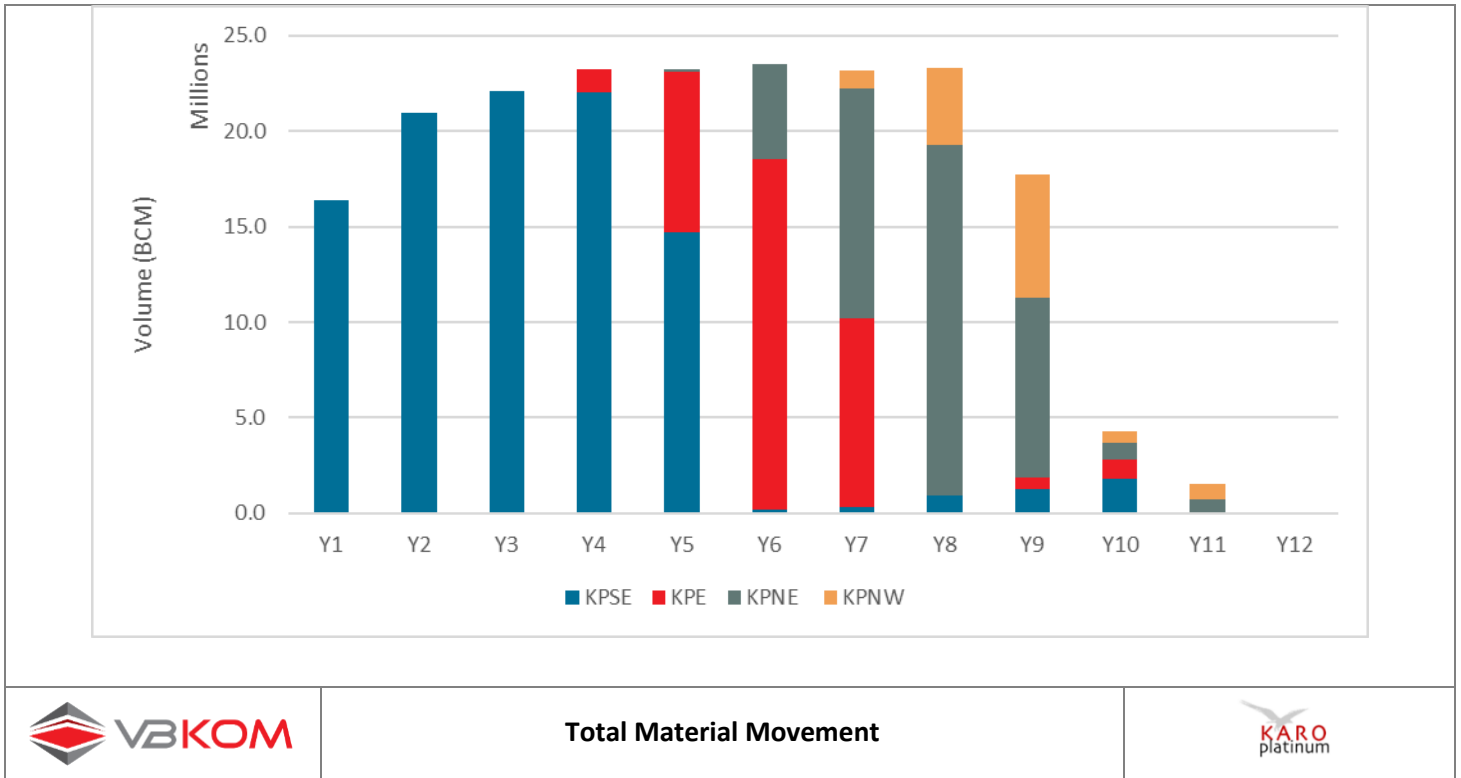


Figure 8-21: Total material movement.

The summary table showing the monthly tonnes for the first two years of the production plan is detailed in Table 8-23 and Table 8-24.

Table 8-23: Production schedule monthly for Y1.

Description	Unit	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Topsoil	[MBCM]	0.07	0.13	0.08	0.11	0.12	0.06	0.07	0.03	0.01	0.02	0.01	0.02
Softs	[MBCM]	0.01	0.47	0.37	0.38	0.75	0.52	0.60	0.12	0.29	0.31	0.11	0.20
Hards	[MBCM]	0.00	0.00	0.19	0.46	0.70	0.83	1.29	1.71	1.51	1.49	1.58	1.56
<b>Total waste</b>	<b>[MBCM]</b>	<b>0.08</b>	<b>0.60</b>	<b>0.64</b>	<b>0.94</b>	<b>1.57</b>	<b>1.41</b>	<b>1.96</b>	<b>1.85</b>	<b>1.80</b>	<b>1.83</b>	<b>1.71</b>	<b>1.78</b>
Transition ore	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.03	0.02	0.02	0.02
Fresh ore	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.12	0.10	0.12
<b>Total ore</b>	<b>[Mt]</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.07</b>	<b>0.08</b>	<b>0.14</b>	<b>0.12</b>	<b>0.14</b>
Total ore KPSE	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.08	0.14	0.12	0.14
Total ore KPE	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total ore KPNW	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total ore KPNE	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip ratio	[t:t]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.4	61.0	36.8	39.9	36.5
3E+Au	[g/t]	0.00	0.00	0.00	0.00	0.00	2.61	3.06	2.85	2.81	2.83	2.83	2.81
Cu	[%]	0.00	0.00	0.00	0.00	0.00	0.14	0.09	0.07	0.07	0.07	0.07	0.07
Ni	[%]	0.00	0.00	0.00	0.00	0.00	0.18	0.12	0.09	0.09	0.09	0.10	0.09

Table 8-24: Production schedule monthly for Y2.

Description	Unit	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
Topsoil	[MBCM]	0.02	0.00	0.01	0.01	0.02	0.04	0.09	0.11	0.10	0.03	0.02	0.05
Softs	[MBCM]	0.11	0.04	0.20	0.10	0.25	0.30	0.42	0.84	0.66	0.22	0.17	0.25
Hards	[MBCM]	1.63	1.50	1.45	1.54	1.22	1.12	1.33	0.95	0.83	1.42	1.52	1.52
<b>Total waste</b>	<b>[MBCM]</b>	<b>1.77</b>	<b>1.54</b>	<b>1.66</b>	<b>1.65</b>	<b>1.49</b>	<b>1.46</b>	<b>1.85</b>	<b>1.90</b>	<b>1.59</b>	<b>1.67</b>	<b>1.71</b>	<b>1.81</b>
Transition ore	[Mt]	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01
Fresh ore	[Mt]	0.14	0.19	0.25	0.21	0.21	0.21	0.21	0.22	0.22	0.21	0.17	0.15
<b>Total ore</b>	<b>[Mt]</b>	<b>0.16</b>	<b>0.19</b>	<b>0.25</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.18</b>	<b>0.16</b>
Total ore KPSE	[Mt]	0.16	0.19	0.25	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.18	0.16
Total ore KPE	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total ore KPNW	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total ore KPNE	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip ratio	[t:t]	31.7	22.8	18.3	21.3	18.6	18.7	22.7	23.3	19.9	20.8	26.5	31.2
3E+Au	[g/t]	2.79	2.81	2.76	2.79	2.80	2.77	2.81	2.76	2.78	2.73	2.81	2.79
Cu	[%]	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06
Ni	[%]	0.10	0.09	0.09	0.10	0.09	0.09	0.10	0.09	0.10	0.09	0.09	0.09

The remainder of the production plan with Y3 detailed in quarters, and thereafter annual detail, is summarised in Table 8-25.

Table 8-25: Production schedule from Y3.

Description	Unit	Y3 - Q1	Y3 - Q2	Y3 - Q3	Y3 - Q4	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Total
Topsoil	[MBCM]	0.13	0.17	0.14	0.28	1.13	0.23	0.65	0.53	0.39	0.18	0.07	0.02	5.18
Softs	[MBCM]	0.46	1.15	0.87	0.76	3.94	4.71	4.33	3.79	3.38	2.42	0.47	0.27	34.26
Hards	[MBCM]	4.33	3.63	4.14	4.28	17.29	17.45	17.70	17.95	18.63	14.18	2.85	0.91	151.58
<b>Total waste</b>	<b>[MBCM]</b>	<b>4.93</b>	<b>4.95</b>	<b>5.16</b>	<b>5.32</b>	<b>22.36</b>	<b>22.40</b>	<b>22.69</b>	<b>22.27</b>	<b>22.40</b>	<b>16.78</b>	<b>3.39</b>	<b>1.21</b>	<b>191.02</b>
Transition ore	[Mt]	0.03	0.01	0.01	0.03	0.15	0.23	0.21	0.15	0.31	0.46	2.41	0.78	5.03
Fresh ore	[Mt]	0.62	0.65	0.66	0.63	2.49	2.41	2.37	2.44	2.33	2.18	0.23	0.00	19.81
<b>Total ore</b>	<b>[Mt]</b>	<b>0.65</b>	<b>0.66</b>	<b>0.67</b>	<b>0.67</b>	<b>2.64</b>	<b>2.64</b>	<b>2.59</b>	<b>2.59</b>	<b>2.64</b>	<b>2.64</b>	<b>2.64</b>	<b>0.78</b>	<b>24.84</b>
Total ore KPSE	[Mt]	0.65	0.66	0.67	0.67	2.64	2.43	0.07	0.01	0.15	0.35	1.33	0.00	12.68
Total ore KPE	[Mt]	0.00	0.00	0.00	0.00	0.00	0.20	2.37	1.93	0.00	0.00	0.85	0.00	5.35
Total ore KPNW	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.80	0.17	0.34	1.50
Total ore KPNE	[Mt]	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.64	2.29	1.49	0.30	0.44	5.31
Strip ratio	[t:t]	22.5	21.8	22.3	23.1	23.3	23.8	24.4	23.9	23.6	17.7	3.6	4.3	21.4
3E+Au	[g/t]	2.80	2.79	2.78	2.78	2.82	2.80	2.83	2.82	2.83	2.92	2.80	2.80	2.82
Cu	[%]	0.07	0.07	0.07	0.08	0.08	0.10	0.14	0.12	0.11	0.12	0.11	0.14	0.10
Ni	[%]	0.09	0.09	0.09	0.10	0.11	0.12	0.15	0.14	0.13	0.15	0.14	0.16	0.13

Figure 8-22 displays the waste volume scheduled per pit and the associated S/R. The waste material was scheduled to ramp up to a total of 22 MBCM in Y4. The overall S/R of the schedule was estimated at 21.4 tonne:tonne.

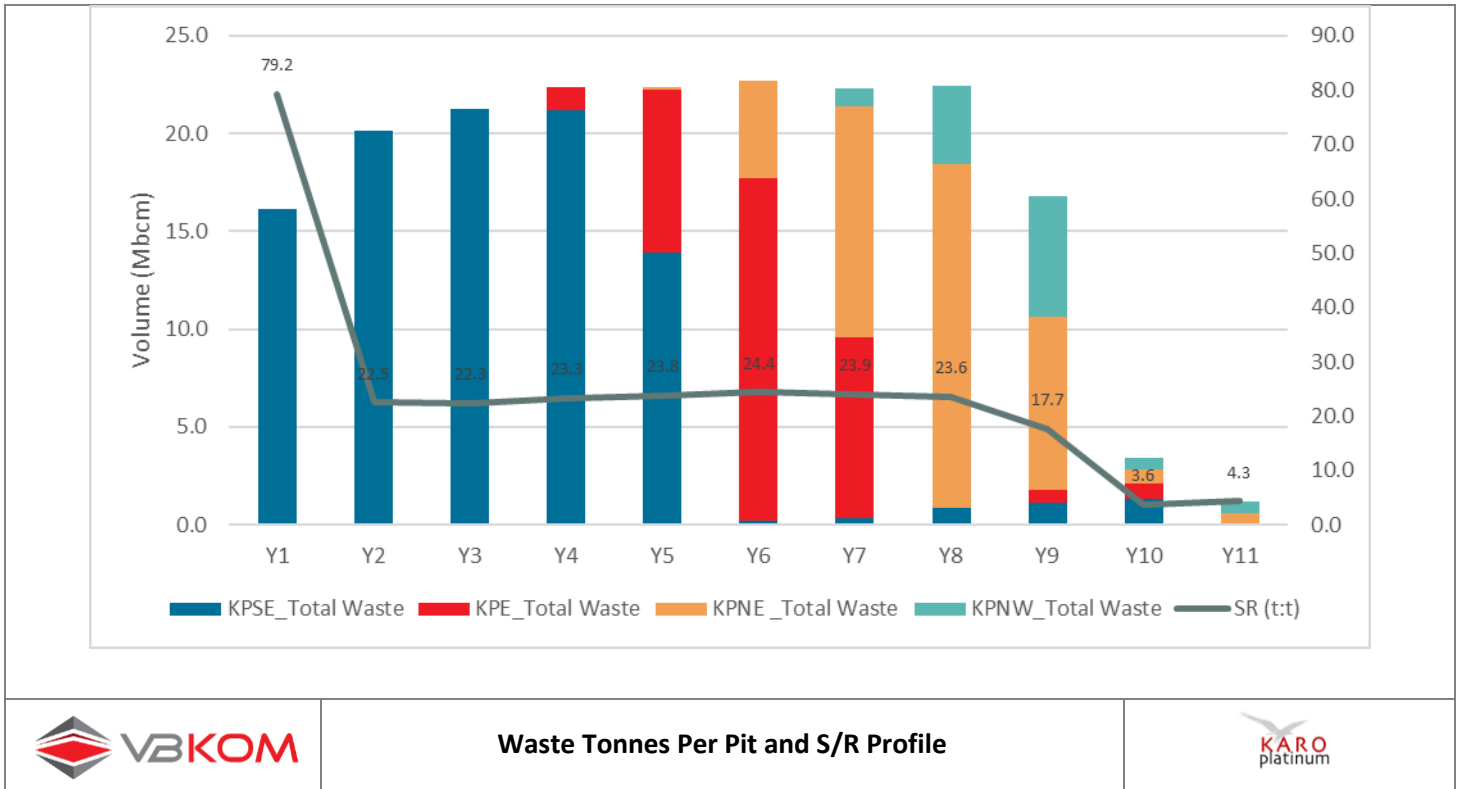


Figure 8-22: Waste tonnes per pit and S/R profile.

Figure 8-23 represents the ex-pit ore tonnes scheduled over the LOM. The ex-pit tonnes were largely dependent on the pit advance and feed grade. The ex-pit ore was scheduled at an average 3E + Au grade of 2.82 g/t and a 5E + Au grade average of 3.00 g/t.

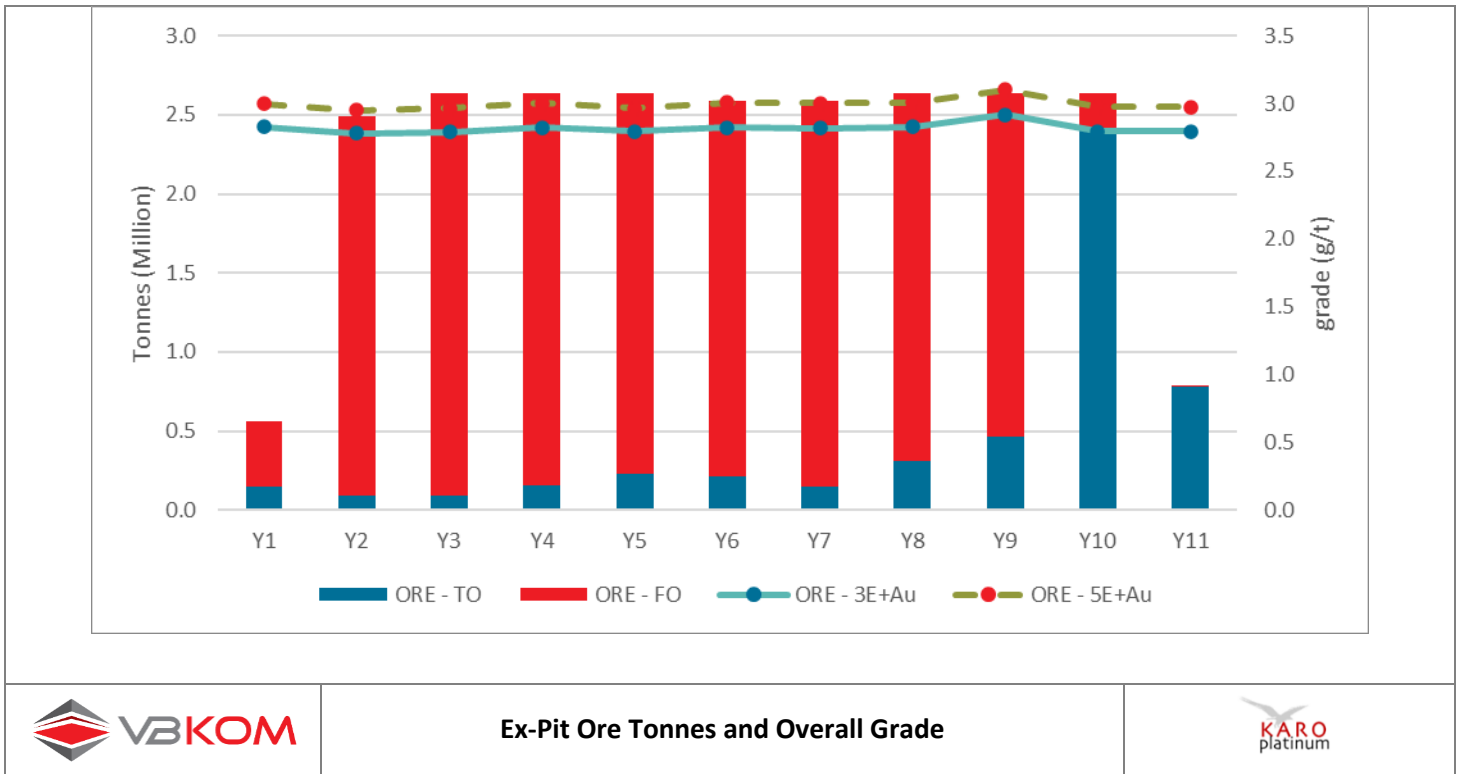


Figure 8-23: Ex-pit ore tonnes and overall grade.

The total ex-pit 5PGE + Au grade for transition and fresh ore is displayed in Figure 8-24 and Figure 8-25, respectively.

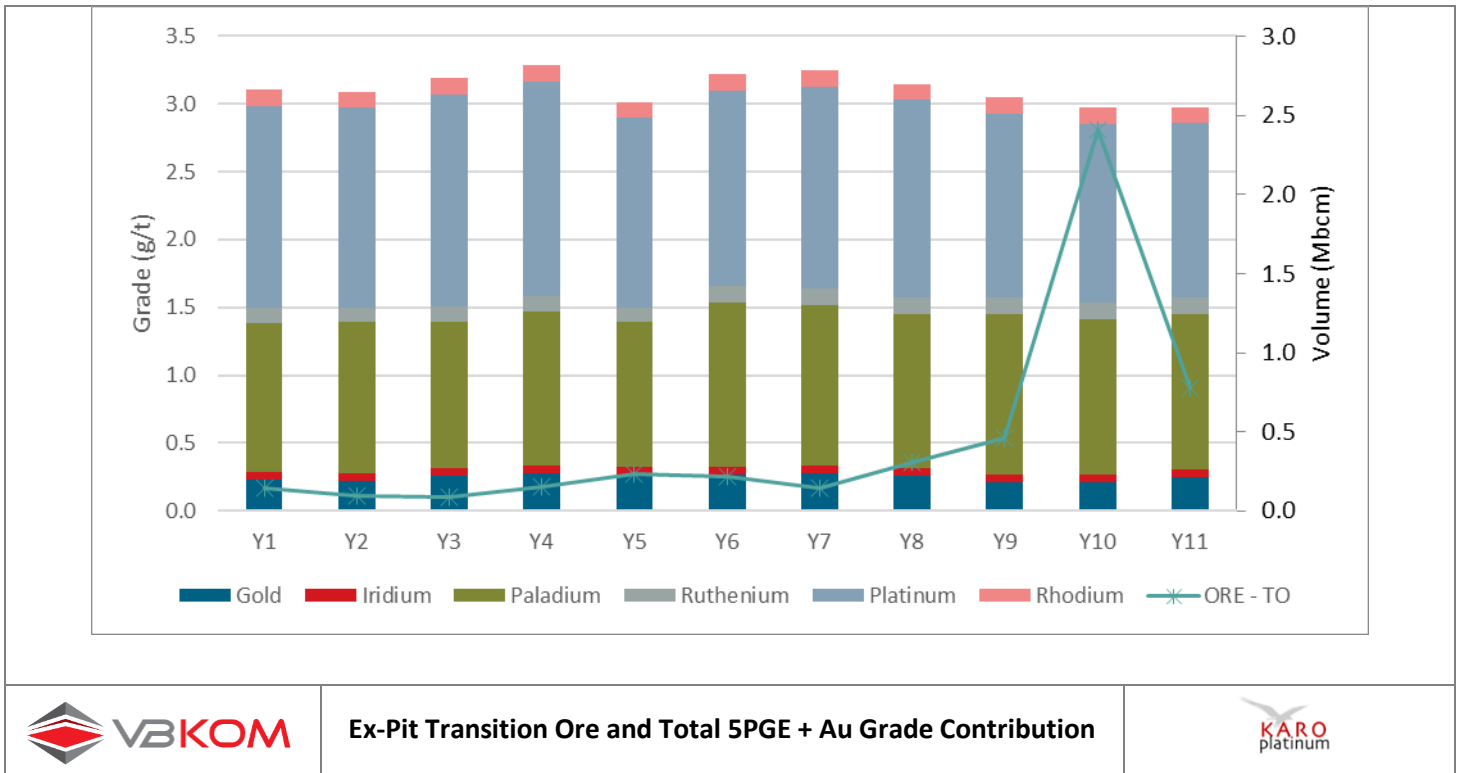
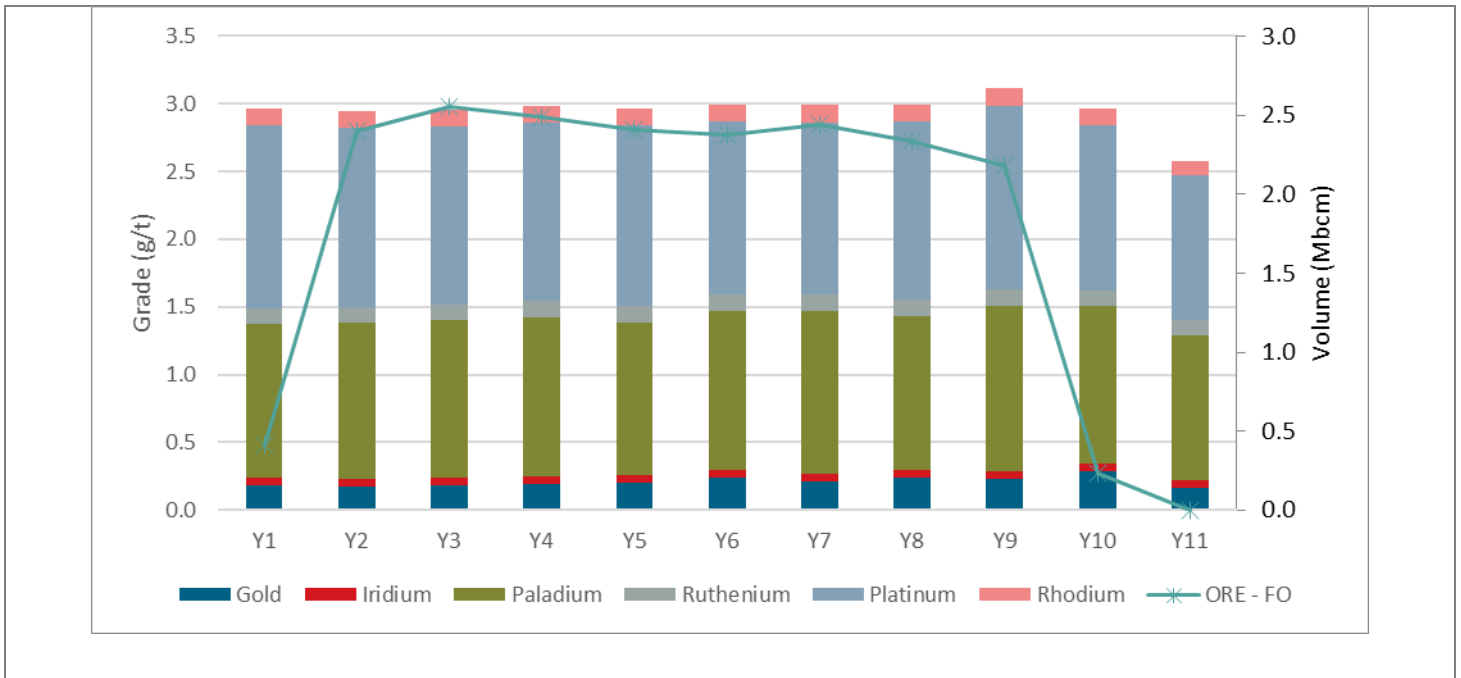


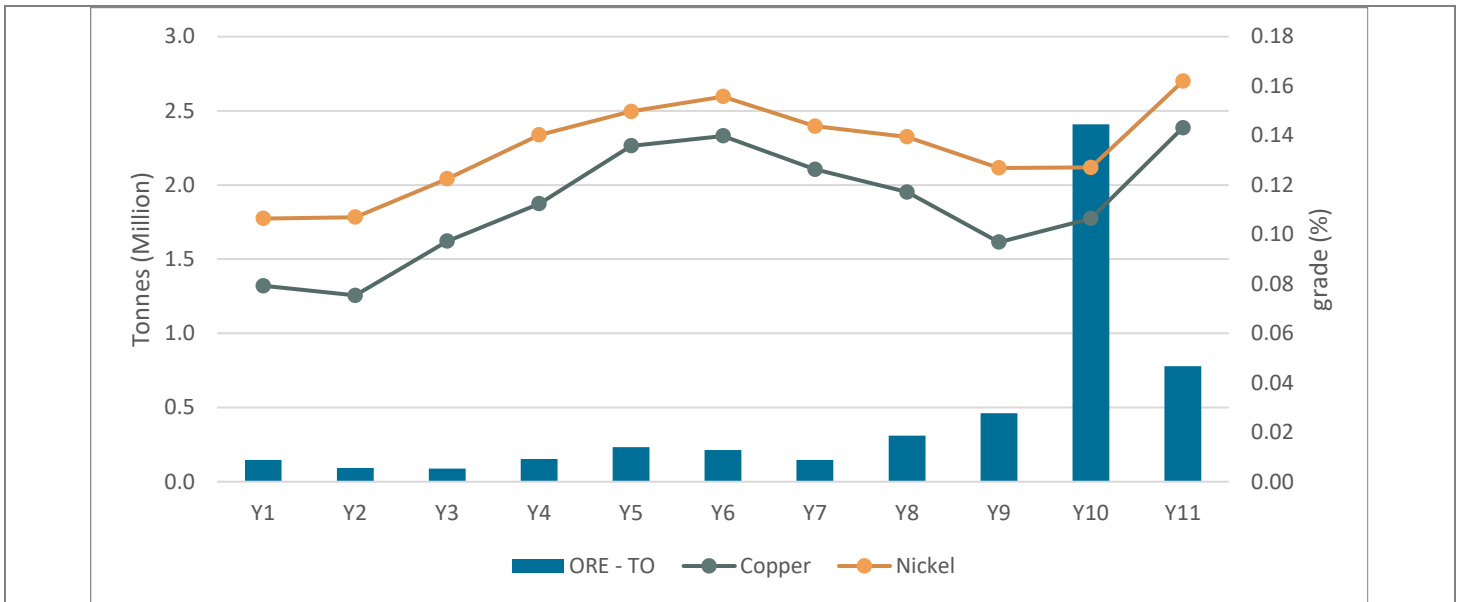
Figure 8-24: Ex-pit transition ore and total 5PGE + Au grade contribution.



**Ex-Pit Fresh Ore and Total 5PGE + Au Grade Contribution**

Figure 8-25: Ex-pit fresh ore and total 5PGE + Au grade contribution.

The ex-pit base metal grade is displayed in Figure 8-26 and Figure 8-27.



**Ex-Pit Transition Ore and Base Metal Grade**

Figure 8-26: Ex-pit transition ore and base metal grade.

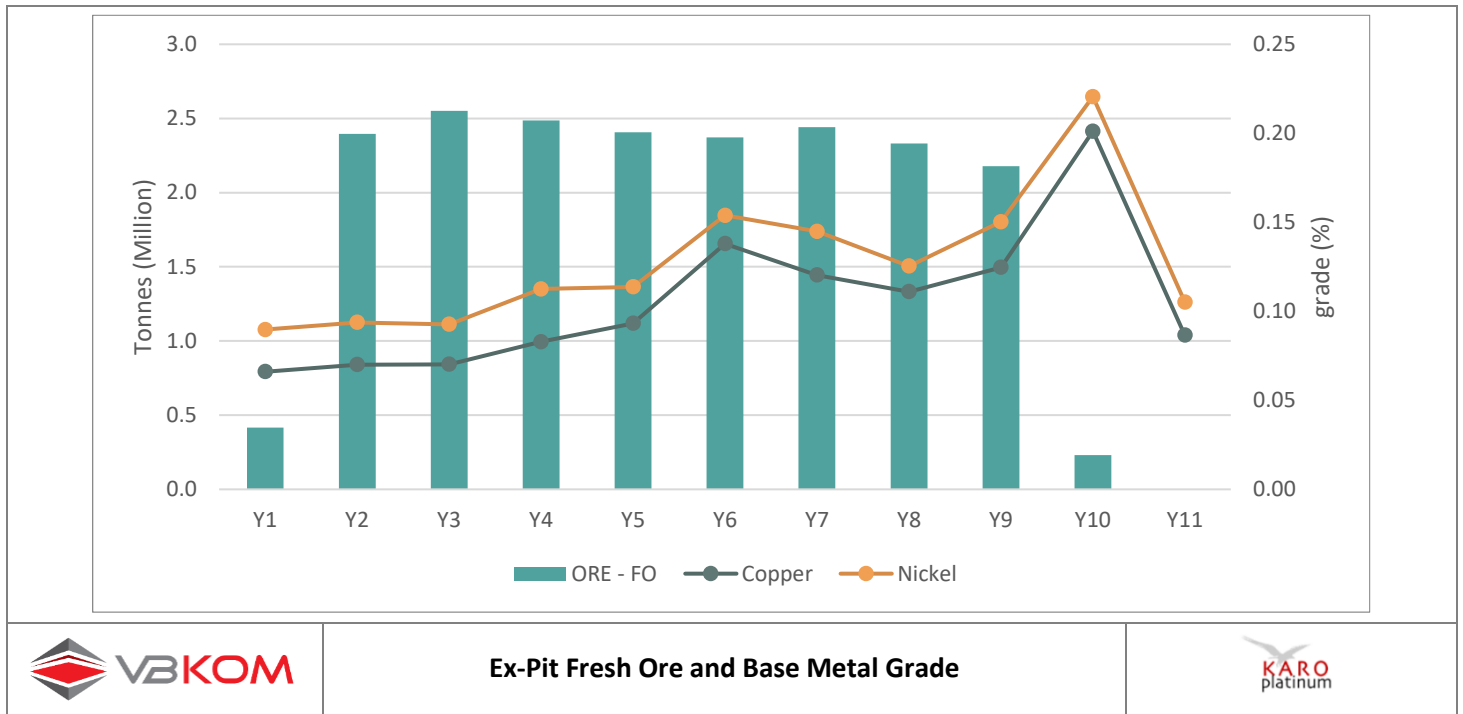


Figure 8-27: Ex-pit fresh ore and base metal grade.

#### 8.4.4.7 Crushing Strategy

The crushing strategy and locations of the different mobile crushers are detailed in Figure 8-28, relative to the haul roads from the different mining areas. Initially, a two-stage primary crushing plant (C150 and C120) incorporated in the circuit will be utilised for the ore material from KPSE Pit 1, Pit 2, and Pit 3. An additional C150 crusher (Crushing Location 2) will be installed for the KPSE Pit 4 and KPE mining areas, as indicated in Figure 8-28. The C150 crushing unit will be relocated to Crushing Location 3, which will be utilised for the ore material from KPNE. Lastly, a C150 crushing plant will be required at Crushing Location 4 to crush ore material from KPNW. Material from all C150 crushing plants will pass through the C120 located at the main crushing location and will also be sufficient to handle the transitional material which will be mined at a later phase of the operation. Experience from the pilot pit indicates that the transitional ore will not carry large boulders, hence the C120 will be sufficient for transitional ore material.

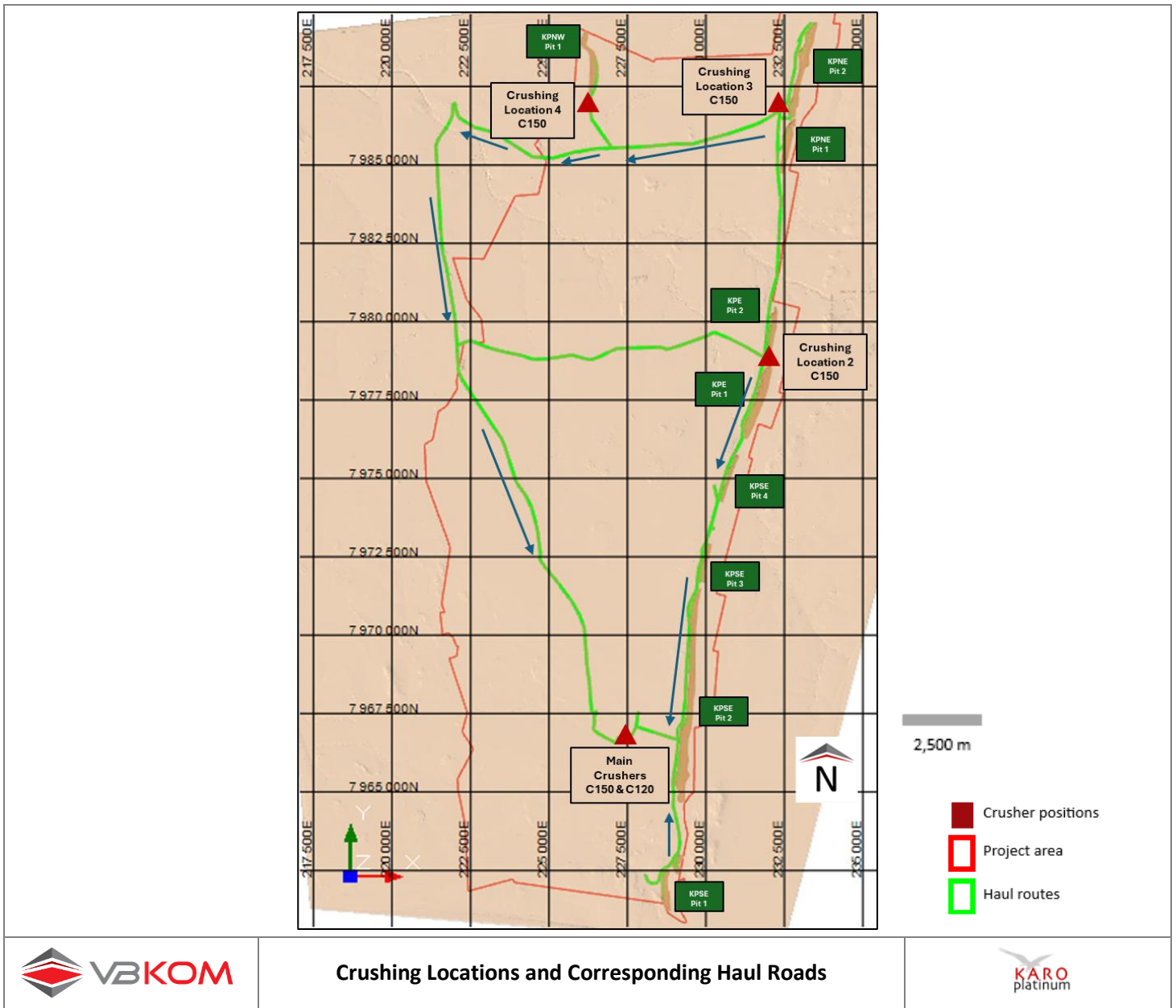


Figure 8-28: Crushing location and corresponding haul roads (WGS84 UTM36S).

#### 8.4.4.8 Schedule Progress

Figure 8-29 to Figure 8-32 represent the scheduled mining progression throughout the LOM plan for KPSE. The pit and WRD progression and placement are shown. Once sufficient pit room was available, waste was scheduled to the pit as backfill. The mining schedule started at the initial box cut towards the south of KPSE 2 and placed waste material on designated WRDs and the TSF. The transitional ore remains in-situ until the depletion of the fresh ore in all the pits.

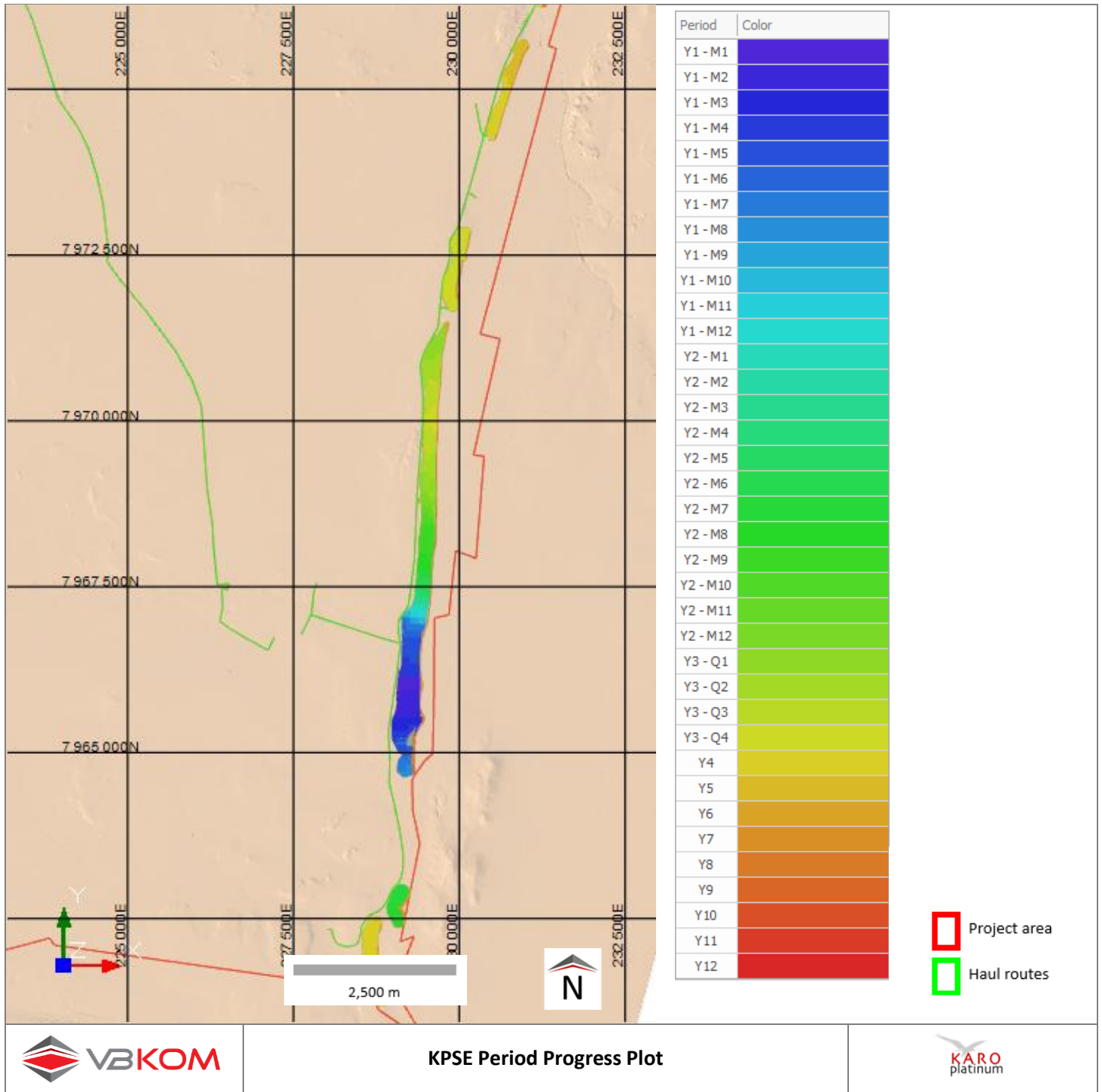


Figure 8-29: KPSE period progress plot (WGS84 UTM36S).

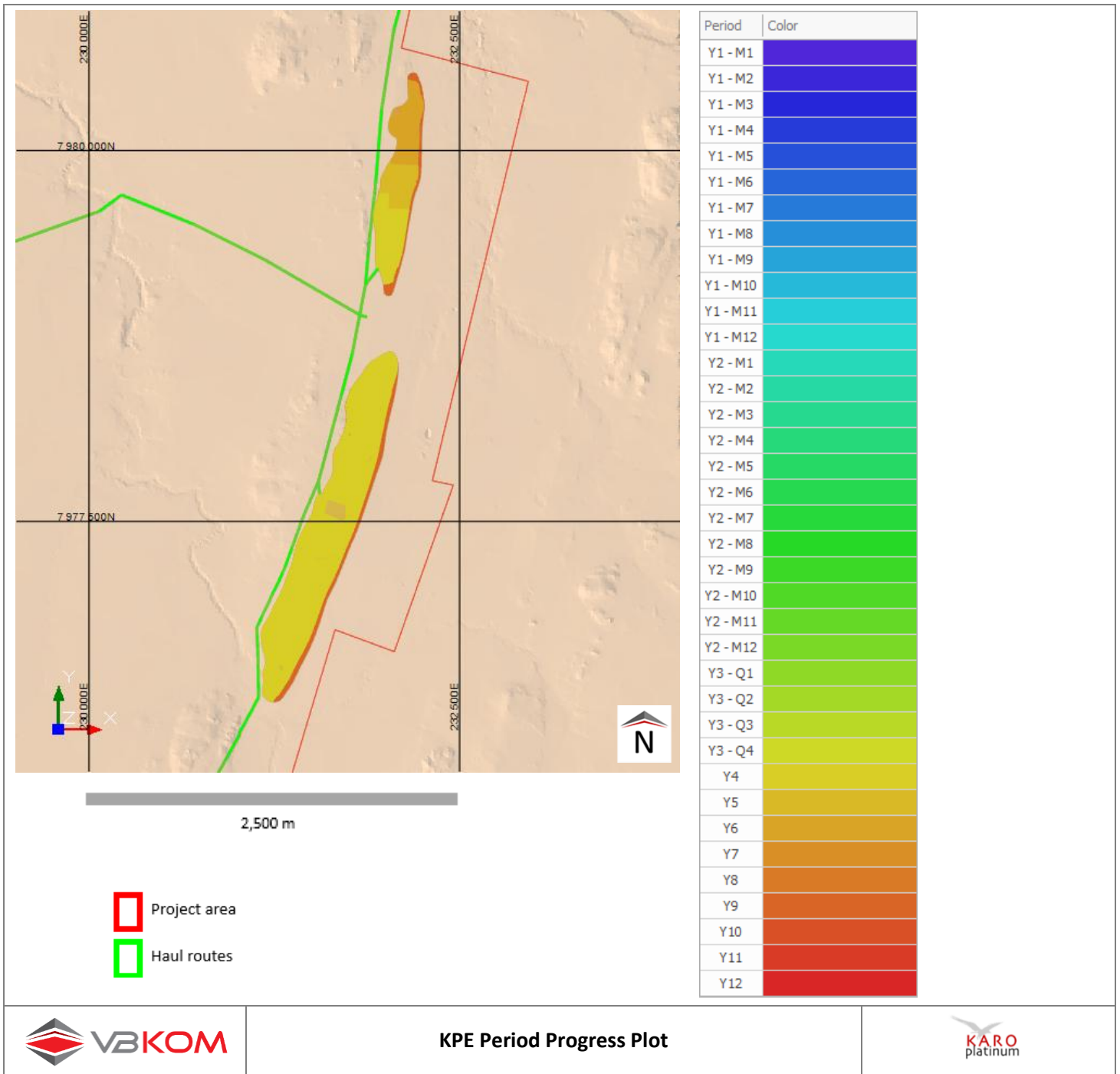


Figure 8-30: KPE period progress plot (WGS84 UTM36S).

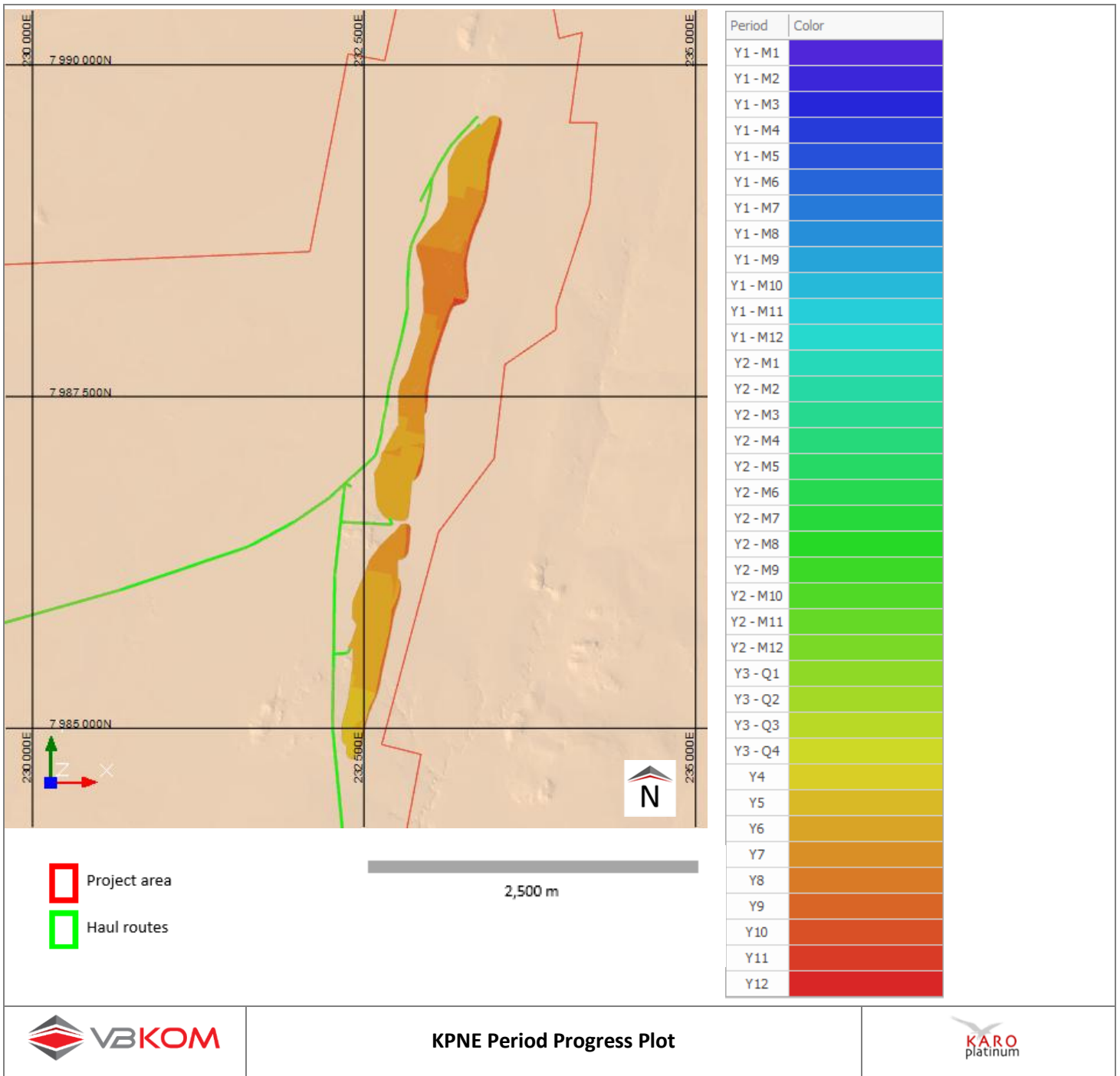


Figure 8-31: KPNE period progress plot (WGS84 UTM36S).

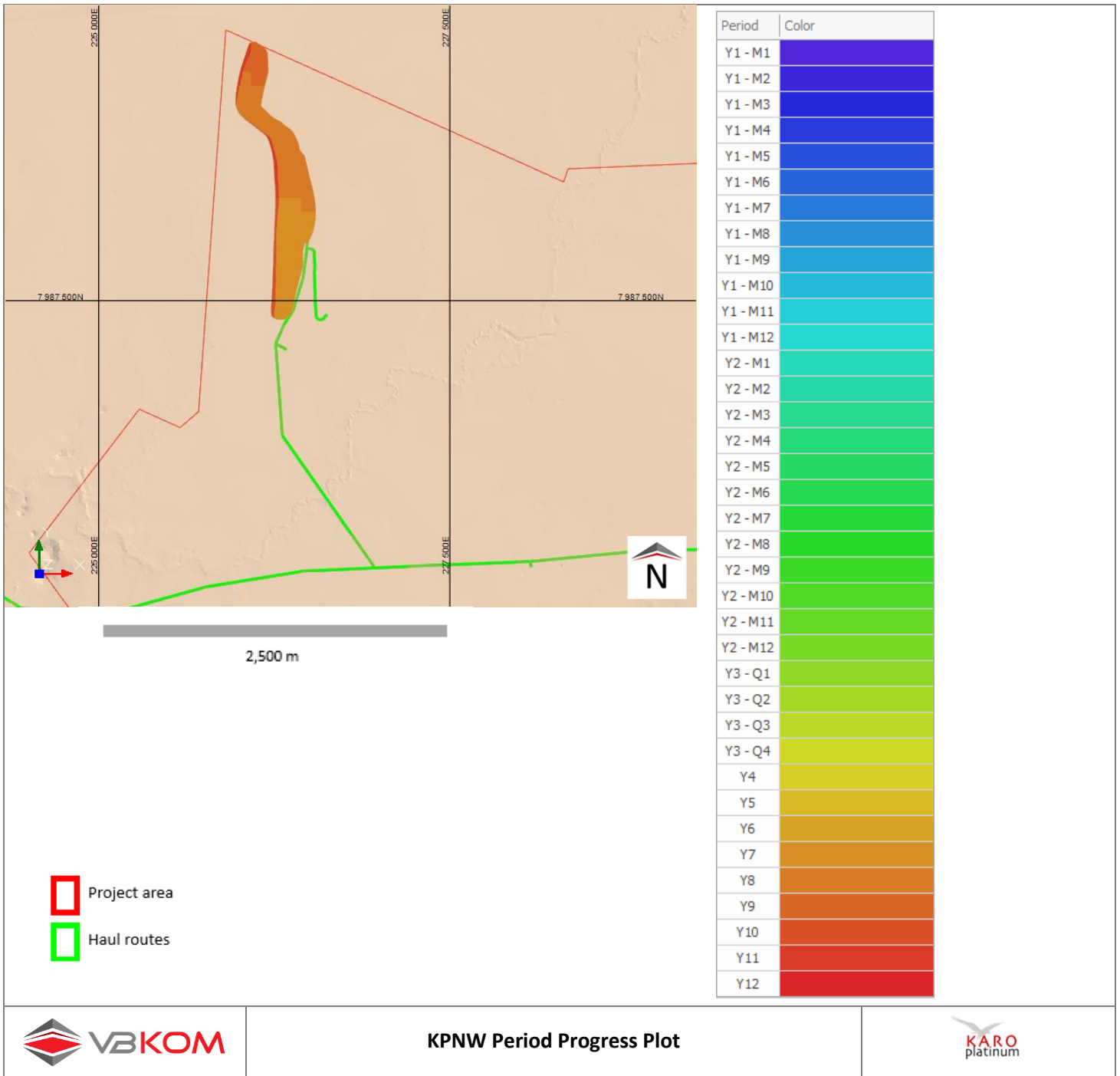


Figure 8-32: KPNW period progress plot (WGS84 UTM36S).

## 8.5 Metallurgical Processing/Recovery

### S4.3(ii), 5.3(iii)(vi), 5.6(viii)

The testwork reports were analysed by ENC Minerals (Pty) Ltd (ENC) in the report titled: *Karo metallurgical and process design FS vs 0 - 22 February 2024*. The ENC report and the testwork results were used by METC for design basis.

METC Engineering was appointed to complete the metallurgical and process plant design for the Karo Platinum Project. The process flowsheet and design criteria are based on a flotation metallurgical test programme conducted on core samples from the Karo site, benchmark data, and experience from similar/surrounding Great Dyke PGM concentrator operations. The process plant is designed for 220 ktpm ROM and employs a conventional mill-float-mill-float (MF2) configuration for the PGM process circuit with a three-stage crushing plant, primary milling and flotation, secondary milling and flotation, tailings dewatering and transfer pumping and concentrate dewatering and stockpiling.

The metallurgical process is well-tested technology. Key process design criteria data are presented in Table 8-26.

Table 8-26: Key process design criteria.

Design Criteria	Units	Value
Annual throughput	tpa	2,460,000
Monthly throughput	tpm	220,000
Feed grade 4E	g/t	2.88
Feed grade 6E	g/t	3.21
Crusher utilisation factor	%	65
Crusher nominal throughput	tph	465
Mill and flotation utilisation factor	%	90
Mill and float nominal throughput	tph	335
Primary Grind size	P <sub>80</sub> µm	120
Secondary Grind size	P <sub>80</sub> µm	65
Overall Circuit Concentrate Mass Pull	%	2.5
Concentrate grade	g/t 3E+Au	100
Concentrate production 4E	tpa	64,000
Concentrate production 6E	tpa	71,000

### 8.5.1 Metallurgical Sampling and Testwork

#### S5.3(I, ii, iv, v)

The four major ore sources listed below were sampled from drill cores and tested for metallurgical properties:

- Sources on the eastern side of the property:
  - Fresh ore from KPE;
  - Fresh ore from KPNE; and
  - Base metal sulphides and transitional ore from KPSE.
- Sources on the western side of the property:
  - KPSW.

Drill cores were classified by the geologists into three broad areas based on depth:

- Oxidised (1–15 m);
- Transitional (15–30 m); and
- Fresh (>30 m).

The samples were selected based on depth as well as logging data. A summary of the samples and tests performed is presented in Table 8-27. Refer to Chapter 9 of the BFS study for more detail on the testwork.

Table 8-27: The four major ore sources sampled from drill cores and tested for metallurgical properties.

Date	Laboratory	Ores	Tests	Targeted Minerals	Reference
30-06-2021	SGS Randfontein	KPE KPSE	Flotation and Mineralogical Analysis	PGM	Phase 1 Final Report 20/1384
29-11-2021	SGS Randfontein	KPE KPNE KPSW	Comminution <ul style="list-style-type: none"> <li>• Ball mill work index</li> <li>• SAG mill test</li> </ul>	PGM	Metallurgical Report 21/1691 and 21/1998
17-3-2023	Suntech GeoMet Laboratories	KARO Fresh Sample	Flotation Locked cycle tests Reagent dosage rate tests.	PGM	Metallurgical report 215 (MET22-010)
20-2-2023	Suntech GeoMet Laboratories	Transition ore	Flotation, Locked cycle tests Reagent dosage rate tests.	PGM	Metallurgical results (MET22/024)
19-2-2024	Suntech GeoMet Laboratories	KPSE	Metallurgical	PGM	Metallurgical results 225 (MET23/003)
20-02-2024	Geolabs Global	KPNE KPE	Flotation test Lock Cycle tests Reagent dosage rates	PGM	Metallurgical results 2024-02-20_KRO2_KPE and KPNE Flotation

Pyrite, Pyrrhotite, Pentlandite, and Chalcopyrite are the main sulphide species, the latter three being the main PGM-bearing minerals which will be targeted in a typical PGM flotation regime. These minerals constitute approximately 2.1% to 2.2% of the total, and ENC concluded that a mass pull to final concentrate between 1.5% to 2.5% should be assumed in the process design when allowing for any losses and gangue entrainment.

In terms of gangue materials, the main minerals of concern would be Chlorite, Mica, and Talc all of which are either naturally or easily floatable gangue materials in a sulphide float process. ENC highlighted the fact that the Talc content is elevated and will require increased reagent addition rates, particularly depressant, to achieve target concentrate grades. They concluded that the detrimental effect of the elevated depressant dosages would be a lower PGM recovery when compared to traditional Bushveld complex ore types.

Detailed outcomes of the comminution results are given in the following SGS reports:

- 20/1384; and

- 21/1691.

The key outcomes of the comminution testwork are summarised in Table 8-28 below.

Table 8-28: Test results of the comminution testwork.

Sample Source	CWi (kWh/t)	BAi (g)	BBWi (kWh/t)	SCSE (kWh/t)
KPE	19.8	0.137	19.0	12.61
KPNE			19.3	10.81
KPSE			17.5	12.98
KPSW	19.1	0.264	18.8	14.49

Even though the ore is classified as hard, it is considered typical of Great Dyke PGM-bearing ore seams. Conventional crusher and mill designs as are typically used for Great Dyke operations are considered suitable.

As indicated in Table 8-29, bench-scale flotation testwork was conducted on various test campaigns.

Table 8-29: Final lock cycle test and recovery results.

Item	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	Ru (g/t)	Ir (g/t)	3E+Au (g/t)	6E (g/t)	Ni (%)	Cu (%)	Co (%)
Flash out											
Cy4, Cy5, Cy6 Flash Conc	58.43	51.19	5.65	2.72	481	3.26	117.99	126.06	3.20	3.45	0.16
Cy4, Cy5, Cy6 Re Recl Conc	48.15	40.82	4.44	2.10	3.72	3.29	95.51	102.51	2.64	0.86	0.14
Cy4, Cy5, Cy6 Sec Recl Conc	8.30	7.20	0.88	0.46	0.67	0.43	16.83	17.93	0.35	0.28	0.07
Cy4, Cy5, Cy6 SRT	0.33	0.17	0.03	0.01	0.08	0.16	0.54	0.77	0.11	0.07	0.06
Flash In											
Cy4, Cy5, Cy6 Re Recl Conc	55.30	48.12	5.34	2.23	4.63	2.50	110.98	118.11	2.47	1.76	0.16
Cy4, Cy5, Cy6 Sec Recl Conc	7.54	6.73	0.68	0.30	0.27	0.36	15.25	15.88	0.27	0.18	0.07
Cy4, Cy5, Cy6 SRT	0.20	0.18	0.02	0.01	0.07	0.18	0.41	0.66	0.10	0.06	0.06
KPI											
Recovery (%)	80.75	89.49	59.45	31.05	35.01	76.59		82.9			6.86

Based on the evaluation of the initial testwork results as well as the final locked cycle test, ENC proposed the following recoveries for mine planning and the financial modelling, with both ore types producing a minimum concentrate grade of 100 g/t 3E+Au:

- 6E recovery 83% for fresh ore (min = 78%, max = 85%); and
- 6E recovery 65% for transitional ore.

## **8.5.2 Process**

### **8.5.2.1 Ore Receiving, Screening, and Crushing**

Ore from the ROM stockpile will pass through a 400 mm static grizzly and feed into a ROM Loading Bin. Ore from the ROM bin will be conveyed to a 100 mm spaced Grizzly bar to feed the Primary Jaw Crusher.

The oversize is fed to the Jaw crusher while the grizzly undersize and primary crusher product are combined and fed to the secondary screen. The secondary screen cuts at between 32–40 mm and the oversize is fed to the Secondary Cone Crusher. The screen undersize and secondary cone crusher product combine to feed the tertiary screen that cuts at 15 mm. Oversize is fed to the tertiary cone crusher. Final crushed product at <10 mm top size will be fed to two mill feed concrete silos with a live capacity of 4,000 tonnes each. Each silo is fitted with six vibrating feeders (3 running, 3 standby), feeding the Primary Ball Mill.

The ore receiving and crushing circuit is equipped with three belt magnets, installed pre- and post-primary jaw crusher circuit, as well as post-Secondary Jaw Crusher Circuit. The primary and secondary discharge conveyor and Silo Feed Conveyor are equipped with weightometers.

### **8.5.2.2 Primary Milling**

The ore is withdrawn from the two mill feed silos and fed to the Primary mill via the mill feed conveyor.

Primary milling is achieved through a ball mill, operating in closed circuit with a cyclone targeting a grind size of 80% passing 120 µm. The classification cyclone underflow returns back to the Primary mill feed hopper. The classification cyclone overflow reports to the Primary Rougher Feed Conditioning tank with a 15-minute residence time where reagent addition and conditioning occur prior to the flotation stage.

### **8.5.2.3 Primary Roughers**

Primary float circuit consists of a primary rougher with three stages of cleaning with the cleaner, recleaner, and re-cleaner in closed circuit with the previous stage. Two separate rougher flotation concentrate sump and pump arrangements are allowed to provide flexibility in terms of the routing of the concentrates. The first, fast floating primary rougher high-concentrate slurry is pumped to the High-Grade recleaner cells, and the second slower floating primary rougher low-concentrate slurry is pumped to the High-Grade cleaner cells. Concentrate from the primary flotation circuit reports to the final concentrate dewatering circuit while the tailings report to the secondary milling circuit.

### **8.5.2.4 Secondary Milling**

Slurry from the Primary Rougher Tails Sump is pumped to a single secondary mill via a dewatering cyclone targeting a product size of 80% passing 65 µm. The secondary mill dewatering cyclone underflow gravitates to the secondary ball mill. The secondary mill dewatering cyclone overflow gravitates to the secondary rougher flotation conditioning tank together with the secondary mill discharge screen undersize.

### **8.5.2.5 Secondary Roughers**

The secondary flotation circuit consists of a rougher in closed circuit with two stages of cleaning (cleaner and recleaner). Concentrate from the recleaner reports to the final concentrate dewatering section while final tailings from the roughers report to the tailings handling section.

#### **8.5.2.6 High-Grade Cleaner Flotation**

The high-grade cleaner bank is designed to allow for a three-stage cleaning circuit, (cleaner, recleaner, and re-recleaner) of the primary and secondary rougher concentrates.

The three cleaning stages comprise:

- Four 30 m<sup>3</sup> high-grade cleaner flotation cells
- Three 30 m<sup>3</sup> high-grade recleaner flotation cells
- Four 10 m<sup>3</sup> high-grade re-recleaner flotation cells

The final concentrate which is produced from the high-grade re-recleaner cells is pumped to the PGM Concentrate Thickener. High-grade cleaner tails gravitate from the last cell into the high-grade cleaner tails sump, from where it is pumped to the low-grade cleaner circuit.

#### **8.5.2.7 Low-Grade Cleaner Flotation**

The low-grade cleaner bank allows for two-stage cleaning (cleaner and recleaner) of the tailings from the high-grade cleaner cells.

The complete low-grade cleaner flotation bank comprises 9 flotation tank-type cells operating in series, with flow from one cell to the next by gravity. The two cleaning stages comprise:

- Five 30 m<sup>3</sup> low-grade cleaner flotation cells
- Four 10 m<sup>3</sup> low-grade re-recleaner flotation cells

The final concentrate which is produced from the low-grade recleaner cells is pumped to the Final Concentrate Thickener, while the tails are either pumped forward to the Tailings Thickening area or back to the Secondary ball mill for regrinding.

#### **8.5.2.8 Final Tailings Handling**

The slurry from the Secondary Rougher is pumped to the Final Tailings Thickener via a dewatering cyclone. Tailings dewatering occurs in a 38 m diameter thickener, with thickener underflow reporting to the TSF Dam, whilst thickener overflow reports to a clarifier for further solids removal and to improve process water clarity. Water is recovered from the tailings dam by means of a penstock and drains behind the dam wall. This water is pumped to the tailings return water dam and is returned to the concentrator.

#### **8.5.2.9 Final Concentrate Handling**

High-grade re-recleaner concentrate and low-grade recleaner concentrate are pumped to the Final concentrate thickener. The thickener overflow reports to a clarifier for further solids removal and to improve process water clarity whilst the concentrate thickener underflow is pumped to the concentrate filter (Larox).

The filtrate from the concentrate filter is pumped back to the final concentrate thickener, while the filter cake, at a moisture of 16% nominal, discharges onto a slow-moving shuttle conveyor which conveys the filter cake and drops it into storage bunkers where it is transported off-site to external third-party smelters for further processing.

#### 8.5.2.10 Reagents Mixing, Storage, and Distribution

The following reagents are allowed for in the design for dosing in the flotation and thickening area:

- Frother – DowFroth
- Activator – Copper Sulphate
- Collector – SIBX
- Depressant – Finnfix
- Flocculant – Betafloc
- Sulfidizer – Sodium Hydrosulfide Solution
- Coagulant “Co-Collector” – Senfloc XD100

#### 8.5.2.11 Other Services

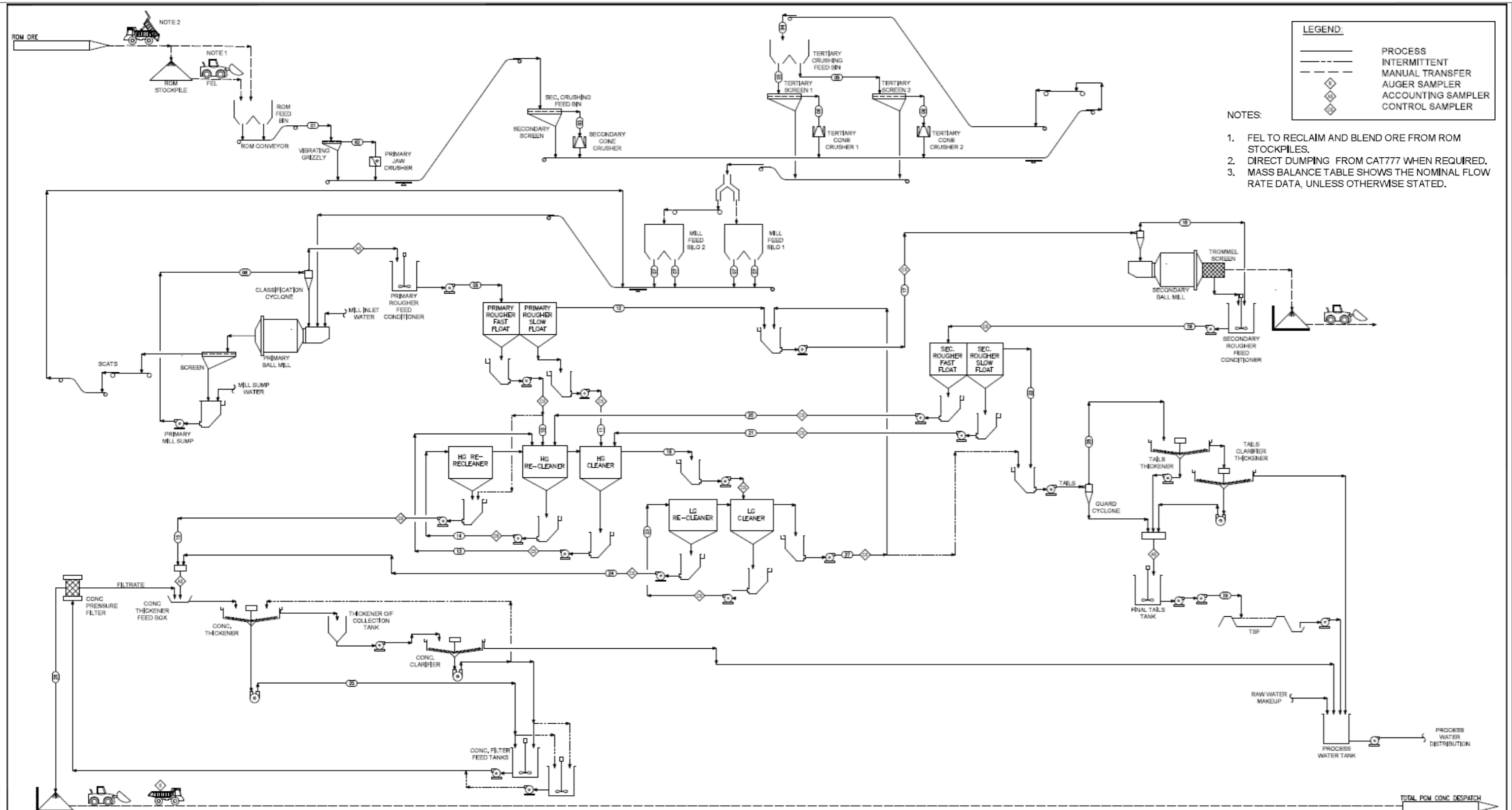
##### S5.3(iv)

The water services section is comprised of raw water, process water system, spray water system, fire water system, stormwater, gland seal water system, dust suppression water system, and potable water supply system.

The Air services section is comprised of Instrument air, Plant air, Blower air, and Drying air.

An onsite laboratory and admin, stores, and maintenance facilities were included in the plant design.

A simplified process flowsheet schematic is presented in Figure 8-33 overleaf. The general arrangement of the plant is shown in Figure 8-34. Construction activities on site of the concentrator plant are shown in Figure 8-35.

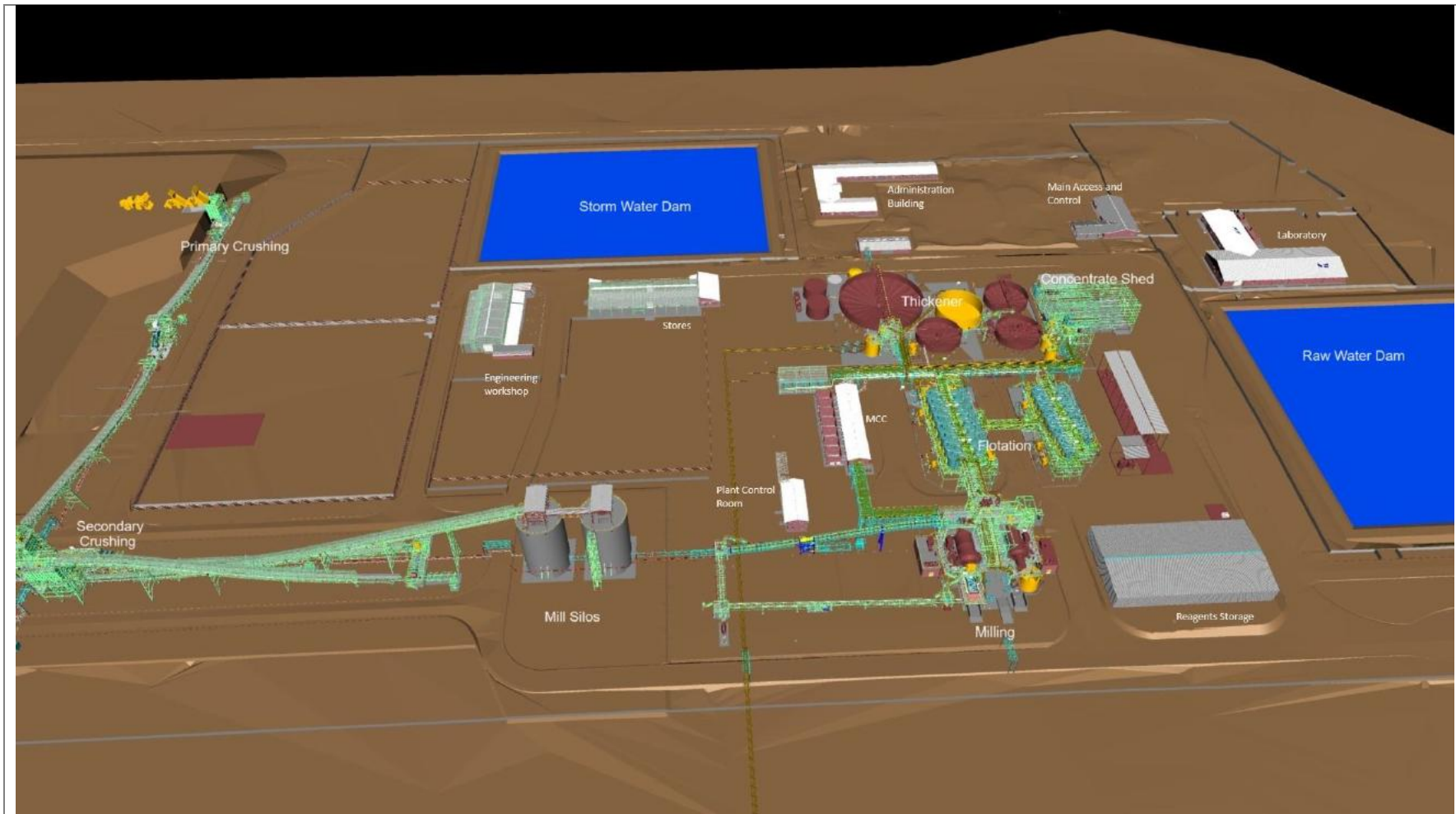


**LEGEND:**

- PROCESS
- - - - - INTERMITTENT
- MANUAL TRANSFER
- ◇ AUGER SAMPLER
- ◇ ACCOUNTING SAMPLER
- ◇ CONTROL SAMPLER

- NOTES:**
1. FEL TO RECLAIM AND BLEND ORE FROM ROM STOCKPILES.
  2. DIRECT DUMPING FROM CAT777 WHEN REQUIRED.
  3. MASS BALANCE TABLE SHOWS THE NOMINAL FLOW RATE DATA, UNLESS OTHERWISE STATED.

Figure 8-33: Process flow diagram (METC).



*Figure 8-34: General arrangement drawing of the concentrator plant.*



*Figure 8-35: On-site construction activities.*

## 8.6 Project Infrastructure

### S4.3(iii), 5.4(ii)(iii)

The general infrastructure was defined as the infrastructure that is not part of the Concentrator Processing System and captured in Chapter 11 of the BFS study. The general infrastructure provided for in the capital cost estimate is made up of the following:

- Bulk power supply:
  - Selous Substation Upgrade – 175 MVA
  - Karo MV Substation – 40 MVA
  - 30 MVA Solar Plant
  - 132 kV Overhead power Line – between Selous & Karo
  - 11 kV reticulation network around the mine
- Bulk water supply:
  - Chirundazi Dam 11 Mm<sup>3</sup> capacity
  - Chiganzi Dam 250,000 m<sup>3</sup> capacity
  - Zinka shaft
  - 5 high-yield boreholes
  - Bulk water line network
  - Water and wastewater treatment plants
- Accommodation camp:
  - Permanent Camp (200 man)
  - Salene Camp (40 man)
- Roads and intersections (excluding the concentrator plant):
  - Karo Plant Main Intersection – Selous Ngezi Highway
  - Permanent Camp Access Road
  - Plant Access Road
  - Plant Side Access and Mining Haul Road
  - Plant Internal Roads
- TSF (co-disposal), including return water dam, water reticulation, and clean and dirty water management.
- Support services buildings

The general layout and infrastructure planning are presented in Figure 8-36. All necessary logistics for the proposed project have been considered.

Major earthworks for the general infrastructure, including the concentrator plant area, have been completed.

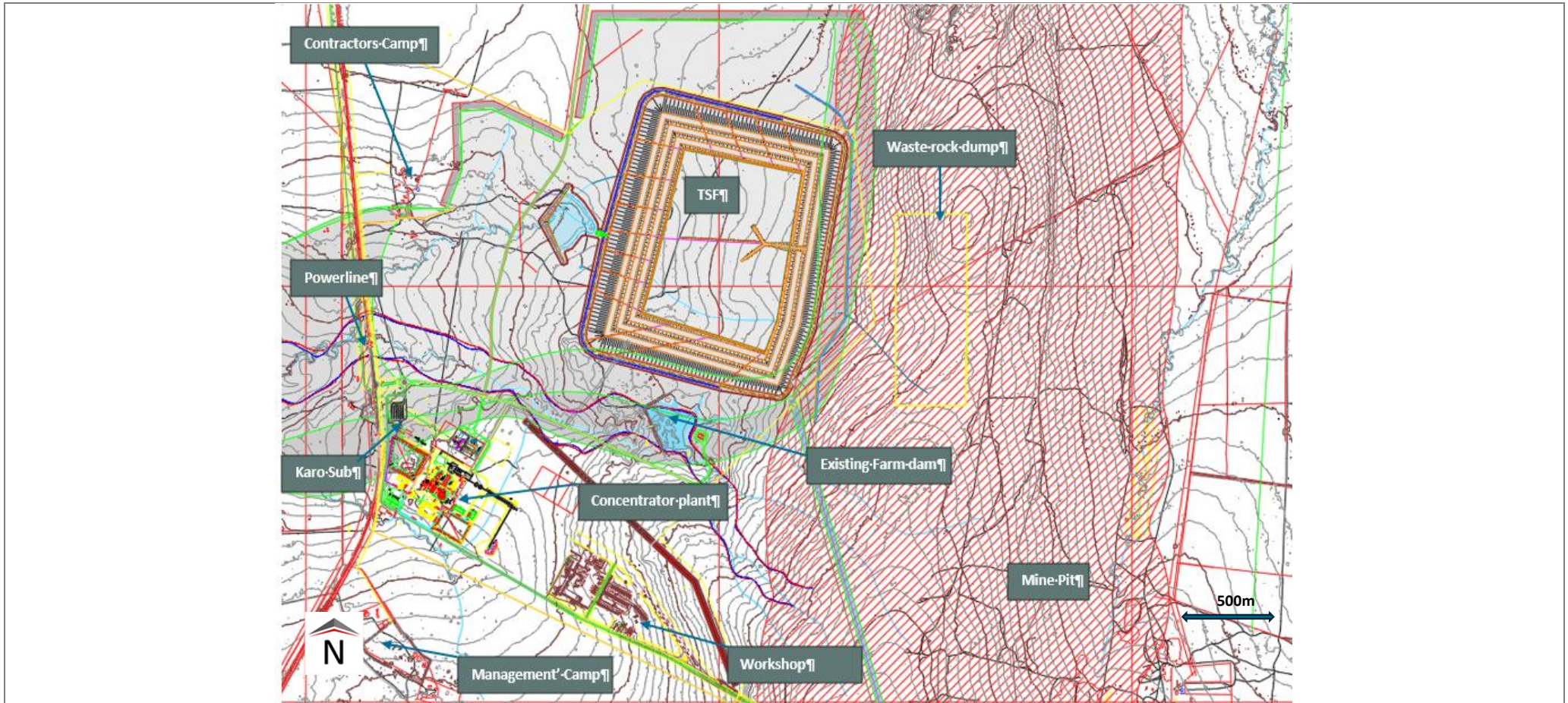


Figure 8-36: General infrastructure layout.

## 8.6.1 Bulk Power Supply

### 8.6.1.1 Background

Bulk electrical supply discussions with the Zimbabwe Electricity Transmission and Distribution Company (ZETDC) started in 2020 with high-level scope and assumptions for Karo Platinum. These developments are simplified and were updated in early 2021 in the context of the Karo Scoping Study, where the bulk electricity supply was divided into two phases, summarised in Table 8-30.

Table 8-30: Bulk electricity supply infrastructure summary.

Project Phase	ZETDC-Owned Infrastructure	Karo-Owned Infrastructure
1	Selous substation 175 MVA 330/132 kV transformer bay no.3	Karo Southwest 132/11 kV Substation (Phase 1)
	Selous substation 132 kV Karo Central East substation overhead line feeder bay	
	Selous - Karo Southwest Substation 132 kV 31 km overhead line	
2	-	Karo Central East 132/11 kV Substation (Phase 2 expansion)

The commercial process to commence with the first phase of the electricity Project is complete and supply and construction contracts were entered into. The final connection application and associated fees for phase 1 are still outstanding.

The current bulk electricity supply and demand is based on a detailed design with a +90% accuracy level. The demand forecast for the project is summarised in Table 8-31.

Table 8-31: Project load forecast.

Operational Year	Calendar Year	Southwest Substation		Central East Substation	Total
		Karo Mine	Base Metal Recovery	Smelter	
		35 MVA Demand	20 MVA Demand	65 MVA Demand	
1	2026	25	0	0	25
2	2027	25	15	0	40
3	2028	30	20	0	50
4	2029	30	20	0	50
5	2030	30	20	15	65
6	2031	30	20	30	80
7	2032	30	20	65	115
8	2033	30	20	65	115
9	2034	30	20	65	115
10	2035	30	20	65	115
11	2036	30	20	65	115
12	2037	30	20	65	115

### 8.6.1.2 Bulk Electricity Supply Network Description

For the proposed engagements with ZETDC, the Karo Platinum electrical loads were located at the two substation positions illustrated in Figure 8-37. These are referred to as the "Southwest" and "Central East" substations.

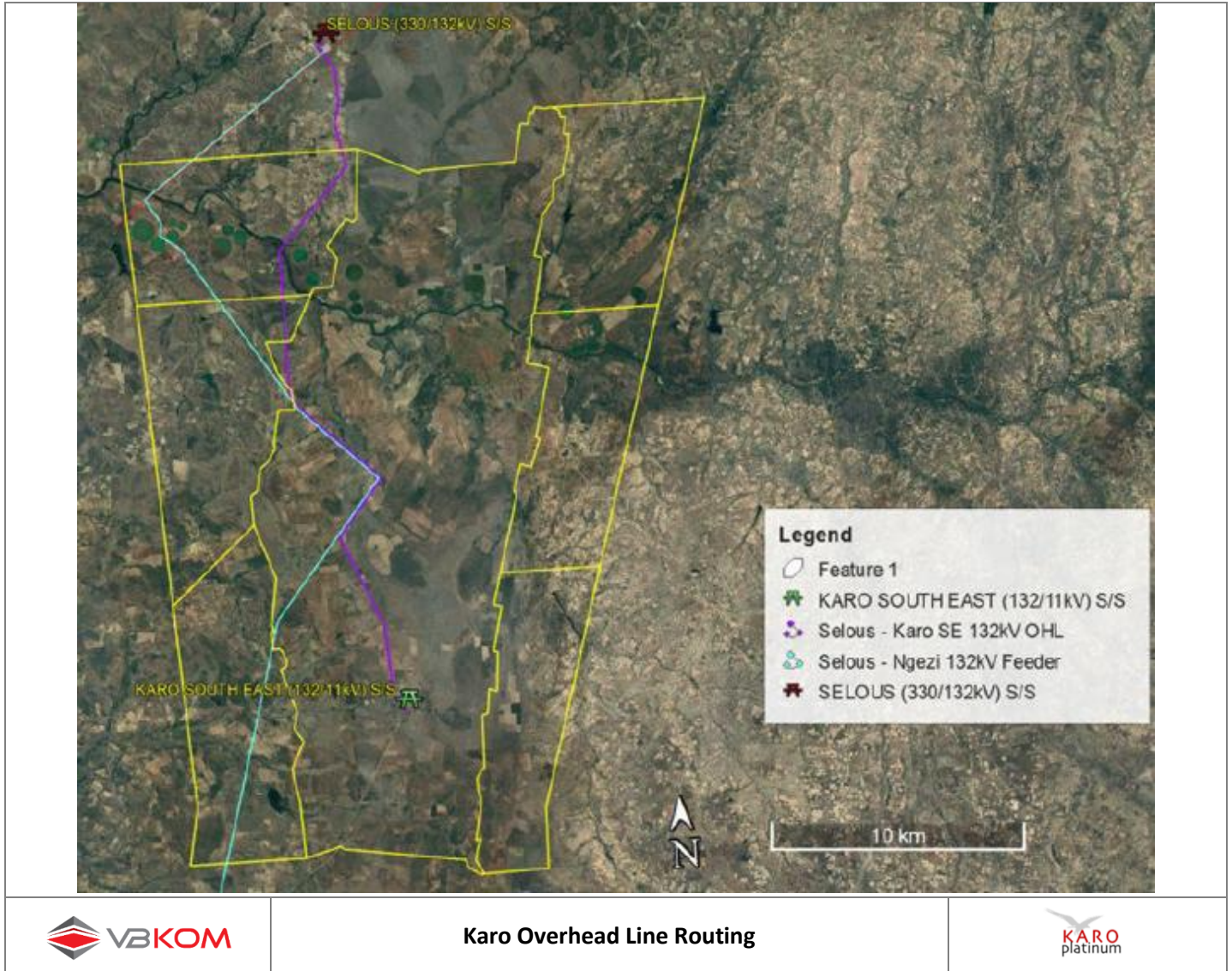


Figure 8-37: Karo overhead line routing.

ZETDC plans to make available the required capacity from its 132 kV network at Selous substation to supply the demand as detailed in Table 8-31. This capacity requires Selous substation to be expanded by installing a third 175 MVA 330/132 kV transformer to augment the existing units. This expansion shall be funded by Karo and be recovered over time from ZETDC and shall be designed and constructed on a self-build basis along with the other infrastructure during Phase 1 of the Project as detailed in Chapter 11 of the BFS Study.

The network for the Karo Southwest substation will supply mining workshops, supplier stores, concentrator plant loads, water boreholes, water pumping from Chirundazi Dam and permanent accommodation camp with approximate load demand of 30 MVA in Phase 1. The Karo Central East substation will be constructed in Phase 2 and will ultimately

have a load requirement of 65 MVA in Phase 2. The loads comprise bulk water services, mining, processing, smelter, and other loads.

### 8.6.2 Water Supply

The Raw Water supply strategy is shown in Figure 8-38. The priority of the water sources for beneficiation is:

- TSF return water
- Waste water treatment plant
- Pit dewatering
- Stormwater
- Chiganzi Dam
- Chirundazi Dam
- Emergency boreholes

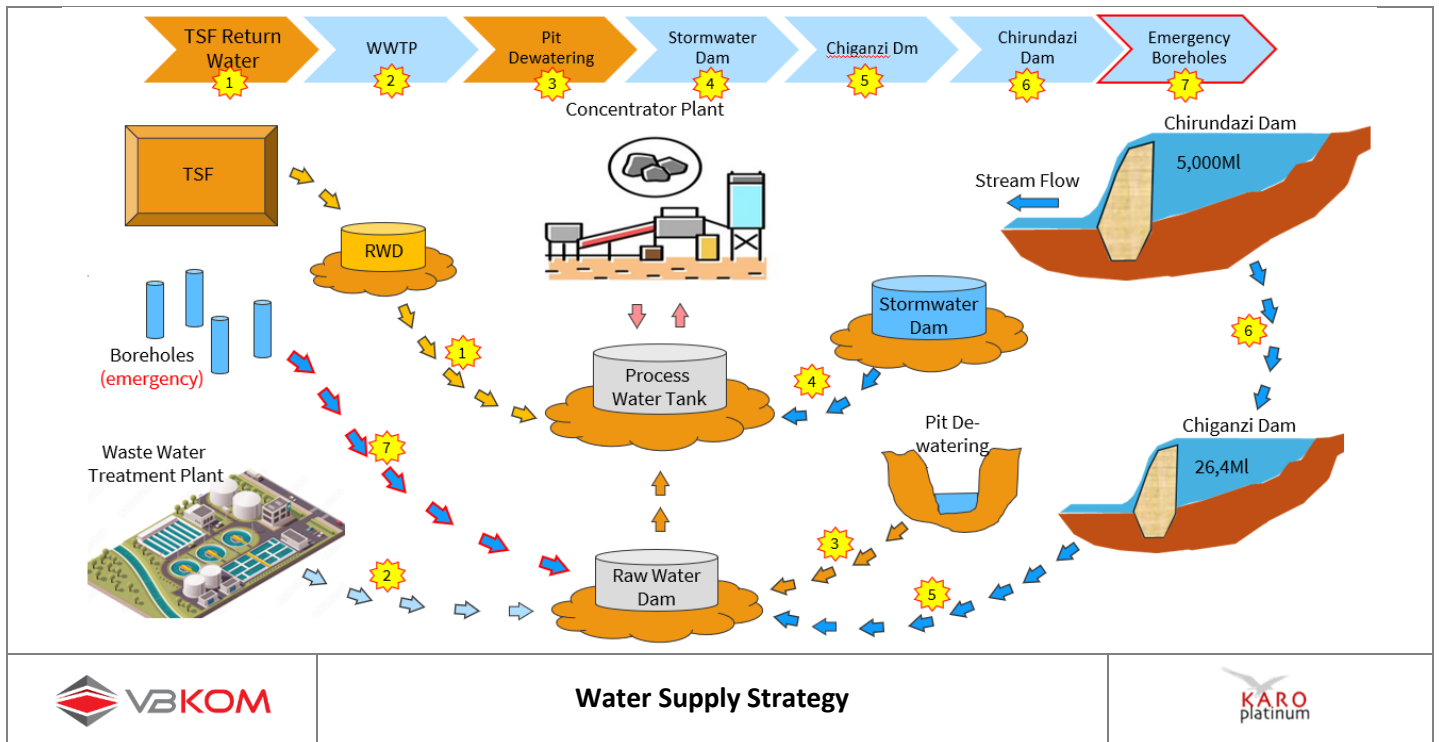


Figure 8-38: Water supply strategy.

The nominal raw water demand for the 220 ktpm plant is 173 m<sup>3</sup>/h. Table 8-32 is a summary of the expected raw water supply as calculated by OMI Solutions (OMI). The table reflects a Phase 1, being commission and ramp-up water supply of 158 m<sup>3</sup>/h, and a Phase 2 strategy, being steady-state water supply of 258 m<sup>3</sup>/h. The maximum plant demand is 223 m<sup>3</sup>/h with a minimum expected supply (excluding the boreholes, Teith Dam, and the Zinka Shaft) of 254 m<sup>3</sup>/h. Based on this, there is sufficient supply predicted for the plant with the execution of Phase 2 which must be timeous to allow for sufficient supply for plant operations.

Table 8-32: Karo Platinum Mine water supply sources (OMI, 2024).

Area	Phase 1 (m <sup>3</sup> /a)	Phase 2 (m <sup>3</sup> /a)
Return water, raw water and stormwater dams	52,560	52,560
Zinca Shaft	271,560	0
Chiganze Dam	490,560	105,120
Chirundazi Dam	0	2,102,400
Boreholes	569,400	0
Total	1,384,080	2,260,080

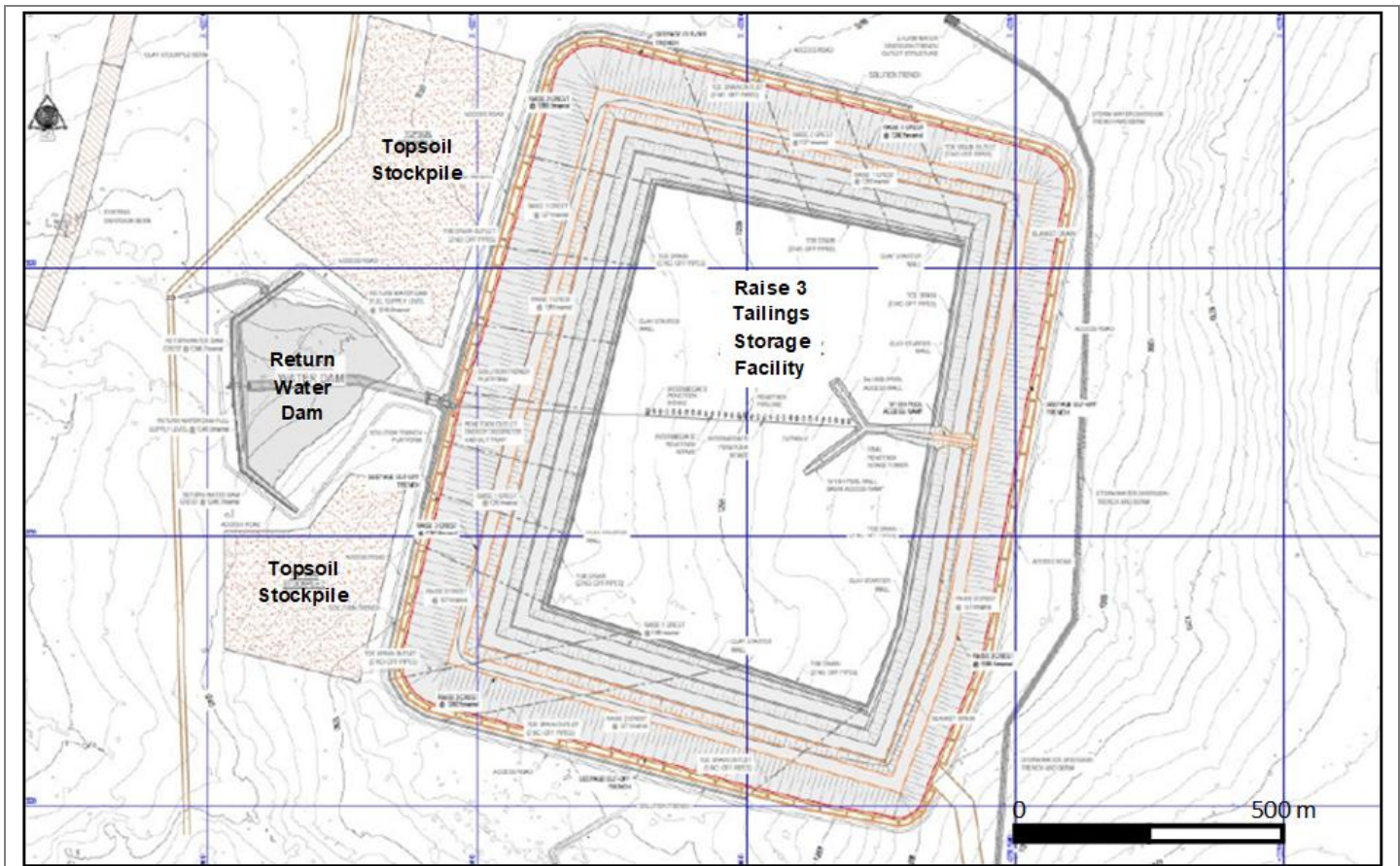
The construction of the Chirundazi Dam has been approved and Karo Platinum has started the tendering process for construction.

### 8.6.3 Tailings Storage Facility

A study for a 205 ktpm TSF was conducted by Epoch Resources (refer to Chapter 10 of the BFS study report). The overall layout of the TSF is shown in Figure 8-39, and Table 8-33 summarises the key layout parameters of the TSF.

The tailings material classifies as a green waste in accordance with SI 6. A risk-based approach to waste management indicated that the installation of a class D liner (rip and recompact the top 300 mm of clay) in areas where the in-situ soil permeabilities were greater than  $1 \times 10^{-10}$  m/s, would provide a suitable contaminant barrier, significantly reducing the extent of contaminant plume originating from the TSF.

VBKOM noted that the TSF footprint overlaps with a wetland area identified in the wetland specialist study as part of the ESIA. It is understood that since the Epoch Resources study work, revised TSF studies incorporating the wetland and environmental aspects has been undertaken, but at the effective date of the report, has not yet been completed and published. It is anticipated that this later study should identify all requirements relating to the lining seepage, and spillage prevention.



Source: Epoch Report210/001



Figure 8-39: TSF layout.

Table 8-33: TSF design parameters (ref: Epoch Report210/001).

Item	TSF Parameter Description	Unit	Parameter
1	Total Footprint Area of TSF	ha	111.5
2	TSF Raise 1 Wall Elevation	mamsl	1,261
3	TSF Raise 1 Wall Elevation	mamsl	1,271
4	TSF Raise 3 Wall elevation	mamsl	1,280.5
5	Final Tailings elevation	mamsl	1,279.5
6	Maximum Height of TSF wall	m	34
7	Upstream Side Slopes		1V:2H
8	Downstream Side Slopes		1V:3H
9	Time period for Tailings to reach Raise 1 Capacity	months	18
10	Time period for Tailings to reach Raise 2 Capacity	months	66
11	Time Period for Tailings to reach Design Capacity	months	124

#### 8.6.4 Accommodation Camp

The permanent accommodation camp will be constructed in a phased approach. Phase 1 will house 200 people, while phase 2 will accommodate a further 98 people. Details of the two phases are given below:

##### Phase 1:

- Laundry;
- Kitchen;
- Recreational area;
- 3x Executive management units (housing 6 executives);
- 16x Mid-management units (housing 32 mid-management personnel);
- 2x General accommodation units (housing 160 general workers);
- Wastewater treatment plant;
- Camp office;
- Generator house;
- Workshops/work areas; and
- 4x Ablution facilities (1 female and 3 male).

##### Phase 2:

- 5x Executive management units (housing 10 executives);
- 4x Mid-management units (housing 8 mid-management personnel);
- 1x General accommodation units (housing 80 general workers); and
- 2x General ablution facilities (2 male)
- Gym

The camp layout allows for future expansion that can provide additional accommodation for 240 general workers.

All infrastructure for which provision has been made is within the boundaries of the Karo Concession ML41.

## 8.7 Environmental and Social

### S4.3(v)

#### 8.7.1 Legal and Permitting

##### S5.5(i)(ii)

Karo Platinum holds all permits and licences as described in Chapter 2.3 of this CPR. The Company is licenced to commence open-pit operations at KPSE only, currently, with an addendum in process for the inclusion of the additional mining areas. Several operational permits need to be obtained in order to undertake lateral operational activities. There is a reasonable basis to believe that all outstanding permits required for the Project will be obtained.

Karo Platinum has addressed the host country's legal compliance requirements, including licencing and environmental and social aspects. All ESIA's were developed to meet Zimbabwean legal requirements, as set out in the EMA Act. As per the EMA Act first schedule, developers are required to first submit an environmental prospectus providing an overview of the Project, its location, and the scope of work for the ESIA to the EMA for approval. Once the Prospectus has been approved, suitably qualified specialists are appointed to assess the baseline situation, assess the Project's impacts, both negative and positive, and develop a comprehensive Environmental and Social Management Plan (ESMP) for submission to EMA. Once EMA has reviewed the documentation to its satisfaction, an ESIA Certificate is issued, with renewal subject to a progress review.

The Company subscribes to the IFC Performance Standards and the Equator Principles. To enhance alignment with these standards and principles, an Environmental and Social Action Plan, complementing the Project ESMP, has been developed. The status of each action item is periodically reviewed and updated by an external specialist. To meet the latest requirements under the fourth iteration of the Equator Principles, the following further studies have been commissioned:

- Human Rights Assessment, to identify the most salient human rights issues for the Project and develop a suitable management strategy.
- Climate Change Risk Assessment, considering both the Project's exposure to and potential contribution to climate change.

The information presented in the sections below is sourced from Chapter 12 of the Karo BFS, authored by Tharisa Environmental Manager, drawing from ESIA studies completed by Black Crystal Environmental Consultants and Digby Wells.

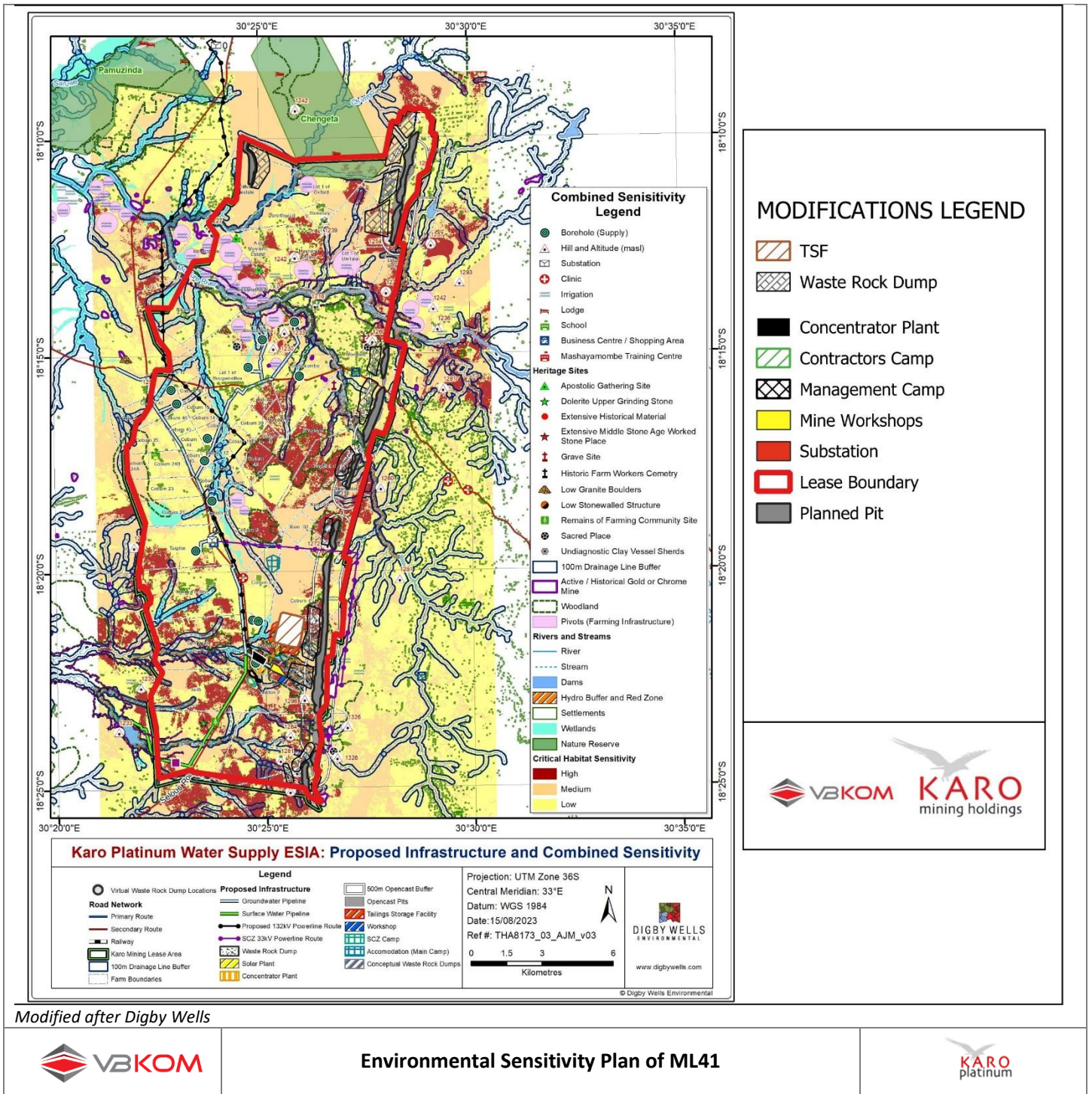
## 8.7.2 Environmental Studies

### S5.5(iii)

The specialist studies on baseline conditions for the following have been undertaken in support of the EIAs:

- Surface water
- Groundwater
- Wetlands
- Soil
- Ecology (fauna, flora, aquatics)
- Climate change

A sensitivity map of the Mining Lease Area was created in August 2023 by Digby Wells. This is presented in Figure 8-40. VBKOM has overlain the new layouts as the original sensitivity plan files were not available.



Modified after Digby Wells

Figure 8-40: Environmental sensitivity plan of ML41.

General infrastructure construction will take place in already disturbed areas. At KPSE, areas of high biodiversity sensitivity are intersected. Wetland areas are also intersected, but these areas are assessed in the corresponding Digby Wells specialist study as being largely critically modified due to the impacts of agricultural and artisanal mining activities locally. Footprints of the TSF and some WRDs, however, will be located directly within the extent of wetlands, which will result in a direct loss thereof. This requires the TSF and WRDs to be adequately lined and adequate water and waste management systems implemented to avoid contamination of water into the vadose zone and avoid further wetland deterioration.

All environmental risks have been identified and analysed by the Company and environmental consultants, and comprehensive mitigation measures have been developed. Additional significant risks associated with the Project include the following:

- Construction and pilot plant activities that may result in the destruction of fauna resources;
- Contamination of groundwater resources from construction activities and pilot mining;
- Pollution of surface water resources from construction activities and pilot mining;
- Siltation of surface water from construction activities and pilot mining; and
- Loss of soil resources and land capability through contamination and physical disturbance from construction activities and pilot mining.

There are no biophysical environmental factors identified and not accounted for that can have a material effect on the likelihood of RPEEE. Continued adherence to the EMAct regulations and EMA audit outcomes is required.

### 8.7.3 Social or Community Impact

#### S5.5(iii)(iv)(v)

Zimbabwe does not have any legislated social management programmes. Meaningful stakeholder engagement processes have been followed in the compilation of all ESIA's and incorporated into social impact assessments. A Stakeholder Engagement Plan has been developed by Digby Wells and adopted by the Company.

A number of PAPs are directly affected by the intended project, through their occupation of various critical land portions as described in Chapter 2.3.3. To this end, the Company has dedicated intensive planning for active engagements and resettlement planning. To date, no major threats or hindrances have been associated with this. Through timeous and continued proactive methodologies employed by Karo Platinum to effect successful resettlement, no material effects on the likelihood of RPEEE are identified. Allowance is made for USD22.6 million over the LOM for effecting Resettlement Action Plans (RAPs), as reflected in Table 8-36. The table is sourced from the financial model, although it is unclear what this allocation specifically entails and what proportion of the additional value is allocated to additional RAP-related activities.

*The following paragraphs are sourced from the BFS documentation.*

All resettlement operations undertaken by Karo are planned and managed in line with the requirements of IFC Performance Standard and the most recent guidance released by IFC. To this end, a Resettlement Framework was developed as part of the Mining and Processing ESIA, setting out the key principles and objectives that will be sought for all resettlement operations. Specific RAPs are then due to be developed, for each resettlement operation in turn.

To date, two resettlement operations are underway at Karo, at varying stages of advancement:

- In the southernmost portion of KPSE, a group of households had been identified for resettlement. To this end, a Resettlement Working Group was established, an entitlement framework developed, an asset survey undertaken, and designs commissioned for replacement housing. The Ministry of Lands also identified a potential host site, the suitability of which has been assessed by a team of experts. The process has, however, been slowed to match the Project's revised timeline. Project Affected Households were informed of the hiatus and released from all constraints in terms of development. Close contacts have been maintained throughout

and will continue to be maintained. KPSE resettlement is currently on hold, with affected farmers continuously updated on study progress. In addition, Karo Platinum has lifted all restrictions emplaced through the agreements, such that the PAPs may continue normal activities on the land.

- In the inundation area of Chirundazi Dam, up to six households may need to be resettled. Some initial engagement has already been undertaken, with the relevant village communities as well as with each household, individually. A formal process will now be entered into, as a Resettlement Action Plan study has been commissioned, with delivery scheduled in November 2024. In this case, it appears replacement land will be released nearby by the local authorities, thereby ensuring these six households are able to maintain their social and support networks. Implementation is due to begin in 2025.

In both cases, a livelihood restoration plan will also need to be developed:

- In KPSE, several alternatives have already been identified to enhance the PAPs' living standards through improved farming techniques, diversification, and the development of food transformation activities. Some of these options have already been discussed with the PAPs and will need to be firmed up when discussions resume regarding this particular operation.
- In the dam area, the livelihood restoration plan will benefit not only the six households mentioned above but also the owners of the ±100 small vegetable gardens identified to date on the edges of the basin formed by the existing weir. The team in charge of developing the RAP will be tasked with developing the plan.

In both cases, it is assumed that the implementation of the Livelihood Restoration Plan will take up to 36 months, with diminishing support provided year after year.

#### **8.7.4 Environmental Monitoring Plan**

To further support implementation and provide Karo Platinum with a robust tool to identify and address any uncontrolled impact on the host environment and communities, a consolidated monitoring plan has been developed and implemented to capture all the environmental monitoring requirements set out in the ESIA's, including:

- Surface water
- Potable water
- Groundwater
- Biodiversity
- Aquatic ecology
- Air quality
- Exhaust / stock fume gas emissions
- Noise
- Green House Gas monitoring
- Blasting

In each case, the plan provides an overview of the applicable standards, the location of each sampling point, the scope of each analysis, and the frequency with which samples must be taken and reports produced.

The majority of monitoring activities are carried out quarterly. No critical failures have been identified to date. Where allowances are exceeded or other negative impacts are flagged, adequate corrective action plans are reviewed and implemented to ensure that all negative impacts are monitored and mitigated. These practices will continue with further activity development and operations.

### 8.7.5 Mine Closure

In 2022, SLR developed a preliminary closure plan for Karo with cognisance of Zimbabwean policies and legal frameworks, the IFC Performance Standards, and the Equator Principles.

The following preliminary mine closure plan objectives are described by SLR:

- Environmental damage is minimised to the extent that they are acceptable to all parties involved;
- The land is rehabilitated to achieve a condition approximating its natural state (as far as practicable), or so that the envisaged post-closure land use / land capability (namely, wilderness and agriculture/cultivation) is achieved;
- The remaining open pits would not be backfilled and will remain open (the pit side walls and highwalls will only be 'made safe' for people, domestic animals, and wildlife);
- Inert building rubble from the decommissioning activities can also be buried within the open pit voids, WRDs and/or TSF (subject to approval from the relevant authorities);
- All surface infrastructure, excluding the TSF, WRDs, and any other surface infrastructure that will support the envisaged post-closure end use, will be removed from site following mine closure;
- Contamination beyond the mine site by wind, surface run-off or groundwater movement will be prevented through appropriate erosion-resistant covers, containment facilities (i.e. stormwater ponds) and drainage controls;
- Mine closure is achieved efficiently, cost-effectively, and in compliance with the governing laws; and
- The social and economic impacts resulting from mine closure are managed in such a way that negative socio-economic impacts are minimised.

Although the pits and WRDs footprints have changed since the plan was developed, the closure objectives remain valid.

## 8.8 Market Studies and Contracts

**S4.3(vi), 5.6(i)(ii), T1.18**

### 8.8.1 Introduction

PGMs comprise six precious metals – platinum (Pt), palladium (Pd), rhodium (Rh), ruthenium (Ru), iridium (Ir), and osmium (Os). These elements tend to occur together in the same mineral deposits and are highly valued for their chemical stability, catalytic properties, and scarcity, making them essential in various industries including automotive, chemical, jewellery, and emerging green technologies. While gold is not a PGM, companies often report grades and prices and refer to “4E” or “3E+ gold”, namely platinum, palladium, rhodium and gold.

Platinum is highly resistant to wear and tarnish, making it well-suited for jewellery. Platinum is also used extensively in the automotive industry in the manufacture of catalysts. Palladium is used in the automotive industry in the manufacture of catalysts as well as in electronics, dental, and as a chemical reagent. Rhodium is used in the automotive industry to reduce harmful pollutants from vehicle exhaust fumes. Over the last few years, even with a steady supply, rhodium demand has increased, exceeding supply due to stricter emission regulations and advancements in the automobile industry.

## 8.8.2 Historical Market Performance

### 8.8.2.1 Price Trends

Historically, platinum has been the cornerstone of the PGM market; however, palladium's price surged past platinum in 2018 due to increased demand for catalytic converters for gasoline engines (World Platinum Investment Council, 2023). Rhodium prices have experienced extreme volatility, peaking above USD29,000/oz in 2021, driven by tight supply and robust industrial demand, before dropping to USD4,000/oz in 2023 (Johnson Matthey, 2023).

Recently, the COVID-19-related lockdowns implemented in South Africa, where mining companies had to close for several weeks, resulted in prices peaking during 2020 and 2021.

#### 8.8.2.1.1 Platinum Pricing

Platinum prices have historically been volatile, peaking at USD2,273/oz in 2008 due to strong industrial and investment demand, before declining sharply during the global financial crisis (World Bank Commodity Markets Outlook, 2024). Prices stabilized around USD900–1,000/oz in recent years. Key factors influencing this decline include:

- **Substitution by Palladium:** Palladium's cost-efficiency in gasoline catalytic converters has led to its widespread adoption, particularly in markets transitioning from diesel to gasoline vehicles (World Platinum Investment Council, 2023).
- **Weak Jewellery Demand:** Platinum jewellery demand in Western markets has declined, although moderate growth persists in China and India due to cultural preferences and marketing efforts by industry groups (Johnson Matthey, 2023).
- **Investment Sentiment:** Platinum has struggled to compete with gold and palladium as a preferred investment asset, partly due to lower liquidity in platinum-based Exchange-traded funds (ETFs) (World Bank, 2024).

#### 8.8.2.1.2 Palladium Pricing

Palladium prices have surged in recent years, peaking at over USD3,000/oz in 2021 before stabilizing between USD1,200 and USD1,300/oz in 2024 (Metals Focus, 2024). Factors driving palladium's price performance include:

- **Strong Automotive Demand:** Palladium's critical role in catalytic converters for gasoline engines has driven consistent demand growth, particularly as countries enforce stricter emission standards (International Platinum Group Metals Association, 2024) and as palladium becomes a substitute for platinum.
- **Supply Constraints:** Russia and South Africa dominate palladium production, accounting for over 75% of global supply. Geopolitical tensions, particularly sanctions on Russian exports, have added uncertainty to supply chains (S&P Global, 2024).
- **Supply Deficits:** Persistent supply-demand imbalances have characterized the palladium market for over a decade, exacerbating price volatility (Johnson Matthey, 2023).

### 8.8.2.1.3 Rhodium Pricing

Rhodium, the rarest and most expensive PGM, has exhibited extreme price fluctuations. Prices reached a record high of USD29,200/oz in March 2021 before declining to approximately USD4,200/oz by January 2025 (Metals Focus, 2024). Factors driving rhodium's price include:

- **Critical Role in Emission Control:** Rhodium's unmatched ability to reduce nitrogen oxide emissions in catalytic converters ensures robust demand, particularly from the automotive sector (World Platinum Investment Council, 2023).
- **Limited Supply:** Rhodium is primarily a by-product of platinum and palladium mining, making its availability highly dependent on primary PGM production (Anglo American Platinum Annual Report, 2023).
- **Volatility Drivers:** The niche market size, combined with speculative activity and low liquidity, significantly amplifies rhodium price movements (Johnson Matthey, 2023).

## 8.8.2.2 Historical Context and Trends

### 8.8.2.2.1 Economic Cycles

Two events in recent history that had a significant impact on the world economy are the 2008 Financial Crisis and the COVID-19 pandemic.

- **2008 Financial Crisis:** Platinum prices collapsed from over USD2,000/oz to USD800/oz as industrial activity declined, but recovered as global economies stabilised (World Bank, 2024).
- **COVID-19 Pandemic:** The pandemic initially caused a sharp drop in PGM prices due to reduced automotive and industrial demand. However, prices rebounded strongly in 2021, supported by supply disruptions and pent-up demand (International Platinum Group Metals Association, 2024).

### 8.8.2.2.2 Technological Changes

The shift from diesel to gasoline engines, driven by stricter emission regulations, has increased palladium and rhodium demand while reducing platinum consumption in the automotive sector (S&P Global, 2024).

Emerging technologies, such as hydrogen fuel cells, could restore platinum's dominance if adoption accelerates in the coming years (Hydrogen Council, 2023).

### 8.8.2.2.3 Investment Behaviour

ETFs have played a significant role in driving speculative activity, particularly for platinum. Investment inflows tend to amplify price volatility during periods of economic uncertainty (World Bank Commodity Markets Outlook, 2024).

### 8.8.2.2.4 Inter-Metal Dynamics

The pricing relationships between PGMs are shaped by their overlapping industrial applications:

- **Platinum vs Palladium:** Historically, platinum commanded a price premium over palladium. However, palladium prices surpassed platinum in 2018 due to surging demand for gasoline catalytic converters. This trend is likely to persist unless hydrogen fuel cell technologies significantly boost platinum demand (World Platinum Investment Council, 2023).
- **Rhodium's Unique Role:** While rhodium is closely tied to palladium in catalytic converter applications, its niche demand and limited supply result in higher price volatility compared to other PGMs (Metals Focus, 2024).

### 8.8.3 Supply Dynamics

The supply of PGMs is geographically concentrated, with South Africa and Russia being the dominant producers. South Africa accounts for approximately 70% of global platinum production and a significant share of palladium and rhodium, while Russia contributes around 40% of global palladium supply (Minerals Council South Africa, 2023; Johnson Matthey, 2023).

#### 8.8.3.1 South Africa

South Africa's production is heavily influenced by the geological complexity of the Bushveld Complex, which hosts the majority of the country's PGM reserves. Operational challenges include:

- **Power Supply Issues:** Persistent energy shortages due to loadshedding by local electricity supplier, Eskom, have disrupted mining activities.
- **Aging Infrastructure:** Many mines in South Africa are mature and require increasing capital investments to maintain output levels.
- **Labor Relations:** Strikes and wage disputes remain a recurrent issue, causing intermittent production disruptions.

Despite these challenges, the country remains the largest source of PGMs, underpinned by its extensive resource base and ongoing investments in mine modernisation.

#### 8.8.3.2 Russia

Russia's PGM supply is dominated by Norilsk Nickel, which extracts palladium and platinum as by-products of its nickel and copper mining operations. The country's production is highly centralised and has been impacted by:

- **Geopolitical Risks:** Sanctions related to the Russia-Ukraine conflict have created uncertainty in supply chains, although exports have largely continued through alternate routes.
- **Environmental Pressures:** Increasing scrutiny over the environmental practices of Russian mining companies could impose additional regulatory costs.

#### 8.8.3.3 Secondary Supply

Recycling plays a vital role in augmenting global PGM supply. Advances in recycling technology have improved recovery rates from spent catalytic converters, which now contribute around 30% of palladium and rhodium supply and 20% of platinum supply (Johnson Matthey, 2023). However, the supply from recycling is highly price-sensitive and fluctuates with metal prices and scrap availability.

#### 8.8.3.4 Other Producers

Other notable PGM producers include Zimbabwe and Canada. Zimbabwe has been increasing its share of global platinum output, supported by policy incentives and investments in new projects. Canada's PGM production is primarily as a by-product of nickel and copper mining, with consistent but relatively small contributions to the global supply.

#### 8.8.3.5 Future Supply Challenges

The global PGM supply faces significant headwinds:

- Mineral Resource Depletion: High-grade ore in many mines, especially in South Africa, is becoming exhausted, necessitating deeper mining and resulting in higher operational costs.
- Capital Constraints: Limited investment in new exploration and development projects may restrict future supply growth.
- Geopolitical and Operational Risks: Events including geopolitical tension and labour strikes have the potential to significantly disrupt supply from key regions.

These dynamics underline the importance of diversifying sources and enhancing recycling efforts to meet growing demand sustainably.

#### **8.8.4 Demand Evolution**

The automotive sector has historically been the primary consumer of PGMs, particularly palladium and rhodium, due to their critical role in reducing vehicle emissions. The adoption of stricter emission standards worldwide continues to drive demand, particularly in regions such as China and the European Union (International Platinum Group Metals Association, 2024).

##### **8.8.4.1 Future Demand Challenges**

Demand is likely to be impacted as Electric Vehicles gain popularity as these vehicles don't require catalytic converters. The demand for platinum and palladium from the automotive sector is anticipated to decrease, further exacerbated by the rise of battery electric vehicles which do not use these metals at all. However, demand for platinum in hydrogen-fuelled vehicles is likely to offset the decline in automotive demand for platinum for catalytic converters.

#### **8.8.5 Current Market Conditions**

##### **8.8.5.1 Supply Analysis**

Global primary PGM production is estimated at approximately 5.7 million ounces for platinum and 6.4 million ounces for palladium in 2023 (Minerals Council South Africa, 2023). Secondary supply from recycling contributes significantly, accounting for nearly 30% of total palladium and rhodium supply (Johnson Matthey, 2023).

##### **8.8.5.2 Demand Analysis**

Demand for PGMs is primarily driven by:

- Automotive Sector: The shift towards hybrid and gasoline vehicles has bolstered demand for palladium and rhodium, with palladium usage in catalytic converters expected to grow by 2% annually (World Platinum Investment Council, 2024).
- Green Energy Transition: Platinum's role in hydrogen fuel cells and electrolyzers has gained traction, supported by decarbonization initiatives in regions such as the European Union (EU) and Japan (Hydrogen Council, 2023).
- Industrial and Jewellery Applications: Industrial demand for PGMs in the chemical and electronics sectors remains stable, while jewellery demand is recovering, particularly in China and India (WPIC, 2024).

##### **8.8.5.3 Pricing Trends**

As of January 2025, platinum is trading at approximately USD950/oz, palladium at USD1,250/oz, and rhodium at USD4,200/oz. These prices reflect supply-side constraints and steady industrial demand (Metals Focus, 2025).

## 8.8.6 Future Market Outlook

### 8.8.6.1 Key Growth Drivers

Key drivers of increased demand for PGMs are:

- **Hydrogen Economy:** The adoption of hydrogen-based technologies could increase platinum demand by 10–15% annually by 2030 (International Energy Agency, 2024).
- **Emission Standards:** Stricter regulations, such as Euro 7 standards in the EU, will sustain demand for palladium and rhodium in automotive applications (European Commission, 2024).
- **Emerging Markets:** Urbanisation in Asia and Africa will drive industrial applications of PGMs (Fitch Solutions, 2024).

### 8.8.6.2 Supply Challenges

Operational inefficiencies and ageing mines in South Africa, coupled with geopolitical risks in Russia, pose ongoing supply constraints. Recycling is expected to grow but may not fully offset primary supply limitations (Johnson Matthey, 2023).

### 8.8.6.3 Price Forecasts

Forecasts suggest modest price increases for platinum and palladium, with rhodium likely remaining volatile. Platinum is projected to average USD1,100/oz by 2027, driven by its increasing role in hydrogen energy applications (World Bank Commodity Markets Outlook, 2024).

## 8.8.7 Risk Analysis

Key Risks to consider that could have a negative impact on the prices of PGMs are:

- **Geopolitical Risks:** Disruptions in South African and Russian production due to political instability remain a significant risk (S&P Global, 2024).
- **Economic Factors:** A global recession could dampen industrial and automotive demand, pressuring prices (World Economic Forum, 2024).
- **Technological Substitution:** Research into alternative materials for catalytic converters or green energy technologies could reduce PGM dependency (MIT Technology Review, 2024).

## 8.8.8 Conclusion

The PGM market remains robust, with strong demand drivers in the automotive and green energy sectors. However, supply-side constraints and price volatility underscore the need for strategic resource planning.

## 8.8.9 Contracts

The targeted product is a PGM concentrate that will be sold to a refinery at gate for further beneficiation. Indicative offtake terms have been provided to Karo Platinum by Northam Platinum Limited (Northam) for delivery of a flotation concentrate to their facility in Rustenburg, South Africa, as of July 2023. The terms provide for 20 ktpa dry metric tonnes (DMTs) delivered in the first year and 70 ktpa DMTs for the following two years at an 81–100 g/t 4E grade.

The indicative terms consider payabilities of 85% for platinum and palladium, 83% for rhodium, 84% for gold, 60% for ruthenium and iridium, 70% for nickel, and 73% for copper. Penalties for chrome content are presented as follows:

- > 2.25–3: 1%

- > 3.1–3.3: 2%
- > 3.4–4.0: 4%
- > 4.1–5.0: 5% and Discussion
- > 5.0: Reject

Pricing is presented as follows:

- Pt, Pd, and Au: Daily London Bullion Market Association Morning auction price, as averaged over the pricing period
- Rh, Ru, and Ir: New York Dealer Bid Price, as averaged over the pricing period
- Ni and Cu: London Metal Exchange Cash buyer price averaged over the pricing period

The offtake agreement has not, at the date of this CPR, been finalised.

## 8.9 Taxation

### S5.6(vii)

The following taxes and fees are incurred by the project:

- **Corporate Tax Rate – Incentive Period:** A corporate tax rate is applied as per the Mining Development Agreement (MDA) incentives provided by the Government of Zimbabwe. The corporate tax rate is applied in three phases, as follows:
  - Phase 1: Tax rate of 0% for the first 60 months, from August 2026 to July 2031
  - Phase 2: Tax rate of 15.45% for the next 60 months, from July 2031 to July 2036
  - Phase 3: Tax rate of 25.75% thereafter, from July 2036 onwards
- **MMCZ Fee:** The Minerals Marketing Corporation of Zimbabwe (MMCZ) charges a fee of 0.9% on Revenue.
- **Export Tax:** No export tax is charged on Revenue, i.e. 0% is applied. This is assumed to be included in the MDA Incentives provided by the Zimbabwean Government.
- **Inspection Fee – Mining Lease:** An inspection fee of USD30 per hectare is applied to the mining lease area.
- **Export License:** An export license fee of USD9,375 per quarter is applied.
- **IMTT Fee:** An Intermediated Money Transfer Tax (IMTT) fee of 2% is applied to operating expenditure with a cap of USD10,150 for transactions exceeding USD500,000.

A summary of all Statutory Costs is shown in Table 8-34.

Table 8-34: Statutory costs.

Item	Total (USD)	%
IMTT Cost	12,400,812	8.9
MMCZ Fee Payable	24,070,651	17.3
Export Tax Payable	-	0.0
Royalty - Total (incl. Base Metals)	91,751,105	66.1
Inspection Fee - Mining Lease	10,039,260	7.2
Export Licence	506,250	0.4
<b>Statutory Cost   Total</b>	<b>138,768,078</b>	<b>100</b>

## 8.10 Capital and Operating Costs

### S5.6(vi)(ix)

#### 8.10.1 Pre-Production Capital

The peak financing requirement is USD512.9 million, which is the maximum cumulative pre-financing cash flows from July 2022 to October 2026, when the monthly net cash flow turns positive. Pre-production capital amounts to USD475,163,714 and includes escalation (4.4% of total capital expenditure (CAPEX)) and contingency (0.1% of CAPEX). The largest pre-production capital item is Mining and Mining Infrastructure (30.7% of total CAPEX) and the second largest is Site Wide Infrastructure (16.7%).

Historical CAPEX, before 30 September 2024, is not included in the project NPV calculation and this amounts to USD137,110,30. Therefore, the remaining CAPEX to be spent after 30 September 2024 is included in the NPV calculation and amounts to **USD338,053,413**.

Table 8-35 shows the breakdown of the pre-production capital item summary.

Table 8-35: Pre-production capital.

Item	Historical CAPEX (USD)	Remaining CAPEX (USD)	Total CAPEX (USD)
Mining Costs - Capitalised to Balance Sheet	-	58,206,711	58,206,711
Mining & Mining Infrastructure	44,093,472	101,759,266	145,852,739
Site-Wide Infrastructure	20,165,507	59,136,275	79,301,782
Concentrator & Concentrator Infrastructure	4,570,538	6,786,695	11,357,233
Project Indirects	5,417,616	-	5,417,616
Environmental & Land Acquisition	14,336,152	23,028,526	37,364,678
Insurances & Legal	2,729,820	2,257,868	4,987,688
Other	34,501,730	40,579,205	75,080,935
Owners	9,860,629	3,017,568	12,878,197
Financial Costs & Taxes	554,294	22,878,710	23,433,004
Escalation	336,997	20,402,590	20,739,586

Item	Historical CAPEX (USD)	Remaining CAPEX (USD)	Total CAPEX (USD)
Contingency on Project Cost	543,545	-	543,545
<b>Capital   Pre-Prod. – Total</b>	<b>137,110,300</b>	<b>338,053,414</b>	<b>475,163,714</b>

### 8.10.2 Sustaining Capital

Sustaining capital is included during the operating life of the mine and amounts to a total of USD106,601,067 as shown in Table 8-36.

Table 8-36: Sustaining capital.

Item	Total (USD)	%
TSF	16,849,650	15.8
Resettlement Action Plan	22,600,000	21.2
Conveyor	-	0.0
In-Pit Crushing	1,712,211	1.6
Haul Roads	3,784,180	3.5
General SIB	41,983,599	39.4
Rehabilitation	19,671,428	18.5
Environmental & RAP	-	0.0
<b>Capital   Sustaining: Total</b>	<b>106,601,068</b>	<b>100</b>

To highlight the largest sustaining capital item, General stay-in-business (SIB) of USD41,983,599, an allowance is made as a percentage of the cumulative pre-production capital spend. This is shown in Table 8-37.

Table 8-37: General SIB capital.

Item	% of CAPEX as SIB	Total (USD)
Mining Costs - Capitalised to Balance Sheet	0.5	2,792,279
Bulk Infrastructure	1.3	17,971,992
Civils and Earthworks	0.9	6,979,202
Camp & Office	1.5	1,653,380
Technical Services	1.1	559,163
Process Plant	1.8	6,552,122
Tailings	1.5	716,980
Project Services	0.6	4,548,012
Owners Team	0.2	210,470
		<b>41,983,600</b>

### 8.10.3 Operating Costs

#### 8.10.3.1 Total

Total Opex amounts to USD1,716,999,910 (Table 8-38) and includes inventory (ore mined during pre-production) capitalised and added back.

Table 8-38: Operating costs.

Item	Total (USD)	%
Mining	1,129,903,424	65.8
Plant	382,188,763	22.3
Logistics	35,910,990	2.1
General & Administration (G&A)	168,911,647	9.8
<b>Total Operating Costs</b>	<b>1,716,914,825</b>	
Pre-Production Capitalisations - Inventory (Ore Mined)	(85,085)	0.0
<b>Total Operating Costs Add Back Capitalised Inventory Pre-Prod</b>	<b>1,716,999,910</b>	<b>100</b>

#### 8.10.3.2 Mining

Mining Opex makes up 65.8% of total operating costs and amounts to USD1,129,903,424 over the LOM period, as shown in Table 8-39. A contractor is used to remove topsoil, drill, blast, load, and haul material.

Table 8-39: Mining Opex.

Item	Total (USD)	%
Preliminary and General (P&G)	140,028,443	12.4
Bush Clearing	936,662	0.1
Topsoil	12,392,964	1.1
Soft Waste	82,451,434	7.3
Hard Waste	620,913,864	55.0
Selective Waste	62,997,018	5.6
Reef	165,167,533	14.6
Technical Services	45,015,506	4.0
<b>Total Mining Opex</b>	<b>1,129,903,424</b>	<b>100</b>

#### 8.10.3.3 Plant

Plant Opex makes up 22.3% of total operating costs and amounts to USD382,188,763 over the LOM period, as shown in Table 8-40.

Table 8-40: Plant Opex.

Item	Total (USD)	%
Labour	20,503,350	5.4
Power	226,519,288	59.3

Item	Total (USD)	%
Water	1,554,981	0.4
Reagents	63,993,990	16.7
Consumables	32,912,932	8.6
Materials Handling	-	0.0
Maintenance	31,897,221	8.3
Laboratory	4,807,000	1.3
Labour Incentives	-	0.0
<b>Operating Costs - Plant   Total</b>	<b>382,188,762</b>	<b>100</b>

#### 8.10.3.4 Logistics

Logistics Opex consists of transport from Karo Platinum Mine to the Smelter in Rustenburg, South Africa, and makes up 2.1% of total operating costs. Transport logistics is applied as USD61.11 per tonne concentrate and amounts to USD35,910,990 over the LOM period.

#### 8.10.3.5 General & Administration (G&A)

General & Administration (G&A) Opex makes up 9.8% of total operating costs and amounts to USD168,911,647 over the LOM period, as shown in Table 8-41.

Table 8-41: G&A/overhead Opex.

Item	Total (USD)	%
Camp & Services Cost	13,156,000	7.8
Security Cost	8,625,000	5.1
Admin Cost	3,450,000	2.0
Environmental and Social (E&S) Cost	-	0.0
Health & Safety Cost	21,891,311	13.0
Legal Cost	4,600,000	2.7
Information Technology Cost	24,430,633	14.5
Insurance Cost	11,590,849	6.9
Finance Cost	3,439,354	2.0
Head Office Cost	-	0.0
Site Overhead Labour Cost	37,199,625	22.0
Corporate Support Labour Cost	40,528,875	24.0
Site Overhead Labour Cost - Incentive Scheme	-	0.0
Corporate Support Labour Cost - Incentive Scheme	-	0.0
<b>Operating Costs - G&amp;A   Total</b>	<b>168,911,647</b>	<b>100</b>

## 8.11 Economic Assessment

### S5.8(i)

It should be noted that this economic assessment has been completed only to support the estimation of Mineral Reserves and as such does not meet the criteria for a Mineral Asset Valuation as per the SAMVAL Code.

### 8.11.1 Economic Criteria

#### S5.6(iii, iv, vi)

The key economic criteria in the financial model include the following assumptions and parameters:

- **Present Value Date:** The financial model is based on a present value date of 30 September 2024.
- **Discount Rate:** A real discount rate after tax of 8% is applied when discounting future cash flows to the Present Value Date of 30 September 2024 and calculating the NPV.  
This discount rate modelled in the Karo financial model is much lower than the SAMVAL Valuation discount rate of 14.44% (see section 11.12.5) and poses a risk to the project economic assessment.
- **Historic Expenditure:** Historical cash flows and expenditure are excluded from the NPV calculation. Therefore, the financial model only considers cash flows from the Present Value Date onwards when determining the economic results.
- **Mine Plan:** The LOM plan used in the financial evaluation is *VBKOM Schedule 22.11.24. 3*. The economic assessment considers Revenue from material sold as a concentrate delivered to the smelting facility.  
Cobalt was not included in the Mine Optimisation Study, however the grades were reported out and therefore revenue is assigned to Cobalt in the financial assessment.
- **CAPEX Case:** The CAPEX case/scenario used in the financial evaluation is *June 2026 CAPEX End Date*.
- **SIB CAPEX Case:** The SIB CAPEX case/scenario used in the financial evaluation is *BFS CAPEX Case*.
- **Pricing Scenario:** The pricing for PGM and Base Metals was based on the Bloomberg Case.
- **Payabilities:** Payabilities for PGMs applied as Pt (85%); Pd (85%); Rh (83%); Au (84%); Ru (60%); Ir (60%). Payabilities for Base Metals applied as Cu (73%); Ni (70%); Co (70%).
- **Inflation:** No inflation has been applied in the financial model except for an escalation allowance (4.4%) included in the CAPEX estimate, therefore all other figures are in Real terms.
- **Plant Start Date and Capacity:** The plant is planned to start on 1 June 2026 with a steady state capacity of 220 ktpm.
- There are no known deleterious elements for which allowances have been made or penalties applicable.

### 8.11.2 Accuracy Range

The accuracy range was determined by MinValGroup as part of the SAMVAL Valuation. This accuracy range provides a level of confidence per cost type for Opex and CAPEX. Table 8-42 shows the breakdown of cost types and the level of confidence/accuracy range.

Table 8-42: Accuracy range.

Cost Item	Source	Confidence Level
<b>Opex</b>		
Drill and Blast Cost	From Company, Mining Tender Rate Comparison	-10% to +15%
Load and Haul	From Company, Mining Tender Rate Comparison	-10% to +15%
Mining Technical Services	From Company, Mining Tender Rate Comparison	-10% to +15%
Reagent Costs	From Company, Market Rates	-10% to +15%
Consumables	From Company, Market Rates	-10% to +15%
Maintenance	From Company, Estimates	-10% to +15%
Labour	From Company, Mining Tender Rate Comparison	-10% to +15%
Logistics	Benchmarked Rate	-10% to +15%
G&A	From Company, Estimates	-10% to +15%
Electricity Prices	Market Rate	-10% to +15%
Diesel Prices	Market Rate	-10% to +15%
<b>CAPEX</b>		
Development CAPEX	From Company, Design Studies	-10% to +15%
Stay in Business CAPEX	Benchmarked	-10% to +15%

### 8.11.3 Economic Analysis

#### S5.8(ii)(iii)(iv)

For the purpose of financial evaluation, Karo Platinum developed a Technical Financial Model, *250112 Detailed Technical Calculations - Rev CT (Output to VBKOM)*, that incorporates the mine plan outputs and results developed by VBKOM. This Technical Financial Model was then reviewed by VBKOM after being updated by Karo Platinum with the inputs and calculations. It should be noted that this economic assessment has been completed only to support the estimation of Mineral Reserves and as such does not meet the criteria for a Mineral Asset Valuation as per the SAMVAL Code.

#### 8.11.3.1 Key Economic Metrics

The project shows a positive NPV of USD83.3 million, at an 8% real discount rate post-tax, and an Internal Rate of Return (IRR) of 12.68%.

The peak financing requirement is USD512.9 million which is the maximum cumulative pre-financing cash flows from July 2022 to October 2026, when the monthly net cash flow turns positive, as shown in Table 8-43. This is also 26 months after the Present Value Date.

Table 8-43: Key economic metrics.

Item	Unit	Value
Peak Project Financing	USD	512,915,888
Project NPV (8% post-tax)	USD	83,310,490
Project IRR	%	12.68

### 8.11.3.2 Cash Flow Summary – Undiscounted, Not Time Adjusted

The undiscounted and non-time-adjusted cash flows includes historical cashflows before the Present Value Date and amounts to USD202,558,742. Table 8-44 shows the breakdown of revenue and expense items that form the basis for the cash flow total.

Table 8-44: Cash flow summary (undiscounted, not time-adjusted).

Item	<sup>1</sup> USD/ Product Ounces	Total (USD)
Revenue   PGM - Total	1,184.72	2,238,274,607
Revenue   Base Metals - Total	230.90	436,242,194
Operating Costs - Total   Total (Add back Inventory Capitalisations pre-prod)	(908.81)	(1,716,999,910)
Statutory Cost   Total	(73.45)	(138,768,079)
Capital   Pre-Prod. - Total	(251.50)	(475,163,714)
Capital   Sustaining : Total	(56.42)	(106,601,067)
Loan Receivable   ZETDC Loan - Repayments Received	4.23	8,000,000
Net Working Capital   Movement	0.00	0
Tax Expense   Tax Payable (Pre-Financing)	(22.46)	(42,425,289)
<b>Project Cash Flow (Pre-Financing)</b>	<b>107.21</b>	<b>202,558,742</b>

**Note:**

1. Total production PGM metal contained in concentrate (t/oz).

Figure 8-41 overleaf shows a waterfall graph of the cashflow summary in an undiscounted, not time-adjusted format. Therefore, it includes historical cash flows before the Present Value date and is a graphical representation of the figures shown in Table 8-44.

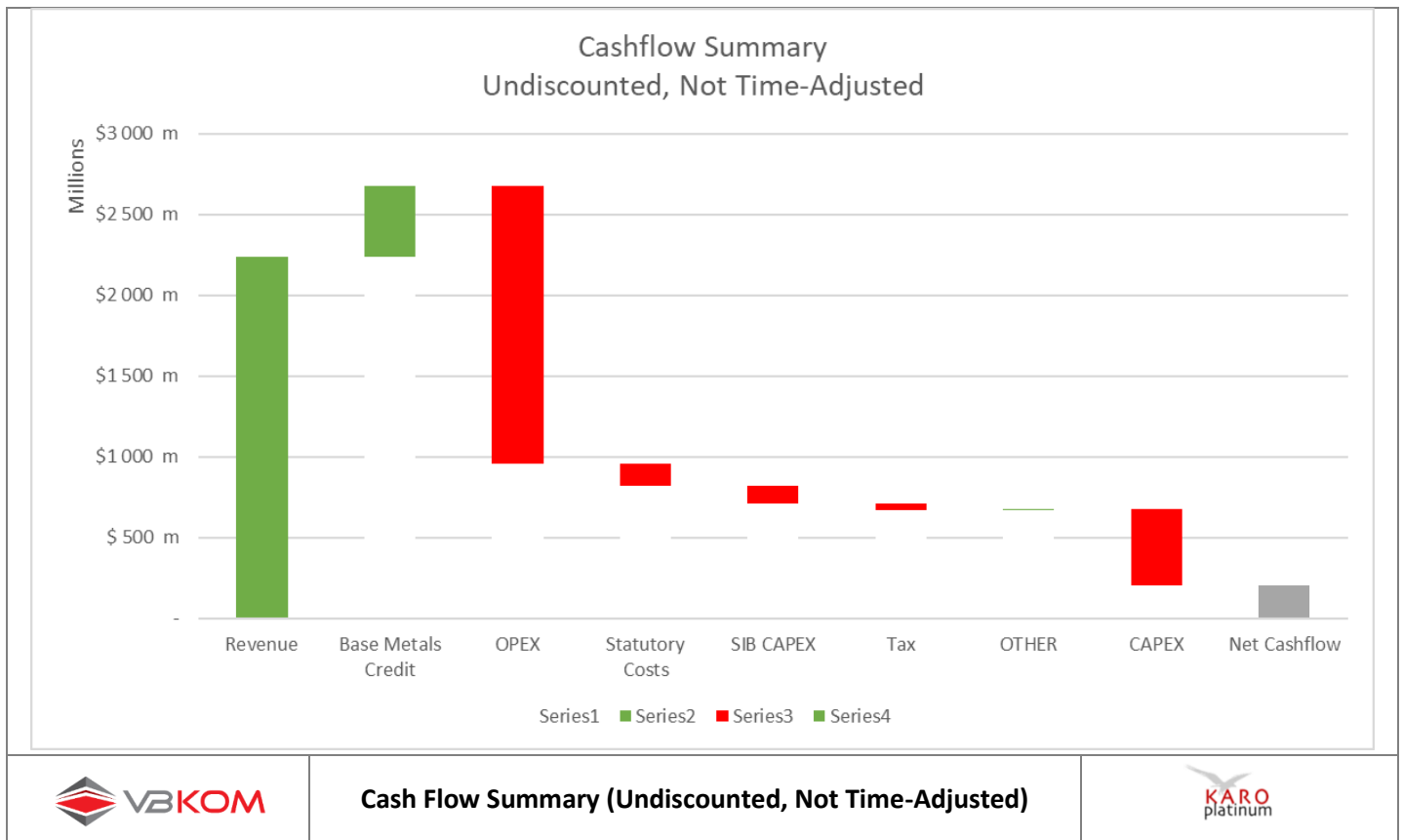


Figure 8-41: Cash flow summary (undiscounted, not time-adjusted).

### 8.11.3.3 Cash Flow Summary – Undiscounted, Time Adjusted

The undiscounted, time-adjusted cash flows from the Present Value Date of 30 September 2024 (excluding historical cash flows) amount to USD334,845,153. The breakdown is provided in Table 8-45.

Table 8-45: Cash flow summary (undiscounted, time-adjusted).

Item	<sup>1</sup> USD/ Product Ounces	Total (USD)
Revenue   PGM - Total	1,184.72	2,238,274,607
Revenue   Base Metals - Total	230.90	436,242,194
Operating Costs - Total   Total (Add back Inventory Capitalisations pre-prod)	(908.81)	(1,716,999,910)
Statutory Cost   Total	(72.64)	(137,243,065)
Capital   Pre-Prod. - Total	(178.93)	(338,053,413)
Capital   Sustaining : Total	(56.00)	(105,809,401)
Loan Receivable   ZETDC Loan - Repayments Received	4.23	8,000,000
Net Working Capital   Movement	(3.78)	(7,140,569)
Tax Expense   Tax Payable (Pre-Financing)	(22.46)	(42,425,289)
<b>Project Cash Flow (Pre-Financing)</b>	<b>177.23</b>	<b>334,845,153</b>

**Note:**

- Total production PGM metal contained in concentrate (t/oz).

Figure 8-42 below shows a waterfall graph of the cash flow summary in an undiscounted, time-adjusted format. Therefore, it excludes historical cashflows before the Present Value date and is a graphical representation of the figures shown in Table 8-45.

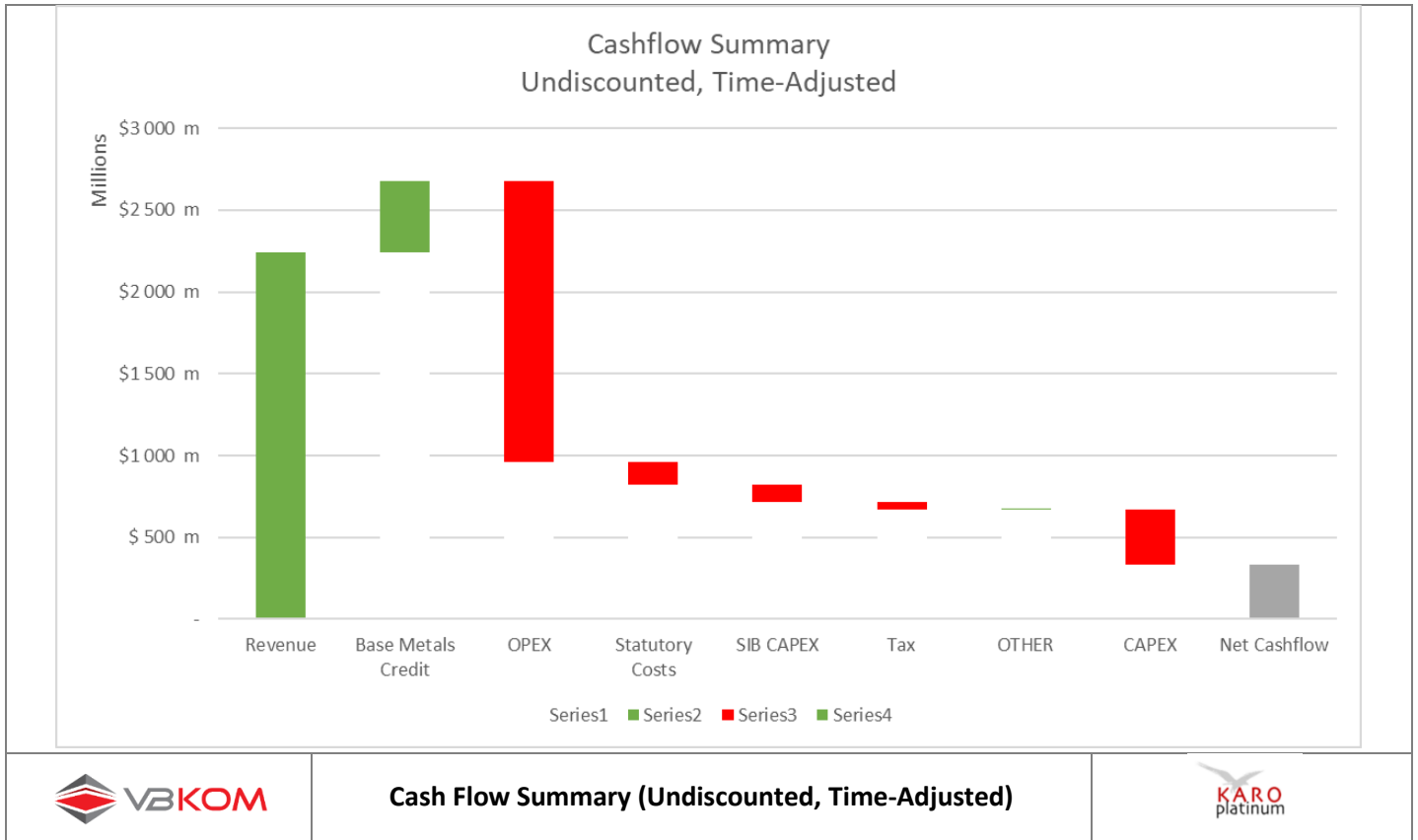


Figure 8-42: Cash flow summary (undiscounted, time-adjusted).

Figure 8-43 overleaf shows the undiscounted, time-adjusted cash flows per revenue and cost category as well as the cumulative Net Cashflow (line graph) to indicate where the project cash flows break even and become positive throughout the project period.

The capital payback period and break-even point of the Project is after **7.08 years**, as seen in Figure 8-43 overleaf.

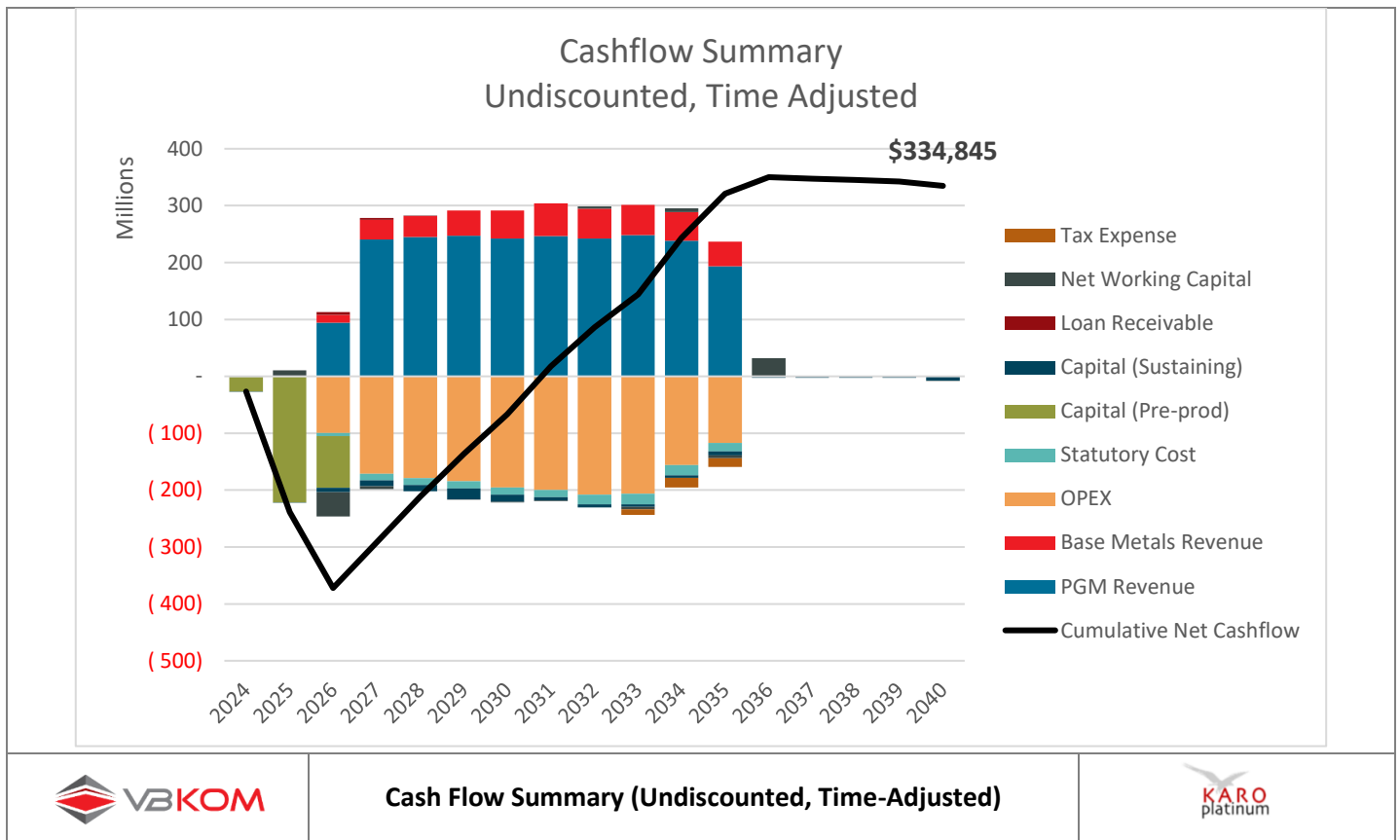


Figure 8-43: Cash flow summary (undiscounted, time-adjusted).

#### 8.11.3.4 Cash Flow Summary – Discounted, Time Adjusted (NPV Analysis)

The NPV is calculated from the time-adjusted cash flows at a discount rate of 8% and amounts to USD83.31 million. See Table 8-46 for the breakdown below of present values.

Table 8-46: Cash flow summary (discounted, time-adjusted).

Item	<sup>1</sup> USD/ Product Ounces	Total (USD)
Revenue   PGM - Total	733.41	1,385,630,097
Revenue   Base Metals - Total	138.74	262,119,094
Operating Costs - Total   Total (Add back Inventory Capitalisations pre-prod)	(567.46)	(1,072,100,676)
Statutory Cost   Total	(43.52)	(82,221,454)
Capital   Pre-Prod. - Total	(166.24)	(314,079,905)
Capital   Sustaining: Total	(34.23)	(64,677,330)
Loan Receivable   ZETDC Loan - Repayments Received	3.56	6,731,802
Net Working Capital   Movement	(9.72)	(18,355,347)
Tax Expense   Tax Payable (Pre-Financing)	(10.45)	(19,735,791)
<b>Project Cash Flow (Pre-Financing)</b>	<b>44.10</b>	<b>83,310,490</b>

**Note:**

- Total production PGM metal contained in concentrate (t/oz).

Figure 8-44 below shows a waterfall graph of the cash flow summary in a discounted, time-adjusted format. Therefore, it excludes historical cash flows before the Present Value date and is a graphical representation of the figures shown in Table 8-46.

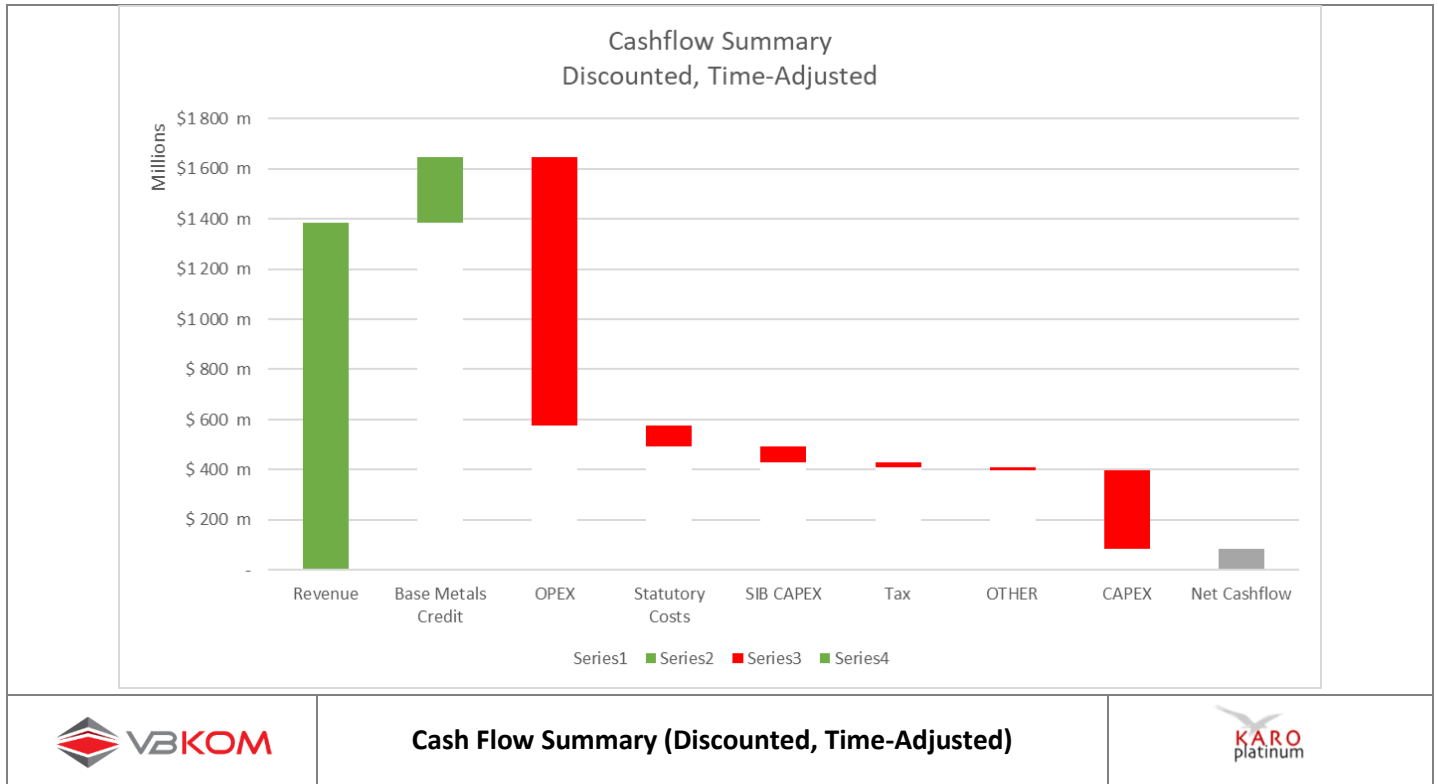


Figure 8-44: Cash flow summary (discounted, time-adjusted).

### 8.11.3.5 Sensitivity Analysis, Risks, and Opportunities

#### Risks

Certain risks were identified during the review of the Karo Platinum financial model and sensitivities were run to understand the order of magnitude of these risks to the overall project viability and NPV:

- Discount Rate:** The discount rate of 8% was benchmarked to other similar projects to support the rate assumption, however, this discount rate modelled in the Karo financial model is much lower than the SAMVAL Valuation discount rate of 14.91% (see section 11.12.5) and poses a risk to the project’s economic assessment. A sensitivity of the discount rate at 12.68% shows that the project NPV would then be USD0, and a discount rate higher than 12.68%, as it is currently modelled, would hamper the project economics.
- MDA Incentives:** The government incentives for taxation and royalties are not substantiated by a written agreement and are subject to change. Without these incentives applied, the NPV will decrease as follows:
  - In the case of taxation, the NPV will decrease from USD83.31 million to USD70.15 million if the tax rate of 25.75% were applied throughout the project period.
  - In the case of royalties, the NPV will decrease from USD83.31 million to USD61.77 million if the royalties rates of 7% for Pt and 4% for Pd were applied throughout the project period.

- **Metal Prices:** Prices are modelled according to the Bloomberg Case for each metal. A sensitivity analysis shows that should prices be reduced by more than 6.1%, as modelled, it would result in a negative NPV. As a result, it is observed that every 2% step change in overall metal prices has an impact on the NPV to the value of ~USD27 million.
- **Capital Estimate:** The contingency estimated in the pre-production capital estimate is 0.1% of the total estimate. Industry benchmarks are closer to 10% and this could indicate a risk in the capital estimate being underestimated. A sensitivity analysis shows that the NPV decreases from USD83.31m to USD55.08 million when changing the contingency to 9.1%. Therefore, the NPV remains positive and does not influence the declaration of Mineral Reserves in this Report.

In these cases, the NPV remains positive and does not cause the project viability to be under threat, unless the parameters exceed those outlined in the sensitivity analysis.

### **Opportunities**

Sales and logistics have been modelled as per the current agreement between Tharisa, Karo Platinum, and the Northam Smelter in Rustenburg, South Africa. This incurs a logistics cost of USD61.11/tonne concentrate and a total Opex Logistics cost of USD35,910,990 over the LOM period. In this case, the NPV is stated as USD83.31 million with an IRR of 12.68%

Should Karo Platinum enter into a take-off agreement with Zimplats instead of Northam, then the concentrate will have little to no logistics cost as the Zimplats smelter is neighbouring the Karo Platinum mine. As a sensitivity of the opportunity, the logistics cost was removed whilst keeping all other parameters constant. This sensitivity results in an NPV stated as USD103.45 million with an IRR of 13.77%

Therefore, an opportunity exists to sell concentrate to the Zimplats smelter next to Karo Platinum, and this will increase the NPV by USD20.14 million (+24%) and increase the IRR by 1.09% (+8.6%).

## 9 MINERAL RESERVE ESTIMATES

T1.2, T1.10

### 9.1 Estimation and Modelling Techniques

S5.2(iv), 6.3(vi)

The Mineral Resources (stated as inclusive of Mineral Reserves) as described in Chapter 7 are used as a basis for the Mineral Reserves.

The mining modelling process was based on three model types, normally with decreasing block dimensions:

1. Mineral Resource or geological model block dimensions (as dictated by the Mineral Resource geologist).
2. Mining block model based on the selective mining unit or diluted mining cut model in this case.
3. Scheduling model based on scheduling unit sizes.

#### 9.1.1 Geological Model as Modelling Basis

S6.1(i)

A 2D Mineral Resource grid model was constructed by Pivot in Datamine. To allow for 3D open-pit modelling, the model was converted to three dimensions incorporating dip factors and modelled wireframes. This 3D model was prepared based on the MSZ wireframes using Datamine. Appropriate reconciliation was done to ensure that the Mineral Resources contained in the 2D block model remain unaltered in quality and quantity in the 3D geological block model.

The data reveal distinct layers of varying grades from the top to the bottom contacts of the mineralised zone and in relation to the MSZ contact. In view of this, the potential economic zone was modelled into 0.2 m layers, and the mineralised zone considered for Mineral Resource classification was limited to 4 m above the BMSZ and 4 m below the same contact. Each of the up to 40 x 0.2 m vertical blocks contains PGM and base metal grades and relative density.

The Mineral Resource cut was based on the cut with a reasonable prospect for eventual economic extraction, defined within the modelled mineralised zone of up to 8 m. The optimisation of the cut was undertaken on a block-by-block basis using 20 cm increments from the BMSZ to 4 m in the hanging wall and 4 m in the footwall. Each 100 m x 100 m block was assessed based on the 3PGE+Au grade and minimum thickness. The potential cut was limited to 4 m above and 4 m below the BMSZ.

#### 9.1.2 Mining Block Model

The mining cut was determined as part of the mining modelling process. This selection considers the targeted techno-economic portion of the Mineral Resource cut based on the selected mining methodology, mining equipment, mining-related modifying factors, and practical execution parameters as applied as part of the LOM and Mineral Reserve estimation processes.

##### 9.1.2.1 Waste Model

To complete the 3D mining model, the space above the mineralised zone and below the surveyed topography was filled with blocks and assigned a waste material type for the appropriate volumetric fit between the mineralised zone and topography. The 100 m x 100 m blocks of the mineralised zone were sub-blocked to a minimum block size of 5 m x 5 m x 0.2 m. The blocks contained in the mineralised zone contain the unmodified grades of the geological model as

the basis of the Mineral Resource estimation. There was no distinction made between the different hard, with differentiation in waste classification between topsoil, softs, and hard waste material deemed sufficient for the purposes of the mining study. The density of the various hard wastes was uniform and should be updated with the relevant density per lithology.

### 9.1.2.2 Oxidised Ore, Transition Zone, and Fresh Ore

The Karo mining areas were defined by an oxidised zone reaching 15 m below the surface of the topography and a transition zone with a reduced metal recovery from 15 m to 30 m below surface. Ore below the transition horizons was classified as fresh ore. Fresh and transition ore were included as part of the Mineral Resource estimation.

A summary of the mining model attributes used in the planning process is shown in Table 9-1. These attributes were included in the model to track values from the Datamine block model through to the Deswik Mining Software (Deswik) CAD and scheduling software.

Table 9-1: Summary of the mining model attributes.

Attribute Name	Note	Unit	Description
AUGT	Gold grade	g/t	Quality
COP	Cobalt grade	%	Quality
CUP	Copper grade	%	Quality
Density	Density	t/m <sup>3</sup>	Density of the various rock types
IRGT	Iridium grade	g/t	Quality
MatType	Geological material type	N/A	Material type
OreZone	Ore Type Definition	N/A	Ore type (Oxidised, Transitional, Fresh)
NIP	Nickel grade	%	Quality
OSGT	Osmium grade	g/t	Quality
PDGT	Palladium grade	g/t	Quality
PTGT	Platinum grade	g/t	Quality
RHGT	Rhodium grade	g/t	Quality
RUGT	Ruthenium grade	g/t	Quality
S%	Sulphur grade	%	Quality

### 9.1.2.3 Economic Mining Cut Selection on a ROM Basis

The practical mining cut targeted a 2.8 g/t 3E+Au concentrator feed grade. The value-based selection considered the major drivers such as the mining production rate, the economic life of the open pit operation, concentrator recoveries, and the overall cost profile.

The mining cut (inclusive of dilution) only considered blocks that form part of the defined Mineral Resource cut. Dilution was 'added' at the modelled quality in the block model by applying a grade dilution factor that accounts for negotiating structurally challenged zones, also informed by the pilot pit and industry experiences. The objectives of the mining cut definition were to achieve the targeted 2.8g/t 3E+Au concentrator feed grade and to allow for practical execution in terms of dilution, thickness, and continuity.

The vertical resolution of the Mineral Resource block model was kept unchanged at 0.2 m as a basis for the mining cut selection. The following process was followed:

- A 3E + Au COG of 1.7 g/t and a thickness cut-off of 1.2 m were assigned to each 100 m x 100 m x 0.2 m block, used to determine the composite grades within each of the open-pit mining areas.
- Ore blocks selected were manually checked and adjusted for vertical continuity.
- A continuous floating mining cut stack was determined for each 100-by-100 m column, based on the minimum thickness and concentrator feed grade target requirements.
- Once the vertical stack was determined, the top and bottom contacts were used to create 3D wireframes.
- The 3D Mineral Resource block model blocks were assigned as either on-grade ore blocks inside the Resource cut and mining cut, or off-grade ore blocks inside the Resource cut but outside the mining cut.
- The average qualities within each pit area were calculated to ensure that the targeted concentrator feed grade could be achieved for each pit.
- The selected mining cut model was used as part of the pit optimisation process.

The average mining cut thickness per mining area is detailed in Table 9-2.

Table 9-2: Average cut thickness per mining area.

Mining Area	Average Thickness (m)
KPSE	3.3
KPE	3.4
KPNE	3.6
KPNW	2.6

A graphical representation of the typical mining cut selection output is shown in Figure 9-1. From the diagram, the identification of the Pt-peak can be seen with the addition of at least 600 mm above the Pt-peak to ensure the optimal extraction of the high mineralisation. The dilution factor includes the additional layers and structures of induced material. The undiluted mining cut results in an average 3E + Au grade of approximately 3.0 g/t and, with the inclusion of an additional 200 mm of highwall dilution and 200 mm of low-wall dilution, the overall 3E + Au grade amounts to 2.8 on a weighted average basis. The Mineral Resource cut is not necessarily offset from the mining cut but represents a separate selection parameter that may not align with the diluted mining cut on a block-by-block basis.

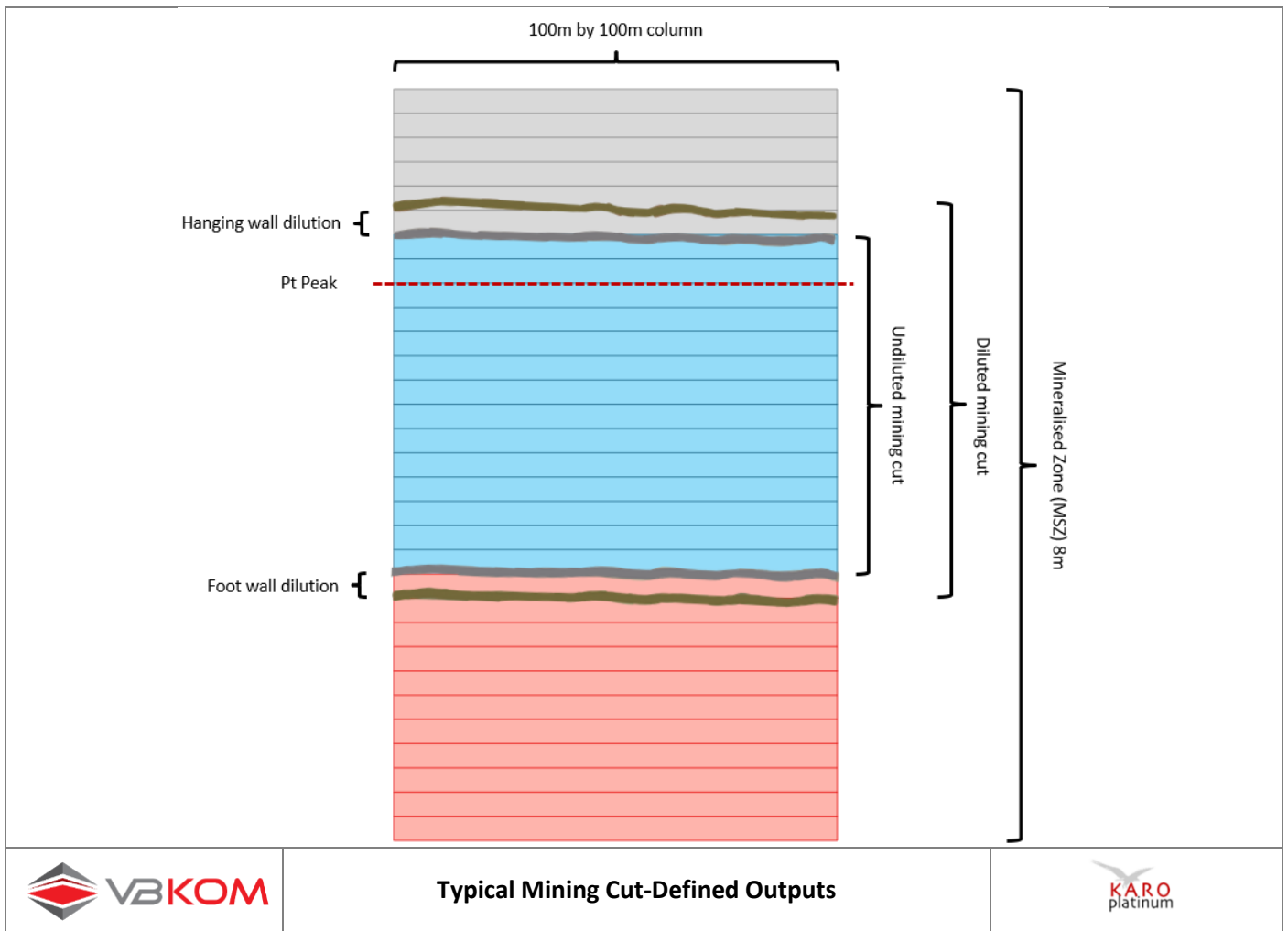


Figure 9-1: Typical mining cut-defined outputs.

Figure 9-2 to Figure 9-7 are graphic representations of the estimated diluted ore mining thickness based on the selected mining cut within the pit designs (detailed later in the report). Mining dilution and other modifying factors are discussed overleaf.

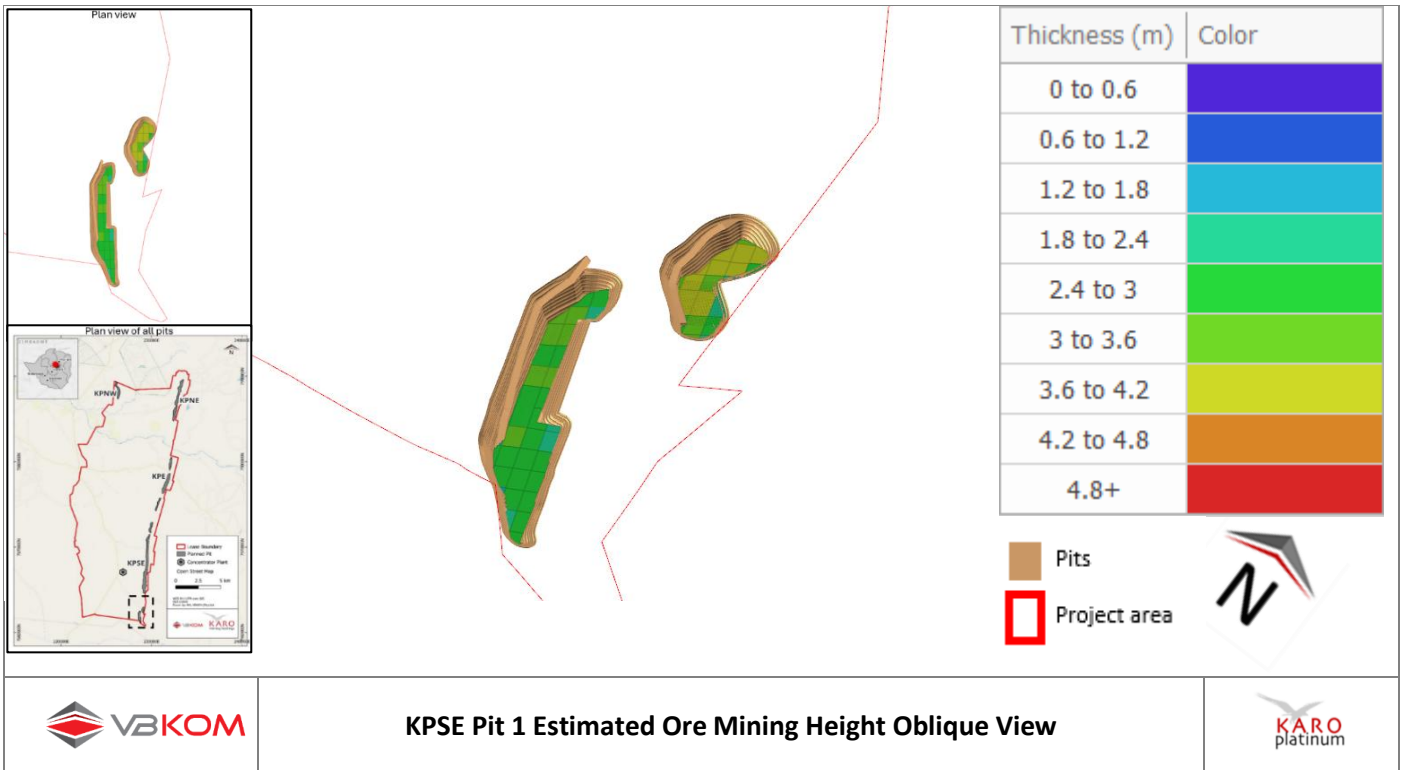


Figure 9-2: KPSE pit 1 estimated ore mining height – Oblique View.

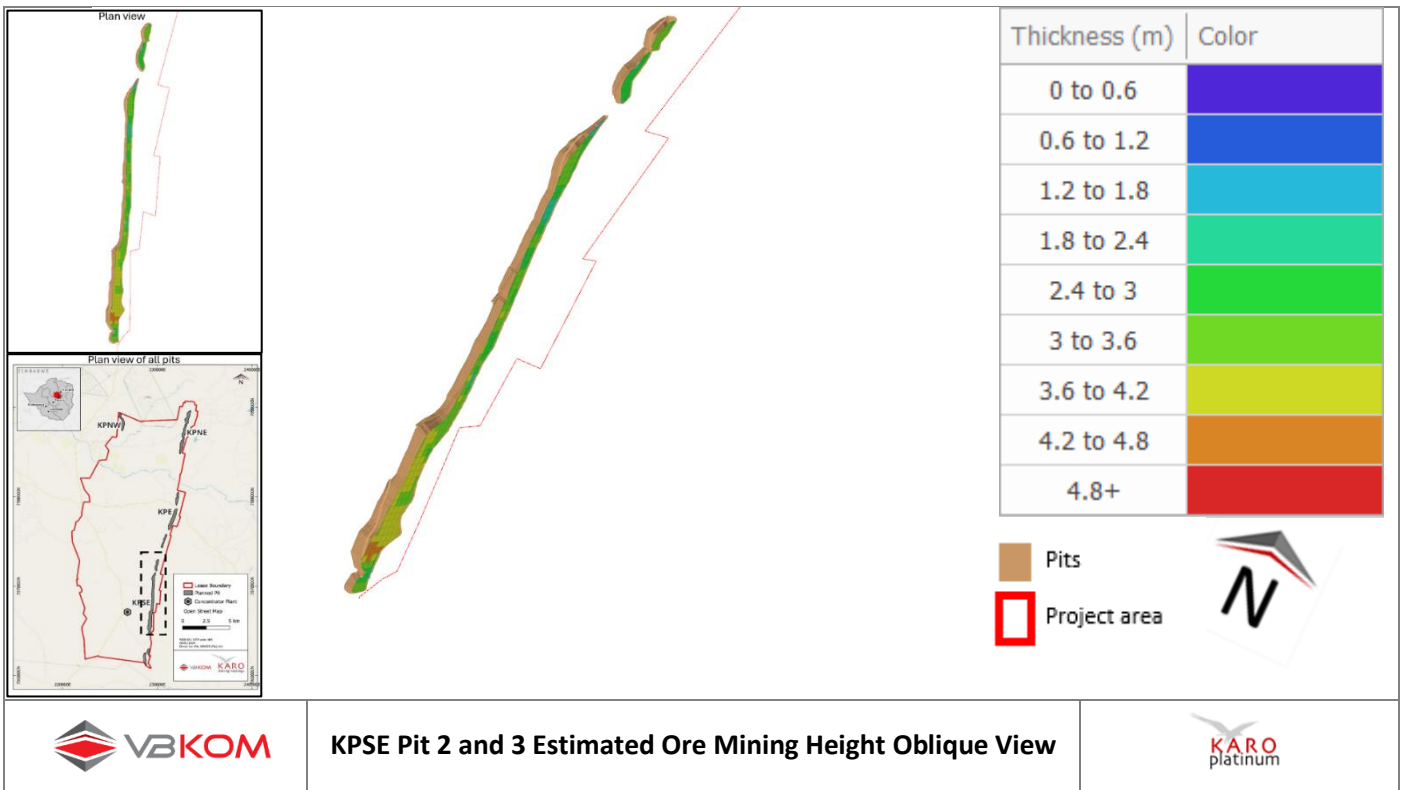


Figure 9-3: KPSE pit 2 and 3 estimated ore mining height – Oblique View.

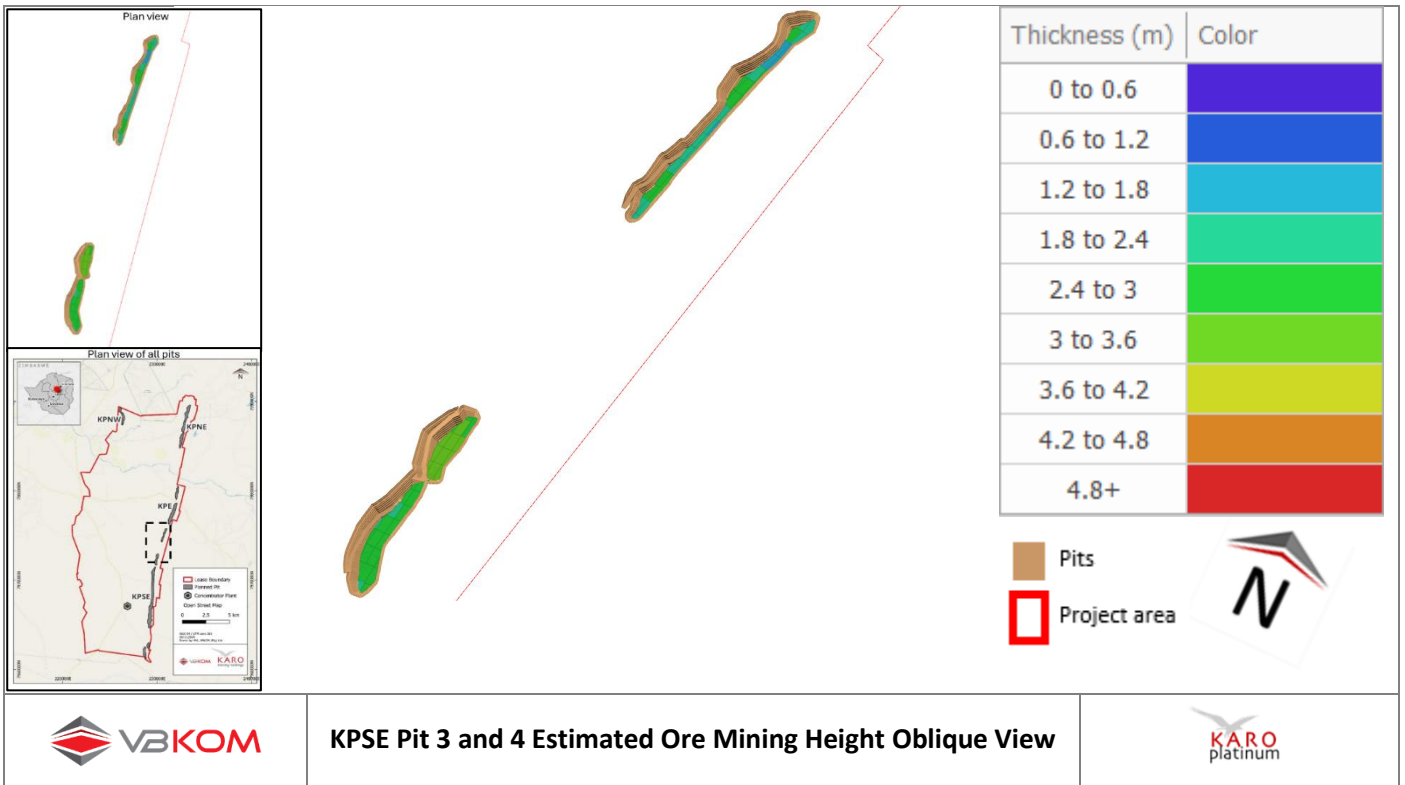


Figure 9-4: KPSE pit 3 and 4 estimated ore mining height – Oblique View.

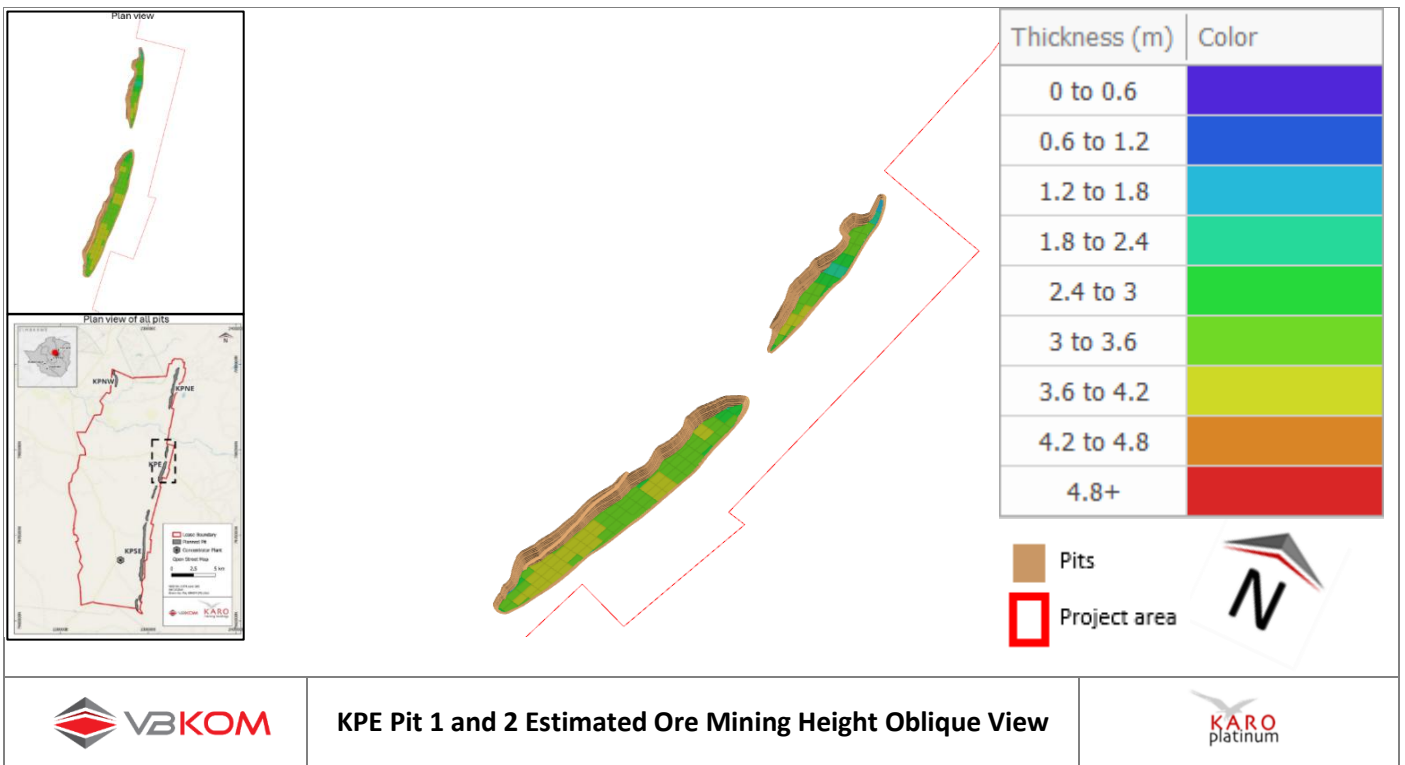


Figure 9-5: KPE pit 1 and 2 estimated ore mining height – Oblique View.

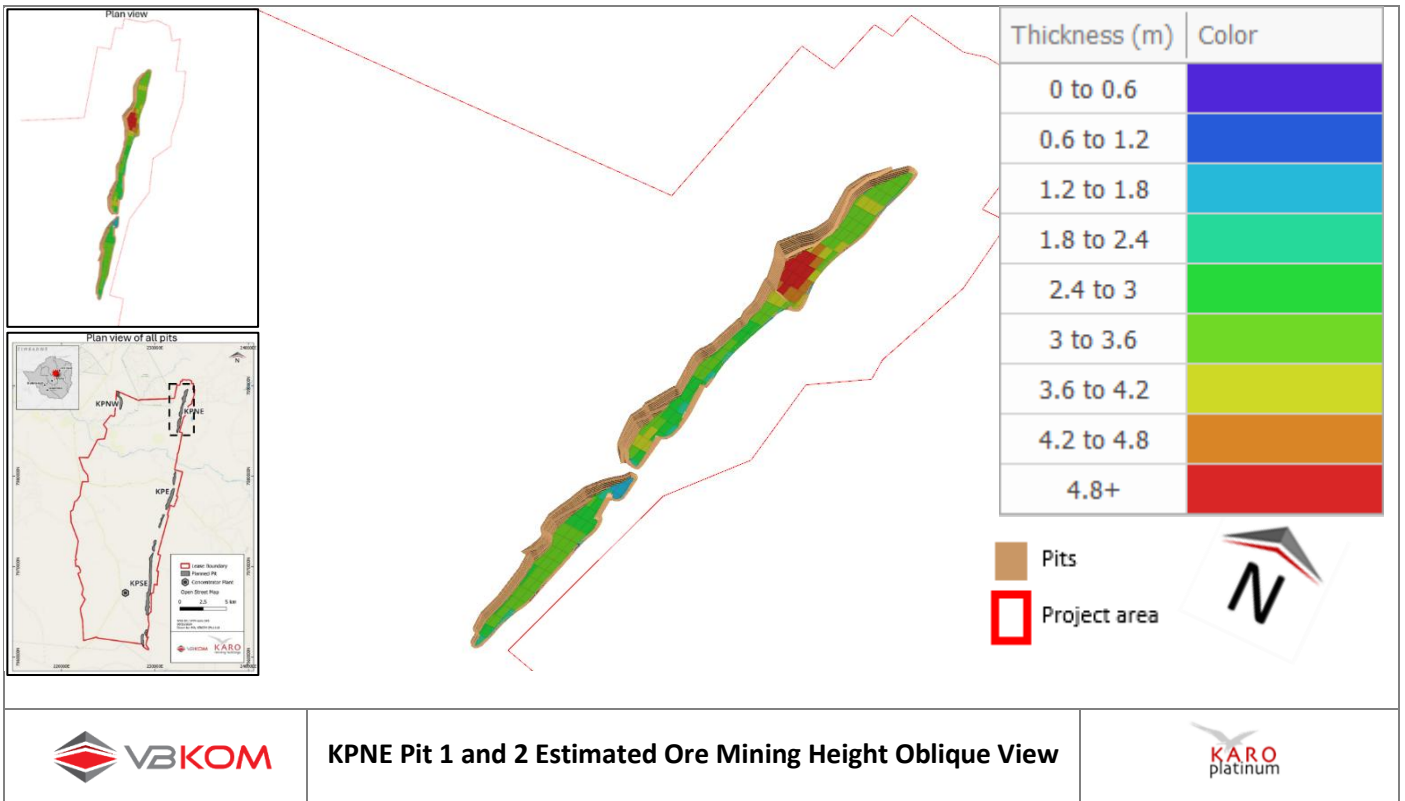


Figure 9-6: KPNE pit 1 and 2 estimated ore mining height – Oblique View.

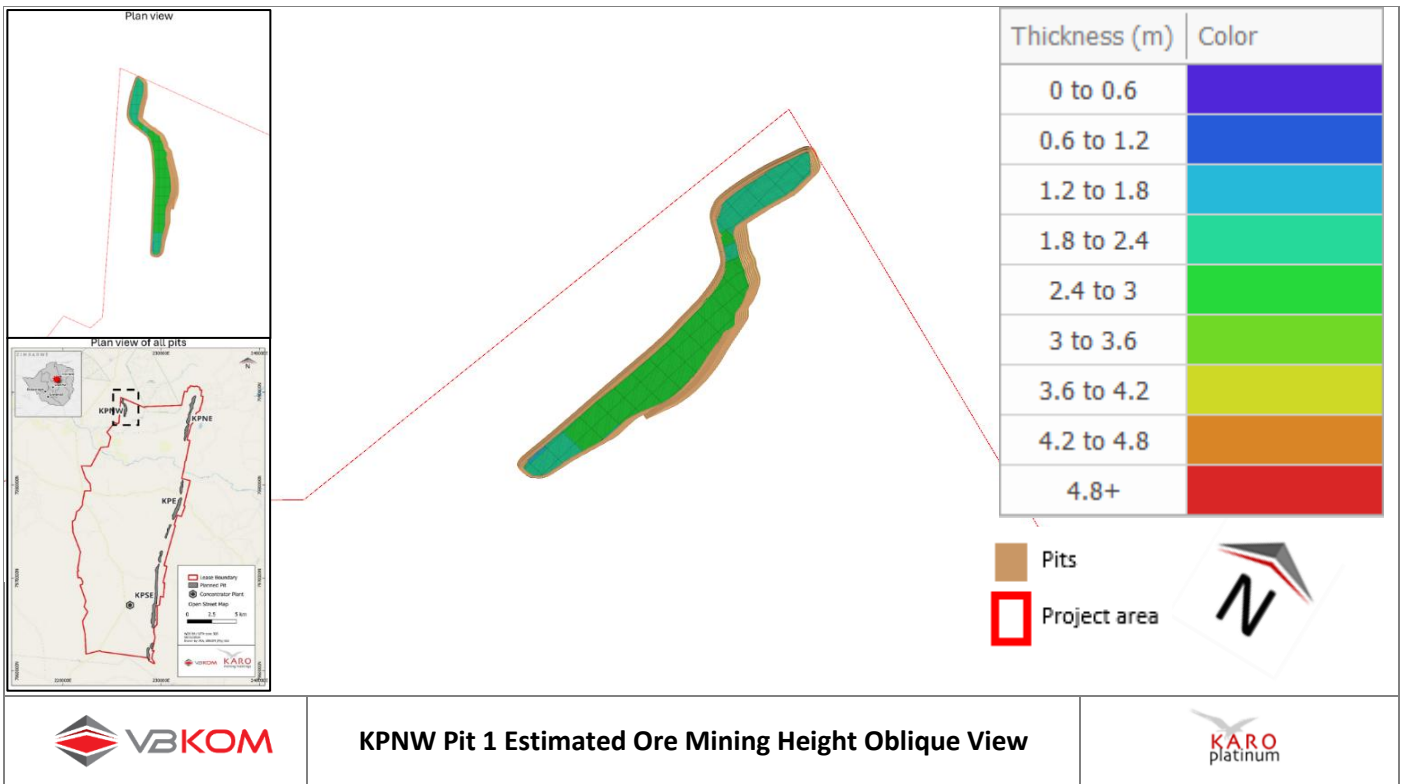


Figure 9-7: KPNW pit 1 estimated ore mining height – Oblique View.

### 9.1.3 Scheduling Unit Model

Once the mining cut was defined, block designs were created and applied as scheduling units. Each block was uniquely referenced and contained a range of material types that were selectively scheduled, based on practical considerations to separate locations such as ROM stockpiles or waste dumps.

The scheduling unit block size applied was 100 m x 60 m x 10 m within the waste material and followed the position and width of the ore mining cut where applicable. Bench heights were based on the proposed mining equipment and confirmed with geotechnical recommendations of 10 m. The selectivity allowed for in the schedule included:

- Material types within a scheduling unit are dependent on waste or ore destinations.
- When mining activities were scheduled to commence on a scheduling block, all the material types were depleted in that block before moving to the next, in line with the mining method allowed for.
- Ore blocks were scheduled separately from the overlying waste for a selective mining approach.

## 9.2 Mineral Reserve Classification Criteria

### S6.2(i)

The economically viable portion of the Measured Mineral Resources was converted to Proved Mineral Reserves by applying the modifying factors stipulated in Table 8-4. The modifying factors were also employed to obtain the Probable Mineral Reserves from the Indicated Mineral Resources.

## 9.3 Mineral Reserve Statement

### S5.6 (v) 6.1(ii) 6.3(i)(ii)(iii)(v), T1.9

The Mineral Reserve estimate was derived from the Measured and Indicated Mineral Resources included as part of the LOM plan. The LOM schedule was based on a targeted steady-state production rate of 2.64 Mtpa. No Inferred Mineral Resources were included as part of the Mineral Reserve estimate. The Proved Mineral Reserve was derived from the Measured Mineral Resource and the Probable Mineral Reserve from the Indicated Mineral Resource. No Probable Mineral Reserve was derived from the Measured Mineral Resource.

The Mineral Reserves are attributed to open-pit operations and do not include any underground operations. No Mineral Reserves were estimated for existing surface stockpiles or existing tailings. The basis of the Mineral Reserve estimate was the delivery of ROM material to the primary crushing ROM bin or related ROM stockpiles.

The consolidated Mineral Reserve estimate is shown in Table 9-3 at a 100% attributable basis and Table 9-4 at a 64.79% attributable basis. The tables show the estimate for fresh, transition ore, and the combined total.

The consolidated Mineral Reserve (as of 30 September 2024) for the open-pit operations of the Karo Project was estimated at 24.8 Mt at a 5PGE + Au grade of 3.00 g/t and 3PGE + Au grade of 2.82 g/t. The base metal grade for Cu was stated at 0.10% and 0.13% for Ni. The Proved Mineral Reserve estimate for the fresh ore totals 14.2 Mt with an additional 5.6 Mt Probable fresh ore for a total of 19.8 Mt fresh ore at a 5PGE + Au grade of 2.99g/t, and 3PGE + Au grade of 2.81 g/t. The Proved Mineral Reserve estimate for the transition ore totals 3.7 Mt with an additional 1.4 Mt Probable transition ore for a total of 5.0 Mt transition ore at a 5PGE + Au grade of 3.03 g/t, and 3PGE + Au grade of 2.85 g/t.



KPSE includes a combined Proved and Probable Mineral Reserve of 12.7 Mt fresh and transitional ore and KPE 5.4 Mt fresh and transitional ore. KPNE includes a combined Proved and Probable Mineral Reserve of 5.3 Mt fresh and transitional ore and KPNW includes 1.5 Mt fresh and transitional ore.

Table 9-3: ROM Mineral Reserve estimate (30 September 2024) (100% attributable basis).

Pit Area	Mineral Reserve Classification	Level of Oxidation	Tonnage [Mt]	3PGE+Au [g/t]	5PGE+Au [g/t]	Cu [%]	Ni [%]	3PGE+Au [koz]	5PGE+Au [koz]	Cu [t]	Ni [t]
KPSE	Proved	Transitional	2.5	2.84	3.02	0.09	0.11	219	232	2,273	2,842
		Fresh	10.0	2.79	2.96	0.08	0.10	869	924	7,846	10,277
		Total	12.5	2.80	2.97	0.08	0.10	1,088	1,156	10,119	13,119
	Probable	Transitional	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Fresh	0.2	2.80	2.98	0.08	0.10	15	16	130	165
		Total	0.2	2.80	2.98	0.08	0.10	15	16	130	165
	<b>Total/ Ave</b>			12.7	2.80	2.97	0.08	0.10	1,103	1,172	10,249
KPE	Proved	Transitional	1.2	2.89	3.08	0.14	0.16	105	112	1,609	1,850
		Fresh	4.2	2.81	2.99	0.14	0.16	365	389	5,654	6,486
		Total	5.4	2.83	3.01	0.14	0.16	471	501	7,263	8,335
	Probable	Transitional	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Fresh	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Total	0.0	0.00	0.00	0.00	0.00	0	0	0	0
	<b>Total/ Ave</b>			5.4	2.83	3.01	0.14	0.16	471	501	7,263
KPNE	Proved	Transitional	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Fresh	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Total	0.0	0.00	0.00	0.00	0.00	0	0	0	0
	Probable	Transitional	0.9	2.88	3.06	0.09	0.11	84	89	860	1,019
		Fresh	4.4	2.86	3.04	0.09	0.11	389	414	4,078	4,858
		Total	5.3	2.86	3.05	0.09	0.11	473	503	4,938	5,878
	<b>Total/ Ave</b>			5.3	2.86	3.05	0.09	0.11	473	503	4,938
KPNW	Proved	Transitional	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Fresh	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Total	0.0	0.00	0.00	0.00	0.00	0	0	0	0

Pit Area	Mineral Reserve Classification	Level of Oxidation	Tonnage [Mt]	3PGE+Au [g/t]	5PGE+Au [g/t]	Cu [%]	Ni [%]	3PGE+Au [koz]	5PGE+Au [koz]	Cu [t]	Ni [t]
	Probable	Transitional	0.4	2.87	3.05	0.23	0.25	40	42	1,021	1,127
		Fresh	1.1	2.84	3.00	0.22	0.25	93	99	2,327	2,643
		Total	1.5	2.85	3.02	0.22	0.25	133	141	3,348	3,770
	<b>Total/ Ave</b>			1.5	2.85	3.02	0.22	0.25	133	141	3,348
<b>Total</b>	<b>Proved</b>	<b>Transitional</b>	<b>3.6</b>	<b>2.86</b>	<b>3.04</b>	<b>0.11</b>	<b>0.13</b>	<b>324</b>	<b>345</b>	<b>3,882</b>	<b>4,692</b>
		<b>Fresh</b>	<b>14.2</b>	<b>2.79</b>	<b>2.97</b>	<b>0.09</b>	<b>0.12</b>	<b>1,234</b>	<b>1,313</b>	<b>13,500</b>	<b>16,762</b>
		<b>Total</b>	<b>17.9</b>	<b>2.81</b>	<b>2.98</b>	<b>0.10</b>	<b>0.12</b>	<b>1,559</b>	<b>1,658</b>	<b>17,382</b>	<b>21,454</b>
	<b>Probable</b>	<b>Transitional</b>	<b>1.4</b>	<b>2.88</b>	<b>3.06</b>	<b>0.14</b>	<b>0.16</b>	<b>124</b>	<b>132</b>	<b>1,881</b>	<b>2,146</b>
		<b>Fresh</b>	<b>5.6</b>	<b>2.85</b>	<b>3.03</b>	<b>0.12</b>	<b>0.14</b>	<b>497</b>	<b>528</b>	<b>6,535</b>	<b>7,666</b>
		<b>Total</b>	<b>7.0</b>	<b>2.86</b>	<b>3.04</b>	<b>0.12</b>	<b>0.14</b>	<b>621</b>	<b>660</b>	<b>8,416</b>	<b>9,813</b>
	<b>Total/Ave</b>			<b>24.8</b>	<b>2.82</b>	<b>3.00</b>	<b>0.10</b>	<b>0.13</b>	<b>2,180</b>	<b>2,318</b>	<b>25,798</b>

**Notes:**

1. The Mineral Reserve estimate is reported in accordance with the guidelines of the SAMREC Code.
2. The Mineral Resources were reported inclusive of the Mineral Reserve.
3. The Mineral Reserve is Reported as delivered run of mine material to the concentrator plant, or related run of mine stockpile.
4. Tonnage estimates are in metric units and reported as million tonnes (Mt).
5. 3PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Au grade (g/t).
6. 5PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Ir grade (g/t) + Ru grade (g/t) + Au grade (g/t).
7. Numbers may not add up due to rounding.
8. Mineral Reserve reported on a 100% project basis.
9. The level of accuracy of the study completed in September 2024, as basis for the Mineral Reserve estimate, complies to the minimum requirements as set out in the SAMREC Code.
10. The Mineral Reserves are dependent on the approval of royalty and tax incentives as shown in the financial model.

Table 9-4: ROM Mineral Reserve estimate (30 September 2024) (64.79% attributable basis).

Pit Area	Mineral Reserve Classification	Level of Oxidation	Tonnage [Mt]	3PGE+Au [g/t]	5PGE+Au [g/t]	Cu [%]	Ni [%]	3PGE+Au [koz]	5PGE+Au [koz]	Cu [t]	Ni [t]
KPSE	Proved	Transitional	1.6	2.84	3.02	0.09	0.11	142	151	1,472	1,842
		Fresh	6.5	2.79	2.96	0.08	0.10	563	598	5,084	6,658
		Total	8.1	2.80	2.97	0.08	0.10	705	749	6,556	8,500
	Probable	Transitional	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Fresh	0.1	2.80	2.98	0.08	0.10	10	10	84	107
		Total	0.1	2.80	2.98	0.08	0.10	10	10	84	107
	<b>Total/ Ave</b>			8.2	8.2	2.80	2.97	0.08	0.10	715	759
KPE	Proved	Transitional	0.8	2.89	3.08	0.14	0.16	68	73	1,043	1,199
		Fresh	2.7	2.81	2.99	0.14	0.16	237	252	3,663	4,202
		Total	3.5	2.83	3.01	0.14	0.16	305	325	4,706	5,400
	Probable	Transitional	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Fresh	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Total	0.0	0.00	0.00	0.00	0.00	0	0	0	0
	<b>Total/ Ave</b>			3.5	3.5	2.83	3.01	0.14	0.16	305	325
KPNE	Proved	Transitional	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Fresh	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Total	0.0	0.00	0.00	0.00	0.00	0	0	0	0
	Probable	Transitional	0.6	2.88	3.06	0.09	0.11	54	58	557	660
		Fresh	2.8	2.86	3.04	0.09	0.11	252	268	2,642	3,148
		Total	3.4	2.86	3.05	0.09	0.11	306	326	3,199	3,808
	<b>Total/ Ave</b>			3.5	3.4	2.86	3.05	0.09	0.11	306	326
KPNW	Proved	Transitional	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Fresh	0.0	0.00	0.00	0.00	0.00	0	0	0	0
		Total	0.0	0.00	0.00	0.00	0.00	0	0	0	0

Pit Area	Mineral Reserve Classification	Level of Oxidation	Tonnage [Mt]	3PGE+Au [g/t]	5PGE+Au [g/t]	Cu [%]	Ni [%]	3PGE+Au [koz]	5PGE+Au [koz]	Cu [t]	Ni [t]
	Probable	Transitional	0.3	2.87	3.05	0.23	0.25	26	27	662	730
		Fresh	0.7	2.84	3.00	0.22	0.25	60	64	1,508	1,712
		Total	1.0	2.85	3.02	0.22	0.25	86	91	2,169	2,442
	<b>Total/ Ave</b>			1.0	1.0	2.85	3.02	0.22	0.25	86	91
<b>Total</b>	<b>Proved</b>	<b>Transitional</b>	<b>2.4</b>	<b>2.86</b>	<b>3.04</b>	<b>0.11</b>	<b>0.13</b>	<b>210</b>	<b>223</b>	<b>2,515</b>	<b>3,040</b>
		<b>Fresh</b>	<b>9.2</b>	<b>2.79</b>	<b>2.97</b>	<b>0.09</b>	<b>0.12</b>	<b>800</b>	<b>851</b>	<b>8,747</b>	<b>10,860</b>
		<b>Total</b>	<b>11.6</b>	<b>2.81</b>	<b>2.98</b>	<b>0.10</b>	<b>0.12</b>	<b>1,010</b>	<b>1,074</b>	<b>11,262</b>	<b>13,900</b>
	<b>Probable</b>	<b>Transitional</b>	<b>0.9</b>	<b>2.88</b>	<b>3.06</b>	<b>0.14</b>	<b>0.16</b>	<b>80</b>	<b>85</b>	<b>1,219</b>	<b>1,391</b>
		<b>Fresh</b>	<b>3.6</b>	<b>2.85</b>	<b>3.03</b>	<b>0.12</b>	<b>0.14</b>	<b>322</b>	<b>342</b>	<b>4,234</b>	<b>4,967</b>
		<b>Total</b>	<b>4.5</b>	<b>2.86</b>	<b>3.04</b>	<b>0.12</b>	<b>0.14</b>	<b>402</b>	<b>428</b>	<b>5,453</b>	<b>6,358</b>
	<b>Total/Ave</b>			<b>16.1</b>	<b>2.82</b>	<b>3.00</b>	<b>0.10</b>	<b>0.13</b>	<b>1,412</b>	<b>1,502</b>	<b>16,714</b>

**Notes:**

1. The Mineral Reserve estimate is reported in accordance with the guidelines of the SAMREC Code.
2. The Mineral Resources were reported inclusive of the Mineral Reserve.
3. The Mineral Reserve is Reported as delivered run of mine material to the concentrator plant, or related run of mine stockpile.
4. Tonnage estimates are in metric units and reported as million tonnes (Mt).
5. 3PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Au grade (g/t).
6. 5PGE + Au = Pt grade (g/t) + Pd grade (g/t) + Rh grade (g/t) + Ir grade (g/t) + Ru grade (g/t) + Au grade (g/t).
7. Numbers may not add up due to rounding.
8. Mineral Reserve reported on a 64.79% project basis.
9. The level of accuracy of the study completed in September 2024, as basis for the Mineral Reserve estimate, complies to the minimum requirements as set out in the SAMREC Code.
10. The Mineral Reserves are dependent on the approval of royalty and tax incentives as shown in the financial model.

Figure 9-8 below illustrates the Proved and Probable ore classification. From the figure, the majority of the ROM ore is Proved Mineral Reserves for the first 7 years. Thereafter, the material is mostly Probable Mineral Reserves.

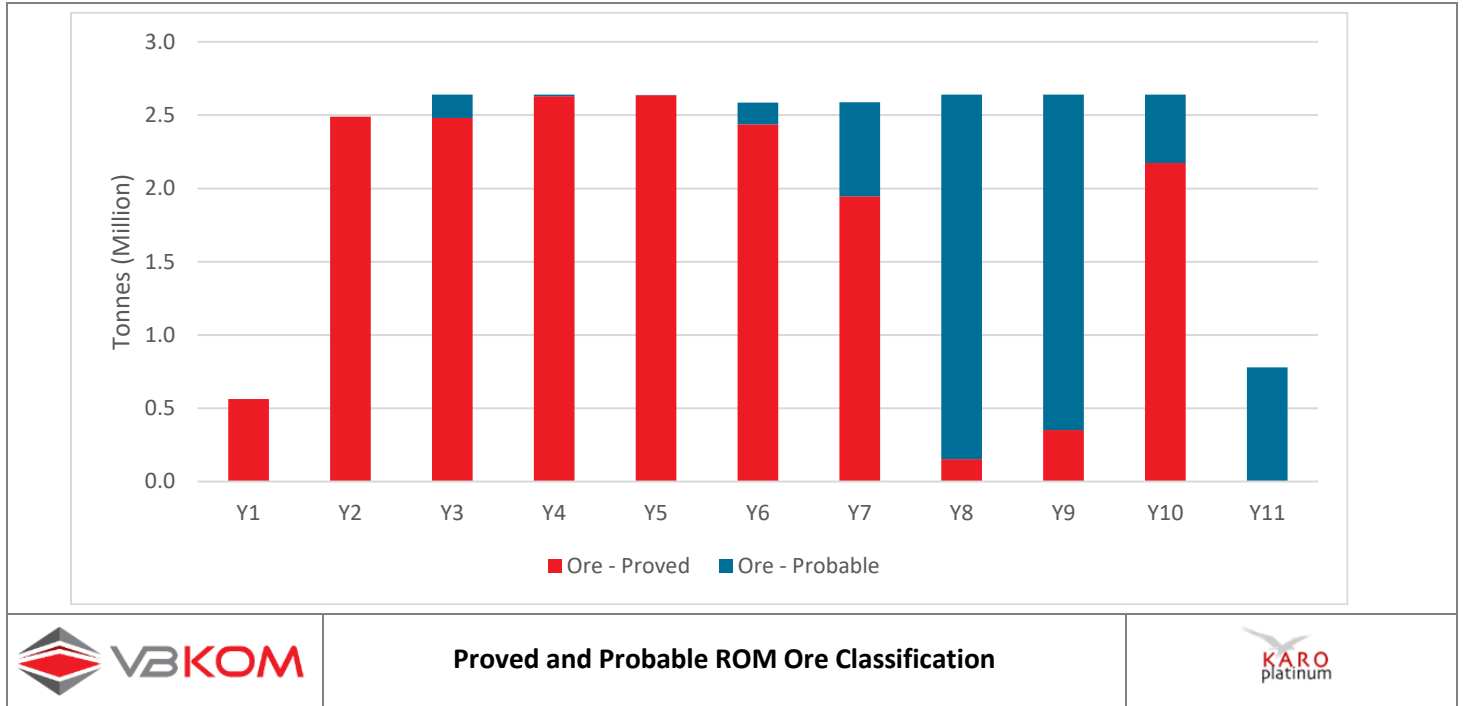


Figure 9-8: Proved and Probable ROM ore classification.

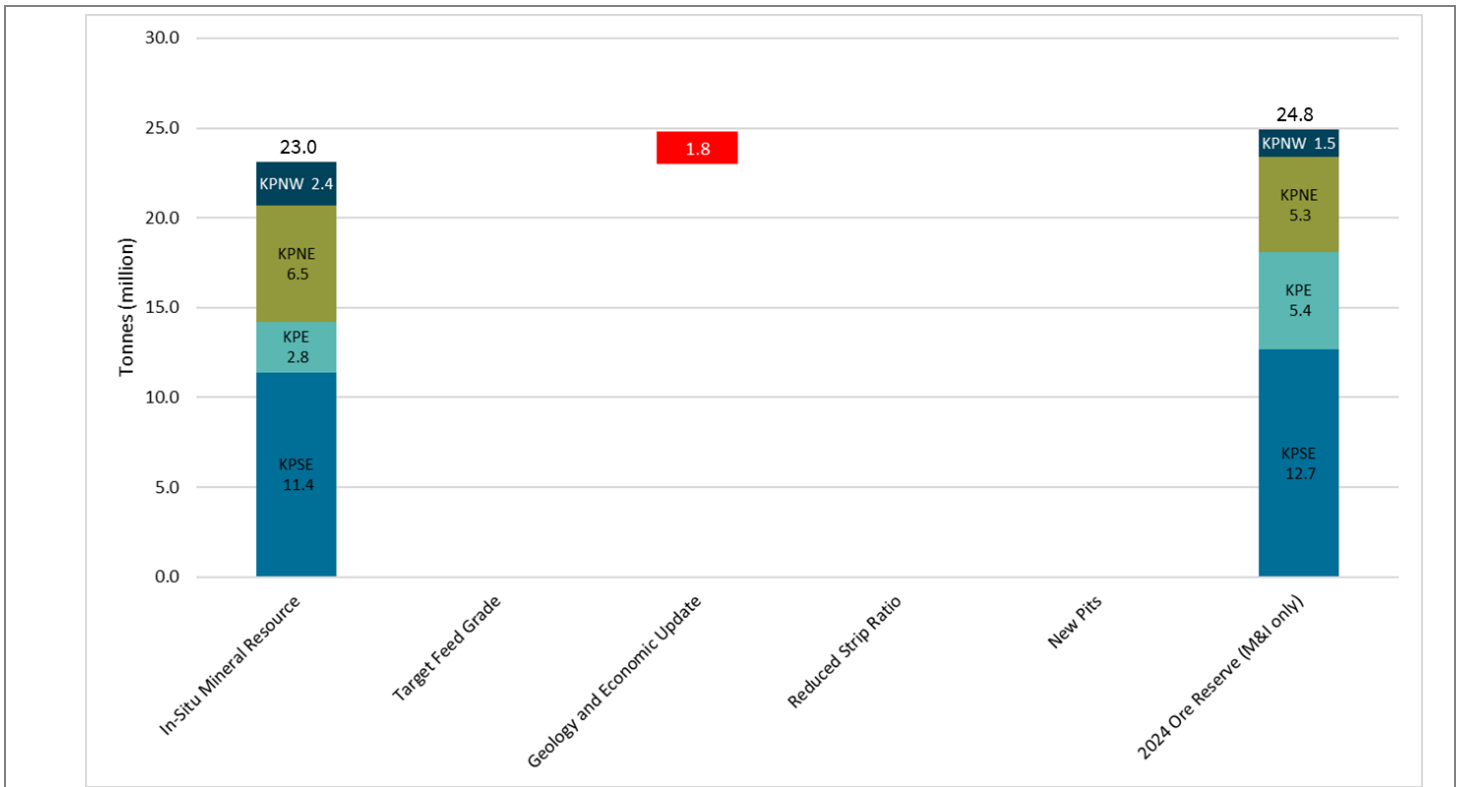
## 9.4 Mineral Reserve Reconciliation

### S6.1(iii), 6.3(iv)

The waterfall graph demonstrating the variances relative to the 2023 Mineral Reserve estimate (as presented in Table 4-4) is shown in Figure 9-9. From the figure, KPSE and KPE’s tonnages increased due to the inclusion of additional Mineral Resource drilling. The KPNE tonnes decreased due to the revised estimation process and updated Mineral Resource information, and KPNW’s tonnes decreased due to the exclusion of uneconomic mining areas.

The following factors contributed to the variance:

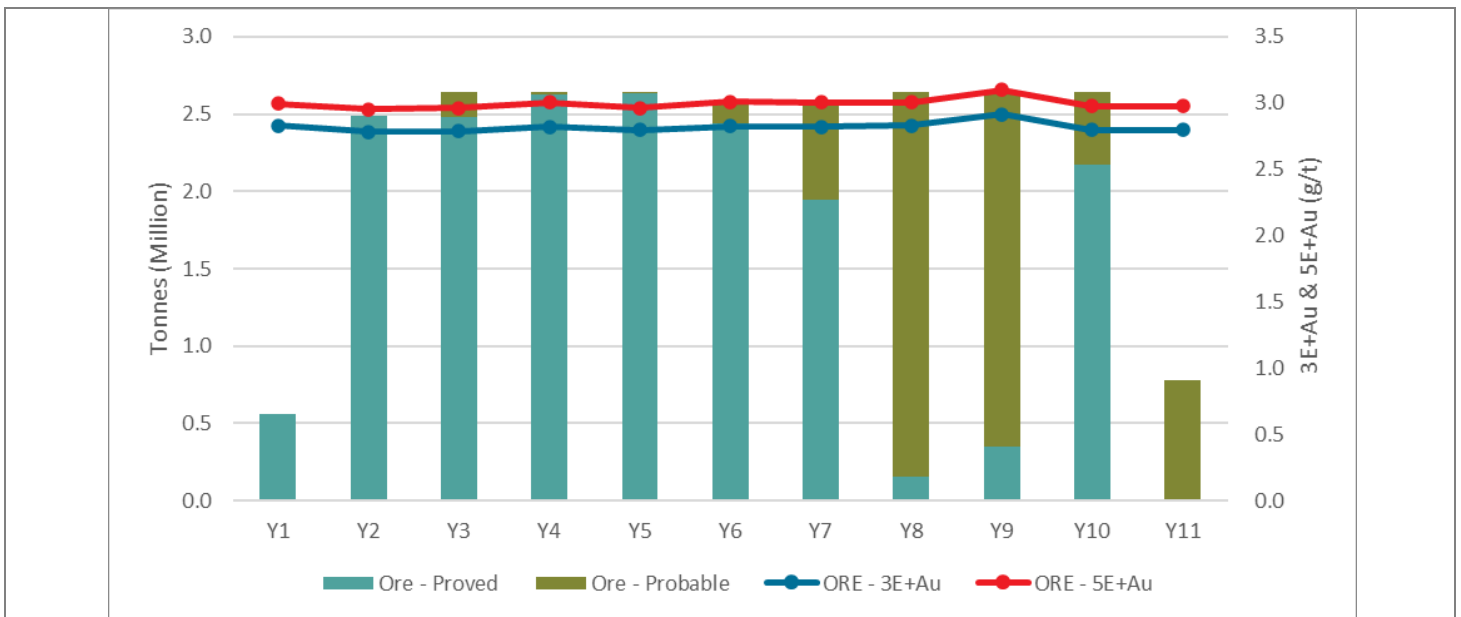
- Updated Mineral Resource models and wireframe surfaces.
- Updated economic inputs and parameters incorporated in the pit optimisation process.



### Mineral Reserves 2023 vs 2024

Figure 9-9: Mineral Reserves 2023 versus 2024 waterfall graph.

For the mining schedule, only unprocessed ROM tonnes were scheduled. The Proved and Probable ore ROM tonnes and corresponding PGE grades are shown in Figure 9-10.



### Proved and Probable ROM Ore and PGE Grade

Figure 9-10: Proved and Probable ROM ore and PGE grade.

The Proved and Probable ROM ore tonnes and corresponding base metals grades are shown in Figure 9-11.

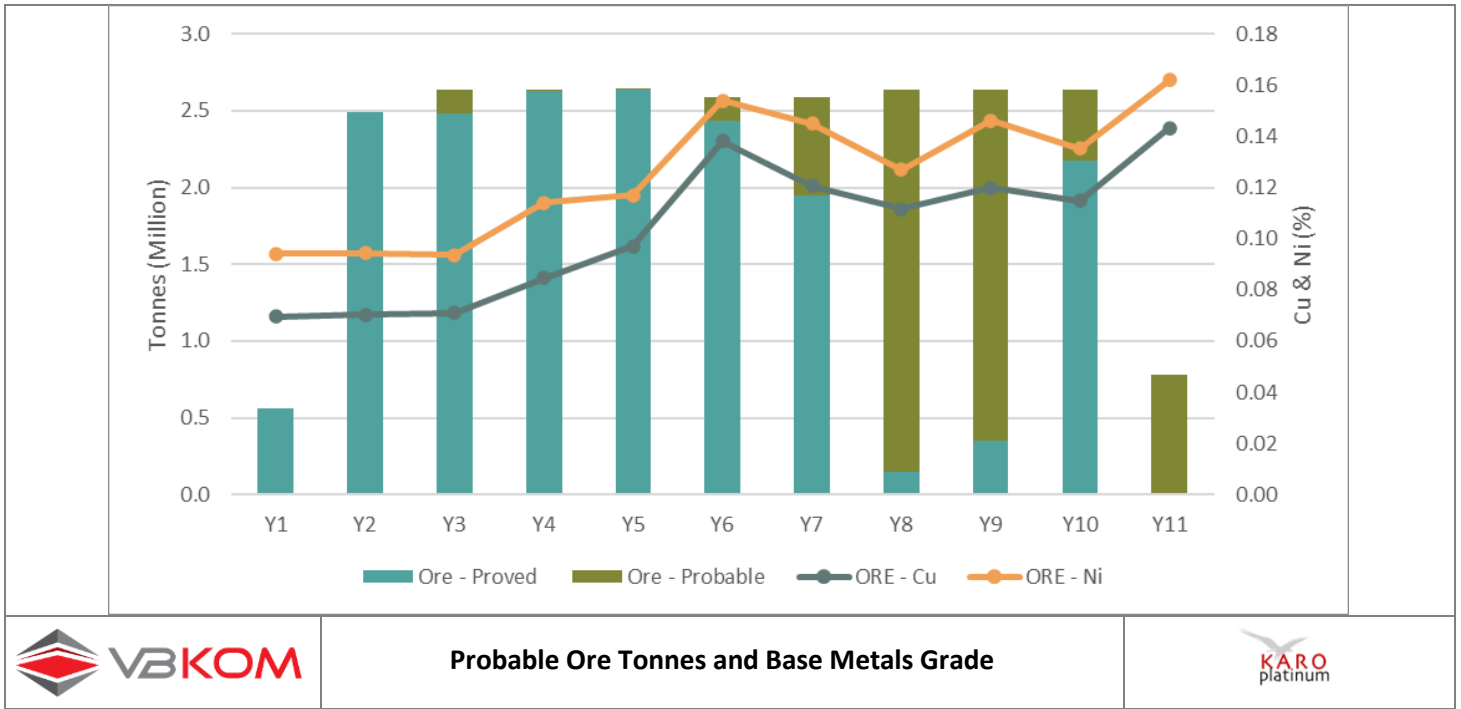


Figure 9-11: Probable ore tonnes and base metals grade.

## 10 OTHER RELEVANT DATA AND INFORMATION

### S8.1(i)

#### 10.1 Audits and Reviews

##### S3.5(iv), 7.1(i)(ii)

The CPs are not aware of any audits having been conducted on geological sampling procedures and analyses. The Mineral Resources as presented in this CPR have been reviewed by Ms Chantelle Obermeyer, who is also a CP as such term is defined in the SAMREC Code. Ms Obermeyer is satisfied with the manner in which the Mineral Resources have been prepared and stated.

Regular inspections are conducted by the EMA to ensure environmental compliance aligned with permitting conditions and relative legislation.

Independent consulting firm Minxcon (Pty) Ltd have undertaken technical reviews of the studies supporting the FS and the chapters which had been drafted. It is understood by the CPs of this Report that findings had been incorporated into the FS. Since the reviews, the mining design, scheduling, and financials have been revised.

The geohydrology has been reviewed by JMA (Chapter 8.2.2). Following their review, the concept geohydrological model is in the process of being revised and updated.

The CPs are not aware of further audits or reviews conducted on the supporting or technical aspects of the Project.

#### 10.2 Risk Assessment

##### S5.7

A structured Risk Assessment Workshop was conducted in September 2023 to document the technical elements that could affect the objectives of the Karo Project, document the primary mitigation strategies to treat the risks, and agree on any additional action required to further reduce the risk.

Various techniques were used to identify and assess risks and their consequences. During the initial risk analysis, the process was performed without taking into consideration any controls or mitigations to contain the risks and their consequences. Using the rating system, the worst-case scenario (inherent risk rating) is determined.

Following the identification and rating of the inherent risks, controls or mitigations were identified that are already in place or are well-understood in terms of the specific risk identified. Based on the effectiveness of the controls, the likelihood and consequences of the risk were re-evaluated, which resulted in the residual risk profile of the Project.

The outcome of this was captured in Chapter 20 of the BFS study report.

Subsequently, a follow-up workshop was held in December 2024. The distribution per category of the 12 risks identified is shown in Figure 10-1. The risks were rated before and after mitigating factors were applied. The heat maps of the risk ratings are presented in Table 10-1. In summary, a total of three risks presented as residually medium or significant after controls and actions were identified. These risks are summarised in Table 10-2. The complete risk register is given in Appendix I.

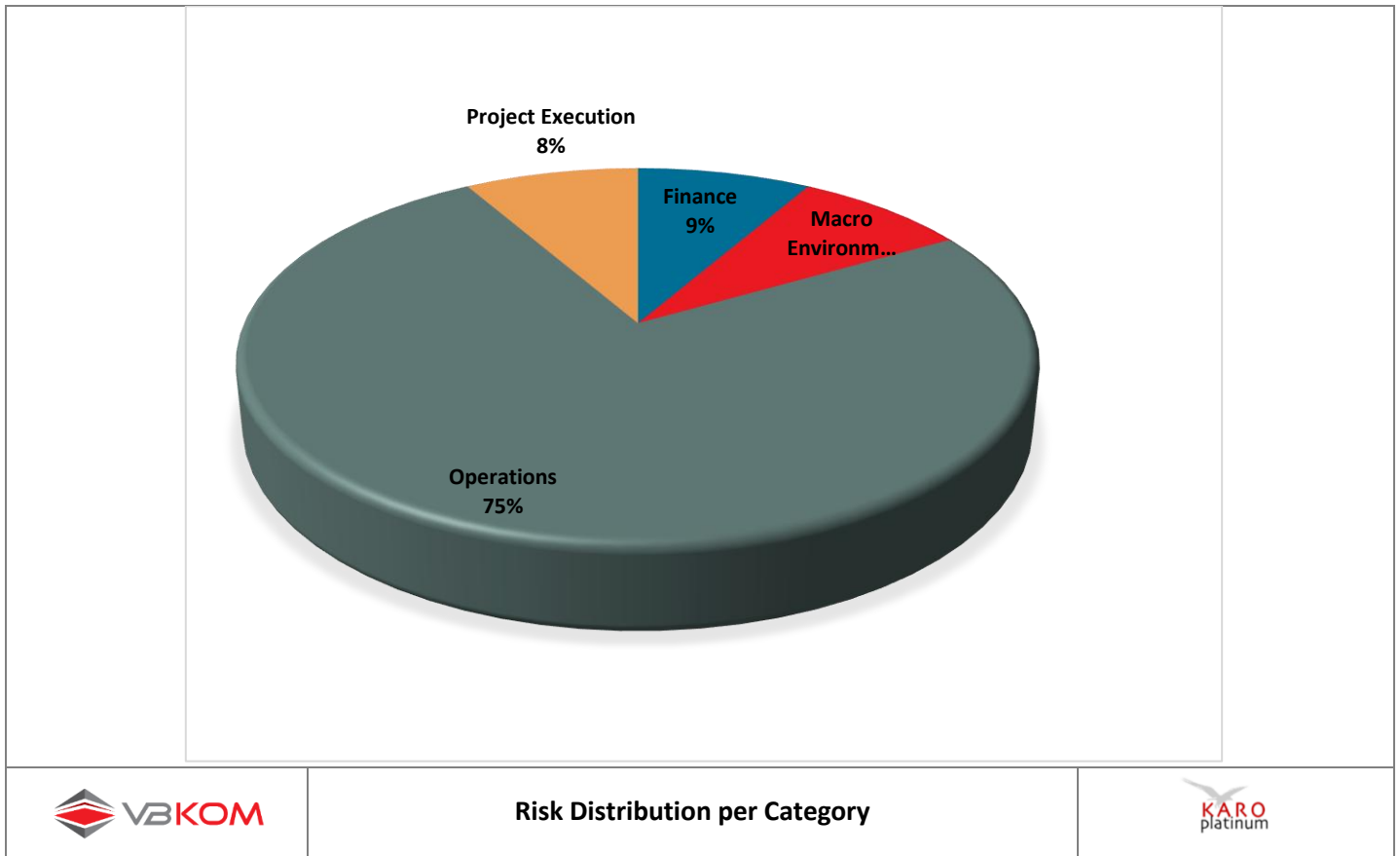


Figure 10-1: Risk distribution per category.

Table 10-1: Heat maps of the identified risks before and after mitigating factors were identified.

**Baseline Rating Count**

Likelihood	Consequence				
	Insignificant	Minor	Moderate	High	Major
Almost Certain	-	-	-	-	-
Likely	-	-	-	1	2
Possible	-	-	4	-	1
Unlikely	-	1	1	2	-
Rare	-	-	-	-	-

**Residual Rating Count After Mitigating**

Likelihood	Consequence				
	Insignificant	Minor	Moderate	High	Major
Almost Certain	-	-	-	-	-
Likely	-	-	-	1	-
Possible	-	-	-	-	1
Unlikely	-	5	3	-	1
Rare	-	1	-	-	-

Table 10-2: Summary of major risks after mitigation.

ID	Risk Category	Business Activity	Risk Ref	Risk Description	Inherent Likelihood	Impact	Inherent Risk	Action Plan	Due Date	Likelihood Post Mitigation	Impact Post Mitigation	Residual Risk Post Mitigation
1	Finance	Funding	2	<ul style="list-style-type: none"> <li>- Not securing sufficient funding to construct the project as currently proposed</li> <li>- Project delay due to protracted process to secure adequate funding</li> <li>- Timeous securing of strategic equity partners to bridge the funding gap.</li> </ul>	4	5	24	<ul style="list-style-type: none"> <li>Pursue previously identified alternative funding options i.e.</li> <li>- A gold stream limited to phase 1- Preliminary discussions have been held with a number of gold streamers (BMO engaged to lead process)</li> <li>- Additional equity or a deeply subordinated shareholder loan</li> <li>- The introduction of a third party investor - both strategic and equity investors are being targeted</li> <li>- Continuous optimisation of capex and operating cost estimations</li> <li>- Finalisation of MDA.</li> <li>- Finalisation of debt funding term sheet</li> <li>-Conclude feasibility study for processing of Base Metal Reef at end of LOM.</li> </ul>	CY Q1 2025 CY Q2 2025	3	5	22
2	Macro Environment	Finance	1	Commodity Price and Market Risk impact on project's funding capability	4	5	24	Market analysts consider PGM prices to have bottomed. Deficits are expected in 2024 and expected grow. Analysts expect PGM prices to increase between 10% and 50%	CY Q2 2025	4	4	21
3	Operations	Revenue	3	Karo is unable to conclude an offtake agreement on favourable terms that supports the project's economics	3	5	22	<ul style="list-style-type: none"> <li>- Continue discussions had with both PGM miners and downstream PGM beneficiations</li> <li>- Conclude draft offtake agreement with preferred PGM producer.</li> </ul>	CY Q2 2025	2	5	19

## 11 MINERAL ASSET VALUATION

JSE 12.10(f)

### 11.1 Introduction and Scope

**T1.3, T1.4, T1.16, T1.17**

Tharisa is an effective 64.79% shareholder in Karo Platinum. VBKOM was committed to undertake a valuation of Karo for inclusion in the CPR in order to comply with regulations of the JSE for listed companies. Karo is an open-pit PGM asset under construction located in the Great Dyke of Zimbabwe.

This valuation of Karo was completed in accordance with the SAMVAL Code. The valuation will be used in the public domain. The valuation should be read in conjunction with the CPR, which provides additional project background and supporting information. There were no restrictions on the valuation scope nor special instructions with regard to completion of this valuation that would affect the reliability of the valuation.

Independent Component Asset Values and historic verification are not applicable to this valuation.

### 11.2 Valuation Date

**T1.13**

The valuation date is 30 November 2024. The CV is not aware of any material changes that have occurred between the Valuation Date and the Report Date.

### 11.3 Background on Authors

**T1.0**

The CV is Iaan Myburgh and has 15 years' experience in the valuation of mineral assets. He is an affiliate member of the Geological Society of South Africa (GSSA) and a member of the Investment Analysts Society (IAS) of South Africa. He is also a Chartered Financial Analyst® charter holder.

Gert Kriel is an additional author to this chapter. He has 14 years' experience in the valuation of mineral assets. He is an affiliate member of the GSSA and a member of the IAS of South Africa. He is also a Chartered Financial Analyst® charter holder.

The CV, Mr Iaan Myburgh and additional author Mr Gert Kriel, are qualified to express their professional opinions in terms of the SAMVAL Code. They hold the necessary qualifications, professional registrations and relevant experience to prepare this valuation. To this end, certificates of competence are presented in Appendix A.

### 11.4 Independence

**T1.0**

Neither VBKOM nor personnel nominated for the completion or review of work, including the CV, has any interest (present or contingent) in Tharisa and its subsidiaries (including Karo Platinum), its directors, senior management, advisers or the mineral properties reported on in this CPR and valuation. The fees for this engagement are not contingent on any aspect of this report and were determined before commencement of the engagement.

The CV has no bias with respect to the assets that are the subject of the Report, or to the parties involved with the assignment.

## 11.5 Forward-Looking Statements

### T1.0, T1.15

The valuation presented in this document is dependent on mine plans, commodity prices, exchange rates, and cost estimates that are not based on historical information and therefore constitute “forward-looking statements”. Forward-looking statements are subject to uncertainty and risk and may cause the actual future results to differ materially from that presented in this document.

All facts presented in this document are correct to the best of the authors’ knowledge, and analysis and conclusions are limited to the reported forecasts and conditions.

## 11.6 Sources of Information

### T1.0, T1.19

Information was primarily sourced from the Karo data room administered by Firmex. Information used in the compilation of this valuation included the following primary sources of information:

- Bankable Feasibility Study report
- Corporate Documentation
- Karo Mineral Resource Estimate Report, June 2024
- Financial modelling for Karo generated by the Company.

Various other sources of information have been used, and these are duly referenced throughout the valuation. Sources of information are further detailed in Chapter 14. Due checks and verifications were made where possible. The analyses and conclusions of the valuation are limited only by the reported forecasts and conditions.

## 11.7 Reliance on Other Experts

### T1.0

This valuation has primarily relied upon the following experts:

- Mr Ken Lomborg, co-author and CP to this report. The Mineral Resource was prepared under the supervision of Mr Lomborg. Mr Lomborg is a geologist with 38 years’ experience in the minerals industry, with specific expertise in Mineral Resource estimation in respect of PGM deposits in the Great Dyke. He holds BSc (Hons) Geology, BCom, and MEng (Mining Engineering) degrees.
- Mr Wilhelm Warschkuhl, co-author and CP to this report. The Mineral Reserve was prepared under the supervision of Mr Warschkuhl. Mr Warschkuhl is a mining engineer with over 14 years’ experience in the minerals industry, with specific expertise in Mineral Reserve estimation. He holds a BEng (Hons) Mining Engineering degree.
- Historical and recent third-party information provided by Karo personnel and/or verification thereof. This includes financial modelling, various studies and prepared associated reports on the project covering a wide

range of disciplines including but not limited to legal and environmental aspects. All these reports are included in the Reference list and are referred to in the relevant text where they are relied upon. Written consent to use and rely on such reports has been obtained.

Particular reliance on other experts is referenced where relevant.

## **11.8 Previous Valuations**

### **T1.11**

VBKOM is not aware of any other valuations on Karo in the public domain.

## **11.9 Valuation Approaches and Methodologies**

### **T1.2, T1.12**

The three generally accepted approaches to Mineral Asset Valuation according to the SAMVAL Code are:

- Cash Flow Approach – The Cash Flow Approach relies on the ‘value-in-use’ principle and requires determination of the present value of future cash flows over the useful life of the Mineral Asset.
- Market Approach – The Market Approach relies on the principle of ‘willing buyer, willing seller’ and requires that the amount obtainable from the sale of the Mineral Asset is determined as if in an arms-length transaction.
- Cost Approach – The Cost Approach relies on historical and/or future amounts spent on the Mineral Asset.

The choice of valuation approach and methodology depends on the development stage of a mineral asset and the available information. In conducting mineral asset valuations, the SAMVAL Code considers the following categories of mineral assets:

- Early-Exploration: Mineral assets where mineralisation may or may not have been identified, and where Mineral Resources have not been defined;
- Advanced Exploration: Mineral Assets where either (i) considerable exploration has been undertaken and specific targets have been identified that warrant further detailed evaluation, usually by drill testing, trenching, or some other form of detailed geological sampling; or (ii) a Mineral Resource estimate has been defined, and a Scoping Study has been applied to determine whether there are RPEEE;
- Development: A mineral asset that is being prepared for mineral production and for which economic viability has been demonstrated by a Feasibility Study or Prefeasibility Study and includes a Mineral Asset which may not be financed or is under construction;
- Production: A mineral asset that is in production. Tenure holdings, particularly mines, well-fields, and directly connected processing plants that have been commissioned and are in production;
- Dormant Asset: A mineral asset that is not being actively explored or exploited, in which the Mineral Resources and Mineral Reserves have not been exhausted, and that may or may not be economically viable; and
- Defunct Asset: A mineral asset on which the Mineral Resources and Mineral Reserves have been exhausted, and exploitation has ceased, and that may or may not have residual assets and liabilities.

Through different stages of the project life, different valuation approaches are deemed appropriate and more widely used. For early-stage assets, the confidence in technical and economic parameters may be substantially lower than compared to development or operating assets, resulting in a lower probability of the Mineral Resources being brought to account. Different valuation approaches and methodologies may produce different valuation results for the same asset. The appropriate valuation approach and methodology recognise this when estimating a value range.

These valuation approaches incorporate the respective Mineral Resource and Mineral Reserve categories on the following basis:

- Stage of development;
- Level of geological confidence in the interpretation of the geology and mineralisation;
- The depth of the defined Mineral Resources and Mineral Reserves relative to surface i.e. whether the undeveloped Mineral Resources are likely to be mined early, or later in the production plan, and at what relative cost;
- The availability of existing mining infrastructure and mineral production within the project area i.e. whether the undeveloped Mineral Resources and Mineral Reserves are likely to be mined as an extension of a pre-existing operation; and
- Relative difficulty or ease of mining conditions largely due to complex geological structures and whether or not they are conducive to mechanised mining.

Where no Mineral Resource has been declared, or insufficient confidence exists in the technical parameters of a mineral asset, the cost approach is considered the most appropriate valuation methodology. In this case, the mineral asset's value is related to the money spent on its acquisition, plus a multiple of the exploration expenditure (Project Enhancement Multiplier (PEM)). The PEM will relate to the level of success achieved through the exploration expenditure.

Once Mineral Resources have been classified, then market comparisons can be made on a monetary value per unit of mineralisation (e.g. USD/oz of PGMs or USD/t contained chrome). Market comparisons can also be made on a monetary value per unit area (USD/ha or USD/km<sup>2</sup>) for properties or projects that have not yet been classified as Mineral Resources. The market valuation essentially recognises the "price" that the assets are trading at in the open market.

After technical studies establishing the basis for future economic exploitation have been carried out, discounted cash flow (DCF) methods become applicable. This essentially establishes the "value" of the assets.

The SAMVAL Code requires at least two valuation approaches must be applied, and the results must be weighed and reconciled into a concluding opinion of value. Figure 11-1 is a graphical representation of the project life stages indicating the expected confidence in the Mineral Resources, completed studies, and most widely used valuation methodologies for each stage. The change in relative project value is also indicated.

Karo is in the Development phase as feasibility studies have been conducted on the asset. The most appropriate valuation methodologies are therefore the Market Approach and the Cash Flow Approach.

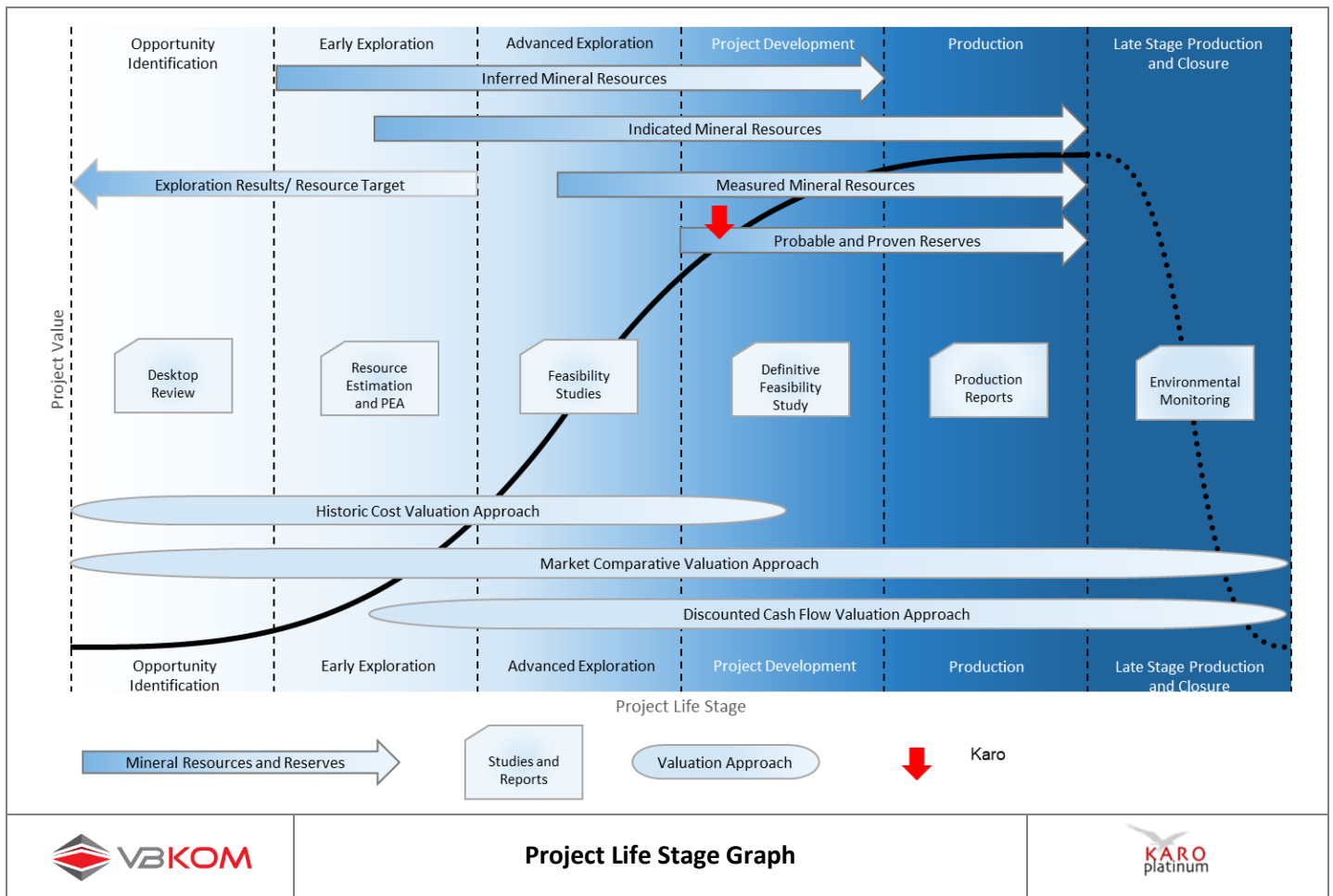


Figure 11-1: Project life stage graph.

## 11.10 Key Assumptions and Modifying Factors

### T1.10

The Karo valuation was based on a number of specific assumptions, which are discussed in the project sections, including the following general assumptions:

- the information provided by Karo Platinum and its contractors and subsidiaries can be relied upon,
- the valuations are based on the face value of the mineral assets only,
- the legal status of the mineral rights and statutory obligations are accurately stated,
- the mining rights will remain valid,
- all necessary regulatory approvals for exploration and mining will be obtained in a timely manner,
- the corporate structures and ongoing activities are accurately presented,
- the expenditures provided by Karo Platinum can be relied upon,
- the financial statements and management accounts provided by Karo Platinum can be relied upon,
- the Mineral Resource and Mineral Reserve estimates, and derived mine plan can be relied upon,
- the mining method is a conventional open pit, truck and shovel operation,

- RoM material will be processed through a concentrator plant consisting of a crushing, milling and flotation circuit,
- the ore quality is suitable for producing a marketable product,
- Karo Platinum and its subsidiaries will continue as going concerns and will remain fully funded,
- resettlement planning is secured and will be completed timeously,
- Karo Platinum will be able to secure markets and offtake for any future production, and
- VBKOM relied on and considered the accuracy of the information provided to it as observable inputs in forming its opinion. Whenever possible, reasonableness of the information was corroborated through publicly available or independently obtained information or by discussing it with Karo Platinum management.

The CV reviewed the modifying Factors as discussed in Chapter 7 to 9 of the CPR. The modifying factors relevant to the valuation have been discussed in further detail in Chapter 11.12.1 to 11.12.9.

Assumptions that pose a risk to the project development and economics are summarised below:

- The valuation considered the total project area, including the areas without permitting as discussed in Chapter 8.7.1. The KPSE are with the current permit contributes 51.2% of the total Mineral Reserve. As per Chapter 8.7.1, an addendum is in process for the inclusion of the additional mining areas. There is a reasonable basis to believe that all outstanding permits required for the Project will be obtained.
- Revenue from base metals was included in the cash flow valuation although these are not specifically included in the Mining Lease issued. As per Chapter 2.3.2, there is a reasonable basis to believe that Karo Platinum can extract the base metals in the defined mining lease area.
- Preferential royalties, taxes and other payments rates to government are based on the MDA incentives by the Zimbabwean government and assumed to be granted. These are not substantiated by a written agreement and are subject to change.
- Karo has not yet finalised an offtake agreement. Indicative offtake terms have been used for the valuation.
- Resettlement action is underway, notably for the southern portion of KPSE. Delays may impact the start of operations, as well as cash flow and expenditure.

VBKOM's valuations are based on current economic, regulatory, market, and other conditions. Future developments may affect these valuations, and VBKOM has no obligation to update, review, or reaffirm its valuations based on such developments. Specific risks relating to the stated assumptions and modifying factors and their impact on the overall valuation are detailed in Chapter 11.13.

## **11.11 Market Approach Valuation**

### **T1.14**

The Market Approach relies on the principle of 'willing buyer, willing seller' and requires that the amount obtainable from the sale of the Mineral Asset is determined as if in an arm's-length transaction. The Market Valuation Approach requires comparison with relatively recent transactions of mineral assets that have similar characteristics to those of the asset being valued. It is generally based upon a monetary value per unit of resource.

VBKOM relied on the database of Transactions and Market Values developed by Minval Group. Since transactions are scarce in the minerals industry, Minval Group supplements transaction data with market data from listed entities. In using this approach, the value of the asset in question is determined by comparing it to observable market values of similar assets. This methodology uses the market capitalisation and enterprise value, or transaction value, commodity prices, and exchange rates as observable market inputs into deconstruction of the comparable asset value.

In completion of the market approach, following methodology was employed:

- Industry transactions based on arm's-length transactions were sourced and expressed as a unit value (USD/4E oz) in a database for the PGM industry Mineral Resources unit values, which were reported in the three categories, Measured, Indicated and Inferred.
- Only recent transactions are used. Transactions values are not adjusted as these factors are considered arbitrary and result in unreliable data.
- In addition to transaction data, Minval Group deconstructs the observable market value data to an in-situ unit value range for each of the Mineral Resource categories of their mineral asset.
  - For each of the companies added to the database, all the relevant technical as well as financial data is captured. Technical information is typically obtained from the company's Annual Report/ Annual Information Form and their Mineral Resource and Ore Reserve Statement
  - Financial data is sourced from the latest published financial statements. In addition, the share price for each company is obtained for the previous six months. The Enterprise Value for each company is calculated by adding debt and subtracting cash and cash equivalents.
  - Development stage, Mineral Resource classification, mining method, and the depth of the Mineral Resource are then used to attribute value to different projects in a company.
- Using the relevant commodity price as a weighting, the Contained in-situ Mineral Resources for other commodities/metals are standardised for all the projects contained in the database. The reporting unit is also standardised, essentially creating "unitless resources".
- For each asset in the database, the in-situ value for each resource category is recorded. A distribution curve is generated for each resource category by considering the distribution curves of each asset in the database.
- Assets considered similar to the project are identified on the distribution curve and used to form the basis for the selected valuation range.

The Minval Group database of PGM assets consists of 45 assets, owned by listed entities across all stages of development.

Distribution graphs of in-situ values for all assets in the database graphically summarise the value ranges. The x-axis indicates the in-situ values in USD/oz and the y-axis shows the frequency distribution. High y-values points to a higher concentration of projects at a specific in-situ value.

For the Karo market valuation, the resultant in-situ resource value distribution graphs are illustrated in Figure 11-2 to Figure 11-4 for Measured, Indicated, and Inferred Mineral Resources, respectively.

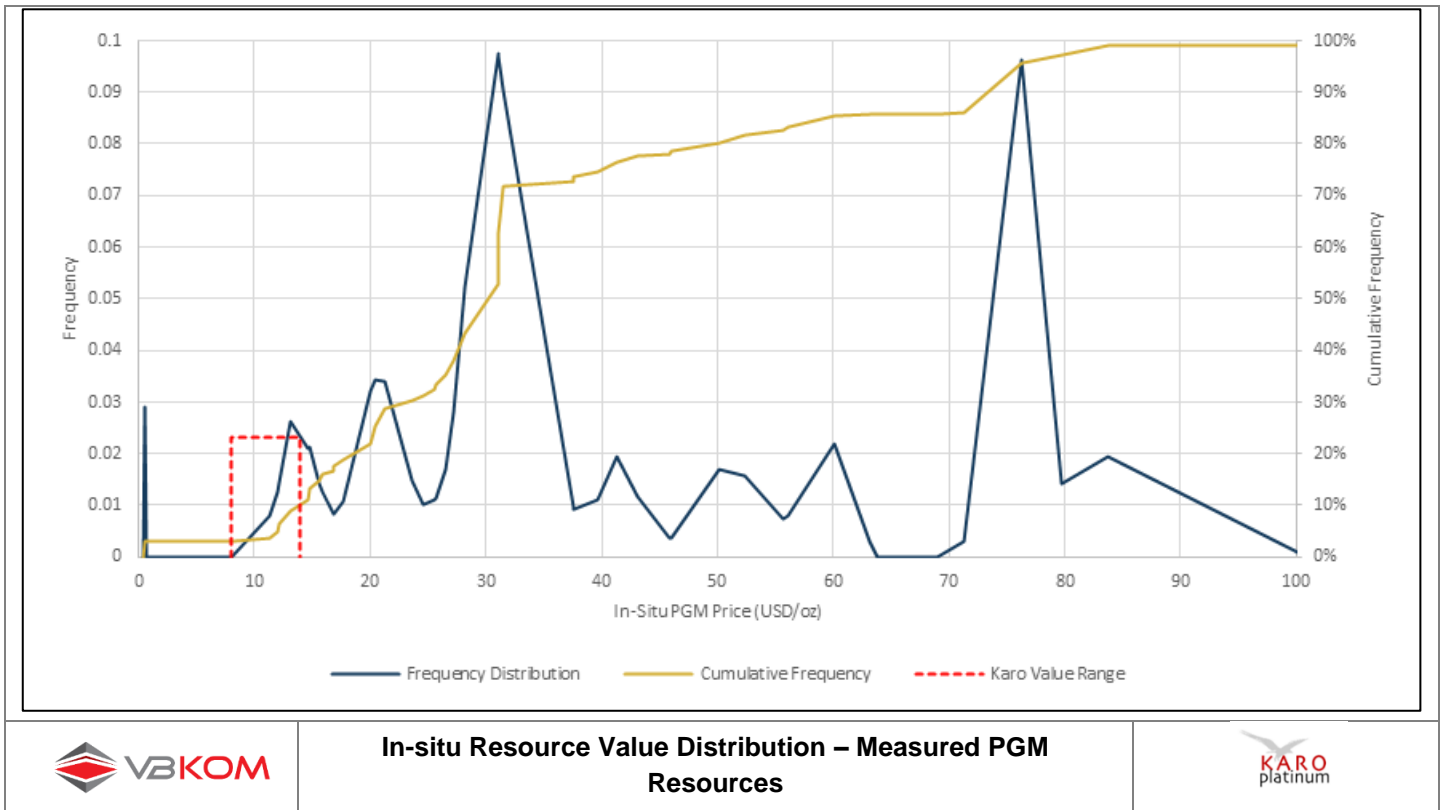


Figure 11-2: In-situ resource value distribution – Measured PGM Resources.

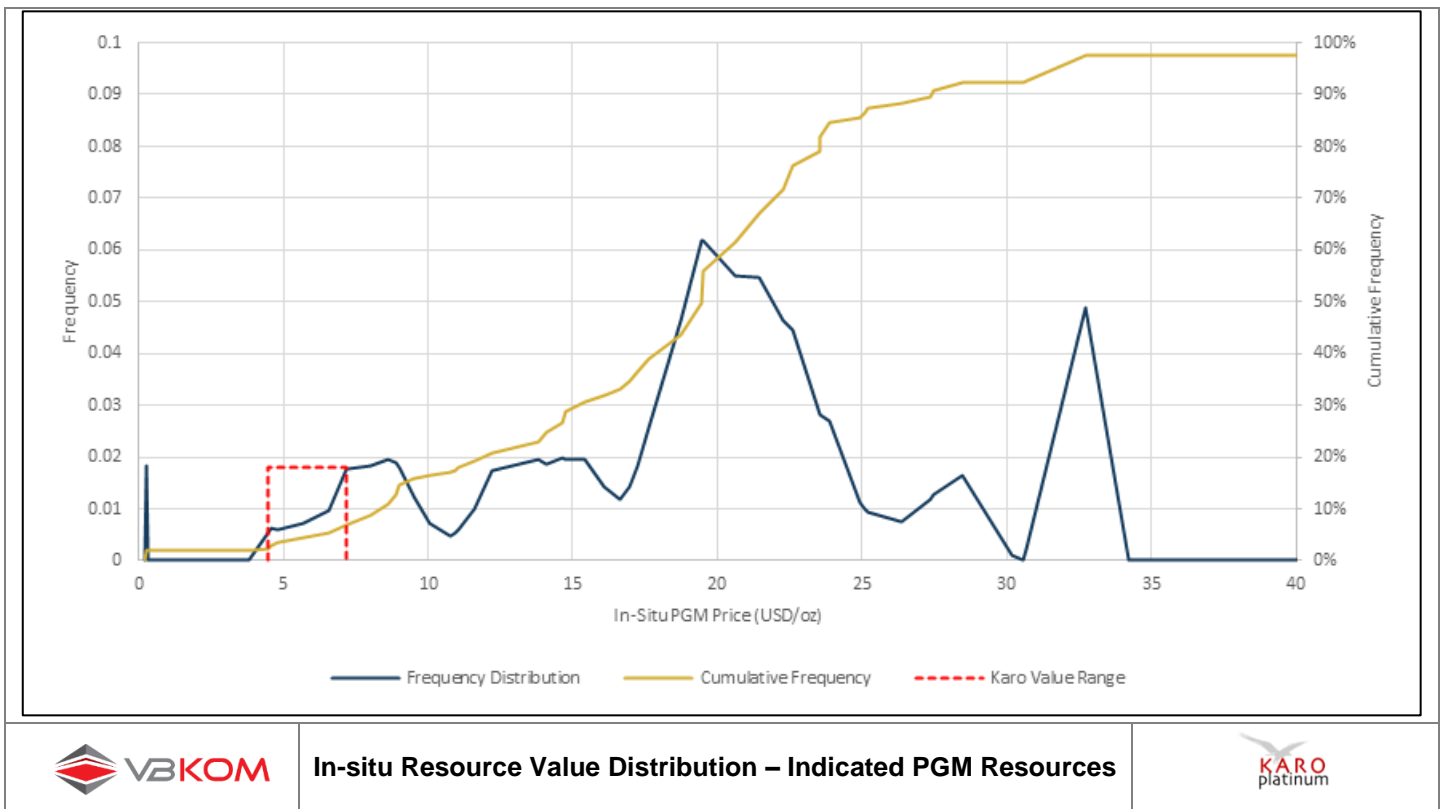


Figure 11-3: In-situ resources value distribution – Indicated PGM Resources.

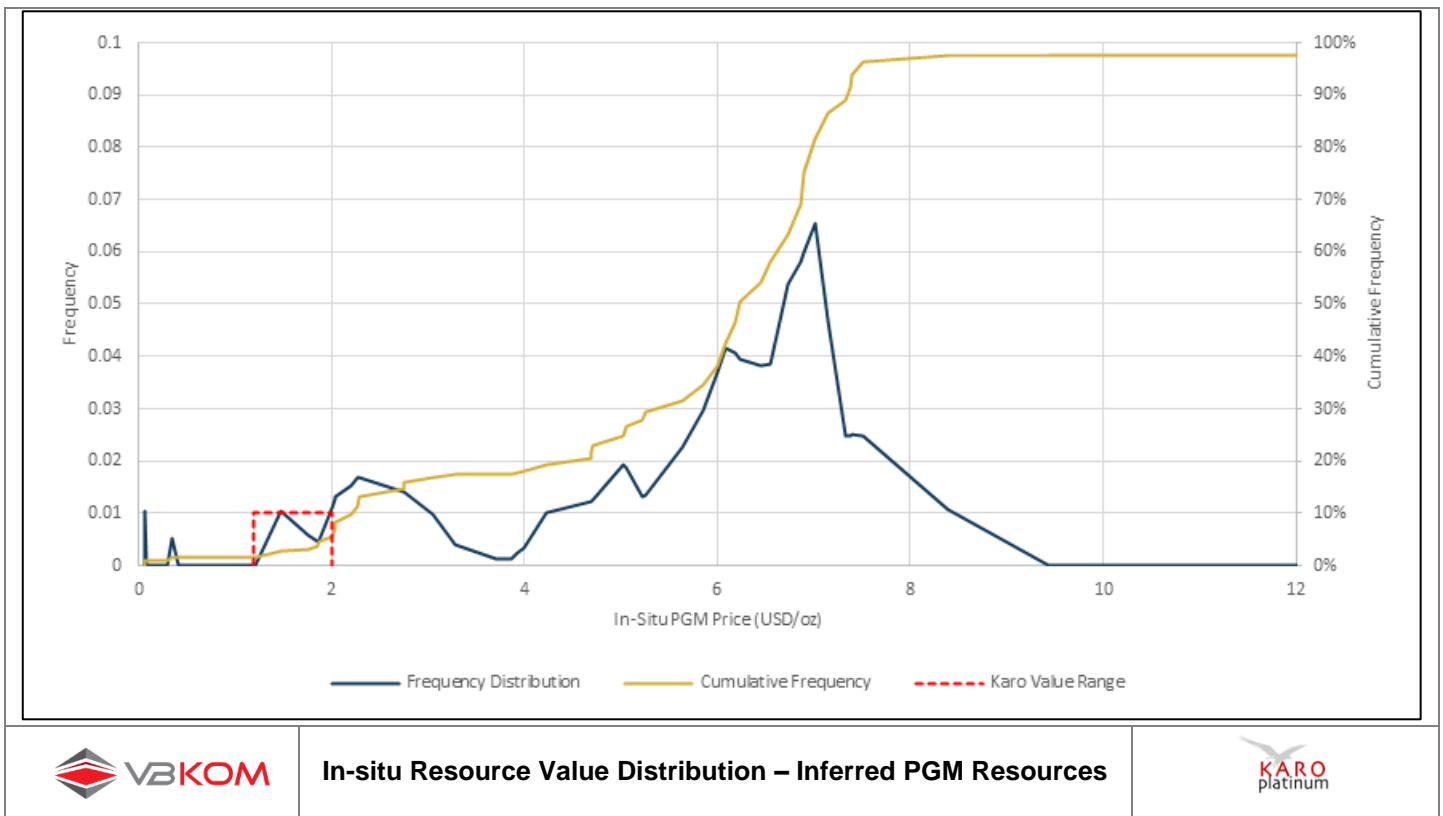


Figure 11-4: In-situ resource value distribution – Inferred PGM Resources.

High in-situ values are from operating mines in vertically integrated companies with beneficiation capabilities. The low in-situ values are from early-stage projects or companies with low market capitalisations.

VBKOM considered the above distribution graphs and the following additional factors to inform the in-situ value ranges for the PGM interest in Karo:

- The project is in a historically active mining area
- The geology is well understood
- Mining is from open pits
- Processing will be done using existing technologies
- The product will be a concentrate that needs to be transported for further beneficiation
- The project has a recently completed feasibility study showing marginal economics
- Zimbabwe still ranks low on global indices for attractiveness and ease of doing business.

Based on the above factors and as compared to similar projects in the database used to generate the distribution graphs, VBKOM considers Karo to fall in the lower range of the dataset (i.e. the 5<sup>th</sup> to 10<sup>th</sup> percentile of values). The resultant value range selected for Karo are indicated on the distribution graphs in Figure 11-2 to Figure 11-4.

The in-situ value ranges attributable to Karo’s PGM interest are USD8.00/oz to USD14.00/oz for the contained Measured PGM Mineral Resources, USD4.50/oz to USD7.20/oz for the contained Indicated PGM Mineral Resources, and USD1.20/oz to USD2.00/oz for the contained Inferred PGM Mineral Resources. This gives a value range of

USD68.26 million to USD114.57 million to the asset. The preferred value is the lower value of USD68.26 million. The valuation of the PGM interest is summarised in Table 11-1.

Table 11-1: Market approach valuation results.

Mineral Resource Category	5PGE + Au (koz)	In-Situ Values		Mineral Asset Value		
		Lower (USD/oz)	Upper (USD/oz)	Lower (USDm)	Upper (USDm)	Preferred (USDm)
Measured	4,439.00	8.00	14.00	35.51	62.15	35.51
Indicated	7,180.00	4.50	7.20	32.31	51.70	32.31
Inferred	363.00	1.20	2.00	0.44	0.73	0.44
<b>Total</b>	<b>11,982.00</b>	<b>5.70</b>	<b>9.56</b>	<b>68.26</b>	<b>114.57</b>	<b>68.26</b>

## 11.12 Cash Flow Valuation

### T1.14

The Cash Flow Approach relies on the 'value-in-use' principle and requires determination of the present value of future cash flows over the useful life of the mineral asset. Future cash flows are estimated from known information on the project's technical and economic parameters and that of similar projects.

VBKOM had access to the original cash flow models prepared for the FS on the Project and the feasibility reports. The feasibility models, various technical studies, and Mineral Resources and Mineral Reserves presented in this report formed the basis of the valuation.

#### 11.12.1 Inflation Rates

The valuation of Karo was undertaken in Real terms and no inflation assumptions were included.

#### 11.12.2 Commodity Prices

Karo produces a concentrate to sell to a refinery where further beneficiation is done to extract the PGE and base metals. The price of the concentrate is calculated based on the contained metal, discounted by a factor calculated by the refinery.

For this valuation, the Bloomberg commodity price forecast as at November 2024 was used. The Bloomberg commodity price forecast is summarised in Table 11-2.

Table 11-2: Commodity prices.

Commodity	Unit	Payability Rate (%)	2025	2026	2027	2028	Long Term
Platinum	(USD/oz)	85	1,130.00	1,200.00	1,215.00	1,215.00	1,215.00
Palladium	(USD/oz)	85	1,060.00	1,000.00	1,125.00	1,125.00	1,125.00
Rhodium	(USD/oz)	83	4,913.00	5,000.00	5,000.00	5,000.00	5,000.00
Gold	(USD/oz)	84	2,592.50	2,500.00	2,500.00	2,500.00	2,500.00
Iridium	(USD/oz)	60	4,691.48	4,611.97	4,582.73	4,503.95	4,476.00
Ruthenium	(USD/oz)	60	391.77	384.09	402.92	392.25	407.18
Nickel	(USD/tonne)	70	17,331.50	17,550.00	17,665.00	17,665.00	17,665.00

Commodity	Unit	Payability Rate (%)	2025	2026	2027	2028	Long Term
Copper	(USD/tonne)	73	9,860.00	10,050.00	9,960.50	9,960.50	9,960.50
Cobalt	(USD/tonne)	70	30,258.41	37,963.56	43,739.66	43,739.66	43,739.66
<b>Average 6E Realised Basket Price</b>			<b>1,154.31</b>	<b>1,156.99</b>	<b>1,204.27</b>	<b>1,203.11</b>	<b>1,203.15</b>

\*Bloomberg November 2024 Price Forecast

The 6E basket price that has been utilised for the valuation is calculated from a real term analyst forecast for each of the 6E metals and calculated using the mine prill splits and the payability rate from the refinery. The realised basket prices used in the valuation are highlighted in the table above.

Individually, the various PGM metal prices vary considerably and are subject to complex market supply, demand and pricing influences. Analysis of historic prices showed that the basket price is less variable than the individual component prices and it was considered reasonable to model the pricing as such.

The 6E basket forecast price used is higher than the basket spot price of USD1,075.50 as at the valuation date.

A break-even 6E price including capital of USD1,213/oz has been calculated for Karo. Additional sensitivity analysis regarding the commodity prices is provided in Chapter 11.12.9 and the risks to the valuation are highlighted in Chapter 11.13.

### 11.12.3 Exchange Rates

The valuation of Karo was undertaken in USD, with all operating costs, capital costs, and revenue calculations estimated in USD.

### 11.12.4 Payments to Government

Payments to government include Royalties, Taxes on Profit, Taxes and Licences on Exports, Minerals Marketing Corporation of Zimbabwe fees, Mining Lease fees, and an IMTT on transactions exceeding USD500,000.

Based on Chapter 2.4, it is assumed that Karo will receive dispensation under the MDA on the tax rate on profit and exports and royalties on Platinum and Palladium for a period of 60 months. The government incentives for taxation and royalties are not substantiated by a written agreement and are subject to change. If Karo does not receive dispensation under the MDA, the corporate tax rate will revert back to 25.8% and the royalty rate for Platinum and Palladium will be 7% and 5% respectively. This will result in an increased tax bill of USD36m over the LoM and USD64m in royalties.

Table 11-3 summarises the input assumptions used in the valuation.

Table 11-3: Payments to Government.

Description	Unit	Value
<b>Royalties</b>		
Platinum	%	2.0
Palladium	%	2.0
Rhodium	%	4.0

Description	Unit	Value
Gold	%	5.0
Iridium	%	4.0
Ruthenium	%	4.0
Base Metals	%	5.0
<b>Tax</b>		
Corporate Tax Rate	%	25.8
Incentive Tax Rate	%	15.5
Incentive Period	months	60.00
Export Tax	%	0.0
<b>Fees</b>		
MMCZ Fee	%	0.9
IMTT Fee	%	2.0
Mining Lease	USD/annum	717,090.00
Export Licence	USD/quarter	9,375.00

### 11.12.5 Discount Rate

Since the project will generate its revenue in USD, and all other costs are either in USD or indexed to the USD, VBKOM calculated a USD-based discount rate for the valuation of Karo. VBKOM uses a build-up method to calculate the discount rate. The formula is:

*Equation 1: Discount rate formula.*

$$\text{Discount Rate} = R_f + \beta * \text{MRP} + \alpha$$

$R_f$  = Risk-free Rate

$\beta$  = beta (systematic risk)

MRP = Market Risk Premium

$\alpha$  = alpha (unsystematic risk or project specific risk)

The global USD-based risk-free rate is 4%. The global MRP is estimated at 6.5% and systematic risk is assumed to be a factor of 1. The project-specific risk premium is 9.35% based on exposure to geological, technical, and economic exposures unique to the project. Project-specific risk is calculated based on the factor risk contribution and the sensitivity of the project to that factor. Table 11-4 illustrates the build-up of project-specific risk.

Table 11-4: Project-specific risk premium.

Item	Factor $\alpha$ (x%)	Rank	Factor Sensitivity $\mu$
Political and Country Risk	3.50	High	1.00
Reserves	3.00	Normal	0.25
Commodity Prices	2.75	Above Normal	0.50
Operating Costs	2.50	Normal	0.25
Social And Environmental	2.00	Normal	0.25
Location	1.50	Normal	0.25
Capital Costs	1.50	Normal	0.25
Management	1.00	Normal	0.25
Ownership	1.00	Normal	0.25
Taxation	0.80	Above Normal	0.50
Recovery	0.80	Normal	0.25
Data Quality	0.60	Normal	0.25
Geology	0.50	Normal	0.25
Cost Inflation	0.40	Above Normal	0.50
Mining Processing Method	0.40	Normal	0.25
Development Stage	0.20	Normal	0.25
Life Of Mine	0.20	Normal	0.25
Scale of Project	0.20	Normal	0.25
Expansion	0.10	Normal	0.25
<b>TOTAL <math>\alpha</math></b>			<b>9.35</b>

The nominal discount rate is calculated as 19.35%. Based on a global USD-based inflation rate of 4.3%, the real discount rate used in the valuation is calculated as 14.44%.

### 11.12.6 Mining and Production Rates

Mining and Processing rates are discussed in detail in Section 8.3 and Section 8.4, respectively, of this report. Mining rates are optimised to supply the plant with 220 kt of ore per month. A mine call factor of 100% is used for the base case model. For the simulation analysis, this was ranged between 95% and 100%.

Where ore mined exceeds 220kt per month, the valuation model assumes material be placed on a RoM stockpile to be processed in the future. Over the life of the mine, the stockpile never exceeds 40% of a single month's production, representing approximately 11 days of stock. This virtual RoM stockpile is not material and will not significantly increase operating costs of the operation. The valuation model prioritises higher grade material be processed first from the RoM stockpile.

6E recoveries are 65% for transition ore and 83% for fresh ore. The plant produces a 6E concentrate with a target grade of 100 g/t. It is assumed that all concentrate will be sold in the month of production.

Table 11-5 summarises the key input assumptions used in the valuation.

Table 11-5: Mining and production inputs.

Description	Unit	Total LOM	Steady-State Average
Life of Mine	years	11.00	
<b>Mining</b>			
Waste	BCM/m	191.02	21.90
Transition Ore	Mt	5.03	0.24
PGE Grade	g/t	3.03	3.03
Fresh Ore	Mt	19.81	2.40
PGE Grade	g/t	2.99	2.99
<b>Processing</b>			
Feed	Mt	24.84	2.64
Feed Grade	g/t	3.00	3.00
<b>PGE Recoveries</b>			
Transition Ore	%	65.0	65.0
Fresh Ore	%	83.0	83.0
<b>Base Metal Recoveries</b>			
Transition Ore	%	60.0	60.0
Fresh Ore	%	78.0	78.0
<b>Production</b>			
PGE Production	koz	1,898.78	205.00
Combined Base Metals	t	43.17	5.80

### 11.12.7 Operating Expenditure

Opex was sourced from the BFS studies and benchmarked to VBKOM'S internal database of cost estimates. Table 11-6 summarises the key Opex assumptions used in the valuation.

Table 11-6: Opex inputs.

Description	Unit	Value
<b>Mining Costs</b>		
<i>Drill and Blast</i>		
Hard Waste	USD/BCM	1.97
Selective Waste	USD/BCM	4.59
Ore	USD/BCM	4.59
<i>Load and Haul</i>		
Topsoil	USD/BCM	3.97
Soft Waste	USD/BCM	2.03
Hard Waste	USD/BCM	2.08
Selective Waste	USD/BCM	2.85
Transition Ore	USD/BCM	3.37
Fresh Ore	USD/BCM	3.48
<i>Other Mining</i>		
Mining Technical Services	USD/month	385,711.25
<b>Processing Costs</b>		
Reagent Costs	USD/tonne	2.72
Consumables	USD/tonne	1.38
Maintenance	USD/month	300,822.34
Labour	USD/month	187,819.20
<b>Other Costs and Rates</b>		
Logistics	USD/conc tonne	61.11
General and Administration	USD/month	1,435,105
Electricity Price	USD/kWh	0.14
Diesel Price	USD/L	1.36

### 11.12.8 Capital Expenditure

CAPEX was sourced from the BFS studies and benchmarked to VBKOM'S internal database of cost estimates as detailed in Chapter 8.10. Pre-production capital amounts to USD475m and includes escalation (4.4% of total CAPEX) and contingency (0.1% of CAPEX). The largest pre-production capital item is Mining and Mining Infrastructure.

Historical CAPEX, before 30 September 2024, amounting to USD137 million, is not included in the valuation as it has already been sunk. The remaining CAPEX to be spent after 30 September 2024 amounts to USD338 million and is included in the valuation.

Table 11-7 summarises the key CAPEX assumptions used in the valuation.

Table 11-7: Capital expenditure inputs.

Description	Unit	Value
<b>Development CAPEX</b>		
Total Development CAPEX	USDm	475.00
Sunk CAPEX	USDm	137.00
Development CAPEX for Valuation	USDm	338.00
<b>Ongoing CAPEX</b>		
Stay in Business	% of Opex	7.5

Stay in Business CAPEX is modelled as a percentage of the Opex. In the Base Case model, under steady state production, this amounts to between USD11.4 million and USD13.4 million per year, totalling USD117.9 million.

Stay in Business CAPEX includes rehabilitation and closure costs. As at the valuation date no statutory instrument has been gazetted implementing an environmental fund. As such, no environmental rehabilitation trusts and guarantees have been established for Karo in terms of Zimbabwean law. A Preliminary Mine Closure Plan assessed the LOM closure liability estimate of USD20 million (excl. VAT) for Karo as outlined in Chapter 2.4.2.

#### 11.12.9 Sensitivity and Simulation Analysis

The base case model yields a NPV of negative USD7.08 million at a real discount rate of 14.44%. The internal rate of return (IRR) is 13.9%.

Single factor sensitivity analysis was performed on key input parameters to assess the impact on the NPV. The tornado graph in Figure 11-5 illustrates the USD change in NPV by increasing or decreasing the input parameter by 10% and 20% increments. The most sensitive parameter is PGM prices followed by mining costs and development CAPEX.

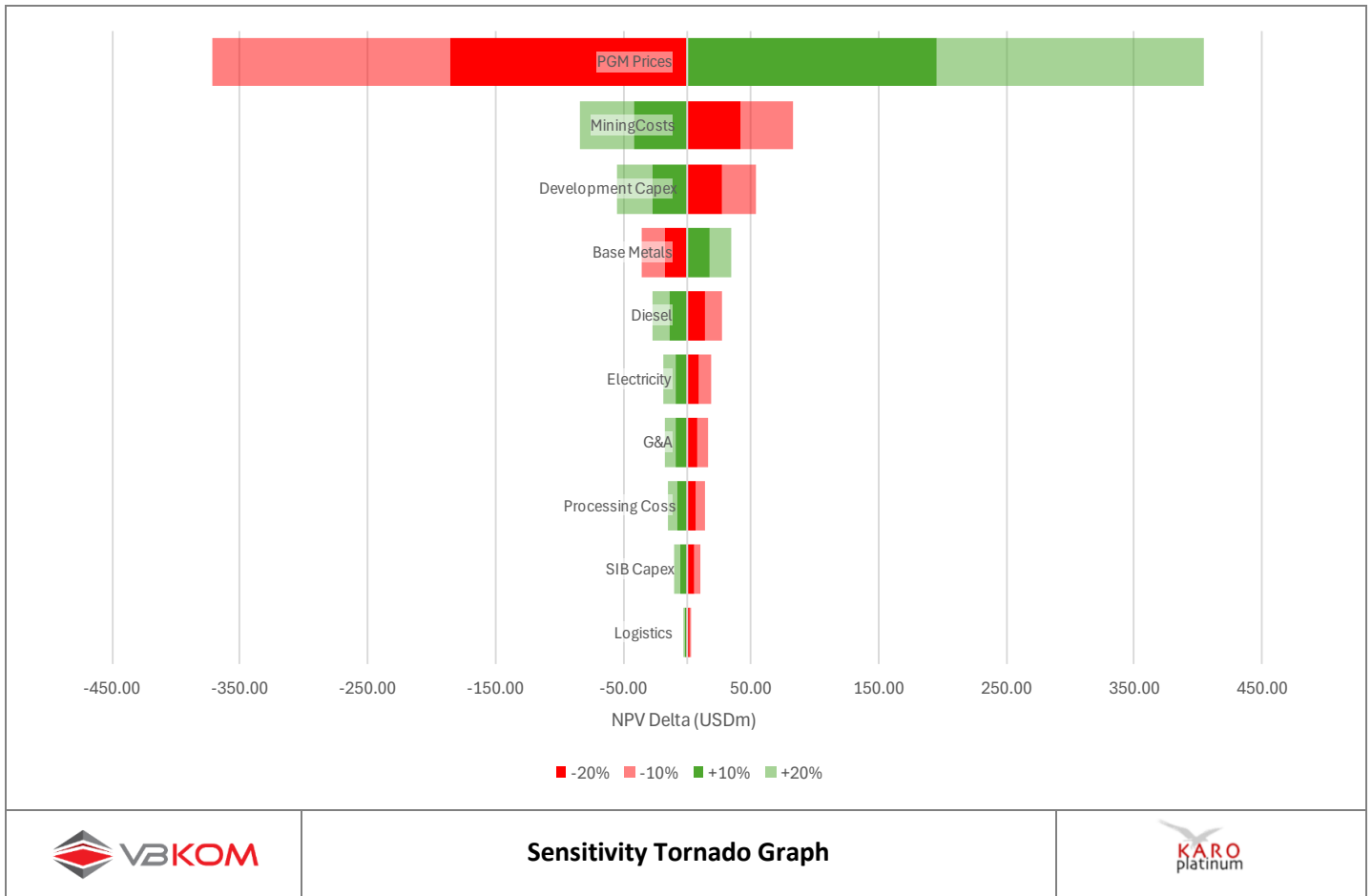


Figure 11-5: Sensitivity tornado graph.

Aggregating input parameters into Revenue, Opex and Capex yields the spider graph in Figure 11-6. The model is very sensitive to changes in parameters affecting revenue: every 5% change in revenue changes the NPV by USD105 million. Opex is less sensitive with a 5% in Opex changing the NPV by USD40 million.

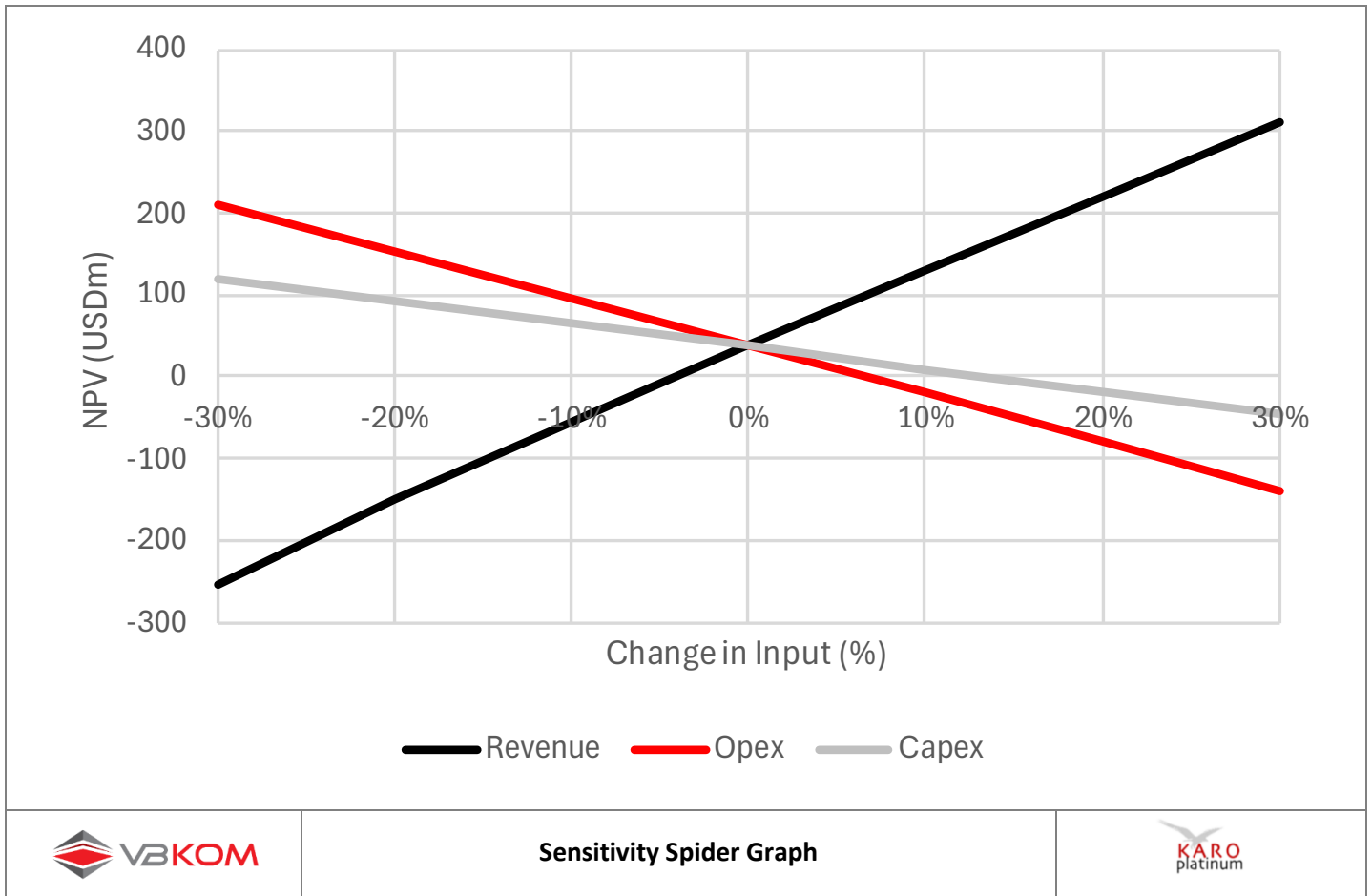


Figure 11-6: Sensitivity spider graph.

The CV considers the 14.44% discount rate calculated in Section 11.12.5 to fairly reflect the risk adjustments and time value of money considerations to calculate the present value of future cash flows. However, different capital structures, cost of capital and risk appetite can yield alternative discount rate expectations. The NPV at different discount rates are summarised in Table 11-8.

Table 11-8: NPV at various discount rates.

NPV Unit	Discount Rate							
%	5.00	7.50	10.00	12.50	<b>14.44</b>	15.00	17.50	20.00
USDm	193.26	123.83	67.79	22.32	<b>-7.08</b>	-14.74	-45.07	-69.98

Even a perfectly specified techno-economic model can only provide a snapshot of reality, reflecting one set of assumptions. Uncertainty in assumptions can be due to estimation accuracy or changes over time. To account for this uncertainty, Monte-Carlo Simulation techniques can be employed. This process involves generating multiple random values for each input parameter based on an appropriate distribution function and recording the outputs. This process is repeated for each key input assumptions to generate an output distribution reflecting a variety of possible outcomes.

Analysis of the output distribution allows for the identification and assessment of risks, sensitivities, correlations, and probabilities for various outcomes. This additional knowledge enhances the understanding of the value of a mineral asset and brings into focus risks and opportunities specific to the asset.

VBKOM used proprietary software developed by MinValGroup to undertake simulation analysis on models in Microsoft Excel. The simulation analysis was done on the Karo valuation model for each of the input parameters described in previous sections, including their associated value ranges. For each iteration in the simulation, a random value was generated for each parameter based on its range. These random numbers were then input into the valuation model, and the results were recorded. The simulation consisted of 5,000 iterations.

The PGM price is calculated as the realised 6E basket price taking the prill split and payability rates into account. Analysis of historic prices showed that the basket price is less variable than the individual component prices and it was considered reasonable to model the pricing as such.

The Mining Costs parameter applies to dry drill, blast, load and haul rates, and also includes technical services costs. The diesel price was modelled independently and applied to the diesel consumption rate per tonne of material moved. The processing cost parameter applies to plant costs including reagents and maintenance. The electricity price was modelled independently and applied to the electricity consumption rate of the plant.

The simulation was run at a 14.44% Discount Rate, and for comparative purposes, the results at a 10% Discount Rate is also shown.

Table 11-9 highlights key statistics from the simulation analysis and Figure 11-7 is the NPV distribution graph.

Table 11-9: Simulation analysis key performance indicators.

Simulation Input Parameters			
Parameter	Distribution	Lower Value (%)	Upper Value (%)
PGM Prices	Pert	80.0	120.0
Base Metal Prices	Pert	80.0	120.0
PGM Recovery	Pert	90.0	105.0
Base Metal Recovery	Pert	90.0	105.0
Mine Call Factor	Uniform	95.0	100.0
Diesel Price	Pert	90.0	115.0
Electricity Price	Pert	90.0	115.0
Mining Costs	Pert	90.0	115.0
Processing Costs	Pert	90.0	115.0
Logistics Costs	Pert	90.0	115.0
G&A Cost	Pert	90.0	115.0
Development CAPEX	Pert	90.0	115.0
SIB CAPEX	Pert	90.0	115.0
Simulation Results			
Description	Unit	10% Discount Rate	14.44% Discount Rate
Number of Iterations	#	5,000	5,000
Minimum NPV	USDm	-386.25	-388.67
Maximum NPV	USDm	568.40	408.29
33 <sup>rd</sup> Percentile	USDm	-21.99	-82.37

Simulation Input Parameters			
Parameter	Distribution	Lower Value (%)	Upper Value (%)
67 <sup>th</sup> Percentile	USDm	124.61	39.15
Average NPV	USDm	55.74	-17.76
Positive NPV results	%	61.8%	44.2.0

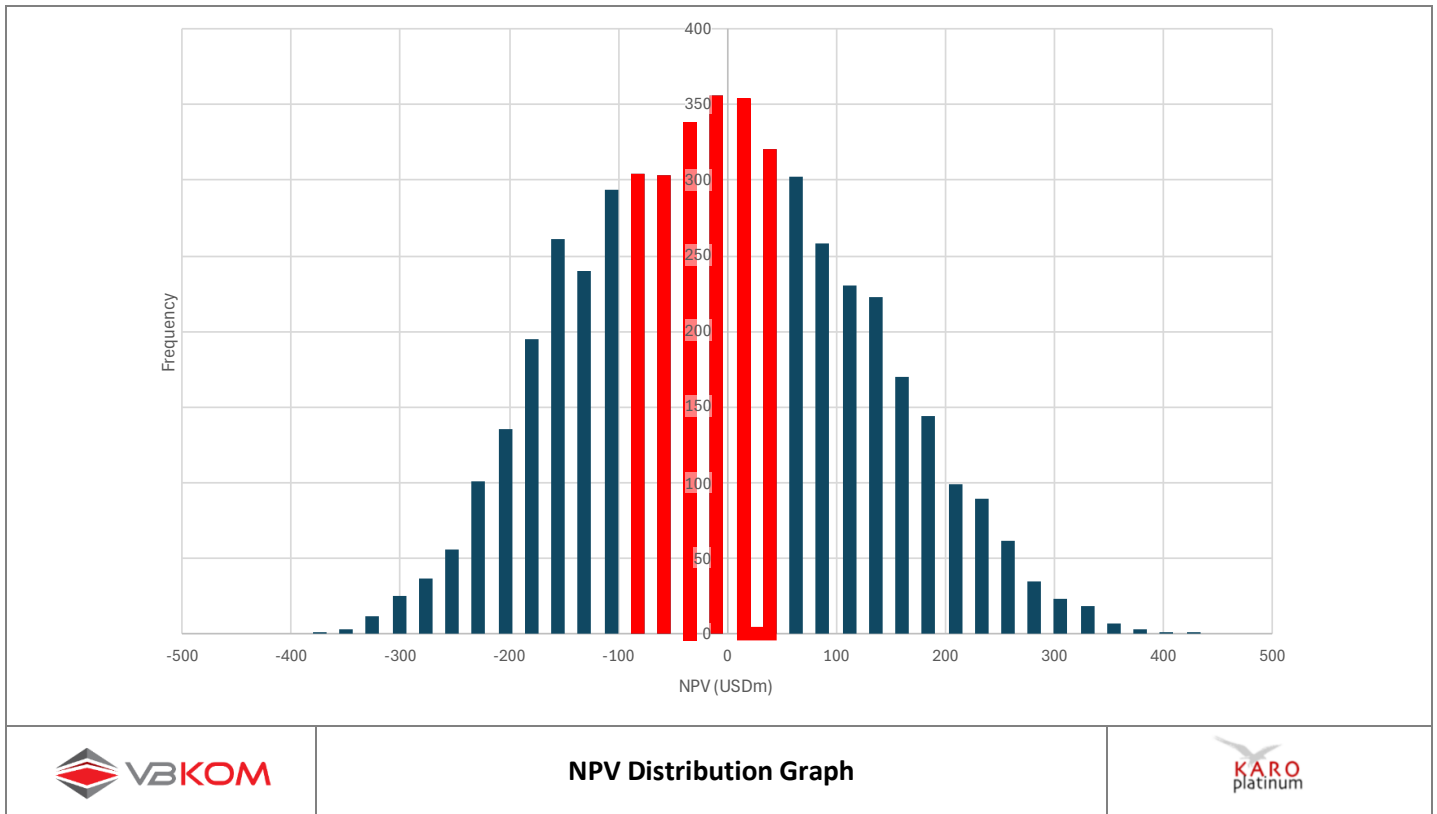


Figure 11-7: NPV distribution graph.

44.2% of iterations yielded a positive NPV at a discount rate of 14.44%. This increases to 61.8% at a discount rate of 10%. The NPV is highly correlated to parameters affecting the revenue of the project, including commodity prices and recoveries. Commodity Prices have a  $R^2$  value of 0.90, indicating a strong positive correlation. The NPV of the project is thus strongly dependent on the commodity prices. The red bars in the NPV distribution graph (Figure 11-7) highlight the first 33<sup>rd</sup> to 66<sup>th</sup> percentile of values.

### 11.12.10 DCF Valuation Results

The Base Case Cash Flow model is presented in Appendix F. The Base Case NPV is negative USD7.08 million at a 14.44% real discount rate with an internal rate of return of 13.9%. At a 10% real discount rate, the NPV is USD67.79 million.

The results from the simulation analysis further highlights the sensitivity of the NPV to changes in input parameters with a range of negative USD388.67 million to USD408.29 million. The middle third of values (percentile 33 to 67) yielded a range of negative USD82.37 million to USD39.11 million. At a 10% discount rate, this range shifts to negative USD21.99 million to USD124.62 million.

The Base Case Cash Flow model and simulation analysis at different discount rates indicates the strong possibility of the project generating a negative NPV. The model's sensitivity to changes in input parameters does suggest that optionality exists to generate positive returns on the project. This can be achieved through a combination of strategies targeting a reduced cost of capital (discount rate and return expectations), optimisation of mine planning, processing and cost reductions.

Considering the results from the Simulation Analysis, the Sensitivity Analysis and the Base Case Model, VBKOM considers the appropriate value range for the project to be the 56<sup>th</sup> to 66<sup>th</sup> percentile from the Simulation Analysis at a 14.44% discount rate. This is the positive NPV values from the middle third of the simulation results (approximately 1 standard deviation around the mean). The reason for this range is based on the optionality that exists in the execution of the project. This gives a value range to the asset of USD0 million to USD39.44 million. The preferred value is the average NPV from the range (refer to Table 11-10).

Table 11-10: Cash flow approach valuation results.

Description	Lower (USDm)	Upper (USDm)	Preferred (USDm)
Cash Flow Approach	0.00	39.44	19.16

## 11.13 Valuation Risks

### T1.14

Certain risks were identified during the valuation of the Karo Project. These risks, and where possible, the magnitude of these risks to the overall project viability and NPV, are summarised below:

- Discount Rate: The NPV is sensitive to the discount rate
- MDA Incentives: The government incentives for taxation and royalties are not substantiated by a written agreement and are subject to change
  - This will result in an increased tax bill of USD36 million and USD64 million in royalties over the LoM.
- Permitting: Project areas and commodities that are excluded from the current permit are included in the valuation
  - The valuation considered the total project area, including the areas without permitting as discussed in Section 8.7.1. The KPSE are with the current permit contributes 51.2% of the total Mineral Reserve.
  - Revenue from base metals was included in the cash flow valuation although these are not specifically included in the Mining Lease issued, as discussed Chapter 2.3.2. Revenue from base metals contributes 16.5% of total revenue and is significant to the economic viability of the project.
- Commodity Prices: Prices are modelled according to the Bloomberg Forecast and averaged as a 6E basket price. Spot prices are currently lower than the forecast prices and are volatile on a per metal basis.
  - A sensitivity analysis shows that the NPV is very sensitive to commodity prices, and if the lower spot prices persist, this will impact the value of the project negatively. Price volatility underscores the need for strategic resource planning and cost optimisation.
- Contingency: A contingency of 0.1% on the pre-production capital has been assumed as per Chapter 8.1.10
  - A contingency of 10% would be considered reasonable for the level of study. Adjusting the contingency in the cash flow valuation results in a decrease in the NPV of negative USD45.7 million.

- **Contract Risk:** Karo has not yet finalised an offtake agreement and indicative offtake terms have been used for the valuation. Less favourable terms may hamper the project economics.
- **Market Risk:** Geopolitical risks, economic factors and technological substitution present risks to the PGE market supply, demand and price forecasts. These constraints underscore the need for strategic resource planning and optimisation. These factors may hamper the project economics.
- **Relocation of people:** a number of PAPs as identified in the specialist studies must be relocated in order to execute the Project. This has been accounted for in both the budgeting and scheduling of the mine planning. There are mechanisms and agreements in place for the execution of the resettlements, and PAP relationships are actively managed and maintained. Should the relocations not take place, the Project cannot be executed.

## 11.14 Valuation Results

### T1.15

The Valuation of Karo was done using the Market Approach and the Cash Flow Approach.

The Market Approach relied on the MinValGroup in-situ valuation database. VBKOM considers Karo to fall in the lower range of the dataset (i.e. the 5<sup>th</sup> to 10<sup>th</sup> percentile of values). This gives a value range of USD68.26 million to USD114.57 million to the asset.

The Cash Flow Approach relied on the techno-economic model VBKOM prepared for the valuation and simulation analysis of that model. The base case model yielded an NPV of negative USD7.08 million at a 14.44% real discount rate. Simulation analysis yielded 44.2% positive NPV and showed a high correlation to commodity prices. The value range VBKOM considers appropriate for Karo is USD0 million to USD39.11 million based on the 56<sup>th</sup> to 66<sup>th</sup> percentiles from the simulation analysis. The Base Case NPV at a 10% real discount rate is USD67.8 million.

Combining the two valuation methodologies, VBKOM considers the value range for Karo to be USD39.11 million to USD68.26 million. The range is informed by the lower value of the Market Approach and the Upper Value of the Cash Flow Approach. The range was also informed considering the sensitivity of the cash flow model to the discount rate. The preferred value is the mid value of the range, USD53.69 million. Table 11-11 summarises the valuation of Karo.

Table 11-11: Valuation results.

Description	Lower (USDm)	Upper (USDm)	Preferred (USDm)
Market Approach	68.26	114.57	68.26
Cash Flow Approach	0.00	39.11	19.16
<b>Preferred Value Range</b>	<b>39.11</b>	<b>68.26</b>	<b>53.69</b>

## 11.15 Competent Valuator Certificate

The CV certificate is provided in Appendix A.

## 12 INTERPRETATION AND CONCLUSIONS

### 12.1 Legal Aspects and Tenure

Karo Platinum is authorised to commence mining and processing of PGMs at KPSE through the provisions of ML41 granted in terms of the MMA and authorisations in terms of the EAct. This is supported by several additional licences allowing supporting activities, with a number of additional permits required for full operation.

While there is a water balance shortfall in current water authorisations, a number of plans are in place for additional supply, including the construction of the Chirundazi Dam.

The development of KPE, KPNE, and KPNW pits is subject to the completion of an ESIA and obtaining all necessary associated permits that are not directly shared with the current authorised activities.

Karo Platinum is proactively undertaking thorough resettlement planning with robust mechanisms implemented to maintain the social licence to operate.

### 12.2 Mineral Resources

The available data consisted of 563 drill hole intersections. The data were verified and were considered suitable for use in the Mineral Resource estimate. The data had sufficient internal continuity to be able to identify the geochemical signature for the MSZ, and thus it has been possible to confidently identify the BMSZ in most of the intersections.

Based on the data from drill holes, a preliminary geological model of the project was constructed using the BMSZ which confirmed the regional structure experienced on the Great Dyke. Very little structure has been identified but it was possible to interpolate some major east-west or dip faults with throws up to nearly 100 m.

The level of oxidation has been estimated to be down to 25 m below surface for the KPSW sector i.e. material shallower than 25 mbs is oxidised. For the eastern side of the Great Dyke (KPNE, KPE, and KPSE) as well as KPNW, the level of oxidation has been estimated to be at 15 mbs with a transitional (slightly weathered) material being estimated to occur to a depth of 30 mbs. The material at shallower depths (<15 mbs) is not expected to be viable to mine due to inter alia grade, recovery, and the ability to mine efficiently. The material was therefore excluded from the declaration of the Mineral Resource.

The geochemical signature for the eastern flank is the typical profile where the precious and base metal profiles are disconnected. The geochemical signature for the western flank has the precious and base metal peaks being coincident. Higher grades are associated with the narrower cut. The Mineral Resource cut that provides the highest value would be 120 cm for both eastern and western flanks.

A Mineral Resource estimate was undertaken over four areas of the tenement:

- The KPE area has a relatively high grade. With the additional drilling, it can now be declared as Measured and Indicated Mineral Resource.
- The KPNE and KPNW areas have been sufficiently drilled to be able to assume geological and grade continuity as required for the declaration of an Indicated Mineral Resource.
- Where the drill spacing for the KPSE area is denser, the area is declared as a Measured Mineral Resource as the geological and grade continuity have been confirmed. The downdip extension has a drill spacing with sufficient confirmation in the geological and grade continuity to declare an Indicated Mineral Resource.

- The KPSW area, although densely drilled over a narrow strip, has been declared an Indicated Mineral Resource. The grade on the western flank is better in the south than in the north.
- The 3PGE+Au grade of the KPW is very low, too low to be considered for the declaration of a Mineral Resource in terms of the guidelines of the SAMREC Code.

### 12.3 Mineral Reserves

The LOM production plan as basis for the Mineral Reserve estimate was designed to sustain a concentrator feed rate of 2.64 Mtpa over a steady nine-year mining period. To achieve this, an average of 61 Mtpa waste stripping will be required for the duration of the LOM at an average S/R of 21.4 on a tonne:tonne basis.

The strategic scheduling sequence prioritised the higher-confidence southern regions and gradually progressed northwards towards lower-confidence Mineral Resources.

The following production schedule drivers, constraints, and practical mining requirements were identified prior to the commencement of the scheduling process and achieved throughout the LOM:

- An annual ROM target of 2.64 Mtpa throughout the LOM.
- Maintain practical mining face advancement.
- Limit bench turnover for the open pits to ensure that the maximum vertical rate of advance is achieved in practical terms.
- Ensure a steady practically achievable waste production profile over the LOM, limiting peak material movement requirements.
- Maximise backfill waste placement creating low-wall access, travel within the pit, and limiting surface WRDs.

Non-modelled geological features are considered to pose a risk. However, this has been mitigated to a degree by the application of a geological loss factor to the various Mineral Resource categories.

Detailed geotechnical pit slope design parameters were prepared for the four mining pits, KPSE, KPE, KPNE, and KPNW. The following considerations were noted for the pit designs:

- Wireframes detailing the different material types overlying the mineralised material were created and considered during the analysis of the final slope angles. The impact on slope angles was analysed and determined to pose a minor risk.
- A waste management strategy aimed at minimising waste material placement in WRDs as well as short-hauling waste to the closest pit highwall dump positions was incorporated. Prioritising in-pit backfilling wherever practically feasible and selecting the closest surface short-haul dump points significantly reduced hauling distances and the mine's long-term closure liabilities. Approximately 137 million cubic metres of waste material were scheduled for surface WRD placement, while 40 MBCM were strategically scheduled for in-pit backfilling throughout the LOM.

This production schedule and waste management strategy align with operational efficiency, environmental responsibility, and prudent long-term planning, establishing a framework for sustained and responsible mineral extraction throughout the mining life cycle.

An upside exists whereby the BMR material could be processed at the end of LOM.

Several rivers, dams, seasonal streams, and wetlands branch throughout the Karo project area. These aspects can impact pit perimeters, dump positions, and plant throughput if appropriate approvals are not received. Timely initiation and submission of appropriate specialist studies lends to reasonable assumption that these applications will be approved.

The commodity prices and associated USD exchange rate fluctuations are a significant sensitivity driver for the project.

The royalty and tax incentives may pose a risk to the project's economic viability as these incentives are still pending approval.

A discount rate of 8% was incorporated and provides a positive business case. Sensitivities on the discount rate show the economic viability is highly dependent on this attribute.

## **12.4 Processing**

The Karo process flowsheet and design are based on a flotation metallurgical test programme conducted on core samples from the Karo site, benchmark data, and experience from similar/surrounding Great Dyke PGM concentrator operations. The process plant is designed for 220 ktpm ROM and employs a conventional mill-float-mill-float (MF2) configuration for the PGM process circuit with a three-stage crushing plant, primary milling and flotation, secondary milling and flotation, tailings dewatering and transfer pumping, and concentrate dewatering and stockpiling.

At 84% average recovery the plant will produce 64 kt of concentrate at 100 g/t 3E+Au.

The timeous implementation of the Chirundazi Dam is crucial for the water supply at the plant.

## **12.5 Valuation**

The Valuation of Karo was done using the Market Approach and the Cash Flow Approach. The MinValGroup used both methodologies to inform the value of Karo, and VBKOM incorporated this valuation in the CPR. The value range is USD39.11 million to USD68.26 million. The preferred value is USD53.69 million.

## **13 RECOMMENDATIONS**

### **13.1 Legal Aspects and Tenure**

Applications for additional licences and authorisations as required must be made timeously. Karo Platinum must uphold all conditions of authorisations, including annual inspections, payments, and renewals, to maintain the register.

### **13.2 Mineral Resources**

It is recommended that more detailed structural work be undertaken utilising the existing information (geophysics and drilling) and available public domain information.

It is recommended that the level of oxidation remain an area of focus to ensure the prediction of the recoveries can be appropriately managed.

### **13.3 Mineral Reserves**

GC as part of the ore mining cycle was identified as a material risk with the selective ore package not identifiable visually. The effective on-grade extraction to the pre-defined mining height is highly reliant on pre- and post-drilling and blasting GC procedures. All collected data (drilling mapping and sampling) will be incorporated into an isopach model which will give accurate input to the depth from the gabbronorite contact down to the BMSZ. This integral part of the GC process is currently being reviewed by the VBKOM's Chantelle Obermeyer and Mr Edgar Chiteka of Karo Platinum.

Detailed geohydrological studies are in progress and could pose a minor risk regarding the impact of water on the geological features.

The timeous approval and construction (completion Q4 2025) of the Chirundazi Dam are crucial to meet the processing plant's water needs.

The density of the various hard waste was uniform and should be updated with the relevant density per lithology.

## 14 REFERENCES

No.	Reference
1	Tharisa PLC (2021). Implementation Study – Karo Platinum Project. Report and effective date August 2021.
2	SLR Consulting (Africa) (Pty) Ltd (2022). Preliminary Mine Closure Plan. Karo Platinum Mine. Prepared for: Tharisa plc. SLR Project No.: 710.11059.00001. April 2022
3	MEMO: Davis, M. June 2023. KP229-20002-INT-MEM-0006. Proposed Changes in Water Supply Strategy. Karo Platinum. Zimbabwe.
4	Mathole, J. Shepherd, P. May 2021. Surface Water Availability Investigation for Karo Platinum, Zimbabwe. SRK Consulting (South Africa) (Pty) Ltd. South Africa
5	Grimmer, K. Mathole, J. June 2023. Karo Platinum: Yield Model Analysis Report. SRK Consulting (South Africa) (Pty) Ltd. South Africa
6	Ndlovu, V. Jacobs, M. Mahomed, I. July 2022. Phase 2 Hydrogeological Study for Karo Platinum Pre-Feasibility Study. SRK Consulting (South Africa) (Pty) Ltd. South Africa
7	BFS Study report Chapters 1-20
8	Mathole, J. De Jager, G. Sheperd, P. July 2022. Karo Platinum: Yield Model Analysis Report. SRK Consulting (South Africa) (Pty) Ltd. South Africa
9	Thulo, C. Sheperd, P. June 2023. Updated Water Balance for the Karo Platinum Mine. SRK Consulting (South Africa) (Pty) Ltd. South Africa
10	0216E2-00-PE-REP-0001 Rev 0.3 220 ktpm Throughput Debottlenecking Report
11	Nel, E. (2023). Karo Metallurgical and Process Design dated 25 February 2024. ENC Minerals
12	230905 Risk register - Karo Holdings
13	241205 Risk register - Karo Holdings
14	Metallurgical Report 21/1691 and 21/1998: Bond ball work index and SAG mill test report. Compiled by SGS (Randfontein) – 29 November 2021
15	Suntech GeoMet testwork was done and included testing of flotation, locked cycle tests as well as reagent dosage rate tests.
16	Metallurgical report 215 (MET22-010): Metallurgical test work on a KARO fresh sample. Compiled by Suntech Geomet laboratories – 17 March 2023
17	Metallurgical results (MET22/024): PGM characterisation test work on a transition ore sample compiled by Suntech Geomet Laboratories – 20 February 2023 (Xcel test results reported).
18	Metallurgical results 225 (MET23/003): Metallurgical test work on a Karo KPSE sample. Compiled by Suntech Geomet Laboratories – 19 February 2024
19	Further testwork was done at Geolabs Global on the KPNE and KPE samples which included flotation tests and locked cycles as well as reagent dosage rates
20	Phase 1 Final Report 20/1384: Flotation and Mineralogical Analysis on PGM Samples from the Great Dyke in Zimbabwe. Compiled by SGS (Randfontein) – 30 June 2021
21	Metallurgical results 2024-02-20_KRO2_KPE and KPNE Flotation Final Results. Compiled by GeolabsGlobal – 20 February 2024
22	African Development Bank Group. Zimbabwe Economic Outlook. Accessed 27 July 2022
23	AngloAmerican. Ore Reserves and Mineral Resources report 2023

No.	Reference
24	CIA Fact book ( <a href="http://www.cia.gov/library/publications/the-world-factbook/geos/zi.html">www.cia.gov/library/publications/the-world-factbook/geos/zi.html</a> )
25	Bank of Zimbabwe. Annual Report 2019
26	Brown R.T. (30 September 2008) A Brief Summary of The Great Dyke of Zimbabwe. Unpublished.
27	Friese AEW (June 2022). Interpretation of the structural geology and tectono-structural evolution and assessment of its impact on future mining operations of the Karo PGM – Salene Chrome Project, Great Dyke, Zimbabwe. Prepared for Karo Mining Holdings Limited.
28	Implats. Mineral Resource and Mineral Reserve Statement as at June 2023. Supplement to the Annual Integrated Report 30 June 2023.
29	Prendergast MD & Wilson AH 1989. The Great Dyke of Zimbabwe-11: Mineralization and mineral deposits. In Prendergast MD & Jones MJ (eds) Magmatic sulphides-the Zimbabwe volume. London. The Institute of Mining and Metallurgy
30	Tharisa Mineral Resource and Mineral Reserve Statement 2019, 2020, 2021, 2022, 2023
31	Sibanye-Stillwater – Mineral Resources and Reserves Report 2019, 2020, 2021, 2022, 2023
32	Wilson AH (1992) The Great Dyke of Zimbabwe Developments in Petrology. Volume 15, 1996, Pgs. 365-402
33	Wilson AH, Prendergast MD (2001). Platinum-Group Element Mineralisation in the Great Dyke, Zimbabwe, and its Relationship to Magma Evolution and Magma Chamber Structure S.Afr.J.Geol., Vol 104, Pgs. 319-342
34	Wilson AH and Tredoux M (1990) Lateral and vertical distribution of the platinum-group elements, and petrogenetic controls on the sulfide mineralization in the P1 Pyroxenite layer of the Darwendale Subchamber of the Great Dyke, Zimbabwe. Econ. Geol., 85, p556-584
35	Worst BG. (1958). The differentiation and structure of the Great Dyke of Southern Rhodesia. Trans. Geol. Soc. S. Afr., 61, p283-354
36	Worst BG. (1960). The Great Dyke of Southern Rhodesia. Bulletin of the Geological Survey of Southern Rhodesia, 47, 234pp
37	Zimplats Annual Integrated Report 2019, 2020, 2021, 2022, 2023
38	Tharisa plc 2023 Integrated Annual Report
39	World Platinum Investment Council (WPIC), 2023.
40	Hydrogen Council, 2023
41	International Platinum Group Metals Association (IPA), 2024
42	Minerals Council South Africa, 2023
43	Anglo American Platinum Annual Report, 2023
44	Johnson Matthey, 2023
45	European Commission, 2024
46	World Bank Commodity Markets Outlook, 2024
47	S&P Global, 2024.
48	MIT Technology Review, 2024.

## 15 APPENDICES

### Appendix A: Competent Persons and Key Technical Staff

The following Competent Persons / Competent Valuator are responsible for this CPR, and their corresponding certificates are provided overleaf:

- Mineral Resources: Mr Kenneth Graham (Ken) Lomberg
- Mineral Reserves: Mr Otto Wilhelm Warschkuhl
- Valuation: Mr Jacobus Adriaan (Iaan) Myburgh

Key technical staff include the following persons, who are all full-time employees of VBKOM:

#### **Chantelle Cassandra Obermeyer** (BSc (Hons) (Geology), MSc (Geology), PrSciNat)

Chantelle Obermeyer has gained more than 28 years' experience in the mining and exploration industry working for various mining companies and mining consultancies in South Africa. During this time, she has held various geological positions including Chief Geologist – Production, Chief Geologist – Mineral Resource Estimation, and Mineral Resource Manager. She has worked at VBKOM since 2019 in the role of Principal Geologist where she has been involved in technical audits, geological modelling, and Mineral Resource estimations for multiple commodities including gold, copper, iron, aluminium, and industrial minerals as well as the compilation, oversight, and signing off of Competent Persons' Reports.

#### **Wilhelmina Fredrika Van der Vyver** (PhD Metallurgy, PMP, PrSciNat, SAIMM)

Mientjie van der Vyver has 32 years of experience in the mining industry in various commodities. Starting as an Engineer in training, she has held various positions, including Chief Metallurgist, Technical Manager Raw Materials Technology COE and Technology manager, Coal. She has moved to the position of Principal Metallurgist at VBKOM in 2019 where she has been involved in Feasibility studies, operational improvement studies, Geometallurgical studies and modelling, Mine Work Programmes and Competent Persons' Reports.

#### **Tiaan Ackermann** (BEng (Industrial), Pr.Eng, MBA, PRINCE2)

Tiaan is a professionally registered Industrial Engineer with over 13 years' experience in the mining industry and mining capital projects, having held operational and consulting roles in the fields of Financial Modelling & Evaluation, Business Improvement, Operational Readiness, Simulation, Business Development, and Management. He has worked at VBKOM since 2014 where he has conducted the financial evaluation, modelling, and reviews of feasibility studies, trade-off studies, and Competent Persons Reports.

**Maria Antoniadis** (BSc Hons (Gly), MSc (Env.Sci.), PrSciNat, GSSA, SAIMM)

Maria has over a decade of experience in the mining industry. She started her career as a Mineral Projects Analyst in an established mining consulting firm, where she gained experience in the assessment of mineral projects across a variety of commodities. She has worked as company geologist assessing geological terrains and identifying target areas for exploration. Maria forms an integral part of the VBKOM team since early 2024 as a senior geologist, undertaking roles including geological interpretations, exploration programme reviews, data compilation, GIS analysis, and project co-ordination. She has extensive experience in the compilation of Competent Persons Reports and remains actively involved in the compilation of technical documentation in compliance with the main reporting codes requirements, and reviews of various mining and exploration projects.

**Armand van Wyngaardt** (BEng Mining, MMCC, SAIMM)

Armand has over 10 years of experience in the mining industry. After completion of his Mining Engineering degree at the University of Pretoria, he held various positions while working for a thermal coal mining company. These positions included graduate engineer, production miner and production shift boss and central technical services specialist. Armand has worked for VBKOM since 2021 where he has held the position of senior mining engineer and worked on various projects which includes conceptual studies, pre-feasibility studies, feasibility studies, and competent persons reports, for multiple commodities including coal, iron, copper, bauxite, nickel, and PGMs.

**Divine-Ito Ile** (BEng Mining, BEng (Hons) Mining, MEng Mining *cum laude*)

Divine Ile joined the University of Pretoria's Department of Mining Engineering as an academic instructor shortly after completing her undergraduate degree. In this role, she gained both teaching and academic skills while pursuing her post-graduate degrees. Thereafter, she joined VBKOM in February 2023 as a Junior Mining Engineer. She has since progressed to the role of Mining Engineer, and has been involved in various projects, including design projects, operational support, RFQ evaluations and time studies.

**Petrus Gerhardus Kriel** (B.Sc. (Mathematics), BCom (Hons) (Economics), CFA, IASSA, GSSA, GASA)

Gert has been involved in Due Diligence Studies, Merger and Acquisition transactions, Scoping and Feasibility Studies, Business Improvement, Impairment Tests, Techno-Economic Statements and Management Consulting. Gert's experience has included involvement in a wide range of commodities, including PGMs, gold, coal, chrome, Rare Earth Elements and base metals, and he has travelled to various operations and projects throughout Africa.

## Certificate of Competent Person

**KG Lomborg**  
**Mineral Resources**

As an author of the Report titled An Independent Competent Persons' Report on the Karo PGE Project, Zimbabwe prepared for Karo Platinum (Pvt) Ltd with an effective date of 30 September 2024 and valuation date of 30 November 2024, I hereby state:

1. My name is Kenneth Graham Lomborg and I am the Director (Geology and Resources) for Pivot Mining Consultants (Pty) Ltd (Lower Ground Floor, Island House, Constantia Office Park, Corner 14th Avenue and Hendrik Potgieter Road, Weltevreden Park, 1709, Roodepoort, South Africa).
2. I am a practicing geologist and a registered with the South African Council for Natural Scientific Professionals.
3. I have a BSc (Hons) (Geology), BCom (Economics and Statistics) and an MEng (Mining Engineering). I have been 39 years mining industry experience (especially in platinum and gold). I have practiced my profession continuously since 1985.
4. I have over 5 years of relevant experience having completed Mineral Resource estimations on various properties located on the Bushveld Complex hosting Magmatic Layered Intrusive style mineralization. I have the relevant experience of the type of deposit and of Mineral Resource estimation that is the subject of this report.
5. I have performed consultant work on various projects on the Great Dyke including Hopewell Project and Karo Project. I have assisted with approximately 15 of the estimated 20 Junior Platinum Exploration and Mining Projects in South Africa. These assignments have ranged from listings documents, CPRs, ITRs, feasibility studies, NI43-101 compliant Mineral Resource estimations and valuations.
6. I am a 'Competent Person' as defined in the SAMREC Code.
7. I am responsible for the Mineral Resources declaration and the joint compilation of the CPR, barring sections 8 and 9.
8. I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission of which would make the Report misleading.
9. I declare that this Report appropriately reflects the Competent Person's/author's view.
10. I am independent of Karo Mining Holdings Limited.
11. I have read the SAMREC Code and the Report has been prepared in accordance with the guidelines of the SAMREC Code.
12. At the effective date of the Report, to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.

Signed at Johannesburg on 09 April 2025.

*Kenneth Lomborg*

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**KG Lomborg**

Director (Geology and Mineral Resources), Pivot Mining Consultants

BSc (Hons) (Geology), BCom (Economics and Statistics), MEng (Mining Engineering), PrSciNat, GSSA

## Certificate of Competent Person

**OW Warschkuhl**  
**Mineral Reserves**

As an author of the Report titled An Independent Competent Persons' Report on the Karo PGE Project, Zimbabwe prepared for Karo Platinum (Pvt) Ltd with an effective date of 30 September 2024 and valuation date of 30 November 2024, I hereby state:

1. My name is Otto Wilhelm Warschkuhl and I am Principal Mining Engineer at VBKOM (Pty) Ltd (95 Lyttelton Road, Clubview, Centurion, South Africa).
2. I am a practicing mining engineer affiliated with the following professional associations, which meet all the attributes of a Professional Association or a Self-regulatory Professional Association, as applicable (as those terms are defined in the SAMREC Code):

Organisation	Membership Type	Reg. Number	Reg. Year
Southern African Institute of Mining and Metallurgy	Member	706664	2016
Engineering Council of South Africa	Pr.Eng.	20170173	2017
Canadian Institute of Mining	Member	756381	2024

3. I hold BEng Mining Engineering and BEng (Hons) Mining Engineering degrees from the University of Pretoria.
4. Mr Warschkuhl has gained more than 14 years' experience in the mining industry, holding various positions including Graduate Engineer, Mining Engineer, and Project Lead Engineer. I have been involved in Concept studies, Pre-feasibility studies, Feasibility studies, Due Diligence assessments, and compilation of Mineral Reserve Estimations for a multitude of commodities including coal, manganese, heavy mineral sands, aggregates, gold, platinum group metals, copper, fluorspar, and phosphates, using approaches described in the SAMREC Code.
5. I am a "Competent Person" as defined in the SAMREC Code.
6. I undertook a personal inspection of the property on 20<sup>th</sup> to 21<sup>st</sup> of November 2024 to inspect the various mining areas within the Karo Platinum property pertaining to this competent person's report.
7. I am responsible for the Mineral Reserves declaration and the joint compilation of the CPR, barring sections 5, 6 and 7.
8. I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission of which would make the Report misleading.
9. I declare that this Report appropriately reflects the Competent Person's/author's view.
10. I am independent of Karo Platinum (Pvt) Ltd.
11. I have read the SAMREC Code and the Report has been prepared in accordance with the guidelines of the SAMREC Code.
12. I do not have, nor do I expect to receive a direct or indirect interest in the Karo Project or Karo Platinum (Pvt) Ltd.
13. My compensation, employment, or contractual relationship with Karo Platinum (Pvt) Ltd is not contingent on any aspect of the Report.
14. I have no bias with respect to the assets that are the subject of the Report, or to the parties involved in the assignment.
15. At the effective date of the Report, to the best of my knowledge, information, and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.

Signed at Clubview, Centurion on 09 April 2025.



**Otto Wilhelm Warschkuhl**

Principal Mining Engineer and Management Executive  
member, VBKOM

BEng (Hons) (Mining Engineering), Pr.Eng.

## Certificate of Competent Valuator

**JA Myburgh**

As the author of the report entitled "Independent Competent Persons' Report on Karo PGE Project, Zimbabwe", I hereby state:

1. My name is Jacobus Adriaan Myburgh, and I am a director of Mineral Valuation Group (Pty) Limited of 479 Cliff Avenue, Waterkloof Ridge, Pretoria, 0181, South Africa.
2. I am a qualified mathematician and chartered financial analyst, and a member in good standing with the Investment Analyst Society of South Africa and GSSA.
3. My qualifications include B.Sc. (Mathematics) and CFA.
4. I have over 15 years' experience in the valuation of mineral assets.
5. I am a 'Competent Valuator' as defined in the 2016 Edition of the SAMVAL Code.
6. I am the lead Competent Valuator and co-author of this CPR.
7. I have not visited the site for the purposes of the preparation of this CPR.
8. I am responsible for the financial valuation sections only.
9. I am not aware of any material fact or material change with respect to the subject matter of the CPR that is not reflected in the CPR, the omission of which would make the CPR misleading.
10. I declare that this CPR appropriately reflects the Competent Person's/author's view.
11. I am independent of the Karo Project and Karo Platinum (Pvt) Ltd.
12. I have read the 2016 Edition of the SAMVAL Code and the CPR has been prepared in accordance with the guidelines of the 2016 Edition of the SAMVAL Code.
13. I do not have, nor do I expect to receive, a direct or indirect interest in the Karo Project or Karo Platinum (Pvt) Ltd.
14. At the effective date of the CPR, to the best of my knowledge, information and belief, the CPR contains all scientific and technical information that is required to be disclosed to make the CPR not misleading.

Signed at Mooinooi, on 09 April 2025.



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**J A Myburgh**

Competent Valuator  
B.Sc. (Mathematics), CFA  
IASSA

## Appendix B: Swedge Results

KPSE swedge results for all wall sectors, websterite, and shear bands (SBs).

Websterite with SB									
DS 1 + DS 2, Wall direction 110, Bench height 10 m					DS 3, Wall direction 190, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS1+SB1	NW	NW	NW	NW	JS1+SB1	NW	NW	NW	NW
JS1+SB2	100	100	100	100	JS1+SB2	100	100	100	100
JS1+SB3	81.43	80.74	80.16	79.63	JS1+SB3	78.45	78.24	78.03	77.84
DS 4 + DS 5, Wall direction 280, Bench height 10 m					DS 6, Wall direction 005, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS1+SB1	4.04	3.78	3.6	3.47	JS1+SB1	NW	NW	0.19	0.19
JS1+SB2	NW	NW	NW	NW	JS1+SB2	NW	NW	NW	NW
JS1+SB3	NW	NW	NW	NW	JS1+SB3	NW	NW	NW	NW
Websterite with SB									
DS 1 + DS 2, Wall direction 110, Bench height 10 m					DS 3, Wall direction 190, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS2+SB1	NW	NW	NW	NW	JS2+SB1	38.31	23.81	19.28	16.97
JS2+SB2	NW	NW	NW	NW	JS2+SB2	NW	NW	NW	NW
JS2+SB3	NW	NW	NW	NW	JS2+SB3	NW	NW	NW	NW
DS 4 + DS 5, Wall direction 280, Bench height 10 m					DS 6, Wall direction 005, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS2+SB1	15.08	14.94	14.81	14.71	JS2+SB1	NW	NW	NW	NW
JS2+SB2	67.92	67.42	67	66.6	JS2+SB2	64.89	64.77	64.67	64.57
JS2+SB3	74.53	74.02	73.59	73.19	JS2+SB3	75.12	74.98	74.85	74.74
Websterite with SB									
DS 1 + DS 2, Wall direction 110, Bench height 10 m					DS 3, Wall direction 190, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS3+SB1	6.9	3.69	2.8	2.36	JS3+SB1	NW	NW	NW	NW
JS3+SB2	61.33	55.92	52.82	50.7	JS3+SB2	100	100	100	95.66
JS3+SB3	NW	NW	NW	NW	JS3+SB3	NW	NW	NW	NW
DS 4 + DS 5, Wall direction 280, Bench height 10 m					DS 6, Wall direction 005, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS3+SB1	NW	NW	NW	NW	JS3+SB1	NW	2.23	1.11	1.03
JS3+SB2	NW	NW	NW	NW	JS3+SB2	NW	NW	NW	NW
JS3+SB3	42.06	41.67	41.36	41.07	JS3+SB3	42.6	42.49	42.39	42.3

KPE swedge results for all wall sectors, websterite, and SBs.














Websterite with SB									
DS 1, Wall direction 100, Bench height 10 m					DS 2, Wall direction 190, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS1+SB1	NW	NW	NW	NW	JS1+SB1	12.9	12.43	12.07	11.78
JS2+SB1	NW	NW	NW	NW	JS2+SB1	9.58	9.54	9.51	9.47
JS3+SB1	NW	NW	NW	NW	JS3+SB1	NW	NW	NW	NW
DS 3, Wall direction 280, Bench height 10 m					DS 4, Wall direction 010, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS1+SB1	2.2	2.2	2.2	2.2	JS1+SB1	NW	NW	NW	NW
JS2+SB1	1.47	1.47	1.47	1.47	JS2+SB1	NW	NW	NW	NW
JS3+SB1	8.41	8.35	8.3	8.26	JS3+SB1	18.93	16.52	14.97	13.83
Websterite with SB									
DS 1, Wall direction 100, Bench height 10 m					DS 2, Wall direction 190, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS1+SB2	NW	NW	NW	NW	JS1+SB2	10.03	9.89	9.77	9.67
JS2+SB2	10.36	4.37	3.01	2.38	JS2+SB2	0.46	0.46	0.46	0.46
JS3+SB2	NW	NW	NW	NW	JS3+SB2	3.85	3.66	3.52	3.41
DS 3, Wall direction 280, Bench height 10 m					DS 4, Wall direction 010, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS1+SB2	11.79	11.41	11.11	10.86	JS1+SB2	NW	NW	NW	NW
JS2+SB2	NW	NW	NW	NW	JS2+SB2	NW	NW	NW	NW
JS3+SB2	49.46	8.27	5.26	4.11	JS3+SB2	NW	NW	NW	NW

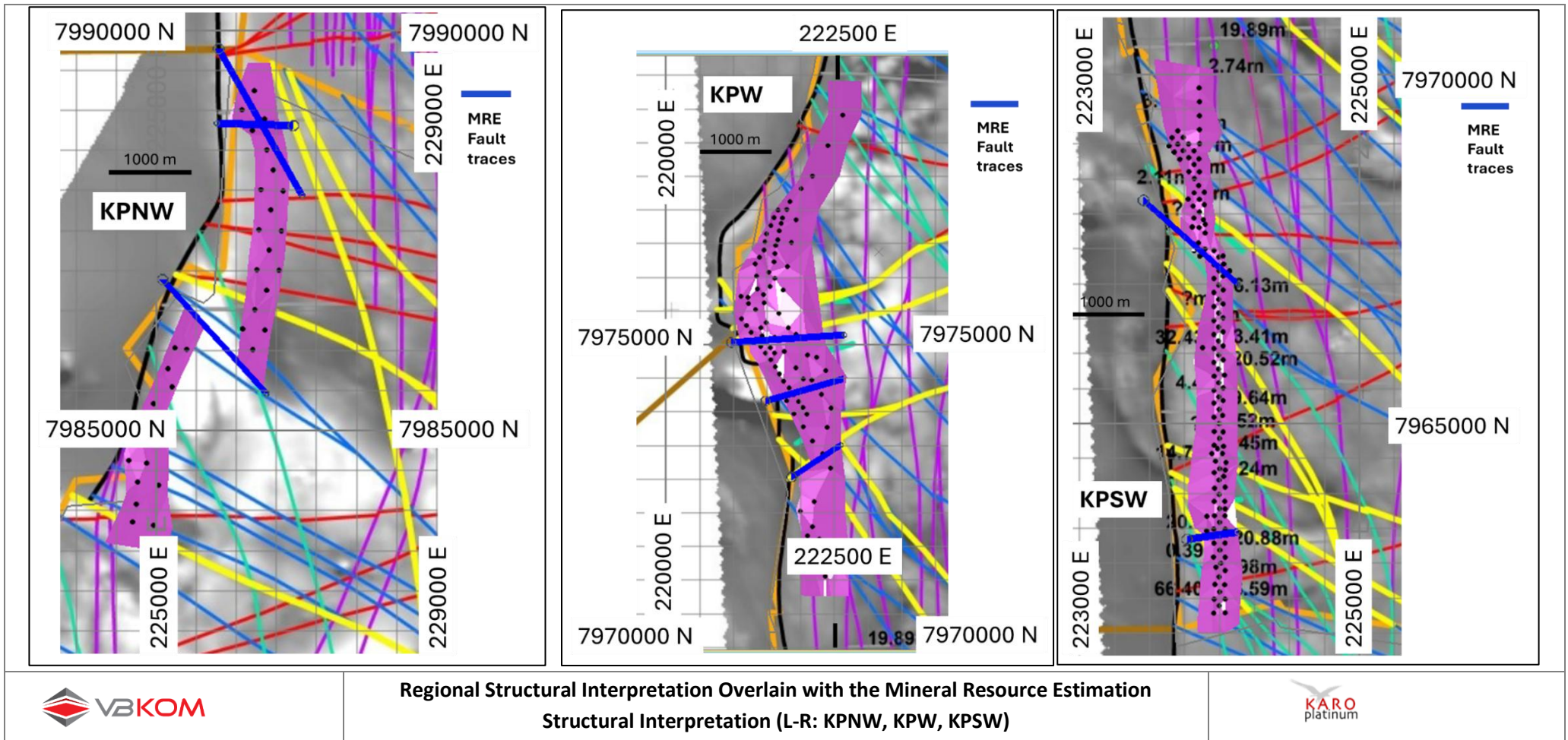
Swedge results for all wall sectors and websterite.

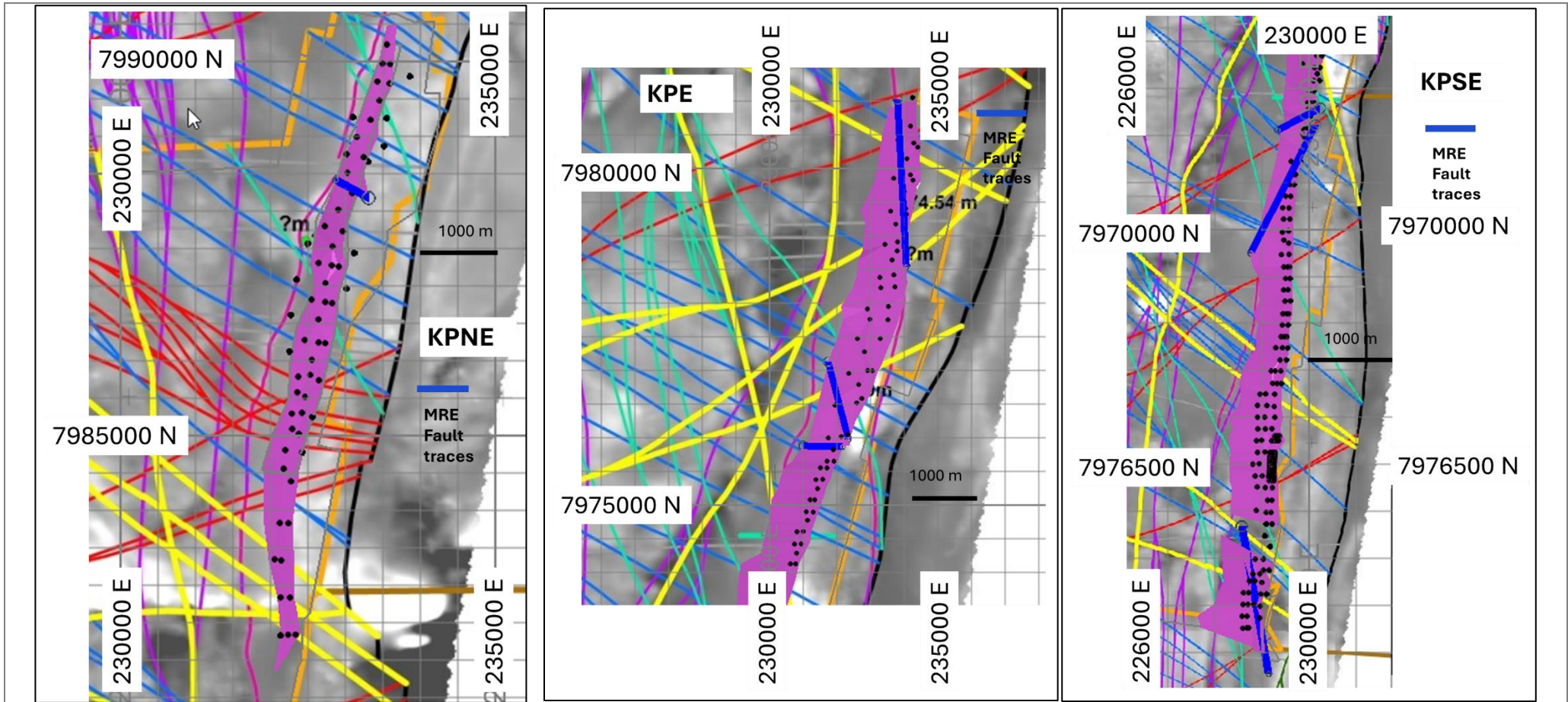
Websterite									
DS 1 + DS 2, Wall direction 110, Bench height 10 m					DS 3, Wall direction 190, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS1+JS2	NW	NW	NW	NW	JS1+JS2	NW	NW	NW	NW
JS1+JS3	NW	NW	NW	NW	JS1+JS3	NW	NW	NW	NW
JS2+JS3	NW	NW	NW	NW	JS2+JS3	NW	NW	NW	NW
DS 4 + DS 5, Wall direction 280, Bench height 10 m					DS 6, Wall direction 005, Bench height 10 m				
Joint set	60°	70°	80°	90°	Joint set	60°	70°	80°	90°
JS1+JS2	58.18	57.88	57.62	57.39	JS1+JS2	64.02	63.86	63.72	63.59
JS1+JS3	100	100	100	100	JS1+JS3	100	100	100	100
JS2+JS3	56.11	55.77	55.48	55.21	JS2+JS3	56.06	55.96	55.87	55.78

## Appendix C: Structural Interpretation

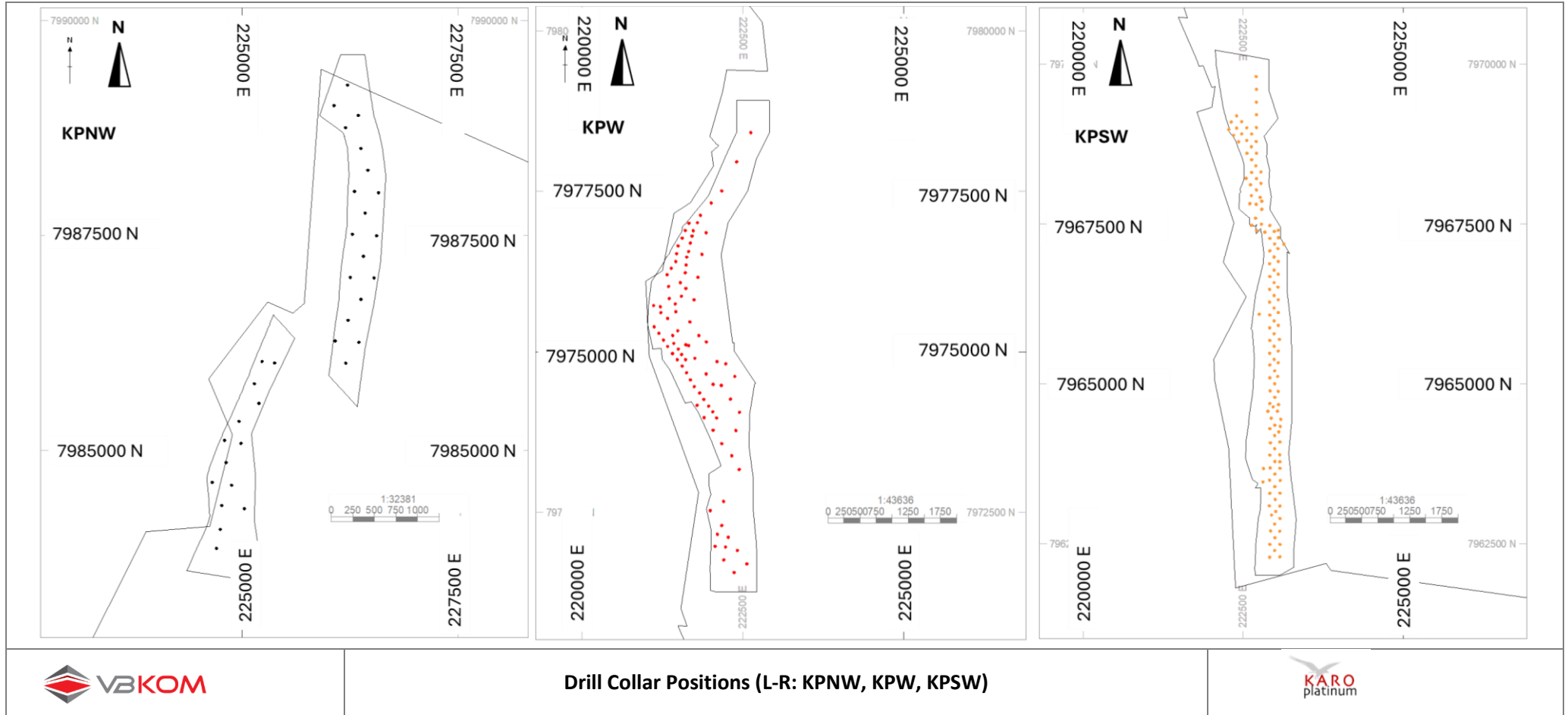
The legend is applicable to each of the following images:

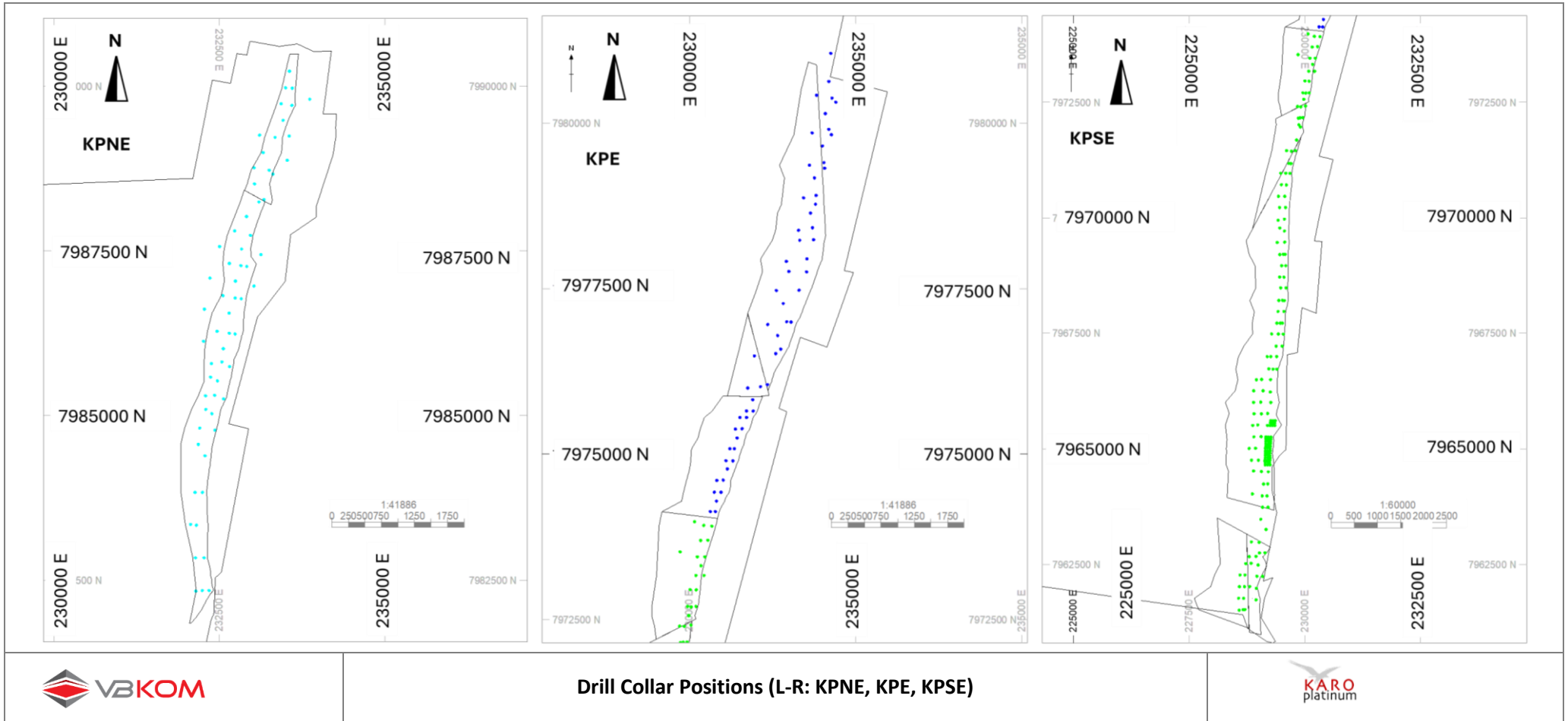
-  Mashonaland Dolerite dykes
-  Okwa (Sebanga) imbractogenel Rift fault
-  Magondi (Nchingwe) imbractognal rift fault
-  Sebanga Poort Dolerite dyke
-  Reactivated Archaean shear zone system
-  Great Dyke related internal dykes
-  N-S Fault (dyke internal shear zone system)
-  E-W (dyke internal transform fault)
-  Mafic sequence – Ultramafic sequence contact
-  Serpentine Harzburgite – Ultramafic sequence contact
-  Eastern Great Dyke Margin Fault
-  Western Great Dyke Margin Fault
-  Faults > 5m (yellow)



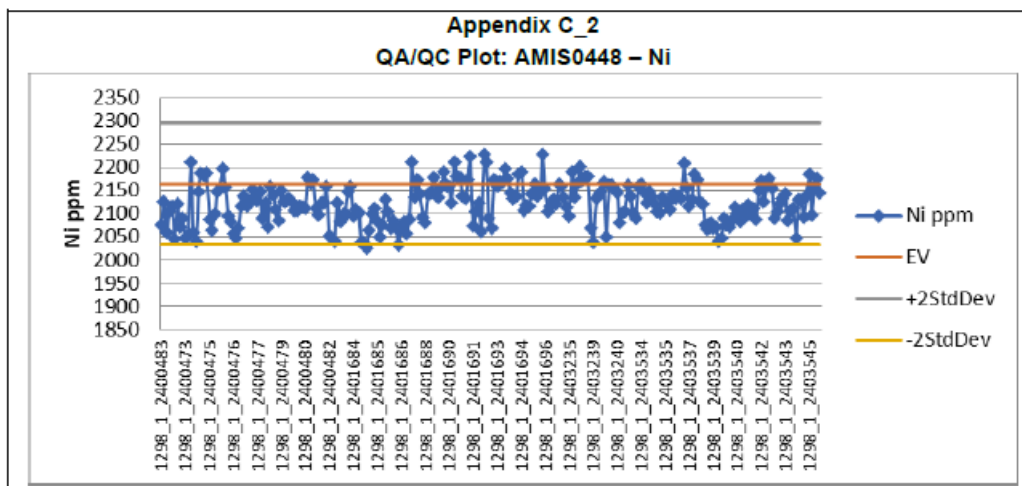
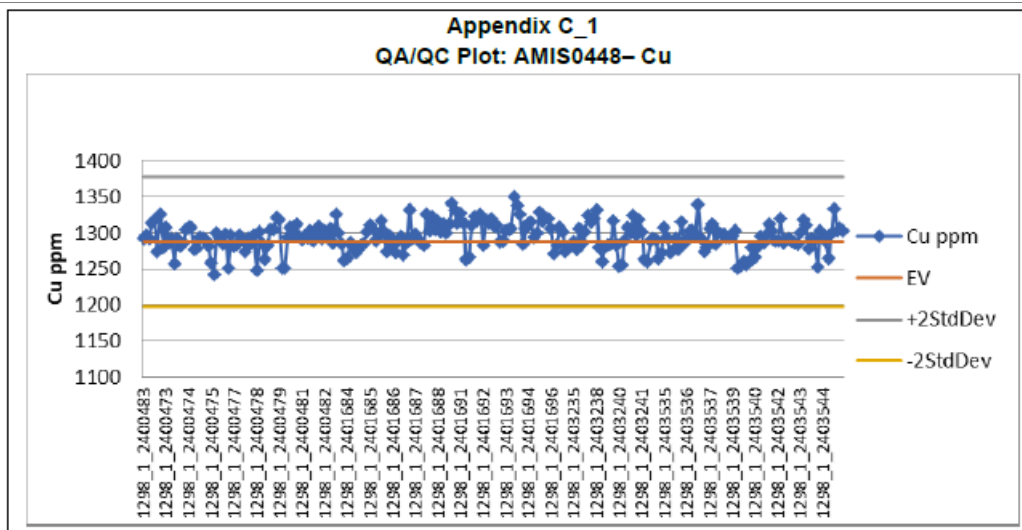


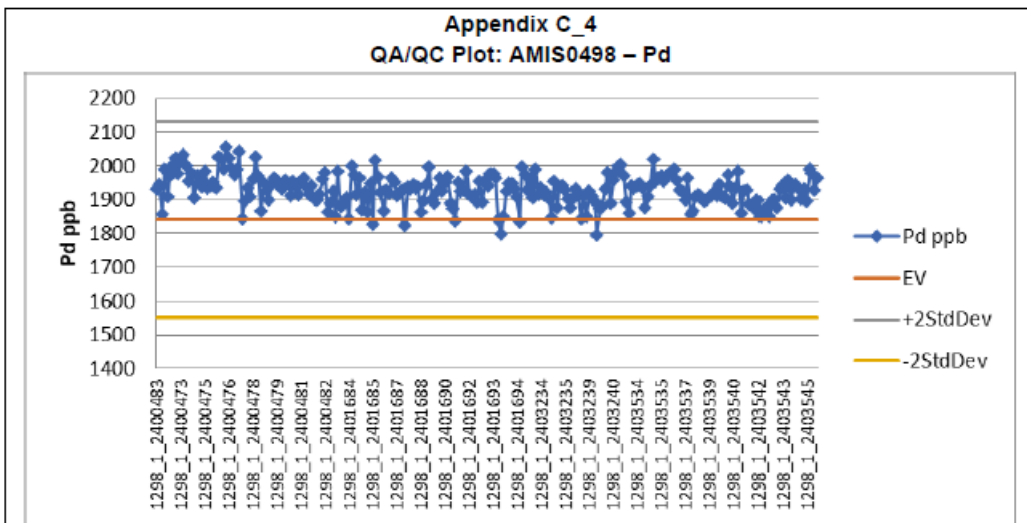
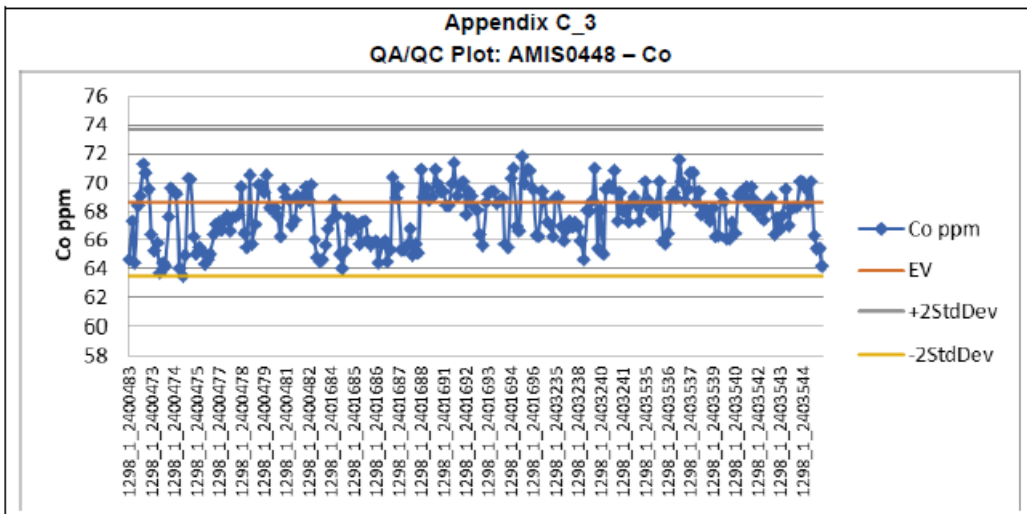
## Appendix D: Drill Collar Positions



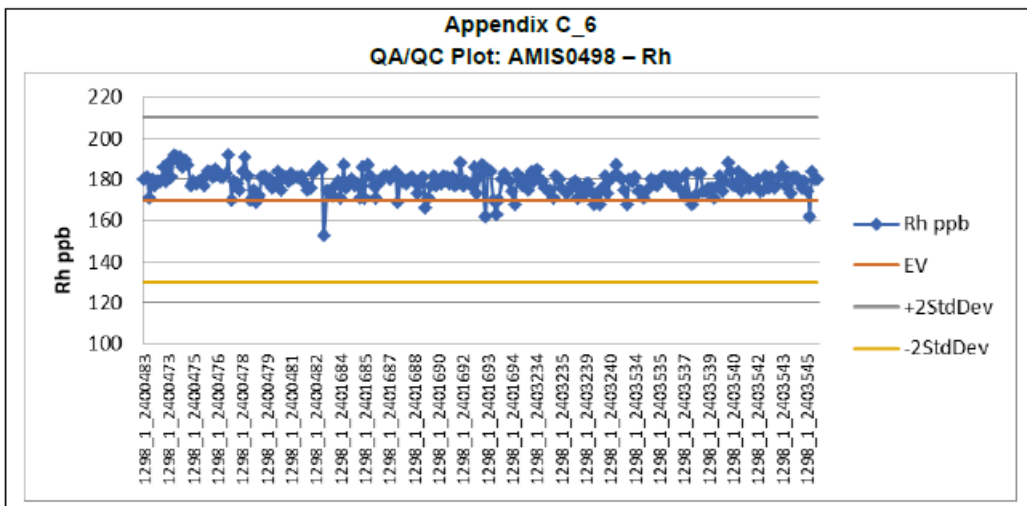
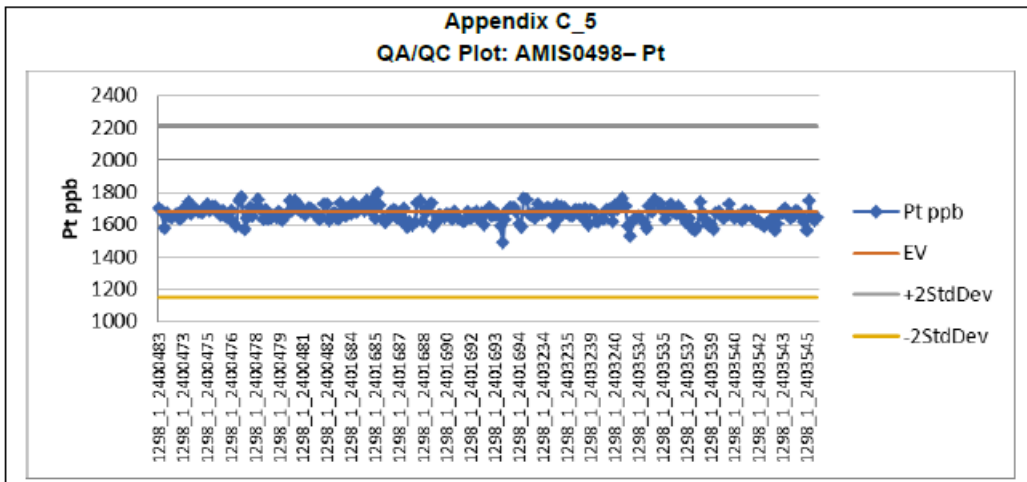


## Appendix E: Quality Control and Quality Assurance

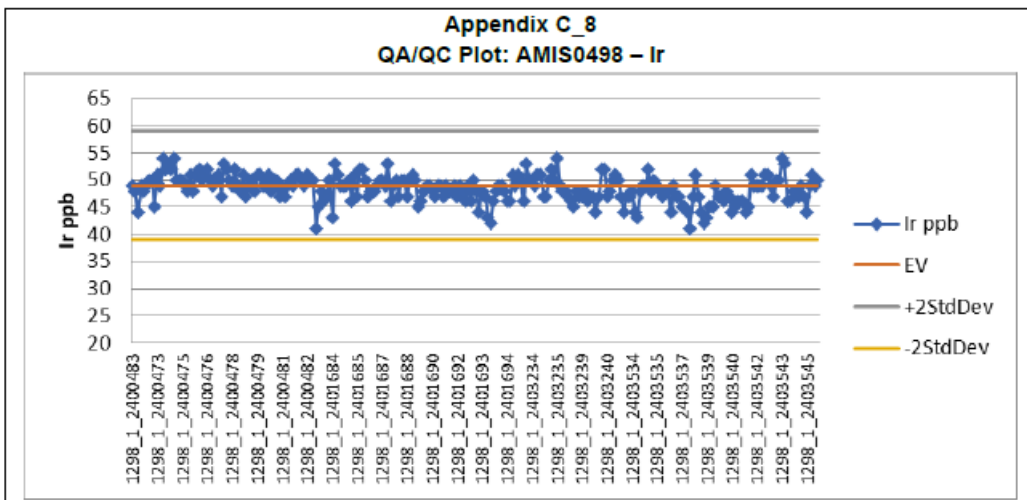
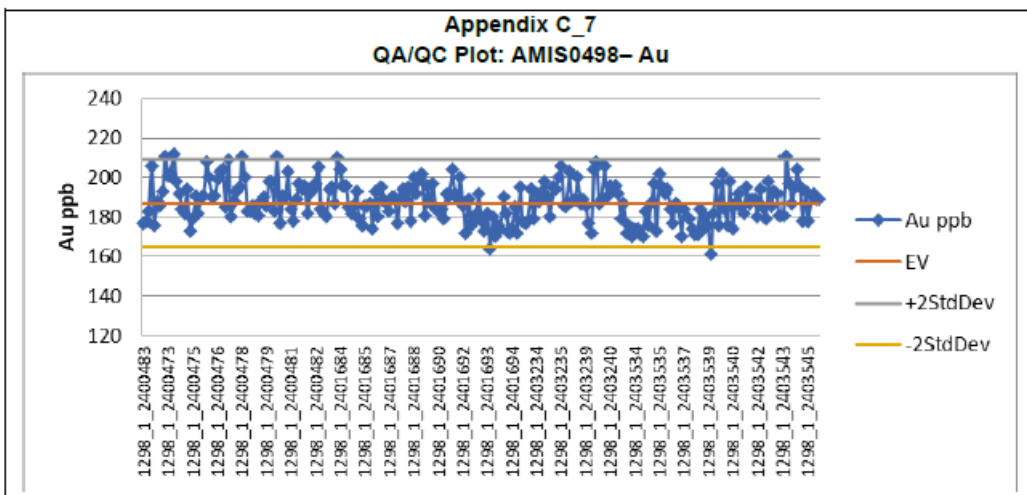


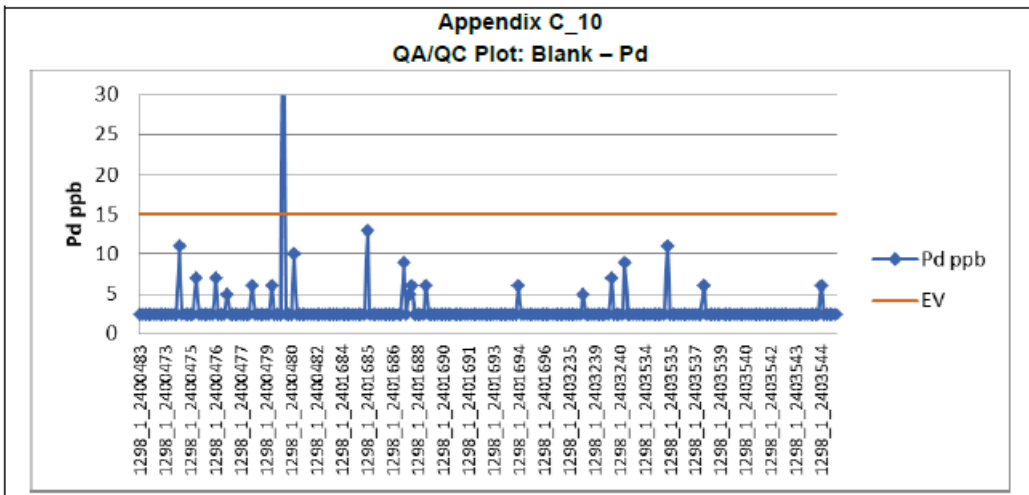
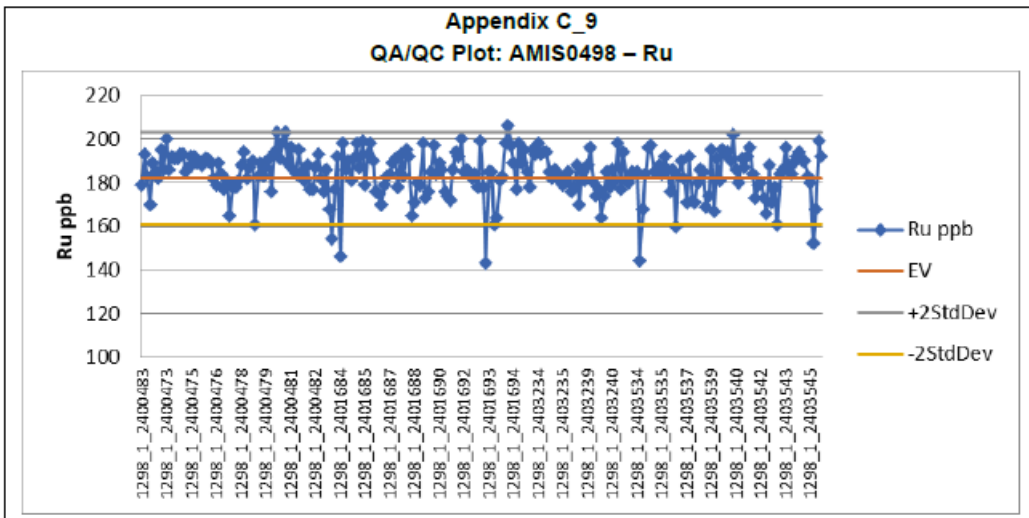


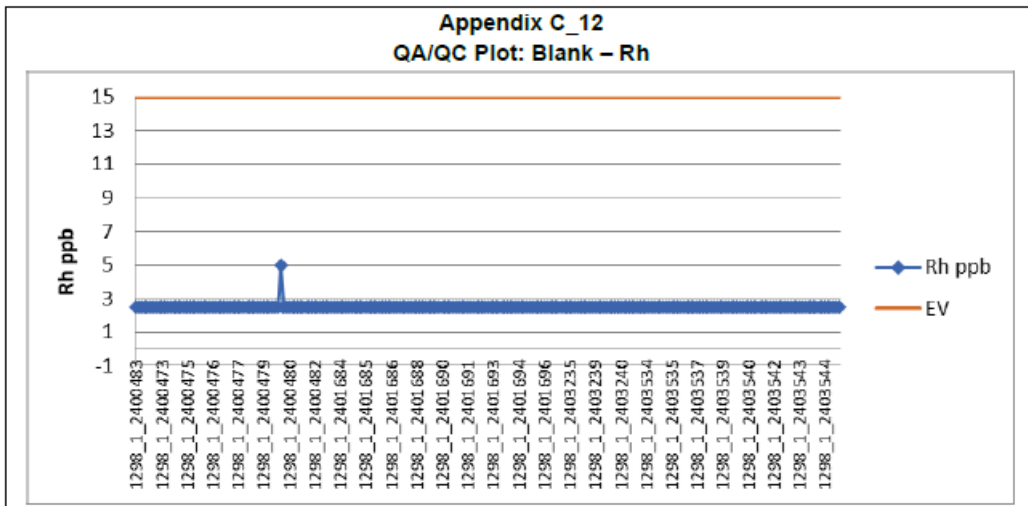
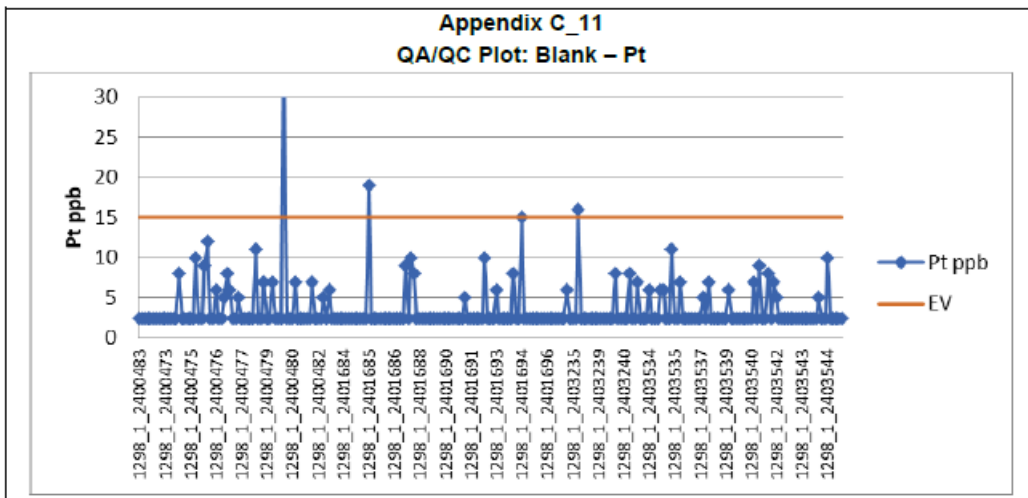
**QA/QC Plots of AMIS0448 – Co (Top) and AMIS0498 – Pd (Bottom)**

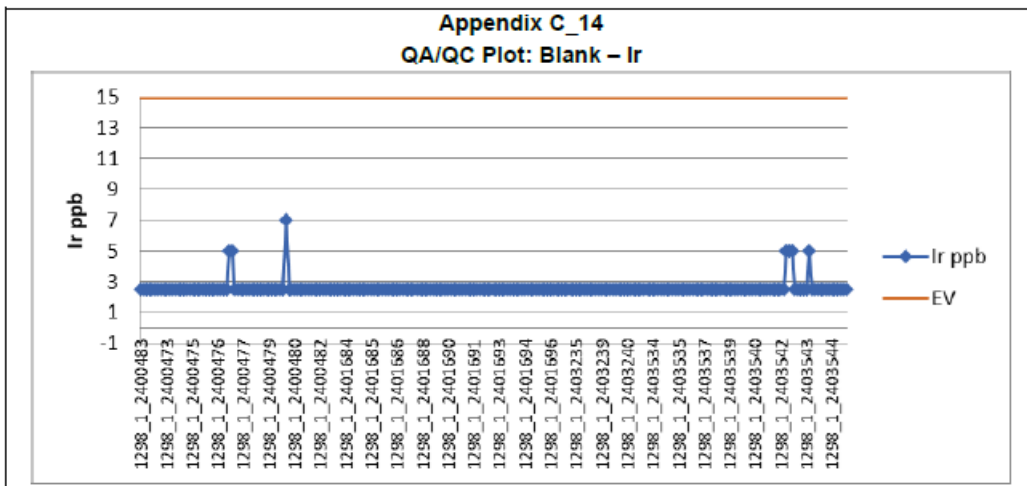
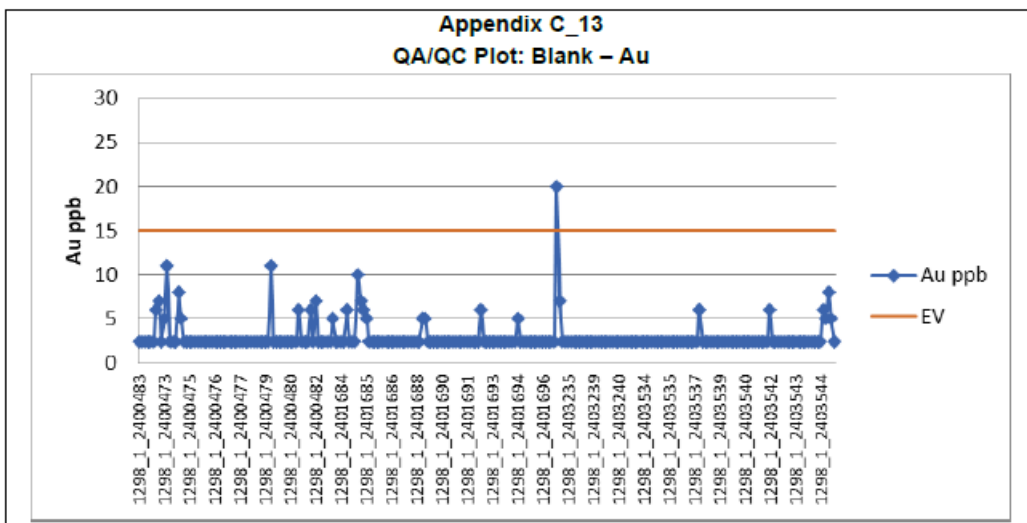


**QA/QC Plots of AMIS0498 – Pt (Top) and AMIS0498 – Rh (Bottom)**

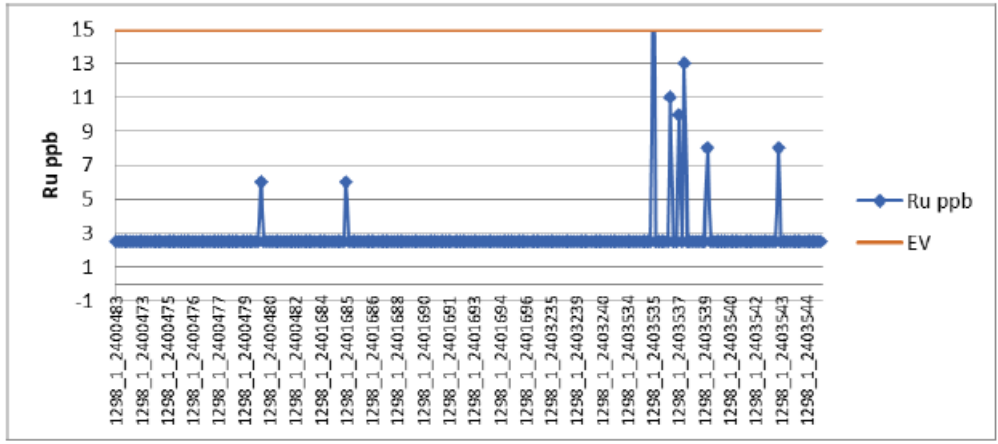




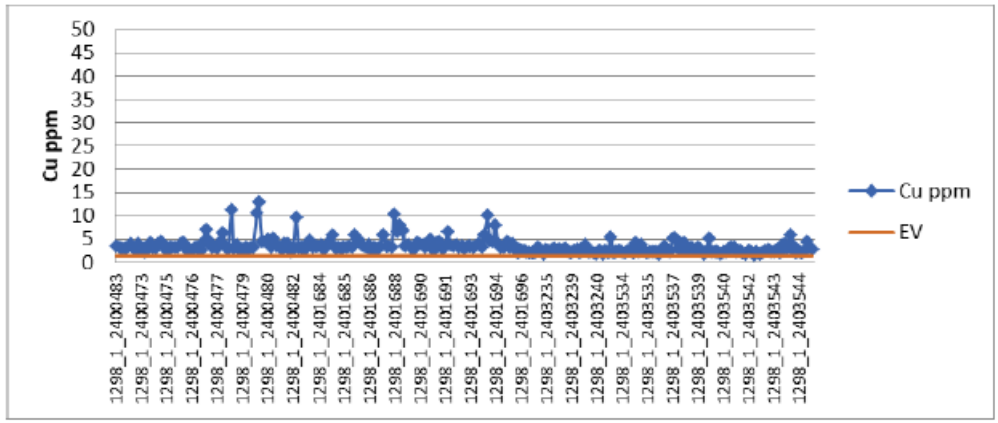


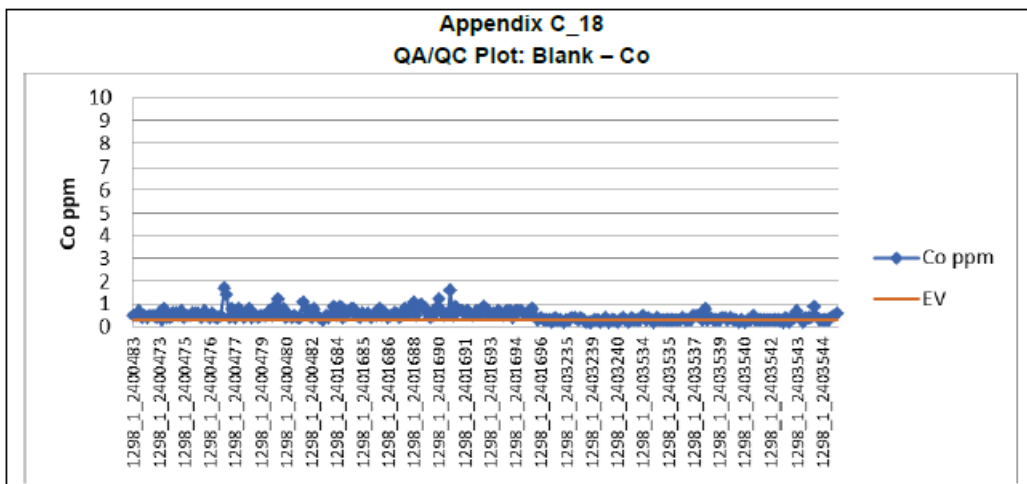
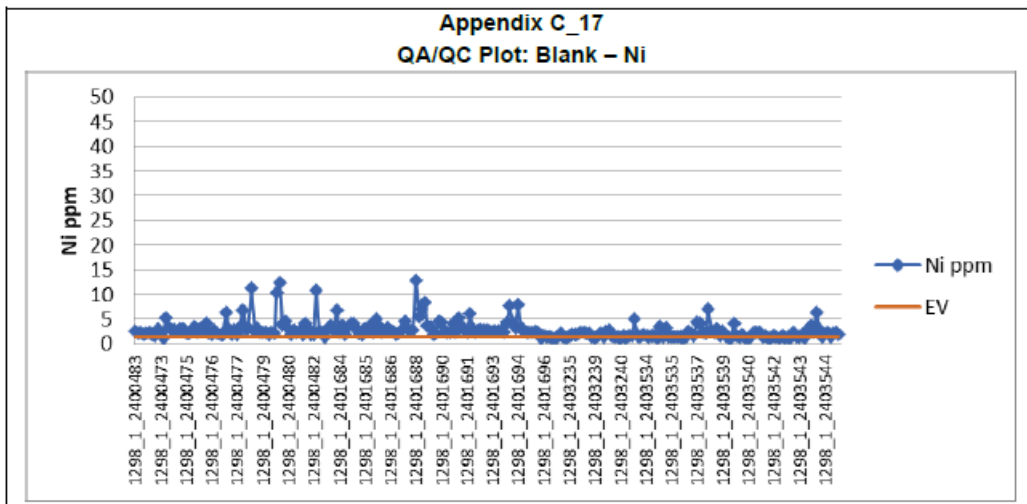


**Appendix C\_15**  
**QA/QC Plot: Blank – Ru**

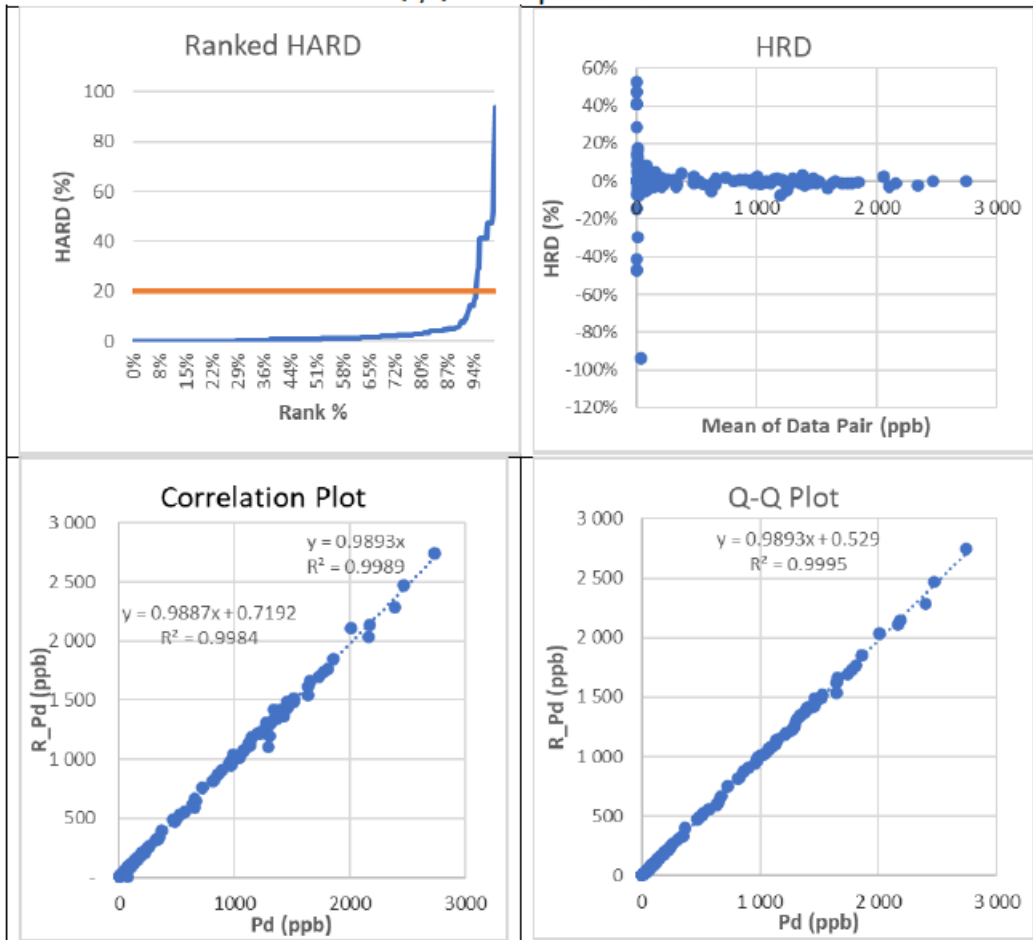


**Appendix C\_16**  
**QA/QC Plot: Blank – Cu**

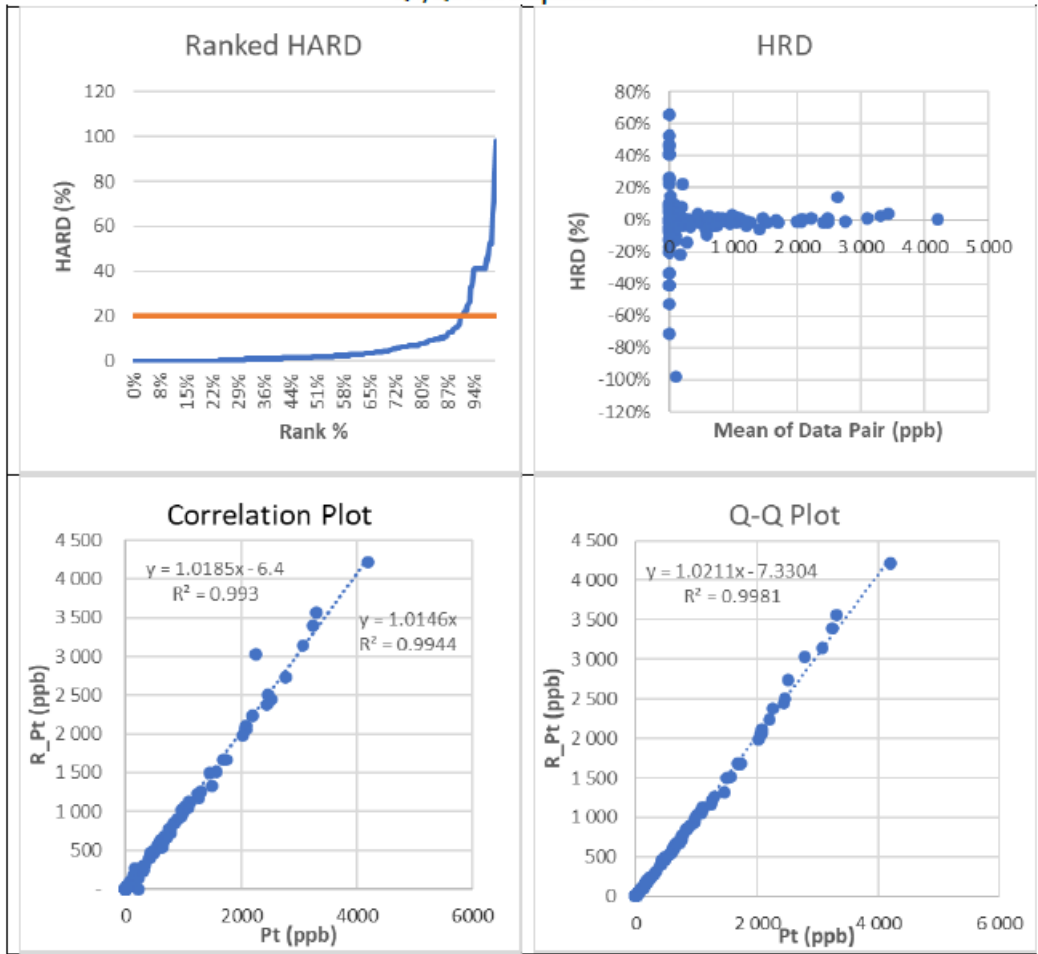




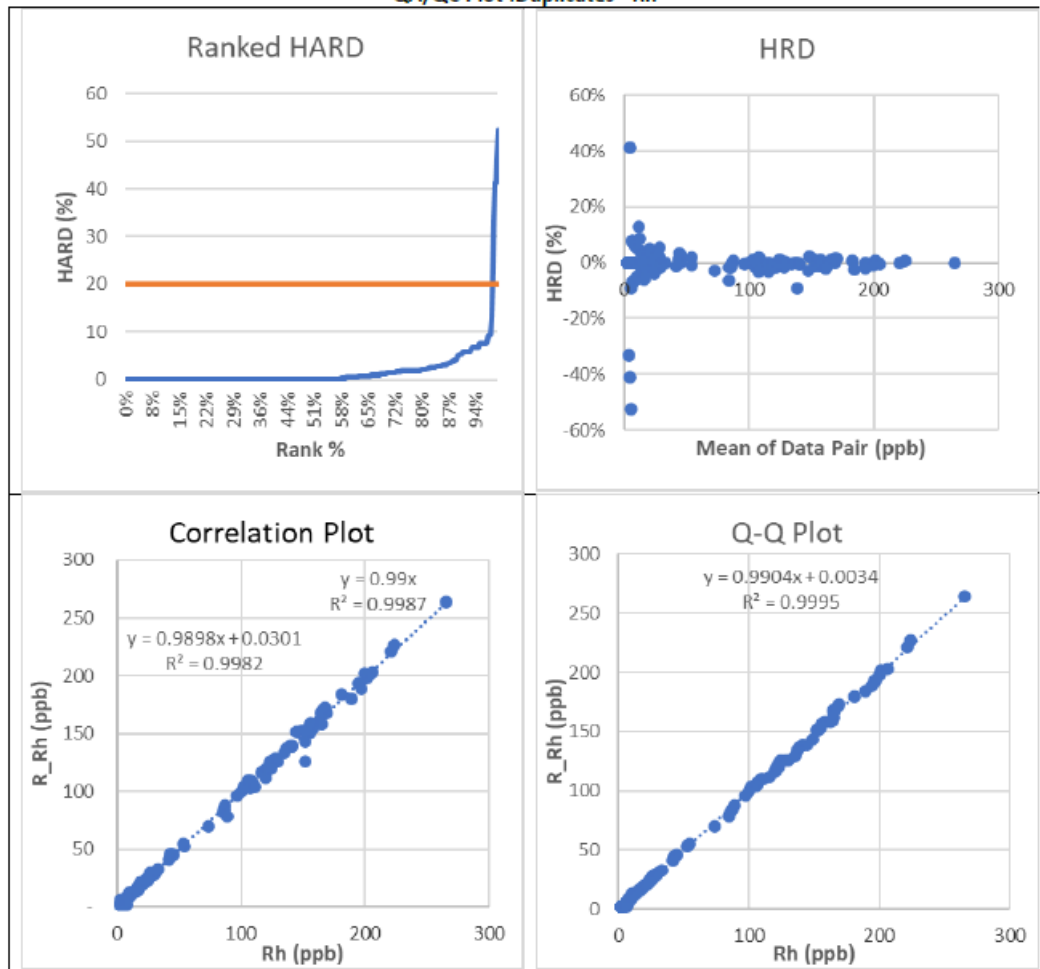
Appendix C\_19  
QA/QC Plot : Duplicates - Pd



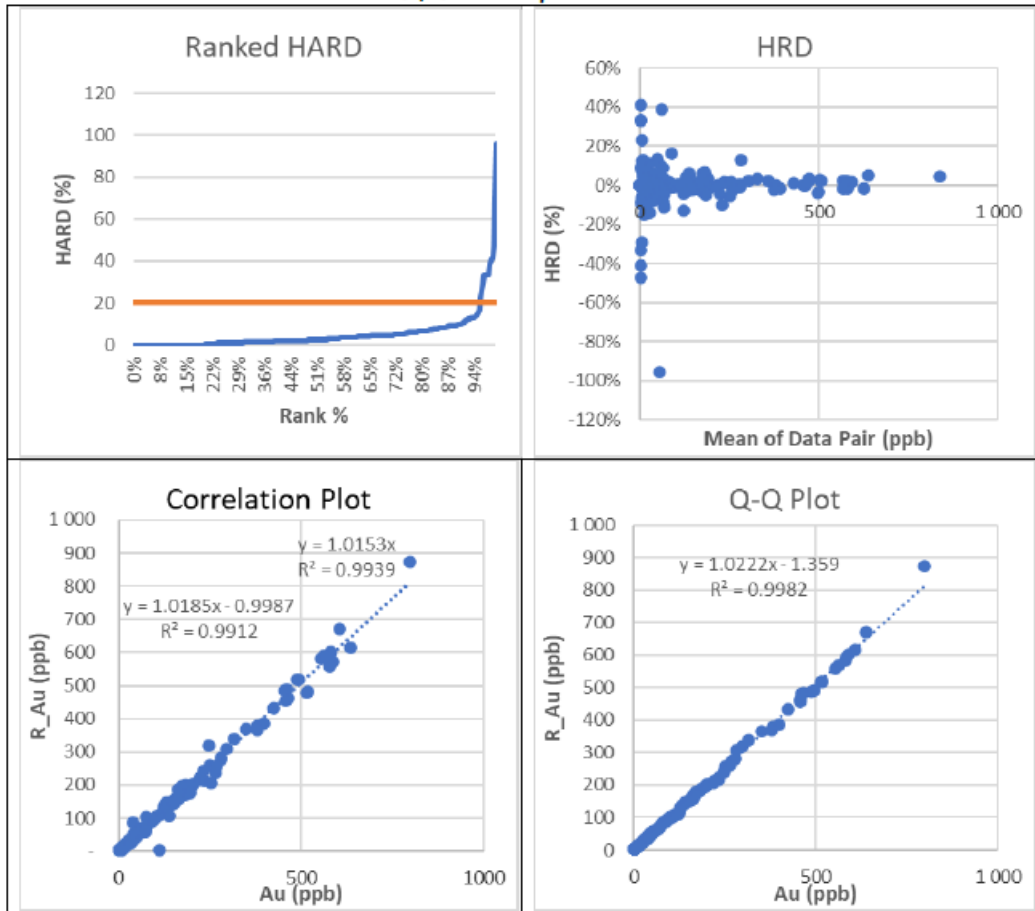
Appendix C\_20  
QA/QC Plot : Duplicates - Pt



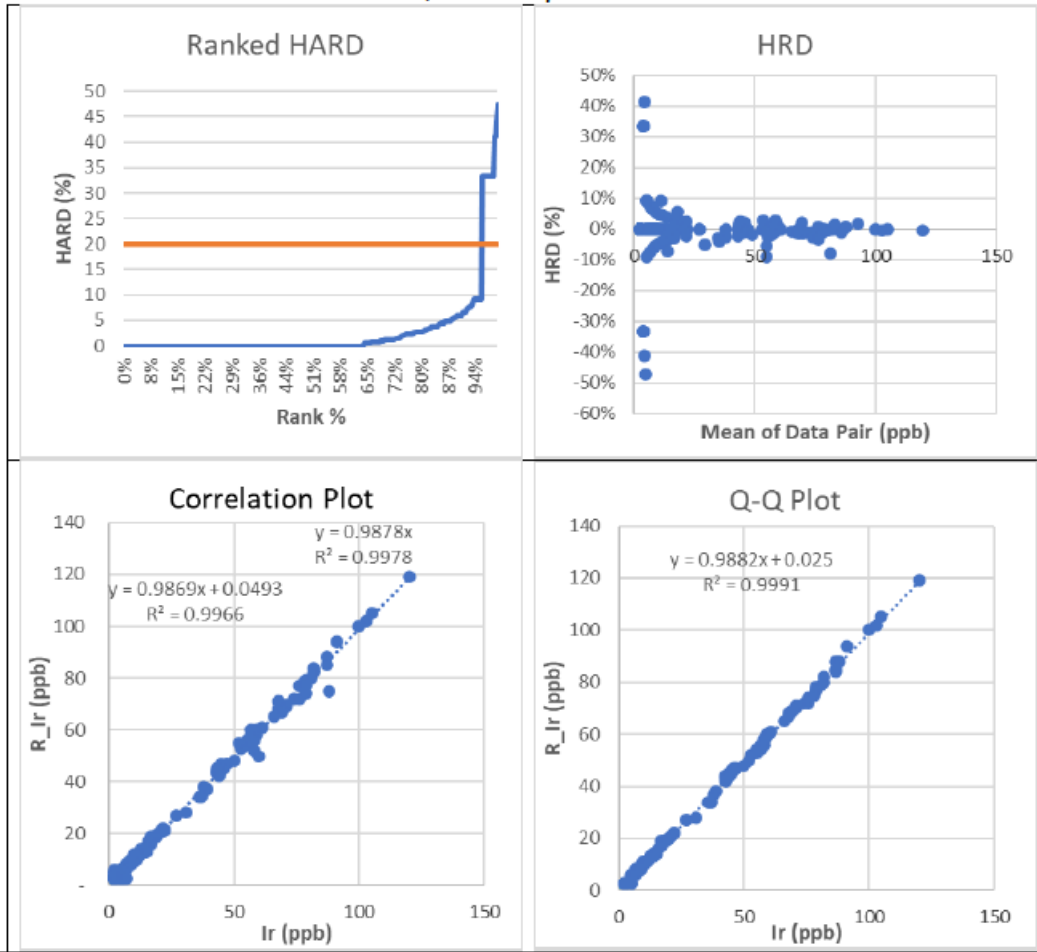
Appendix C\_21  
QA/QC Plot : Duplicates - Rh



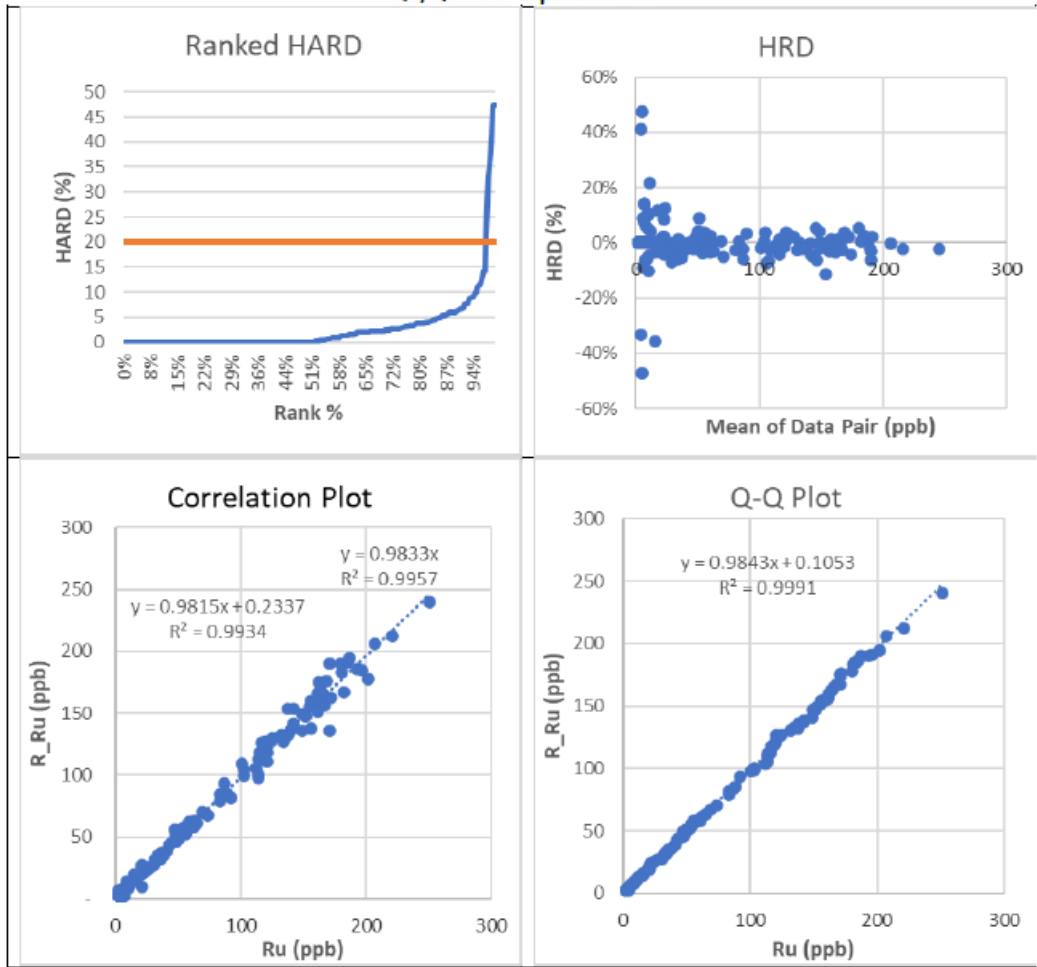
Appendix C\_22  
QA/QC Plot : Duplicates - Au



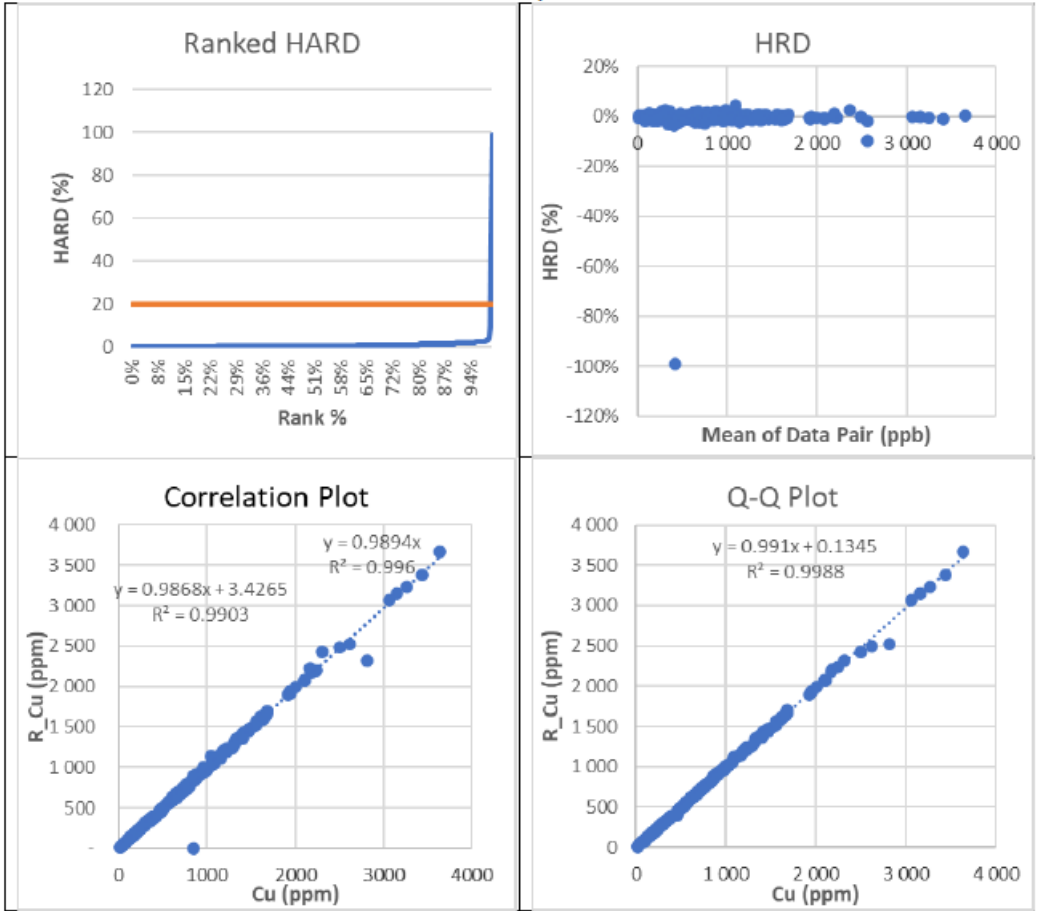
Appendix C\_23  
QA/QC Plot : Duplicates - Ir



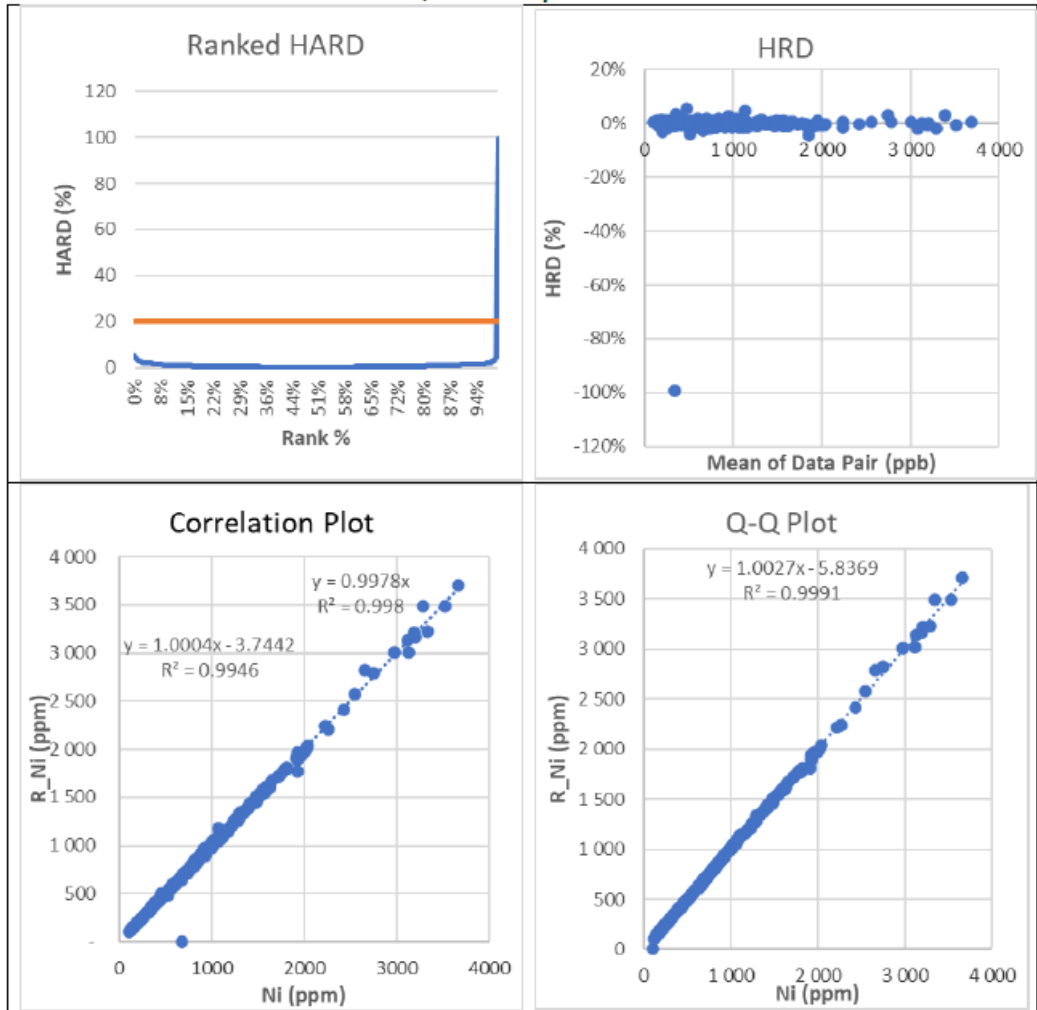
Appendix C\_24  
QA/QC Plot :Duplicates - Ru



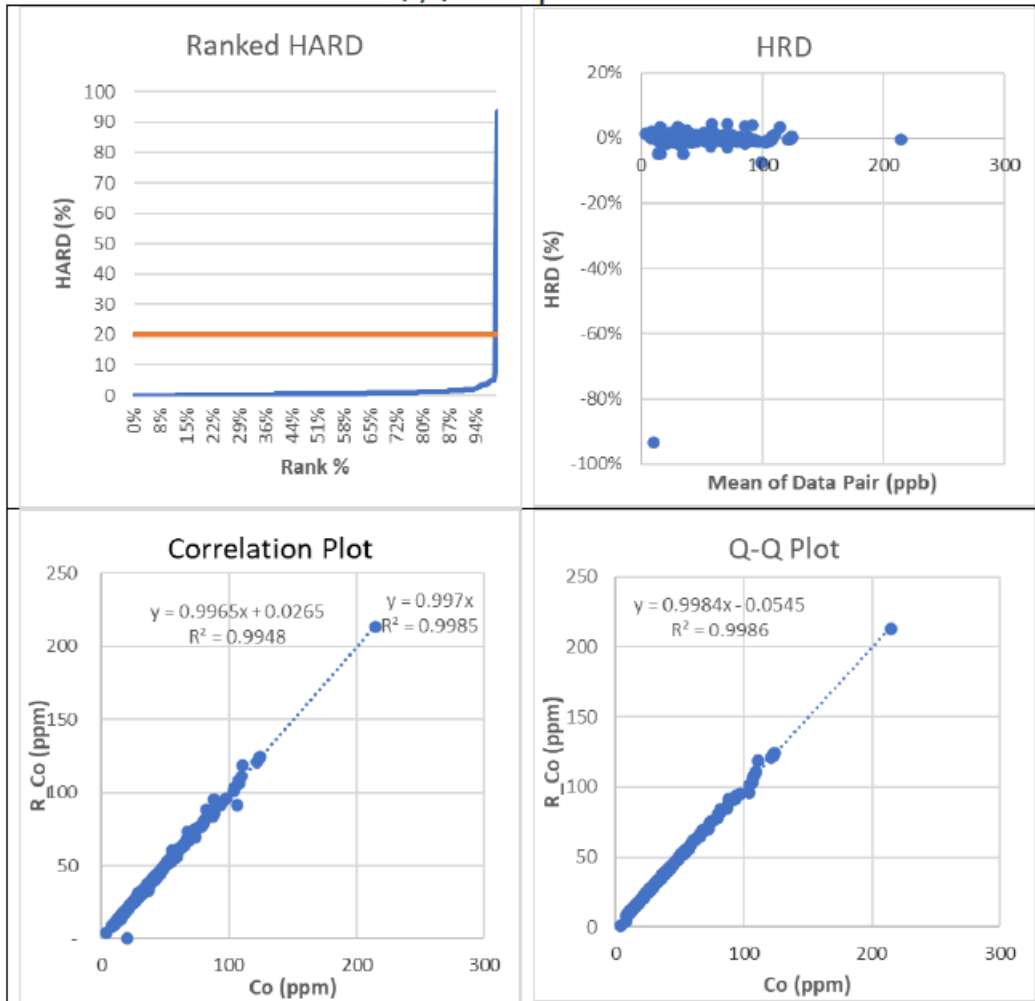
Appendix C\_25  
QA/QC Plot : Duplicates - Cu



Appendix C\_26  
QA/QC Plot : Duplicates - Ni



Appendix C\_27  
QA/QC Plot : Duplicates - Co

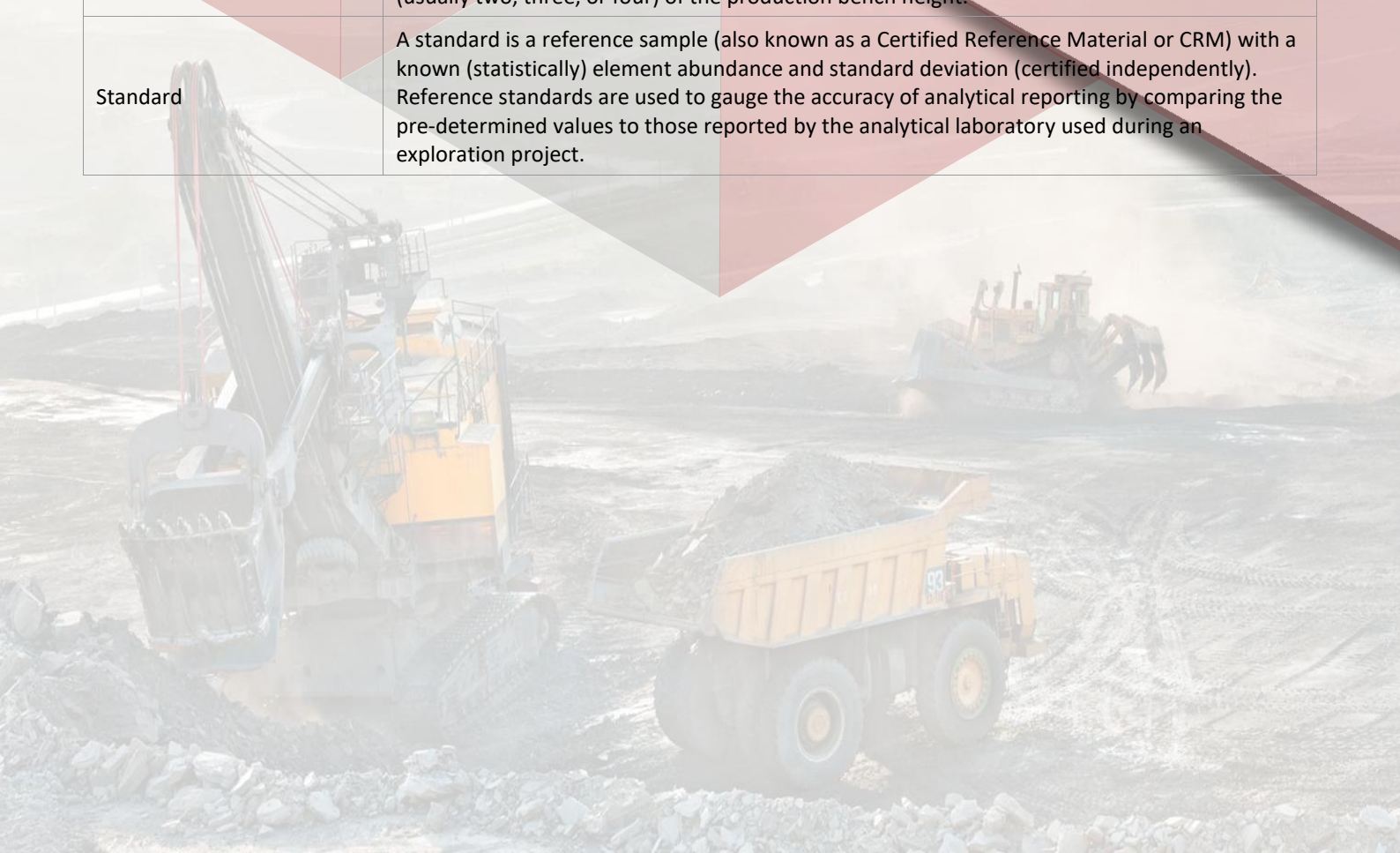


## Appendix F: Base Case Cash Flow Model

SUMMARY	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
<b>Revenue</b>												
PGM Sales (USD)	2,288,499,250	49,417,278	223,729,964	243,765,536	250,591,045	246,946,441	249,055,347	249,065,915	245,067,126	254,363,829	209,329,163	67,167,605
Base Metal Sales (USD)	453,817,343	7,024,470	34,072,416	35,987,296	43,493,146	46,004,414	62,175,251	58,153,702	49,378,563	56,637,841	44,451,761	16,438,484
<b>Total Revenue (USD)</b>	<b>2,742,316,593</b>	<b>56,441,748</b>	<b>257,802,380</b>	<b>279,752,833</b>	<b>294,084,191</b>	<b>292,950,855</b>	<b>311,230,598</b>	<b>307,219,617</b>	<b>294,445,688</b>	<b>311,001,670</b>	<b>253,780,924</b>	<b>83,606,089</b>
<b>Opex</b>												
Mining Costs (USD)	-1,122,516,598	-84,356,997	-116,625,370	-124,287,284	-129,288,773	-127,963,723	-129,385,464	-128,840,943	-131,708,770	-102,738,013	-35,572,984	-11,748,278
Processing Costs (USD)	-373,650,484	-10,559,045	-37,489,349	-38,724,121	-39,392,084	-39,392,041	-38,959,039	-39,026,486	-38,473,136	-39,392,037	-39,391,976	-12,851,170
Logistics Costs (USD)	-36,090,835	-804,826	-3,697,308	-3,870,741	-3,965,432	-3,894,927	-3,889,035	-3,925,316	-3,834,074	-3,995,651	-3,198,072	-1,015,453
General and Administration (USD)	-177,952,960	-17,221,254	-17,221,254	-17,221,254	-17,221,254	-17,221,254	-17,221,254	-17,221,254	-17,221,254	-17,221,254	-17,221,254	-5,740,418
<b>Total Operating Expenditure (USD)</b>	<b>-1,710,210,878</b>	<b>-112,942,123</b>	<b>-175,033,280</b>	<b>-184,103,400</b>	<b>-189,867,543</b>	<b>-188,471,945</b>	<b>-189,454,792</b>	<b>-189,014,000</b>	<b>-191,237,234</b>	<b>-163,346,955</b>	<b>-95,384,286</b>	<b>-31,355,320</b>
<b>Capex</b>												
Development Capex (USD)	-338,053,414	-338,053,414	0	0	0	0	0	0	0	0	0	0
Sustaining Capex (USD)	-117,964,059	-6,155,246	-12,252,330	-12,887,238	-13,290,728	-13,193,036	-13,261,835	-13,230,980	-13,386,606	-11,434,287	-6,676,900	-2,194,872
<b>Total Capital Expenditure (USD)</b>	<b>-456,017,473</b>	<b>-344,208,660</b>	<b>-12,252,330</b>	<b>-12,887,238</b>	<b>-13,290,728</b>	<b>-13,193,036</b>	<b>-13,261,835</b>	<b>-13,230,980</b>	<b>-13,386,606</b>	<b>-11,434,287</b>	<b>-6,676,900</b>	<b>-2,194,872</b>
<b>Payments to Government</b>												
Export Licence (USD)	-375,000	-28,125	-37,500	-37,500	-37,500	-37,500	-37,500	-37,500	-37,500	-37,500	-37,500	-9,375
Mining Licence and Inspection Fee (USD)	-7,170,900	-717,090	-717,090	-717,090	-717,090	-717,090	-717,090	-717,090	-717,090	-717,090	-717,090	0
MMCZ Fee (USD)	-24,680,849	-507,976	-2,320,221	-2,517,775	-2,646,758	-2,636,558	-2,801,075	-2,764,977	-2,650,011	-2,799,015	-2,284,028	-752,455
IMTT Fee (USD)	-13,681,687	-903,537	-1,400,266	-1,472,827	-1,518,940	-1,507,776	-1,515,638	-1,512,112	-1,529,898	-1,306,776	-763,074	-250,843
Royalty Payment (USD)	-62,629,866	-1,339,297	-6,099,806	-6,599,694	-6,826,745	-6,746,179	-6,941,271	-6,853,006	-6,815,692	-6,974,953	-5,609,495	-1,823,726
Tax Payment (USD)	-79,326,584	0	0	0	0	0	-1,348,012	-15,159,792	-12,824,451	-19,968,426	-22,574,033	-7,451,870
<b>Payments to Government (USD)</b>	<b>-187,864,886</b>	<b>-3,496,025</b>	<b>-10,574,884</b>	<b>-11,344,887</b>	<b>-11,747,033</b>	<b>-11,645,103</b>	<b>-13,360,586</b>	<b>-27,044,477</b>	<b>-24,574,642</b>	<b>-31,803,760</b>	<b>-31,985,220</b>	<b>-10,288,269</b>
<b>Cash Flow (USD)</b>	<b>388,223,356</b>	<b>-404,205,060</b>	<b>59,941,887</b>	<b>71,417,308</b>	<b>79,178,886</b>	<b>79,640,772</b>	<b>95,153,384</b>	<b>77,930,160</b>	<b>65,247,205</b>	<b>104,416,669</b>	<b>119,734,518</b>	<b>39,767,628</b>
Cumulative Cash Flow		-404,205,060	-344,263,173	-272,845,866	-193,666,980	-114,026,208	-18,872,823	59,057,337	124,304,542	228,721,211	348,455,728	388,223,356
Net Present Value @ 14.4% (USD)	<b>-7,079,778</b>											
Internal Rate of Return (%)	13.9%											
Net Present Value @ 10.0% (USD)	<b>67,791,795</b>											

## Appendix G: Glossary of Terms

Term	Definition
Bench Face Angle	The Bench Face Angle is controlled by the material strength, the orientation of the discontinuities in relation to the face azimuth, and/or blasting and excavation practices.
Bench Height	Mining equipment used to drill and blast the rock determines the bench height. Currently, most large mining operations drill and blast on 12 to 15-metre intervals, with 15 metres being the most common.
Bench Toe	The bottom edge of a bench is referred to as the toe.
Berm/Bench Width	Bench widths are selected to facilitate containment of potential failing material (small wedges and blocks) and to ensure that loose material does not become hazardous to personnel and equipment.
Blank	A blank is a standard with abundance of the element of interest below the level of detection of the analytical technique (certified independently).
Duplicate	A duplicate is the split of a sample taken at a particular stage of the sampling process e.g. Field Duplicate.
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.
Inter-Ramp Angle	The inter-ramp angle (IRA) or stack angle is formed by a series of uninterrupted benches and corresponds to the inclination from the horizontal of a line joining the toes of the benches.
Overall Slope Angle	The overall slope angle (OSA) is formed by a series of inter-ramp slopes separated by haul roads and corresponds to the angle formed by the line joining the toe of the lowest bench with the slope crest. The incorporation of ramps onto a wall will result in a slope that has a shallower overall slope angle than the inter-ramp angle.
Stack	When there are multiple benches in a slope design. A stack usually refers to several production benches between catch benches so that the vertical catch bench separation is a multiple (usually two, three, or four) of the production bench height.
Standard	A standard is a reference sample (also known as a Certified Reference Material or CRM) with a known (statistically) element abundance and standard deviation (certified independently). Reference standards are used to gauge the accuracy of analytical reporting by comparing the pre-determined values to those reported by the analytical laboratory used during an exploration project.



## Appendix H: Abbreviations and Chemical Formulae

### List of Abbreviations & Acronyms

Abbreviation/Acronym	Definition
2D	Two-Dimensional
3D	Three-Dimensional
ADT	Articulated Dump Truck
AIM	Alternative Investment Market
AMIS	African Mineral Standards (Pty) Ltd
AS	Analytical Signal
ASX	Australian Securities Exchange
Ave	Average
BIT	Bilateral Investment Treaty
BFS	Bankable Feasibility Study
BHP	Broken Hill Proprietary Company Limited
BMR	Base Metal Reef
BMSZ	Base of the Main Sulphide Zone
CAPEX	Capital Expenditure
COG	Cut-Off Grade
CP	Competent Person
CPR	Competent Persons' Report
CRM	Certified Reference Material
CS	Carbon Sulphur
DCF	Discounted Cash Flow
DMT	Dry Metric Tonne
E&S	Environmental and Social
ECSA	Engineering Council of South Africa
EIA	Environmental Impact Assessment
EMA	Environmental Management Agency
EMAct	Environmental Management Act [Chapter 20:27]
ENC	ENC Minerals (Pty) Ltd
ENE	East-Northeastern
EPCM	Engineering, Procurement, and Construction Management
EPO	Exclusive Prospecting Order
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ETF	Exchange-Traded Fund

Abbreviation/Acronym	Definition
EU	European Union
EV	Expected Value
FW	Footwall
FY	Financial Year
G&A	General and Administration
GC	Grade Control
GDP	Gross Domestic Product
Genalysis	Genalysis Laboratory Services (Pty) Ltd
GNI	Gross National Income
GPS	Global Positioning System
GSSA	Geological Society of South Africa
HEX	Hydraulic Excavator
IAR	Integrated Annual Report
IAS	Investment Analysts Society
IASSA	Investment Analyst Society of South Africa
ICID	International Convention on Settlement of Disputes
ICP-MS	Inductively Coupled Plasma Mass Spectrometry
IDW <sup>2</sup>	Inverse Distance Weighting to the Power 2
IFC	International Finance Corporation
Impala	Impala Platinum Limited
IAR	Integrated Annual Report
IMTT	Intermediated Money Transfer Tax
IRR	Internal Rate of Return
JMA	JMA Consulting (Pty) Ltd
JORC	Joint Ore Reserves Committee
JSE	Johannesburg Stock Exchange
JS	Joint Set
Karo	Karo Project
Karo Platinum	Karo Platinum (Pvt) Ltd
KPE	Karo Project East
KPNE	Karo Project North East
KPSE	Karo Project South East
KPSW	Karo Project South West
KPW	Karo Project West
LOM	Life of Mine

Abbreviation/Acronym	Definition
LSZ	Lower Sulphide Zone
MAB	Mining Affairs Board
MCF	Mine Call Factor
MDA	Mining Development Agreement
MF2	Mill-Float-Mill-Float
MIGA	Multilateral Investment Guarantee Agency
MinValGroup	Mineral Valuation Group (Pty) Ltd
ML41/ML36/ML37	Mining Lease Numbers 41, 36, and 37, respectively (Formal Abbreviation “ML” Attributed to Specific Mining Lease Licence Areas)
MMA	Mines and Minerals Act (Chapter 21:05) 38 of 1961, as amended
MMCZ	Minerals Marketing Corporation of Zimbabwe
MRM	Mineral Resource Management
MRP	Market Risk Premium
MSZ	Main Sulphide Zone
NEE	Northeastern with Eastern
Northam	Northam Platinum Limited
NPV	Net Present Value
NW	Northwest
OFAC	Office of Foreign Assets Control
OMI	OMI Solutions
Opex	Operating Expenditure
OPIC	Overseas Private Investments Corporation
P&G	Preliminary and General
PAP	Project Affected Person
PEM	Project Enhancement Multiplier
PF	Powder Factor
PGE	Platinum Group Element
PGM	Platinum Group Metal
PL	Prospecting Licence
QA/QC	Quality Assurance / Quality Control
RAP	Resettlement Action Plan
RBZ	Reserve Bank of Zimbabwe
RDT	Rigid Dump Truck
ROM	Run of Mine
RPEEE	Reasonable Prospects for Eventual Economic Extraction
SAIMM	Southern African Institute of Mining and Metallurgy

Abbreviation/Acronym	Definition
SAMREC Code	South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2016 Edition)
SAMVAL Code	South African Code for the Reporting of Mineral Asset Valuation (2016 Edition)
S/R	Stripping Ratio
SB	Shear Band
SEZ	Special Economic Zone
SIB	Stay-in-Business
SMC	Selous Metallurgical Complex
SML	Special Mining Lease
SMZ	Main Sulphide Zone
TA	Tilt Angle
TCS	Triaxial Compressive Strength
Tharisa	Tharisa plc
TMF	Total Magnetic Field
TRO	Transitional Ore
TSF	Tailings Storage Facility
TSX	Toronto Stock Exchange
UCS	Uniaxial Compressive Strength
UNCITRAL	United Nations Convention on International Trade Law
Union Carbide	Union Carbide Zimbabwe Limited
UTB	Indirect Tensile Strength
UTM	Universal Transverse Mercator
VBKOM	VBKOM (Pty) Ltd
VD	Vertical Derivative
WGS 84	World Geodetic System 1984
WRD	Waste Rock Dump
WSM	WSM Leshika Consulting (Pty) Ltd
WSW	West-Southwest
ZETDC	Zimbabwe Electricity Transmission and Distribution Company
Zimplats	Zimplats Holdings Limited
ZISCO	The Zimbabwe Iron and Steel Co

**List of Chemical Formulae**

Chemical Formula	Mineral/Oxide
Au	Gold
Co	Cobalt
Cu	Copper
Ir	Iridium
Ni	Nickel
NiS	Nickel Sulphide
Os	Osmium
Pd	Palladium
Pt	Platinum
Rh	Rhodium
Ru	Ruthenium
S	Sulphur

## Appendix I: Risk Register

ID	Risk Ranking	Risk Category	Business Activity	Risk Ref	Risk Description	Risk Category Definition	Contributing Factors	Risk Mitigation
1	2	Macro Environment	Finance	1	Commodity Price and Market Risk impact on project's funding capability	Negative impact on forecast revenue; Inability to fund project until outlook improves; Increases initial working capital requirements (increasing total funding need)	Unstable current global outlook with exchange rate and interest volatility. Product demand and supply impacting forecast pricing	Cost management. Obtain independent commodity market outlook. Forecasts indicate that there will be a significant worldwide supply deficit of PGMs from FY2025 that should lead to a price correction. From a demand point of view the softening in demand for battery electrical vehicles and the increase in the sentiment toward hybrid vehicle technologies should increase demand for PGMs. There has been limited investment in additional primary supply over the past decade.
2	1	Finance	Funding	2	- Not securing sufficient funding to construct the project as currently proposed - Project delay due to protracted process to secure adequate funding - Timeous securing of strategic equity partners to bridge the funding gap.	Ad hoc changes to fiscal and investment regime Perception of Zim political risk Project Financial Results could impact fundability.	Zimbabwe government stability and changes to fiscal regime. Investor perceptions of other PGM operators in Zim. Project Metrics including costing, production build-up, revenue factors.	Finalise the Mining Development Agreement (MDA) with government of Zimbabwe which includes the relaxations of various fiscal terms. Maintain strong government relations and communication. Show strong community and country benefits from development of the project. Processing of base metal reef post PGM production enhancing project financials.
3	3	Operations	Revenue	3	Karo is unable to conclude a offtake agreement on favourable terms that supports the project's economics	Karo have received an indicative offtake term sheet from a major PGM producer, however an offtake agreement has not been fully secured.	Smelting capacity with the various producers Quality of final concentrate and how it impacts the smelter requirements	Karo has a favourable concentrate composition being sulphide rich concentrate and low chrome present in concentrate. Sound indicative terms provided by blue chip PGM producer
4	6	Operations	Power	4	Insufficient and inconsistent power supply	National supply of power	Reliability of coal fired power stations Drought conditions that affects the generating capacity at Kariba dam Reliability of transmission network.	Uninterrupted power supply agreement with the supply utility. Securing of third party independent power suppliers agreement. Current power supply agreement with ZETDC. Favourable location relative to key / priority infrastructure will reduce response times during outages.
5	5	Operations	Bulk water supply to site	5	- Delay in Zimbabwe's EMA approval of the project's ESIA. - Construction risk if Chirundazi dam is not completed by Q4 2025. - Negative climate change impacts. - Securing wayleaves for the pipeline for supply of water from the dam to site.	Delay in the start-up and ramp-up of the project. Impact on production rate due to insufficient water availability. Increase in capital cost should alternative supply source be required.	Community objections to ESIA and/or wayleaves. Adverse weather conditions and lack of borrow material could delay construction progress. Insufficient rainfall due to climate change.	Active engagement with EMA and communities. The Independent E&S Consultant has reviewed both the ESIA and the scoping study, and confirmed they satisfy requirements. Design authority will actively engage on site with construction, RFP completed, tenders under evaluation, appointment of contractors envisaged for Q1 2025.
6	11	Project Execution	Construction	6	- Construction schedule is not met within the proposed timelines resulting additional capex.	Working capital and initial peak funding estimate Delay in project start-up. Re-negotiation of contracts - escalation terms higher than provided in the model.	Delay in funding. Time between Final Investment Decision (FID) and recommencement of construction activities. Availability of reputable/preferred contractors at recommencement of construction activities. Timeous hiring full complement of owners team personnel (Execution team) Under performing contractors.	Most key contracts already in place. Timeous negotiation of escalation clauses with reputable / preferred contractors. Experienced and qualified owners team, tried and tested project execution strategy. - SMPP - contracts awarded. Risk mitigated by appointing scope of work between two contractors (wet- and dry end contractors). - Utilise capable, experienced logistics provider - going out to the market, possibly 2 service providers - The project now employs an experienced team with exposure to several mining construction projects both in Zimbabwe and globally - Independent review of construction schedule - Bulk earthworks complete and Civils as 64% complete which are typically the high risk activities that has potential for schedule overruns and therefore the potential schedule delay has been mitigated. - Mills (100% ); Larox Filter (100%); Flotation Mechanisms (100%); Karo Substation Switchgear (100%); 40MVA transformers (100%); 175MVA (100%);

**Lines of Assurance**

Risk Response	Inherent Likelihood	Impact	Inherent Risk Rating	Action Plan	Due Date	Status of Action Plan	Likelihood Post Mitigation	Impact Post Mitigation	Residual Risk Post Mitigation
Treat	4	5	24	Market analysts consider PGM prices to have bottomed. Deficits are expected in 2024 and expected grow. Analysts expect PGM prices to increase between 10% and 50%	CY Q2 2025	A Henwood	4	4	21
Treat	4	5	24	<ul style="list-style-type: none"> <li>Pursue previously identified alternative funding options i.e. <ul style="list-style-type: none"> <li>- A gold stream limited to phase 1- Preliminary discussions have been held with a number of gold streamers (BMO engaged to lead process)</li> <li>- Additional equity or a deeply subordinated shareholder loan</li> <li>- The introduction of a third party investor - both strategic and equity investors are being targeted</li> <li>- Continous optimisation of capex and operating cost estimations <ul style="list-style-type: none"> <li>- Finalisation of MDA.</li> <li>- Finalisation of debt funding term sheet</li> </ul> </li> <li>- Conclude feasibility study for processing of base metal reef at end of LoM.</li> </ul> </li> </ul>	CY Q1 2025 CY Q2 2025	A Henwood	3	5	22
	3	5	22	<ul style="list-style-type: none"> <li>- Continue discussions had with both PGM miners and downstream PGM beneficiators</li> <li>- Conclude draft offtake agreement with preferred PGM producer.</li> </ul>	CY Q2 2025	B Pryor	2	5	19
	2	4	14	<ul style="list-style-type: none"> <li>- Finalise ZETDC power supply agreement.</li> <li>- As an alternative power supply, source a portion of power from neighboring countries.</li> <li>- Develop dedicated solar power facility.</li> </ul>	Ongoing	C Bronn	2	3	9
Treat	2	4	14	<ul style="list-style-type: none"> <li>- Consultations with local communities ongoing to understand water needs. Some community water demand will decline with RAP</li> <li>- Wayleave consultations complete, one wayleave outstanding</li> <li>- Detailed design of dedicated 5Mm<sup>3</sup> dam complete, tender evaluation in progress and to be awarded Q1 2025.</li> </ul>	Q1 2025	J Pierce M. Bisschoff	2	3	9
	3	3	13	<ul style="list-style-type: none"> <li>- Negotiations of escalation factors with contractors.</li> <li>- Implementation of Project Execution Plan</li> </ul>	Ongoing	R Damons	2	2	5

ID	Risk Ranking	Risk Category	Business Activity	Risk Ref	Risk Description	Risk Category Definition	Contributing Factors	Risk Mitigation
7	10	Operations	Production - Mining	7	Slow ramp up and delay to achieve planned production rate.	Timeous signing of mining contract.	Funding to be secured prior to signing of mining contract. Contractor own funding & Mobilisation logistics. Under performing contractor. Availability of mining equipment in the market. Contractor learning phase.	Phase 1 Mining tender process complete. Identified 3 x preferred mining contractors. Contractor DD complete. Detailed mine plan completed and bill of quantities available. Learnings from Pilot Pit incorporated in mine design.
8	9	Operations	Production - Processing	8	Slow ramp up to achieve nameplate capacity.	Reliability of equipment and performance gaurentees not being met. Handover from construction team to owners team.	Mining contractor performance could impact plant ramp-up. Unexpected failure of major equipment during ramp-up. Successful completion of commissioning phases and handover to owners team.	Concervative approach with the planned ramp-up schedule. Ensurance and strategic spares for major / cirtical equipment have already been procured. (Q to supply short list of key items.) QA & QC processes that will be followed during commissioning as part of execution plan.
9	12	Operations	Production - Processing	9	Recovery rates of plant lower than expected.	Stabilising plant to effectively manage tails grade. Plant not achieving the recovery rates as modelled.	Not achieving planned grind Reliability of equipment could impact stability of plant. Availability of the correct spec and quantities of reagents. Not achieving plant feed grade. Variable depth of weathering.	Metallurgical test work supports design and planned recovery rates. New equipment, spares and reagents procured from reputable suppliers and OEMs.
10	4	Operations	Mineral Resource Estimation	10	Over estimation of Mineral Resource	Over estimation due to lower than anticipated geological losses. Over estimation due to poor understanding of structural interpretation.	Structural complexity and over extrapolation	Test implementation of Kriging Exclusion of structurally challenging zones from pit area. Independent Resource estimation reviews (including peer reviews)
11	8	Operations	Mineral Reserve Estimation - Mine Plan	11	Higher than planned dilution	Potential reduction of grade. Reduction in plant performance.	Higher than anticipated faulting and intrusives (Complex geology). Steeper than anticipated dip of the orebody. Grade control Inaccurate mining. Narrow and blind nature of the PGM peak zone. Variable depth of weathering.	Grade control procedure. (Evaluation and RC drilling, sampling, laboratory assaying and detailed in pit mapping) Application of dilution factors in mine plan. Benchmarking against neighbouring mines and learnings from pilot pit. Experienced MRM team - familiar with Great Dyke Geology
12	7	Operations	Mineral Reserve Estimation - Mine Design	12	Pit design changes due to adverse slope design parameters.	Pit high and low wall stability could be affected by complex geological structures. Overal Reserves can be affected	Complex geological structures. Potential adverse geohydrological conditions. Variable depth of weathering.	Detailed structural interpretation. Geohydrological Studies. Positioning of open pits outside the structural complex domains. Waste material modelling.

				Lines of Assurance					
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Treat	4	5	24	<ul style="list-style-type: none"> <li>Pursue previously identified alternative funding options i.e.</li> <li>- A gold stream limited to phase 1- Preliminary discussions have been held with a number of gold streamers (BMO engaged to lead process)</li> <li>- Additional equity or a deeply subordinated shareholder loan</li> <li>- The introduction of a third party investor - both strategic and equity investors are being targeted</li> <li>- Continuous optimisation of capex and operating cost estimations</li> <li>- Finalisation of MDA.</li> <li>- Finalisation of debt funding term sheet</li> <li>- Conclude feasibility study for processing of base metal reef at end of LoM.</li> </ul>	CY Q1 2025 CY Q2 2025	A Henwood	3	5	22
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	3	3	13	<ul style="list-style-type: none"> <li>- Negotiations of escalation factors with contractors.</li> <li>- Implementation of Project Execution Plan</li> </ul>	Ongoing	R Damons	2	2	5

## 16 COMPLIANCE CHECKLISTS

Throughout this CPR, references are made beneath certain headings that reflect a corresponding section of:

- JSE Section 12.10 (marked as JSE 12.10(xxx))
- SAMREC Table 1 (marked as SXXX(xxx))
- SAMVAL Table 1 (marked as TXXX(xxx))

## JSE Listings Requirements Section 12.10: Competent Person's Report

Section 12.10	Contents	Report Section
12.10	A Competent Person's Report must comply with the SAMREC and SAMVAL Codes and must:-	
a	have an effective date (being the date at which the contents of the Competent Person's Report are valid) less than six months prior to the date of publication of the pre-listing statement, listing particulars, prospectus or Category 1 circular.	1.1.1
b	be updated prior to publication of the pre-listing statement, listing particulars, prospectus or Category 1 circular if further material data becomes available after the effective date.	-
c	if the Competent Person is not independent of the issuer, clearly disclose the nature of the relationship or interest	1.1.4
d	show the particular paragraph of this section, the SAMREC Code (including Table 1) and SAMVAL Code (including Appendices and Tables) complied with in the margin of Competent Person's Report	Throughout document
e	contain a paragraph stating that all requirements of this section, the SAMREC Code (including Table 1) and SAMVAL Code (including Appendices and Tables) have been complied with, or state that certain clauses in the SAMVAL code were not applicable and provide a list of such clauses; and include a statement detailing:	1.1.2
	(i) exploration expenditure incurred to date by the applicant issuer and by other parties, where available	
	(ii) planned exploration expenditure that has been committed, but not yet incurred, by the applicant issuer concerned	6.6
	(iii) planned exploration expenditure that has not been committed to by the applicant issuer but which is expected to be incurred sometime in the future, in sufficient detail to fairly present future expectations	
f	contain a valuation section which must be completed and signed off by a Competent Valuator in terms of and in compliance with the SAMVAL Code (including Appendices and Tables)	11
g	be published in full on the applicant issuer's website	-
h	be included in the relevant JSE document either in full (which includes incorporation by reference pursuant to paragraph 11.61) or as an executive summary. The executive summary must be approved by the JSE (after approval by the Readers Panel) at the same time as the Competent Person's Report is approved by the JSE and the Readers Panel. The executive summary should be a concise summary of the Competent Person's Report and must cover, at a minimum, where applicable:	Executive Summary
	(i) purpose	I
	(ii) project outline	II
	(iii) location map indicating area of interest	II, III
	(iv) legal aspects and tenure, including any disputes, risks or impediments	III
	(v) geological setting description	IV
	(vi) exploration programme and budget	V
	(vii) brief description of individual key modifying factors	VII
	(viii) brief description of key environmental issues	VI
	(ix) Mineral Resource and Mineral Reserve Statement	VIII
	(x) reference to risk paragraph in the full Competent Person's Report	X
	(xi) statement by the Competent Person that the summary is a true reflection of the full Competent Person's Report	I
	(xii) summary valuation table. Where the cash flow approach has been employed, the valuation summary must include the discount rate(s) applied to calculate the NPV(s) (net present value(s)) per share with reference to the specific paragraph in the Competent Person's Report. If inferred resources are used, show the summary valuation with and without inclusion of such inferred resources.	IX

## SAMREC Table 1 Compliance Checklist

SAMREC TABLE 1		Exploration Results		Mineral Resources		Mineral Reserves		Report Section		
Section 1: Project Outline										
1.1	Property Description	(i)	Brief description of the scope of project (i.e. whether in preliminary sampling, advanced exploration, Scoping, Pre-feasibility, or Feasibility phase, Life of Mine plan for an ongoing mining operation or closure).						2.1	
		(ii)	Describe (noting any conditions that may affect possible prospecting/mining activities) topography, elevation, drainage, fauna and flora and vegetation, the means and ease of access to the property, the proximity of the property to a population centre, and the nature of transport, the climate, known associated climatic risks and the length of the operating season and to the extent relevant to the mineral project, the sufficiency of surface rights for mining operations including the availability and sources of power, water, mining personnel, potential tailings storage areas, potential waste disposal areas, heap leach pad areas, and potential processing plant sites.						2.3.3, 3	
		(iii)	Specify the details of the personal inspection on the property by each CP or, if applicable, the reason why a personal inspection has not been completed.						1.4	
1.2	Location	(i)	Description of location and map (country, province, and closest town/city, coordinate systems and ranges, etc.).						2.1	
		(ii)	Country profile: describe information pertaining to the project host country that is pertinent to the project, including relevant applicable legislation, environmental and social context, etc. Assess, at a high level, relevant technical, environmental, social, economic, political, and other key risks.						2.2, 2.3.3	
		(iii)	Provide a general topo-cadastral map.	Provide a topo-cadastral map in sufficient detail to support the assessment of eventual economics. State the known associated climatic risks.	Provide a detailed topo-cadastral map. Confirm that applicable aerial surveys have been checked with ground controls and surveys, particularly in areas of rugged terrain, dense vegetation or high altitude.			2.1		
1.3	Adjacent Properties	(i)	Discuss details of relevant adjacent properties. If adjacent or nearby properties have an important bearing on the report, then their location and common mineralised structures should be included on the maps. Reference all information used from other sources.						2.5	
1.4	History	(i)	State historical background to the project and adjacent areas concerned, including known results of previous exploration and mining activities (type, amount, quantity, and development work), previous ownership, and changes thereto.						4.1, 4.2	
		(ii)	Present details of previous successes or failures with reasons why the project may now be considered potentially economic.						4.1, 4.2	
		(iii)	Discuss known or existing historical Mineral Resource estimates and performance statistics on actual production for past and current operations.						4.3	
		(iv)	Discuss known or existing historical Mineral Reserve estimates and performance statistics on actual						4.4, 4.5	

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
				production for past and current operations.	
1.5	Legal Aspects and Permitting	Confirm the legal tenure to the satisfaction of the Competent Person, including a description of the following:			–
		(i)	Discuss the nature of the issuer's rights (e.g. prospecting and/or mining) and the right to use the surface of the properties to which these rights relate. Disclose the date of expiry and other relevant details.		2.3.2, 2.3.3
		(ii)	Present the principal terms and conditions of all existing agreements and details of those still to be obtained (such as, but not limited to, concessions, partnerships, joint ventures, access rights, leases, historical and cultural sites, wilderness or national park and environmental settings, royalties, consents, permission, permits or authorisations).		2.3
		(iii)	Present the security of the tenure held at the time of reporting or that is reasonably expected to be granted in the future along with any known impediments to obtaining the right to operate in the area. State details of applications that have been made.		2.3
		(iv)	Provide a statement of any legal proceedings, for example: land claims, that may have an influence on the rights to prospect or mine for minerals, or an appropriate negative statement.		2.3.7
		(v)	Provide a statement relating to governmental/statutory requirements and permits as may be required, have been applied for, approved or can be reasonably expected to be obtained.		2.3.7
1.6	Royalties	(i)	Describe the royalties that are payable in respect of each property.		2.4.1
1.7	Liabilities	(i)	Describe any liabilities, including rehabilitation guarantees that are pertinent to the project. Provide a description of the rehabilitation liability, including, but not limited to, legislative requirements, assumptions, and limitations.		2.4.2
<b>Section 2: Geological Setting, Deposit, Mineralisation</b>					
2.1	Geological Setting, Deposit, Mineralisation	(i)	Describe the regional geology.		5.1
		(ii)	Describe the project geology including deposit type, geological setting, and style of mineralisation.		5.3, 5.5
		(iii)	Discuss the geological model or concepts being applied in the investigation and on the basis of which the exploration programme is planned. Describe the inferences made from this model.		5.4, 5.5
		(iv)	Discuss data density, distribution, and reliability and whether the quality and quantity of information are sufficient to support statements, made or inferred, concerning the Exploration Target or Mineralisation.		6.4
		(v)	Discuss the significant minerals present in the deposit, their frequency, size, and other characteristics. Includes minor and gangue minerals where these will have an effect on the processing steps. Indicate the variability of each important mineral within the deposit.		5.3
		(vi)	Describe the significant mineralised zones encountered on the property, including a summary of the surrounding rock types, relevant geological controls, and the length, width, depth, and continuity of the mineralisation, together with a description of the type, character, and distribution of the mineralisation		5.3

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
		(vii)	Confirm that reliable geological models and/or maps and cross sections that support interpretations exist.		7.2
Section 3: Exploration and Drilling, Sampling Techniques, and Data					
3.1	Exploration	(i)	Describe the data acquisition or exploration techniques and the nature, level of detail, and confidence in the geological data used (i.e. geological observations, remote sensing results, stratigraphy, lithology, structure, alteration, mineralisation, hydrology, geophysical, geochemical, petrography, mineralogy, geochronology, bulk density, potential deleterious or contaminating substances, geotechnical and rock characteristics, moisture content, bulk samples, etc.). Confirm that datasets include all relevant metadata, such as unique sample number, sample mass, collection date, spatial location, etc.		6
		(ii)	Identify and comment on the primary data elements (observation and measurements) used for the project and describe the management and verification of these data or the database. This should describe the following relevant processes: acquisition (capture or transfer), validation, integration, control, storage, retrieval, and backup processes. It is assumed that data are stored digitally but hand-printed tables with well-organised data and information may also constitute a database.		6.4, 7.1
		(iii)	Acknowledge and appraise data from other parties and reference all data and information used from other sources.		6
		(iv)	Clearly distinguish between data/information from the property under discussion and that derived from surrounding properties.		6
		(v)	Describe the survey methods, techniques, and expected accuracies of data. Specify the grid system used.		6
		(vi)	Discuss whether the data spacing and distribution are sufficient to establish the degree of geological and grade continuity appropriate for the estimation procedure(s) and classifications applied.		6.4
		(vii)	Present representative models and/or maps and cross sections or other two- or three-dimensional illustrations of results, showing location of samples, accurate drill hole collar positions, down-hole surveys, exploration pits, underground workings, relevant geological data, etc.		5.5, 6.1, 6.4, 7.2
		(viii)	Report the relationships between mineralisation widths and intercept lengths (particularly important) and the geometry of the mineralisation with respect to the drill hole angle. If it is not known and only the down-hole lengths are reported, confirm it with a clear statement to this effect e.g. 'down-hole length, true width not known'.		7.5, 7.12
3.2	Drilling Techniques	(i)	Present the type of drilling undertaken (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).		6.4
		(ii)	Describe whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, technical studies, mining studies, and metallurgical studies.		6.4
		(iii)	Describe whether logging is qualitative or quantitative in nature; indicate if core photography (or costean, channel, etc.) was undertaken.		6.4

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
		(iv)	Present the total length and percentage of the relevant intersections logged.		6.4
		(v)	Results of any down-hole surveys of the drill hole to be discussed.		6.4
3.3	Sample Method, Collection, Capture, and Storage	(i)	Describe the nature and quality of sampling (e.g. 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.		6.4
		(ii)	Describe the sampling processes, including sub-sampling stages to maximise representivity of samples. This should include whether sample sizes are appropriate to the grain size of the material being sampled. Indicate whether sample compositing has been applied.		6.4
		(iii)	Appropriately describe each dataset (e.g. geology, grade, density, quality, diamond breakage, geo-metallurgical characteristics, etc.), sample type, sample-size selection, and collection methods.		6.4, 7.1
		(iv)	Report the geometry of the mineralisation with respect to the drill hole angle. State whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. State if the intersection angle is not known and only the down-hole lengths are reported.		5.5, 6.4
		(v)	Describe retention policy and storage of physical samples (e.g. core, sample reject, etc.).		6.4.7
		(vi)	Describe the 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 and 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.		6.4
		(vii)	If a drill core sample is taken, state whether it was split or sawn and whether quarter, half or full core was submitted for analysis. If a non-core sample, state whether the sample was riffled, tube sampled, rotary split, etc. and whether it was sampled wet or dry.		6.4
3.4	Sample Preparation and Analysis	(i)	Identify the laboratory(s) and state the accreditation status and Registration Number of the laboratory or provide a statement that the laboratories are not accredited.		6.4.8
		(ii)	Identify the analytical method. Discuss the nature, quality, and appropriateness of the assaying and laboratory processes and procedures used and whether the technique is considered partial or total.		6.4.8
		(iii)	Describe the process and method used for sample preparation, sub-sampling and size reduction, and likelihood of inadequate or non-representative samples (i.e. improper size reduction, contamination, screen sizes, granulometry, mass balance, etc.).		6.4.8
3.5	Sampling Governance	(i)	Discuss the governance of the sampling campaign and process, to ensure quality and representivity of samples and data, such as sample recovery, high grading, selective losses or contamination, core/hole diameter, internal and external QA/QC, and any other factors that may have resulted in or identified sample bias.		6.4.9
		(ii)	Describe the measures taken to ensure sample security and the Chain of Custody.		6.4.7

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
		(iii)	Describe the validation procedures used to ensure the integrity of the data, e.g. transcription, input or other errors, between its initial collection and its future use for modelling (e.g. geology, grade, density, etc.).		6.4, 6.4.9, 7.13
		(iv)	Describe the audit process and frequency (including dates of these audits) and disclose any material risks identified.		10.1
3.6	Quality Control/Quality Assurance	(i)	Demonstrate that adequate field sampling process verification techniques (QA/QC) have been applied e.g. the level of duplicates, blanks, reference material standards, process audits, analysis, etc. If indirect methods of measurement were used (e.g. geophysical methods), these should be described, with attention given to the confidence of interpretation.		6.4.9
3.7	Bulk Density	(i)	Describe the method of bulk density determination with reference to the frequency of measurements, the size, nature, and representativeness of the samples.		6.4.6
		(ii)	If target tonnage ranges are reported, state the preliminary estimates or basis of assumptions made for bulk density.		6.4.6
		(iii)	Discuss the representivity of bulk density samples of the material for which a grade range is reported.		6.4.6
		(iv)	Discuss the adequacy of the methods of bulk density determination for bulk material with special reference to accounting for void spaces (vugs, porosity, etc.), moisture, and differences between rock and alteration zones within the deposit.		6.4.6
3.8	Bulk-sampling and/or Trial-mining	(i)	Indicate the location of individual samples (including map).		7.11
		(ii)	Describe the size of samples, spacing/density of samples recovered, and whether sample sizes and distribution are appropriate to the grain size of the material being sampled.		7.11
		(iii)	Describe the method of mining and treatment.		7.11
		(iv)	Indicate the degree to which the samples are representative of the various types and styles of mineralisation and the mineral deposit as a whole.		7.11
Section 4: Estimation and Reporting of Exploration Results and Mineral Resources					
4.1	Geological Model and Interpretation	(i)	Describe the geological model, construction technique, and assumptions that form the basis for the Exploration Results or Mineral Resource estimate. Discuss the sufficiency of data density to assure continuity of mineralisation and geology and provide an adequate basis for the estimation and classification procedures applied.		5.5, 7.2
		(ii)	Describe the nature, detail, and reliability of geological information with which lithological, structural, mineralogical, alteration or other geological, geotechnical, and geo-metallurgical characteristics were recorded.		5.5, 7.1, 7.2
		(iii)	Describe any obvious geological, mining, metallurgical, environmental, social, infrastructural, legal, and economic factors that could have a significant effect on the		

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
		prospects of any possible exploration target or deposit.			
		(iv)	Discuss all known geological data that could materially influence the estimated quantity and quality of the Mineral Resource.		7.1
		(v)	Discuss whether consideration was given to alternative interpretations or models and their possible effect (or potential risk), if any, on the Mineral Resource estimate.		7.4, 7.13
		(vi)	Discuss geological discounts (e.g. magnitude, per reef, domain, etc.) applied in the model, whether applied to mineralised and/or un-mineralised material (e.g. potholes, faults, dykes, etc.).		7.14
4.2	Estimation and Modelling Techniques	(i)	Describe in detail the estimation techniques and assumptions used to determine the grade and tonnage ranges.		Not applicable
		(ii)		Discuss the nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values (cutting or capping), compositing (including by length and/or density), domaining, sample spacing, estimation unit size (block size), selective mining units, interpolation parameters, and maximum distance of extrapolation from data points.	7.4, 7.13
		(iii)		Describe assumptions and justification of correlations made between variables.	7.5, 7.6, 7.12
		(iv)		Provide details of any relevant specialised computer program (software) used, with the version number, together with the estimation parameters used.	7.13
		(v)		State the processes of checking and validation, the comparison of model information to sample data, and use of reconciliation data and whether the Mineral Resource estimate takes account of such information.	7.13
		(vi)		Describe the assumptions made regarding the estimation of any co-products, by-products or deleterious elements.	7.13, 7.17
4.3	Reasonable and Realistic Prospects for Eventual Economic Extraction	(i)	Disclose and discuss the geological parameters. These would include (but not be limited to) volume/tonnage, grade, and value/quality estimates, cut-off grades, strip ratios, upper- and lower-screen sizes.		7.14, 7.15, 7.17
		(ii)	Disclose and discuss the engineering parameters. These would include mining method, dilution, processing, geotechnical, geohydraulic, and metallurgical parameters.		7.17, 8.4, 8.5

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section	
		(iii)		Disclose and discuss the infrastructure including, but not limited to, power, water, site access.	7.17, 8.6	
		(iv)		Disclose and discuss the legal, governmental, permitting, statutory parameters.	2.3, 7.17	
		(v)		Disclose and discuss the environmental and social (or community) parameters.	7.17, 8.7	
		(vi)		Disclose and discuss the marketing parameters.	7.17, 8.8	
		(vii)		Disclose and discuss the economic assumptions and parameters. These factors will include, but not limited to, commodity prices and potential capital and operating costs.	7.17	
		(viii)		Discuss any material risks.	7.20	
		(ix)		Discuss the parameters used to support the concept of "eventual".	7.17	
4.4	Classification Criteria	(i)		Describe and justify criteria and methods used as the basis for the classification of the Mineral Resources into varying confidence categories.	7.15	
4.5	Reporting	(i)	Discuss the reported low and high grades and widths together with their spatial location to avoid misleading the reporting of Exploration Results, Mineral Resources or Mineral Reserves.		7.13, 7.17	
		(ii)	Discuss whether the reported grades are regional averages or if they are selected individual samples taken from the property under discussion.		7.4, 7.13	
		(iii)	State assumptions regarding mining methods, infrastructure, metallurgy, environmental, and social parameters. State and discuss where no mining-related assumptions have been made.			Not applicable
		(iv)	State the specific quantities and grades/qualities which are being reported in ranges and/or widths, and explain the basis of the reporting			Not applicable
		(v)		Present the detail, for example, open pit, underground, residue stockpile, remnants, tailings, and existing pillars or other sources in the Mineral Resource statement		7.17

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
		(vi)		Present a reconciliation with any previous Mineral Resource estimates. Where appropriate, report and comment on any historic trends (e.g. global bias).	7.19
		(vii)		Present the defined reference point for the tonnages and grades reported as Mineral Resources. State the reference point if the point is where the run of mine material is delivered to the processing plant. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.	7.18
		(viii)	If the CP is relying on a report, opinion, or statement of another expert who is not a CP, disclose the date, title, and author of the report, opinion, or statement, the qualifications of the other expert and why it is reasonable for the CP to rely on the other expert, any significant risks, and any steps the CP took to verify the information provided.		–
		(ix)	State the basis of equivalent metal formulae, if applied.		–
Section 5: Technical Studies					
5.1	Introduction	(i)	Technical Studies are not applicable to Exploration Results.	State the level of study – whether scoping, pre-feasibility, feasibility or ongoing Life of Mine.	8.1
		(ii)		Provide a summary table of the Modifying Factors used to convert the Mineral Resource to Mineral Reserve for Pre-feasibility, Feasibility or ongoing life of mine studies.	8.3
5.2	Mining Design	(i)		State assumptions regarding mining methods and parameters when estimating	7.17, 8.4

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
			Mineral Resources or explain where no mining assumptions have been made.		
	(ii)	Technical Studies are not applicable to Exploration Results.		State and justify all modifying factors and assumptions made regarding mining methods, minimum mining dimensions (or pit shell and internal and, if applicable, external), mining dilution, and mining losses used for the techno-economic study and signed-off, such as mining method, mine design criteria, infrastructure, capacities, production schedule, mining efficiencies, grade control, geotechnical and hydrological considerations, closure plans, and personnel requirements.	8.3, 8.4.1
	(iii)			State what Mineral Resource models have been used in the study.	8.4
	(iv)			Explain the basis of (the adopted) cut-off grade(s) or quality parameters applied. Include metal equivalents if relevant.	9.1
	(v)			Description and justification of mining method(s) to be used.	8.4.1
	(vi)			For open-pit mines, include a discussion of pit slopes, slope stability, and strip ratio.	8.4.3, 8.4.4
	(vii)			For underground mines, discussion of mining method, geotechnical considerations, mine design characteristics, and ventilation/cooling requirements.	(open-pit mining)
	(viii)			Discussion of mining rate, equipment selected, grade-control methods, geotechnical and hydrogeological considerations, health and safety of the workforce, staffing requirements, dilution, and recovery.	8.2, 8.3, 8.4.1, 8.4.2, 8.4.4

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section	
		(ix)		State the optimisation methods used in planning, list of constraints (practicality, plant, access, exposed Mineral Reserves, stripped Mineral Reserves, bottlenecks, draw control).	8.4.3	
5.3	Metallurgical and Testwork	Technical Studies are not applicable to Exploration Results.	(i)	Discuss the source of the sample and the techniques to obtain the sample, laboratory and metallurgical testing techniques.	8.5.1	
			(ii)	Explain the basis for assumptions or predictions regarding metallurgical amenability and any preliminary mineralogical testwork already carried out.	8.5.1	
			(iii)	Discuss the possible processing methods and any processing factors that could have a material effect on the likelihood of eventual economic extraction. Discuss the appropriateness of the processing methods to the style of mineralisation.	Describe and justify the processing method(s) to be used, equipment, plant capacity, efficiencies, and personnel requirements.	8.5
			(iv)		Discuss the nature, amount, and representativeness of metallurgical testwork undertaken and the recovery factors used. A detailed flow sheet / diagram and a mass balance should exist, especially for multi-product operations from which the saleable materials are priced for different chemical and physical characteristics.	8.5.1, 8.5.2.11
			(v)		State what assumptions or allowances have been made for deleterious elements and the existence of any bulk-sample or pilot-scale testwork and the degree to which such samples are representative of the ore body as a whole.	8.5.1

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
		(vi)		State whether the metallurgical process is well-tested technology or novel in nature.	8.5
5.4	Infrastructure	(i)	Technical Studies are not applicable to Exploration Results.	Comment regarding the current state of infrastructure or the ease with which the infrastructure can be provided or accessed	3.5
		(ii)		Report in sufficient detail to demonstrate that the necessary facilities have been allowed for (which may include, but not be limited to, processing plant, tailings dam, leaching facilities, waste dumps, road, rail or port facilities, water and power supply, offices, housing, security, Mineral Resource sterilisation testing, etc.). Provide detailed maps showing locations of facilities.	8.6
		(iii)		Statement showing that all necessary logistics have been considered.	8.6
5.5	Environmental and Social	(i)	Technical Studies are not applicable to Exploration Results.	Confirm that the company holding the tenement has addressed the host country environmental legal compliance requirements and any mandatory and/or voluntary standards or guidelines to which it subscribes.	8.7.1
		(ii)		Identify the necessary permits that will be required and their status and where not yet obtained, confirm that there is a reasonable basis to believe that all permits required for the project will be obtained.	8.7.1
		(iii)		Identify and discuss any sensitive areas that may affect the project as well as any other environmental factors including I&AP and/or studies that could have a material effect on the likelihood of eventual economic extraction. Discuss possible means of mitigation.	8.7.2, 8.7.3
		(iv)		Identify any legislated social management programmes that may be required and discuss the content and status of these.	8.7.3
		(v)		Outline and quantify the material socio-economic and cultural impacts that need to be mitigated and their mitigation measures and, where appropriate, the associated costs.	8.7.3
5.6		(i)		Describe the valuable and potentially valuable product(s) including suitability of	8.8

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
Market Studies and Economic Criteria		Technical Studies are not applicable to Exploration Results.		products, co-products, and by-products to market.	
	(ii)			Describe the product(s) to be sold, customer specifications, testing, and acceptance requirements. Discuss whether there exists a ready market for the product(s) and whether contracts for the sale of the product(s) are in place or expected to be readily obtained. Present price and volume forecasts and the basis for the forecast.	8.8
	(iii)			State and describe all economic criteria that have been used for the study such as capital and operating costs, exchange rates, revenue/price curves, royalties, cut-off grades, reserve pay limits.	8.11.1
	(iv)			Provide a summary description, source of, and confidence in method used to estimate the commodity price/value profiles used for cut-off grade calculation, economic analysis, and project valuation, including applicable taxes, inflation indices, discount rate, and exchange rates.	8.11.1
	(v)			Present the details of the point of reference for the tonnages and grades reported as Mineral Reserves (e.g. material delivered to the processing facility or saleable product(s)). It is important that, in any situation where the reference point is different, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.	9.3
	(vi)			Justify assumptions made concerning production cost including transportation, treatment, penalties, exchange rates,	8.10, 8.11.1

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
				marketing, and other costs. Provide details of allowances that are made for the content of deleterious elements and the cost of penalties.	
		(vii)		Provide details of allowances made for royalties payable, both to Government and private.	2.4, 8.9
		(viii)		State type, extent, and condition of plant and equipment that is significant to the existing operation(s).	8.5
		(ix)		Provide details of all environmental, social, and labour costs considered.	8.10
5.7	Risk Analysis	(i)	Technical Studies are not applicable to Exploration Results.	Report an assessment of technical, environmental, social, economic, political, and other key risks to the project. Describe actions that will be taken to mitigate and/or manage the identified risks.	10.2
5.8	Economic Analysis	(i)	Technical Studies are not applicable to Exploration Results.	At the relevant level (Scoping Study, Pre-feasibility, Feasibility or on-going Life of Mine), provide an economic analysis for the project that includes:	8.11
		(ii)		Cash Flow forecast on an annual basis using Mineral Reserves or an annual production schedule for the life of the project.	8.11.3
		(iii)		A discussion of net present value (NPV), internal rate of return (IRR), and payback period of capital.	8.11.3
		(iv)		Sensitivity or other analysis using variants in commodity price, grade, capital, and operating costs, or other significant parameters, as appropriate, and discuss the impact of the results.	8.11.3
Section 6: Estimation and Reporting of Mineral Reserves					
6.1	Estimation and Modelling Techniques	(i)		Describe the Mineral Resource estimate used as a basis for the conversion to a Mineral Reserve.	9.1.1
		(ii)		Report the Mineral Reserve Statement with sufficient detail indicating if the mining is open pit or underground plus the source and type of mineralisation, domain or ore body, surface dumps, stockpiles, and all other sources.	9.3

SAMREC TABLE 1			Exploration Results	Mineral Resources	Mineral Reserves	Report Section
		(iii)			Provide a reconciliation reporting historic reliability of the performance parameters, assumptions, and modifying factors including a comparison with the previous Reserve quantity and qualities, if available. Where appropriate, report and comment on any historic trends (e.g. global bias).	9.4
6.2	Classification Criteria	(i)			Describe and justify criteria and methods used as the basis for the classification of the Mineral Reserves into varying confidence categories, based on the Mineral Resource category, including consideration of the confidence in all the modifying factors.	9.2
6.3	Reporting	(i)			Discuss the proportion of Probable Mineral Reserves, which have been derived from Measured Mineral Resources (if any), including the reason(s) therefore.	9.3
		(ii)			Present details of, for example, open pit, underground, residue stockpile, remnants, tailings, and existing pillars or other sources in respect of the Mineral Reserve statement.	9.3
		(iii)			Present the details of the defined reference point for the Mineral Reserves. State where the reference point is the point where the run of mine material is delivered to the processing plant. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. State clearly whether the tonnages and grades reported for Mineral Reserves are in	9.3

SAMREC TABLE 1		Exploration Results	Mineral Resources	Mineral Reserves	Report Section
				respect of material delivered to the plant or after recovery.	
		(iv)		Present a reconciliation with the previous Mineral Reserve estimates. Where appropriate, report and comment on any historic trends (e.g. global bias).	9.4
		(v)		Only Measured and Indicated Mineral Resources can be considered for inclusion in the Mineral Reserve.	9.3
		(vi)		State whether the Mineral Resources are inclusive or exclusive of Mineral Reserves.	9.1
<b>Section 7: Audits and Reviews</b>					
7.1	Audits and Reviews	(i)	State type of review/audit (e.g. independent, external), area (e.g. laboratory, drilling, data, environmental compliance, etc.), date and name of the reviewer(s) together with their recognised professional qualifications.		10.1
		(ii)	Disclose the conclusions of relevant audits or reviews. Note where significant deficiencies exist and remedial actions are required.		10.1
<b>Section 8: Other Relevant Information</b>					
8.1		(i)	Discuss all other relevant and material information not discussed elsewhere.		10
<b>Section 9: Qualification of Competent Person(s) and other Key Technical Staff. Date and Signature Page</b>					
9.1		(i)	State the full name, registration number, and name of the professional body or RPO, for all the Competent Person(s). State the relevant experience of the Competent Person(s) and other key technical staff who prepared and are responsible for the Public Report.		1.1.3, Appendix A
		(ii)	State the Competent Person's relationship to the issuer of the report.		1.1.4
		(iii)	Provide the Certificate of the Competent Person (Appendix 2), including the date of sign-off and the effective date, in the Public Report.		Appendix A

### SAMVAL Table 1 Compliance Checklist

Criteria	Comments	Report Section
T1.0 General	The Valuation Report shall contain: The signature of the CV; The CV's qualifications and experience in valuing mineral properties, or relevant valuation experience; A statement that all facts presented in the report are correct to the best of the CVs knowledge; A statement that the analyses and conclusions are limited only by the reported forecasts and conditions; A statement of the CV's present or prospective interest in the subject property or asset; A statement that the CV's compensation, employment, or contractual relationship with the Commissioning Entity is not contingent on any aspect of the Report; A statement that the CV has no bias with respect to the assets that are the subject of the Report, or to the parties involved with the assignment; A statement that the CV has (or has not) made a personal inspection of the property; and A record of the CP's and experts who have contributed to the valuation. Written consent to use and rely on such Reports shall be obtained. Significant contributions made by such experts shall be highlighted individually.	1.1.3, 1.1.4, 1.4, 11.3 - 11.7
T1.1 Illustrations	There are numerous instances (especially in the non-listed environment) when a valuation is not accompanied by the CPR on which it is based. In these cases, especially, diagrams/illustrations are required and shall be in the required format. Diagrams, maps, plans, sections, and illustrations shall be legible and prepared at an appropriate scale to distinguish important features. Maps shall be dated and include a legend, author or information source, coordinate system and datum, a scale in bar or grid form, and an arrow indicating north. A location or index map and more detailed maps showing all important features described in the text, including all relevant cadastral and other infrastructure features, shall be included.	Throughout document
T1.2 Synopsis	Provide the salient features of the report - a brief description of the terms of reference, scope of work, the Valuation Date, the mineral property; its location, ownership, geology, and mineralization; history of exploration and production, current status, Exploration Targets, mineralization and/or production forecast, Mineral Resources and Mineral Reserves, production facilities (if any); environmental, social, legal, and permitting considerations; valuation approaches and methods, valuation, and conclusions.	1.1, 2, 4-9, 11.9
T1.3 Introduction and Scope	Introduction and scope, specifying commissioning instructions including reference to the valuation, engagement letter, date, purpose and intended use of the valuation. The CV shall fully disclose any interests in the Mineral Asset or Commissioning Entity. Any restrictions on scope and special instructions followed by the CV, and how these affect the reliability of the valuation, shall be disclosed.	1.1, 11.1
T1.4 Compliance	A statement that the report complies with SAMVAL shall be included. Any variations shall be described and discussed.	1.1.2, 11.1
T1.5 Identity, Tenure and Infrastructure	The identity, tenure, associated infrastructure and locations of the property interests, rights or securities to be valued (i.e. the physical, legal, and economic characteristics of the property) shall be disclosed.	2, 3
T1.6 History	History of activities, results, and operations to date shall be included.	4
T1.7 Geological Setting	Geological setting, models, and mineralization shall be described.	5
T1.8 Exploration Results and Exploration Targets	Exploration programmes, their location, results, interpretation, and significance shall be described. Exploration Targets shall be discussed.	6
T1.9 Mineral Resources and Mineral Reserves	Mineral Resource and Mineral Reserve statements shall be provided. They shall be signed off by a Competent Person in compliance with the SAMREC Code or another CRIRSCO code. The CV shall set out the manner in which he has satisfied himself that he can rely upon the information in the CPR.	7.18, 9.3
T1.10 Modifying Factors and Key Assumptions	A statement of Modifying Factors shall be included, separately summarizing material issues relating to each applicable Modifying Factor. The CV shall set out the manner in which he has satisfied himself that he can rely upon the technical information provided. (NOTE: All the Modifying Factors shall be listed, or references provided to relevant definitions). This shall include an explanation of all material assumptions and limiting factors. When reporting on environmental, social and governance modifying factors, reference should be made to the ESG reporting parameters as required by the Southern African Minerals Environmental, Social and Governance Guideline (SAMESG) or other recognised code, e.g. Equator Principles.	7, 8, 9, 11.10
T1.11 Previous Valuations	The valuation shall refer to all available and relevant previous valuations of the Mineral Asset that have been performed in at least the previous two years, and explain any material differences between these and the present valuation.	11.8

Criteria	Comments	Report Section
T1.12 Valuation Approaches and Methods	The valuation approaches and methods used in the valuation shall be described and justified in full.	11.9
T1.13 Valuation Date	A statement detailing the Report Date and the Valuation Date, as defined in this Code, and whether any material changes have occurred between the Valuation Date and the Report Date.	11.2
T1.14 Valuation Results	For the Income Approach, the valuation cash flow shall be disclosed. For the Market Approach, the market comparable information shall be disclosed. For the Cost Approach, the relevant and applicable cost shall be disclosed.	11.11 - 11.13
T1.15 Valuation Summary and Conclusions	A summary of the valuation details, consolidated into single material line items, shall be provided. The Mineral Asset Valuation shall specify the key risks and forecasts used in the valuation. A cautionary statement concerning all forward-looking or forecast statements shall be included. The valuation's conclusions, illustrating a range of values, the best estimate value for each valuation, and whether the conclusions are qualified or subject to any restrictions imposed on the CV, shall be included.	11.5, 11.14
T1.16 Identifiable Component Asset (ICA) Values	In some valuations, the valuation shall be broken down into Identifiable Component Asset Values (an ICA valuation) equalling the Mineral Asset Value. This could be, for example, due to the requirements of other valuation rules and legislative practices including taxation (i.e. fixed property, plant, and equipment relative to Mineral Asset Value allocations such as in recoupment or capital gains tax calculations or where a commissioned Mineral Asset Valuation specifies a need for a breakdown of the Mineral Asset Valuation). In such cases, the separate allocations of value shall be made by taking account of the value of every separately identifiable component asset. Allocation of value to only some, and not all identifiable component assets is not allowed. This requires a specialist appraisal of each identifiable component asset of property, plant and equipment, with the 'remaining' value of the Mineral Asset being attributed to the Mineral Resources and Reserves. Such valuations shall be performed by suitably qualified experts, who may include the CV. If the Mineral Asset Valuation includes an ICA Valuation, the CV shall satisfy himself or herself that the ICA Valuation is reasonable before signing off the Mineral Asset Valuation.	11.1
T1.17 Historic Verification	A historic verification of the performance parameters on which the Mineral Asset Valuation is based shall be presented.	11.1
T1.18 Market Assessment	A comprehensive market assessment should be presented.	8.8
T1.19 Sources of Information	The sources of all material information and data used in the report shall be disclosed, as well as references to any published or unpublished technical papers used in the valuation, subject to confidentiality. A reference shall be made to any other report that has been compiled, for the purpose of providing information for the valuation, including SAMREC-compliant reports and any other contributions or reports from experts.	11.6



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09/04/2025 14:28:50 SAST	i.myburgh@minvalgroup.com (Jacobus Adriaan Myburgh) accepted QuicklySign Terms and Conditions	192.143.130.247
09/04/2025 14:28:40 SAST	i.myburgh@minvalgroup.com (Jacobus Adriaan Myburgh) opened document via authenticated session	192.143.130.247
09/04/2025 14:24:00 SAST	i.myburgh@minvalgroup.com (Jacobus Adriaan Myburgh) opened document	192.143.130.247
09/04/2025 14:24:00 SAST	i.myburgh@minvalgroup.com (Jacobus Adriaan Myburgh) clicked document link	192.143.130.247
09/04/2025 14:21:04 SAST	Email has been received by i.myburgh@minvalgroup.com mail server	149.72.149.168
09/04/2025 14:20:59 SAST	Signature request sent to: i.myburgh@minvalgroup.com (Jacobus Adriaan Myburgh)	
09/04/2025 14:20:52 SAST	Wilhelm@vbkom.co.za (Otto Wilhelm Warschkuhl) completed signing document	165.255.251.84
09/04/2025 14:18:12 SAST	Wilhelm@vbkom.co.za (Otto Wilhelm Warschkuhl) accepted QuicklySign Terms and Conditions	165.255.251.84
09/04/2025 14:17:56 SAST	Wilhelm@vbkom.co.za (Otto Wilhelm Warschkuhl) opened document	165.255.251.84
09/04/2025 14:17:56 SAST	Wilhelm@vbkom.co.za (Otto Wilhelm Warschkuhl) clicked document link	165.255.251.84
09/04/2025 14:16:25 SAST	Email has been received by wilhelm@vbkom.co.za mail server	167.89.84.21
09/04/2025 14:16:07 SAST	Signature request sent to: Wilhelm@vbkom.co.za (Otto Wilhelm Warschkuhl)	
09/04/2025 14:16:01 SAST	Chantelleo@vbkom.co.za (Chantelle Cassandra Obermeyer) completed signing document	165.255.251.84
09/04/2025 14:15:23 SAST	Chantelleo@vbkom.co.za (Chantelle Cassandra Obermeyer) accepted QuicklySign Terms and Conditions	165.255.251.84
09/04/2025 14:15:11 SAST	Chantelleo@vbkom.co.za (Chantelle Cassandra Obermeyer) opened document	165.255.251.84

09/04/2025 14:15:11 SAST	Chantelleo@vbkom.co.za (Chantelle Cassandra Obermeyer) clicked document link	165.255.251.84
09/04/2025 13:35:14 SAST	Email has been received by chantelleo@vbkom.co.za mail server	149.72.149.195
09/04/2025 13:34:52 SAST	Signature request sent to: Chantelleo@vbkom.co.za (Chantelle Cassandra Obermeyer)	
09/04/2025 13:34:46 SAST	Maria@vbkom.co.za (Maria Antoniades) completed signing document	165.255.251.84
09/04/2025 13:33:53 SAST	Maria@vbkom.co.za (Maria Antoniades) accepted QuicklySign Terms and Conditions	165.255.251.84
09/04/2025 13:33:46 SAST	Maria@vbkom.co.za (Maria Antoniades) opened document	165.255.251.84
09/04/2025 13:33:46 SAST	Maria@vbkom.co.za (Maria Antoniades) clicked document link	165.255.251.84
09/04/2025 12:51:19 SAST	Email has been received by maria@vbkom.co.za mail server	167.89.84.21
09/04/2025 12:51:03 SAST	Signature request sent to: Maria@vbkom.co.za (Maria Antoniades)	
09/04/2025 12:50:53 SAST	Kerryn Taylor changed the status to:awaiting_signatures	165.255.251.84
09/04/2025 09:56:32 SAST	kerryn@vbkom.co.za (Kerryn Taylor) uploaded document	165.255.251.84

## Signers

<p><b>Maria Antoniades</b>  Email: Maria@vbkom.co.za  Role: signer-1  Mobile Number: None  User Identification: email</p>	 Date completed: 09/04/2025 13:34:33 SAST
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<p><b>Chantelle Cassandra Obermeyer</b>  Email: Chantelleo@vbkom.co.za  Role: signer-2  Mobile Number: None  User Identification: email</p>	 Date completed: 09/04/2025 14:15:34 SAST
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*Otto Wilhelm Warschkuhl*

Email: Wilhelm@vbkom.co.za

Role: signer-3

Mobile Number: None

User Identification: email



Date completed: 09/04/2025 14:20:47 SAST

*Jacobus Adriaan Myburgh*

Email: i.myburgh@minvalgroup.com

Role: signer-4

Mobile Number: None

User Identification: email



Date completed: 09/04/2025 14:49:29 SAST

*Wilhelmina Fredrika van der Vyver*

Email: Mientjie@vbkom.co.za

Role: signer-5

Mobile Number: None

User Identification: email



Date completed: 09/04/2025 17:16:27 SAST

*Divine-Ito Ile*

Email: Divine@vbkom.co.za

Role: signer-6

Mobile Number: None

User Identification: email



Date completed: 10/04/2025 07:59:38 SAST

*Petrus Gerhardus Kriel*

Email: g.kriel@minvalgroup.com

Role: signer-7

Mobile Number: None

User Identification: email



Date completed: 10/04/2025 10:35:33 SAST

*Kenneth Graham Lomborg*

Email: ken@pivotmining.co.za

Role: signer-8

Mobile Number: None

User Identification: email

*Kenenth Lomborg*

Date completed: 11/04/2025 08:21:17 SAST

*Armand van Wyngaardt*

Email: Armand@vbkom.co.za

Role: signer-9

Mobile Number: None

User Identification: email

*Armand van Wyngaardt*

Date completed: 11/04/2025 08:42:58 SAST

## Supporting documentation

Supporting documents that were uploaded, as part of the signing process, can be found on the document page online.

## Online verification

This document can be verified online here

[https://app.quicklysign.com/verify\\_document/1voSwTZBrMLuZX196198cd672\\_oY7sbJoy6Mwfuc](https://app.quicklysign.com/verify_document/1voSwTZBrMLuZX196198cd672_oY7sbJoy6Mwfuc)